

## **Publications, Dr. Stephen Mattingly**

### **Journal**

Hirunyanitiwattana, Worapong, and Stephen P. Mattingly, Identifying Secondary Crash Characteristics for the California Highway System. Submitted and under review for Transportation Research Record.

Hirunyanitiwattana, Worapong, and Stephen P. Mattingly, Identifying Secondary Crash Characteristics for the California Highway System. Submitted and under review for Accident Analysis and Prevention.

Upayokin, Auttawit, Stephen P. Mattingly and Jianling Li, HOT Lane vs. Main Lane: Mode Choice Models. Submitted and under review for Computer-Aided Civil and Infrastructure Engineering.

Moore, James E., C. Arthur MacCarley, Stephen P. Mattingly, and Michael G. McNally, Technical Evaluation of the Anaheim Advanced Traffic Control System Field Operational Test. Submitted and under review for Transportation Planning and Technology.

Jayakrishnan, R., Stephen P. Mattingly, and Michael G. McNally, Performance Study of SCOOT Traffic Control System with Non-Ideal Detectorization: Field Operational Test in the City of Anaheim. Revised and forthcoming in Transportation Research Record.

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**

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 & Environmental 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 & Environmental 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 & Environmental 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 & Environmental Engineering, pp. 599-610.

### **Conference Presentations**

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 & Environmental 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 & Environmental 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 & Environmental 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.

Jayakrishnan, R., Stephen P. Mattingly, and Michael G. McNally, Performance Study of SCOOT Traffic Control System with Non-Ideal Detectorization: Field Operational Test in the City of Anaheim. Presented at the Transportation Research Board 80th Annual Meeting in Washington, D.C., January 2001.

Mattingly, Stephen P., Michael G. McNally and R. Jayakrishnan, Decision Theory for the Performance Evaluation of a New Traffic Control System. Presented at the 2nd International Conference on Decision Making in Urban and Civil & Environmental Engineering in Lyon, France, November 2000.

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Stephen P. Mattingly, Michael G. McNally, R. Jayakrishnan, James E. Moore and C. Arthur MacCarley, Institutional Evaluation of the Anaheim Adaptive Control Field Operational Test. Presented at the American Society of Civil Engineers, Fairbanks Chapter, Monthly Meeting, March 2000.

Stephen P. Mattingly, Michael G. McNally, R. Jayakrishnan, James E. Moore and C. Arthur MacCarley, Institutional Evaluation of the Anaheim Adaptive Control Field Operational Test. Presented at the Institute of Transportation Engineers, Alaska Section, Monthly Meeting, March 2000.

Mattingly, Stephen P., Decision Theory for Performance Evaluation of New Technologies Incorporating Institutional Issues: Application to Traffic Control Implementation. Presented at the Seminar on Doctoral Student Research at the Transportation Research Board 79th Annual Meeting in Washington, D.C., January 2000.

McNally, Michael G., Stephen P. Mattingly, James E. Moore, and C. Arthur MacCarley, Evaluation of the Irvine Integrated Ramp Metering/Adaptive Signal Control Field Operational Test: Post-Mortem for MOU 65315. Presented at PATH Program-Wide Research Meeting, Richmond, CA, November 1999.

McNally, Michael G., Stephen P. Mattingly, James E. Moore, Hsi-Hwa Hu, C. Arthur MacCarley, and R. Jayakrishnan, Evaluation of the Anaheim Adaptive Control Field Operational Test: Technical and Institutional Issues. Presented at the Transportation Research Board 78th Annual Meeting in Washington, D.C., January 1999.

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Jayakrishnan, R., Michael McNally, and Stephen Mattingly, Evaluation of Traffic Control Field Test. Presented at the Transportation Research Board 75th Annual Meeting in Washington, D.C., January 1996.

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## **Reports**

Mattingly, Stephen P. Evaluation of Overheight Vehicle Warning Devices. Final Report prepared under project FHWA-AK-RD-01-13 for the Alaska Department of Transportation and Public Facilities, Juneau, Alaska. (Transportation Research Center, Institute of Northern Engineering, University of Alaska, Fairbanks, Research Report INE/TRC), June 2003.

Copus, Gary and Stephen P. Mattingly. Security Plan for General Aviation: Survey of General Aviation Airports and Part 135 Operations in the State of Alaska. Final Report prepared under a project for the U.S. Department of Transportation, Federal Aviation Administration, Washington, D.C. through the Center for General Aviation Research, Daytona Beach, Florida. (Transportation Research Center, Institute of Northern Engineering, University of Alaska, Fairbanks, Research Report INE/TRC), August 2002.

Mattingly, Stephen P. Guardrail End Terminal Rating and Comparison Survey. Final Report prepared under project FHWA-AK-RD-01-08 for the Alaska Department of Transportation and Public Facilities, Juneau, Alaska. (Transportation Research Center, Institute of Northern Engineering, University of Alaska, Fairbanks, Research Report INE/TRC 02.03), July 2002.

McNally, Michael G., James E. Moore II and C. Arthur McCarley with Steve Mattingly, James Roldan, Hsi-Hwa Hu, Seongkil Cho and Daniel B. Mezger. Documentation of the Irvine Integrated Corridor Freeway Ramp Metering and Arterial Adaptive Control Field Operational Test. Final report prepared under project RTA 65V313-5 for the U.S. Department of Transportation, Federal Highway Administration, Washington, D.C. (California Partnership for Advanced

Transit and Highways (PATH), University of California, Berkeley, Research Report UCB-ITS-PRR-2001-02), January 2001.

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Moore, James E., II, R. Jayakrishnan, Michael G. McNally and C. Arthur MacCarley with Hsi-Hwa Hu, Steve Mattingly, Seongkil Cho and James Roldan. Evaluation of the Anaheim Advanced Traffic Control System Field Operational Test: Introduction and Task A: Evaluation of SCOOT Performance. Final report prepared under project RTA-65V313 for the U.S. Department of Transportation, Federal Highway Administration, Washington, D.C. (California Partnership for Advanced Transit and Highways (PATH), University of California, Berkeley, Research Report UCB-ITS-PRR-99-26), July 1999.

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