# CURRICULUM VITAE KARA MARIA KOCKELMAN

Professor Department of Civil Engineering University of Texas at Austin

## **EDUCATION**

University of California at Berkeley	Civil Engineering	BS	Spring 1991
University of California at Berkeley	City & Regional Planning	MCP	Spring 1996
University of California at Berkeley	Civil Engineering	MS	Spring 1996
University of California at Berkeley	Civil Engineering	PhD	Summer 1998

#### PROFESSIONAL EXPERIENCE - Academic

University of California at Berkeley	Research Assistant	Fall 1993, Summer 1994, & May 1995 – May 1996
Hairmanian of California at Davida	Tarabina Assistant	
University of California at Berkeley	Teaching Assistant	June 1997 – December 1997
University of Texas at Austin	Clare Boothe Luce Assistant	Fall 1998 – Summer 2004
	Professor of Civil Engineering	
University of Texas at Austin	Clare Boothe Luce Associate	Fall 2004 – Summer 2005
·	Professor of Civil Engineering	
University of Texas at Austin	Associate Professor & William	Fall 2005 – Summer 2009
·	J. Murray Jr. Fellow	
University of Texas at Austin	Professor & William	Fall 2009 – Present
•	J. Murray Jr. Fellow	

#### HONORS AND AWARDS

 $University\ Medal-"Most\ Distinguished\ Graduate"\ of\ U.C.\ Berkeley's\ 5,300\ Graduating\ Class,\ 1991$ 

Civil Engineering Departmental Citation - Highest G.P.A. of Graduates, 1991

Kennedy Interdisciplinary Studies Award in Economics, 1991

ASCE's "Promise and Accomplishment in Transportation Engineering" Award, 1991

University of California at Berkeley Fellowship, 1993-1998

National Science Foundation Fellowship, 1993-1998

Institute of Transportation Engineers "Best Student Paper" Prize, Northern California Section, 1995

Outstanding Student of the Year, University of California Transportation Center, 1997

Winner, Western Regional Science Association's Tiebout Prize for Best Student Paper, 1999

Clare Boothe Luce Professor of Civil Engineering, 1999-2004

National Science Foundation Faculty Early Career Development (CAREER) Award, 2000-2004

TRB Committee on Pedestrians Award for Outstanding Paper, January 2002

Ford CAREER Award, given by Ford Motor Company's Ford Fund, 2002

Voted one the world's Top 100 Young Innovators for MIT's Technology Review, May 2002

Named to the National Academy of Engineering's Gallery of Women in Engineering, August 2002

Inaugural recipient of the Annual New Faculty Award, sponsored by the Council of University Transportation Centers and the American Road and Transportation Builders Association, recognizing "outstanding teaching and research contributions to the transportation field." December 2002

Featured in *High Tech Austin, The Ultimate Who's Who of the Austin High-Tech Community*, 5th edition, 2003 Recipient of the William J. Murray Jr. Fellowship in Engineering, September 2004-Present

Recipient of the Geoffrey J.D. Hewings Award, presented by the Regional Science Association International, for innovative research contributions, November 2006

Recipient of ASCE's Harland Bartholomew Award, in recognition of contributions to the enhancement of the role of the civil engineer in urban planning and development, November 2007

Recipient of the Women's Transportation Seminar (WTS) 2007 Heart of Texas Chapter Woman of the Year Award, January 2008 (awarded May 1, 2008)

Recipient of Plan II Honors Program stipend for support of undergraduate Matthew Bomberg, The University of Texas, May 2008

Recipient of the 2009 Young Researcher Award from the Transportation Research Board's Committee on Statistical Methods (ABJ80) for paper titled "Application of the Dynamic Spatial Ordered Probit Model: Patterns of Ozone Concentration in Austin, Texas," January 2010.

Recipient of ASCE's Walter L. Huber Research Prize in Transportation Engineering, for contributions in data acquisition and analysis to facilitate transport planning and policy-making, September 2010 Women's Transportation Seminar International and Heart of Texas Chapter, Honorary Member, 2012

#### PROFESSIONAL SOCIETY AFFILIATIONS & LICENSURE

Tau Beta Pi - Engineering Honor Society

Phi Beta Kappa, Alpha Chapter - Humanities Honor Society

American Society for Engineering Education, 1999-2006

International Association of Travel Behavior Research, 1998-2009

Society of Women Engineers, 2000-2004

American Society of Civil Engineers, 2000-2003, 2005-2007, 2009-2010

Regional Science Association International, 2002-Present

American Association of Geographers, 2002-2004

Institute for Operations Research and the Management Sciences (INFORMS), 2003-2004, and 2011

World Conference on Transportation Research Society, 2007-2009

Licensed Professional Engineer, States of California (Certification #C057380, from 1997-2010) and Texas (Certification #93443, since 14 May 2004)

Licensed City Planner, AICP 2008, and Member, American Planning Assoc. National and Texas Chapters, 2008 - 2009

Inaugural Board Member, World Society for Transport and Land Use Research, September 2011-Present

## REFEREED, ARCHIVAL PUBLICATIONS

- 1. Kockelman, Kara. "High-Speed Rail for California: A Cost-Benefit Analysis." *Berkeley Planning Journal*, Volume 9: 61-80, 1994.
- 2. Cervero, Robert and Kara Kockelman. "Travel Demand and the Three Ds: Density, Diversity, and Design." *Transportation Research* 2D (3):199-219, 1997.
- 3. Kockelman, Kara. "Travel Behavior as a Function of Accessibility, Land Use Mixing, and Land Use Balance: Evidence from the San Francisco Bay Area." *Transportation Research Record No. 1607*: 116-125, 1997.
- 4. Kockelman, Kara. "The Effects of Location Elements on Home Purchase Prices and Rents in San Francisco Bay Area." *Transportation Research Record No. 1606*: 40-50, 1997.
- 5. Kockelman, Kara. "Changes in the Flow-Density Relationship due to Environmental, Vehicle, and Driver Characteristics." *Transportation Research Record No. 1644*: 47-56, 1998.
- 6. Kockelman, Kara. "Application of a Utility-Theory-Consistent, System-of-Demand-Equations Approach to Household Travel Choice." *Transportation Research Record No. 1676*: 20-29, October 1999.
- 7. Kockelman, Kara. "To LDT or Not to LDT: Assessment of Principal Impacts of Light-Duty Trucks." *Transportation Research Record No. 1738*: 3-10, 2000.
- 8. Kockelman, Kara, Yong Zhao, Lydia Heard, Dean Taylor, and Beth Taylor. "Sidewalk Cross-Slope Requirements of the Americans with Disabilities Act: Literature Review." *Transportation Research Record No. 1705*: 53-60, December 2000.
- 9. Kockelman, Kara and Raheel, Shabih. "Effect of Light-Duty Trucks on the Capacity of Signalized Intersections." *Journal of Transportation Engineering*, 126 (6):506-512, 2000.

- 10. Kockelman, Kara and Yong Zhao. "Behavioral Distinctions: The Use of Light-Duty Trucks and Passenger Cars." *Journal of Transportation and Statistics* 3 (3):47-60, 2000.
- 11. Kockelman, Kara, Yong Zhao, and Chessalay Blanchard-Zimmerman. "Meeting the Intent of ADA in Sidewalk Cross- Slope Design." *Journal of Rehabilitation Research and Development* 38 (1):101-110, 2001.
- 12. Kockelman Kara. "A Model for Time- and Budget-Constrained Activity Demand Analysis." *Transportation Research* 35B (3):255-269, 2001.
- 13. Kockelman, Kara. "Modeling Traffic's Flow-Density Relation: Accommodation of Multiple Flow Regimes and Traveler Types." *Transportation* 28 (4):363-374, November 2001.
- 14. Nakamura, Katsuhiko and Kara Kockelman. "Congestion Pricing and Roadspace Rationing: An Application to the San Francisco Bay Bridge Corridor." *Transportation Research* 36A (5):403-417, 2002.
- 15. Kockelman, Kara and Young-Jun Kweon. "Driver Injury Severity: An Application of Ordered Probit Models." *Accident Analysis and Prevention* 34 (4):313-321, 2002.
- 16. Zhao, Yong and Kara Kockelman. "The Propagation of Uncertainty through Travel Demand Models: An Exploratory Analysis." *Annals of Regional Science* 36 (1):145-163, 2002.
- 17. Srinivasan, Siva and Kara Kockelman. "The Impacts of Bypasses on Small- and Medium-Sized Communities: An Econometric Analysis." *Journal of Transportation and Statistics* 5 (1):57-69, 2002.
- 18. TenSiethoff, Brian and Kara Kockelman. "Property Values and Highway Expansions: Timing, Size, Location, and Use Effects." *Transportation Research Record No. 1812*:191-200, December 2002.
- 19. Srour, Issam, Kara Kockelman, and Travis Dunn. "Accessibility Indices: Connection to Residential Land Prices and Location Choices." *Transportation Research Record No. 1805*: 25-34, December 2002.
- 20. Kockelman, Kara, Lydia Heard, Young-Jun Kweon, and Thomas W. Rioux. "Sidewalk Cross-Slope Design: Analysis of Accessibility for Persons with Disabilities." *Transportation Research Record No. 1818*:108-118, December 2002.
- 21. Pradhan, Anant and Kara Kockelman. "Uncertainty Propagation in an Integrated Land Use-Transportation Modeling Framework: Output Variation via UrbanSim." *Transportation Research Record No. 1805*: 128-135, 2002.
- 22. Kweon, Young-Jun and Kara Kockelman. "Overall Injury Risk to Different Drivers: Combining Exposure, Frequency, and Severity Models." *Accident Analysis and Prevention* 35 (3):414-450, 2003.
- 23. Kockelman, Kara, Randy Machemehl, Aaron Overman, Jacob Sesker, Marwan Madi, Jenny Peterman, and Susan Handy. "Frontage Roads: An Assessment of Legal Issues, Design Decisions, Costs, Operations, and Land-Development Differences." *Journal of Transportation Engineering*, 129 (3):242-252, 2003.
- 24. Kockelman, Kara and Sriram Krishnamurthy, "Propagation of Uncertainty in Transportation-Land Use Models: Investigation of DRAM-EMPAL and UTPP Predictions in Austin, TX." *Transportation Research Record No. 1831*: 219-229, December 2003.
- 25. Zhao, Yong and Kara Kockelman. "The Random-Utility-Based Multiregional Input-Output Model: Solution Existence and Uniqueness." *Transportation Research* 38B (9):789-807, 2004.
- 26. Kockelman, Kara and Sriram Krishnamurthy. "A New Approach for Travel Demand Modeling: Linking Roy's Identity to Discrete Choice." *Transportation Research* 38B (5):459-475, 2004.
- 27. Kalmanje, Sukumar and Kara Kockelman. "Credit-Based Congestion Pricing: Travel, Land Value, & Welfare Impacts." *Transportation Research Record No. 1864*: 45-53, 2004.
- 28. Frazier, Christopher and Kara Kockelman. "Chaos Theory and Transportation Systems: An Instructive Example." *Transportation Research Record No.1897*: 9-17, 2004.
- 29. Heiner, Jared and Kara Kockelman. "The Costs of Right of Way Acquisition: Methods and Models for Estimation." *Journal of Transportation Engineering* 131 (3):193-204, 2005.
- 30. Vanka, Salila, Susan Handy, and Kara Kockelman. "State-local Coordination in Managing Land Use and Transportation Along State Highways." *Journal of Urban Planning and Development* 131 (1): 10-18, 2005.
- 31. Kockelman, Kara and Sukumar Kalmanje. "Credit-Based Congestion Pricing: A Policy Proposal and the Public's Response." *Transportation Research* 39A: 671-690, 2005.
- 32. Kockelman, Kara, Ling Jin, Yong Zhao, and Natalia Ruiz-Juri. "Tracking Land Use, Transport, and Industrial Production using Random-Utility Based Multiregional Input-Output Models: Applications for Texas Trade." *Journal of Transport Geography* 13 (3):275-286, 2005.

- 33. Frazier, Christopher and Kara Kockelman. "Spatial Econometric Models for Panel Data: Incorporating Spatial and Temporal Data." *Transportation Research Record No. 1902*: 80-90, 2005.
- 34. Wang, Xiaokun and Kara Kockelman. "Use of Heteroscedastic Ordered Logit Model to Study Severity of Occupant Injury: Distinguishing Effects of Vehicle Weight and Type" *Transportation Research Record No.* 1908: 195-204, 2005.
- 35. Kweon, Young-Jun and Kara Kockelman. "Safety Effects of Speed Limit Changes: Use of Panel Models, Including Speed, Use, and Design Variables." *Transportation Research Record No. 1908*: 148-158, 2005.
- 36. Hakimi, Shadi and Kara Kockelman. "Right-of-Way Acquisition and Property Condemnation: a Comparison of U.S. State Laws." *Journal of the Transportation Research Forum* 44 (3):45-58, 2005.
- 37. Gupta, Surabhi, Sukumar Kalmanje, and Kara Kockelman. "Road Pricing Simulations: Traffic, Land Use and Welfare Impacts for Austin, Texas." *Transportation Planning & Technology* 29 (1):1-23, 2006.
- 38. Zhao, Yong and Kara Kockelman. "On-Line Marginal-Cost Pricing across Networks: Incorporating Heterogeneous Users and Stochastic Equilibria." *Transportation Research* 40B (5):424-435, 2006.
- 39. Ruiz-Juri, Natalia and Kara Kockelman. "Evaluation of the Trans-Texas Corridor Proposal: Application and Enhancements of the Random-Utility-Based Multiregional Input-Output Model." *Journal of Transportation Engineering* 132 (7):531-539, 2006.
- 40. Podgorski, Kaethe and Kara Kockelman. "Public Perception of Toll Roads: A Survey of the Texas Perspective." *Transportation Research* 40A: 888-902, December 2006.
- 41. Bina, Michelle, Valdemar Warburg, and Kara Kockelman. "Location Choice vis-à-vis Transportation: The Case of Apartment Dwellers." *Transportation Research Record No.1977*: 93-102, 2006.
- 42. Wang, Xiaokun and Kara Kockelman. "Tracking Land Cover Change in a Mixed Logit Model: Recognizing Temporal and Spatial Effects." *Transportation Research Record No. 1977:*112-120, 2006.
- 43. Ma, Jianming, Kara Kockelman, and Paul Damien. "Bayesian Multivariate Poisson Regression for Models of Injury Count, by Severity." *Transportation Research Record No. 1950*:24-34, 2006.
- 44. Kweon, Young-Jun and Kara Kockelman. "Driver Attitudes and Choices: Speed Limits, Speed Choices, Seatbelt Use." *Journal of the Transportation Research Forum* 45 (3):39-56, 2006.
- 45. Wang, Xiaokun and Kara Kockelman. "Specification and Estimation of a Spatially and Temporally Autocorrelated Seemingly Unrelated Regression Model: Application to Crash Rates in China." *Transportation* 34 (3):281-300, 2007.
- 46. Ma, Jianming and Kara Kockelman. "Freeway Speeds and Speed Variations preceding Crashes, within and across Lanes." *Journal of Transportation Research Forum* 46 (1):43-61, 2007.
- 47. Lemp, Jason, Laura McWethy, and Kara Kockelman "From Aggregate Methods to Microsimulation: Assessing the Benefits of Microscopic Activity-Based Models of Travel Demand." *Transportation Research Record No. 1994*: 80-88, 2007.
- 48. Gulipalli, Pradeep and Kara Kockelman. "Credit-Based Congestion Pricing: A Dallas-Fort Worth Application." *Transport Policy* 15 (1):23-32, 2008.
- 49. Zhou, Bin (Brenda) and Kara Kockelman. "Neighborhood Impacts on Land Use Change: A Multinomial Logit Model of Spatial Relationships." *Annals of Regional Science*, 42 (2):321-340, April 2008.
- 50. Ma, Jianming, Kara Kockelman and Paul Damien. "A Multivariate Poisson-Lognormal Regression Model for Prediction of Crash Counts by Severity, Using Bayesian Methods." *Accident Analysis and Prevention*, 40 (3):964–975, 2008.
- 51. Lemp, Jason, Brenda Zhou, Kara Kockelman, and Barbara Parmenter. "Visioning vs. Modeling: Analyzing the Land Use-Transportation Futures of Urban Regions." *Journal of Urban Planning and Development*, 134 (3):97-109, 2008.
- 52. Huang, Tian and Kara Kockelman. "The Introduction of Dynamic Features in a Random-Utility-Based Multiregional Input-Output Model of Trade, Production, and Location Choice." *Journal of the Transportation Research Forum*, 47 (1):23-42, 2008.
- 53. Kumar, Saurabh and Kara Kockelman. "Tracking the Size, Location and Interactions of Businesses: Microsimulation of Firm Behavior in Austin, Texas." *Transportation Research Record No.* 2077: 113-121, 2008.

- 54. Zhou, Brenda and Kara Kockelman. "Microsimulation of Residential Land Development and Household Location Choices: Bidding for Land in Austin, Texas." *Transportation Research Record No.* 2077: 106-112, 2008.
- 55. Zhou, Brenda and Kara Kockelman. "Self-Selection in Home Choice: Use of Treatment Effects in Evaluating the Relationship Between the Built Environment and Travel Behavior." *Transportation Research Record No.* 2077: 54–61, 2008.
- 56. Stopher, Peter R, Kara Kockelman, Stephen Greaves, and Eoin Clifford. "Reducing Burden and Sample Sizes in Multiday Household Travel Surveys." *Transportation Research Record No.* 2064:12-18, 2008.
- 57. Gulipalli, Pradeep, Sukumar Kalmanje, and Kara Kockelman. "Credit-Based Congestion Pricing: Expert Expectations and Guidelines for Application." *Journal of the Transportation Research Forum*, 47 (2):5-20, 2008.
- 58. Karoonsoontawong, Ampol, Satish Ukkusuri, S. Travis Waller and Kara Kockelman. "A Simulation-based Approximation Algorithm for Dynamic Marginal Cost Pricing." *Journal of the Transportation Research Forum* 47(4):81-99, 2008.
- 59. Kockelman, Kara, Kaethe Podgorski, Michelle Bina and Shashank Gadda. "Public Perceptions of Pricing Existing Roads and Other Transportation Policies: The Texas Perspective." *Journal of the Transportation Research Forum*, 48 (3):19-38, 2009.
- 60. Zhou, Brenda and Kara Kockelman. "Predicting the Distribution of Households and Employment: A Seemingly Unrelated Regression Model with Two Spatial Processes." *Journal of Transport Geography* 17 (5):369-376, 2009.
- 61. Lemp, Jason and Kara Kockelman. "Quantifying the External Costs of Vehicle Use: Evidence from America's Top Selling Light-Duty Models." *Transportation Research* 13D (8):491-504, 2008.
- 62. Wang, Cara and Kara Kockelman. "Forecasting Network Data: Spatial Interpolation of Traffic Counts Using Texas Data." *Transportation Research Record No. 2105*: 100-108, 2009.
- 63. Wang, Xiaokun and Kara Kockelman. "Application of the Dynamic Spatial Ordered Probit Model: Patterns of Land Development Change in Austin, Texas." *Papers in Regional Science*, 88 (2):345-366, 2009.
- 64. Kalmanje, Sukumar and Kara Kockelman. "Variations in Toll Road Impacts: Case Studies from Texas." *Journal of the Transportation Research Forum*, 48(2):5-22, 2009.
- 65. Wang, Xiaokun and Kara Kockelman. "Bayesian Inference for Ordered Response Data with a Dynamic Spatial-Ordered Probit Model." *Journal of Regional Science*, 49 (5):877-913, 2009.
- 66. Gadda, Shashank, Kara Kockelman and Paul Damien. "Continuous Departure Time Models: A Bayesian Approach." *Transportation Research Record No. 2132*: 13-24, 2009.
- 67. Lemp, Jason and Kara Kockelman. "Understanding and Accommodating Risk and Uncertainty in Toll Road Projects: A Review of the Literature." *Transportation Research Record No. 2132*: 106-112, 2009.
- 68. Wang, Cara and Kara Kockelman. "Application of the Dynamic Spatial Ordered Probit Model: Patterns of Ozone Concentration in Austin, Texas." *Transportation Research Record No. 2136*:45-56, 2009.
- 69. Zhou, Brenda, Kara Kockelman and Jason Lemp. "Applications of Integrated Transport and Gravity-Based Land Use Models for Policy Analysis." *Transportation Research Record No. 2133*: 123-132, 2009.
- 70. Zhou, Brenda and Kara Kockelman. "Lessons Learned in Developing and Applying Land Use Model Systems: A Parcel-based Example." *Transportation Research Record No. 2133*: 75-82, 2009.
  71. Lemp, Jason and Kara Kockelman. "Anticipating Welfare Impacts via Travel Demand Forecasting
- 71. Lemp, Jason and Kara Kockelman. "Anticipating Welfare Impacts via Travel Demand Forecasting Models: Comparison of Aggregate and Activity-Based Approaches for the Austin, Texas Region." *Transportation Research Record No. 2133*:11-22, 2009.
- 72. Boyles, Steve, Kara Kockelman, and S. Travis Waller. "Congestion Pricing under Operational, Supply-Side Uncertainty." *Transportation Research Part C* 18(4):519-535, 2010.
- 73. Lemp, Jason, Kara Kockelman and Paul Damien. "The Continuous Cross-Nested Logit Model: Formulation and Application for Departure Time Choice." *Transportation Research Part B* 44 (5): 646-661, 2010.
- 74. Shively, Thomas, Kara Kockelman and Paul Damien. "A Bayesian Semi-parametric Model to Estimate Relationships Between Crash Counts and Roadway Characteristics." *Transportation Research Part B*

- 44 (5):699-715, 2010.
- 75. Ng, ManWo, Kara Kockelman and S. Travis Waller. "Relaxing the Multivariate Normality Assumption in the Simulation of Transportation System Dependencies." *Transportation Letters: The International Journal of Transportation Research*, Vol. 2 (2):63-74, April 2010.
- 76. McDonald- Buller, Elena, Alba Webb, Kara Kockelman and Brenda Zhou. "Effects of Transportation and Land Use Policies on Air Quality: A Case Study in Austin, TX." *Transportation Research Record No. 2158*: 28-35, 2010.
- 77. Lemp, Jason and Kara Kockelman. "Empirical Investigation of the Continuous Logit for Departure Time Choice with Bayesian Methods." *Transportation Research Record No. 2165*:59-68, 2010.
- 78. Whitehead, Charlotte and Kara Kockelman. "Americans' Time Use: A Focus on Women and Child-Rearing via Structural Equations Modeling." *Transportation Research Record No.* 2163:32-44, 2010.
- 79. Xie, Chi and Kara Kockelman. "A Maximum Entropy Method for Subnetwork Origin-Destination Trip Matrix Estimation." *Transportation Research Record No.* 2196: 111-119, 2010.
- 80. Lemp, Jason, Kara Kockelman and Avinash Unnikrishnan. "Analysis of Large Truck Crash Severity using Heteroskedastic Ordered Probit Models." *Accident Analysis and Prevention*, 43 (1):370–380, 2011.
- 81. Musti, Sashank, Katherine Kortum and Kara Kockelman. "Household Energy Use and Travel: Opportunities for Behavioral Change." *Transportation Research Part D* 16 (1):49-56, 2011.
- 82. Kockelman, Kara, Melissa Thompson and Charlotte Whitehead. "Americans' Contributions to Climate Change: Opportunities for Meeting Carbon Targets." *Journal of Urban Planning and Development*, Vol.137 (2): 91-100, 2011.
- 83. Duthie, Jennifer, Avinash Voruganti, Kara Kockelman and S.T. Waller. "Highway Improvement Project Rankings due to Uncertain Model Inputs: Application of Traditional Transportation and Land Use Models." *Journal of Urban Planning and Development*, Vol. 136 (4):294-302, 2010.
- 84. Zhou, Brenda, and Kara Kockelman. "Opportunities for and Impacts of Carsharing: A Survey of the Austin, Texas Market." *International Journal of Sustainable Transportation* 5 (3): 135-152, 2011.
- 85. Paul, Binny, Kara Kockelman and Sashank Musti. "Evolution of the Light-Duty Vehicle Fleet: Anticipating Adoption of Plug-In Hybrid Electric Vehicles and Greenhouse Gas Emissions Across the U.S. Fleet." *Transportation Research Record No.* 2252:107-117, 2011.
- 86. Wang, YiYi, Kara Kockelman and Cara Wang. "Anticipation of Land Use Change through Use of Geographically Weighted Regression Models for Discrete Response." *Transportation Research Record No.* 2245: 111-123, 2011.
- 87. Zhou, Brenda and Kara Kockelman. "Change in Land Use through Microsimulation of Market Dynamics: Agent-based Model of Land Development and Locator Bidding in Austin, Texas." *Transportation Research Record No.* 2255: 125-136, 2011.
- 88. Kakaraparthi, Siva and Kara Kockelman. "Application of UrbanSim to the Austin, Texas Region: Integrated-Model Forecasts for the Year 2030." *Journal of Urban Planning and Development*, Vol. 137 (3):238-247, 2011.
- 89. Xie, Chi, S. Travis Waller and Kara Kockelman. "Intersection Origin-Destination Flow Optimization Problem for Evacuation-Network Design." *Transportation Research Record No.* 2234: 105-115, 2011.
- 90. Xie, Chi, Kara Kockelman and S. Travis Waller. "A Maximum Entropy-Least Squares Estimator for Elastic Origin-Destination Trip Matrix Estimation." *Transportation Research Part B* 45(9):1465-1482, 2011.
- 91. Musti, Sashank, and Kara Kockelman. "Evolution of the Household Vehicle Fleet: Anticipating Fleet Composition, PHEV Adoption and GHG Emissions in Austin, Texas." *Transportation Research Part A*, 45 (8):707-720, 2011.
- 92. Kockelman, Kara and Jason Lemp. "Anticipating New-Highway Impacts: Opportunities for Welfare Analysis and Credit-Based Congestion Pricing" *Transportation Research Part A*, 45 (8):825-838, 2011.
- 93. Lemp, Jason, Kara Kockelman and Paul Damien. "A Bivariate Multinomial Probit Model for Trip Scheduling: Bayesian Analysis of the Work Tour." *Transportation Science* http://transci.journal.informs.org/content/early/2012/02/08/trsc.1110.0397.full.pdf+html, 2011.

- 94. Caldas, C., Z. Zhang, K. Kockelman, K. Persad, R. Al Halabi and E. Kincaid. "Development of Best Practices for Right-of-Way Valuations and Negotiations in Transportation Projects." *Journal of the Transportation Research Forum*, 50 (3):23-42, 2011.
- 95. Zhao, Yong, Kara Kockelman and Anders Karlstrom. "Welfare Calculations in Discrete Choice Settings: The Role of Error Term Correlation." *Transport Policy 19* (1):76-84, 2012.
- 96. Lemp, Jason and Kara Kockelman. "Strategic Sampling for Large Choice Sets in Estimation and Application." *Transportation Research Part A*, 46 (2012):602-613, 2012.
- 97. Tuttle, David P. and Kara Kockelman. "Electrified Vehicle Technology Trends, Infrastructure Implications and Cost Comparisons." Forthcoming in the *Journal of the Transportation Research Forum*, 2012.
- 98. Chen, T. Donna and Kara Kockelman. "The Roles of Vehicle Footprint, Height and Weight in Crash Outcomes: Application of a Heteroscedastic Ordered Probit Model." Forthcoming in *Transportation Research Record*.
- 99. Du, Xiaochuan and Kara Kockelman. "Tracking Transportation and Industrial Production Across a Nation: Application of the Rubmrio Model for U.S. Trades." Forthcoming in *Transportation Research Record*.
- 100. Fagnant, Dan and Kara Kockelman. "Transportation Project Outcomes Under Uncertainty: An Examination of Benefit-Cost Ratios and Other Impacts." Forthcoming in *Transportation Research Record*.
- 101. Xie, Chi and Kara Kockelman. "A Two-stage Equilibrium Travel Demand Model for Sketch Planning." Forthcoming in *Transportation Research Record*.
- 102. Khan, Mobashwir and Kara Kockelman. "Predicting the Market Potential of Plug-In Electric Vehicles Using Multiday GPS Data." Forthcoming in *Energy Policy*.
- 103. Wang, Cara, Kara Kockelman and Jason Lemp. "The Dynamic Spatial Multinomial Probit Model: Analysis of Land Use Change Using Parcel-Level Data." Forthcoming in the *Journal of Transport Geography*.

## **Submissions Currently under Review**

- 104. Tirumalachetty, Sumala and Kara Kockelman. "Forecasting Greenhouse Gas Emissions from Urban Regions: Microsimulation of Land Use and Transport Patterns in Austin, Texas." Submitted to the *Journal of Transport Geography*.
- 105. Selby, Brent and Kara Kockelman. "Spatial Prediction of AADT in Unmeasured Locations by Universal Kriging." Submitted to the *Journal of Transport Geography*
- 106. Xiong, Xiaoxia and Kara Kockelman. "The Cost of Right-of-Way Acquisition: Recognizing the Impact of Condemnation via a Switching Regression Model." Submitted to *Transportation Research Record*.
- 107. Fagnant, Daniel, Kara Kockelman and Chi Xie. "Anticipating Roadway Expansion & Tolling Impacts: A Toolkit for Abstracted Networks." To be submitted to *Transportation*.
- 108. Bomberg, Matthew, Kara Kockelman, and Melissa Thompson. "GHG Emissions Control Options: Assessing Transportation & Electricity Generation Technologies & Policies to Stabilize Climate Change." Submitted to the *International Journal of Energy Science*,
- 109. Selby, Brent and Kara Kockelman. "Microsimulating Automobile Markets: Evolution of Vehicle Holdings and Vehicle-Pricing Dynamics." Under final review for publication in *Journal of the Transportation Research Forum*.
- 110. Wang, Yiyi, Kara Kockelman and Xiaokun (Cara) Wang. "Understanding Spatial Filtering for Analysis of Land Use Data Sets." Submitted to the *Journal of Transport Geography*.
- 111. Wang, Yiyi, Kara Kockelman and Xiaokun (Cara) Wang. "The Impact of Weight Matrices on Parameter Estimations and Inference: A Case Study of Binary Response Using Land Use Data." Submitted to the *Journal of Transportation and Land Use*.

#### **BOOK CHAPTERS & BOOK REVIEWS**

## **Book Chapters**

- 1. Jara-Díaz, Sergio R., and Kara Kockelman. "Microeconomic Perspectives on Travel Behavior and Valuation Research." Workshop Report for the International Association of Travel Behavior Research conference of 2000, Published in *The Leading Edge of Behavioral Transport Research*, D. Hensher (Ed.), 2002: 279-287, Pergamon Press.
- 2. Kockelman, Kara. "Traffic Congestion." Published as Chapter 22 in the *Transportation Engineers Handbook*, McGraw Hill, January 2004.
- 3. Ukkusuri, Satish, Ampol Karoonsoontawong, S. Travis Waller and Kara Kockelman. "Congestion Pricing Technologies: A Comparative Evaluation." Published as Chapter 4 in *New Transportation Research Progress*, Filip N. Gustavsson (Ed.) 2008: 121-142, Nova Science Publishers.
- 4. Wang, Xiaokun and Kara Kockelman. "Maximum Simulated Likelihood Estimation with Correlated Observations: A Comparison of Simulation Techniques." Published as Chapter 8 in *Transportation Statistics*, Brian Sloboda (Ed.) 2009: 173-189, JD Ross Publications.
- 5. Kockelman, Kara, Michael Browne and Jacques Leonardi. "The Acquisition of Long-Distance Freight Data: Synthesis of a Workshop." Chapter 18 in Bonnel, P., M. Lee-Gosselin, J. Zmud and J.-L. Madre (eds.) *Transport Survey Methods: Keeping Up with a Changing World*, 2009, Emerald Group Publishing, U.K.
- 6. Bina, Michelle and Kara Kockelman. "Location Choice vis-à-vis Transportation: The Case of Recent Home Buyers." Published as Chapter 28 in *The Expanding Sphere of Travel Behaviour Research*, Kitamura, R. and T. Yoshii (Eds.) 2009:597-619, Emerald Group Publishing, U.K. .
- 7. Kockelman, Kara. "Traffic Congestion." Published as Chapter 3 in the *Handbook of Transportation Engineering 2<sup>nd</sup> Edition, Volume II*, 2011, McGraw Hill.
- 8. Kockelman, Kara and Bin (Brenda) Zhou. "Transportation and Land Use." Published as Chapter 8 in the *Handbook of Transportation Engineering 2<sup>nd</sup> Edition, Volume I,* 2011, McGraw Hill.
- 9. Bomberg, Matthew and Kara Kockelman. "Traveler Response to the 2005 Gas Price Spike." Published as Chapter 3 in *Household Energy: Economics, Consumption and Efficiency*, B. Mendez and J. Pena (Eds) 2011, NOVA Science Publishers Inc.
- 10. Tirumalachetty, Sumala and Kara Kockelman. "The Welfare Implications of Carbon Taxes and Carbon Caps: A Look at U.S. Households." Published as Chapter 4 in *Household Energy: Economics, Consumption and Efficiency*, B. Mendez and J. Pena (Eds) 2011, NOVA Science Publishers Inc.

## **Book and Report Reviews**

- 1. Review of D. Neimeier and J. Utt's Prospectus for *Statistics for Engineers*, for Duxbury Press. Review of R.H.M. Emmerink's book *Information and Pricing in Road Transportation*, for *Papers in Regional Science*, 1999, Volume 78: 333-335.
- 3. Review of Gärling et al.'s (eds.) book *Theoretical Foundations of Travel Choice Modeling*, for *Transportation*, 1999. Volume 4: 435.
- 4. Review of K.J. Button and E.T. Verhoef's (eds.) book *Road Pricing, Traffic Congestion and the Environment*, for *Journal of Regional Science*, August 2000 issue.
- 5. Review of D.L. Greene et al. (eds.) book *The Full Costs and Benefits of Transportation: Contributions to Theory, Method, and Measurement,* for *Transportation Science* 34 (4), November 2003.
- 6. Review of Ennio Cascetta's *Transportation Systems Analysis: Models and Applications* textbook for Kluwer/Springer Publishing Company, September 2007.
- 7. Review of Greene & Plotkin's *Reducing Greenhouse Gas Emissions from U.S. Transportation* report for the Pew Center on Global Climate Change, July 2010.
- 8. Review of T. Wenzel's statistical analysis of NHTSA's *Effects of Vehicle Mass & Footprint Reduction on Safety* report, for the US Environmental Protection Agency, January 2011.

#### EDITORIAL BOARD ASSIGNMENTS

Member, Editorial Advisory Board, *Transportation Research Part B* (including co-editorship of June 2010 special issue on Bayesian Methods), 2001-Present

Associate Editor, Journal of Regional Science, June 2004-Present

Member, Editorial Board, Papers in Regional Science, February 2005-Present

Member, Editorial Board, UT's Undergraduate Research Journal, September 2005-2009

Member, Editorial Advisory Board, Journal of Transport and Land Use, May 2007-Present

Member, Editorial Review Board, International Regional Science Review, 2009-2012

Member, Editorial Board, Economics of Transportation, July 2011-Present

#### UNIVERSITY COMMITTEE ASSIGNMENTS

University -	Member, University Shuttle Committee	1998-2004
	Member, Search Committee for Department of Community &	2003
	Regional Planning	
	Member, Research Internship Selection Committee	2007-2009
School -	Member, School of Engineering Technical Communication Committe	1999-2000
	Member, Hocott Award Selection Committee	2007-2010
Departmental -	Member, Undergraduate Experience Committee	1998-2001
_	Member, Graduate Curricula and Policies Committee	1999-2000
	Graduate Recruiter for Transportation	2001-2002
	Member, Graduate Fellowships, Financial Aid & Recruiting Committ	2001-2002
	Member, Computer Use & Policies Committee	2001-2003
	Department Liaison to University Libraries	2001-Present
	Chair, Information Technology Committee	2003-2009
	Member, Awards Committee	2004-2006
	Member, ABET PO3 Subcommittee	2009-2010
	Member, Advisory Committee (Transportation Area Coordinator)	2009-Present
	Member, Outreach Committee	2009-2010
	Member, Curriculum Committee	2010-2011
	Member, Search Committee for Transportation Faculty Position	2010-2011

### PROFESSIONAL SERVICE: COMMITTEE ASSIGNMENTS

Member, Subcommittee on Integrated Transportation and Land Use Modeling, Transportation Research Board (TRB), 2001-Present.

Member, Committee on Transportation and Land Development, Transportation Research Board (TRB), 1999-2011.

Member, Committee on Traveler Behavior and Values, Transportation Research Board (TRB), 2002-2005.

Member, Committee on Travel Survey Methods, Transportation Research Board (TRB), 2002-2007.

Chair, Committee on Travel Survey Methods, Transportation Research Board (TRB ABJ40), 2007-2010.

Member, Committee on Statistical Methods, Transportation Research Board, (TRB ABJ80), 2007- Present.

Member, "Providing Transit Options for Older Americans" Project Panel, National Research Council's

Transportation Research Board (TRB) Transit Cooperative Research Program (TCRP), 1999-2001.

Member, "Statistical and Methodological Standards for Metropolitan Travel Surveys" Project Panel, National Research Council's Transportation Research Board (TRB), National Cooperative Highway Research Program (NCHRP), 2002-2006.

Member, "Using American Community Survey Data for Transportation Planning" Project Panel, National Research Council's Transportation Research Board (TRB), National Cooperative Highway Research Program (NCHRP), 2002-2007.

Panelist, National Expert Panel for (Portland, Oregon's) MetroScope model, 2001.

- Panelist, USDOT's Office of Transportation Policy, Expert Forum on Modeling Pricing in the Planning Process, Alexandria, VA, November 14 & 15, 2005.
- Panelist, National Science Foundation's Proposal Review Panels, Fall 2001, Spring 2003, Fall 2005, Spring 2006, Fall 2006 and Fall 2009.
- Member, Search Committee for the Department of Community & Regional Planning, The University of Texas, Austin, Spring 2003.
- Member, Conference Planning Committee, 50<sup>th</sup>, 51<sup>st</sup>, 52<sup>nd</sup>, 53<sup>rd</sup>, 54<sup>th</sup>, 55<sup>th</sup>, 56<sup>th</sup>, 57<sup>th</sup> and 58<sup>th</sup> Annual North American Meetings of the Regional Science Association International, November 2003 through 2011 (Philadelphia, Puerto Rico, Las Vegas, Toronto, Savannah, Brooklyn, San Francisco, Denver and Miami).
- Member, Nominations Committee of the North American Regional Science Council, 2005-2009.
- Councilor, North American Regional Science Council, January 2006 through January 2009.
- Judge, 2nd International Association of Travel Behavior Research Lifetime Achievement Award Panel, August 2006.
- Member, National Research Council Committee for the Study on Relationships Among Development Patterns, VMT, and Energy Conservation, 2007-2009.
- Member, RAND Corporation's Panel on Transportation and Climate Change, Washington, DC, June 2008.
- Member, Advisory Council on Transportation Statistics (ACTS), Federal advisory committee for the Bureau of Transportation Statistics Research and Innovative Technology Administration (RITA), U.S. Department of Transportation, 2010- present.
- Member, Executive Committee, UT Austin & Texas A&M, NSF-sponsored Plug-in Electric Vehicle Industry-University Research Center (IURC), 2010-Present.
- Member, Faculty team for NSF Integrative Graduate Education and Research Training (IGERT) program at UT Austin, to address sustainable grid integration of distributed and renewable energy systems, 2010-Present.
- Vice Chair, Organizing Committee, University of Texas/Texas A&M University PHEV/EBV I/U Research Center workshop, College Station, TX, October 20, 2010.
- Member, Committee on Transportation Economics, Transportation Research Board (TRB), April 2011–Present.
- Member, American Society of Civil Engineers' Society Awards Committee, October 2011 September 2013.
- Member, Inaugural Board of the World Society for Transport and Land Use Research, October 2011 2017. Member, Scientific Committee for International Association of Travel Behavior Research Conference, 2012.

## OTHER PROFESSIONAL SERVICE

- Outside Reviewer for Papers submitted to various journals, including: Transportation Research (Parts A, B, C & D), Transportation Science, Transportation Planning & Technology, ASCE's Journal of Transportation Engineering, Journal of the American Planning Association, International Journal of Operations and Quantitative Management, Annals of Regional Science, Journal of Regional Science, Transport Policy, J of Transport Geography, Journal of the Transportation Research Forum, J of Regional Science, Papers in Regional Science, Journal of Planning Literature, Urban Studies, Accident Analysis & Prevention, Geographical Analysis, Environment & Planning, Journal of Industrial Ecology, Energy Policy, and Computers, Environment and Urban Systems.
- Outside Reviewer for Papers submitted to the following conferences & conference committees: numerous Transportation Research Board (TRB) Committees (e.g., Travel Behavior Modeling; Transportation & Land Development; Traffic Flow Theory and Characteristics; Passenger Travel Demand Forecasting; Travel Survey Methods; Transportation Network Modeling; Economics; Congestion Pricing; Pedestrians; Safety Data, Analysis and Evaluation; Taxation and Finance; and (Subcommittee on) Integrated Transportation and Land Use Modeling); World Conference on Transportation Research; International Symposium on Transportation and Traffic Theory; World Conference on Intelligent Transportation Systems; and many others; 1997-Present.
- Outside Reviewer for Proposals submitted to the following agencies: National Science Foundation's Division of Civil, Mechanical and Manufacturing Innovation (CMMI) and Geography and Spatial Sciences (GSS) Program, University of California Transportation Center (UCTC), U.S. Environmental Protection Agency

(EPA), Hong Kong's CERG System of Research Grants Council, U.S. Army Corps of Engineer Research and Development Center (ERDC), 2003-Present.

U.T. Women in Engineering Program (WEP), Active Participant, 1998-Present.

Advisor to the Urban Issues Program at U.T., Austin, TX, 1999-2003.

Fireside Chat Host to U.T. Undergraduates at my Home, March 1999, March & April 2000, April 2002, April 2003 and hosted SWE luncheon at a local park, April 2007.

Advisor to Society of Women Engineers, U.T. Chapter, March 1999-2003 (& Informal Advisor, November 1998-March 1999).

Organized & sponsored Peace Corps information meeting for U.T. Students featuring 6 speakers delivering a formal presentation regarding Peace Corps service, U.T. campus, Austin, TX, Spring 1999 and 2003.

Cluster Facilitator at U.T.'s week-long LeaderShape-Texas Institute, May 1999 and August 2000.

Advising Engineer for Careers in Engineering for Women (CEW) Summer Program, June 1999.

Assisted U.T.'s Women in Engineering Program during two screening sessions for applicants to Careers in Engineering for Women (CEW) summer program, April 9 & 10, 2000.

Volunteer for Habitat for Humanity, Austin, TX, May and June 2000.

Faculty Mentor, Freshman Engineering Class, U.T. College of Engineering, Fall 2001, 2002 and 2003.

Organized & sponsored first-ever Friday Forum for Future Female Faculty ("F6"), for doctoral students and faculty in the Colleges of Engineering and Natural Science, Austin, TX, August 2002. Organized a second, similar event in October 2003.

Panelist, MIT's Technology Review magazine's TR100 (Top 100 Innovators) panel of judges, January 2003.

Panelist for Leadership Austin's Roundtable Discussion titled "Rail and Roads and the Future of Austin" in Austin, Texas on September 23, 2004 (Co-panelists were Austin Mayor W. Wynn, County Commissioner G. Daugherty, and DART Exec. VP Doug Allen).

Advisor to the U.T. Chapter of Engineers Without Borders, August 2005 – 2009.

Advisor to the El Paso, Texas Metropolitan Planning Organization, April 2006-Present.

Founding Member, Austin Carshare (www.austincarshare.org) July 2006.

Chaired Road Pricing Policy Session for International Association of Travel Behavior Research Conference, Kyoto, Japan, August 18, 2006.

Overseas PhD Thesis Examiner for Singapore's Nanyang Technological University (School of Civil and Environmental Engineering), August 2007.

Adjunct Faculty Member of U.T.'s Division of Statistics and Scientific Computation, 2007-Present.

Presented to UT Austin assistant faculty (pre-tenure group) on "Time Management for a Ticking Tenure Clock", sponsored by UT's Work Life Services Program, Austin, TX, March 19, 2008.

Chair of 8-hour workshop, titled "The Acquisition of Long Distance Freight Data" for the 8th International Conference on Survey Methods in Transport, Annecy, France, May 28, 2008.

Delivered 2 lectures for new CAEE course titled CE 397: Selected Topics in Sustainability (team taught with other faculty), Spring 2009.

CAEE Faculty Mentor, providing a support network for four first- and second-year CAEE students, U.T. Austin, 2009.

Organized and conducted a 1.5-day workshop on Integrated Models for the North Central Texas Council of Governments, facilitating a 30-member panel of national and international experts in the field of land-use modeling, Arlington, TX, July 2009.

Chaired 2-day Meeting of Congestion Pricing Model Expert Panel for the Southern California Association of Governments (SCAG), facilitating a panel of national and international experts in the field of congestion pricing, Los Angeles, California, August 2009.

Moderator, WTS Professional Development Seminar Panel titled "Rail Opportunities, Perspectives and Trends," Austin, TX, September 9, 2009.

Member, Expert Panel, FHWA Workshop on Multimodal Inter-Regional Passenger Travel Demand, University of Maryland, January 14, 2010.

Coordinator and Editor of the online (and wiki-editable) *Travel Survey Manual*, a product of the Transportation Research Board's Travel Survey Methods Committee; available at http://www.travelsurveymethods.org/, 2009-2010.

- Co-Editor of *Transportation Research Part B* Volume 44, Issue 5, special issue on Bayesian Methods, coordinating the efforts and manuscripts of 7 authors, with Dr. Paul Damien, June 2010.
- Organized User Workshop titled "Comprehensive Evaluation of Competing Projects: A Toolkit for Sketch Planning", for presentation of TxDOT project 0-6235's project evaluation toolkit, as part of the 2010 Texas Department of Transportation Planning Conference, Lost Pines, Texas, June 30, 2010.
- Member, Transportation Electrification Panel, Sponsored by Indiana University's School of Public and Environmental Affairs, producing report "Plug-in Electric Vehicles: A Practical Plan for Progress" (available at http://www.indiana.edu/~spea/pubs/TEP\_combined.pdf), 2010-2011.
- Faculty Advisor to U.T. Chapter of the Women's Transportation Seminar (WTS) Heart of Texas Chapter, March 2011-Present.
- Member, Academic Job Search & Preparation Seminar Committee for Cockrell School of Engineering Graduate Students, sponsored by the Graduate Engineering Council, University of Texas, March, 2011.
- Organized User Workshop titled "A Toolkit to Evaluate (and Compare) the Benefits of Operational Improvements and Capacity Additions", for TxDOT and Texas MPO personnel, July 11, 2011.
- Member of External Advisory Panel for preparation of the 19th International Symposium on Transportation and Traffic Theory (ISTTT 19), Berkeley, California, July 18-20, 2011.
- Judge, Cockrell School of Engineering, 2nd Annual Undergraduate Research Poster Exhibition, April 11, 2012.
- Member, Faculty Panel, Cockrell School of Engineering Undergraduate Research Forum, April 12, 2012.

## OTHER PRESENTATIONS AND PROFESSIONAL HIGHLIGHTS

- Featured Speaker at U.T.'s Student Chapter of the Institute of Transportation Engineer's Meeting, September 29, 1998.
- Attended and presented at U.T. College of Engineering's Austin Recruitment Dinner (for top high school students), March 29, 2001.
- Attended Texas Women Faculty Forum, Austin, TX March 30-31, 2001.
- Invited participant, National Academy of Science's Frontiers of Engineering, University of California, Irvine, CA, March 1-3, 2002.
- Attended Career Success Workshop for Faculty Women in Engineering and Natural Sciences sponsored by The University of Texas at Austin, Guadalupe River Ranch, Boerne, TX, April 5-7, 2002.
- Panelist, UT Austin's Air and Waste Management Association's "Environmentally Incorrect" panel discussion, The University of Texas, Austin, TX, April 24, 2002.
- Attended 3<sup>rd</sup> Oregon Symposium on Integrated Land Use and Transport Models, Portland, OR, July 23-25, 2002. Invited presentation titled "Congestion 101" for UCLA Symposium titled Tackling Traffic Congestion, Lake Arrowhead, CA, October 2002.
- Presented "Improving Teaching under a Heavy Research Load" at U.T. College of Engineering's New Faculty Seminar, April 16, 2003.
- Invited presenter for the USDOT-UCLA Tackling Traffic Congestion: Issues and Options Symposium to present original lecture titled "Congestion Fundamentals: Supply & Demand, Metrics & Solutions," Washington, DC, June 26-27, 2003.
- Presented "Bringing the Splendor of Statistics to All Students: Animations, Adaptive Problem Sets, & More." Faculty Innovation Seminar, The University of Texas College of Engineering, Austin, TX, May 13, 2004.
- Invited Panelist for "Teaching Your First Course: Balancing Teaching and Research." UT Austin's Negotiating the Ideal Faculty Position Workshop for Women (graduate students and post-doctoral fellows) in Engineering, October 21, 2004.
- Attended Sustainability as Security: Engaging Education, Business & Technology, 2005 ESW National Conference, The University of Texas, Austin, TX, October 5-9, 2005.
- Presented "Credit-Based Congestion Pricing (CBCP): Perception & Prediction" for U.C. Berkeley's Fall 2005 Transportation Seminar Series, the University of California, Berkeley, October 31, 2005.

- Presented "Regional Development, Population Trend, & Technology Change Impacts on Future Air Quality: A Case Study for Austin, Texas" as part of a progress review meeting for the U.S. Environmental Protection Agency Star Project held in Washington, DC, November 7, 2005.
- Presented "The Safety Impacts of Raised Speed Limits on High-Speed Roads" as part of U.C. Berkeley Traffic Safety Center's Seminar Series, Berkeley, CA, May 31, 2006.
- Panelist for UT's 2007 New Faculty Teaching, Learning & Orientation Seminar, as part of session titled "Planning for Promotion and Tenure Today," Austin, TX, August 23, 2007.
- Presented "Lessons Learned in Developing and Applying Land Use Model Systems" for the Area Metropolitan Planning Organization (AMPO) Workshop on integrating transportation and land use, Austin, TX, November 17, 2008.
- Invited presentation titled "Incorporating Environment and Equity into Evaluations of Land Use Transportation Systems" for UCLA Symposium titled "Transportation Land Use -Environment Connection," Lake Arrowhead, CA, October 18-20, 2009.
- Invited presentation titled "To Drive, or Not to Drive? The Relative Costs of Cars & Light-Duty Trucks" for U.T.'s Women in Engineering Program's Summer Camp event, Communities, Environment & Transportation, June 10, 2010.
- Invited lecture titled "Environmental Impacts of Land Use and Transportation Policies" for Europe's Kuhmo-Nectar Summer School in Transportation Economics, Valencia, Spain, July 2010.
- Invited to serve on the nation's Nuclear Waste Technical Review Board (for technical oversight of the U.S. Department of Energy's programs to manage, transport, and dispose of commercial and defense nuclear waste). November 2010.
- Invited Presenter, US-China NSF Workshop titled "Pathways Toward Low Carbon Cities: Quantifying Baselines and Interventions", Hong Kong, December 13-14, 2010.
- Attended 2011 Annual Conference of the Academy of Medicine Engineering and Science of Texas (TAMEST), Hyatt Regency, Austin, TX, January 6 -7, 2011.
- Invited panelist, Powering Transportation Panel, at the 2011 UT Energy Forum titled "Fostering Interdisciplinary Collaboration in Energy," Austin, TX, February 3-4, 2011.
- Invited lecture titled "Anticipating and Evaluating the Impacts of Changes to Highway Networks and their Operations" for UCLA's Civil & Environmental Engineering Department's CEE 249 Seminar Series, Los Angeles, CA, June 2, 2011.
- Invited speaker, presentation titled "Urban Planning, Land Use, and Vehicle Technologies to Reduce GHG Emissions in Cities", Sustainable Cities session of the National Academy of Science's EU-US Frontiers of Engineering Symposium, University of California, Irvine, CA, November 2011.

## **INTERVIEWS & MEDIA EVENTS**

Over 120 interviews by members of national, international and local news media (television, radio and print) since 1999. A sample of these is as follows:

- 1. Radio Interview on SUV's, CBS Radio Affiliate, July 1999.
- 2. Television Interview on SUV's, KVUE 24 News, August 1999.
- 3. Interviewed for "Heavy Traffic; No Wonder S.U.V.'s Are Called Light Trucks." *New York Times*, January 16, 2000.
- 4. Interviewed by Curtis Rist, for article "Roll Over, Newton." Discover Magazine, April 2001.
- 5. Interviewed by Paul Mulshine for his column in *The Star Ledger* (New Jersey's largest paper), May 10, 2001.
- 6. Interviewed by Charles Oliver for *Investor's Business Daily*, article on LDT vs. PC use (e.g., occupancies) July 2001.
- 7. Appeared in a documentary film titled "Bike Like You Mean It." Produced and directed by both Rusty Martin & Susan Kirr, featured in the South by Southwest 2002 Film Festival, Austin, TX, March 2002.
- 8. Interviewed by Dick Gordon on "The Connection" radio program for WBUR, Boston and National Public Radio, production titled "Stopping Traffic." May 24, 2002.

- 9. Interviewed for *M2 Presswire*, the world's third-largest electronic press release distribution service and the UK/Europe's largest, regarding research study titled "The Impacts of Bypasses on Small and Medium-Sized Communities: An Econometric Analysis." December 4, 2002.
- 10. Interviewed by Kelly Daniel, *Austin American Statesman*, for article titled "Would you pay to skip past traffic?" Published December 16, 2002.
- 11. Interviewed by Jenee Richie, FOX News Network regarding Managed Lanes on 4 Central Texas Turnpikes aired on FOX national television news, January 3, 2003.
- 12. Research on Credit-Based Congestion Pricing as featured topic for talk show on KLBJ 590am radio talk show hosted by Kenny Rahmeyer, February 23, 2003.
- 13. Interviewed by Gerald Burstyn for article regarding research in *HI International*, July 28, 2003.
- 14. Interviewed by Steven Cuevas for radio feature titled "Toll Roads for Central Texas" for NPR affiliate, KUT radio 90.5, aired November 4, 2003.
- 15. Interviewed by Steve Scheibal, *Austin American Statesman* newspaper, for an article on the land use impacts of toll roads and the Trans-Texas Corridor, December 2004.
- 16. Interviewed by Cathy Booth Thomas, *Time Magazine*, for an article on the Trans-Texas Corridor titled "The Next Wave in Superhighways, or A Big, Fat Texas Boondoggle?" published in the December 6, 2004 edition.
- 17. Interviewed by Andrew Barksdale, the *Fayetteville* (North Carolina) *Observer*, regarding Public Perceptions of Toll Roads project work, August 17, 2005.
- 18. Interviewed by David Talbot for MIT's *Technology Review* on-line Q&A article titled "Stuck in July 4<sup>th</sup> Traffic? Maybe you should Pay More", on June 28, 2006.
- 19. Interviewed by David Talbot for MIT's *Technology Review* on-line article titled "Market Forces vs. Traffic Jams," on Aug 29, 2006.
- 20. Interviewed by Julianna Carpenez, Technology Reporter for Brazil's on-line media group, *Globo* (http://www.globo.com/) regarding GPS vs. RFID usage in toll-tag technology, September 1, 2006.
- 21. Interviewed by *Financial Times*' Michael Schrage for article on Stockholm's congestion pricing experiment & worldwide traffic management experimentation, September 19, 2006.
- 22. Interviewed by *Technology Review's* David Talbot for transportation article titled "Congestion Control" regarding credit-based congestion pricing benefits for Dallas-Ft. Worth, appearing on page 21, December 2006.
- 23. Interviewed by Craig Johnson for March 2007 issue of *Biodiesel Magazine*, regarding article on Minnesota's talk of implementing a mileage tax, January 26, 2007.
- 24. Interviewed by KUT's Matt Largey regarding tolling roadways for revenue, for broadcast on April 4, 2007.
- 25. Interviewed by KUT's Matt Largey for a story on Austin congestion, and whether we can build our way out of it, for broadcast on May 9, 2007.
- 26. Interviewed by *Dallas Observer* writer, Matt Pulley, regarding toll road emissions impacts for a story posted on-line November 2, 2007.
- 27. Interviewed by Fox 7 News' Foti Kallergis regarding SH130 contract clauses on compensation for speed limit changes along SH130 and I35, for broadcast on November 5, 2007.
- 28. Interviewed by UT Public Affairs representative Tim Green regarding credit-based congestion pricing research, for UT home page feature article titled "On the Road ... Again," at http://www.utexas.edu/features/2007/traffic/. Week of November 5, 2007.
- 29. Interviewed by Fox 7 News' Crystal Cotti on Austin's downtown development and impacts on downtown and Austin area traffic with projected influx of 25,000 new residents and retail, for broadcast on November 13, 2007.
- 30. Interviewed by the Associated Press out of Los Angeles, California regarding financial feasibility of toll roads in Orange County, on October 16, 2008.
- 31. Interviewed by Fox 7 News' Crystal Cotti on Austin's proposal to ban the use of non-hands-free cell phones for broadcast on November 3, 2008.
- 32. Quoted in FHWA's *Public Roads* magazine, regarding implications of Credit-Based Congestion Pricing theory, issue published March-April 2009.

- 33. Interviewed by KUT Radio's Mose Buchele, regarding the drop in business travel, and its affect on the U.S. airline industry, broadcast on April 15, 2009.
- 34. Interviewed by David C. Holzman from *Environmental Health Perspectives* (the journal of the National Institute of Environmental Health Sciences) on policies for greenhouse gas emissions, May 2009.
- 35. Interviewed by Avrel Seale, editor of U.T.'s Alumni Magazine *The Alcalde*, for the November/December 2009 issue examining "20 things students might have learned in school years ago that are now considered wrong" to address the fallacy that "More highways relieve traffic congestion," June 2009.
- 36. Interviewed by Phil McKenna, Energy and Environment Correspondent for MIT's *Technology Review Magazine*, regarding co-authorship of the newly released NAS study titled "Driving and the Built Environment: The Effects of Compact Development on Motorized Travel, Energy Use and C02 Emissions", September 2009.
- 37. Interviewed by Austin's NPR affiliate's (KUT's) Mose Buchele for story on toll roads in Austin, and what those may mean for emissions and environmental impacts, broadcast on November 16, 2009.
- 38. Research described in *New York Times*' article titled "Life (and Death) in the Fast Lane", by Eric Morris, regarding speed limits, crash and safety results of NCHRP Report #17-23, April 2, 2010.
- 39. Interviewed by Willy Stern at *The Weekly Standard*, regarding the effectiveness of safety-related regulations on public carriers for personal-travel, May, 13 2010.
- 40. Interviewed by Shivam Purohit for UT's newspaper, *The Daily Texan*, on the Austin Energy installation of 100 200 electric vehicle plug-in stations throughout the city, November 2010.
- 41. Interviewed by Joe Layton for UT's newspaper, *The Daily Texan*, regarding the 2010 Urban Mobility Report ranking Austin as the 36th most congested urban area in the United States, January 2011.
- 42. Interviewed by Birmingham, AL WBHM public radio station's Andrew Yeager regarding research on interstate bypasses and their effect on inter-city business, April 2011.
- 43. Interviewed by Lindsay Patterson, for the Chemical Heritage Foundation's on-line podcast *Episode 124: Our Chemical Landscape: the Suburb Future of the Suburb: Mass Transit in Austin, TX*, found at http://www.chemheritage.org/community/distillations/124-suburb-show.aspx, June 24, 2011.
- 44. Interviewed by Keith Bradsher, Hong Kong Bureau Chief for the *New York Times*, regarding the high-speed train accident in China, July 25, 2011.
- 45. Interviewed by KVUE TV's (Austin's ABC affiliate) Andrew Horansky, on the topic of congestion in Austin; air date, September 27, 2011.
- 46. Authored *UT Know* on-line news, regarding the big question in Transportation. Available at http://www.utexas.edu/know/2011/09/28/big\_question\_kockelman/, September 28, 2011.
- 47. Interviewed by KUT (NPR and Music for Austin, TX) Radio's Matt Largey on the topic of route choices, congestion externalities, and the "price of anarchy" in shortest-path selections, December 1, 2011.
- 48. Interviewed by the *Huffington Post's* Matt Sledge for a story on the San Diego South Bay Expressway bankruptcy, December 23, 2011.

#### REFEREED CONFERENCE PROCEEDINGS

(Each Proceeding is associated with a presentation. Dr. Kockelman presented all papers marked with an asterisk [\*]. Her graduate student co-authors presented all others.)

- 1. Kockelman, Kara. "Travel Behavior as a Function of Accessibility, Land Use Balance, and Land Use Mixing: Evidence from the San Francisco Bay Area." Compendium of the Transportation Research Board's 76th Annual Meeting, Washington, DC, January 1997.\*
- 2. Kockelman, Kara. "The Effects of Location Elements on Home Purchase Prices and Rents: Evidence from the San Francisco Bay Area." Compendium of the Transportation Research Board's 76th Annual Meeting, Washington, DC, January 1997.\*
- 3. Zhao, Yong and Kara Kockelman. "The Propagation of Uncertainty through Travel Demand Models." Compendium, Transportation Research Board's 80th Annual Meeting, Washington, DC, January 2001.

- 4. Kockelman, Kara and Katsuhiko Nakamura. "Congestion Pricing and Roadspace Rationing: An Application to the San Francisco Bay Bridge Corridor." Compendium, Transportation Research Board's 80th Annual Meeting, Washington, DC, January 2001.\*
- 5. Kockelman, Kara and Siva Srinivasan. "The Impacts of Bypasses on Small- and Medium-Sized Communities: An Econometric Analysis." Compendium of the Transportation Research Board's 80th Annual Meeting, Washington, DC, January 2001.\*
- Kockelman, Kara and Young-Jun Kweon. "Driver Injury Severity and Vehicle Type: An Application of Ordered Probit Models." Compendium of the Transportation Research Board's 80th Annual Meeting, Washington, DC, January 2001.
- 7. Ten Siethoff, Brian and Kara Kockelman. "Property Values and Highway Expansions: An Investigation of Timing, Size, Location, and Use Effects." Compendium of the Transportation Research Board's 81st Annual Meeting, Washington, DC, January 2002.
- 8. Kockelman, Kara and Young-Jun Kweon. "Overall Injury Risk to Different Drivers: Combining Exposure, Frequency and Severity Models." Compendium of the Transportation Research Board's 81st Annual Meeting, Washington, DC, January 2002.
- 9. Zhao, Yong and Kara Kockelman. "Household Vehicle Ownership by Vehicle Type: Application of a Multivariate Negative Binomial Model." Compendium of the Transportation Research Board's 81st Annual Meeting, Washington, DC, January 2002.
- 10. Srour, Issam, Kara Kockelman, and Travis Dunn. "Accessibility Indices: Connection to Residential Land Prices and Location Choices." Compendium of the Transportation Research Board's 81st Annual Meeting, Washington, DC, January 2002.
- 11. Kockelman, Kara, Lydia Heard, Young-Jun Kweon, and Thomas W. Rioux. "Sidewalk Cross-Slope Design: Analysis of Accessibility for Persons with Disabilities." Compendium of the Transportation Research Board's 81st Annual Meeting, Washington, DC, January 2002.\*
- 12. Pradhan, Anant and Kara Kockelman. "Uncertainty Propagation in an Integrated Land Use-Transportation Modeling Framework: Output Variation via UrbanSim." Compendium of the Transportation Research Board's 81st Annual Meeting, Washington, DC, January 2002.
- 13. Bhat, Chandra, Susan Handy, Kara Kockelman, Hani Mahmassani, Lisa Weston, Qinglin Chen, and Issam Srour. "Development of Urban Accessibility Index." Compendium of Papers for the 81st Annual Meeting of the Transportation Research Board, Washington DC, January 2002.
- 14. Kockelman, Kara and Sriram Krishnamurthy. "Use of Roy's Identity for Comprehensive Travel Demand Modeling: Application to Austin, TX." Compendium of the Transportation Research Board's 82nd Annual Meeting, Washington, DC, January 12-16, 2003.\*
- 15. Kweon, Young-Jun and Kara Kockelman. "Driver Attitudes and Choices: Seatbelt Use, Speed Limits, Drunk Driving, and Crash Histories." Compendium of the Transportation Research Board's 82nd Annual Meeting, Washington, DC, January 12-16, 2003.
- 16. Krishnamurthy, Sriram and Kara Kockelman. "Propagation of Uncertainty in Transportation-Land Use Models: Investigation of DRAM-EMPAL and UTPP Predictions in Austin, TX." Compendium of the Transportation Research Board's 82nd Annual Meeting, Washington, DC, January 12-16, 2003.
- 17. Zhao, Yong and Kara Kockelman. "Random-Utility-Based Multiregional Input-Output Model: Solution Existence and Uniqueness." Compendium of the Transportation Research Board's 82nd Annual Meeting, Washington, DC, January 12-16, 2003.
- 18. Kockelman, Kara and Sukumar Kalmanje. "Credit-Based Value Pricing of Congested Roadways: Perceptions and Applications in Austin, TX." Proceedings of the International Association for Travel Behavior Research Conference, Lucerne, Switzerland, August 10-14, 2003.\*
- 19. Kalmanje, Sukumar and Kara Kockelman. "Credit-Based Congestion Pricing: Travel, Land Value, & Welfare Impacts." Compendium of the Transportation Research Board's 83rd Annual Meeting, Washington, DC, January 11-15, 2004.
- 20. Kockelman, Kara and Sukumar Kalmanje. "Credit-Based Value Pricing: Policy Proposal and the Public's Response." Compendium of the Transportation Research Board's 83rd Annual Meeting, Washington, DC, January 11-15, 2004.

- 21. Zhao, Yong and Kara Kockelman. "On-Line Marginal-Cost Pricing across Networks with Heterogeneous Users and Stochastic Equilibria." Compendium of the Transportation Research Board's 83rd Annual Meeting, Washington, DC, January 11-15, 2004.
- 22. Frazier, Christopher and Kara Kockelman. "Chaos Theory and Transportation Systems: An Instructive Example." Compendium of the Transportation Research Board's 83rd Annual Meeting, Washington, DC, January 11-15, 2004.
- 23. Heiner, Jared and Kara Kockelman. "The Costs of Right of Way Acquisition: Methods and Models for Estimation." Compendium of the Transportation Research Board's 83rd Annual Meeting, Washington, DC, January 11-15, 2004.
- 24. Kweon, Young-Jun and Kara Kockelman. "Spatially Disaggregate Panel Models of Crash and Injury Counts: The Effect of Speed Limits and Design." Compendium of the Transportation Research Board's 83rd Annual Meeting, Washington, DC, January 11-15, 2004.
- 25. Kockelman, Kara and Jianming Ma. "Freeway Speeds and Speed Variations Preceding Crashes, Within and Across Lanes." Compendium of the Transportation Research Board's 83rd Annual Meeting, Washington, DC, January 11-15, 2004.
- 26. Ma, Jianming and Kara Kockelman. "Anticipating Injury & Death: Controlling for New Variables on Southern California Highways." Compendium of the Transportation Research Board's 83rd Annual Meeting, Washington, DC, January 11-15, 2004.
- 27. Gupta, Surabhi, Sukumar Kalmanje, and Kara Kockelman. "Road Pricing Simulations: Traffic, Land Use and Welfare Impacts for Austin, Texas." Compendium of the Transportation Research Board's 84th Annual Meeting, Washington, DC, January 2005.
- 28. Frazier, Christopher and Kara Kockelman. "Spatial Econometric Models for Panel Data: Incorporating Spatial and Temporal Data." Compendium of the Transportation Research Board's 84th Annual Meeting, Washington, DC, January 2005.\*
- 29. Ruiz Juri, Natalia and Kara Kockelman. "Evaluation of the Trans-Texas Corridor Proposal: Application and Enhancements of the Random-Utility-Based Multiregional Input-Output Model." Compendium of the Transportation Research Board's 84th Annual Meeting, Washington, DC, January 2005.
- 30. Podgorski, Kaethe and Kara Kockelman. "Public Perceptions of Toll Roads: A Survey of the Texas Perspective. Compendium of the Transportation Research Board's 84th Annual Meeting, Washington, DC, January 2005.
- 31. Gulipalli, Pradeep, Sukumar Kalmanje, and Kara Kockelman. "Credit-Based Congestion Pricing: Expert Expectations and Guidelines for Application." Compendium of the Transportation Research Board's 84th Annual Meeting, Washington, DC, January 2005.
- 32. Wang, Xiaokun and Kara Kockelman. "Occupant Injury Severity using a Heteroscedastic Ordered Logit Model: Distinguishing the Effects of Vehicle Weight and Type." Compendium of the Transportation Research Board's 84th Annual Meeting, Washington, DC, January 2005.
- 33. Kweon, Young-Jun and Kara Kockelman. "The Safety Effects of Speed Limit Changes: Use of Panel Models, Including Speed, Use and Design Variables." Compendium of the Transportation Research Board's 84th Annual Meeting, Washington, DC, January 2005.
- 34. Ukkusuri, Satish, Ampol Karoonsoontawong, S. Travis Waller, and Kara Kockelman. "Congestion Pricing Technologies: Synthesis and an Evaluation Framework." Compendium of the Transportation Research Board's 84th Annual Meeting, Washington, DC, January 2005.
- 35. Kockelman, Kara and Yong Zhao. "Toll Predictions, Assignment, and Online Techniques in Marginal Cost Pricing." Compendium of the Specialist Session "Active Road Pricing: Description of Key Problem Areas and their Solutions," Transportation Research Board's 85th Annual Meeting, Washington, DC, January 2006 (invited presentation).\*
- 36. Gulipalli, Pradeep and Kara Kockelman. "Credit-Based Congestion Pricing: A Dallas-Fort Worth Application." Compendium of the Transportation Research Board's 85th Annual Meeting, Washington, DC, January 2006.
- 37. Wang, Xiaokun and Kara Kockelman. "Tracking Land Cover Change in a Mixed Logit Model: Recognizing Temporal and Spatial Effects." Compendium of the Transportation Research Board's 85th Annual Meeting, Washington, DC, January 2006.

- 38. Kockelman, Kara, Kaethe Podgorski, Michelle Bina, and Shashank Gadda. "Public Perceptions of Pricing Existing Roads and Other Transportation Policies: The Texas Perspective." Compendium of the Transportation Research Board's 85th Annual Meeting, Washington, DC, January 2006.
- 39. Ma, Jianming, Kara Kockelman and Paul Damien. "Bayesian Multivariate Poisson Regression for Models of Injury Count, by Severity." Compendium of the Transportation Research Board's 85th Annual Meeting, Washington, DC, January 2006.
- 40. Bina, Michelle, Valdemar Warburg, and Kara Kockelman. "Location Choice vis-à-vis Transportation: The Case of Apartment Dwellers." Compendium of the Transportation Research Board's 85th Annual Meeting, Washington, DC, January 2006.
- 41. Boyles, Stephen, Satish V Ukkusuri, S. Travis Waller, and Kara Kockelman. "A Comparison of Static and Dynamic Traffic Assignment Under Tolls in the Dallas-Fort Worth Region." Compendium of the Transportation Research Board's 85th Annual Meeting, Washington, DC, January 2006.
- 42. Webb, Alba, Shashank Gadda, Kara Kockelman and Elena McDonald-Buller. "Predicting the Relative Impacts of Regional Development Trends on Air Quality" (Extended Abstract #216). Proceedings of the 99th Annual Air and Waste Management Association Conference & Exhibition, New Orleans, Louisiana, June 20-23, 2006.
- 43. Wang, Xiaokun and Kara Kockelman. "Specification and Estimation of a Spatially and Temporally Autocorrelated Seemingly Unrelated Regression Model: Application to Crash Rates in China." Compendium of the Transportation Research Board's 86th Annual Meeting, Washington, DC, January 2007.
- 44. Marks, Alexander F. and Kara Kockelman. "A Cordon Charge for the District of Columbia: A Solution to DC's Fiscal Problems and the Region's Congestion?" Compendium of the Transportation Research Board's 86th Annual Meeting, Washington, DC, January 2007.
- 45. Lemp, Jason, Brenda Zhou, Kara Kockelman, and Barbara Parmenter. "Visioning vs. Modeling: Analyzing the Land Use-Transportation Futures of Urban Regions." Compendium of the Transportation Research Board's 86th Annual Meeting, Washington, DC, January 2007.
- 46. Ma, Jianming, Kara Kockleman, and Paul Damien. "Bayesian Multivariate Poisson-Lognormal Regression for Crash Prediction on Rural Two-Lane Highways." Compendium of the Transportation Research Board's 86th Annual Meeting, Washington, DC, January 2007.
- 47. Bomberg, Matthew and Kara Kockelman. "Traveler Response to the 2005 Gas Price Spike." Compendium of the Transportation Research Board's 86th Annual Meeting, Washington, DC, January 2007.
- 48. Zhou, Brenda and Kara Kockelman. "Predicting the Distribution of Households and Employment: A Seemingly Unrelated Regression Model with Two Spatial Processes." Compendium of the Transportation Research Board's 86th Annual Meeting, Washington, DC, January 2007.
- 49. Gadda, Shashank and Kara Kockelman. "Continuous Departure Time Models: A Bayesian Approach." Compendium of the Transportation Research Board's 86th Annual Meeting, Washington, DC, January 2007.
- 50. Huang, Tian and Kara Kockelman. "The Introduction of Dynamic Features in a Random-Utility-Based Multiregional Input-Output Model of Trade, Production, and Location Choice." Compendium of the Transportation Research Board's 86th Annual Meeting, Washington, DC, January 2007.
- 51. McWethy, Laura, Jason Lemp, and Kara Kockelman "From Aggregate Methods to Microsimulation: Assessing the Benefits of Microscopic Activity-Based Models of Travel Demand." Compendium of the Transportation Research Board's 86th Annual Meeting, Washington, DC, January 2007.
- 52. Gadda, Shashank, Atul Magoon, and Kara Kockelman. "Quantifying the Uncertainty in Annual Average Daily Traffic (AADT) Count Estimates." Presented at The 11th World Conference on Transport Research, Berkeley, CA, June 2007.\*
- 53. Ma, Jianming, Kara Kockleman, and Paul Damien. "Bayesian Multivariate Poisson-Lognormal Regression for Crash Prediction on Rural Two-Lane Highways." Presented at The 11th World Conference on Transport Research, Berkeley, CA, June 2007.

- 54. McWethy, Laura, Jason Lemp, and Kara Kockelman "From Aggregate Methods to Microsimulation: Assessing the Benefits of Microscopic Activity-Based Models of Travel Demand." Presented at The 11th World Conference on Transport Research, Berkeley, CA, June 2007.
- 55. Huang, Tian and Kara Kockelman. "The Introduction of Dynamic Features in a Random-Utility-Based Multiregional Input-Output Model of Trade, Production, and Location Choice." Presented at The 11th World Conference on Transport Research, Berkeley, CA, June 2007.
- 56. Zhou, Brenda and Kara Kockelman. "Microsimulation of Residential Land Development and Household Location Choices: Bidding for Land in Austin, Texas." Presented at The 11th World Conference on Transport Research, Berkeley, CA, June 2007.
- 57. Zhou, Brenda and Kara Kockelman. "Predicting the Distribution of Households and Employment: A Seemingly Unrelated Regression Model with Two Spatial Processes." Presented at The 11th World Conference on Transport Research, Berkeley, CA, June 2007.
- 58. Wang, Xiaokun and Kara Kockelman. "Maximum Simulated Likelihood Estimation with Correlated Observations: A Comparison of Simulation Techniques." Presented at The 11th World Conference on Transport Research, Berkeley, CA, June 2007.\*
- 59. Lemp, Jason, Brenda Zhou, Kara Kockelman and Barbara Parmenter. "Visioning vs. Modeling: Analyzing the Land Use-Transportation Futures of Urban Regions." Presented at The 11th World Conference on Transport Research, Berkeley, CA, June 2007.
- 60. McDonald-Buller, Elena, Jihee Song, Alba Webb, Gary McGaughey, Brenda Zhou, Kara Kockelman, Jason Lemp, Barbara Parmenter, and David Allen. "The Impacts of Urban Development on Anthropogenic and Biogenic Emissions and Air Quality: A Case Study in Austin, Texas." Compendium of the Air & Waste Management Association's Transportation Land-Use, Planning, and Air Quality Conference, Orlando, FL, July 9-11, 2007. (Extended abstract.)
- 61. Kumar, Saurabh and Kara Kockelman. "Tracking the Size, Location and Interactions of Businesses: Microsimulation of Firm Behavior in Austin, Texas." Compendium of the Transportation Research Board's 87th Annual Meeting, Washington, DC, January 2008.
- 62. Lemp, Jason and Kara Kockelman. "Quantifying the External Costs of Vehicle Use: Evidence from America's Top Selling Light-Duty Modes." Compendium of the Transportation Research Board's 87th Annual Meeting, Washington, DC, January 2008.
- 63. Zhou, Brenda and Kara Kockelman. "Microsimulation of Residential Land Development and Household Location Choices: Bidding for Land in Austin, Texas." Compendium of the Transportation Research Board's 87th Annual Meeting, Washington, DC, January 2008.
- 64. Zhou, Brenda and Kara Kockelman. "Opportunities for and Impacts of Carsharing: A Survey of the Austin, Texas Market." Compendium of the Transportation Research Board's 87th Annual Meeting, Washington, DC, January 2008.
- 65. Zhou, Brenda and Kara Kockelman. "Self-Selection in Home Choice: Use of Treatment Effects in Evaluating the Relationship Between the Built Environment and Travel Behavior." Compendium of the Transportation Research Board's 87th Annual Meeting, Washington, DC, January 2008.
- 66. Habib, Khandker N. and Kara Kockelman. "Modeling the Choice of Residential Location and Home Type: Recent Movers in Austin, Texas." Compendium of the Transportation Research Board's 87th Annual Meeting, Washington, DC, January 2008.\*
- 67. Zhao, Yong, Kara Kockelman and Anders Karlstrom. "Welfare Calculations in Discrete Choice Settings: The Role of Error Term Correlation." Compendium of the Transportation Research Board's 87th Annual Meeting, Washington, DC, January 2008.
- 68. Karoonsoontawong, Ampol and Kara Kockelman. "Simulation-Based Heuristic Approach for Dynamic Marginal Cost Pricing." Compendium of the Transportation Research Board's 87th Annual Meeting, Washington, DC, January 2008.
- 69. Stopher, Peter R, Kara Kockelman, Stephen Greaves, and Eoin Clifford. "Reducing Burden and Sample Sizes in Multiday Household Travel Surveys." Compendium of the Transportation Research Board's 87th Annual Meeting, Washington, DC, January 2008.
- 70. Wang, Cara and Kara Kockelman. "Data Mining for Supporting Integrated Land Development-Transportation Modeling A Case Study of Austin, TX, US." Compendium of the International

- Conference on Integrated Transport for Sustainable Urban Development, Beijing, China, December 2008.
- 71. Stephen Boyles, Satish Ukkusuri, S Travis Waller, and Kara Kockelman. "A Comparison of Static and Dynamic Traffic Assignment under Tolls in the Dallas-Fort Worth Region." Proceedings 42: Innovations in Travel Demand Modeling, Vol. 2: Papers, December 2008.
- 72. Kockelman, Kara and Jason Lemp. "The Financing of New Highways: Opportunities for Welfare Analysis and Credit-based Congestion Pricing." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 73. Lemp, Jason and Kara Kockelman. "Anticipating Welfare Impacts via Travel Demand Forecasting Models: Comparison of Aggregate and Activity-Based Approaches for the Austin, Texas Region." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 74. Lemp, Jason and Kara Kockelman. "Understanding and Accommodating Risk and Uncertainty in Toll Road Projects: A Review of the Literature." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 75. Zhou, Brenda, Kara Kockelman and Jason Lemp. "Transportation and Land Use Policy Analysis using Integrated Transport and Gravity-based Land Use Models." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 76. Bomberg, Matthew, Kara Kockelman, Melissa Thompson. "GHG Emissions Control Options: Assessing Transportation & Electricity Generation Technologies & Policies to Stabilize Climate Change." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 77. Wang, Cara and Kara Kockelman. "Forecasting Network Data: Spatial Interpolation of Traffic Counts Using Texas Data." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 78. Wang, Cara and Kara Kockelman. "Application of the Dynamic Spatial Ordered Probit Model: Patterns of Ozone Concentration in Austin, Texas." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 79. Gadda, Shashank, Kara Kockelman and Paul Damien. "Continuous Departure Time Models: A Bayesian Approach." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 80. Boyles, Stephen, Kara Kockelman and S. Travis Waller. "Congestion Pricing under Operational Supply Side Uncertainty." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 81. Zhou, Brenda and Kara Kockelman. "Lessons Learned in Developing and Applying Land Use Model Systems: A Parcel-based Example." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 82. Tirumalachetty, Sumala, Kara Kockelman and Saurabh Kumar. "Microsimulation Models of Urban Regions: Anticipating Greenhouse Gas Emissions from Transport and Housing in Austin, Texas." Compendium of the Transportation Research Board's 88th Annual Meeting, Washington, DC, January 2009.
- 83. Tirumalachetty, Sumala and Kara Kockelman. "The Welfare Implications of Carbon Taxes and Carbon Caps: A Look at U.S. Households." Compendium of the Transportation Research Board's 89th Annual Meeting, Washington, DC, January 2010.
- 84. Tirumalachetty, Sumala and Kara Kockelman. "Forecasting Greenhouse Gas Emissions from Urban Regions: Microsimulation of Land Use and Transport Patterns in Austin, Texas." Compendium of the Transportation Research Board's 89th Annual Meeting, Washington, DC, January 2010.
- 85. Lemp, Jason and Kara Kockelman. "The Continuous Cross-Nested Logit Model: Formulation and Application for Departure Time Choice." Compendium of the Transportation Research Board's 89th Annual Meeting, Washington, DC, January 2010.

- 86. Lemp, Jason and Kara Kockelman. "Empirical Investigation of the Continuous Logit for Departure Time Choice using Bayesian Methods." Compendium of the Transportation Research Board's 89th Annual Meeting, Washington, DC, January 2010.
- 87. Xie, Chi and Kara Kockelman. "A Maximum Entropy Method for Subnetwork Origin-Destination Trip Matrix Estimation." Compendium of the Transportation Research Board's 89th Annual Meeting, Washington, DC, January 2010.\*
- 88. Whitehead, Charlotte and Kara Kockelman. "Americans' Time Use: A Focus on Women and Child-Rearing via Structural Equations Modeling." Compendium of the Transportation Research Board's 89th Annual Meeting, Washington, DC, January 2010.\*
- 89. McDonald- Buller, Elena, Alba Webb, Kara Kockelman and Brenda Zhou. "Air Quality Impacts of Transportation and Land Use Policies: A Case Study in Austin, Texas." Compendium of the Transportation Research Board's 89th Annual Meeting, Washington, DC, January 2010.
- 90. Xie, Chi, S. Travis Waller and Kara Kockelman. "An Intersection Origin-Destination Flow Optimization Problem for Evacuation-Network Design." Compendium of the Transportation Research Board's 90th Annual Meeting, Washington, DC, January 2011.
- 91. Selby, Brent and Kara Kockelman. "Spatial Prediction of AADT in Unmeasured Locations by Universal Kriging." Compendium of the Transportation Research Board's 90th Annual Meeting, Washington, DC, January 2011.
- 92. Lemp, Jason, Kara Kockelman and Paul Damien. "A Bivariate Multinomial Probit Model for Trip Scheduling: Bayesian Analysis of the Work Tour." Compendium of the Transportation Research Board's 90th Annual Meeting, Washington, DC, January 2011.\*
- 93. Wang, Cara, Kara Kockelman and Jason Lemp. "The Dynamic Spatial Multinomial Probit Model: Analysis of Land Use Change Using Parcel-Level Data Compendium of the Transportation Research Board's 90th Annual Meeting, Washington, DC, January 2011.
- 94. Paul, Binny, Kara Kockelman and Sashank Musti. "The Light-Duty-Vehicle Fleet's Evolution: Anticipating PHEV Adoption and Greenhouse Gas Emissions across the U.S. Fleet." Compendium of the Transportation Research Board's 90th Annual Meeting, Washington, DC, January 2011.
- 95. Wang, YiYi, Kara Kockelman and Cara Wang. "Anticipating Land Use Change Using Geographically Weighted Regression Models for Discrete Response." Compendium of the Transportation Research Board's 90th Annual Meeting, Washington, DC, January 2011.
- 96. Lemp, Jason, Kara Kockelman and Avinash Unnikrishnan. "Analysis of Large Truck Crash Severity using Heteroskedastic Ordered Probit Models." Compendium of the Transportation Research Board's 90th Annual Meeting, Washington, DC, January 2011.
- 97. Zhou, Brenda and Kara Kockelman. "Land Use Change through Microsimulation of Market Dynamics: An Agent-based Model of Land Development and Locator Bidding in Austin, Texas." Compendium of the Transportation Research Board's 90th Annual Meeting, Washington, DC, January 2011.\*
- 98. Fagnant, Daniel, Kara Kockelman and Chi Xie. "Anticipating Roadway Expansion & Tolling Impacts: A Toolkit for Abstracted Networks." Compendium of the Transportation Research Board's 90th Annual Meeting, Washington, DC, January 2011.
- 99. Ng, ManWo, S. Travis Waller and Kara Kockelman. "A Review of the Correlation Coefficient as a Dependence Modeling Tool." Compendium of the Transportation Research Board's 90th Annual Meeting, Washington, DC, January 2011.
- 100. Xie, Chi, Kara Kockelman and S. Travis Waller. "A Maximum Entropy-Least Squares Estimator for Elastic Origin-Destination Trip Matrix Estimation." Compendium of the ISTTT Conference, Berkeley, California, July 2011.
- 101. Du, Xiaochuan and Kara Kockelman. "Tracking Transportation and Industrial Production Across a Nation: Application of the Rubmrio Model for U.S. Trades." Compendium of the 2011 International Conference on Transportation and Mechanical & Electrical Engineering, Changchun, China, December 2011.
- 102. Selby, Brent and Kara Kockelman. "Microsimulating Automobile Markets: Evolution of Vehicle Holdings and Vehicle-Pricing Dynamics." Compendium of the Transportation Research Board's 91<sup>st</sup> Annual Meeting, Washington, DC, January 2012.\*

- 103. Xiong, Xiaoxia and Kara Kockelman. "The Cost of Right-of-Way Acquisition: Recognizing the Impact of Condemnation via a Switching Regression Model." Compendium of the Transportation Research Board's 91<sup>st</sup> Annual Meeting, Washington, DC, January 2012.
- 104. Du, Xiaochuan and Kara Kockelman. "Tracking Transportation and Industrial Production Across a Nation: Application of the Rubmrio Model for U.S. Trades." Compendium of the Transportation Research Board's 91<sup>st</sup> Annual Meeting, Washington, DC, January 2012.\*
- 105. Fagnant, Dan and Kara Kockelman. "Transportation Project Outcomes Under Uncertainty: An Examination of Benefit-Cost Ratios and Other Impacts." Compendium of the Transportation Research Board's 91<sup>st</sup> Annual Meeting, Washington, DC, January 2012.
- 106. Chen, T. Donna and Kara Kockelman. "The Roles of Vehicle Footprint, Height and Weight in Crash Outcomes: Application of a Heteroscedastic Ordered Probit Model." Compendium of the Transportation Research Board's 91<sup>st</sup> Annual Meeting, Washington, DC, January 2012.
- 107. Wang, Yiyi, Kara Kockelman and Xiaokun (Cara) Wang. "The Impact of Weight Matrices on Parameter Estimations and Inference: A Case Study of Binary Response Using Land Use Data." Compendium of the Transportation Research Board's 91<sup>st</sup> Annual Meeting, Washington, DC, January 2012.
- 108. Xie, Chi and Kara Kockelman. "A Two-stage Equilibrium Travel Demand Model for Sketch Planning." Compendium of the Transportation Research Board's 91<sup>st</sup> Annual Meeting, Washington, DC, January 2012.
- 109. Khan, Mobashwir and Kara Kockelman. "Predicting the market Potential of Plug-In Electric Vehicles Using Multiday GPS Data." Compendium of the Transportation Research Board's 91<sup>st</sup> Annual Meeting, Washington, DC, January 2012.
- 110. Tuttle, David P. and Kara Kockelman. "Electrified Vehicle Technology Trends, Infrastructure Implications and Cost Comparisons." Compendium of the Transportation Research Board's 91<sup>st</sup> Annual Meeting, Washington, DC, January 2012.\*

## **OTHER CONFERENCE PROCEEDINGS – Non-Refereed Papers**

(Each Proceeding is associated with a presentation. Dr. Kockelman presented all papers marked with an asterisk [\*]. Her graduate student co-authors presented all others.)

- 1. Kockelman, Kara. "Which Matters More in Mode Choice: Density or Density?" Conference Compendium for Institute of Transportation Engineers Annual Meeting, Denver, CO, 1995.\*
- 2. Zhao, Yong and Kara Kockelman. "The Propagation of Uncertainty through Travel Demand Models." Compendium of the Eighth TRB Conference on the Application of Transportation Planning Methods, Corpus Christi, TX, April 2001.
- 3. Pradhan, Anant and Kara Kockelman. "Uncertainty Propagation in an Integrated Land Use-Transportation Model." Proceedings of the 9th Meeting of EURO Working Group on Transportation, Polytechnic University of Bari Department of Highways and Transportation, Bari, Italy, June 10-13, 2002.\*
- 4. Zhao, Yong and Kara Kockelman. "The Propagation of Uncertainty through Travel Demand Models." Proceedings of the 9th Meeting of EURO Working Group on Transportation, Polytechnic University of Bari Department of Highways and Transportation, Bari, Italy, June 10-13, 2002.\*
- 5. Ma, Jianming and Kara Kockelman. "Crash Frequency and Severity Modeling Using Clustered Data from Washington State." Proceedings of the IEEE Intelligent Transportation Systems Conference, Toronto, Canada, September 17-20, 2006.
- 6. Kockelman, Kara. "Credit Based Congestion Pricing: An Opportunity for Reductions in Greenhouse Gas Emissions?" Invited paper for presentation at the International Colloquium, Transports, Energie Et Gaza a Effet De Serre: Vers Un Rationnement? (Transport, Energy and Greenhouse Gases: Will Rationing be Necessary?), part of the 19th Entretiens du Centre Jacques Cartier in Lyon, France, December 4-5, 2006.\*
- 7. Wang, Cara and Kara Kockelman. "Specification and Estimation of the Dynamic Spatial Multinomial Probit Model." Compendium of the 4th World Conference of the Spatial Econometrics Association, Chicago, IL. June 9-12, 2010.

8. Kockelman, Kara. "Transportation and Land Use Solutions for Low-Carbon Cities." Invited presentation at the NSF's U.S.-China Workshop on Pathways to Low Carbon Cities, held at Hong Kong's Polytechnic University, December 13-14, 2010.

## OTHER PRESENTATIONS

(Dr. Kockelman presented all papers marked with an asterisk [\*]. Her graduate student co-authors presented all others.)

## **Conferences, Workshops & Seminars**

(The following presentations are associated with research papers.)

- 1. Kockelman, Kara. "A Utility-Theory-Consistent System-of-Demand-Equations Approach to Household Travel Choice." Dissertation presentation at U.C. Berkeley's Institute for Transportation Studies' Seminar, Spring 1998.\*
- 2. Jara-Díaz, Sergio R. and Kara Kockelman. "Microeconomic Perspectives on Travel Behavior and Valuation Research." Workshop Report for the International Association of Travel Behavior Research Conference of 2000.\*
- 3. Zhao, Yong and Kara Kockelman. "The Propagation of Uncertainty through Travel Demand Models." Western Regional Science Association's Annual Meeting, Palm Springs, CA, February 2001.\*
- 4. Kockelman, Kara. "Student Grades and Course Evaluations in Engineering: What Makes a Difference?" Compendium, ASEE Gulf-Southwest Section Annual Conference, College Station, TX, March 29, 2001.\*
- 5. Kockelman, Kara and Katsuhiko Nakamura. "Congestion Pricing and Roadspace Rationing: An Application to the San Francisco Bay Bridge Corridor." Compendium of the Eighth TRB Conference on the Application of Transportation Planning Methods, Corpus Christi, TX, April 2001.\*
- 6. Jin, Ling and Kara Kockelman. "Key Concepts for a New Integrated Transport Land Use Model." Presented at the Southern Regional Science Conference, Austin, TX, April 2001.
- 7. Min, Yeonjoo and Kara Kockelman. "Review of Combined Input-Output and Commodity Flow Models." Presented at the Southern Regional Science Conference, Austin, TX, April 2001.
- 8. Pradhan, Anant and Kara Kockelman. "Comparison of Integrated and 'Linked' Land Use Transportation Models." Presented at the Southern Regional Science Conference, Austin, TX, April 2001.
- 9. Srinivasan, Siv and Kara Kockelman. "The Impacts of Bypasses on Small- and Medium-Sized Communities: An Econometric Analysis." Presented at the Southern Regional Science Conference, Austin, TX, April 2001.\*
- 10. Srour, Issam and Kara Kockelman. "Use of the Logit Models for Accessibility Measurements." Presented at the Southern Regional Science Conference, Austin, TX, April 2001.
- 11. Zhao, Yong and Kara Kockelman. "The Propagation of Uncertainty through Travel Demand Models." Presented at the Southern Regional Science Conference, Austin, TX, April 2001.
- 12. Zhao, Yong and Kara Kockelman. "Network Equilibria: An Analysis of Existence, Uniqueness and Stability." Presented at the Southern Regional Science Conference, Austin, TX, April 2001.
- 13. Kockelman, Kara. "Student Grades and Course Evaluations in Engineering: What Makes a Difference?" Presented at the ASEE Annual Conference, Albuquerque, NM, June 24-27, 2001.\*
- 14. Pradhan, Anant and Kara Kockelman. "Uncertainty Propagation in an Integrated Land Use-Transportation Model." Presented at the 48th Annual North American Meetings of the Regional Science Association International, Charleston, SC, November 15-17, 2001.\*
- 15. Min, Yeonjoo, Kara Kockelman, Yong Zhao, and Ling Jin. "Models of Location, Trade and Travel: An Application of Random-Utility Based Interzonal Input-Output Models to Texas Counties." Presented at the 48th Annual North American Meetings of the Regional Science Association International, Charleston, SC, November 15-17, 2001.\*
- 16. Srour, Issam and Kara Kockelman. "Accessibility Indices: A Connection to Residential Land Prices and Location Choices." Presented at the 48th Annual North American Meetings of the Regional Science Association International, Charleston, SC, November 15-17, 2001.\*
- 17. Zhao, Yong and Kara Kockelman. "Spatial Input-Output Models: Solution Existence and Uniqueness." Presented at the 49th Annual North American RSAI Meetings, San Juan, PR, November 14-16, 2002.\*

- 18. Jin, Ling, Kara Kockelman, and Yong Zhao. "Application of Random-Utility-Based Multizonal Input-Output Models: Production, Trade, Travel, and Location Choice in the State of Texas." Presented at the 49th Annual North American RSAI Meetings, San Juan, PR, November 14-16, 2002.\*
- 19. Krishnamurthy, Sriram and Kara Kockelman. "Uncertainty Propagation through an Integrated Transportation-Land Use Model: Application to Austin, TX." Presented at the 49th Annual North American RSAI Meetings, San Juan, PR, November 14-16, 2002.\*
- 20. Zhao, Yong and Kara Kockelman, "Application of and Solution Uniqueness for Random-Utility-Based Multizonal Input-Output Models: Production, Trade, Travel, and Location Choice in the State of Texas." Presented at the INFORMS Conference, San Jose, CA, November 17-20, 2002.
- 21. Jin, Ling, Kara Kockelman, and Yong Zhao. "Application of Random-Utility-Based Multizonal Input-Output Models: Production, Trade, Travel, and Location Choice in the State of Texas." Presented at the INFORMS Conference, San Jose, CA, November 17-20, 2002.
- 22. Krishnamurthy, Sriram and Kara Kockelman. "Uncertainty Propagation through an Integrated Transportation-Land Use Model: Application to Austin, TX." Presented at the INFORMS Conference, San Jose, CA, November 17-20, 2002.
- 23. Jin, Ling, Kara Kockelman, and Yong Zhao. "Tracking Land Use, Transport, and Industrial Production using Random-Utility Based Multizonal Input-Output Models: Applications for Texas Trade." Presented at the 99th Annual Meeting of the Assoc. of American Geographers, New Orleans, LA, March 6, 2003.\*
- 24. Kockelman, Kara and Sukumar Kalmanje. "Credit-Based Value Pricing of Congested Roadways: Perceptions and Applications in Austin, TX." Presented at the International Symposium on the Theory and Practice of Congestion Charging, London, England, August 18-20, 2003.\*
- 25. Ruiz-Juri, Natalia and Kara Kockelman. "Extending the Random-Utility-Based Multiregional Input-Output Model: Incorporating Land-Use Constraints, Domestic Demand and Network Congestion in a Model of Texas Trade." Presented at the INFORMS Conference, Atlanta, GA, October 19-22, 2003.
- 26. Frazier, Christopher and Kara Kockelman. "Chaotic Systems Modeling: Applications for Transportation." Presented at the INFORMS Conference, Atlanta, GA, October 19-22, 2003.
- 27. Kalmanje, Sukumar and Kara Kockelman. "Credit-Based Congestion Pricing: Travel Land Value & Welfare Impacts." Presented at the INFORMS Conference, Atlanta, GA, October 19-22, 2003.
- 28. Frazier, Christopher and Kara Kockelman. "Cities and Satellite Imagery: Models for Regional Change." Presented at the INFORMS Conference, Atlanta, GA, October 19-22, 2003.
- 29. Ruiz-Juri, Natalia and Kara Kockelman. "Extending the Random-Utility-Based Multiregional Input-Output Model: Incorporating Land-Use Constraints, Domestic Demand and Network Congestion in a Model of Texas Trade." Presented at the 50th Annual North American Meetings of the Regional Science Association, Philadelphia, PA, November 20-22, 2003.\*
- 30. Frazier, Christopher and Kara Kockelman. "Cities and Satellite Imagery: Models for Regional Change." Presented at the 50th Annual North American Meetings of the Regional Science Association, Philadelphia, PA, November 20-22, 2003.\*
- 31. Kalmanje, Sukumar and Kara Kockelman. "Credit-Based Congestion Pricing: The Public's Response to New Policy and Welfare." Presented at the 50th Annual North American Meetings of the Regional Science Association, Philadelphia, PA, November 20-22, 2003.\*
- 32. Ruiz-Juri, Natalia and Kara Kockelman. "Extending the Random-Utility-Based Multiregional Input-Output Model: Incorporating Land-Use Constraints, Domestic Demand and Network Congestion in a Model of Texas Trade." Compendium of the 14th Annual ITS-America Meeting & Exposition, San Antonio, TX, April 26-28, 2004.
- 33. Kockelman, Kara and Jianming Ma. "Freeway Speeds and Speed Variations preceding Crashes, within and across Lanes." Presented at the 14th Annual ITS-America Meeting & Exposition, San Antonio, TX, April 26-28, 2004.
- 34. Kalmanje, Sukumar and Kara Kockelman. "Credit-Based Congestion Pricing: Travel, Land Value and Welfare Impacts." Presented at the 14th Annual ITS-America Meeting & Exposition, San Antonio, TX, April 26-28, 2004.
- 35. Frazier, Christopher and Kara Kockelman. "Cities & Satellite Imagery: Models for Regional Change." Presented at the 14th Annual ITS-America Meeting & Exposition, San Antonio, TX, April 26-28, 2004.

- 36. Zhao, Yong and Kara Kockelman. "On-Line Marginal-Cost Pricing across Networks: Incorporating Heterogeneous Users and Stochastic Equilibria." Presented at the 14th Annual ITS-America Meeting & Exposition, San Antonio, TX, April 26-28, 2004.
- 37. Podgorski, Kaethe, Kara Kockelman, and Sukumar Kalmanje. "Survey Work for Assessing New Policies: Identifying Public Response to and Preferences for Variations on Toll Roads and Congestion Pricing." Presented at the ISCTSC Triennial International Conference on Transport Survey Methods, Costa Rica, August 1-6, 2004.
- 38. Frazier, Christopher and Kara Kockelman. "Spatial Econometric Models for Panel Satellite Data: New Methods for Application." Presented at the 51st Annual North American Meetings of the Regional Science Association, Seattle, WA, November 11-13, 2004.\*
- 39. Gupta, Surabhi, Sukumar Kalmanje and Kara Kockelman. "Road Pricing Simulations for Austin: Traffic, Land Use and Welfare Impacts." Presented at the 51st Annual North American Meetings of the Regional Science Association, Seattle, WA, November 11-13, 2004.\*
- 40. Ruiz Juri, Natalia and Kara Kockelman. "Evaluation of the TransTexas Corridor Plan: Application of a Random-Utility-Based Multiregional Input-Output Model." Presented at the 51st Annual North American Meetings of the Regional Science Association, Seattle, WA, November 11-13, 2004.\*
- 41. Kockelman, Kara. "Credit-Based Congestion Pricing: Policy, Perception & Prediction." PROCESSUS Second International Colloquium on the Behavioral Foundations of Integrated Land-use and Transportation Models: Frameworks, Models and Applications, University of Toronto. Toronto, Ontario, Canada, June 10, 2005.\*
- 42. Ma, Jianming, Kara Kockelman and Paul Damien. "Simultaneously Modeling Crash Frequencies by Severity using Bayesian Multivariate Poisson Models." Presented at the INFORMS Conference, San Francisco, CA, November 13-16, 2005.
- 43. Zhou, Bin (Brenda), and Kara Kockelman. "Neighborhood impacts on land use change: a multinomial logit model of spatial relationships." Presented at the 52nd Annual North American Meeting of the Regional Science Association International, Las Vegas, NV, November 2005.
- 44. Bina, Michelle, Valdemar Warburg, and Kara Kockelman. "Location Choice vis-à-vis Transportation: The Case of Apartment Dwellers." Presented at the 52nd Annual North American Meeting of the Regional Science Association International, Las Vegas, NV, November 2005. \*
- 45. Bina, Michelle, Kara Kockelman and David Suescun. "Location Choice vis-à-vis Transportation: The Case of Recent Home Buyers." Presented at the 52nd Annual North American Meeting of the Regional Science Association International, Las Vegas, NV, November 2005. \*
- 46. Wang, Xiaokun and Kara Kockelman. "Tracking Land Cover Change in a Mixed Logit Model: Recognizing Temporal and Spatial Effects." Presented at the 52nd Annual North American Meeting of the Regional Science Association International, Las Vegas, November 2005.
- 47. Stephen Boyles, Satish Ukkusuri, S Travis Waller, and Kara Kockelman. "A Comparison of Static and Dynamic Traffic Assignment under Tolls in the Dallas-Fort Worth Region." Presented at the Transportation Research Board Specialty Conference: Innovations in Travel Modeling, Austin, TX, May 2006.
- 48. Bina, Michelle and Kara Kockelman. "Location Choice vis-a-vis Transportation: The Case of Recent Home Buyers and Apartment Dwellers." Presented at the International Association of Travel Behavior Research Conference, Kyoto, Japan, August 16-20, 2006.\*
- 49. "Credit-Based Congestion Pricing: Perception & Prediction." Presented at the 2006 Association of Collegiate Schools of Planning Conference, Fort Worth, TX, November 9-11, 2006.\*
- 50. Wang, Xiaokun and Kara Kockelman. "Specification and Estimation of a Spatially and Temporally Autocorrelated Seemingly Unrelated Regression Model: Application to Crash Rates in China." Presented at the 53<sup>rd</sup> Annual North American Meeting of the Regional Science Association International, Toronto, Canada, November 2006.
- 51. Lemp, Jason, Brenda Zhou, Kara Kockelman, and Barbara Parmenter. "Visioning vs. Modeling: Analyzing the Land Use-Transportation Futures of Urban Regions." Presented at the 53<sup>rd</sup> Annual North American Meeting of the Regional Science Association International, Toronto, Canada, November 2006.

- 52. Huang, Tian and Kara Kockelman. "The Introduction of Dynamic Features in a Random-Utility-Based Multiregional Input-Output Model of Trade, Production, and Location Choice." Presented at the 53<sup>rd</sup> Annual North American Meeting of the Regional Science Association International, Toronto, Canada, November 2006.\*
- 53. Zhou, Brenda and Kara Kockelman. "Predicting the Distribution of Households and Employment: A Seemingly Unrelated Regression Model with Two Spatial Processes." Presented at the 53<sup>rd</sup> Annual North American Meeting of the Regional Science Association International, Toronto, Canada, November 2006.
- 54. Wang, Xiaokun and Kara Kockelman. "Maximum Simulated Likelihood Estimation with Correlated Observations: A Comparison of Simulation Techniques." Presented at the 53<sup>rd</sup> Annual North American Meeting of the Regional Science Association International, Toronto, Canada, November 2006.
- 55. Zhou, Brenda and Kara Kockelman. "Microsimulation of Home Choices for Residential Market Equilibrium." Presented at the 53<sup>rd</sup> Annual North American Meeting of the Regional Science Association International, Toronto, Canada, November 2006.
- 56. Wang, Xiaokun and Kara Kockelman. "Capturing Patterns of Spatial and Temporal Autocorrelation in Ordered Response Data, Using a Bayesian Approach: A Case Study of Land Use Changes in Austin, TX." Presented at the 54<sup>th</sup> Annual North American Meeting of the Regional Science Association International, Savannah, GA, November 2007.
- 57. Zhou, Brenda and Kara Kockelman. "Microsimulation of Residential Land Development and Household Location Choices: Bidding for Land in Austin, TX." Presented at the 54<sup>th</sup> Annual North American Meeting of the Regional Science Association International, Savannah, GA, November 2007.
- 58. Zhou, Brenda and Kara Kockelman. "Self-Selection in Home Choice: Use of Treatment Effects in Evaluating the Relationship Between the Build Environment and Travel Behavior." Presented at the 54<sup>th</sup> Annual North American Meeting of the Regional Science Association International, Savannah, GA, November 2007.
- 59. Kumar, Saurabh and Kara Kockelman. "Tracking the Size, Location and Interactions of Businesses: Microsimulation of Firm Behavior in Austin, TX." Presented at the 54<sup>th</sup> Annual North American Meeting of the Regional Science Association International, Savannah, GA, November 2007.\*
- 60. Duthie, Jennifer, Kara Kockelman, Varunraj Valsaraj and Brenda Zhou. "Integrated Models of Land Use and Transport: The Results of ITLUP and UrbanSim in Austin, TX." Presented at the 54<sup>th</sup> Annual North American Meeting of the Regional Science Association International, Savannah, GA, November 2007.\*
- 61. Stopher, Peter R, Kara Kockelman, Stephen Greaves and Eoin Clifford. "Sample Sizes and Sampling Issues for Multi-day Household Travel Surveys." Presented at the 8th International Conference on Survey Methods in Transport: Harmonization and Data Comparability, Annecy, France in May 25-31, 2008.
- 62. Wang, Xiaokun Cara and Kara Kockelman. "Forecasting Network Data: Spatial Interpolation of Traffic Counts Using Texas Data." Presented at the 55<sup>th</sup> Annual North American Meeting of the Regional Science Association International, Brooklyn, NY, November 2008.
- 63. Kakaraparthi, Siva K., Kara Kockelman. "An Application of UrbanSim to the Austin, Texas Region: Integrated-Model Forecasts for the Year 2030." Presented at the 55<sup>th</sup> Annual North American Meeting of the Regional Science Association International, Brooklyn, NY, November 2008.\*
- 64. Zhou, Brenda, Kara Kockelman and Jason Lemp. "Transportation and Land Use Policy Analysis Using Integrated Transport and Gravity-Based Land Use Models." Presented at the 55<sup>th</sup> Annual North American Meeting of the Regional Science Association International, Brooklyn, NY, November 2008.
- 65. Zhou, Brenda and Kara Kockelman. "Lessons Learned in Developing and Applying Land Use Model Systems: A Parcel-based Example." Presented at the 55<sup>th</sup> Annual North American Meeting of the Regional Science Association International, Brooklyn, NY, November 2008.
- 66. Duthie, Jennifer, Avinash Voruganti, Kara Kockelman and S. Travis Waller. "Uncertainty Analysis and its Impacts on Decision-Making in an Integrated Transportation and Gravity-based Land Use Model." Presented at the 55<sup>th</sup> Annual North American Meeting of the Regional Science Association International, Brooklyn, NY, November 2008. \*
- 67. Kockelman, Kara, Melissa Thompson and Charlotte Whitehead. "Americans' Travel Choices and their Relative Contributions to Climate Change: What Near-Term Behavioral Shifts Will Buy Us and

- Opportunities for Meeting Carbon Targets." Presented at the 48th Southern Regional Science Association Annual Meeting, San Antonio, TX, March 27, 2009.
- 68. Kakaraparthi, Siva and Kara Kockelman. "Forecasting Land Use & Transport through 2030 Using UrbanSim: A Case Study of Austin, Texas." Presented at the 48th Southern Regional Science Association Annual Meeting, San Antonio, TX, March 27, 2009.
- 69. Musti, Sashank, Katherine Kortum and Kara Kockelman. "Survey and Analysis of Household Energy Consumption & Carbon Footprints: Opportunities for Behavioral Changes." Presented at the TRB 12th Conference on Transportation Planning Applications (and nominated as a "best paper" by the Transportation Planning Applications Committee ABD50), Houston, TX, May 2009.
- 70. Wang, Xiaokun (Cara) and Kara Kockelman. "Forecasting Network Data: Spatial Interpolation of Traffic Counts using Texas Data." Presented at the 2009 ASCE International Workshop on Computing in Civil Engineering, Austin, TX, June 2009.\*
- 71. Tirumalachetty, Sumala, Kara Kockelman and Saurabh Kumar. "Estimation of Greenhouse Gas Emissions Using Microsimulation Models: the Case of Austin, Texas." Presented at the 2009 ASCE International Workshop on Computing in Civil Engineering, Austin, TX, June 2009.
- 72. Tirumalachetty, Sumala, and Kara Kockelman. The Welfare Implications of Carbon Taxes and Carbon Caps: A Look at U.S. Households." Presented at the 56th Annual North American Meeting of the Regional Science Association International, San Francisco, CA, November 2009.\*
- 73. Zhou, Brenda and Kara Kockelman. "Land Use Change through Microsimulation of Market Dynamics: An Agent-based Model of Land Development and Locator Bidding in Austin, Texas." Presented at the 56th Annual North American Meeting of the Regional Science Association International, San Francisco, CA, November 2009.\*
- 74. Tirumalachetty, Sumala and Kara Kockelman. "Forecasting Greenhouse Gas Emissions from Urban Regions: Microsimulation of Land Use and Transport Patterns in Austin, Texas." Presented at the 56th Annual North American Meeting of the Regional Science Association International, San Francisco, CA, November 2009.\*
- 75. Zhou, Brenda and Kara Kockelman. "Land Use Change through Microsimulation of Market Dynamics: An Agent-based Model of Land Development and Locator Bidding in Austin, Texas." Presented at the 12<sup>th</sup> Conference of the International Association of Travel Behavior Research Conference, Jaipur, India, December 13-18, 2009.\*
- 76. Musti, Sashank, and Kara Kockelman. "Evolution of Vehicle Fleet in Households: Anticipating Vehicle Composition Through a Stated Preference Survey in Austin, Texas." Presented at the 12<sup>th</sup> Conference of the International Association of Travel Behavior Research Conference, Jaipur, India, December 13-18, 2009.\*
- 77. Lemp, Jason and Kara Kockelman. "Empirical Investigation of the Continuous Logit for Departure Time Choice using Bayesian Methods." Presented at the 12<sup>th</sup> Conference of the International Association of Travel Behavior Research Conference, Jaipur, India, December 13-18, 2009.\*
- 78. Musti, Sashank, and Kara Kockelman. "Evolution of Vehicle Fleet in Households: Anticipating Vehicle Composition through a Stated Preference Survey in Austin, Texas." Presented at the TRB Alternative Transportation Fuels and Technologies Committee Meeting (ADC80) during the 89th Annual Meeting of the Transportation Research Board, Washington DC, January 2010.
- 79. Musti, Sashank, Katherine Kortum and Kara Kockelman. "Household Energy Use and Travel: Opportunities for Behavioral Change." Presented at the TRB Transportation Energy Committee Meeting (ADC70) during the 89th Annual Meeting of the Transportation Research Board, Washington DC, January 2010.
- 80. Kockelman, Kara and Steven Puller. "PEV use vis-à-vis Grid Power Demands." A presentation of proposed research for the University of Texas/Texas A&M University PHEV/EBV I/U Research Center workshop titled." Interfacing Electricity and Transportation Networks: The Role of Battery Electric Vehicles (BEVs) and Plug-In Hybrid Electric Vehicles (PHEVs), College Station, TX, October 19, 2010.
- 81. Kockelman, Kara. "PEV Adoption & Use: Anticipating Electric-Power Demand." A presentation of proposed research for the University of Texas/Texas A&M University PHEV/EBV I/U Research Center workshop titled Interfacing Electricity and Transportation Networks: The Role of Battery Electric

- Vehicles (BEVs) and Plug-In Hybrid Electric Vehicles (PHEVs) Workshop, College Station, TX, October 20, 2010.\*
- 82. Tirumalachetty, Sumala, Kara Kockelman and Binny Paul. "The Welfare Implications of Carbon Taxes and Carbon Caps: A Look at U.S. Households." Presented at the INFORMS Conference, Austin, TX, November 7-10, 2010.
- 83. Fagnant, Dan, Kara Kockelman and Chi Xie. "Toolkit for Anticipating and Evaluating Roadway Expansion and Tolling Impacts." Presented at the INFORMS Conference, Austin, TX, November 7-10, 2010.
- 84. Lemp, Jason, Kara Kockelman and Paul Damien. "Continuous Cross Nested Logit Model: Formulation and Application for Departure Time Choice." Presented at the INFORMS Conference, Austin, TX, November 7-10, 2010.
- 85. Wang, Cara, Kara Kockelman and Jason Lemp. "The Dynamic Spatial Multinomial Probit Model: Analysis of Land Use Change Using Parcel-Level Data." Presented at the 57th North American Meeting of the Regional Science Association International, Denver, CO, November 2010.\*
- 86. Wang, Yiyi, Kara Kockelman and Cara Wang. "Anticipating Land Use Change Using Geographically Weighted Regression Models for Discrete Response." Presented at the 57th North American Meeting of the Regional Science Association International, Denver, CO, November 2010.
- 87. Selby, Brent and Kara Kockelman. "Spatial Prediction of AADT in Unmeasured Locations by Universal Kriging." Presented at the 57th North American Meeting of the Regional Science Association International, Denver, CO, November 2010.
- 88. Lemp, Jason and Kara Kockelman. "Strategic Sampling for Large Choice Sets in Estimation and Application." Presented at the 57th North American Meeting of the Regional Science Association International, Denver, CO, November 2010. \*
- 89. Kockelman, Kara, Binny Paul and Mobashwir Khan. "Plug-in Electric Vehicles: Their Technology, Use, and Impacts." NSF EV-TEC Industry-University Research Center workshop on Transportation and Electricity Convergence, Industry Advisory Panel Meeting, Austin, TX, April 21, 2011.\*
- 90. Khan, Mobashwir and Kara Kockelman. "PEV Market Potential Using Multi-Day GPS Data." NSF EV-TEC Industry-University Research Center workshop on Electric Vehicles - Transportation and Electricity Convergence, Industry Advisory Panel Meeting, Houston, TX, November 2, 2011.
- 91. Wang, Yiyi, Kara Kockelman and Xiaokun (Cara) Wang. "The Impact of Weight Matrices on Parameter Estimations and Inference: A Case Study of Binary Response Using Land Use Data." Presented at the 58<sup>th</sup> North American Meeting of the Regional Science Association International, Miami, FL, November 2011.
- 92. Wang, Yiyi, Kara Kockelman and Xiaokun (Cara) Wang. "Understanding Spatial Filtering for Analysis of Land Use Data Sets." Presented at the 58<sup>th</sup> North American Meeting of the Regional Science Association International, Miami, FL, November 2011.
- 93. Khan, Mobashwir and Kara Kockelman. "Models for Anticipating Non-Motorized Travel Choices, and the Role of the Built Environment." Presented at the 58<sup>th</sup> North American Meeting of the Regional Science Association International, Miami, FL. November 2011.\*
- 94. Du, Xiaochuan and Kara Kockelman. "Tracking Transportation and Industrial Production across a Nation: Application of the Rubmrio Model for U.S. Trades." Presented at the 58<sup>th</sup> North American Meeting of the Regional Science Association International, Miami, FL, November 2011.\*
- 95. Resource Systems Group, Fehr & Peers, Robert Cervero, Kara Kockelman and Renaissance Planning Group. "Regional Evaluation Decision Tool for Smart Growth (REDSmart)." Presented at SHRP2 session of the 91st Annual Meeting of the Transportation Research Board, Washington, D.C., January 2012.
- 96. Kockelman, Kara and Mobashwir Khan. "Identifying Optimal Charging Station Locations: A Case Study of Seattle." NSF EV-TEC Industry-University Research Center workshop on Electric Vehicles: Transportation and Electricity Convergence, Member Advisory Panel Meeting, Austin, TX, April 19, 2012.\*

#### **Other Presentations of Research**

- 1. "Uncovering the Hidden Costs of Light-Duty Trucks." Engineering Faculty Advisory Committee, Semiannual Meeting, September 1999. \*
- 2. "Research on Relationships Between Transportation Infrastructure and Increases in Vehicle Miles Traveled." EPA- Sponsored Workshop on Induced Traffic Research, Berkeley, CA, June 8-9, 2000. (Presented by graduate student Brian tenSiethoff.)
- 3. "Overview of Recent Research: Road Pricing, Integrated Models, Econometrics, and Uncertainty." Undergraduate Summer Internship in Transportation (USIT) Seminar Series, University of Texas, Austin, TX, July 27, 2000.\*
- 4. "Modeling Traffic's Flow-Density Relation: Accommodation of Multiple Flow Regimes and Traveler Types." University of Texas Operations Research/Industrial Engineering Seminar Series, October 13, 2000.\*
- 5. "Investigation of the Impact of Frontage Roads as an Element of Controlled Access Facilities." Texas DOT Research Management Committee Meeting, Corpus Christi, TX, November 8, 2000.\*
- 6. "The Qualities and Benefits of Teamwork." Presentation to the Senior Engineering Honors Seminar, College of Engineering, University of Texas at Austin, February 10, 2001.\*
- 7. "Modeling Traffic's Flow-Density Relation: Accommodation of Multiple Flow Regimes and Traveler Types." Texas A&M University, College Station, TX, Institute of Transportation Engineers Student Section Seminar Series, March 28, 2001.\*
- 8. "The Integrated Modeling of Land Use-Transport Systems." Presentation to City College of New York, May 29, 2001.\*
- 9. "Sidewalk Cross-Slopes and the ADA." Presentation to the TxDOT Research Management Committee meeting, Arlington, TX, June 2001.\*
- 10. "The Integrated Modeling of Land Use Transport Systems." Presentation at USIT Seminar Series, College of Engineering, University of Texas at Austin, TX, July 5, 2001.\*
- 11. "The Integrated Modeling of Land Use Transport Systems." Presentation to University of California at Berkeley's Institute of Transportation Studies, Berkeley, CA, September 28, 2001.\*
- 12. "What to Do After Engineering Graduation?" Presentation to students of Chi Epsilon, ASCE, & SWE at University of California, Berkeley, CA, September 28, 2001.\*
- 13. "Investigation of the Impact of Frontage Roads: A Final Research Report." Texas DOT Research Management Committee Meeting, San Antonio, TX, November 7, 2001.\*
- 14. "Models of Location, Trade, and Travel: An Application of Random-Utility-Based Interzonal Input-Output Models." Presented at the Bureau of Transportation Statistics, Washington, DC, December 11, 2001.\*
- 15. "Uncertainty Propagation in four-step and Integrated Land Use-Transportation Models." Presented to the Bureau of Transportation Statistics, Washington, DC, December 11, 2001.\*
- 16. "Overall Injury Risk to Different Drivers: Combining Exposure, Frequency, and Severity Models." Presentation at The University of Illinois, Urbana, IL, March 12, 2002.\*
- 17. "Models of Location, Trade, and Travel: Random Utility-Based Multi-Zonal Input Output Modeling." Presentation at Northwestern University's Transportation Center, Evanston, IL, March 14, 2002.\*
- 18. "Models of Location, Trade and Travel: Random-Utility-Based Multi-Zonal Input-Output Modeling." Presentation given at The University of Maryland, College Park, MD, April 22, 2002.\*
- 19. "Accessibility Indices: A Connection to Residential Land Prices and Location Choices." Presented at IVT, ETH University Honggerberg, Zurich, Switzerland, May 31, 2002.\*
- 20. "Frontage Roads: An Assessment of Legal Issues, Design Decisions, Costs, Operations and Land-Development Differences." Presented at the 5th National Conference on Access Management Meeting, Austin, TX, June 23-26, 2002.\*
- 21. "Modeling Urban Futures of Land Use-Transport Systems." Presentation to USIT Seminar Series, University of Texas at Austin, Austin, TX, June 27, 2002.\*
- 22. "The Integrated Modeling of Land Use-Transport Systems." Presentation to Ford Motor Company, Dearborn, MI, July 25, 2002.\*
- 23. Presented research on Credit-Based Congestion Pricing to the Capitol Area Metropolitan Planning Organization (CAMPO), Austin, TX, January 31, 2003.\*

- 24. Presented research on Credit-Based Congestion Pricing to the North Central Texas Council of Governments (NCTCOG) and to TxDOT district engineers, Dallas, TX, March 10, 2003.\*
- 25. "Improving Teaching under a Heavy Research Load." U.T. College of Engineering's New Faculty Seminar, April 16, 2003.\*
- 26. "Modeling Urban Features of Land-Use Transport Systems." Undergraduate Summer Internship in Transportation (USIT) Seminar Series, The University of Texas, Austin, TX, June 18, 2003.\*
- 27. "Congestion Fundamentals: Supply & Demand, Metrics & Solutions." at the USDOT-UCLA Tackling Traffic Congestion: Issues and Options Symposium, Washington, DC, June 26-27, 2003 (presentation done by substitute presenter).
- 28. "Integrated Modeling of Austin's Land-Use & Transportation Systems: Applications for Informed Policy Making." Colloquium Seminar Series, The University of Texas Department of Geography, Austin, TX, September 19, 2003.\*
- 29. "Use of TransCAD for Travel Demand Model Applications of Credit-Based Congestion Pricing in the Austin & Dallas-Ft. Worth Regions." presented to graduate student researchers and representatives of the North Central Texas Council of Governments, Austin, TX, January 28, 2004.\*
- 30. "Public Perceptions of Toll Roads: an Interim Report." Texas DOT Research Management Committee Meeting, Austin, TX, June 9, 2004.\*
- 31. "Modeling Urban Features of Land-Use Transport Systems." Undergraduate Summer Internship in Transportation (USIT) Seminar Series, The University of Texas, Austin, TX, June 30, 2004.\*
- 32. "Occupant Injury Severity Using a Heteroscedastic Ordered Logit Model: Distinguishing the Effects of Vehicle Weight and Type." Presented in the poster session of Corridor Partnerships, CTR Symposium, Austin, TX, April 6, 2005.
- 33. "Credit-Based Congestion Pricing: Expert Expectations and Guidelines for Application." Presented in the poster session of Corridor Partnerships, CTR Symposium, Austin, TX, April 6, 2005.
- 34. "Evaluation of the Trans-Texas Corridor Proposal: Application and Enhancements of the Random-Utility-Based Multiregional Input-Output Model." Presented in the poster session of Corridor Partnerships, CTR Symposium, Austin, TX, April 6, 2005.
- 35. "Credit-Based Congestion Pricing: Policy, Perception & Prediction." Undergraduate Summer Internship in Transportation (USIT) Seminar Series, The University of Texas, Austin, TX, July 13, 2005.\*
- 36. "Potential Land Use Effects of the Trans-Texas Corridor." Texas DOT Research Management Committee Meeting, Austin, TX, June 6, 2005.\*
- 37. "Location Choice vis-à-vis Transportation: The Case of Apartment Dwellers." Presented in the poster session of Navigating Costs, CTR Symposium, Austin, TX, April 4, 2006.
- 38. "Public Perceptions of Pricing Existing Roads and Other Transportation Policies: The Texas Perspective." Presented in the poster session of Navigating Costs, CTR Symposium, Austin, TX, April 4, 2006.
- 39. "Household Location Choices: Who Lives Where & Why? And What's the Connection to Transportation?" Undergraduate Summer Internship in Transportation (USIT) Seminar Series, University of Texas, Austin, TX, July 26, 2006.\*
- 40. "Specification and Estimation of a Spatially and Temporally Autocorrelated Seemingly Unrelated Regression Model: Application to Crash Rates in China." Presented in the poster session of Smart Highways, CTR Symposium, Austin, TX, April, 2007.
- 41. Video-conference presentation (titled "Taming the Traffic Monster") to Turkish authorities and transportation experts at the U.S. Embassy in Ankara, on the topic traffic safety in connection with UN Road Safety Week, April 26, 2007.\*
- 42. "To LDT or Not to LDT: The Relative Cost of Cars and Light-duty Trucks." Undergraduate Summer Internship in Transportation (USIT) Seminar Series, University of Texas, Austin, TX, June 6, 2007.\*
- 43. "GHG Emissions Control Options: Opportunities for Conservation." Presentation of commissioned paper to The National Academy of Sciences' Committee for the Study of the Relationships Among Development Patterns, Vehicle Miles Traveled, and Energy, December 12, 2007, Irvine, CA.\*

- 44. "Critical Elements of a High-Quality Research Paper." Invited presentation for workshop session sponsored by TRB's Statistical Methodology and Statistical Computer Software in Transportation Research Committee (ABJ80) during the Transportation Research Board's 87th Annual Meeting, Washington, DC, January 2008.\*
- 45. "Saving Money through Research: The Case of Right-of-Way Cost Estimation." Invited presentation to industry and state officials at the Center for Transportation Research's Annual Symposium, Austin, TX, April 2, 2008.\*
- 46. "GHG Emissions Control Options: Opportunities for Conservation." Presentation of commissioned paper to The National Academy of Sciences' Committee for the Study of the Relationships Among Development Patterns, Vehicle Miles Traveled, and Energy, Portland, Oregon, May 8, 2008.\*
- 47. "To LDT or Not to LDT: The Relative Cost of Cars and Light-duty Trucks." Undergraduate Summer Internship in Transportation (USIT) Seminar Series, University of Texas, Austin, TX, June 11, 2008.\*
- 48. "Energy & Transport: Opportunities for Collaborative Research." Presentation of strategies to support CSoE's Strategic Planning, given to Mechanical Engineering faculty at Faculty Retreat, University of Texas, Austin, May 11, 2009.\*
- 49. "To LDT or Not to LDT: The Relative Cost of Cars and Light-duty Trucks." Undergraduate Summer Internship in Transportation (USIT) Seminar Series, University of Texas, Austin, TX, May 27, 2009.\*
- 50. "Strategies for Tackling Energy Security & Climate Change Issues: Evolving Roles for Engineering Expertise." U.T. Engineering Honors Council's Fireside Chat, November 4, 2009.\*
- 51. "To LDT or Not to LDT: The Relative Cost of Cars and Light-duty Trucks." Undergraduate Summer Internship in Transportation (USIT) Seminar Series, University of Texas, Austin, TX, June 9, 2010.\*
- 52. "Environmental Impacts of Land Use and Transportation Policies." For Europe's Kuhmo-Nectar Summer School in Transportation Economics, Valencia, Spain, July 2010.\*
- 53. "To LDT or Not to LDT: The Relative Cost of Cars and Light-duty Trucks." Undergraduate Summer Internship in Transportation (USIT) Seminar Series, University of Texas, Austin, TX, August 10, 2011.\*
- 54. "A Toolkit for Anticipating and Evaluating the Impacts of Roadway Improvements." TexITE Fall Meeting, Austin, Texas, September 2011.
- 55. "Urban Planning, Land Use, and Vehicle Technologies to Reduce GHG Emissions in Cities." Energy and Urban Development Conference, hosted by UT Schools of Architecture, Business and Engineering and the Urban Land Institute, University of Texas, Austin, TX, November 18, 2011.\*
- 56. "Electrified Vehicle Technology Trends, Infrastructure Implications, & Cost Comparisons." UT Energy Forum, University of Texas, Austin, TX, February 2-3, 2012.
- 57. "Project Outcomes Under Uncertainty: An Examination of Benefit-Cost Ratios and other Impacts." Presented at the Texas ITE Conference, San Marcos, TX, March 29-30, 2012.
- 58. "PEV Market Potential Using Multi-Day GPS Data." Presented in the poster session of Emerging Vehicle Technologies, CTR Symposium, Austin, TX, April 4, 2012.
- 59. "Project Outcomes Under Uncertainty: An Examination of Benefit-Cost Ratios and Other Impacts." Presented in the poster session of Emerging Vehicle Technologies, CTR Symposium, Austin, TX, April 4, 2012.
- 97. "The Future of Plug-In Vehicles: Owner Preferences, Fleet Evolution, and Vehicle Use." Presentation to the UT Energy Symposium May 3, 2012.\*
- 60. "Anticipating and Comparing Transportation Investment Impacts: A Holistic Project Evaluation Toolkit (PET) for Engineers and Planners." TxDOT 2012 Transportation Planning Conference & TRB Access Management Conference, Dallas, TX, July 19, 2012.

## Community Outreach/Education: Public Service Presentations and Other Activities

- 1. "To SUV or Not to SUV, That is the Question." University of Texas Interactive, Austin, TX, March 1999.\*
- 2. "Designing Away Death." The University of Texas Minority Introduction to Transportation Engineering, (MITE), Austin, TX, June 1999.\*
- 3. "Designing Away Death." The University of Texas Honors Colloquium, Austin, TX, June 1999.\*

- 4. "Mitigating Traffic Impacts through Urban Form, Vehicle Regulation, and Models of Traffic Flow." U.T. Update for Texas Exes, The University of Texas, Austin, TX, June 1999.\*
- 5. "Working Women in Today's Society: A Personal Look at Women in Non-Traditional Fields." Panel Member. The University of Texas, October 30, 2000.\*
- 6. "Driving Dangerously: Roadway Design & Crash Consequences." Presented to general public attending Explore U.T. Open House, March 3, 2001.\*
- 7. "Designing Away Death." Expanding Your Horizons Conference, University of Texas Campus, Austin, TX, March 24, 2001.\*
- 8. "Designing Away Death." Women in Engineering at U.T. (WE@U.T.) program for female high school honors students, University of Texas Campus, Austin, TX, August 2001.\*
- 9. "To SUV or Not to SUV: That is the Question." Presented to Austin's Professional Society for Women Engineers (SWE). Austin, TX, September 19, 2001.\*
- 10. "Designing Away Death." Expanding Your Horizons Conference, University of Texas Campus, Austin, TX, February 23, 2002. \*
- 11. "To SUV or Not to SUV: That is the Question." Presentation to U.T. LAMP (Learning Activities for Mature People) Association, University of Texas Campus, Austin, TX, April 24, 2002.\*
- 12. "Designing Away Death." Expanding Your Horizons Conference, University of Texas Campus, Austin, TX, February 22, 2003.\*
- 13. "Congestion 101: Transportation Supply, Demand, and Solutions." Presented to general public attending Explore U.T. Open House, March 1, 2003.\*
- 14. Presentation relating to Travel Demand Models & Air Quality at ECT-Livable City-CAMPO (Capital Area Metropolitan Planning Organization Meeting, Austin, TX, November 3, 2005.\*
- 15. Gas Price Survey results with student Matthew Bomberg was mentioned in Capital Area MPO's Agenda Item 7, "Presentation on peaking of oil, gasoline prices, the effect on transportation and MPO responsibilities," Austin, TX, September 11, 2006.\*
- 16. Invited presentation of current research modeling efforts for Senator Kirk Watson's Mobility Financing Task Force Group Meeting, Austin, TX, February, 23, 2007.\*
- 17. "To LDT or Not to LDT: The Relative Cost of Cars and Light-Duty Trucks." Presented to general public attending Explore U.T. Open House, Austin, TX, March 3, 2007.
- 18. "An Inconvenient Truth." Led discussion of Al Gore's book at the U.T. Freshman Reading Round-Up, on August 28, 2007.\*
- 19. "Credit-Based Congestion Pricing: An Equitable Solution to Congestion." Invited presentation before the City of Austin's Urban Transportation Commission at City Hall, Austin, TX, December 11, 2007.\*
- 20. "Addressing Spatial Autocorrelation in Land Use and Transport Data: New Opportunities for Forecasting." Invited Seminar presentation before graduate students in U.T.'s Operations Research area, University of Texas campus, Austin, TX, April 11, 2008.\*
- 21. "Forecasting the Future: Using Math and Science to Construct a Crystal Ball for Cities." Invited presentation before 4th-6th graders as part of the Summer Institute for the Gifted course titled "Future City Design" held on the UT campus, July 18, 2008.
- 22. "An Inconvenient Truth." Led discussion of Al Gore's book at the U.T. Freshman Reading Round-Up, on August 26, 2008.\*
- 23. "Successful female leaders and role models." Invited panel presentation to 6th, 7th and 8th grade girls (ages 10 through 13) at the Ann Richards School, Austin, TX, May 15, 2009.\*
- 24. "An Inconvenient Truth." Led discussion of Al Gore's book at the U.T. Freshman Reading Round-Up, August 25, 2009.\*
- 25. Two-weeks of meetings with transportation policymakers and policy experts in Washington, D.C., October 1-15, 2009.\*
- 26. Newsletter and other contributions to the City of Austin's Child Walk-to-School Safety Program at Casis Elementary School, Fall 2009.\*
- 27. Presentation to second graders at Career Day for Casis Elementary School, on the practice of transportation engineering, Austin, TX, March 12, 2010.\*

- 28. Presentation on training and engineering experiences from 2-year Peace Corps service in Ecuador, given to University of Maryland students at the request of Prof. David Lovell, March 31, 2010.\*
- 29. Presentation on recycling, climate change and related topics, titled "Protecting the Planet," for students at Casis Elementary School, as part of Earth Month celebration, April 5, 2010.\*
- 30. Panelist on "Supervisory Skills A Range of Styles", as part of a professional development workshop for UT's Women in Engineering's Graduates Linking with Undergraduates (GLUE) program, April 7, 2010.\*
- 31. "To Drive or Not to Drive? Transportation Engineering. "Women in Engineering at U.T. (WE@U.T.) day camp titled Consider Every Option (CEO) for female high school students, University of Texas Campus, Austin, TX, June 2010.
- 32. "To Drive or Not to Drive? Transportation Engineering. "Women in Engineering at U.T. (WE@U.T.) camp for high school senior girls, University of Texas Campus, Austin, TX, July 2010.
- 33. "Plug-in Electric Vehicles: Their Technology, Use, and Impacts." Presentation to U.T. LAMP (Learning Activities for Mature People) Association, University of Texas Campus, Austin, TX, April, 2011.\*
- 34. Helped manage "Science in a Box" program and contributor to "Health and Welfare" news series for students at Casis Elementary School, September 2010 May 2011.\*
- 35. Presentation to UT Transportation Engineering graduate students: "Ethics for Graduate School and Beyond," August 9, 2011.\*
- 36. Presentation to fifth graders at Career Day for Casis Elementary School, on the practice of transportation engineering, Austin, TX, May 2012.\*

#### **TECHNICAL REPORTS**

- 1. Kara Kockelman, Yong Zhao, and Chessalay Blanchard-Zimmerman. "Methods for Meeting the Intent of the ADA in Sidewalk Cross-Slope Design." Report No. 4933-S (also containing 4933-1), TxDOT, CTR, UT Austin, TX, January 2000.
- 2. Chandra Bhat, S. Handy, Kara Kockelman, H. S. Mahmassani, Q. Chen, and L. Weston. "Urban Accessibility Index Literature Review." Report No. 4938-1, TxDOT, CTR, UT Austin, TX, May 2000.
- 3. Kara Kockelman, Aaron Overman, Marwan Madi, Jenny Peterman, Randy B. Machemehl, and Susan Handy. "Frontage Roads in Texas: Legal Issues, Operational Issues, and Land Use Distinctions." Report No. 1873-1, TxDOT, CTR, UT Austin, TX, August 2000.
- 4. Chandra Bhat, Susan Handy, Kara Kockelman, Hani S. Mahmassani, Qinglin Chen, and Lisa Weston. "Accessibility Measures: Formulation Considerations and Current Applications." Report No. 4938-2, TxDOT, CTR, UT Austin, TX, September 2000.
- 5. Yong Zhao and Kara Kockelman. "The Propagation of Uncertainty Through Travel Demand Models." SWUTC/00/167804-1, UT Austin, TX, October 2000.
- 6. Kara Kockelman, Brian ten Siethoff, C. Michael Walton, and Hani Mahmassani. "Research on Relationships Between Transportation Infrastructure and Increases in Vehicle Miles Traveled." Environmental Protection Agency, 2001.
- 7. Kara Kockelman, Siva Srinivasan, and Susan Handy. "Economic Effects of Highway Relief Routes on Small-and Medium-Size Communities: An Econometric Analysis." Report 1843-2, TxDOT, CTR, UT Austin, TX, May 2001.
- 8. Chandra Bhat, S. Handy, Kara Kockelman, H.S. Mahmassani, Q. Chen, I. Srour, and Lisa Weston, "Assessment of Accessibility Measures." Report 4938-3, TxDOT, CTR, UT Austin, TX, August 2001.
- 9. Kara Kockelman, Randy Machemehl, Aaron Overman, Marwan Madi, Jacob Sesker, Jenny Peterman, and Susan Handy. "Frontage Roads in Texas: Legal Issues, Operational Issues and Land Use Distinctions." Report 0-1873-S, TxDOT, CTR, UT Austin, TX, October 2001.
- 10. Kara Kockelman, Lydia Heard, Young-Jun Kweon, and Tom Rioux. "Sidewalk Cross-Slope Design: Analysis of Accessibility for Persons with Disabilities." Project 0-4171-1, TxDOT, CTR, UT Austin, TX, October 2001.
- 11. Susan Handy, Kara Kockelman, Scott Kubly, Siva Srinivasan, James Jarrett, Michael Oden and Hani Mahmassani. "The Impacts of Highway Relief Routes on Small Towns in Texas." Report 1843-S, TxDOT, CTR, UT Austin, TX, October 2001.

- 12. Kara M. Kockelman, Lydia Heard, Young-Jun Kweon, and Tom Rioux. "Sidewalk Cross-Slope Design: Analysis of Accessibility for Persons with Disabilities- A Summary." Report 0-4171-S, TxDOT, CTR, UT Austin, TX, October 2001.
- 13. Kara M. Kockelman, Lydia Heard, Young-Jun Kweon, and Tom Rioux. "Sample Size Expansion of Sidewalk Cross Slope Variability with Respect to the Americans with Disabilities Act Accessibility Guidelines." Report 0-4171-2, TxDOT, CTR, UT Austin, TX, October 2001.
- 14. Kara M. Kockelman, Randy Machemehl, Aaron Overman, Marwan Madi, Jacob Sesker, Jean (Jenny) Peterman, and Susan Handy. "Frontage Roads in Texas: A Comprehensive Assessment." Report 0-1873-2, TxDOT, CTR, UT Austin, TX, October 2001.
- 15. Susan Handy, Bob Paterson, Chandra Bhat, Kara Kockelman, J. Song, Jayanthi Rajamani, and Juchul Jung. "Techniques for Mitigating Urban Sprawl." Report 0-4420-1, TxDOT, CTR, UT Austin, TX, August 2002.
- 16. Anant Pradhan and Kara Kockelman. "Uncertainty in Integrated Land Use-Transport Models." SWUTC/02/167223-1, UT Austin, TX, September 2002.
- 17. Sriram Krishnamurthy and Kara Kockelman. "Uncertainty in Integrated Land Use-Transport Models: Simulation and Propagation." SWUTC/02/167523-1, UT Austin, TX, September 2002.
- 18. Chandra Bhat, Susan Handy, Kara Kockelman, Hani Mahmassani, Anand Gopal, Issam Srour, and Lisa Weston. "Development of an Urban Accessibility Index: Formulations, Aggregation, and Application." Research Report 0-4938-4, TxDOT, CTR, UT Austin, TX, October 2002.
- 19. Robert Paterson, Susan Handy, Kara Kockelman, Chandra Bhat, Jumin Song, Jayanthi Rajamani, Juchul Jung, Kari Banta, Urvi Desai, and John Waleski. "Techniques for Mitigating Urban Sprawl." Report 0-4420-2, TxDOT, CTR, UT Austin, Austin, TX, September 2003.
- 20. Sukumar Kalmanje and Kara Kockelman. "Credit-Based Congestion Pricing: A Policy Proposal and the Public's Response." SWUTC/03/167822-1, UT Austin, TX, October 2003.
- 21. Surabhi Gupta, Sukumar Kalmanje, and Kara Kockelman. "Road Pricing Simulations: Traffic, Land Use and Welfare Impacts." SWUTC/04/167242-1, UT Austin, TX, October 2003.
- 22. Sukumar Kalmanje and Kara Kockelman. "Credit-Based Congestion Pricing: Travel, Land Values and Welfare Impacts." SWUTC/03/167822-2, UT Austin, TX, October 2003.
- 23. Kara Kockelman, W. Curtis Bouldin, S. Hakimi, and R. Machemehl. "Freeway Design Decisions for Revised Frontage Road Policy." Report 5-1873-01-1, TxDOT, CTR, UT Austin, TX, January 2004.
- 24. Khali R. Persad, S. Bansal, S. Kalmanje, Pradeep Gulipalli, and Kara Kockelman. "Impacts of Toll Projects and Methodology for Candidate Evaluation." Report 0-4637-1, TxDOT, CTR, UT Austin, TX, 2004. (Not finalized for public distribution, due to policy controversies.)
- 25. Kara M. Kockelman, Jared D. Heiner, Shadi Hakimi, and James Jarrett. "Right-of-Way Costs and Property Values: Estimating the Costs of Texas Takings and Commercial Property Sales Data." Report 0-4079-1, TxDOT, CTR, UT Austin, TX, October 2004.
- 26. Kara Kockelman, Travis Waller, Pradeep Gulipalli, Sukumar Kalmanje, Ampol Karoonsoontawong, and Satish Ukkusuri. "Application of Credit-Based Congestion Pricing in Texas: Operational Considerations and Impacts." Report 0-4634-1, TxDOT, CTR, UT Austin, TX, October 2005.
- 27. Kara Kockelman, Khali Persad, Travis Waller, Sukumar Kalmanje, Satish Ukkusuri, Stephen Boyles, Pradeep Gulipalli, and Saurabh Bansal. "Toll Road Project Selection and Evaluation of Impacts." Report 0-4637-2, TxDOT, CTR, UT Austin, TX, 2005. (Not finalized for public distribution, due to policy controversies.)
- 28. K. Kockelman, K. Podgorski, and M. Bina. "Public Perceptions of Pricing Existing Roads and Other Transportation Policies: The Texas Perspective." Report 0-4817-1&2, TxDOT, CTR, UT Austin, TX, 2005. (Not finalized for public distribution, due to policy controversies.)
- 29. Kara Kockelman and Jianming Ma. "Rural Two-Lane Roadway Crash Analysis." Report 0-4965, TxDOT, CTR, UT Austin, TX, March 2006. (Not available for public distribution, due to reliance on past data. CRIS data were to be used, but did not become available during the project period.)
- 30. Kara Kockelman, J. Bottom, Young-Jun Kweon, Jianming Ma, and Xiaokun Wang. "Safety Impacts and Other Implications of Raised Speed Limits on High-Speed Roads." NCHRP Project #17-23, UT Austin and Charles River & Associates, NCHRP Research Results Digest 303 and available on-line at <a href="http://www.ce.utexas.edu/prof/kockelman/public\_html/NCHRPSpeedLimits17-23.pdf">http://www.ce.utexas.edu/prof/kockelman/public\_html/NCHRPSpeedLimits17-23.pdf</a>, April 2006.

- 31. Michelle Bina and Kara Kockelman. "Household Location Choices: The Case of Homebuyers and Apartment Dwellers in Austin, Texas." SWUTC/06/167552-1, UT Austin, TX, April 2006.
- 32. Kara Kockelman, C. Caldas, Z. Zhang, Lu Gao, and Raquel Escatel. "Estimating the Cost of Right-of-Way Acquisitions Along Texas Corridors." Report 5-4079-1, TxDOT, CTR, UT Austin, TX, August 2006.
- 33. Kara Kockelman, Carlos Caldas, Zhanmin Zhang, Raquel Escatel, and Lu Gao. "Right-of-Way Cost Estimating Tool User Manual." Report 5-4079-01-P1, TxDOT, CTR, UT Austin, TX, August 2006.
- 34. C. Caldas, Z. Zhang, K. Kockelman, K. Persad, E. Chung, and D. Medina. "TxDOT Guidebook for Right-of-Way Valuations and Negotiations." Report 0-5379-P2, TxDOT, CTR, UT Austin, TX, August 2006.
- 35. Carlos Caldas, Zhanmin Zhang, Kara Kockelman, Khali Persad, Doris Medina, and Eugene Chung. "Synthesis of Best Practices in Right-of-Way Valuations and Negotiations." Report 0-5379-P1, TxDOT, CTR, UT Austin, TX, August 2006.
- 36. Alba Webb, Jarett Spinhirne, Shashank Gadda, Yosuke Kimura, Laura Gonzales, Cyril Durenberger, Gary McGaughey, Sonia Uribe, Kara Kockelman, Elena McDonald-Buller, and David Allen. "Evaluation of Emission Control Strategies for the 8-Hour Ozone Standard in the Houston and Dallas Areas and a Pilot-Scale Study of In-Use Emissions from Heavy-Duty diesel Dump Trucks using a Portable Emissions monitoring System (PEMS)." Report 0-5191-1, TxDOT, CTR, UT Austin, TX, October 2006.
- 37. Carlos Caldas, Z. Zhang, K. Kockelman, K. Persad, D. Medina, and E. Chung. "Best Practices in Right-of-Way Valuations and Negotiations Report." Report 0-5379-1, TxDOT, CTR, UT Austin, TX, January 2007.
- 38. Saurabh Kumar and Kara Kockelman. "Microsimulation of Household and Firm Behaviors: Coupled Models of Land Use and Travel Demand in Austin, Texas." SWUTC/2007/167262-1, UT Austin, TX, December 2007.
- 39. Kara Kockelman, Jennifer Duthie, Siva Karthik Kakaraparthi, Bin (Brenda) Zhou, Ardeshir Anjomani and Sruti Marepally. "An Examination of Land Use Models, Emphasizing UrbanSim, TELUM, and Suitability Analysis." Report 0-5667-1, TxDOT, CTR, UT Austin, TX, October 2008.
- 40. S. Travis Waller, Kara Kockelman, Dazhi Sun, Stephen Boyles, Dung-Ying Lin, ManWo Ng, Saamiya Seraj, Mohamad Tassabehji, Varunraj Valsaraj and Xiaokun Wang. "Archiving, Sharing, and Quantifying Reliability of Traffic Data." Report 0-5686-1, TxDOT, CTR, UT Austin, TX, October 2008.
- 41. Peter, Vovsha, Kara Kockelman, Robert Donnelly, Ken Small, Thomas Adler, Mark Bradley and Hani Mahmassani. "Improved Framework and Tools for Highway Pricing Decisions." National Cooperative Highway Research Program (NCHRP) Project HR 08-57 Interim Report Volume 1: Decision-Making Framework for Highway Pricing and Volume 2: Travel Demand Forecasting Tools for Pricing Projects. PB and Teammates, December 2008.
- 42. Alba Webb, Jihee Song, David Allen, Elena McDonald-Buller, Brenda Zhou, Shashank Gadda, Jason Lemp, Sumala Tirumalachetty, Kara Kockelman and Barbara Parmenter. "Predicting the Relative Impacts of Urban Development Policies and On-Road Vehicle Technologies on Air Quality in the United States: Modeling and Analysis of a Case Study in Austin, Texas." Final Report, EPA Project RD-831183901, UT Austin, TX, December 2008.
- 43. Sumala Tirumalachetty and Kara Kockelman. "Microsimulation of Household and Firm Behaviors: Anticipation of Greenhouse Gas Emissions for Austin, Texas." SWUTC/2009/167272-1, UT Austin, Austin, TX, December 2009.
- 44. Kara Kockelman, Matthew Bomberg, Melissa Thompson and Charlotte Whitehead. "GHG Emissions Control Options: Opportunities for Conservation." Report commissioned by the National Academy of Science's Committee for the Study on the Relationships among Development Patterns, VMT, and Energy Conservation. UT Austin, TX, June 2009.
- 45. Jose A. Gomez-Ibanez et al., "Driving and the Built Environment: The Effects of Compact Development on Motorized Travel, Energy Use, and CO<sub>2</sub> Emissions." Report of the National Research Council of the National Academies, findings of the Committee for the Study on the Relaitonships Among Development Patterns, Vehicle Miles Travels and Energy Consumption, Transportation Research Board. UT Austin, TX, August 2009.
- 46. Kara Kockelman. "Towards Behaviorally-Consistent Integrated Transport-Land Use Models, in Support of Infrastructure System Decisions." Final Research Report for the National Science Foundation (CAREER Award) # CMS 9984541. UT Austin, TX, January 2010.

- 47. Sashank Musti and Kara Kockelman. "Evolution of the Household Vehicle Fleet: Anticipating Fleet Composition, Plug-In Hybrid Electric Vehicle (PHEV) Adoption and Greenhouse Gas (GHG) Emissions in Austin, Texas." SWUTC/2009/169202-1, UT Austin, TX, 2010.
- 48. C.M. Walton, Jolanda Prozzi, Alejandra Cruz-Ross, Kara Kockelman, Alison Conway, Daniel Evans and Robert Harrison. "Potential Use of Longer Combination Vehicles in Texas: First Year Report." Report 0-6095-1, TxDOT, CTR, UT Austin, TX, May 2010.
- 49. Kara Kockelman, Chi Xie, Dan Fagnant, Tammy Thompson, Elena McDonald-Buller and Travis Waller. "Comprehensive Evaluation of Transportation Projects: A Toolkit for Sketch Planning." Report 0-6235-1, TxDOT, CTR, UT Austin, TX, October 2010.
- 50. Transportation Electrification Panel. "Plug-in Electric Vehicles: A Practical Plan for Progress" report (facilitated by Indiana University's School of Public Affairs, and available at http://www.indiana.edu/~spea/pubs/TEP combined.pdf), 2011.
- 51. C.M.Walton, Robert Harrison, Bridget Bienkowski, Kara Kockelman, Anjela J. Weissmann, Jose Weissmann, A.T. Papagaiannakis, Mijia Yang, Jaya L. Kunsietty. "Potential Use of Longer Combination Vehicles in Texas: SecondYear Report." Report 0-6095-2, TxDOT, CTR, UT Austin, TX, October 2010.
- 52. J. Richard Kuzmyak, Kara Kockelman, John Bowman, Mark Bradley, Keith Lawton & Richard H. Pratt. "Estimating Bicycling and Walking for Planning and Project Development; Task 3 Interim Report." NCHRP Project No. 08-78, March 2011.
- 53. Resource Systems Group, Inc., Fehr & Peers, R. Cervero, K. Kockelman, and Renaissance Planning Group. "The Effect of Smart Growth Policies on Travel Demand." Interim Report, Strategic Highway Research Program (SHRP) Project 2 C16. Transportation Research Board, National Academy of Science. June 2011.
- 54. Binny Paul, Kara Kockelman and Sashank Musti." The Light-Duty-Vehicle Fleet's Evolution: Anticipating PHEV Adoption and Greenhouse Gas Emissions Across the U.S. Fleet." SWUTC/2011/161023-1, UT Austin, May 2011.
- 55. Mobashwir Khan and Kara Kockelman. "Predicting the Market Potential of Plug-In Electric Vehicles using Multiday GPS Data." SWUTC/2011/161123-1, UT Austin, TX, December 2011.

## **UNPUBLISHED MANUSCRIPTS**

- 1. Kockelman, Kara M. "A Utility-Theory-Consistent System-of-Demand-Equations Approach to Household Travel Choice." Dissertation, Department of Civil and Environmental Engineering, The University of California, Berkeley, August 1998. (As noted earlier, a short form of this dissertation was published in *Transportation Research* Part B).
- 2. Reckinger, Jamie, Michael Bomba, and Kara Kockelman. "Difficulties of Beyond Long-Range Planning for Transportation Projects: Case of the Trans-Texas Corridor." 2004.
- 3. Kweon, Young-Jun and Kara Kockelman. "Nonparametric Regression Estimation of Household VMT." 2004.
- 4. Reckinger, Jamie and Kara Kockelman. "Assessing Demand for the Trans-Texas Corridor: Analysis of the National Household Travel Survey's Long-Distance Travel Data." 2005.
- 5. Kockelman, Kara, Jamie Reckinger, Michael Bomba, Natalia Ruiz-Juri, and Shadi Hakimi. "Potential Impacts of the Trans-Texas Corridor on Land Use, Travel Patterns, and the Growth of Population and Employment." August 2005.
- 6. Duthie, Jennifer, Kara Kockelman, Varunraj Valsaraj and Brenda Zhou. "Integrated Models of Land Use and Transport: The Results of ITLUP and UrbanSim in Austin, Texas." 2007.
- 7. Gadda, Shashank, Kara Kockelman and Atul Magoon. "Estimates of AADT: Quantifying the Uncertainty." 2007.
- 8. Habib, Khandker N. and Kara Kockelman. "Modeling the Choice of Residential Location and Home Type: Recent Movers in Austin, Texas." 2008.
- 9. Kockelman, Kara. "Transportation and Land Use Solutions for Low-Carbon Cities." 2010.

# RESEARCH GRANTS AND CONTRACTS

Co-Investigators	Title	Agency	Grant Total (Kockelman's share)	Grant Period
1. (None)*	Light-Duty-Truck Accident and Use Modeling	UT Austin College of Engineering	Student TA Costs	9/1/98 – 8/31/01
2. Dean Taylor (during first 4 months of project)*	Sidewalk Slope Variability with Respect to the ADA Accessibility Guidelines	Texas Dept. of Transp. (TxDOT)	\$100,213 (\$100K)	11/13/98 – 8/31/99
3. Hani Mahmassani, Michael Walton	Research on Relationships between Transportation Infrastructure and Increases in Vehicle Miles Traveled	U.S. EPA	\$120,000 (\$100K)	6/1/99 – 5/31/01
4. (None)*	The Propagation of Uncertainty in Multi-Stage Transport Demand Models	SWUTC	\$ 32,000 (\$32K)	9/1/99 - 8/31/00
5. Randy Machemehl, Susan Handy*	Investigation of the Impact of Frontage Roads as an Element of Controlled Access Facilities	TxDOT	\$176,770 (\$120K)	9/1/99 — 8/31/01
6. Susan Handy	Investigate the Economic Impacts of Highway Relief Routes on Small and Medium Size Communities	TxDOT	\$150,000 (\$50K)	9/1/99 - 8/31/01
7. Chandra Bhat, Susan Handy, & Hani Mahmassani	Development of an Urban Accessibility Index	TxDOT	\$181,000 (\$40K)	9/1/99 - 8/31/02
8. (None)*	Engineering Student Grades and Course Evaluations	UT Austin College of Engineering	Student TA Costs	1/1/00 - 8/31/02
9. (None)*	Uncertainty in Integrated Land Use-Transport Models	SWUTC	\$ 24,000 (\$24K)	9/1/00 - 8/31/01
10-12. (None)*	Towards Behaviorally Consistent Integrated Transport Land Use Models, In Support of Infrastructure Systems Decisions (CAREER Award)	NSF, Oregon DOT, TxDOT	\$500,000 (\$500K)	9/1/00 - 12/31/07
13. Tom Rioux*	Sample Size Expansion of Sidewalk Cross Slope Variability with Respect to the ADA Accessibility Guidelines	TxDOT	\$100,000 (\$100K)	9/1/00 - 8/31/01

14. Susan Handy, Chandra Bhat, Robert Patterson	Techniques for Mitigating Urban Sprawl	TxDOT	\$190,000 (\$40K)	9/1/01 – 8/31/03
15. (None)*	Uncertainty in Integrated Land Use-Transport Models: Simulations & Propagation	SWUTC	\$ 25,500 (\$25.5K)	9/1/01 – 8/31/02
16. (None)* Note: GIFT	Towards Behaviorally Consistent Integrated Transport Land Use Models, In Support of Infrastructure Systems Decisions	Ford Motor Company	\$ 17,500 (\$17.5K)	1/1/02
17. Randy Machemehl, Susan Handy*	Freeway Design Decisions for Revised Frontage Road Policy	TxDOT	\$172,000 (\$130K)	2/1/02 - 2/15/04
18. Charles River Associates Inc.	Safety Impacts & Other Implications of Raised Speed Limits on High-Speed Roads	TRB/ NCHRP	\$350,000 (\$150K)	8/1/02 – 12/31/04
19. (None)*	Research Internship Program 2002/2003	U.T. Office of Grad. Studies	\$ 19,000 (\$19K)	9/1/02 - 5/31/03
20. (None)*	Credit-Based Congestion Pricing	SWUTC	\$ 27,000 (\$27K)	9/1/02 - 8/31/03
21. Michael Walton & James Jarrett*	Impacts of Land Use & Land- Use Change on Right of Way Cost	TxDOT	\$196,750 (\$170K)	9/1/02 – 8/31/04
22. Michael Walton	Coordinating Traffic Management Responses Between TxDOT Districts in Extraordinary Events	TxDOT	\$110,000 (\$10K)	9/1/02 - 8/31/03
23. (None)*	Research Experience for Undergraduates: Towards Behaviorally Consistent Integrated Transport Land Use Models, in Support of Infrastructure Systems Decisions	NSF	\$15,000 (\$15K)	7/1/03 – 8/31/04
24. Academic Development Funds*	Bringing the Splendor of Statistics to All Students: Animation, Adaptive Problem Sets, & More	UT Austin College of Engineering	\$6,000 (\$6K)	9/1/03 - 8/31/04

25. (None)*	Credit-Based Congestion Pricing: Implementation and Welfare Calculations	SWUTC	\$32,000 (\$32K)	9/1/03 - 8/31/04
26. Jolanda Prozzi, Chandra Bhat, Tom Rioux	Development of Sources and Methods for Securing Truck Travel Data in Texas	TxDOT	\$132,500 (\$10K)	9/1/03 – 8/31/04
27. Travis Waller, David Luskin, & Chandra Bhat*	Application of Credit-Based Congestion Pricing in Texas: Operational Considerations & Impacts	TxDOT	\$215,000 (\$150K)	9/1/03 – 8/31/05
28. Khali Persad, Travis Waller, David Luskin, Michael Walton, & Randy Machemehl*	The Role of Toll Projects in Enhancing Texas Transportation	TxDOT	\$231,612 (\$162K)	9/1/03 – 8/31/05
29. Michael Walton, David Luskin, & Michael Bomba*	Potential Effects of the Trans- Texas Corridor on Land Use Patterns	TxDOT	\$200,000 (\$160K)	9/1/03 – 8/31/05
30. Randy Machemehl, David Luskin, & Chandra Bhat*	Public Perceptions of Toll Roads	TxDOT	\$270,000 (\$193K)	9/1/03 – 8/31/05
31. Elena C. McDonald-Buller B. Parmenter, & D. Allen	Predicting the Relative Impacts of Urban Development Policies and On-Road Vehicle Technologies on Air Quality in the United States: Modeling and Analysis of a Case Study in Austin, Texas	U.S. EPA	\$650,000 (\$260K)	12/20/04 – 12/19/08
32. David Allen, Elena C. McDonald-Buller	Investigation of Control Strategies for 8-hour Ozone Standard	TxDOT	\$311,082 (\$60K)	9/1/04 - 8/31/06
33. John Mounce (at TTI)*	Rural Two-Lane Roadway Crash Analysis	TxDOT	\$300,000 (\$140K)	9/1/04 – 3/31/06
34. (None) *	The Basis for Location Choice, vis-a-vis Transportation Demand	SWUTC	\$32,000 (\$32K)	9/1/04 - 8/31/05
35. Carlos Caldas, Zhanmin Zhang *	Impacts of Land Use & Land- Use Change on Right of Way	TxDOT	\$162,000 (\$14K)	1/1/05 - 8/31/06

	Cost – Implementation Project			
36. Carlos Caldas, Khali Persad, Zhanmin Zhang	Best Practices in ROW Valuations and Negotiations	TxDOT	\$84,943 (\$10K)	9/1/05 – 8/31/06
37. (None) *	Microsimulation for Models of Travel & Location Choice	SWUTC	\$31,000 (\$31K)	9/1/05 - 8/31/06
38. Peter Vovsha, M. Bradley, H. Mahmassani, K. Small, T. Adler	Improved Framework and Tools for Highway Pricing Decisions	TRB/ NCHRP #8-57	\$600,000 (\$125K)	8/1/06 – 6/30/09
39. S. Travis Waller, Ard Anjomani *	Analysis and Guidelines for Establishing Unified Urban Land-Use and Transportation Planning Framework and Procedures	TxDOT	\$262,288 (\$172K)	9/1/06 - 8/31/08
40. S. Travis Waller, Zhanmin Zhang	Utilizing the Data Collected at Traffic Management Centers for Planning Purposes Through Non-Traditional Sources and Improved Equipment	TxDOT	\$267,834 (\$36K)	9/1/06 - 8/31/08
41. (None) *	Microsimulation for Coupled Models of Travel & Location Choice Behavior	SWUTC	\$38,600 (\$38.6K)	9/1/06 – 8/31/07
42. (None) *	Development of Next Generation of Travel Demand Models	El Paso MPO	\$9,600 (\$9.6K)	2/1/07 - 12//31/08
43. (None)*	Greenhouse Gas Emissions Control Options: Opportunities for Conservation	NAS	\$11,000 (\$11K)	9/1/07-4/30/09
44. Peter Vovsha, M. Bradley, H. Mahmassani	Improving Our Understanding of How Congestion and Pricing Affect Travel Demand.	SHRP	\$1,000,000 (\$40K)	9/1/07 – 1/20/10
45. (None) *	Microsimulation for Coupled Models of Travel & Location Choice: Applications to Greenhouse Gas Emissions	SWUTC	\$40,000 (\$40K)	9/1/07 - 8/31/08
46. (None) *	Land Use Modeling of the DFW Region – Phase 1	NCTCOG	\$71,175 (\$71K)	1/1/08 – 9/30/09

47. Chandra Bhat, S. Travis Waller *	Sketch Planning Techniques to Assess Regional Air Quality Impacts of Congestion Mitigation Strategies	TxDOT	\$310,000 (\$190K)	9/1/08 – 8/31/10
48. C.M. Walton, Z. Zhang, R. Harrison, J.P. Prozzi, L. Loftus- Ottway, J. Weissmann	Longer Combination Vehicles & Road Trains for Texas?	TxDOT	\$423,000 (\$22K)	9/1/08 – 8/31/10
57. (None) *	Vehicle Ownership, Retirement and Use Decisions: Response to Rising Fuel Prices and Implications for Carbon Emissions Forecasts	SWUTC	\$39,000 (\$39K)	9/1/08 – 8/31/09
50. Ard Anjomani *	Implementation of Accessible Land Use Modeling Tools for Texas Applications	TxDOT	\$215,920K (\$146K)	11/10/08 - 2/29/10
51. Xiaokun (Cara) Wang *	Models for Dynamic Discrete Response Data with Spatial Autocorrelation: Specification and Estimation	NSF	\$240,000 (\$200.9K)	1/1/09 – 8/31/12
52. (None) *	Land Use Model Program & Peer Review - Phase 2	NCTCOG	\$50,000 (\$50K)	5/1/09 – 12/31/10
53. S. Travis Waller, Dazhi Sun*	Development of a Performance Measurement Based Methodology to Objectively Compare Operational Improvements with Capacity Additions	TxDOT	\$425,000 (\$327K)	9/1/09 – 8/31/12
54. (None)*	Evolution of Vehicle Fleet: Anticipating Fleet Composition, Use and PHEV Adoption	SWUTC	\$39,000 (\$39K)	9/1/09 – 8/31/10
55. S. Travis Waller, R. Machemehl, Dazhi Sun	Safety Implications of Using Active Traffic Strategies on TxDOT Freeways	TxDOT	\$278,435 (\$24K)	9/1/09 – 8/31/11
56. Rich Kuzmyak, Dick Pratt, Mark Bradley, John Bowman & others	Estimating Walking & Bicycling for Planning & Project Development	NCHRP	\$300,000 (\$37K)	5/1/10 - 4/30/12
57. Fernanda Leite, Leigh Boske, Jolanda Prozzi *	Economic Considerations in Transportation System Development & Operations	TxDOT	\$270,000 (\$152K)	9/1/10 – 8/31/12

58. C. Caldas, C. Bhat, L. Loftus- Otway, N. Hutson	Condemnation in Transportation Projects: Causes and Solutions	TxDOT	\$213,832 (\$61K)	9/1/10 – 2/28/12
59. (None) *	Evolution of the Nation's Vehicle Fleet and GHG Emissions Reduction under Climate Policies	SWUTC	\$39,000 (\$39K)	9/1/10 – 8/31/11
60. (None) *	Implementation of Project Evaluation Toolkit for Abstracted Networks	TxDOT	\$240,000 (\$240K)	6/1/11-8/31/12
61. S. Travis Waller, Ross Baldick, Mike Walton	NSF Industry-University Research Center on Electric Vehicles: Transportation & Electricity Convergence	NSF & Industry Partners	\$400,000 (\$40K)	9/1/10 - 8/31/12
62. Tom Edgar, Ross Baldick, Michael Webber, & Others	Sustainable Grid Integration of Distributed & Renewable Resources (IGERT)	NSF	\$3,071,000 (\$81K)	9/1/11 – 8/31/14
63. Zhanmin Zhang, Michael Murphy	Relationship between Safety & Reduced Roadway Condition Maintenance	TxDOT	\$273,894 (\$70K)	9/1/11 - 8/31/13
64. Academic Development Funds*	Design and Evaluation of Ground-Based Transportation Systems	UT Austin College of Engineering	\$12,194 (\$12.2K)	9/1/11 - 8/31/12
65. A. Ramaswami, L. Baker, L. Bank, M. Chertow, P. Romero-Lankao	Research Coordination Network for Sustainable Cities: People and the Energy-Climate-Water Nexus	NSF	\$749,704	1/1/12 – 12/31/16
66. R. Machemehl, Z. Zhang	Demand Leveling and Roadway Pricing for Managing Congestion in Transportation Networks	TxDOT	\$75,000 (\$9K)	3/1/12 – 9/30/12
67. None *	Life-cycle Costs & Benefits of Different Land Use & Transportation Patterns	SWUTC	\$79,285 (\$79 K)	5/1/12 - 8/31/13
68. Stephen Mattingly	Evaluation of Existing Smartphone Applications & Data Needs for Travel Surveys	TxDOT	\$319,000 (\$150K)	Project Pending
69. Elena C. McDonald-Buller, R. Baldick*	Accounting for Electric Vehicles in Air Quality Conformity	TxDOT	\$317,335 (\$203K)	Project Pending
70. Kevin Hall, Stephen Boyles	Review of Tolling Approaches for Implementation within	TxDOT	\$160,000 (\$72K)	Project Pending

TOTAL		(& Approx. Share)	Funded	
<b>Funded Projects</b>		Date	(\$5,345K)	9/1/98 – 8/31/2014
		Total to	\$15,284,631	
Romero-Lankao				
M. Chertow, P.	Cities			
L. Baker, L. Bank,	for Low Carbon and Sustainable		(\$500K)	
72. A. Ramaswami,	Sustainability Research Network	NSF	\$12 million	Project Pending
Michael Murphy*	Treatments on Curves		(\$221K)	
71. R. Machemehl,	Safety Effect of Pavement Edge	TxDOT	\$309,008	Project Pending
	Model			
	TxDOT's Travel Demand			

<sup>\*</sup> Asterisks indicate the 44 funded projects on which Dr. Kockelman served (or serve) as the lead investigator.

**HONORS FOR SUPERVISED STUDENTS** (All awards marked with an asterisk [\*] indicate Dr. Kockelman's co-authorship of an associated paper.)

- Ms. Xiaokun Wang received the Sixth Annual Benjamin H. Stevens Graduate Fellowship in Regional Science for 2005.
- Ms. Xiaokun Wang received the Women's Transportation Seminar's Helene M. Overly Memorial Scholarship for Graduate Students, Fall 2005.
- Mr. Pradeep Gulipalli received the CUTC's Pikarsky Award for Outstanding M.S. Thesis in Science and Technology, December 2005.\*
- Mr. Matthew Bomberg received an Undergraduate Research Fellowship to study "Traveler Response to the 2005 Gas Price Spike", by U.T. Austin's VP for Research, 2005.\*
- Ms. Xiaokun Wang was designated an International Road Federation Executive Leadership Fellow, Fall 2006.
- Ms. Bin (Brenda) Zhou was a Finalist in the 2006 Graduate Student Paper Competition, North American Regional Science Council, November 2006.\*
- Ms. Bin (Brenda) Zhou and Mr. Jason Lemp were recipients of the 2007 Dwight D. Eisenhower Graduate Fellowship Grants, April 2007.
- Mr. Matthew Bomberg won a 2007 George H. Mitchell Student Award for Academic Excellence (based on his Plan II Honors thesis, "Traveler Response to the 2005 Gas Price Spike"), April 2007\*.
- Ms. Brenda Zhou received the Women's Transportation Seminar's Helene M. Overly Memorial Scholarship for Graduate Students, Fall 2007.
- Dr. Xiaokun Wang received the 2007 CUTC Pikarsky Award for best PhD dissertation titled "Capturing Patterns of Spatial and Temporal Autocorrelation in Ordered Response Data: A Case Study of Land Use and Air Quality Changes in Austin, Texas", January 2008.
- Ms. Brenda Zhou received a Women's Transportation Seminar International Scholarship for Graduate Students, May 2008.
- Ms. Brenda Zhou received the 2007-2008 Outstanding Woman Engineer Award by the University of Texas at Austin's Society of Women Engineers, May 2008.
- Mr. Jason Lemp received the 2009 SWUTC Dr. William J. Harris Award to the Outstanding Doctoral (PhD) Student, January 2010.
- Dr. Xiaokun Wang received the 2009 Young Researcher Award from the Transportation Research Board's Committee on Statistical Methods (ABJ80) for paper titled "Application of the Dynamic Spatial Ordered Probit Model: Patterns of Ozone Concentration in Austin, Texas," January 2010.\*
- Mr. Daniel Fagnant received the 2010 ITS Texas Scholarship, awarded during the ITS Texas Business and Awards Luncheon in Fort Worth, TX, November 2010.

- Ms. Yiyi Wang was a Finalist in the 2010 Graduate Student-Led Paper Competition, North American Regional Science Council, November 2010.\*
- Mr. Sashank Musti received the 2010 CUTC Wootan Award for Outstanding M.S. Thesis in Policy & Planning MS, January 2011.
- Dr. Jason Lemp received the International Association for Travel Behaviour Research 2009 Eric Pas Dissertation Prize to recognize the best dissertation in the field of travel behaviour research in 2009, presented at the annual meeting of the Transportation Research Board, January 2011.
- Mr. Daniel Fagnant received the 2011 Dwight D. Eisenhower Graduate Fellowship Grant, April 2011.
- Mr. Daniel Fagnant received the 20<sup>th</sup> annual Eno Leadership Development Fellowship, March 2012.
- Ms. Tong Donna Chen received the 2012 Dwight D. Eisenhower Graduate Fellowship Grant, April 2012.

## POST-DOCTORAL ADVISEES/COLLABORATORS

- Dr. Takuya Maruyama, 2006-2008, Ph.D. awarded by The University of Tokyo and fellowship funded by Japan's Society of Science.
- Dr. Tammy Thompson, 2009-2010, Ph.D. in Chemical Engineering awarded by U.T. Austin.
- Dr. Chi Xie, 2009-2011, Ph.D. in Civil Engineering awarded by Cornell University.

#### DOCTORAL THESIS ADVISEES

#### Completed:

- Yong Zhao, 2002
- Young-Jun Kweon, 2004
- Jianming Ma, 2006
- Xiaokun Wang, 2007
- Bin (Brenda) Zhou, 2009
- Jason Lemp, 2009

## In Progress:

- Yiyi Wang
- Donna Chen
- Dan Fagnant

#### MASTER'S THESIS ADVISEES

#### Completed:

- Raheel Shabih, 1999
- Katsuhiko Nakamura, 2000
- Brian tenSiethoff, 2000
- Aaron Overman, 2000
- Siva Srinivasan, 2000
- Issam Srour, 2001
- Anant Pradhan, 2001
- Yeonjoo Min, 2001
- Ling Jin, 2002
- Sriram Krishnamurthy, 2002
- Jared Heiner, 2003
- C. Patricia Delgado, 2004
- Natalia Ruiz-Juri, 2004
- Christopher Frazier, 2004
- Kaethe Podgorski, 2004
- Surabhi Gupta, 2004

- Sukumar Kalmanje, 2005
- Jamie Reckinger, 2005
- Pradeep Gulipalli, 2005
- Shadi Hakimi, 2005
- Michelle Bina, 2005
- Shashank Gadda, 2006
- Laura McWethy, 2006
- Jason Lemp, 2007
- Saurabh Kumar, 2007
- Siva Karthik Kakaraparthi, 2009
- Sumala Tirumalachetty, 2009
- Sashank Musti, 2009
- Binny Paul, 2011
- Brent Selby, 2011
- Dan Fagnant, 2011

## In Progress:

- Mobashwir Khan
- Xiaoxia Xiong

## **UNDERGRADUATE ADVISEES**

- Travis Dunn (2003) Plan II Honor's Thesis
- Alexander Marks (2005) Plan II Honor's Thesis TC 660HA&B course
- Matthew Bomberg (2006) Plan II Honor's Thesis TC 359T course

#### **GRADUATE NON-THESIS ADVISEES**

- Susan Humphrey, 2005, ME, Engineering Management (Summer Report)
- Mr. Xiaochuan Du, 2010-2011, PhD candidate, visiting student under the China Scholarship Council's (CSC) Joint-Training Program

#### OTHER TEACHING PREPARATION ACTIVITIES

Attended Orientation and Teaching Conferences and Pedagogical Workshop for Graduate Student Instructors, U.C. Berkeley, 1996-1997.

Informal Teaching Assistant, U.C. Berkeley's CE262 (Concepts of Probability and Transportation Statistics), Fall 1997.

Graduate Student Instructor, U.C. Berkeley's Statistics 131A (Statistical Inferences for Social and Life Scientists), Summer 1997.

Regularly attend U.T. College of Engineering's Faculty Innovation Seminars & U.T.'s Discovery Learning Seminars, 1998-Present.

Participant in U.T.'s New Faculty Orientation Week, August 1998.

Attended TxDOT's GEOPAK I & II Week-long Courses, for preparation of U.T.'s CE367 & 391M design courses, September 1998 & January 1999.

Attended "Presentation on New Century Scholars' Workshop Materials." Sponsored by U.T.'s College of Engineering. January 30, 2001.

Attended workshop on "Effective Interpersonal Communication." University of Texas EAP, February 7, 2001.

Coordination with College of Engineering's Faculty Innovation Center to animate Highway Design course concepts related to braking distances and curve banking for student visualization, University of Texas at Austin, Spring 2001.

Attended conference on "Forging Academic Partnerships." Sponsored by University of Texas' Office of Student Affairs at Thompson Conference Center, March 2, 2001.

Attended ASEE Gulf-Southwest Section Annual Conference and presented "Student Grades and Course Evaluations in Engineering: What Makes a Difference." College Station, TX, March 29, 2001.

Attended workshop on "Successful Negotiation Strategies." University of Texas EAP, April 4, 2001.

Participant in ASEE 2001 National Effective Teaching Institute (NETI), Albuquerque, NM, June 21-23, 2001.

Attended ASEE Annual Conference and presented "Student Grades and Course Evaluations in Engineering: What Makes a Difference." Albuquerque, NM, June 24-27, 2001.

Participant in ASCE 2001 Excellence in Civil Engineering Education (ExCEEd) Teaching Workshop, Fayetteville, AR, July 8-13, 2001.

Attended "Bringing Drama to the Classroom." University of Texas Graduate School of Business Forum, Austin, TX, February 8, 2002.

Attended the University of Texas's 18th Annual Teaching Seminar for Experienced Faculty, Austin, TX, January 6 & 7, 2003.

Awarded U.T. College of Engineering Academic Development Funds for developing animations and adaptive problem sets for use in CE311S (Elementary Probability and Statistics for Civil Engineering) for academic year 2004.

Attended "Scientific Teaching: What is the Evidence that Students Learn?" lecture by Dr. Diane Ebert May. UT's Discovery Learning Seminar, The University of Texas at Austin, TX, October 7, 2005.

Attended Faculty Innovation Seminar titled "Critical Thinking across Classrooms", September 23, 2009.

Attended Faculty Innovation Seminar titled "Why Don't Students Like School?" October 30, 2009.

Attended Faculty Innovation Seminar titled "Case Studies: A Better Way to Teach Numerical Methods", September 7, 2010.

Attended Faculty Innovation Seminar titled "Teaching Probability & Statistics: Stories & Captivation", October 27, 2010.

Attended UT College of Natural Sciences' Discovery Learning Luncheon Seminar titled "Exploring Creativity", February 9, 2011.

## PROFESSIONAL EXPERIENCE - Non-Academic

U.S. Peace Corps, Ecuador Project Engineer Aug. 1991 - Aug. 1993
City of Palo Alto, California Technician/Engineering Assistant

Aug. 1991 - Aug. 1993
Summer 1990

Summer 1990

Vossbrinck Associates Inc., Paid Intern Summers 1988 & 1989

Structural Engineers

## **CONSULTING**

Edward Rose & Sons (Property Management)

Jan. 2004 – April 2006

Retained by: Dunbar Munroe, Bryan Construction Co., Avalon Bay 2006 – 2009

Resource Systems Group, SHRP 2 C16 Effect of Smart Growth

Policies on Travel Demand 2011 – Present Board of Directors, GoingMyWay (dynamic ridesharing smartphone app) 2012 – Present

## **VITA**

Professor of Civil, Architectural and Environmental Engineering and William J. Murray Jr. Fellow at the University of Texas at Austin, Dr. Kockelman is a registered professional engineer and holds a PhD, MS, and BS in civil engineering, a Masters of City Planning, and a minor in economics from the University of

California at Berkeley. She has received an NSF CAREER Award for faculty research and teaching (2000-2004), a Ford Fund CAREER Award (2002), a U.C. Transportation Center "Student of the Year" Award (1998), U.C. Berkeley's University Medal (1991), and the NSF and Berkeley Fellowships for graduate study (1993-1998). In 2002, MIT's Technology Review Magazine identified her as one of the world's Top 100 Innovators under age 35, and the Council of University Transportation Centers awarded her its inaugural Young Faculty Award. In 2006, the Regional Science Association International presented her with its Geoffrey J.D. Hewings Award (for exceptional promise as a young regional science researcher). Dr. Kockelman received ASCE's 2007 Harland Bartholomew Award, to recognize her many transportation planning contributions, including her novel credit-based congestion pricing theory. She also received the Heart of Texas' Women's Transportation Seminar's 2007 Woman of the Year Award and was made a WTS-HOT Honorary Member in 2012. In 2010, Dr. Kockelman received ASCE's Walter L. Huber Research Prize in Transportation Engineering, for contributions in the areas of data acquisition and analysis to facilitate decisions in transport planning and policy-making. Between her undergraduate and graduate studies, she served as a Peace Corps Volunteer in the rural Andean region of Ecuador, managing the construction of potable water systems and other sanitation infrastructure. She continues her public service through her research and interactions with a variety of Austin groups, including student and alumni associations and professional societies.

Dr. Kockelman's primary research interests include the statistical modeling of urban systems (including models of travel behavior, trade, and location choice), energy and climate issues (vis-à-vis transport and land use decisions), the economic impacts of transport policy, and crash occurrence and consequences. She has taught classes in transportation systems, transport economics, transport data acquisition and analysis, probability and statistics, design of ground-based transportation systems, and geometric design of roadways. For several years, she advised the student chapters of the Society of Women Engineers (SWE) and Engineers Without Borders (EWB) at the University of Texas at Austin.

Dr. Kockelman chaired the Transportation Research Board's (TRB) Travel Survey Methods committee for three years (2007-2010) and served on the Transportation and Land Development committee for 11 years (1999-2010). She also serves on the organization's Committee on Transportation Economics, Committee on Statistical Methods, and Integrated Transportation and Land Use Modeling subcommittee. She has been a member of the two National Cooperative Highway Research Program (NCHRP) panels and one Transit CRP panel, and recently served as a member of the National Research Council's Committee for the Study on Relationships among Development Patterns, VMT, and Energy Conservation. She sits on the editorial advisory boards of *Transportation Research (Part B, Methodological)*, *Journal of Transport and Land Use, Journal of Regional Science, International Regional Science Review, Economics of Transportation* and *Papers in Regional Science*. In 2005, she was elected to the North American Regional Science Council, and in 2009 she chaired the annual North American meetings of the Regional Science Association International. In 2010, Dr. Kockelman was appointed to a three-year term as a member of the U.S. Department of Transportation's Advisory Council on Transportation Statistics. In 2011, she was appointed to a two-year term on ASCE's national Awards Committee.

Dr. Kockelman is primary and co-author of over 100 papers across a variety of subjects, all of which involve transportation-related data analysis. She has conducted research for the National Science Foundation, the U.S. Environmental Protection Agency, the National Cooperative and Strategic Highway Research Programs, the University Transportation Centers program, the North Central Texas Council of Governments and the Texas and Oregon Departments of Transportation. Recent and current projects include NSF grants for spatial econometric models of discrete response and studies of plug-in-electric-vehicle ownership and use, an NSF IGERT on the power grid, an NSF RCN on sustainable cities, an EPA STAR grant for land use, transport, and air quality models, NCHRP projects on demand modeling of non-motorized travel and tolled roadways, and TxDOT projects for holistic evaluation of competing network improvement projects and the development of a transportation economics reference for practitioners.