

Stephen P. Mattingly

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CURRENT POSITION

Sep. 2008 **University of Texas, Arlington, Texas**
-present Associate Professor

PREVIOUS POSITIONS

Aug. 2002 **University of Texas, Arlington, Texas**
-Aug. 2008 Assistant Professor

Jan. 2000 **University of Alaska, Fairbanks, Alaska**
-Aug. 2002 Assistant Professor

EDUCATION

Sep. 1994 **University of California**
-Mar. 2000 **Irvine, California**
Ph.D., Civil Engineering (Transportation), June 2000.
Dissertation: Decision Theory for Performance Evaluation of New Technologies
Incorporating Institutional Issues: Application to Traffic Control Implementation
Advisors: Professors R. Jayakrishnan and Michael G. McNally
Informal Advisor: Professor James Moore

Sept. 1993 **University of Texas**
-Aug. 1994 **Arlington, Texas**
M.S., Civil Engineering (Transportation), August 1994
Thesis: Detection and Mitigation of Roadway Hazards for Bicyclists
Advisor: Professor Siamak Ardekani

Aug. 1987 **Rice University**
-May 1991 **Houston, Texas**
B.S., Civil Engineering, May 1991

RESEARCH ACTIVITIES

Aug. 2002 **University of Texas**, Arlington, Texas
-present Assistant and Associate Professor

Projects

- TxDOT: *Examining the Use of Public Rights-of-Way for High-Speed Rail or Other Infrastructure*, Sep. 2011 – Present (8/13), Joint with the University of Texas at Austin (C. Michael Walton), Texas Southern University (Yi Qi) and University of North Texas (Terry Clower), \$387,943 (\$125,868/UTA) (with Siamak Ardekani)
- UTA: *Civil Engineering and Life Decisions: Choose Wisely*, Quality Enhancement Program, Sep. 2010 – Present (8/14), \$118,348 (with Andrew P. Kruzic and Yvette Weatheron)
- DART: *Support for the Integrated Corridor Management Demonstration Project*, Jul. 2010 – June 2011, \$198,692 (with Siamak A. Ardekani)
- NSF: *Engineering Sustainable Engineers*, Sep. 2009 – Aug. 2011, \$150,000 (with Melanie Sattler, Kambiz Alavi, Yvette Weatheron, K. Jamie Rogers, and Victoria Chen)
- TxDOT: *TxDOT Research Technical Assistance Panels*, Sep. 2009 – Aug. 2011, \$20,000 (with Ali Abolmaali, Sia Ardekani, Andrew Kruzic, John McEnery, Mohammad Najafi, Anand Puppala, and Roger Walker)
- TxDOT: *Evaluating the Impact of Transit Oriented Development*, Sep. 2009 – Aug. 2010, Joint with the University of North Texas (Terry Clower) and Texas Transportation Institute (Jeffery Arndt), \$175,878 (\$45,771/UTA) (with Jianling Li)
- NCTCOG: *The Role of Managed Lanes in Long-Range Urban Mobility Planning*, Mar. 2009 – Dec. 2009, \$50,000 (with Siamak A. Ardekani)
- NCTCOG: *Sustainable Development Impact*, Sep. 2008 – Sep. 2009, \$80,000 (with Siamak A. Ardekani and Enid Arvidson)
- DART: *Technical Assistance with the Integrated Corridor Management SmartNET System*, Oct. 2008 – Aug. 2009, \$83,887 (with Siamak A. Ardekani)
- Integrated Resource Group: *City of Duncanville Emission Testing Program*, Feb. 2008 – May 2008, \$1,128 (with Melanie Sattler)
- DART: *Accelerating Response to Roadway Incidents in Conjunction with the ICM Programs in the Greater Dallas Area*, Nov. 2007 – Oct. 2008, \$37,420 (with Siamak A. Ardekani)
- UTA: *Engineering Capstone Design Courses*, Quality Enhancement Program, Jan. 2007 – Present, \$198,000 (with Lynn Peterson, Bernd Chudoba, Ralph S Gibbs, Andrew Kruzic, Mike J. O'Dell, Thomas J. Rethard, K. Jamie Rogers, and Robert L. Woods)
- TxDOT: *TxDOT Research Technical Assistance Panels*, Sep. 2007 – Sep. 2009), \$20,000 (with Ali Abolmaali, Sia Ardekani, Andrew Kruzic, John McEnery, Mohammad Najafi, Anand Puppala, and Roger Walker)

TxDOT: *Assessment and Validation of Managed Lanes Weaving and Access Guidelines*, Sep. 2006 – Aug. 2008, \$213,417 (with James C. Williams)

NCTCOG: *Regional Transportation Council Aftermarket Technology and Fuel Additive Research Program*, Sep. 2005 – Sep. 2007, \$146,086 (with Melanie Sattler)

TxDOT: *Using Operations-Oriented Performance Measures to Support Freeway Management Systems*, Sep. 2005 – Sep. 2007, Joint with the Texas Transportation Institute (Robert E. Brydia), \$269,230 (\$74,230/UTA) (with Melanie Sattler)

TxDOT: *The Role of Preferential Treatment for Carpools in Managed Lane Facilities*, Sep. 2005 – Aug. 2008), Joint with the Texas Transportation Institute (Ginger Goodin), \$380,105 (\$134,105/UTA) (with Jianling Li)

TxDOT: *TxDOT Research Technical Assistance Panels*, Sep. 2005 – Sep. 2007, \$21,000 (with Ali Abolmaali, Ernest Crosby, Anand Puppala, Roger Walker and James C. Williams)

TxDOT: *An Assessment of Frontage Road Yield Treatment Effectiveness*, Sep. 2004 – Aug. 2008, Joint with the Texas Transportation Institute (Russell Henk), \$381,814 (\$106,169/UTA) (with James C. Williams)

TARC: *On-Road Measurement of Air Quality Benefits: Traffic Signal Improvements*, Sep. 2004 – Aug. 2006), \$31,315 (with Melanie Sattler)

TxDOT: *Development of Guidelines for Ramp Reversal Projects*, Sep. 2004 – Feb. 2006, Joint with the Texas Transportation Institute (Scott Cooner), \$135,262 (\$36,249/UTA) (with James C. Williams)

TxDOT: *TxDOT Research Technical Assistance Panels*, Sep. 2003 – Aug. 2005, \$21,000 (with Ali Abolmaali, Ernest Crosby, Anand Puppala, Roger Walker and James C. Williams)

TxDOT: *Developing a Comprehensive Pricing Evaluation Model for Managed Lanes*, Sep. 2003 – Aug. 2004, \$103,708 (with Jianling Li, Shekhar Govind, Siamak Ardekani, James C. Williams, and Richard Cole)

PATH: *Institutional Approaches for Interjurisdictional System Management*, Apr. 2003 – June 2004, Joint with the University of California, Irvine (Michael G. McNally), \$90,249 (\$48,733/UTA)

TxDOT: *Projected Changes in Transportation Demand and System Needs*, Sep. 2002 – Aug. 2004, \$216,436 (with Jianling Li, James C. Williams, Theresa M. Daniel and Ardeshir Anjomani)

Jan. 2000 **University of Alaska**, Fairbanks, Alaska
-Aug. 2002 Assistant Professor

Centers

FAA: *Air Transportation Centers of Excellence Program: Center for General Aviation Research*, Apr. 2001 – Aug. 2002 [continuing], Joint with Embry Riddle Aeronautical University (Andres Zellweger), the University of North Dakota (Paul Lindseth) and Wichita State University (Ramesh Agarwal)

Projects

FAA: *Security Plan for General Aviation*, April 2002 – Sep. 2002, \$9,500 (with Gary Copus)

Alaska DOT&PF: *Evaluation of Oversized Vehicle Warning Devices*, Aug. 2001 – Aug. 2002, \$23,499

Alaska DOT&PF: *Guardrail End Terminal Rating and Comparison Survey*, Feb. 2001 - June 2002, \$19,234

US DOT/TransNow: *Categorization of Expectations and Requirements for Seasonal Variations in Transit Needs for a Tourist Destination*, Sep. 2000 – February 2003, \$66,355

Alaska DOT&PF: *Preliminary Study on Snowplow Survivability of Guardrail Terminals*, July – August 2000, \$19,699 (with Zhongguo (John) Ma)

Sep. 1994 **University of California**, Irvine, California
-Dec. 1999 Graduate Student Researcher

Sep. 1993 **University of Texas**, Arlington, Texas
-Aug. 1994 Graduate Research Assistant

TEACHING EXPERIENCE

- Aug. 2002 **University of Texas**, Arlington, Texas
-present Assistant and Associate Professor
CE 3301 Stochastic Models in Civil Engineering
CE 3302 Transportation Engineering
CE 4311 Urban Transportation Infrastructure Planning
CE 4352 Professional Practice
CE 5300 Bicycle and Pedestrian Facility Planning and Design
CE 5337 Urban Transportation Planning
CE 5338 System Evaluation
CE 6308 Analytical Models in Transportation
- Jan. 2000 **University of Alaska**, Fairbanks, Alaska
-Aug. 2002 Assistant Professor
CE 402 Introduction to Transportation Engineering
CE 403 Traffic Engineering
CE 404 Highway Engineering
CE 693 Transportation Planning
ESM 620 Statistics for ESM
ESM 621 Operations Research
- Sep. 1998 **University of Southern California**, Los Angeles, California
-Dec. 1998 Lecturer
CE 471 Principles of Transportation Engineering

PROFESSIONAL EXPERIENCE

- June 1992 **Caldwell Engineering**, Richardson, Texas
-Apr. 1993 Junior Engineer
- May 1990 **Boyle Engineering**, Dallas, Texas
-Aug. 1990 Student Engineer

PUBLICATIONS

Journal papers

- Sinprasertkool, Asapol, Stephen P. Mattingly and Massidda, “Managing Toll Pricing: Comparison of Value of Time Options.” Submitted and under review for the *Journal of the Transportation Research Forum*
- Massidda, Antonio, Andrew Kirchhoff, Jonathan Massey and Stephen P. Mattingly, “The New Dallas Love Field Airport Terminal’s Capacity Planning: A Challenging Unique Case.” Submitted and under review for the *Transportation Research Record*.
- Daneshgar, Farzad, Stephen P. Mattingly and Arezoo Memarian, “Freeway Service Patrol Fleet Allocation: Are Fewer Beats Better for the Tarrant County Courtesy Patrol?” Submitted and under review for the *Transportation Research Record*.
- Li, Jianling, Siamak Ardekani and Stephen Mattingly, Chapter 11: “Urban transportation sustainability in China: issues, policies and a planning tool.” *China’s Economy in the Post-WTO Environment: Stock Markets, FDI and Challenges of Sustainability*, Forthcoming.
- Yang, Chulsu, James C. Williams and Stephen P. Mattingly, “Microscopic Simulation Model (VISSIM) Calibration for Freeways with Managed Lanes.” Revised and forthcoming in *Journal of the Eastern Asia Society for Transportation Studies*.
- Yang, Chulsu, Stephen P. Mattingly, James C. Williams and Hyunwoon Kim (2011), “Development of Managed-Lane Access Guidelines Based on Gap Acceptance Theory.” Revised and forthcoming in *Transportation Research Record - Journal of the Transportation Research Board*.
- Ardekani, Siamak A., Asapol Sinprasertkool, and Stephen P. Mattingly (2011), “A New Paradigm in User Equilibrium- Application in Managed Lane Pricing.” *International Journal of Engineering*, vol. 5, no. 1, pp. 73-101.
- Yang, Chulsu, Stephen P. Mattingly, Hyunwoon Kim and Youngjang Kwon (2010), “Design Guideline Development for Managed Lane Access Spacing Using Gap Acceptance Theory.” *Journal of Korean Society of Transportation*, vol. 28, no. 4, pp. 177-186.
- Jimenez, Gustavo, and Stephen P. Mattingly (2009), “Travel Behavior of Largest Minority Cohorts in Texas.” *Transportation Research Record - Journal of the Transportation Research Board*, no. 2135, pp. 130-137.
- Upayokin, Auttawit, Stephen P. Mattingly and Sergio A. Lugo Serrato (2008), “Decision-Making Procedure for Assessing Performance Measures of Freeway Operations.” *Transportation Research Record - Journal of the Transportation Research Board*, no. 2046, pp. 11-19.
- Burris, Mark W., Kaveh Farokhi Sadabadi, Stephen P. Mattingly, Maneesh Mahlawat, Jianling Li, Isaradatta Rasmidatta and Alireza Saroosh (2007), “Reaction to the Managed Lane Concept by Various Groups of Travelers.” *Transportation Research Record - Journal of the Transportation Research Board*, no. 1996, pp. 74-82.

- Li, Jianling, Patrick Embry, Stephen P. Mattingly, Kaveh Farokhi Sadabadi, Isaradatta Rasmidatta, and Mark W. Burris (2007), “Who Chooses to Carpool and Why: an Examination of Texas Carpoolers.” *Transportation Research Record - Journal of the Transportation Research Board*, no. 2021, pp. 110-117.
- Vo, Phong Thanh, Stephen P. Mattingly, Siamak A. Ardekani and Yasmin Dilshad (2007), “Comparison of Quality of Service in Two Texas Central Business Districts: Two-Fluid Model Approach.” *Transportation Research Record - Journal of the Transportation Research Board*, no. 1999, pp. 180-188.
- Moore, James E., Stephen P. Mattingly, C. Arthur MacCarley, and Michael G. McNally (2005), “Technical Evaluation of the Anaheim Advanced Traffic Control System Field Operational Test.” *Transportation Planning and Technology*, vol. 6., no. 28, pp. 465 – 482.
- MacCarley, C. Arthur, Stephen P. Mattingly, Michael G. McNally, Daniel B. Mezger, and James E. Moore, II (2002), “Field Operational Test of Integrated Freeway Ramp Metering/Arterial Adaptive Signal Control: Lessons Learned in Irvine, California.” *Transportation Research Record - Journal of the Transportation Research Board*, no. 1811, pp. 76-83.
- Mattingly, Stephen P., R. Jayakrishnan and Michael G. McNally (2000), “Integrated Multiple Objective-Attribute Methodology to Determine the Overall Value of Implemented New Technology in Transportation.” *Transportation Research Record - Journal of the Transportation Research Board*, no. 1739, pp. 92-102.
- McNally, Michael G., Steve Mattingly, James E. Moore, Hsi-Hwa Hu, C. Arthur MacCarley, and R. Jayakrishnan (1999), “Evaluation of the Anaheim Adaptive Control Field Operational Test: Institutional Issues.” *Transportation Research Record - Journal of the Transportation Research Board*, no. 1683, pp. 67-77.

Conference papers

- Sattler, M., Y. Pearson Weatherton, S. Mattingly, V. Chen, and K. J. Rogers (2011), “Engineering Sustainable Civil Engineers.” *Proceedings of the Annual Conference of the American Society for Engineering Education*.
- Yang, Chulsu, James C. Williams and Stephen P. Mattingly (2011), “Managed Lanes Meaving and Access Guideline Development Using Micorscopic Simulation Model.” *Proceedings of the 9th Eastern Asia Society for Transportation Studies Conference*.
- Massidda, Antonio and Stephen P. Mattingly (2011), “Expanding Intermodal Access to Airports: A Sketch Planning Tool to Estimate the Impact of Providing Rail Transit Service to Airport Terminals.” *Proceedings of the Transportation Research Forum 52nd Annual Meeting*.
- Massidda, Antonio and Stephen P. Mattingly (2011), “Revisiting High Speed Railways in the US: Assessing Their Future Development, Their Role in Intercity Passenger Transportation and Their Impacts on Air Travel and the Airline Industry.” *Proceedings of the Transportation Research Forum 52nd Annual Meeting*.

- Sinprasertkool, Asapol, and Antonio Massidda (2011), “Managing Toll Pricing: Comparison of Value of Time Options.” *Proceedings of the Transportation Research Forum 52nd Annual Meeting*.
- Afotey, Benjamin, Melanie L.Sattler, Stephen P. Mattingly and Victoria Chen (2010), “Statistical Approach to the Development of a Microscale Model for Estimating Carbon Dioxide Emissions from a Light Duty Gasoline Vehicle.” *Proceedings of the Air & Waste Management Association 103rd Annual Conference*.
- Mattingly, Stephen P., Melanie L. Sattler, Hetal Bhatt, Sulak Sumitsawan, Natchanok Pala-en and Parthen Parikh (2009), “A Model for Estimating NO_x Emission Reductions after Closing Drive-Thrus.” (U.S.) *National Research Council, Transportation Research Board 87th Annual Meeting CD*, 09-3489.
- Afotey, Benjamin, Melanie Sattler and Stephen P. Mattingly (2008), “Statistical Approach to the Development of a Microscale Model for Estimating Exhaust Emissions of a Light Duty Gasoline Vehicle.” *Proceedings of the Air & Waste Management Association 101st Annual Meeting*, #374.
- Lugo Serrato, Sergio A., Auttawit Upayokin and Stephen P. Mattingly (2008), “Transit Capacity Quality Service Manual: Applications to Mexican Transit Systems.” (U.S.) *National Research Council, Transportation Research Board 87th Annual Meeting CD*, 08-0399.
- Satyamurti, S.D., and Stephen P. Mattingly (2008), “Flight Track Data Analysis to Estimate Aircraft Height Above a Perimeter Taxiway System.” (U.S.) *National Research Council, Transportation Research Board 87th Annual Meeting CD*, 08-1795.
- Yang, Chulsu, and Stephen P. Mattingly (2008), “Guidance for Managed Lane Access Spacing Using the Gap Acceptance Theory-Based Capacity Estimation of Two-sided Type C Weaves.” (U.S.) *National Research Council, Transportation Research Board 87th Annual Meeting CD*, 08-1793.
- Farokhi Sadabadi, Kaveh, and Stephen P. Mattingly (2007), “Zoning and Trip Generation Using Fuzzy Cluster Estimation.” (U.S.) *National Research Council, Transportation Research Board 86th Annual Meeting CD*, 07-1911.
- Kanukolanu, Sri Harsha, Stephen P. Mattingly and Melanie Sattler (2007), “Impact of a Pre-Combustion Retrofit Device on Vehicular Emissions: A Case Study.” *Proceedings of the Air & Waste Management Association 100th Annual Meeting*.
- Lugo Serrato, Sergio A., Auttawit Upayokin and Stephen P. Mattingly (2007), “Paratransit Use of Taxis in Urban and Rural Areas.” (U.S.) *National Research Council, Transportation Research Board 86th Annual Meeting CD*, 07-1152.

- Satyamurti, Satyamangalam, and Stephen P. Mattingly (2007), "Runway Incursion Mitigation, Capacity Enhancement and Safety Improvements with Perimeter Taxiway Operations." *Proceedings of the 29th International Air Transport Conference: A World of Growth*, pp. 23-36.
- Satyanarayana, Shruthi, Stephen P. Mattingly and Melanie Sattler (2007), "Trends of Vehicular Emissions Due to the Effect of ETHOS FR as Fuel Additive: A Case Study." *Proceedings of the Air & Waste Management Association 100th Annual Meeting*.
- Hirunyanitiwattana, Worapong, and Stephen P. Mattingly (2006), "Identifying Secondary Crash Characteristics for the California Highway System." (U.S.) *National Research Council, Transportation Research Board 85th Annual Meeting CD*, 06-2900.
- Munshi, Rupangi, Melanie Sattler, and Stephen Mattingly (2006). "Impacts of Signal Synchronization on Vehicular Emissions - An Onboard Measurement Case Study." *Proceedings of the Air & Waste Management Association 99th Annual Meeting*.
- Pulipati, Sasanka and Stephen P. Mattingly (2006), "Regional Prioritization of Corridors for Traffic Signal Retiming." *Proceedings of the Joint International Conference on Computing and Decision Making in Civil and Building Engineering*, CD, IC-416.
- Mattingly, Stephen P., Phong Vo, Isaradatta Rasmidatta and James C. Williams (2005), "Assessing the Performance of a Statewide Multimodal Transportation System." (U.S.) *National Research Council, Transportation Research Board 84th Annual Meeting CD*, 05-2392.
- Mattingly, Stephen P., Auttawit Upayokin and Jianling Li (2004), "A Driver's Dilemma: Main Lane or HOT Lane." *Proceedings of the 4th International Conference on Decision Making in Urban and Civil Engineering*, CD.
- Mattingly, Stephen P., Kathryn Knorr and Jason Sakalaskas (2003), "Mitigating Overheight Vehicle Crashes into Infrastructure: State of the Practice." (U.S.) *National Research Council, Transportation Research Board 82nd Annual Meeting CD*, 03-2563.
- Mattingly, Stephen P. (2002), "A Comparison of Alternative Strategies for Choosing a Guardrail End Terminal." *Proceedings of the 3rd International Conference on Decision Making in Urban and Civil Engineering*, pp. 418-424.
- Mattingly, Stephen P. (2002), "Identifying a Small Sample Reliability Measure for Value and Utility Functions." *Proceedings of the 3rd International Conference on Decision Making in Urban and Civil Engineering*, pp. 189-195.
- Mattingly, Stephen P. and Zhongguo (John) Ma (2002), "Selecting a Guardrail End Terminal for High Snowfall Regions." *Proceedings of the 11th International American Society of Civil Engineers' Conference on Cold Regions Engineering*, pp. 267-277.

Mattingly, Stephen P., R. Jayakrishnan and Michael G. McNally (2001), "Application of an Integrated Multiple Objective-Attribute Methodology to a New Traffic Control System." (U.S.) *National Research Council, Transportation Research Board 80th Annual Meeting CD*, 01-3322.

Mattingly, Stephen P., Michael G. McNally and R. Jayakrishnan (2000), "Decision Theory for the Performance Evaluation of a New Traffic Control System." *Proceedings of the 2nd International Conference on Decision Making in Urban and Civil Engineering*, pp. 599-610.

Conference and Invited Presentations

Sattler, Melanie, Yvette Pearson-Weatherton, Stephen P. Mattingly, Victoria Chen, and K. Jamie Rogers (2011), "Engineering Sustainable Civil Engineers." Presented at the Annual Conference of the American Society for Engineering Education in Vancouver, BC, Canada, June 2011.

Yang, Chulsu, James C. Williams and Stephen P. Mattingly (2011), "Managed Lanes Meaving and Access Guideline Development Using Micorscopic Simulation Model." Presented at the 9th Eastern Asia Society for Transportation Studies Conference in Jeju, South Korea, June 2011.

Massidda, Antonio and Stephen P. Mattingly (2011), "Expanding Intermodal Access to Airports: A Sketch Planning Tool to Estimate the Impact of Providing Rail Transit Service to Airport Terminals." Presented at the Transportation Research Forum 52nd Annual Meeting in Long Beach, CA, March 2011.

Massidda, Antonio and Stephen P. Mattingly (2011), "Revisiting High Speed Railways in the US: Assessing Their Future Development, Their Role in Intercity Passenger Transportation and Their Impacts on Air Travel and the Airline Industry." Presented at the Transportation Research Forum 52nd Annual Meeting in Long Beach, CA, March 2011.

Sinprasertkool, Asapol, Stephen P. Mattingly and Antonio Massidda (2011), "Managing Toll Pricing: Comparison of Value of Time Options." Presented at the Transportation Research Forum 52nd Annual Meeting in Long Beach, CA, March 2011.

Upayokin, Auttawit, Stephen P. Mattingly and Sergio A. Lugo Serrato, "Decision-Making Procedure for Assessing Performance Measures of Freeway Operations." Presented to the University of California, Irvine Institute of Transportation Studies Graduate Student Seminar in Irvine, CA, March 2011.

Yang, Chulsu, Stephen P. Mattingly, James C. Williams and Hyunwoon Kim, "Development of Managed-Lane Access Guidelines Based on Gap Acceptance Theory." Presented at the Transportation Research Board 90th Annual Meeting in Washington, D.C., January 2011.

Ardekani, Sia and Stephen P. Mattingly, "The Role of Managed Lanes in Long-Range Urban Mobility Planning." ITS Texas 2010 Annual Meeting, Fort Worth, Texas, November 2010.

- Sattler, Melanie, Kambiz Alavi, Victoria Chen, Steve Mattingly, K. Jamie Rogers, Yvette Weatherton, Benjamin Afotey and Madhu Rani, "Engineering Sustainable Engineers." International Symposium on Sustainable Systems and Technology Co-organized with the IEEE Society on Social Implications of Technology, Washington, D.C., May 2010.
- Mattingly, Stephen P., Melanie L. Sattler, Hetal Bhatt, Sulak Sumitsawan, Natchanok Pala-en, Parthen Parikh, "A Model for Estimating Hydrocarbon and CO₂ Emission Reductions after Closing Drive-Thrus." Presented at the 19th Coordinating Research Council On-Road Vehicle Emissions Workshop in San Diego, CA, March 2009.
- Jimenez, Gustavo, and Stephen P. Mattingly, "The Travel Behavior of the Largest Minority Cohorts in Texas." Presented at the Transportation Research Board 88th Annual Meeting in Washington, D.C., January 2009.
- Mattingly, Stephen P., Melanie L. Sattler, Hetal Bhatt, Sulak Sumitsawan, Natchanok Pala-en and Parthen Parikh, "A Model for Estimating NO_x Emission Reductions after Closing Drive-Thrus." Presented at the Transportation Research Board 88th Annual Meeting in Washington, D.C., January 2009.
- Sumitsawan, Sulak, Sahithi Raj Kalidindi, Parthen Parikh, Melanie Sattler, Stephen P. Mattingly, H. Michael Ladd and Jim Humphreys, "School Bus Emission Testing: Retrofit Device, Combustion Chamber, Biodiesel." Presented at Texas Section of the American Society of Civil Engineering Fall Meeting in Dallas, Texas, October 2008.
- Afotey, Benjamin, Melanie Sattler and Stephen P. Mattingly, "Statistical Approach to the Development of a Microscale Model for Estimating Exhaust Emissions of a Light Duty Gasoline Vehicle." Presented at the Air & Waste Management Association 101st Annual Meeting in Portland, Oregon, June 2008.
- Mattingly, Stephen P. and Melanie Sattler, "On-Road Measurement of Emissions Impact of Clean Air Catalytic Converter." Presented at the 18th Coordinating Research Council On-Road Vehicle Emissions Workshop in San Diego, CA, March 2008.
- Sattler, Melanie and Stephen P. Mattingly, "On-Road Measurement of Emissions Impact of ETHOS Fuel Reformulator." Presented at the 18th Coordinating Research Council On-Road Vehicle Emissions Workshop in San Diego, CA, March 2008.
- Lugo Serrato, Sergio A., Auttawit Upayokin and Stephen P. Mattingly, "Transit Capacity Quality Service Manual: Applications to Mexican Transit Systems." Presented at the Transportation Research Board 87th Annual Meeting in Washington, D.C., January 2008.
- Satyamurti, S.D., and Stephen P. Mattingly, "Flight Track Data Analysis to Estimate Aircraft Height Above a Perimeter Taxiway System." Presented at the Transportation Research Board 87th Annual Meeting in Washington, D.C., January 2008.
- Upayokin, Auttawit, Stephen P. Mattingly and Sergio A. Lugo Serrato, "Decision-Making Procedure for Assessing Performance Measures of Freeway Operations." Presented at the Transportation Research Board 87th Annual Meeting in Washington, D.C., January 2008.

- Yang, Chulsu, Stephen P. Mattingly and Siamak A. Ardekani, “Density-Speed Equilibrium and Non-Equilibrium Traffic Flow Theories Based on Statistics.” Presented at the Transportation Research Board 87th Annual Meeting in Washington, D.C., January 2008.
- Yang, Chulsu, Stephen P. Mattingly and James C. Williams, “Driving Dynamic Travel Time Models Using a Statistical Approach.” Presented at the Transportation Research Board 87th Annual Meeting in Washington, D.C., January 2008.
- Satyamurti, Satyamangalam, and Stephen P. Mattingly, “Runway Incursion Mitigation, Capacity Enhancement and Safety Improvements with Perimeter Taxiway Operations.” Presented at the 29th International Air Transport Conference: A World of Growth (American Society of Civil Engineers) in Irving, Texas, August 2007.
- Kanukolanu, Sri Harsha, Stephen P. Mattingly and Melanie Sattler, “Impact of a Pre-Combustion Retrofit Device on Vehicular Emissions: A Case Study.” Presented at the Air & Waste Management Association 100th Annual Meeting in Pittsburgh, PA, June 2007.
- Satyanarayana, Shruthi, Stephen P. Mattingly and Melanie Sattler, “Trends of Vehicular Emissions Due to the Effect of ETHOS FR as Fuel Additive: A Case Study.” Presented at the Air & Waste Management Association 100th Annual Meeting in Pittsburgh, PA, June 2007.
- Burris, Mark W., Kaveh Farokhi Sadabadi, Stephen P. Mattingly, Maneesh Mahlawat, Jianling Li, Isaradatta Rasmidatta and Alireza Saroosh, “Reaction to the Managed Lane Concept by Various Groups of Travelers.” Presented at the Transportation Research Board 86th Annual Meeting in Washington, D.C., January 2007.
- Farokhi Sadabadi, Kaveh, and Stephen P. Mattingly, “Zoning and Trip Generation Using Fuzzy Cluster Estimation.” Presented at the Transportation Research Board 86th Annual Meeting in Washington, D.C., January 2007.
- Li, Jianling, Patrick Embry, Stephen P. Mattingly, Kaveh Farokhi Sadabadi, Isaradatta Rasmidatta, Mark W. Burris, “Who Chooses to Carpool and Why: an Examination of Texas Carpoolers.” Presented at the Transportation Research Board 86th Annual Meeting in Washington, D.C., January 2007.
- Lugo Serrato, Sergio A., Autawit Upayokin and Stephen P. Mattingly, “Paratransit Use of Taxis in Urban and Rural Areas.” Presented at the Transportation Research Board 86th Annual Meeting in Washington, D.C., January 2007.
- Mattingly, Stephen P., Phong Thanh Vo, Siamak A. Ardekani and Yasmin Dilshad, “Comparison of the Quality of Service in the Arlington, Dallas and Fort Worth CBD – A Two Fluid Model Approach.” Presented at the Transportation Research Board 86th Annual Meeting in Washington, D.C., January 2007.
- Mattingly, Stephen P., “Managed Lane vs. Main Lane: Mode Choice Models.” Presented at the Association of Collegiate Schools of Planning Annual Conference in Fort Worth, Texas, November 2006.

- Pulipati, Sasanka and Stephen P. Mattingly, "Regional Prioritization of Corridors for Traffic Signal Retiming." Presented at the Joint International Conference on Computing and Decision Making in Civil and Building Engineering in Montreal, Quebec, Canada, June 2006.
- Munshi, Rupangi, Melanie Sattler, and Stephen Mattingly (2006). "Impacts of Signal Synchronization on Vehicular Emissions - An Onboard Measurement Case Study." Presented at the Air & Waste Management Association 99th Annual Meeting in New Orleans, LA, June 2006.
- Hirunyanitiwattana, Worapong, and Stephen P. Mattingly, "Identifying Secondary Crash Characteristics for the California Highway System." Presented at the Transportation Research Board 85th Annual Meeting in Washington, D.C., January 2006.
- Mattingly, Stephen P., Phong Vo, Isaradatta Rasmidatta and James C. Williams, "Assessing the Performance of a Statewide Multimodal Transportation System." Presented at the Transportation Research Board 84th Annual Meeting in Washington, D.C., January 2005.
- Mattingly, Stephen P., Auttawit Upayokin and Jianling Li, "A Driver's Dilemma: Main Lane or HOT Lane." Presented at the 4th International Conference on Decision Making in Urban and Civil Engineering in Oporto, Portugal, November 2004.
- Mattingly, Stephen P., Kathryn Knorr and Jason Sakalaskas, "Mitigating Overheight Vehicle Crashes into Infrastructure: State of the Practice." Presented at the Transportation Research Board 82nd Annual Meeting in Washington, D.C., January 2003.
- Mattingly, Stephen P., "A Comparison of Alternative Strategies for Choosing a Guardrail End Terminal." Presented at the 3rd International Conference on Decision Making in Urban and Civil Engineering in London, United Kingdom, November 2002.
- Mattingly, Stephen P., "Identifying a Small Sample Reliability Measure for Value and Utility Functions." Presented at the 3rd International Conference on Decision Making in Urban and Civil Engineering in London, United Kingdom, November 2002.
- Mattingly, Stephen P. and Zhongguo (John) Ma, "Selecting a Guardrail End Terminal for High Snowfall Regions." Presented at the 11th International American Society of Civil Engineers' Conference on Cold Regions Engineering in Anchorage, Alaska, May 2002.
- Mattingly, Stephen P., R. Jayakrishnan and Michael G. McNally, "Application of an Integrated Multiple Objective-Attribute Methodology to a New Traffic Control System." Presented at the Transportation Research Board 80th Annual Meeting in Washington, D.C., January 2001.
- MacCarley, C. Arthur, Stephen P. Mattingly, Michael G. McNally, James E. Moore and Daniel B. Mezger, "Lessons Learned from the Irvine Integrated Freeway Ramp Metering/Arterial Adaptive Signal Control Field Operational Test." Presented at the Transportation Research Board 80th Annual Meeting in Washington, D.C., January 2001.

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ACADEMIC AWARDS

University of California Transportation Center Dissertation Fellowship, 1999

“Decision Theory for Performance Evaluation of New Technologies Incorporating Institutional Issues: Application to Traffic Control Implementation”

PROFESSIONAL MEMBERSHIPS

Institute of Transportation Engineers

Member, Transportation Education Council Committee

American Society of Civil Engineers

Transportation Research Board

Member, Committee on Transportation Network Modeling

Member, Committee on Traffic Flow and Characteristics

Friend, Managed Lanes Joint Subcommittee

Decision Making in Civil and Urban Engineering Society

Chi Epsilon

Engineer-In-Training, October 1991

OTHER ACTIVITIES

Alumni Admissions Interviewer for Rice University

Red Cross, Water Safety Instructor

Various Rugby Football Clubs

Seven Championship Teams

Match Secretary