

Robert Lawrence Bertini, Ph.D., P.E.

Curriculum Vitae

Professor of Civil and Environmental Engineering and Urban Studies and Planning
Director, Oregon Transportation Research and Education Consortium
Portland State University
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Education

Ph.D. in Civil Engineering (Transportation), University of California at Berkeley, 1999
Dissertation Title: *Time Dependent Traffic Flow Features at a Freeway Bottleneck
Downstream of a Merge*

M.S. in Civil Engineering (Transportation), San Jose State University, 1991

B.S. cum laude in Civil Engineering, California Polytechnic State University, San Luis Obispo,
1988 (Music Minor: French horn)

Professional History

Professor of Civil and Environmental Engineering and Urban Studies and Planning, Portland
State University, 2008–present

Director, Oregon Transportation Research and Education Consortium (OTREC), a National
University Transportation Center, Portland State University in partnership with the
University of Oregon, Oregon State University and the Oregon Institute of Technology,
2006–2009

Associate Professor of Civil and Environmental Engineering and Urban Studies and Planning,
Portland State University, 2004–2008

Assistant Professor of Civil and Environmental Engineering and Urban Studies and Planning
(since 2003), Portland State University, 2000–2004

Director, Intelligent Transportation Systems Laboratory, Portland State University, 2000–2009

Director, Center for Transportation Studies, College of Urban and Public Affairs, Portland State
University, 2003–2006 (acting 2002–03)

Senior Research Scientist, DaimlerChrysler Research and Technology North America, Inc., Palo
Alto, California, 1999–2000

University of California Transportation Center Fellow, Eisenhower Fellow, and Graduate Research and Teaching Assistant, Institute of Transportation Studies, University of California at Berkeley, 1995–1999

Lecturer, Department of Civil and Environmental Engineering, San Jose State University, 1993–1995

Lead Civil Engineer, Parsons Brinckerhoff Quade & Douglas, Inc., San Jose and San Francisco, California, 1993–1995

Senior Civil Engineer, DeLeuw, Cather & Company, San Jose and San Francisco, California, 1990–1993

Associate Engineer, San Mateo County Department of Public Works, Redwood City, California, 1988–1990

Senior Engineering Aide, San Mateo County Department of Public Works, Redwood City, California, Summers 1984–1986.

Affiliations and Other Appointments

Visiting Professor, Department of Civil Engineering and Institute of Transport Studies, Monash University, Melbourne, Australia, December 2008

Senior Fellow, Center for Transportation Studies, College of Urban and Public Affairs, Portland State University, 2006–present.

Research Associate, Center for Urban Studies, College of Urban and Public Affairs, Portland State University, 2001–present.

Research Associate, Mineta Transportation Institute, San Jose State University, 1994–2009.

Awards and Honors

National Science Foundation Faculty Early Career Development (CAREER) Award, “Mining Archived Intelligent Transportation Systems Data: A Validation Framework for Improved Performance Assessment and Modeling,” \$400,000, 2003–2008

Distinguished Faculty Achievement Award, Portland State University, 2007

WesternITE Editorial Award, Institute of Transportation Engineers District 6 Annual Meeting, *Transportation Gets Googled*, McCourt, R., Welch, T., Tufte, K., and Bertini, R.L., 2007

Best Annual Meeting Paper Award, Institute of Transportation Engineers District 6 Annual Meeting, *Evaluating an Adaptive Signal Control System in Gresham*, Peters, J.M., McCoy, J., and Bertini, R.L., 2007

Omega Rho, Operations Research and Management Science Honor Society, 2007

Outstanding Transportation Educator, Institute of Transportation Engineers, District 6, 2006.

Excellence in Community-Based Research Civic Engagement Award, Portland State University Center for Academic Excellence, with C. Monsere, 2006

Women's Transportation Seminar (WTS) Portland Chapter 2006 Diversity Achievement Award
Chinook Award, Outstanding Volunteer Group Contribution, Sullivan's Gulch Trail Design,
Metro Regional Parks and Greenspaces, 2005.

Institute of Transportation Engineers, "Individual Achievement Award," Oregon Section, 2004

Institute of Transportation Engineers, District 6 Annual Meeting Best Paper Award, "Analysis of
a Transit Bus as a Probe Vehicle for Arterial Performance Measurement," with S.
Tantiyanugulchai, 2003

Outstanding Research Award, Maseeh College of Engineering and Computer Science, Portland
State University, 2003

Outstanding Teaching Award, Civil and Environmental Engineering, Portland State University,
2002

Innovative Ideas Award, Bus Rapid Transit and the American Community Design Competition,
2001

Eno Foundation Fellow, Eno Center for Transportation Leadership Development, 1998

Dwight David Eisenhower Graduate Fellowship (\$70,000), National Highway Institute, U.S.
Department of Transportation, 1997–1999

University of California Transportation Center (UCTC) Dissertation Fellowship, 1999

University of California Transportation Center (UCTC) Fellowship, 1996

Publications

Refereed Archival Journal Publications

Published

1. Berkow, M., Monsere, C., Koonce, P., Bertini, R.L., and Wolfe, M. and "Prototype for Data Fusion Using Stationary and Mobile Data Sources for Improved Arterial Performance Measurement" *Transportation Research Record No. 2099*, pp. 102-112, 2009.
2. Bertini, R.L., and Lovell, D. "[Impacts of Sensor Spacing on Accurate Freeway Travel Time Estimation for Traveler Information.](#)" *Journal of Intelligent Transportation Systems*, Vol. 13, No. 2, pp. 97–110, April 2009.
3. Zielke, B., Bertini, R.L., and Treiber, M. "[Empirical Measurement of Freeway Oscillation Characteristics: An International Comparison.](#)" *Transportation Research Record No. 2088*, pp. 57–67, 2008.
4. Monsere, C., Bosa, P., and Bertini, R.L. "[Combining Climate, Crash, and Highway Data for Improved Ranking of Speed and Winter-Weather Related Crash Locations in Oregon.](#)" *ASCE Journal of Transportation Engineering*, Volume 134, Issue 7, pp. 287–296, 2008.
5. Lyman, K., and Bertini, R.L. "[Using Travel Time Reliability Measures to Improve Regional Transportation Planning and Operations.](#)" *Transportation Research Record No. 2046*, pp. 1–10, 2008.

6. Kothuri, S., Tuftte, K., Fayed, E., and Bertini, R.L. “[Toward Understanding and Reducing Errors in Real-Time Estimation of Travel Times.](#)” *Transportation Research Record No. 2049*, pp. 21–28, 2008.
7. Monsere, C., Breakstone, A., Bertini, R.L. and Bish, D. “[Developing an Online Tool for Delivering Research Results: An Update to the Oregon Department of Transportation’s Crash Reduction Factor Database.](#)” *Transportation Research Record No. 2009*, pp. 113–120, 2007.
8. Ahn, S., Bertini, R.L., Auffray, B. and Ross, J. “[Evaluating the Benefits of a System-Wide Adaptive Ramp-Metering Strategy in Portland, Oregon.](#)” *Transportation Research Record No. 2012*, pp. 47–56, 2007.
9. Bertini, R.L., Boice, S. and Bogenberger, K. “[Dynamics of Variable Speed Limit System Surrounding a Bottleneck on a German Autobahn.](#)” *Transportation Research Record No. 1978*, pp. 149–159, 2006.
10. Monsere, C., Breakstone, A., Bertini, R.L., Deeter, D. and McGill, G. “[Validating Dynamic Message Sign Freeway Travel Time Messages Using Ground Truth Geospatial Data.](#)” *Transportation Research Record No. 1959*, pp. 19–27, 2006.
11. Lindgren, R., Bertini, R.L., Helbing, D. and Schönhof, M. “[Toward Demonstrating the Predictability of Bottleneck Activation on a German Autobahn.](#)” *Transportation Research Record No. 1965*, pp. 12–22, 2006.
12. Bertini, R.L., Hansen, S. and Bogenberger, K. “[Empirical Analysis of Traffic Sensor Data Surrounding a Bottleneck on a German Autobahn.](#)” *Transportation Research Record No. 1934*, pp. 97–107, 2005.
13. Monsere, C., Nolan, C., Bertini, R., Anderson, A. and El-Seoud, T. “[Measuring the Impacts of Speed Reduction Technologies: A Dynamic Advanced Curve Warning System Evaluation.](#)” *Transportation Research Record No. 1918*, pp. 98–107, 2005.
14. Byrne, N., Koonce, P., Bertini, R.L., Pangilinan, C. and Lasky, M. “[Using Hardware-in-the-Loop Simulation to Evaluate Signal Control Strategies for Transit Signal Priority.](#)” *Transportation Research Record No. 1925*, pp. 227–234, 2005.
15. Bertini, R.L., Hansen, S., Byrd, A. and Yin, T. “[PORTAL: Experience Implementing the ITS Archived Data User Service in Portland, Oregon.](#)” *Transportation Research Record No. 1917*, pp. 90–99, 2005.
16. Bertini, R.L. and Myton, A. “[Using PeMS Data to Empirically Diagnose Freeway Bottleneck Locations in Orange County, California.](#)” *Transportation Research Record No. 1925*, pp. 48–57, 2005.
17. Bertini, R.L., Monsere, C., Byrd, A., Rose, M. and El-Seoud, T. “[Using Custom Transportation Data Collection Software with Handheld Computers for Education, Research, and Practice.](#)” *Transportation Research Record No. 1924*, pp. 37–45, 2005.
18. Kimpel, T., Strathman, J., Bertini, R.L. and Callas, S. “[Analysis of Transit Signal Priority Using Archived TriMet Bus Dispatch System Data.](#)” *Transportation Research Record No. 1925*, pp. 156–166, 2005.
19. Bertini, R.L. and Leal, M. “[Empirical Study of Traffic Features at a Freeway Lane Drop.](#)” *ASCE Journal of Transportation Engineering*, Vol. 131, No. 6, pp. 397–407, 2005.
20. Bertini, R.L., Glasgow, C., and Peters, J. “[Evaluating Traffic Signal Improvements Using Archived Transit AVL Data.](#)” *Institute of Transportation Engineers Journal on the Web*, Vol. 75, No. 2, pp. 69–75, 2005.

21. Bertini, R.L. “[Detecting Signals of Bottleneck Activation for Freeway Operations and Control.](#)” *Journal of Intelligent Transportation Systems*, Vol. 9, No. 1, pp. 35–45, 2005.
22. Bertini, R.L. and Malik, S. “[Observed Dynamic Traffic Features On a Freeway Section with Merges and Diverges.](#)” *Transportation Research Record No. 1867*, pp. 25–35, 2004.
23. Bertini, R.L. and Tantiyanugulchai, S. “[Transit Buses as Traffic Probes: Empirical Evaluation Using Geo-Location Data.](#)” *Transportation Research Record No. 1870*, pp. 35–45, 2004.
24. Astarita, A., Bertini, R., D’Elia, S. And Guido. G. “[Motorway Traffic Parameters Estimation from Mobile Phone Counts.](#)” *European Journal of Operational Research*, Vol. 175, Issue 3, pp. 1435–1446, 2006.
25. Lin, W.H. and Bertini, R.L. “[Modeling Schedule Recovery Processes in Transit Operations for Bus Arrival Time Prediction.](#)” *Journal of Advanced Transportation*, Vol. 38, No. 3, pp. 347–365, 2004.
26. Bertini, R.L. and El-Geneidy, A.M. “[Modeling Transit Trip Time Using Archived Bus Dispatch System Data.](#)” *ASCE Journal of Transportation Engineering*, Vol. 130, No. 1, pp. 56–67, 2004.
27. Bertini, R.L. and El-Geneidy, A.M. “[Using Archived Data to Generate Transit Performance Measures.](#)” *Transportation Research Record No. 1841*, pp. 109–119, 2003.
28. Pahs, M., Rohden, M., Hampsten, D., Gallant, S. and Bertini, R.L. “[Door-to-Door Mobility: A Bus Rapid Transit Community Transport Concept for Southeast Portland, Oregon.](#)” *Journal of Public Transportation*, Vol. 5, No. 2, pp. 137–161, 2002.
29. Bertini, R.L. and Cassidy, M.J. “[Some Observed Queue Discharge Features at a Freeway Bottleneck Downstream of a Merge.](#)” *Transportation Research, Part A*, Vol. 36, No. 8, pp. 683–697, 2002.
30. Steingröver, A., Krevet, R., and Bertini, R.L. “[Feasibility, Financial and Environmental Analysis of an Advanced Maglev-Based Intermodal System.](#)” *Transportation Research Record No. 1760*, pp. 153–160, 2001.
31. Daganzo, C.F., Cassidy, M.J. and Bertini, R.L. “[Possible Explanations of Phase Transitions in Highway Traffic.](#)” *Transportation Research, Part A*, Vol. 33, No. 5, pp. 365–379, 1999.
32. Smilowitz, K., Daganzo, C.F., Cassidy, M.J. and Bertini, R.L. “[Some Observations of Highway Traffic in Long Queues.](#)” *Transportation Research Record No. 1678*, pp. 225–233, 1999.
33. Cassidy, M.J. and Bertini, R.L. “[Some Traffic Features at Freeway Bottlenecks.](#)” *Transportation Research, Part B*, Vol. 33, No. 1, pp. 25–42, 1999.
34. Skabardonis, A., Bertini, R.L. and Gallagher, B. “[Development and Application of Control Strategies for Signals in Coordinated Systems.](#)” *Transportation Research Record No. 1634*, pp. 110–117, 1998.
35. Skabardonis, A., Petty, K., Bertini, R.L., Varaiya, P.P., Noemi, H. and Rydzewski, D. “[The I-880 Field Experiment: Analysis Of The Incident Data.](#)” *Transportation Research Record No. 1603*, pp. 72–79, 1997.

In Press

36. Bigazzi, A., and Bertini, R.L. “Adding Green Performance Metrics to a Transportation Data Archive.” To appear in *Transportation Research Record*, 2009.

37. Berkow, M., El-Geneidy, A., Bertini, R.L. and Crout, D. “Beyond Generating Transit Performance Measures: Visualizations and Statistical Analysis Using Historical Data.” To appear in *Transportation Research Record*, 2009.
38. Li, H., and Bertini, R.L. “Assessment of an Optimal Bus Stop Spacing Model Using High Resolution Archived Stop-Level Data.” To appear in *Transportation Research Record*, 2009.

Submitted

39. Bigazzi, A., Siri, Helene, and Bertini, R.L. “Effects of Temporal Data Aggregation on Performance Measures and other ITS Applications.” 89th Annual Meeting of the Transportation Research Board, Washington, D.C., 2010 (Accepted).
40. Bigazzi, A., and Bertini, R.L. “Carbon Sponsoring: Using Social Networks to Encourage Climate-Conscious Travel Choices.” 89th Annual Meeting of the Transportation Research Board, Washington, D.C., 2010 (Rejected).
41. Saberi K., M, and Bertini, R.L. “Empirical Analysis of the Effects of Rain on Measured Freeway Traffic Parameters.” 89th Annual Meeting of the Transportation Research Board, Washington, D.C., 2010 (Submitted).
42. Saberi K., M, and Bertini, R.L. “Beyond Corridor Reliability Measures: Analysis of Freeway Travel Time Reliability at the Segment Level for Hotspot Identification.” 89th Annual Meeting of the Transportation Research Board, Washington, D.C., 2010 (Submitted).
43. Feng, W., and Bertini, R.L. “Assessing the Impacts of Freeway Sensor Spacing and Probe Vehicle Penetration on Travel Time Estimation Accuracy for Traveler Information and Traffic Management.” 89th Annual Meeting of the Transportation Research Board, Washington, D.C., 2010 (Submitted).
44. Li, H., Fernández-Moctezuma, R., Wieczorek, J., and Bertini, R.L. “A Comparison of Algorithms for Systematically Tracking Congested Traffic Patterns on Freeways in Portland, Oregon.” 89th Annual Meeting of the Transportation Research Board, Washington, D.C., 2010 (Accepted).
45. Wieczorek, J., Fernández-Moctezuma, R., and Bertini, R.L. “Techniques for Validating an Automatic Bottleneck Detection Tool Using Archived Freeway Sensor Data.” 89th Annual Meeting of the Transportation Research Board, Washington, D.C., 2010 (Accepted).
46. Ou, Q., Bertini, R.L., van Lint, H., and Hoogendoorn, S. “A Theoretical Framework for Traffic Speed Estimation by Fusing Low Resolution Probe Vehicle Data.” *IEEE Transactions on Intelligent Transportation Systems* (Submitted).
47. Ahn, S., Rayabhari, M., Qin, O., Feng, W., and Bertini, R.L. “Characteristics of Transitions in Freeway Traffic Near a Merge and Queue Tails.” *Transportation Research Part B*, 2009 (Submitted).
48. Tufte, K., Ahn, S., Bertini, R.L., Wang, Y., Cheevarunothai, P., Auffray, B., and Monsere, C. “Toward the Systematic Improvement of Data Quality in the Portland, Oregon Regional Transportation Archive Listing (PORTAL).” *Journal of Intelligent Transportation Systems*, 2008.

Conference Proceedings

Published Fully Refereed Conference Proceedings

1. Ahn, S., Rayabhari, M., Ou, Q., and Bertini, R.L. “An Empirical Study of Transient Freeway Traffic States along Kinematic Waves.” *Proceedings of the 88th Annual Meeting of the Transportation Research Board*, 2009.
2. Monsere, C., Eshel, O., and Bertini, R.L. “Empirical Evaluation of Freeway Corridor Performance Before and After System-Wide Adaptive Ramp Metering System Implementation.” *Proceedings of the 88th Annual Meeting of the Transportation Research Board*, 2009.
3. Wieczorek, J., Li, H., Fernández-Moctezuma, R., and Bertini, R.L. “Integrating an Automated Bottleneck Detection Tool into an Online Freeway Data Archive.” *Proceedings of the 88th Annual Meeting of the Transportation Research Board*, 2009.
4. Fernández-Moctezuma, R., Bertini, R.L., Maier, D., and Tufte, K. “Toward Improved and Transparent Imputation Techniques for Online Traffic Data Streams and Archiving Applications.” *Proceedings of the 88th Annual Meeting of the Transportation Research Board*, 2009.
5. Bertini, R.L., Li, H., Wieczorek, J. and Fernández, R. “[Using Archived Data to Systematically Identify and Prioritize Freeway Bottlenecks](#).” 10th International Conference on Application of Advanced Technologies in Transportation, Athens, Greece, May 27– 31, 2008.
6. Tasnim, S., Monsere, C. and Bertini, R.L. “[Toward an Automated Incident Analysis Process Using Archived Data on the Portland Oregon Freeway System](#).” 10th International Conference on Application of Advanced Technologies in Transportation, Athens, Greece, May 27– 31, 2008.
7. Berkow, M., Wolfe, M., Monsere, C., and Bertini, R.L. “[Using Signal System Data and Buses as Probe Vehicles to Define the Congested Regime on Arterials](#).” *Proceedings of the 87th Annual Meeting of the Transportation Research Board*, 2008.
8. Bertini, R.L., and Lovell, D. “[Developing an Optimal Sensing Strategy for Accurate Freeway Travel Time Estimation and Traveler Information](#).” *Proceedings of the 87th Annual Meeting of the Transportation Research Board*, 2008.
9. Li, H., Mao, B., and Bertini, R.L. “[Using Simulation to Evaluate Bus Facility Design Impacts on Transit Operations in Beijing, China](#).” *Proceedings of the 87th Annual Meeting of the Transportation Research Board*, 2008.
10. Auffray, B., Monsere, C., and Bertini, R.L. “[An Empirical Investigation of the Impacts of Sun-Related Glare on Traffic Flow](#).” *Proceedings of the 87th Annual Meeting of the Transportation Research Board*, 2008.
11. Chavan, P., Tufte, K., Monsere, C., Stephens, M. and Bertini, R.L. “[Extending the Use of Archived ITS Data As a Potential Management Tool to Evaluate Traveler Information on Dynamic Message Signs](#).” *Proceedings of the 87th Annual Meeting of the Transportation Research Board*, 2008.
12. Bertini, R.L., and Makler, J. “[Beyond Archiving: Developing and Attracting Users of an Archived Data User Service](#).” *Proceedings of the 87th Annual Meeting of the Transportation Research Board*, 2008.

13. Bertini, R.L. “[Toward Optimal Sensor Density for Improved Freeway Travel Time Estimation and Traveler Information.](#)” 10th International IEEE Conference on Intelligent Transportation Systems, Seattle, Washington, September 30–October 3, 2007.
14. Kothuri, S., Bertini, R.L. and Makler, J. “[Lessons from Developing an Archived Data User Service in Portland, Oregon: Who Is Using It?](#)” 10th International IEEE Conference on Intelligent Transportation Systems, Seattle, Washington, September 30–October 3, 2007.
15. Wolfe, M., Monsere, C., Koonce, P. and Bertini, R.L. “[Improving Arterial Performance Measurement Using Traffic Signal System Data.](#)” 10th International IEEE Conference on Intelligent Transportation Systems, Seattle, Washington, September 30–October 3, 2007.
16. Fernández-Moctezuma, R., Tufte, K., Maier, D. and Bertini, R.L. “[Toward Management and Imputation of Unavailable Data in Online Advanced Traveler Information Systems.](#)” 10th International IEEE Conference on Intelligent Transportation Systems, Seattle, Washington, September 30–October 3, 2007.
17. Horowitz, Z. and Bertini, R.L. “[Using PORTAL Data to Empirically Diagnose Freeway Bottlenecks Located on Oregon Highway 217.](#)” *Proceedings of the 86th Annual Meeting of the Transportation Research Board*, 2007.
18. Kothuri, S., Tufte, K., Ahn, S. And Bertini, R.L. “[Using Archived ITS Data to Generate Improved Freeway Travel Time Estimates.](#)” *Proceedings of the 86th Annual Meeting of the Transportation Research Board*, 2007.
19. Tufte, K., Ahn, S., Bertini, R.L., Auffray, B. and Rucker, J. “[Toward the Systematic Improvement of Data Quality in the Portland, Oregon Regional Transportation Archive Listing \(PORTAL\).](#)” *Proceedings of the 86th Annual Meeting of the Transportation Research Board*, 2007.
20. Potter, J., Tasnim, S., Tufte, K. and Bertini, R.L. “[Incorporating Incident Data into a Freeway Data Archive for Improved Performance Measurement.](#)” *Proceedings of the 86th Annual Meeting of the Transportation Research Board*, 2007.
21. Welch, T., Tufte, K., McCourt, R., Bertini, R.L. and Snook, A. “[Implementing a User–Oriented Web-based Traffic Data Management and Archive System.](#)” *Proceedings of the 86th Annual Meeting of the Transportation Research Board*, 2007.
22. Kothuri, S., Tufte, K., Ahn, S., and Bertini, R.L., “[Development of an ITS Data Archive Application for Improving Freeway Travel Time Estimation.](#)” 9th International IEEE Conference on Intelligent Transportation Systems, Toronto, Canada, September 17–20, 2006.
23. Bertini, R.L., Tufte, K., Rucker, J., Potter, J., and Welch, T. “[Expansion of an ITS Data Archive with Applications for Improving Spatial Analysis and Tracking Non-Recurrent Congestion.](#)” 9th International IEEE Conference on Intelligent Transportation Systems, Toronto, Canada, September 17–20, 2006.
24. Bertini, R.L. “[You Are the Traffic Jam: An Examination of Congestion Measures.](#)” *Proceedings of the 85th Annual Meeting of the Transportation Research Board*, 2006.
25. Bertini, R.L., Lasky, M. and Monsere, C. “[Validating an Automated License Plate Recognition System for Predicting Rural Corridor Travel Times.](#)” 12th World Congress on Intelligent Transport Systems, San Francisco, November 5–10, 2005.
26. Bertini, R.L., Boice, S. and Bogenberger, K. “[Using ITS Data Fusion to Examine Traffic Dynamics on a Freeway with Variable Speed Limits.](#)” 8th International IEEE Conference on Intelligent Transportation Systems, Vienna, Austria, September 13–16, 2005.

27. Bertini, R.L., Matthews, S., Hansen, S., Delcambre, A., and Rodriguez, A. “[ITS Archived Data User Service in Portland, Oregon: Now and Into the Future.](#)” 8th International IEEE Conference on Intelligent Transportation Systems, Vienna, Austria, September 13–16, 2005.
28. Bertini, R.L., Lindgren, R.V., Helbing, D. and Schonhof, M. “[The German Autobahn: An ITS Test Bed for Examining Dynamic Traffic Flow Phenomena.](#)” 8th International IEEE Conference on Intelligent Transportation Systems, Vienna, Austria, September 13–16, 2005.
29. Bertini, R.L., Lasky, M. and Monsere, C. “[Validating Predicted Rural Corridor Travel Times from an Automated License Plate Recognition System: Oregon’s Frontier Project.](#)” 8th International IEEE Conference on Intelligent Transportation Systems, Vienna, Austria, September 13–16, 2005.
30. Astarita, V., Bertini, R.L. and Guido, G. “[The Estimation of Traffic Flow Parameters From Instrumented Vehicles Counts.](#)” *Proceedings of the 84th Annual Meeting of the Transportation Research Board*, 2005.
31. Bertini, R.L., Rose, M. and El-Geneidy, A. “[Using Archived ITS Data Sources to Measure the Effectiveness of a Freeway Incident Response Program.](#)” *Proceedings of the 84th Annual Meeting of the Transportation Research Board*, 2005.
32. Bertini, R.L. and Rose, M. “[Using Archived ATMS Data for the Performance Evaluation of a Freeway Incident Response Program.](#)” *Proceedings of the IEEE 7th Annual Conference on Intelligent Transportation Systems*, Washington, D.C., 2004.
33. El-Geneidy, A. and Bertini, R.L. “[Toward Validation of Freeway Loop Detector Speed Measurements Using Transit Probe Data.](#)” *Proceedings of the IEEE 7th Annual Conference on Intelligent Transportation Systems*, Washington, D.C., 2004.
34. Bertini, R.L., Byrd, A. and Yin, T. “[Implementing the ITS Archived Data User Service in Portland, Oregon.](#)” *Proceedings of the IEEE 7th Annual Conference on Intelligent Transportation Systems*, Washington, D.C., 2004.
35. Bertini, R.L. and El-Geneidy, A. “[Empirical Techniques for Improving the Performance of Ramp Control Systems Using Archived ITS Data.](#)” *Proceedings of the Eleventh World Congress on Intelligent Transport Systems*, Nagoya, Japan, 2004.
36. Bertini, R.L., Lindgren, R., Helbing, D. and Schönhof, M. “[Empirical Analysis of Flow Features on a German Autobahn.](#)” *Proceedings of the 83rd Annual Meeting of the Transportation Research Board*, 2004.
37. Bertini, R.L. “[Toward the Systematic Diagnosis of Freeway Bottleneck Activation,](#)” *Proceedings of the IEEE 6th Annual Conference on Intelligent Transportation Systems*, Shanghai, China, October 2003.
38. Bertini, R.L. and Tantiyanugulchai, S. “[Arterial Performance Measurement Using Transit Buses as Probe Vehicles,](#)” *Proceedings of the IEEE 6th Annual Conference on Intelligent Transportation Systems*, Shanghai, China, October 2003.
39. Bertini, R.L., Leal, M. and Lindgren, R. “[Examination Of Features of a Freeway Bottleneck Surrounding A Lane Drop,](#)” *Proceedings of the 82nd Annual Meeting of the Transportation Research Board*, 2003
40. Lin, W.H. and R. L. Bertini, “[Modeling Schedule Recovery Processes in Transit Operations for Bus Arrival Time Prediction,](#)” *Proceedings of the IEEE 5th Annual Conference on Intelligent Transportation Systems*, Singapore, 2002

41. Bertini, R.L. and Leal, M. “[Generating Performance Measures from Portland’s Archived Advanced Traffic Management System Data](#),” *Proceedings of the 81st Annual Meeting of the Transportation Research Board*, 2002.
42. Cassidy, M.J. and Bertini, R.L. “[Observations at a Freeway Bottleneck](#).” In: *Proceedings of the Fourteenth International Symposium on Transportation and Traffic Theory (14th ISTTT)*, Jerusalem, Israel, Pergamon, New York, 1999, pp. 107–124.
43. Bertini, R.L., Botha, J.L. and Nielsen, K.O. “[Light Rail Transit Implementation Perspectives for the Future: Lessons Learned in Silicon Valley](#).” *Conference Proceedings 8, Seventh National Conference on Light Rail Transit*, Transportation Research Board, Baltimore, Maryland, 1995, pp. 23–32.
44. Bertini, R.L., Barnes, W.L. and Mackie, J. “[Art Integration: An Essential Design Component and Vehicle for Community Commitment](#).” *Conference Proceedings 8, Seventh National Conference on Light Rail Transit*, Transportation Research Board, Baltimore, Maryland, 1995, pp. 87–95.
45. Bertini, R.L. “[Rail Corridor Evolution: The Development of the San Francisco – San Jose Corridor](#).” *Proceedings of the 72nd Annual Meeting of the Transportation Research Board*, 1993.
46. Bertini, R.L., Botha, J.L., Colman, S.B. and McKean, P. “[The Rail Transit/Land Use Synergism—Case Study of the San Francisco Bay Area](#).” *Proceedings of the 72nd Annual Meeting of the Transportation Research Board*, 1993.

Accepted Fully Refereed Proceedings

47. Li, H., Bertini, R.L., and El-Geneidy, A. “Using Archived Stop-Level Transit Data for Assessing Bus Operations and Exploring Optimal Stop Spacing.” 11th International Conference on Advanced Systems for Public Transport (CASPT 2009), Hong Kong, 2009
48. Saberi, M., and Bertini, R.L. “Toward Implementing Weather-Responsive Advanced Traffic Management and Information Systems.” *Proceedings of the 16th World Congress on Intelligent Transport Systems*, Stockholm, Sweden, September 21–25, 2009.
49. Li, H., and Bertini, R.L. “Toward Sustainable Transit Operations and Performance Enhancement Using Archived Automatic Vehicle Location Data.” *Proceedings of the 16th World Congress on Intelligent Transport Systems*, Stockholm, Sweden, September 21–25, 2009.
50. Palmer, J., Wiczorek, J., Fernandez, R., Rehborn, H., and Bertini, R.L. “Comparing a Bottleneck Identification Tool With a Congested Traffic Pattern Recognition System Using Archived Freeway Data from Portland, Oregon.” *Proceedings of the 16th World Congress on Intelligent Transport Systems*, Stockholm, Sweden, September 21–25, 2009.

Submitted Fully Refereed Proceedings

51. Feng, W., Bertini, R.L., and Fernandez-Moctezuma, R. “Considering the Impacts of Sensor Spacing on Alternative Freeway Travel Time Estimation Techniques in a Traveler Information Framework.” *12th International IEEE Conference on Intelligent Transportation Systems*, St. Louis, Missouri, October 3–7, 2009. (Accepted but deferred)
52. Saberi, M., and Bertini, R.L. “Examining Segment Level Analysis of Travel Time Reliability Using Archived ITS Data.” *12th International IEEE Conference on Intelligent Transportation Systems*, St. Louis, Missouri, October 3–7, 2009. (Accepted but deferred)

53. Saberi K., M., Bertini, R.L., Fernandez-Moctezuma, R., and Wieczorek, J. "Using Archived ITS Data to Assess the Effects of Rain on Freeway Traffic Flow in Portland, Oregon." *12th International IEEE Conference on Intelligent Transportation Systems*, St. Louis, Missouri, October 3–7, 2009. (Accepted but deferred)
54. Tufté, K., Fernández-Moctezuma, R., Bertini, R.L., Matthews, S., and Chee, J. "Portal 2.0: Toward User-Centric Experiences in Archived Data User Services." *12th International IEEE Conference on Intelligent Transportation Systems*, St. Louis, Missouri, October 3–7, 2009. (Rejected)

Published Proceedings (Based on Full Paper)

1. Bertini, R.L. and Li, H. "[Toward Optimal Transit Stop Spacing](#)." Sixth International Conference on Traffic & Transportation Studies (ICTTS), Nanning, China, August 5–8 2008.
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50. "Fixed Guideway Planning Charrette Summary Report." Santa Cruz County Regional Transportation Commission, Santa Cruz California, 1991.
51. Bertini, R.L. and Pang, J. "Lobitos Creek Bridge Replacement: Design and Analysis." Senior Project, Department of Civil Engineering, California Polytechnic State University, San Luis Obispo, 1987.

Articles in Industry Publications

1. Belzner, H., Bertini, R.L., and Bogenberger, K. "[Qualität der Verkehrsinfrastruktur amerikanischer Metropolen.](#)" *Internationales Verkehrswesen* Vol. 61, November 2009.
2. Monsere, C., Eshel, O., Bertini, R.L., and Hagedorn, H. "Evaluating Oregon's Statewide Adaptive Ramp Metering System." *Traffic Technology International*, 2009 Annual Review, October 2008.
3. Bogenberger, K., Bertini, R.L. and Boice, S. "[Analytische Methoden zur Interpretation von Verkehrsdaten.](#)" *Straßenverkehrstechnik*, September 2006.
4. Welch, T., Tuft, K., McCourt, R., Bertini, R.L., and Snook, A. "[Getting Googled: Managing Traffic Data Using a Web-based Map Interface.](#)" *WesternITE*, Institute of Transportation Engineers District 6, January–February 2006, Vol. 61, No. 1, pp. 1–4.
5. Tantiyanugulchai, S. and Bertini, R.L. "[Can Buses Predict Your Car's Travel Time?](#)" *WesternITE*, Institute of Transportation Engineers District 6, Vol. 57, No. 5, September–October, 2003.
6. Bertini, R.L. and McGill, G. "[Getting Traffic Moving Again.](#)" *Public Roads*, Federal Highway Administration, Turner-Fairbank Highway Research Center, Volume 67, No. 2, September/October 2003.
7. Rufolo, A.M. and Bertini, R.L. "[Designing Alternatives To State Motor Fuel Taxes.](#)" *Transportation Quarterly*, Vol. 57, No. 1, Winter 2003, pp. 33–46.
8. Steingröver, A., Krevet, R., and Bertini, R.L. "[Intermodal Innovation.](#)" *Civil Engineering*, American Society of Civil Engineers, Vol. 71, No. 4, April 2001, pp. 56–61.
9. Bertini, R.L. "[The Freeway's Guardian Angels.](#)" *Access Magazine*, No. 9, University of California Transportation Center, Berkeley, California, Fall 1996, pp. 26–28.
10. Bertini, R.L. and Green, G.L. "[San Mateo County Projects Incorporate Aesthetic Features.](#)" *APWA Reporter*, American Public Works Association. July 1992.

Citations

Published work has been cited 228 times in the [Institute for Scientific Information](#) databases.

Other Significant Research Dissemination

Website for Intelligent Transportation Systems Laboratory: <http://www.its.pdx.edu>

Online Transportation Data Archive: <http://portal.its.pdx.edu>

Wiki for ITS Lab Project Management: <https://wiki.cecs.pdx.edu/bin/view/ItsWeb/>

Website for Transportation Research Board Committee on Traffic Flow Theory and Characteristics: <http://www.tft.pdx.edu>

Other Scholarly Activity

Invited Lectures and Seminars

1. Munich University of Technology, *IntelliDrive and Vehicle Infrastructure Integration in the USA*, Intelligent Transport Systems Education Network (ITS-Edunet) Short Course on Challenges and Opportunities of V2X Communication, May 14-15, 2009.
1. University of Arizona, Systems and Industrial Engineering Seminar Series, *Intelligent Transportation Solutions for Planning, Optimizing and Measuring Public Transport Performance*, April 7, 2009.
2. University of Nevada Reno, Department of Civil and Environmental Engineering, Transportation Research Group Seminar, *Impact of Sensor Spacing on Travel Time Estimation and Information*, April 1, 2009.
3. University of Nevada Reno, Department of Geography, Geography Colloquium, *How Transportation Technology Can Limit the Impact of Future Climate Change*, April 1, 2009.
4. Portland State University, Department of Civil and Environmental Engineering, CE 351 Guest Lecture, *Transportation Technology Impacts on Climate Change*, February 24, 2009.
5. Monash University, Department of Civil Engineering, Transportation Group Seminar, *Transportation Research at Portland State University*, December 5, 2008.
6. Monash University, Department of Civil Engineering, Innovative Traffic Management Workshop, *Freeway Performance Before and After Installation of a Systemwide Adaptive Ramp Metering System*, December 1, 2008.
7. Monash University, Department of Civil Engineering, Innovative Traffic Management Workshop, *Freeway Travel Time Estimation*, December 1, 2008.
8. University of Illinois at Chicago, Department of Urban Planning and Policy and Computational Transportation Science IGERT Seminar, *Travel Time Estimation for Traffic Management and Traveler Information*, November 10, 2008.
9. Portland State University USP 556 Urban Transportation: Problems and Policies, *Evaluation of Intelligent Transportation System Impacts*, May 6, 2008.
10. Portland State University, Computer Science Departmental Colloquium Series, *Intelligent Transportation Systems: a Domain Area for Computer Scientists in the 21st Century*, April 23, 2008.

11. Portland State University Friday Transportation Seminar Series, *Travel Time Estimation for Traffic Management and Traveler Information*. April 4, 2008.
12. Tsinghua University, Institute of Systems Engineering, Department of Automation, *Unlocking the Mysteries of Freeway Sensor Data to Diagnose Detailed Bottleneck Dynamics*. Beijing, China, October 12, 2007.
13. Oregon Transportation Commission meeting, *Portland Ramp Metering and Gresham Adaptive Signal System Evaluations*, September 12, 2007.
14. Portland State University USP 556 Urban Transportation: Problems and Policies, *Introduction to Intelligent Transportation Systems*, May 31, 2007.
15. Portland State University, Environmental Sciences and Resources Seminar, *Oregon Transportation Research and Education Consortium Environmental Priorities and Opportunities*, April 27, 2007.
16. Portland State University, Road Ecology Class, Environmental Sciences and Resources Program, *Introduction to the Oregon Transportation Research and Education Consortium*, April 5, 2007.
17. Portland State University Friday Transportation Seminar Series, *PORTAL: Lessons from Developing an Archived Data User Service in Portland, Oregon*, March 16, 2007.
18. Portland State University, Department of Mechanical and Materials Engineering (MME) Seminar Series, *Lessons from Doing Research: Developing Ideas, Getting Funding, and Doing the Work*, November 17, 2006.
19. Portland Traffic and Transportation Course, City of Portland, *Portland State University Transportation Education And Research Overview*, November 8, 2006.
20. Federal Highway Administration, Oregon Division, *PORTAL: Implementing a New Generation Archived Data User Service in Oregon*, November 7, 2006.
21. Delegation from Binh Duong Province, Vietnam, *Portland State University Transportation Education And Research Overview*, U.S. Vietnam Chamber of Commerce (UVCC), November 6, 2006.
22. Mobility the Smart Way, The State of Intelligent Transportation Systems in the Portland Metropolitan Region, *Portland State University's Role in the Region's ITS Program Development*, Oregon Convention Center, October 26, 2006.
23. CH2MHill Lunchtime Seminar, *Transportation Research and Education at Portland State University*. October 24, 2006.
24. Portland State University, PSU Weekend, *Fuel for Thought*, October 21, 2006.
25. Kittelson & Associates, Inc. Lunchtime Seminar, *Transportation Research and Education at Portland State University*. August 10, 2006.
26. Metro Seminar, *PORTAL: Implementing a New Generation Archived Data User Service in Oregon*, Portland, Oregon, February 22, 2006.
27. Portland State University USP 556 Urban Transportation: Problems and Policies, *Introduction to Intelligent Transportation Systems*, February 13, 2006.

28. Technische Universität München, Department of Traffic Engineering and Control, *International Definitions of Congestion: An Examination of Macroscopic Models*. Munich, Germany, January 27, 2006.
29. University of Washington, Department of Civil and Environmental Engineering, *ITS Data Applications*. CEE 412/599 Transportation Data Management and Analysis, December 7, 2005.
30. University of Portland, Department of Civil Engineering, *Graduate Studies and Transportation Research at PSU*. December 6, 2005.
31. Portland State University, *Introduction to Public Transportation*. CE 454 Urban Transportation Systems Guest Lecture, November 28, 2005.
32. ASCE Oregon Capital Branch, *Expanding Transportation Research in Oregon*. Salem, Oregon, November 17, 2005.
33. Joint Institute of Transportation Engineers (ITE)/International Municipal Signal Association (IMSA) Meeting, *Designation of a Partnership of Four Oregon Universities as a National University Transportation Center*. October 31, 2005.
34. Portland State University, Natural and Urban Ecology of Portland, Geography Seminar, *Urban Transportation: Human and Natural Impacts on the Portland Landscapes*, November 2, 2005.
35. Portland Traffic and Transportation Course, City of Portland, *Transportation Research, Education and Outreach at Portland State University*, October 27, 2005.
36. Portland State University, PSU Weekend, *Congestion: the Good, the Bad and the Ugly*. October 22, 2005.
37. Portland Freight Committee, *Intelligent Transportation Systems and Freight*, October 6, 2005.
38. Imperial College, London, *What is Traffic Congestion*, Department of Civil and Environmental Engineering, June 28, 2005.
39. Technische Universität München, Department of Traffic Engineering and Control, *Using Basic Traffic Flow Principles to Diagnose Bottlenecks on German Autobahns*, Munich, Germany, May 19, 2005.
40. BMW Research and Innovation Center, *An International Comparison of Macroscopic and Microscopic Measures of Congestion*, Munich, Germany, May 18, 2005.
41. University of Alabama at Birmingham, Department of Civil and Environmental Engineering, *Prototype for Advanced Public Transit Systems in Multimodal Corridors*, April 25, 2005.
42. Faculty Association at Portland State University, *Intelligent Transportation Systems: An Oxymoron or Can Technology Really Reduce Congestion?* April 12, 2005.
43. Sigma Xi Columbia-Willamette Chapter and PSU Department of Geology, *Intelligent Transportation Systems: An Oxymoron or Can Technology Really Reduce Congestion?* March 9, 2005.
44. National Institute for Advanced Transportation Technology, Department of Civil Engineering, University of Idaho, *Unlocking Some Mysteries of Traffic Flow Theory*, February 22, 2005.

45. Traffic Monitoring Peer Exchange, *Innovations in Intelligent Transportation Systems*, Oregon and Washington Departments of Transportation, February 16, 2005.
46. Portland State University, Center for Transportation Studies, *Congestion and Its Extent*. Fall Seminar Series, November 19, 2004.
47. U.S. Department of Transportation Site Visit, TransNow University Transportation Center, University of Washington, *Intelligent Transportation Systems Research at Portland State University*, September 22, 2004.
48. Oregon Model Steering Committee, *Portland Performance Measures for 2002*, Oregon Department of Transportation, Salem, Oregon, September 15, 2004.
49. Transportation and Livability Summit, *New Transportation Ideas, Insights and Opportunities for 21st Century Livable Communities*, Congressman Earl Blumenauer, Gresham, Oregon, August 3, 2004.
50. Comet Operators Meeting, *Evaluation of Comet Incident Response Program*, Oregon Department of Transportation, Region 1, June 16, 2004.
51. PSU Alumni Association Events, *Transportation and Technology: Solutions for Seattle*. Seattle, Washington, April 7, 2004.
52. BMW Group Research and Innovation Center, *Empirical Comparison of German and U.S. Traffic Sensor Data and Impact on Driver Assistance Systems*, Munich, Germany, March 22, 2004.
53. CH2Mhill, *Intelligent Transportation Systems Research and Education*, Portland, Oregon, December 2, 2003.
54. Oregon State University, Department of Civil, Environmental and Construction Engineering, *Freeway Bottleneck Analysis*, November 21, 2003.
55. University of California at Berkeley, Institute of Transportation Studies, [Using Archived Stop-Level Transit Geo-Location Data for Improved Operations and Performance Monitoring](#), Transportation Seminar Series, September 26, 2003.
56. ITS Oregon Workshop, *Benefits of Freeway Service Patrol Vehicles*, Wilsonville, Oregon, April 17, 2003.
57. Portland State University, Center for Transportation Studies, *Recent Research on the Transformation of Oregon's Gasoline Tax Into a Road User Fee System*, Winter Seminar Series, February 14, 2003.
58. Institute of Transportation Engineers Oregon Section, *Transportation Education at Portland State University*, Workshop on Transportation Education in the Northwest, January 24, 2003.
59. Oregon Department of Transportation, *Evaluation of ODOT's Region 2 Incident Management Program*. Regional Maintenance Managers' Meeting, Salem, Oregon, January 23, 2003.
60. Value Pricing in the Northwest – Can We Make it Work?, *Value Pricing Technology and Institutional Issues and Options*, Workshop, December 17, 2002.
61. Oregon Road User Fee Task Force, *Data Transmission Options for VMT Data and Fee Collection Centers*, Legislative Testimony, Salem, Oregon, November 15, 2002.

62. Northwest Transportation Training and Education and Training Alliance (NWTTEA) Traffic Operations Workshop, *Inventory of Current Traffic Operations Training and Education Resources*, Portland, Oregon, September 12, 2002.
63. Oregon State University, Department of Civil, Environmental and Construction Engineering, *Archived ITS Data: A New Resource For Operations, Planning and Research*, March 6, 2002.
64. Oregon State University, Department of Civil, Environmental and Construction Engineering, *Technology Options for Alternative Road User Fee Systems*, Graduate Seminar, March 6, 2002.
65. National Institute for Advanced Transportation Technology, Department of Civil Engineering, University of Idaho, *Capacity and the Breakdown Phenomenon at a Freeway Merge Bottleneck: Unlocking the Potential of Loop Sensor Data*, March 1, 2002.
66. Portland State University, Department of Electrical and Computer Engineering Graduate Seminar, *Capacity and the Breakdown Phenomenon at a Freeway Merge Bottleneck: Unlocking the Potential of Loop Sensor Data*, February 22, 2002.
67. Institute of Transportation Engineers, Oregon Section, Workshop on Transportation Finance, *Alternatives to the Motor Fuel Tax*. January 24, 2002.
68. Oregon Road User Fee Task Force, *Alternatives to the Motor Fuel Tax*. Legislative Testimony, Salem, Oregon, November 30, 2001.
69. TransPort ITS Technical Advisory Committee, *Archived ITS Data: A New Resource For Operations, Planning and Research*, November 14, 2001.
70. American Society of Civil Engineers, Oregon Section Meeting, *Transportation in the 21st Century*. Portland, Oregon, October 18, 2001.
71. Oregon Transportation Forum, Institute of Transportation Engineers, Women's Transportation Seminar, ITS Oregon, *Performance Measures for Improving Transportation Operations*. Portland, Oregon, February 15, 2001.
72. Portland State University, Transportation Research Group, *Benefits of Archived ITS Data: Measuring Capacity at a Freeway Bottleneck*. Fall Seminar Series, October 5, 2000.
73. University of California, Irvine, Institute of Transportation Studies, ITS Seminar Series, *Time Dependent Traffic Flow Features at Freeway Bottlenecks*. June 1999.
74. University of California at Berkeley, Institute of Transportation Studies, Transportation Seminar Series, *Time Dependent Traffic Flow Features at Freeway Bottlenecks*. April 1999.
75. San Jose State University, Department of Civil and Environmental Engineering, *Public Transit Technology*. Guest Lecture, CE 296B Public Transportation Systems, September 1997.
76. San Jose State University, College of Engineering/International Institute of Transportation Policy Studies, *Symposium on the Future of Public Transportation*. 1994.
77. American Society of Civil Engineers, Younger Member Forum, *Light Rail Design in a Changing Economy*. San Jose, California, September 1994.

Conference Presentations

55. Li, H., **Bertini, R.L.**, and El-Geneidy, A. “Using Archived Stop-Level Transit Data for Assessing Bus Operations and Exploring Optimal Stop Spacing.” 11th International Conference on Advanced Systems for Public Transport (CASPT 2009), Hong Kong, 2009
1. **Bertini, R.L.** “UTC Best Practices—OTREC and Livability.” University Transportation Center Directors Summer Meeting, University of Massachusetts, Amherst, Massachusetts, June 30, 2009.
2. **Bertini, R.L.** “The Future of a Vehicle Miles Traveled (VMT) User Fee.” Congressional Fact Finding Panel, ITS America Annual Meeting and Exposition, Washington, D.C., June 1-3, 2009
3. Saberi, M., and **Bertini, R.L.** “Toward Implementing Weather-Responsive Advanced Traffic Management and Information Systems.” 16th World Congress on Intelligent Transport Systems, Stockholm, Sweden, September 21–25, 2009.
4. Li, H., and **Bertini, R.L.** “Toward Sustainable Transit Operations and Performance Enhancement Using Archived Automatic Vehicle Location Data.” 16th World Congress on Intelligent Transport Systems, Stockholm, Sweden, September 21–25, 2009.
5. Li, H., **Bertini, R.L.**, and El-Geneidy, A. “Using Archived Stop-Level Transit Data for Assessing Bus Operations and Exploring Optimal Stop Spacing.” 11th International Conference on Advanced Systems for Public Transport (CASPT 2009), Hong Kong, July 20-22, 2009
6. **Bertini, R.L.**, Li, H., and El-Geneidy, A. “Intelligent Transportation Solutions for Planning, Optimizing and Measuring Public Transport Performance,” mobil.TUM 2009, International Scientific Conference on Mobility and Transport, Munich, Germany, May 12-13, 2009.
7. **Bertini, R.L.** “Can Sensors Be Used to Provide Accurate Travel Time Information?” *Transportation Research Forum*, 50th Annual Forum, Portland, Oregon, March 16-18, 2009.
8. **Bertini, R.L.** “How Transportation Technology Can Limit the Impact of Future Climate Change.” *International Consumer Electronics Show (CES)*, Las Vegas, Nevada, January 9, 2009.
9. **Bertini, R.L.** “Exploiting High Resolution Archived Transit Data for Improved Planning and Operations: A Portland, Oregon Case Study.” *Conference for the Australian Institutes of Transport Research*, University of Western Australia, 10–12 December, 2008.
10. Eshel, O., **Bertini, R.L.**, and Monsere, C. “Empirical Evaluation of Adaptive Ramp Metering Along Two Freeway Corridors in Portland, Oregon.” *15th World Congress on Intelligent Transport Systems*, New York, NY, November 16–20, 2008.
11. Bertini, R.L., Fernández, R., **Wieczorek, J.**, and Li, H. “Using Archived ITS Data to Automatically Identify Freeway Bottlenecks in Portland, Oregon.” *15th World Congress on Intelligent Transport Systems*, New York, NY, November 16–20, 2008.
12. **Fernández, R.**, Bertini, R.L., and Maier, D. “Developing an Imputation Strategy for an Archived Data User Service in Portland, Oregon.” *15th World Congress on Intelligent Transport Systems*, New York, NY, November 16–20, 2008.

13. **Bertini, R.L.** “[Leveraging Intelligent Transportation Systems Data to Improve Transportation Efficiency.](#)” Keynote Address, *Sixth International Conference on Traffic & Transportation Studies (ICTTS)*, Nanning, China, August 5–8 2008.
14. **Bertini, R.L.** and Horowitz, Z. “Diagnosing a Freeway Bottleneck in Portland Oregon (USA) Using Archived Sensor Data.” *Sixth International Conference on Traffic & Transportation Studies (ICTTS)*, Nanning, China, August 5–8 2008.
15. **Bertini, R.L.** “Perspectives on Traffic Flow Theory: Beyond Greenshields.” Panel Discussion, *Symposium on The Fundamental Diagram: 75 Years (Greenshields 75 Symposium)*, Woods Hole, Massachusetts, July 10, 2008.
16. Eshel, O., Monsere, C., and **Bertini, R.L.** “Empirical Evaluation of Oregon’s System-wide Adaptive Ramp Metering System.” *2008 TRB / IBTTA Joint Conference on Freeway and Tollway Operations*, Fort Lauderdale, Florida, June 15–19, 2008
17. **Bertini, R.L.**, Li, H., Wieczorek, J. and Fernández, R. “Using Archived Data to Systematically Identify and Prioritize Freeway Bottlenecks.” *10th International Conference on Application of Advanced Technologies in Transportation*, Athens, Greece, May 27– 31, 2008.
18. Tasnim, S., Monsere, C. and **Bertini, R.L.** “Toward an Automated Incident Analysis Process Using Archived Data on the Portland Oregon Freeway System.” *10th International Conference on Application of Advanced Technologies in Transportation*, Athens, Greece, May 27– 31, 2008.
19. Zielke, B., **Bertini, R.L.**, and Treiber, M. “[Empirical Measurement of Freeway Oscillation Characteristics: An International Comparison.](#)” *87th Annual Meeting of the Transportation Research Board* January 2008.
20. **Bertini, R.L.** “[State of ITS Benchmarking in Portland, Oregon and the U.S.](#)” Special Session on ITS in Cities (Benchmarking), *14th World Congress on Intelligent Transport Systems*, Beijing, October 13, 2007.
21. **Bertini, R.L.** “[Building Planning and Operations Analysis Tools on an Archived ITS Data Platform: Who Are the Users?](#)” *14th World Congress on Intelligent Transport Systems*, Beijing, October 13, 2007.
22. Makler, J., Coffman, M., and **Bertini, R.L.** “[Regional Collaboration: A Model for Successful ITS Implementation in Portland, Oregon.](#)” *14th World Congress on Intelligent Transport Systems*, Beijing, October 11, 2007.
23. **Bertini, R.L.** “[Toward Optimal Sensor Density for Improved Freeway Travel Time Estimation and Traveler Information.](#)” *10th International IEEE Conference on Intelligent Transportation Systems*, Seattle, Washington, October 1, 2007.
24. Kothuri, S., **Bertini, R.L.** and Makler, J. “[Lessons from Developing an Archived Data User Service in Portland, Oregon: Who Is Using It?](#)” *10th International IEEE Conference on Intelligent Transportation Systems*, Seattle, Washington, October 1, 2007.
25. **Bertini, R.L.** “So You Want to Be a Transportation Professional,” *Institute of Transportation Engineers, District 6 Annual Meeting*, Portland, Oregon, July 16, 2007.

26. **Bertini, R.L.** and Lyman, K. “[Developing Improved Travel Time Reliability Measures For Real-Time And Archived ITS Data Applications](#),” *6th European Congress on Intelligent Transportation Systems and Services*, Aalborg, Denmark, June 20, 2007.
27. **Bertini, R.L.** “[Leveraging Archived Freeway Sensor Data for Regional Transportation Performance Measurement](#).” *Intelligent Transportation Society of America, 2007 Annual Meeting and Exhibition*, Palm Springs, California, June 6, 2007.
28. **Bertini, R.L.** “Multimodal Transportation Planning and Engineering Challenges,” *Joint Engineering Conference, Professional Engineers of Oregon*, Bend, Oregon, May 17, 2007.
29. **Bertini, R.L.** “Lessons from Developing an Archived Data User Service in Portland, Oregon,” *Linking Archived Data User Service, Performance Measures and Freeway Operations to Improve Mobility, Workshop 124, 86th Annual Meeting of the Transportation Research Board*, January 2007.
30. **Bertini, R.L.** “Improving Collaboration in the Northwest,” *Annual Meeting of the Council of University Transportation Centers*, Washington, D.C., January 2007.
31. **Bertini, R.L.** “Estimating Truck Flows on a Freeway Network to Improve Freight Operations and Planning,” *13th World Congress on Intelligent Transport Systems*, London, October 10, 2006.
32. **Bertini, R.L.** “Influence of Variable Speed Limit and Driver Information System on Key Traffic Flow Parameters on a German Autobahn,” *13th World Congress on Intelligent Transport Systems*, London, October 10, 2006.
33. **Bertini, R.L.** “Improving the Accuracy of Freeway Travel Time Estimates Using Archived ITS Data,” *13th World Congress on Intelligent Transport Systems*, London, October 9, 2006.
34. **Bertini, R.L.**, “Development of an ITS Data Archive Application for Improving Freeway Travel Time Estimation.” *9th International IEEE Conference on Intelligent Transportation Systems*, Toronto, Canada, September 20, 2006.
35. **Bertini, R.L.** “Expansion of an ITS Data Archive with Applications for Improving Spatial Analysis and Tracking Non-Recurrent Congestion.” *9th International IEEE Conference on Intelligent Transportation Systems*, Toronto, Canada, September 20, 2006.
36. **Bertini, R.L.** “Developing Comparative Congestion Measures to Improve Transportation System Performance.” *Fifth International Conference on Traffic & Transportation Studies (ICTTS)*, Xi’an, China, August 2, 2006.
37. **Bertini, R.L.** “Unlocking the Mysteries of Freeway Sensor Data to Diagnose Detailed Bottleneck Dynamics.” *Fifth International Conference on Traffic & Transportation Studies (ICTTS)*, Xi’an, China, August 3, 2006.
38. Boice, S., **Bertini, R.L.** and Bogenberger, K. “Comparison of Key Freeway Capacity Parameters on North American Freeways with German Autobahns Equipped With a Variable Speed Limit System.” *5th International Symposium on Highway Capacity and Quality of Service*, Yokohama, Japan, July 26, 2006.
39. **Bertini, R.L.** and Makler, J. “Using Real Time Transportation System Performance Measures to Fuel a Regional Congestion Management System,” *Institute of Transportation Engineers, District 6 Annual Meeting*, Honolulu, Hawaii, June 26, 2006.

40. **Bertini, R.L.**, “Speeding and Speed Limits: Are Drivers Out of Control?” *First International Symposium on Freeway & Tollway Operations*, Athens, Greece, June 6, 2006.
41. **Bertini, R.L.**, Boice, S. and Bogenberger, K. S. “Measuring the Impacts of a Variable Speed Limit System on a German Motorway.” *First International Symposium on Freeway & Tollway Operations*, Athens, Greece, June 6, 2006.
42. **Bertini, R.L.** and Kothuri, S. “Improving Travel Time Estimation for Freeway Traffic Management and Traveler Information Systems.” *First International Symposium on Freeway & Tollway Operations*, Athens, Greece, June 7, 2006.
43. **Bertini, R.L.**, “Portal: Implementing an Archived Data User Service in Oregon,” *Northwest Transportation Conference*, Corvallis, Oregon, February 8, 2006.
44. **Bertini, R.L.**, “A New National University Transportation Center in Oregon,” *Northwest Transportation Conference*, Corvallis, Oregon, February 8, 2006.
45. **Bertini, R.L.**, “You Are the Traffic Jam: An Examination of Congestion Measures.” *85th Annual Meeting of the Transportation Research Board*, January 2006.
46. **Bertini, R.L.**, “New Research Initiatives at the National University Transportation Center,” *Oregon Modeling Symposium*, Portland, Oregon, November 15, 2005.
47. **Bertini, R.L.**, Hansen, S., Matthews, S. and Delcambre, A. “[PORTAL: Implementing a New Generation Archived Data User Service in Portland, Oregon.](#)” *12th World Congress on Intelligent Transport Systems*, San Francisco, November 8, 2005.
48. Bertini, R.L., Bogenberger, K. and **Boice, S.** “[Impact of Variable Speed Limit and Driver Information System on Traffic Dynamics on a German Autobahn: Lessons for U.S. Applications.](#)” *12th World Congress on Intelligent Transport Systems*, San Francisco, November 9, 2005.
49. **Bertini, R.L.**, Lasky, M. and Monsere, C. “[Validating an Automated License Plate Recognition System for Predicting Rural Corridor Travel Times.](#)” *12th World Congress on Intelligent Transport Systems*, San Francisco, November 10, 2005.
50. **Bertini, R.L.**, Boice, S. and Bogenberger, K. “Using ITS Data Fusion to Examine Traffic Dynamics on a Freeway with Variable Speed Limits.” *8th International IEEE Conference on Intelligent Transportation Systems*, Vienna, Austria, September 13–16, 2005.
51. **Bertini, R.L.**, Matthews, S., Hansen, S., Delcambre, A., and Rodriguez, A. “ITS Archived Data User Service in Portland, Oregon: Now and Into the Future.” *8th International IEEE Conference on Intelligent Transportation Systems*, Vienna, Austria, September 13–16, 2005.
52. Bertini, R.L., **Lindgren, R.V.**, Helbing, D. and Schonhof, M. “The German Autobahn: An ITS Test Bed for Examining Dynamic Traffic Flow Phenomena.” *8th International IEEE Conference on Intelligent Transportation Systems*, Vienna, Austria, September 13–16, 2005.
53. **Bertini, R.L.**, Lasky, M. and Monsere, C. “Validating Predicted Rural Corridor Travel Times from an Automated License Plate Recognition System: Oregon’s Frontier Project.” *8th International IEEE Conference on Intelligent Transportation Systems*, Vienna, Austria, September 13–16, 2005.
54. **Bertini, R.L.**, Hansen, S. and El-Geneidy, A. “Using the Portland Regional Transportation Archive Listing (PORTAL) to Measure the Performance of the Portland, Oregon Regional

Transportation System.” *9th International Conference on Computers in Urban Planning and Urban Management Conference (CUPUM)*, London, June 29, 2005.

55. **Bertini, R.L.**, Monsere, C., El-Geneidy, A., Kimpel, T. and Bosa, P. “Exploring Spatial And Temporal Performance Measurement In Metropolitan Transportation Safety Improvement Programs.” *9th International Conference on Computers in Urban Planning and Urban Management Conference (CUPUM)*, London, June 29, 2005.
56. **Bertini, R.L.** “Educational Applications of the Portland Oregon Regional Archived Data User Service (ADUS),” *American Society for Engineering Education Annual Meeting*, Portland, Oregon, June 14, 2005.
57. Bertini, R.L., **Hansen, S.** and Bogenberger, K. “[Empirical Analysis of Traffic Sensor Data Surrounding a Bottleneck on a German Autobahn.](#)” *84th Annual Meeting of the Transportation Research Board*, January 2005.
58. Monsere, C., **Nolan, C.**, Bertini, R., Anderson, A. and El-Seoud, T. “[Measuring the Impacts of Speed Reduction Technologies: A Dynamic Advanced Curve Warning System Evaluation.](#)” *84th Annual Meeting of the Transportation Research Board*, January 2005.
59. Byrne, N., Koonce, P., Bertini, R.L., **Pangilinan, C.** and Lasky, M. “[Using Hardware-in-the-Loop Simulation to Evaluate Signal Control Strategies for Transit Signal Priority.](#)” *84th Annual Meeting of the Transportation Research Board*, January 2005.
60. Bertini, R.L., **Hansen, S.**, Byrd, A. and Yin, T. “[PORTAL: Experience Implementing the ITS Archived Data User Service in Portland, Oregon.](#)” *84th Annual Meeting of the Transportation Research Board*, January 2005.
61. **Astarita, V.**, Bertini, R.L. and Guido, G. “The Estimation of Traffic Flow Parameters From Instrumented Vehicles Counts.” *84th Annual Meeting of the Transportation Research Board*, January 2005.
62. Bertini, R.L. and **Myton, A.** “[Using PeMS Data to Empirically Diagnose Freeway Bottleneck Locations in Orange County, California.](#)” *84th Annual Meeting of the Transportation Research Board*, January 2005.
63. Bertini, R.L., **Monsere, C.**, Byrd, A., Rose, M. and El-Seoud, T. “[Using Custom Transportation Data Collection Software with Handheld Computers for Education, Research, and Practice.](#)” *84th Annual Meeting of the Transportation Research Board*, January 2005.
64. Bertini, R.L., **Rose, M.** and El-Geneidy, A. “[Using Archived ITS Data Sources to Measure the Effectiveness of a Freeway Incident Response Program.](#)” *84th Annual Meeting of the Transportation Research Board*, January 2005.
65. **Bertini, R.L.** “[Congestion and Its Extent.](#)” *Access to Destinations: Rethinking the Transportation Future of our Region*, University of Minnesota Center for Transportation Studies, November 8, 2004.
66. **Bertini, R.L.** and El-Geneidy, A. “[Empirical Techniques for Improving the Performance of Ramp Control Systems Using Archived ITS Data.](#)” *Eleventh World Congress on Intelligent Transport Systems*, Nagoya, Japan, October 21, 2004.
67. **Bertini, R.L.** and Rose, M. “[Using Archived ATMS Data for the Performance Evaluation of a Freeway Incident Response Program.](#)” *IEEE 7th Annual Conference on Intelligent Transportation Systems*, Washington, D.C., October 4, 2004.

68. **El-Geneidy, A.** and Bertini, R.L. “[Toward Validation of Freeway Loop Detector Speed Measurements Using Transit Probe Data.](#)” *IEEE 7th Annual Conference on Intelligent Transportation Systems*, Washington, D.C., October 5, 2004.
69. **Yin, T.**, Bertini, R.L. and Byrd, A. “[Implementing the ITS Archived Data User Service in Portland, Oregon.](#)” *IEEE 7th Annual Conference on Intelligent Transportation Systems*, Washington, D.C., October 4, 2004.
70. **Bertini, R.L.** “[Multimodal ITS Data Integration and Performance Measurement in Portland, Oregon.](#)” *North American Travel Monitoring Exhibition & Conference*, San Diego, California, June 27–30, 2004.
71. **Bertini, R.L.** “[Using ITS Data to Measure Arterial Travel Time in Portland.](#)” *North American Travel Monitoring Exhibition & Conference*, San Diego, California, June 27–30, 2004.
72. **Bertini, R.L.** “[Regional Data Archive and Performance Measures.](#)” *North American Travel Monitoring Exhibition & Conference*, San Diego, California, June 27–30, 2004.
73. **Nolan, C.** and Bertini, R.L. “Examination of the Impact of Speed Upon Highway Safety: An Oregon Perspective.” *Institute of Transportation Engineers, District 6 Annual Meeting*, Sacramento, California, June 21, 2004.
74. **Bertini, R.L.** “Enhancing Transportation Education.” Panel Discussion, *Institute of Transportation Engineers, District 6 Annual Meeting*, Sacramento, California, June 21, 2004.
75. **Koonce, P.** and Bertini, R.L. “Blueprint for Evaluation and Improvement of Transit Signal Priority: A Portland Case Study.” *Institute of Transportation Engineers, District 6 Annual Meeting*, Sacramento, California, June 22, 2004.
76. **Bertini, R.L.**, Byrd, A. and Yin, T. “Developing a Transportation Data Archive for the Portland Metropolitan Area.” *Institute of Transportation Engineers, Quad Conference*, Portland, Oregon, April 23, 2004.
77. **Rose, M.** and Bertini, R.L. “Using Archived ITS Data Sources to Measure the Effectiveness of a Freeway Incident Response Program.” *Institute of Transportation Engineers, Quad Conference*, Portland, Oregon, April 23, 2004.
78. **Koonce, P.** and Bertini, R.L. “The Importance of Bus Stop Location for Signal Priority.” *Institute of Transportation Engineers, Quad Conference*, Portland, Oregon, April 23, 2004.
79. **Bertini, R.L.** and Rose, M. “Evaluation of the COMET Incident Response Program.” *Northwest Transportation Conference*, Oregon Department of Transportation, Corvallis, Oregon, February 2004.
80. Bertini, R.L. and **Malik, S.** “[Observed Dynamic Traffic Features On a Freeway Section with Merges and Diverges.](#)” *83rd Annual Meeting of the Transportation Research Board*, January 2004.
81. Bertini, R.L. and **Tantiyanugulchai, S.** “[Transit Buses as Traffic Probes: Empirical Evaluation Using Geo-Location Data.](#)” *83rd Annual Meeting of the Transportation Research Board*, January 2004.
82. Bertini, R.L., **Lindgren, R.**, Helbing, D. and Schönhof, M. “[Empirical Analysis of Flow Features on a German Autobahn.](#)” *83rd Annual Meeting of the Transportation Research Board*, January 2004.

83. **Bertini, R.L.** “[Toward the Systematic Diagnosis of Freeway Bottleneck Activation](#),” *IEEE 6th Annual Conference on Intelligent Transportation Systems*, Shanghai, China, October 2003.
84. **Bertini, R.L.** and Tantiyanugulchai, S. “[Arterial Performance Measurement Using Transit Buses as Probe Vehicles](#),” *IEEE 6th Annual Conference on Intelligent Transportation Systems*, Shanghai, China, October 2003.
85. **Bertini, R.L.** “Crash Data Reporting And Analysis – An Oregon Pilot Study.” *Institute of Transportation Engineers 2003 Annual Meeting*, Seattle, Washington, August 25, 2003.
86. **Bertini, R.L.** “[Integrating Geographic Information Systems and Intelligent Transportation Systems to Improve Incident Management and Life Safety](#).” *Eighth International Conference on Computers in Urban Planning and Urban Management (CUPUM)*, Sendai, Japan, May 2003.
87. Bertini, R.L., **Leal, M.** and Lindgren, R. “Examination Of Features Of A Freeway Bottleneck Surrounding A Lane Drop,” *82nd Annual Meeting of the Transportation Research Board*, January 13, 2003.
88. **Bertini, R.L.** and El-Geneidy, A.M. “Using Archived Data to Generate Transit Performance Measures,” *82nd Annual Meeting of the Transportation Research Board*, January 13, 2003.
89. **Bertini, R.L.** “Analysis Of Oregon’s Rural Incident Response Program Using Archived ITS Data,” *Ninth World Congress on Intelligent Transport Systems*, Chicago, Illinois, October 18, 2002.
90. **Bertini, R.L.** and Rufolo, T. “Alternatives to the Motor Fuel Tax.” *Northwest Transportation Conference*, Funding Transportation Panel, Corvallis, Oregon, February 6, 2002.
91. **Bertini, R.L.** “Evaluation of ODOT’s Region 2 Incident Management Program.” *Northwest Transportation Conference*, Corvallis, Oregon, February 7, 2002.
92. **Bertini, R.L.**, “Generating Performance Measures from Portland’s Archived Advanced Traffic Management System Data.” *81st Annual Meeting of the Transportation Research Board*, January 16, 2002.
93. **Bertini, R.L.** “Time Dependent Traffic Flow Features at a Freeway Bottleneck.” Workshop on Doctoral Student Research in Transportation Modeling, *78th Annual Meeting of the Transportation Research Board*, January 1999.
94. Cassidy, M.J. and **Bertini, R.L.** “Some Traffic Features at Freeway Bottlenecks.” *Third International Symposium on Highway Capacity*, Transportation Research Board, Copenhagen, Denmark, June 1998.
95. **Bertini, R.L.** “Freeway Incident Characteristics.” *Institute of Transportation Engineers, District 6 Annual Meeting*, San Jose, California, July 1998.
96. **Bertini, R.L.** “Time Dependent Traffic Flow Features at Freeway Bottlenecks.” Eisenhower Research Presentation, *77th Annual Meeting of the Transportation Research Board*, January 1998.
97. **Skabardonis, A.** and Bertini, R.L. “The Los Angeles Freeway Service Patrol Evaluation.” Conference on Traffic Management and Planning for Freeway Emergencies and Special Events, *76th Annual Meeting of the Transportation Research Board*, January 1997.

98. Skabardonis, A. and **Bertini, R.L.** “Determination of Timings in Signal Systems With Traffic Actuated Controllers.” *75th Annual Meeting of the Transportation Research Board*, January 1996.
99. **Bertini, R.L.** “Tasman Corridor Light Rail Design.” *Chi Epsilon, Civil Engineering Honor Society, Pacific District Conference*, Technical Session Speaker, San Jose, California, 1994.
100. **Bertini, R.L.** “Rail Corridor Evolution: The Development of the San Francisco – San Jose Corridor.” *72nd Annual Meeting of the Transportation Research Board*, January 1993.
101. **Bertini, R.L.**, Botha, J.L., Colman, S.B. and McKean, P. “The Rail Transit/Land Use Synergism—Case Study of the San Francisco Bay Area.” *72nd Annual Meeting of the Transportation Research Board*, January 1993.

Professional Society Memberships

American Road and Transportation Builders Association, 2005–present
 American Society for Engineering Education, 2005–present
 American Society of Civil Engineers, 1988–present
 Chi Epsilon, Civil Engineering Honor Society, 1986–present
 Institute of Transportation Engineers, 1988–present
 Intelligent Transportation Society of America, 2001–present
 Intelligent Transportation Society of Oregon, 2001–present
 International Benefits, Costs and Evaluation (IBEC) Working Group for Intelligent Transportation Systems, 2002–present
 Omega Rho, Operations Research and Management Science Honor Society, 2007–present
 Tau Beta Pi, Engineering Honor Society, 1987–present
 TransPort Technical Advisory Committee, 2000–present
 Transportation Research Board, 1993–present
 Women’s Transportation Seminar, 2005–present

Professional Registration

Registered Professional Civil Engineer: Oregon No. 65260PE and California No. C47064

Referee Activity [number in brackets is estimate of reviews since 2005]

10th International Conference on Application of Advanced Technologies in Transportation, Athens, Greece [3]
ASCE Journal of Transportation Engineering, 1997–present [5]
ASCE Journal of Urban Planning and Management, 2004–present [1]
ASCE Journal of Computer Aided Civil and Infrastructure Engineering, 2005–present [4]
 Eighth World Congress on Intelligent Transport Systems, Sydney, Australia, 2001
 Eleventh World Congress on Intelligent Transportation Systems, Nagoya, Japan, 2004
 IEEE 62nd Semiannual Vehicular Technology Conference, 2005 [2]
 Institute of Electrical and Electronics Engineers (IEEE), International Conferences on Intelligent Transportation Systems, 2001–present [20]

Institute of Electrical and Electronics Engineers (IEEE) *Transactions on Intelligent Transportation Systems*, 2002–present [3]
 International Symposium on Highway Capacity, 1999
 International Symposium on Transportation and Traffic Theory (ISTTT) [3]
Internet Journal of Cooperative Transportation Dynamics, 2001–present
Journal of Public Transportation, 2003–present [1]
Journal of Intelligent Transportation Systems, 2004–present [7]
Journal of Planning Education and Research, 2005–present [1]
 National Sciences and Engineering Research Council of Canada (NSERC), proposal review 2005 [1]
 Ninth World Congress on Intelligent Transportation Systems, Chicago, Illinois, USA, 2002
 Sixth International Conference on Traffic & Transportation Studies (ICTTS), Nanning, China [3]
 mobil.TUM 2009 Scientific Conference on Mobility and Transport, Munich Germany [19]
Transportation Research Record, Journal of the Transportation Research Board, 1995–present [84]
Transportation Research Parts A and B, 2002–present [6]
Transportation Research Part C, 2007–present [4]
Transportation Science, 2006–present [3]
 Various University Promotion and Tenure External Review, 2002–present
 University of California at Berkeley and California Department of Transportation, PATH Program, Proposal Review, 2004–present [9]
 Villanova University (Pennsylvania), Summer Research Fellowships and Research Support Grants, proposal review, 2003 [1].

Graduate Students

Chaired Doctoral Degrees

Roger Lindgren, Ph.D., Civil & Environmental Engineering, “[Analysis of Flow Features in Queued Traffic on a German Freeway](#),” 2002–2005
 Sirisha Kothuri, Ph.D. Student, Student, Civil & Environmental Engineering, “Improving Freeway Travel Time Estimation,” 2006–present
 Huan Li, Ph.D. Student, Civil & Environmental Engineering, “Automating Freeway Bottleneck Detection,” 2008–present
 Benjamin Auffray, Ph.D. Student, Civil & Environmental Engineering, to begin Fall 2009

Ph.D. Dissertation Committee Member

Rafael Fernandez-Moctezuma, Ph.D. Student, Computer Science, “Feedback in Stream Engines via Punctuation,” 2009–present
 Kathryn Mohror, Ph.D. Student, Computer Science, “Performance evaluation of MPI-2 Applications,” 2007–present
 Jin Li, Ph.D. Student, Computer Science, “Windowed Queries Over Data Streams,” 2007–2008

James Terwilliger, Ph.D. Student, Computer Science, “The User Interface is the Conceptual Model,” 2007–2008

Chansung Kim, Ph.D. Candidate, Urban Studies, “Interrelationships Among Workplace Relocation, Residential Relocation and Commuting,” 2003–2005

Ali Eghtedari, Ph.D. Candidate, Systems Science: Civil Engineering, “Measuring the Benefits of an Adaptive Signal Control System,” 2000–2005

Ph.D. Comprehensive Examination Committee

Ahmed M. El-Geneidy, Ph.D., Urban Studies, 2003.

Ph.D. Student Research Advisor

Jaturapat Bhromkaew, Ph.D., Urban Studies, 2002

Ahmed El-Geneidy, Ph.D., Urban Studies, 2001–03

Paul Bender, Ph.D., Urban Studies, 2003–04

Rafael Fernandez-Moctezuma, Ph.D., Computer Science, 2006–present (w/D. Maier)

Heiko Jentsch, Visiting Ph.D. Student, Darmstadt University of Technology, Germany, 2008

Qing Ou, Ph.D., Visiting Ph.D. Student, Delft University of Technology, The Netherlands, 2008

Chaired Master’s Degrees

M.S. Thesis Advisor

Wei Feng, M.S. Candidate, 2008–2009

Meead Saberi, M.S. Candidate, 2008–present

Michael Wolfe, M.S. Candidate, Civil & Environmental Engineering, “The Effects of Data Aggregation on Measuring Arterial Performance,” 2007–2009

Steven Boice, M.S. Candidate, Civil & Environmental Engineering, “Evaluation of Variable Speed Limit and Driver Information System on a German Autobahn,” 2004–present

Benjamin Auffray, M.S., Transportation, L'école nationale des travaux publics d'Etat (ENTPE), France, “Impact of Adverse Weather on Traffic Conditions on an American Highway: Effect of Sun Glare on Traffic Flow,” 2006–2007

Benjamin Zielke, M.S., Transportation, Technical University of Dresden, Germany, “Identification of Country Specific Characteristics of Oscillating Congested Traffic,” 2006–2007

[Sutti Tantiyanugulchai](#), M.S., Civil & Environmental Engineering, “[Arterial Performance Measurement Using Transit Buses as Probe Vehicles](#),” 2001–2003

M.S. Research Project Advisor

Amanda Owings, M.S., Civil & Environmental Engineering, Evaluation of Oregon’s Formula for Section 5311 Funding Allocation,” 2009

Leah S. Tomlinson, M.S., Civil & Environmental Engineering, “Orange County Empirical Analysis: Using Loop Detector Data to Identify Bottleneck Locations and Characteristics,” 2006–2008

Lynn Peterson, M.S., Civil & Environmental Engineering, “Sub-Area Transportation System/Land Use Scenario Modeling,” 2003–2008
Monica Leal, M.S., Civil & Environmental Engineering, “[Empirical Analysis of Traffic Flow Features of a Freeway Bottleneck Surrounding a Lane Drop](#),” 2000–2002
Shazia Malik, M.S., Civil & Environmental Engineering, “[Observed Dynamic Traffic Features on a Freeway Section With Merges and Diverges](#),” 2001–2003
Aaron Myton, M.S., Civil & Environmental Engineering, “[I-405 Freeway Bottleneck Analysis](#),” 2003–2004.
Nivedita Doijode, M.S. Candidate, Civil & Environmental Engineering, “Freeway Bottleneck Video Analysis,” 2003–2005
Jaspreet Anand, M.S. Candidate, Civil & Environmental Engineering, 2004–2006.

Master of Urban and Regional Planning Field Area Paper First Reader

Max Coffman, “Transport Payment Integration in Portland, Oregon,” 2006–2007

M.S. Thesis Committee Member

Robert Jones, M.S., Computer Science, “Content Aware Request Distribution for High Performance Web Service: A Performance Study,” 2002
Brian Kearns, M.S., Computer Science, “A Performance Study of LAM and MPICH on an SMP Cluster,” 2002
Bhaskar Bhatnagar, M.S., Mechanical Engineering, “Aerodynamic Design of Wind Tunnel Inlet for Testing Class 8 Trucks,” 2003
John Hoffman, M.S., Computer Science, “PPerfGrid: A Grid Services-based Tool for the Exchange of Heterogeneous Parallel Performance Data,” 2004
Rashawn Knapp, M.S., Computer Science, “Environment Aware Performance Analysis: Scope of Performance Analysis Tools for Cluster Computing and MPI Applications,” 2006

Master of Urban and Regional Planning Field Area Paper Second Reader

Carolyn Bonner, “Public Transportation for Small Cities,” 2004–2005
Matthew Lasky, “Bicycle Use on Transit,” 2004–2005
Kate Lyman, “[Travel Time Reliability in Regional Transportation Planning](#),” 2006–2007

Master’s Student Research Advisor

Helene Siri, M.S., Transportation, L'école nationale des travaux publics d'Etat (ENTPE), France, 2009
Jerzy Wiczorek, M.S., Statistics, 2007–2009
Leah Tomlinson, M.S., Civil and Environmental Engineering, 2007–08
Priya Chavan, M.S., Computer Science, 2007–present (w/K. Tufte)
Enas Fayed, M.S., Civil and Environmental Engineering, 2007 (w/K. Tufte)
Matt Berkow, Master of Urban and Regional Planning, 2006–08
Oren Eshel, Master of Urban and Regional Planning, 2006–08
Maisha Mahmud, M.S., Civil and Environmental Engineering, 2006–08 (w/C. Monsere)
Jake Hofeld, M.S., Civil and Environmental Engineering, 2006–07 (w/C. Monsere)

Sandeep Puppala, M.S., Civil and Environmental Engineering, 2006 (w/C. Monsere)
Zachary Horowitz, M.S., Civil and Environmental Engineering, 2005–06
Suman Tasnim, M.S., Civil and Environmental Engineering, 2004–07 (w/C. Monsere)
Aaron Breakstone, Master of Urban and Regional Planning, 2004–06 (w/C. Monsere)
Peter Bosa, Master of Urban and Regional Planning, 2004–06 (w/C. Monsere)
Alex White, Master of Urban and Regional Planning, 2004–05
Sonoko Endo, Master of Urban and Regional Planning, 2004
Thareth Yin, M.S., Civil and Environmental Engineering, 2003–05 (w/C. Monsere)
Steve Hansen, Master of Urban and Regional Planning, 2003–05
Casey Nolan, Master of Urban and Regional Planning, 2003–05
Mike Rose, Master of Urban and Regional Planning, 2003–04
Nina Rufer, Master of Business Administration, 2003
Sachin Karmarkar, M.S., Civil and Environmental Engineering, 2002–03
Kerri Sullivan, Master of Urban and Regional Planning, 2002
Edward Anderson, M.S., Civil and Environmental Engineering, 2000–01

Post-Doctoral Research Associate Supervisor

Kristin Tufte, Post-Doctoral Research Associate, 2005–2007
Soyoung Ahn, Post-Doctoral Research Associate, 2005–06
Tarek El-Seoud, Visiting Post-Doctoral Research Associate, University of Cairo, Egypt,
2002–2004

B.S. Honors Thesis Advisor

Alexander Bigazzi, B.S., Civil Engineering, “Carbon Sponsoring: a New Idea in Personal Carbon Trading, Direct Carbon Offset Pledges for Travel,” 2008–2009
Joshua Crane, “Real Time Transit Information,” 2008–present

Research Experience for Undergraduates (REU) Advisor

Dan Johnson, B.S., Civil Engineering, 2003
Chris Pangilinan, B.S., Civil Engineering, 2002–04
Andrew Byrd, B.S., Computer Science, 2002–04
Neil Byrne, B.S., Civil Engineering, 2003–2004
Violet Gordon, B.S., Civil Engineering, 2003–04
Matthew Dorado, B.S., Civil Engineering, 2003–07
Jacob Baglien, B.S., Civil Engineering, 2003–05
Andy Delcambre, B.S., Computer Science, 2004–05
Andy Rodriguez, B.S., Computer Science, 2004–05
Abram VanElswyk, B.S., Civil Engineering, 2004–05
Erin Qureshi, B.S., Civil Engineering, 2004–05
Rodger Gutierrez, B.S., Civil Engineering, 2005
Spicer Matthews, B.S., Computer Science, 2004–06
Scott Pulice, B.S., Civil Engineering, 2005

Nick Carey, B.S., Civil Engineering, 2005–07
 Jonathan Horowitz, B.S., Civil Engineering, 2005
 Hiu Ng, B.S., Civil Engineering, 2005–06 (w/C. Monsere)
 James Rucker, B.S., Computer Science, 2004–07
 Jessica Potter, B.S., Computer Science, 2004–07
 Tim Welch, B.S., Computer Science, 2006
 River Hwang, B.S., Civil Engineering, 2004–06
 Andrew Coons, B.S., Computer Science, 2006
 Max Stephens, B.S., Civil Engineering, 2006–07 (w/C. Monsere)
 John Chee, B.S., Computer Science, 2006–present

Undergraduate Summer Internship Advisor

Nick Millar, Civil Engineering, Summer 2006 (w/C. Monsere)

Research

Total Funded Research:	\$18,607,494
Total as OTREC Director:	\$13,870,500
Total as Principal Investigator:	\$4,736,994

Funded Research as University Transportation Center Director

Sponsor	Title	Role	Period	Total
US DOT Research and Innovative Technology Administration	Oregon Transportation Research and Education Consortium (OTREC) National University Transportation Center	PI	2006–07	\$1,560,000
			2007–08	\$3,010,000
			2008–09	\$2,858,100
			2009–10	\$3,199,000
			2010–11	\$ 3,243,400
Total as OTREC Director				\$13,870,500

Funded Research as Principal Investigator

Sponsor	Title	Role	Period	Total
Oregon Transportation Research and Education Consortium	Development, Deployment, and Assessment of a New Educational Paradigm for Transportation Professionals and University Students	PI	2009-2010	\$30,000
Oregon Transportation Research and Education Consortium	How Transportation Technology Can Limit the Impact of Future Climate Change	PI	2009-2010	\$25,000
Portland State University	Professional Travel Grant	PI	2009	\$1,500
Portland State University	Faculty Enhancement Grant	PI	2010	\$9,305
Portland State University	Development of a Transportation	Co-	2009	\$50,094

Center for Sustainable Processes and Practices	Sustainability Roadmap Collaborator: H. Hagedorn	PI			
Metropolitan Transportation Improvement Program	PORTAL Data Archive	PI	2009– 2011	\$226,234	
Oregon Transportation Research and Education Consortium	Exploiting a Next Generation ITS Data Warehouse for Improved System Performance and Congestion Monitoring Collaborators: D. Maier and K. Tufte	PI	2008– 2009	\$170,000	
Oregon Transportation Research and Education Consortium	Value of Reliability, Phase 2 Collaborator: D. Levinson, University of Minnesota	PI	2008– 2009	\$121,571	
FHWA Transportation Education Development Pilot Program	Development, Deployment, and Assessment of a New Educational Paradigm for Transportation Professionals and University Students: A Collaboration of the Region X Transportation Consortium Collaborator: University of Idaho	Co-PI	2008– 2010	\$229,946	
Oregon Transportation Research and Education Consortium	Value of Reliability Collaborator: D. Levinson, University of Minnesota	PI	2007– 2008	\$333,346	
Oregon Transportation Research and Education Consortium	Oregon Freight Data Mart Collaborator: M. Figliozzi	PI	2007– 2008	\$120,036	
Oregon Transportation Research and Education Consortium	Using Archived ITS Data to Measure the Operational Benefits of a System-wide Adaptive Ramp Metering System Collaborator: L. Zhang, Oregon State University	PI	2007– 2008	\$112,960	
Oregon Transportation Research and Education Consortium	Characteristics of Transitions in Freeway Traffic Collaborator: S. Ahn, Arizona State University	PI	2006– 2007	\$107,465	
National Science Foundation	Exploiting Live Plus Archive Data for Intelligent Transportation Systems Collaborators: D. Maier, K. Tufte	Co-PI	2006– 2008	\$410,670	
Oregon Department of Transportation	Visiting Scholar Transportation Seminar Series	PI	2005– 2006	\$3,000	
National Science Foundation	Research Experience for Undergraduate Supplement: Mining Archived ITS Data	PI	2005– 2006	\$6,000	
Oregon Department of Transportation	Using Existing ITS Commercial Vehicle Operation (ITS/CVO) Data to Develop Truck Travel Time Estimates and Other	Co-PI	2006– 2007	\$85,301	

Freight Measures		Collaborator: C. Monsere			
Oregon Department of Transportation	Dynamic Travel Time Estimation Using Regression Trees Prime Contractor: R. Logendran, Oregon State University	Sub	2005–2007	\$25,508	
Oregon Department of Transportation	Using Archived ITS Data to Measure the Operational Benefits of a System-wide Adaptive Ramp Metering System	PI	2005–2007	\$140,000	
BMW Group	Stage 1 Empirical Evaluation Of Alternative North American Traffic Information Solutions	PI	2005	\$78,401	
Metropolitan Transportation Improvement Program	Freight Data Collection Infrastructure and Archive System	PI	2006	\$179,000	
BMW Group	Congestion And Its Extent: An International Analysis Of Congestion Definitions	PI	2005	\$36,000	
Oregon Department of Transportation	Visiting Scholar Transportation Seminar Series	PI	2004–2005	\$3,000	
U.S. Department of Transportation	Portland State University Center for Transportation Studies Intelligent Transportation Research Initiative	PI	2005–2006	\$400,000	
Oregon Department of Transportation	Evaluation of Freeway Travel Time Estimates Prime Contractor: Castle Rock Consultants	PI	2004–2005	\$39,775	
National Science Foundation	Research Experience for Undergraduate Supplement: Mining Archived ITS Data	PI	2003–2004	\$12,000	
Federal Highway Administration	Integrated Transportation System Freeway Travel Time Study	PI	2004	\$15,000	
Federal Transit Administration University of Wisconsin Milwaukee	Great Cities Universities Local Transit Innovations	PI	2004	\$15,312	
Oregon Department of Transportation	ODOT Region 1 ITS Implementation and Operations Plan Prime Contractor: Parametrix	Sub		\$10,000	
NCHRP 8-36B Task 52 AASHTO Standing Committee on Planning	Changes in Travel Behavior/Demand Associated with Managed Lanes Facility System Expansion Prime Contractor: Kittelson & Assoc.	Sub		\$10,000	
U.S. Department of Transportation	Portland State University Intelligent Transportation Research Initiative	PI	2004–2005	\$344,633	

Oregon Department of Transportation	Impacts and Issues Related to Changes in Interstate Speed Limits Collaborator: C. Monsere	Co-PI	2004	\$41,791
City of Portland	Community and School Traffic Safety Partnership Research and Evaluation Collaborator: C. Monsere	Co-PI	2004–2005	\$40,589
TransNow University Transportation Center	Techniques for Mining Truck Data to Improve Freight Operations and Planning Collaborator: R. Fountain	PI	2003–2005	Phase 1 \$62,442 Phase 2 \$60,000
National Science Foundation	Research Experience for Undergraduate Supplement: Mining Archived ITS Data	PI	2003–2004	\$15,000
Oregon Department of Transportation	Update And Enhancement of ODOT's Crash Reduction Factors Collaborator: K. Hunter-Zaworski	Co-PI	2003–2005	\$60,000
City of Portland and Kittelson & Associates, Inc.	Transit Signal Priority Evaluation	PI	2003–2005	\$24,656
National Science Foundation	CAREER: Mining Archived Intelligent Transportation Systems Data: A Validation Framework for Improved Performance Assessment and Modeling	PI	2003–2008	\$400,000
BMW Group	Empirical Comparison Of German And U.S. Traffic Sensor Data And Impact On Driver Assistance Systems	PI	2003	\$60,000
Oregon Department of Transportation	Region 1 Intelligent Transportation Systems (ITS) TransPort Support	PI	2003	\$6,960
Oregon Department of Transportation	Evaluation of Variable Speed Limits	PI	2002–2003	\$11,000
Oregon Department of Transportation	Institutional and Technology Options for VMT Data and Fee Collection Centers Collaborators: T. Rufolo & K. Karavanic	Co-PI	2002	\$64,906
Federal Highway Administration, Western Transportation Institute and Montana State University	Frontier Project Evaluation of Video Recognition Travel Time System	PI	2002	\$11,070
Oregon Department of Transportation	Measuring the Impacts of Speed Reduction Technologies on Highway Safety	PI	2002–2003	\$90,000
TransNow University Transportation Center and Oregon Department of Transportation	Using Archived Data to Measure Operational Benefits of ITS Investments	PI	2001–2003	\$84,092

Federal Transit Administration/ University of Alabama	Great Cities Prototype for Advanced Public Transit Systems in Multimodal Corridors Collaborators: J. Strathman, T. Kimpel	Co-PI	2002–2003	\$221,435
Oregon Department of Transportation	Alternatives to the Motor Fuel Tax Phase I: Identification of Economic/ Institutional & Technology Issues Collaborator: T. Rufolo	Co-PI	2001	\$60,568
Oregon Department of Transportation	Evaluation of Region 2 Incident Response Program	PI	2001	\$23,962
Portland State University Maseeh College of Engineering & Computer Science	Intelligent Transportation Systems CCTV Fiber Optics Connection	PI	2001	\$13,000
Portland State University Faculty Enhancement Award	Oregon Intelligent Transportation System Monitoring/Evaluation Prototype	PI	2001–2002	\$7,505
Federal Transit Administration/ Weststart	Bus Rapid Transit and the American Community Design Competition	PI	2001	\$1,000
City of Portland	Traffic Signal Pole Failure Testing	PI	2001	\$1,005
PSU Scholarship of Teaching Resource Team	Intelligent Systems Laboratory Assessment	PI	2001–2002	\$800
Portland State University Faculty Development Grant	Transportation Research Laboratory	PI	2000	\$1,250
Oregon Department of Transportation	Evaluation of Paramics Microsimulation Software	PI	2001–2002	\$2,000
Innovative Transportation Concepts	Evaluation of VISSIM Microsimulation Software (In-kind)	PI	2001–2002	\$5,000
PSU Office of Information Technologies	Capital Funds Grant for Student Access Technology Projects	PI	2003	\$15,000
Portland State University	Professional Travel Grant	PI	2003	\$800
Portland State University	Professional Travel Grant	PI	2001	\$200
Total as Principal Investigator				\$4,736,994

Unfunded Proposals as Principal Investigator

Sponsor	Title	Role	Period	Total
Transportation Research Board, Strategic	Evaluating Alternative Operations Strategies to Improve Travel Time Reliability	Sub	2008	

Highway Research Program 2					
Transportation Research Board, Strategic Highway Research Program 2	Requirements and Feasibility of a System for Archiving and Disseminating Data from SHRP 2 Reliability and Related Studies	Sub	2008		
National Science Foundation	Collaborative Research: Pedagogies to Improve Learning Outcomes in Transportation (PILOT)	Co-PI	2008	\$75,000	
National Cooperative Highway Research Program (NCHRP)	Low-Cost Improvements for Recurring Freeway Bottlenecks	Co-PI	2005	\$75,000	
National Science Foundation	SEI: Data Stream Querying for Intelligent Traffic Systems	Co-PI	2004	\$415,758	
National Cooperative Highway Research Program (NCHRP)	Cost-Effective Measures and Planning Procedures for Travel Time, Delay and Reliability	Sub	2003		
National Science Foundation	Collaborative Research: Traffic Modeling and Real Time Routing for Intelligent Transportation Systems	Co-PI	2003	\$50,000	
TransNow	Improved Ice Detection Toward Optimal Use of Maintenance Resources	Co-PI	2002	\$113,000	
Oregon Intel Curriculum Fellowship & Student Labs Grant Program	Transportation and Emergency Information Technology For Enhanced Public Safety	PI	2002	\$25,000	
TransNow	Automated Enforcement Pilot Project Evaluation	PI	2002	\$82,000	
TransNow	Capacity Building for Improved Traffic Signal Timing and Control Training and Education	PI	2002	\$50,000	
City Of Vancouver, Washington	Automated Enforcement Pilot Project Evaluation	PI	2001	\$97,000	
City Of Vancouver, Washington	Evaluation of Lighted Crosswalk Warning Systems	PI	2001	\$75,000	
PSU Office of Graduate Studies and Research, Research Advisory Committee	Creating Safe and Sustainable Neighborhoods for Pedestrians and Bicyclists, A Great City: Great University Partnership	PI	2001	\$100,000	
Federal Highway Administration	Pedestrian Safety Engineering and Intelligent Transportation System-Based Countermeasures Program for Reducing Pedestrian Fatalities, Injuries, Conflicts, and Other Surrogate Measures	Sub	2001		

Teaching

Courses Taught & Student Evaluations

Portland State University

Course	Title	Term	Students	Evaluations	Q11 Score ¹
CE 4/510	Advanced Transportation Technology	Fall 2000	6	0	--
CE 4/510	Intelligent Transportation Systems	Winter 2001	11	11	1.6
CE 4/510	Public Transportation Systems	Spring 2001	12	9	1.6
CE 4/510	Intelligent Transportation Systems	Fall 2001	7	6	1.8
CE 4/510	Transportation Operations	Fall 2001	11	10	1.3
CE 454	Urban Transportation Systems	Winter 2002	25	16	2.3
CE 4/510	Public Transportation Systems	Spring 2002	8	6	1.5
CE 4/510	Transportation Data Analysis	Spring 2002	8	7	1.1
CE 4/510	Intelligent Transportation Systems	Fall 2002	10	10	1.1
CE 4/510	Transportation Operations	Fall 2002	5	6	1.2
CE 4/510	Urban Transportation Systems	Winter 2003	37	32	1.7
CE 4/510	Public Transportation Systems	Spring 2003	18	12	1.5
CE 4/510	Intelligent Transportation Systems	Fall 2003	13	10	1.5
CE 4/510	Transportation Operations	Fall 2003	6	6	1.5
CE 454	Urban Transportation Systems	Winter 2004	30	23	1.4
CE 4/558	Public Transportation Systems	Spring 2004	9	9	1.6
CE 4/510	Freight Transportation & Logistics	Spring 2004	4	3	1.3
CE 454	Urban Transportation Systems	Fall 2004	37	24	1.6
CE 4/555	Intelligent Transportation Systems	Fall 2004	9	9	1.1
CE 4/558	Public Transportation Systems	Spring 2005	13	11	1.6
CE 4/559	Transportation Operations	Spring 2005	6	6	1.5
CE 4/555	Intelligent Transportation Systems	Winter 2006	9	9	1.3
CE 4/558	Public Transportation Systems	Spring 2006	7	5	1.6
CE 4/559	Transportation Operations	Spring 2006	6	3	1.7
CE 4/555	Intelligent Transportation Systems	Fall 2006	10	1	1.0
CE 4/559	Transportation Operations	Winter 2007	9	8	1.6
CE 4/558	Public Transportation Systems	Spring 2007	11	9	1.2
CE 4/555	Intelligent Transportation Systems	Fall 2007	6	6	1.2
CE 4/559	Transportation Operations	Winter 2008	15	14	1.7
CE 4/555	Intelligent Transportation Systems	Fall 2008	14	13	1.4
CE 4/559	Transportation Operations	Winter 2009	25	25	1.4
				Average	1.5

¹ PSU's Teacher and Course Evaluation questionnaire asks 14 questions on a scale of 1–5: 1 = Excellent; 2 = Good; 3 = Satisfactory; 4 = Marginal; 5 = Poor
Question 11 asks for the overall teaching effectiveness of the instructor.

San Jose State University

Course	Title	Term	Students	Q14 Score ²
CE 130	Engineering Economics	Spring 1993	47	4.6
CE 222	Transportation Engineering Planning	Fall 1993	19	4.4
CE 130	Engineering Economics	Spring 1994	62	4.2
CE 296A	Public Transportation Systems	Fall 1994	23	4.5
CE 130	Engineering Economics	Spring 1995	20	4.5
CE 222	Transportation Engineering Planning	Spring 1995	15	4.6
Average				4.4

² SJSU's Student Opinion of Teaching Effectiveness asked 14 questions on a scale of 5–1 (the opposite of the PSU rating scheme where 1 is Excellent): 5 = Excellent; 4 = Good; 3 = Satisfactory; 2 = Marginal; 1 = Poor.
Question 14 asks for the overall effectiveness of the instructor.

Supervision of Independent Study

Winter 2001, "Advanced Transportation Operations I," Roger Lindgren, Ph.D. student
 Spring 2001, "Advanced Transportation Operations II," Roger Lindgren, Ph.D. student
 Fall 2001, "Bottleneck Analysis," Monica Leal, M.S. student
 Fall 2001, "Bus Trip Time Prediction," Ahmed El-Geneidy, Ph.D. student, Urban Studies
 Winter 2002, "Comparison of Bus and Auto Travel Times," Sutti Tantiyanugulchai, M.S. student
 Winter 2002, "Bottleneck Analysis," Monica Leal, M.S. student
 Winter 2002, "Minnesota Ramp Metering Analysis," Shazia Malik, M.S. student
 Spring 2002, "Comparison of Bus and Auto Travel Times," Sutti Tantiyanugulchai, M.S. student
 Spring 2002, "Bottleneck Analysis," Monica Leal, M.S. student
 Fall 2002, "Bottleneck Analysis," Monica Leal, M.S. student
 Fall 2002, "Arterial Performance," Sutti Tantiyanugulchai, M.S. student
 Fall 2002, "Bottleneck Analysis," Shazia Malik, M.S. student
 Winter 2003, "Bottleneck Analysis," Shazia Malik, M.S. student
 Winter 2003, "Arterial Performance," Sutti Tantiyanugulchai, M.S. student
 Fall 2003, "Sullivan's Gulch Trail," Morgan Will, MURP Student
 Fall 2003, "Transportation Policy," Lynn Peterson, Ph.D. Student
 Winter 2004, "Freeway Bottleneck Analysis," Aaron Myton, M.S. student
 Winter 2004, "Rural ITS," Carolyn Bonner, MURP Student
 Winter 2004, "Intelligent Transportation Systems," Paul Bender, MURP Student
 Spring 2004, "Transportation Networks," Lynn Peterson, Ph.D. Student

Fall 2004, “Real Time Transit Information,” Lynn Peterson, Ph.D. Student
 Fall 2004, “Transit Services for Elderly,” Lynn Peterson, Ph.D. Student
 Fall 2004, “Context Sensitive Road Design,” Lynn Peterson, Ph.D. Student
 Winter 2005, “Bottleneck Analysis,” Nivedita Doijode, M.S. student
 Winter 2005, “Readings in Transportation,” Casey Nolan, MURP Student
 Winter 2005, “Context Sensitive Design,” Lynn Peterson, Ph.D. Student
 Winter 2005, “Arterial Analysis,” Rodger Gutierrez, B.S. Student
 Winter 2005, “Travel Time Analysis,” Jaspreet Anand, M.S. student
 Spring 2005, “Transportation Analysis,” Steven Hansen, MURP student
 Spring 2006, “Bottleneck Analysis,” Zachary Horowitz, M.S. student
 Spring 2006, “Incident Analysis,” Suman Tasnim, M.S. student
 Fall 2006 and Spring 2007, “Carsharing,” Max Coffman, MURP student
 Spring 2007, “Transportation Analysis,” Sirisha Kothuri, Ph.D. student

Technology–Based Learning

Technology Integration: actively integrate technology into coursework at both graduate and undergraduate level, including course web sites, presentations, syllabi, problem sets, exams and large transportation data sets for laboratory exercises. Students are actively involved with intelligent transportation systems technology and use classroom presentation technology for individual and group projects.

Transportation Research & Practice Seminar: weekly seminar is streamed live via streaming video over the Internet and seminar presentations are archived for future use. Participants can email live questions during the seminar that are accessed via wireless modem. Offered in partnership with the Center for Transportation Studies, the Center for Urban Studies, the School of Urban Studies and Planning and the Department of Civil and Environmental Engineering.

Continuing Education

Oregon Transportation Research and Education Consortium

Transportation Education: Partnerships for Leading and Learning, conference co-sponsored with NIATT, June 2009

Building Future Transportation Leadership: Success Factors from Portland, January 2008 (100 participants)

Roundabout Analysis & Design, May 2008

Geometric Design: Contemporary Considerations of Traditional Elements, June 2008

Traffic Signal Design, July 2008

Urban Traffic Solutions, 2009

Center for Transportation Studies

Light Rail Transit Facility Design Short Course, Portland, September 2004

Light Rail Transit Systems Design Basics Short Course, Portland, May 2005

Contracting and Constructability Short Course, Portland, September 2005

University of California at Berkeley, Institute of Transportation Studies, Technology Transfer Program

Fundamentals of Traffic Engineering (Capacity Analysis and Freeway Operations), Fall 1997, Spring 1998, Fall 1998 and Spring 1999

University of California at Berkeley, Continuing Education in Engineering

Review of Civil Engineering (Transportation) for Professional Engineer (P.E.) Examination, Fall 1996, Spring 1997, Fall 1997, Spring 1998, Fall 1998 and Spring 1999

San Jose State University, Department of Civil and Environmental Engineering

Review of Engineering Economics for Fundamentals of Engineering (F.E.) Examination, Fall 1996

Curriculum Development

Portland State University, 2000–present

New Transportation Curriculum

Developed new curriculum in Intelligent Transportation Systems, including courses, laboratory, real-time data connection with Oregon Department of Transportation, City of Portland and TriMet. New and modified courses include:

MODIFIED COURSE

1. CE 454 Urban Transportation Systems (4 credits)

NEW COURSES

1. CE 455/555 Intelligent Transportation Systems (4 credits)
2. CE 458/558 Public Transportation Systems (4 credits)
3. CE 459/559 Transportation Operations (4 credits)
4. CE 410/510 Transportation Data Analysis (4 credits)
5. CE 453/553 Freight Transportation and Logistics (4 credits), with C. Monsere
6. CE 407/507 Seminar: Transportation Research & Practice (1 credit)

Intelligent Systems Laboratory

Initiated and developed a new Intelligent Transportation Systems (ITS) Laboratory. Established a real-time video feed via fiber optics connection with Oregon Department of Transportation (ODOT), City of Portland and TriMet, the Portland region's transit provider. This provides real-time closed-circuit television (CCTV) feeds from more than 100 freeway cameras. Established 24 student workstations with new PCs and flat panel monitors. Laboratory also includes modern microsimulation tools (Synchro, Highway Capacity Software, Paramics and VISSIM), computer-aided design software (Matlab and AutoCAD), travel demand forecasting (EMME/2) software, and Geographic Information Systems (GIS). The lab has also begun to serve as a data archive as part of the Portland region's ITS Architecture development. As archivers of ODOT's advanced transportation management system (ATMS) data, we have been the first users and evaluators of the raw data. Currently we are developing a traffic signal system lab component and a wireless interface to TriMet's

real-time bus arrival prediction system. Involved in design of new laboratories in the Northwest Center for Engineering Science and Technology (NWCEST), which opened in December 2005. The new building includes the Intelligent Transportation Systems Laboratory (1200 sf), the Traffic Signal Laboratory (600 sf) and the Transportation and GIS Laboratory (900 sf).

Graduate Certificate in Transportation

Developed the proposal for the Graduate Certificate in Transportation, under the auspices of the Portland State University Office of Graduate Studies. The proposal was approved by the PSU faculty senate in 2004 and was approved by the State Board of Higher Education in November 2005. The Certificate program is a 21 credit-hour program based on the following courses:

1. USP 556 Urban Transportation: Problems and Policies (3 credits)
2. USP 544 Urban Transportation Planning (3 credits)
3. USP 570 Transportation and Land Use (3 credits)
4. USP/CE Elective graduate courses (12 credits)

This program can be completed in a single year on a full-time basis or over two years on a part-time basis. All of the courses are existing courses in the PSU Bulletin.

Dual Transportation Master's Degree Program in Urban and Regional Planning and Civil and Environmental Engineering

Developed materials for describing how students can obtain a dual MURP/MSCE focusing on transportation using the university's existing dual master's degree policy. Developing streamlined proposal for specific dual program in transportation.

Norman Y. Mineta International Institute for Surface Transportation Policy Studies (IISTPS), San Jose State University, 1993–1995

Introduction to Transportation Systems (TPM 201)

Responsible for development of new curriculum for one of three core graduate courses for an innovative new educational program culminating in a multidisciplinary M.S. in Transportation Policy and Management.

Service

Departmental Service

Transportation Graduate Program Coordinator, 2002–2006

Assigned advisor to approximately 20 undergraduates and 10 graduate students per year, Department of Civil and Environmental Engineering, 2000–present

MURP Admissions Committee, Nohad A. Toulon School of Urban Studies & Planning, 2005–2006

Review Panelist, CE494 CE Design Capstone 50% and 90% Presentations, Spring 2003 and Spring 2004

Faculty Search Committee Chair, Transportation Engineering position, 2006 (Miguel Figliozzi)

Search Committee Chair, Fiscal Operations Coordinator, OTREC, 2007

Search Committee, Office Assistant, OTREC 2008

Search Committee, Education and Technology Transfer Program Manager, OTREC, 2008

Faculty Search Committee, Structural Engineering and Seismic Testing position, 2004 (Peter Dusicka)

Faculty Search Committee, Urban Studies and Planning Transportation Modeling position, 2006 (John Gliebe)

Student Scholarship and Awards Committee, Department of Civil and Environmental Engineering, 2000–2003

Undergraduate Advising Guide update, Department of Civil and Environmental Engineering, 2002

Advisor, Planning Workshop Capstone Bus Rapid Transit Project Team, 2000–2001

ASCE Student Chapter Advisor, 2000–2004

Regional Conferences: Pocatello, Idaho, 2001; Moscow, Idaho, 2002; Boise, Idaho, 2003; Klamath Falls, Oregon, 2004; Butte and Helena, Montana, 2005

National Steel Bridge Competitions: Madison, Wisconsin, 2002; Orlando, Florida, 2005

ITE Student Chapter and Students in Transportation Engineering and Planning (STEP), Faculty supporter, 2000–present

Engineers Without Borders, Faculty Advisor, 2004–present

College Service

Maseeh College of Engineering and Computer Science, Strategic Planning, 2007

Maseeh College of Engineering and Computer Science Computing Plan Task Force, 2002–2003

Northwest Center for Engineering, Science and Technology (new engineering building), Laboratory Planning and Design Committee, 2001–2005

Computer Committee, Maseeh College of Engineering and Computer Science, 2001–2002; developed and administered customer needs survey (staff, faculty and students).

Student Scholarship and Awards Committee, Maseeh College of Engineering and Computer Science, 2000–2003

Staff Awards Committee, Maseeh College of Engineering and Computer Science, 2000–2003

Advisor, Tau Beta Pi, Department of Civil & Environmental Engineering, 2004–present

University Service

Search Committee Chair, Green Transportation Energy/Infrastructure Position, Portland State University, 2008-2009

Traffic Appeals Board, 2008-2009

Sustainability Academic Advisory Committee, 2007–present

Custodial Services Proposal Review Committee, 2007

Faculty Senate, 2004–2007

Faculty Senate Budget Committee, 2004–2007

Task Force on Research and Sponsored Projects Infrastructure, 2006
Search Committee Member, Vice President of Finance and Administration, Portland State University, 2004–2005 (Lindsay Desrochers)
Faculty Development Committee, 2002–2004; 2009–present
Search Committee Member, Assistant Director of Transportation and Parking, Portland State University, 2002 (Matthew Lauer)
Streetcar Safety Advisory Committee, Portland State University, 2001
Great Cities Universities Coalition, Transportation Initiative, Portland State University Team Leader, 2000–present
Economic Development Task Force, 2006

Committee Membership and Professional Service

National Science Foundation

Review Panelist, 2009
Review Panelist, 2007
Review Panelist, 2007 [second separate panel]
Review Panelist, 2006
Ad hoc Review Panelist, 2005
Review Panelist, 2004
Review Panelist, 2003
Review Panelist, 2001
Program Committee, National Conference on Digital Government Research, dg.o 2004, Seattle, Washington, May 24–26, 2004.

IEEE Intelligent Transportation Systems Society

4th International Conference on Intelligent Transportation Systems (ITSC01), International Program Committee, Oakland, California, U.S.A., 2001
6th International Conference on Intelligent Transportation Systems (ITSC03), International Program Committee and Session Chair, Shanghai, China, 2003
8th International Conference on Intelligent Transportation Systems (ITSC05), Associate Editor, International Program Committee and Session Chair, Vienna, Austria, 2005
9th International Conference on Intelligent Transportation Systems (ITSC06), Associate Editor, International Program Committee and Session Chair on ITS Planning, Training and Evaluation, Toronto, Canada, 2006
10th International Conference on Intelligent Transportation Systems (ITSC07), Associate Editor, International Program Committee and Session Chair on Traffic Information and Guidance—Sensors, Seattle, Washington, USA, 2007

ITS America

Member, 1999–present
Intelligent Transportation Society of Oregon (ITS Oregon)
Member, 2000–present
Treasurer, 2002–2004
Planning Committee, ITS Workshop, April 2003

Planning Committee, “State of Freight” Workshop, jointly with ITE, SWE and WTS,
March 2003

Assisted with planning and Introduced Keynote Speaker, Annual Meeting, February 2005

Website manager, 2005–2006

Fourteenth World Congress on Intelligent Transport Systems, Session Chair on
Interoperability and Integration, Beijing, China, 2007

Institute of Transportation Engineers

District 6 Student Faculty Initiatives Committee, Faculty Subcommittee, 2004–present

Oregon Section, Quad Conference, Moderated Traffic Safety Session, April 24, 2004

District 6 Annual Meeting, Moderated Freeway Topics Session, July 17, 2007

American Society of Civil Engineers

Oregon Section, Host-a-Student Night Committee, Portland, Oregon, 2001

Pacific Regional Conference, Concrete Canoe Judge, San Jose, California, 1994

Transportation Research Board

Strategic Highway Research Program 2 (SHRP2)

Expert Task Group for Reliability Project L14, *Effectiveness of Different Approaches to
Disseminating Traveler Information on Travel Time Reliability*, 2009

Transit Cooperative Research Program (TCRP)

Panelist, TCRP Project H-39, *Methodology for Determining the Economic Development
Impacts of Transit Projects*, 2008

Operations Section (AHB00)

Member, 2009-present

Committee on Traffic Flow Theory and Characteristics (AHB45)

Chair, 2009-present

Committee Secretary, 2004–2009

Member, 2002–present

Paper Review Subcommittee, 2001–present

Friend, 1996–2002

Committee Web Site Coordinator, 2002–present

Session Chair, “Lane Use, Merging, and Lane-Changing Behavior,” TRB Annual
Meeting 2005

Session Chair, “Empirical Analysis of Car-Following Behavior,” TRB Annual Meeting
2006

Session Chair, “Combined Lane-Changing and Merging Behavior,” TRB Annual Meeting
2007

Session Chair, “Traffic Flow Behavior: New Modeling Techniques,” TRB Annual
Meeting 2008

Session Chair, “Oscillations in Congested Traffic: Observations and Estimation,” TRB
Annual Meeting 2009

Session Chair, “The Fundamental Diagram: From Theory to Practice,” and Panelist,
“Perspectives on Traffic Flow Theory: Beyond Greenshields,” TRB Traffic Flow

Theory and Characteristics Committee (TFT) Summer Meeting and Symposium on the Fundamental Diagram: 75 years (“Greenshields75” Symposium), July 8–10, 2008

Archived Data User Service (ADUS) Joint Subcommittee (ABJ35(1))

Member, 2007–present

Subcommittee on Training, Education, and Technology Transfer, Committee on Critical Transportation Infrastructure (ABE40(5))

Member, 2003–present

Paper Review, 2003–present

Task Force on the Traffic Monitoring Conferences (ABJ25T)

Member, 2009–10

Committee on Freeway Operations (AHB20)

Friend, 1996–present

Paper Review, 2000–present

Session Chair, “Freeway Bottlenecks and Ramp Metering,” TRB Annual Meeting 2004

Session Chair, “Freeway Operations II,” TRB Annual Meeting 2005

Committee on Highway Capacity and Quality of Service (AHB40)

Friend, 1997–present

Provided freeway data set for development of analytical methodology and new chapter for the HCM2000 on capacity and level of service analysis of freeway systems, 1998

Committee on Urban Transportation Data and Information Systems (ABJ30)

Panelist, Workshop on Sharing Data on Transportation System Operations - Benefits and Barriers, January 22, 2006

Friend, 2000–present

Paper Review, 2000–present

Session Chair, “Using Archived Transit Data to Improve Operations Planning,” TRB Annual Meeting, 2002

Committee on Traveler Behavior and Values, Paper Review (ADB10), 2000–present

Committee on Traffic Signal Systems (AHB25), Paper Review, 2005–present

Committee on Intelligent Transportation Systems (AHB15)

Workshop on Identifying Traveler Information Research Needs to Achieve “All Roads, All Modes, All the Time,” April 15-17, 2009, Irvine, California

American Association of State Highway and Transportation Officials (AASHTO)

Standing Committee on Research, Town Hall Panel on University Transportation Centers, Panelist, January 22, 2006

TransPort Technical Advisory Committee, Subcommittee to TPAC

Member of Committee

Chair, Data Subcommittee

Transportation Northwest (TransNow), Region X University Transportation Center

Advisory Committee Member, 2007–present

Proposal Review

Final Report Peer Review

Reion X Transportation Consortium

Coordination Meetings/Workshops: October 2005; June 2006, University of Washington; May 2007, University of Idaho; October 2007, University of Washington; May 2008, University of Alaska

Organized Workshop at PSU, October 2006

Transportation Research Forum (TRF)

Session Chair, 50th Annual Forum, Session 4.1: Transportation Measures: Which Ones and How Do we Measure Them?, Portland, Oregon, March 17, 2009

Council of University Transportation Centers (CUTC)

PSU/OTREC representative

January Meetings, Washington, DC: 2006, 2007, 2008

Summer Meetings: Big Sky, Montana, 2006; Madison, Wisconsin, 2007; San Jose, California, 2008

RITA Plenary Meeting, Washington, D.C., April 11–12, 2006

Northwest Transportation Training and Education Alliance (NWTTEA)

Member, Board of Directors

Workshop Planning Committee, 2002

Oregon Department of Transportation

Technical Advisory Committee, Operations Performance Measures Project, 2004.

Research Advisory Committee, Ex Officio Member

Oregon Model Steering Committee

Member, 2004–present

Oregon Longitudinal Panel Survey, Expert Panel Work Session, 2002

Federal Highway Administration

Intelligent Transportation Systems Safety Scan, sponsored by AASHTO, FHWA and TRB; Japan, Germany and France, 2004

Other Conference Service

10th International Conference on Application of Advanced Technologies in Transportation, Athens, Greece, Session Chair TRAF-4.

6th International Conference on Traffic and Transportation Studies, Nanning, China: Member, International Scientific committee; Session Chair; Paper Reviewer; and Keynote Speaker, August 2008

Traffic and Transport 2030, International Congress & Workshop, Technical University of Darmstadt, Germany, February 27–29, 2008, Invited participant and discussant

Access to Destinations: *Rethinking the Transportation Future of our Region*, University of Minnesota Center for Transportation Studies, Discussant for Modeling session and invited presenter, November 8–9, 2004.

Twelfth World Conference on Transportation Research (WCTR), Instituto Superior Técnico, Lisbon, Portugal, 2010, Session Track Co-Organizer for Track C1: Traffic Theory and Measurement

The Transportation Enterprise: Challenges of the 21st Century, Institute of Transportation Studies 50th Anniversary Symposium, Berkeley, California, 1998
mobil.TUM 2009 International Scientific Conference on Mobility and Transport, Munich Germany, member of International Scientific Committee, May 12-13, 2009
Sixth International Conference on Traffic and Transportation Studies, Nanning, China, member of the International Scientific Committee, August 5-7, 2008
Eleventh International Conference on Advanced Systems for Public Transport (CASPT 09), Session Chair A2 Scheduling, 20 July 2009, Hong Kong

Editorial Boards

Journal of Transportation Systems Engineering and Information Technology, 2007–present
Journal of Intelligent Transportation Systems, 2005–present
Internet Journal of Cooperative Transportation Dynamics, 2001–present

University Community Service

Hosted visitors from Arriyadh Development Authority, Saudi Arabia, April 2008
Hosted visitors from Nissan Motor Co., Ltd., October 2007
Portland State University Fall Symposium, Research for Global Learning, Facilitator, 2005
Oregon Engineering and Technology Industry Council (ETIC), Laboratory Tour and Presentation, 2004
Open House for Prospective Undergraduate Students, Laboratory Tours, 2003
“Fusing Technology and Transportation,” PSU Weekend Presentation, October 26, 2002.
Open House for Prospective Undergraduate Students, Poster and Simulation Display, 2002
University Vision Faculty Focus Group, February 2002
PSU Foundation Board, Faculty Research Presentation, 2002
Maseeh College of Engineering and Computer Science Advisory Board, Faculty Research Presentation, 2002, 2004
Spring Commencement Marshal, 2001–2006, 2008
Sustainability Faculty Roundtables, Portland State University, 2001–present
Portland Streetcar Celebration Volunteer, July 2001
Maseeh College of Engineering and Computer Science, Industry Open House Poster Display, 2001
Civil & Environmental Engineering Advisory Board, Faculty Research Presentation, 2001

Community Service

Columbia River Crossing Cost Benefit Analysis of Investment Alternatives Task Force, 2008–present
City of Portland, Office of Transportation, Portland Operations Steering Team, 2007–present
City of Portland, Office of Transportation, Budget Task Force, 2005–present
City of Portland, Mayor’s Transportation Cabinet, 2009–present
Oregon Department of Transportation, Director Search, External Stakeholders Interviews, 2005

Peninsula Symphony Orchestra Board of Directors, San Mateo, California, 1989–1995

Community Outreach

Testified before Subcommittee on Technology and Innovation, House Committee on Science and Technology, in a hearing entitled “Surface Transportation Research and Development for Energy Efficiency,” June 24, 2008

Tour of Tomorrow, a Bi-State Bicycle Ride, July 2007

City Club of Portland, Testimony to the Regional Transportation Governance Research Committee, April 2009

Hosted ITS Lab Tour for ITE District 6 Annual Meeting

Hosted Northwest Academic Forum Meeting Tour of ITS Lab and OTREC, April 27, 2007

Hosted AASHTO Annual Meeting Tour of ITS Lab, October 28, 2006

Summer 2006 Intern Jamboree, Portland area transportation employers

Hosted Women’s Transportation Seminar (WTS) Portland Chapter meeting in ITS Lab, April 2006

Panelist on Intelligent Transportation Systems, *Energy Dependence and Our Environment*, Sixth Annual Environmental Forum, Congressman David Wu, Portland, Oregon, April 17, 2006

Testimony to Oregon Senate Committee on Economic Development Agency Oversight, April 13, 2006

Presentation to Oregon Transportation Commission, New National University Transportation Center in Oregon, February 14, 2006

Testimony before Joint Policy Advisory Committee on Transportation (JPACT), February 17, 2005

Oregon Legislature Briefings, House and Senate Transportation Committee members, Salem, Oregon: January/February 2005 and April 2007

Innovation Celebration, Portland Business Alliance and Oregon Museum of Science and Industry, PORTAL Exhibit, November 2004.

Open Meadow Alternative High School, program, Corps Restoring Urban Environments (C.R.U.E.) Program, transportation lab and field data collection, April 6, 2004.

Intelligent Transportation Systems Laboratory Open House, October 10, 2003

Legislative Briefing, “Research, Job Creation, Economic Development and Portland State University,” February 27, 2003, State Capitol, Salem, Oregon

Meetings with Oregon Congressional Delegation transportation staff members, Washington, D.C., 2002 and 2003.

Attendance and representation of University at Metro Joint Policy Advisory Committee on Transportation (JPACT) and Transportation Policy Alternatives Committee (TPAC), 2002–present

Meetings with Metro Joint Policy Advisory Committee on Transportation (JPACT) members, 2002–present

Transportation Alternatives Committee, City of Portland, 2002–2003

Oregon Museum of Science and Industry, Transportation Technology Advisor, 2002–2003

Guest Lecturer, Technical Seminar, DKS Associates, Portland, Oregon, December 4, 2002

Transportation Reauthorization Panel Discussion with Congressman Earl Blumenauer, July 2002
Guest Lecturer, Technical Session, Kittelson & Associates, Portland, Oregon, May 30, 2002
Traffic Microsimulation Workshop (PARAMICS), Oregon Department of Transportation, 2002
Umbrella Tours, Office of Marketing and Communications, Portland State University, 2002,
2003, 2005, 2006, 2008
Center for Transportation Studies, Weekly Transportation Seminar Coordinator, 2001–present
Traffic Engineering Advisor, Sunnyside Neighborhood Association, Portland, Oregon, 2001–
present
Technology Advisor, Road User Fee Task Force, State of Oregon, 2001–2002
Traffic Engineering Advisor, Los Gatos Neighborhood Association, Los Gatos, California, 1998
Traffic Engineering Advisor, Piedmont Neighborhood Association, Oakland, California, 1997
Traffic Engineering Advisor, Stanford University Expansion Plan and Sand Hill Road Extension,
Palo Alto Neighborhood Association, Palo Alto, California, 1997
City of San Jose Department of Streets and Parks, Monthly Seminar Speaker, San Jose,
California, 1994
City of Mountain View Environmental Planning Commission, Member, Mountain View,
California, 1994–1995
Chi Epsilon, Civil Engineering Honor Society, Pacific District Conference, San Jose, Technical
Session Speaker, 1994
Traffic Engineering Advisor, The Waters Homeowners Association, Mountain View, California,
1992–2001
Engineers Week In–School Volunteer, San Jose, California, 1991

Media Outreach

The Oregonian, quoted in “Could you give up life in the cash lane?” January 12, 2009
KOIN Channel 6, Interview, July 2008
KATU Channel 2, Interview, July 2008
Eugene Register-Guard, quoted in “Oregon motorists may be driving less,” July 16, 2008
Daily Journal of Commerce, featured in “PSU professor drives travel time studies,” April 2008
Daily Vanguard, interviewed September 28, 2007
PE Magazine, National Society of Professional Engineers, quoted in “Road Smarts,” April 2007
The Oregonian, quoted in “Heavy traffic,” February 11, 2007
The Columbian, quoted in “Steering clear of gridlock,” February 11, 2007
Portland Business Journal, quoted/featured in “Calming the traffic beast,” December 15, 2006
Portland Tribune, quoted/featured in “PSU lab can make drivers smarter,” and “Solutions: How
to keep us all moving,” November 28, 2006
Kansas City Star, quoted in “Driving time’s in the signs for KC,” October 24, 2006
Daily Vanguard, quoted in “Cheap rides,” September, 2006
Portland Tribune, quoted in “Traffic jams don’t stop the data flow,” September 12, 2006
The Oregonian, quoted in “Lab helps TriMet glide to more green lights,” July 26, 2006
Daily Vanguard, quoted in “Grant delay slows research center development,” April, 2006

Daily Vanguard, quoted in “Bike program would be first on West Coast,” April, 2006

Daily Journal of Commerce, quoted in “Transportation agencies open a missing link,” February 13, 2006

Daily Vanguard, quoted in “Transportation graduate certificate at PSU,” November, 2005

The Oregonian, quoted in “Think the commute’s bad now? More jobs may mean more jams,” October 2, 2005.

Daily Vanguard, quoted in “\$16 million grant received for new transportation center at PSU,” August 10, 2005

The Oregonian, quoted in “Oregon bridges, roads score with transportation bill,” July 29, 2005

Sustainable Industries Journal, quoted in “Future-gazers see waves of wireless efficiencies,” June 1, 2005

Daily Vanguard, quoted in “Taking PSU to the capitol,” February 1, 2005

The Reporter, Lansdale, Pennsylvania, quoted in “Traffic delays target of law,” December 27, 2004

Daily Journal of Commerce, featured in “Federal funding will keep research moving at PSU transportation lab,” November 2004

Oregon Business Magazine, featured in “Portland State University: taking a lead in research.” September 2004

KXL 750 AM Radio, Portland, interviewed by Lars Larson, September 8, 2004

The Oregonian, quoted in “Familiarity breeds traffic jams,” September 8, 2004

KPTV Channel 12, Portland, cited in “Traffic grows,” September 7, 2004

KINK 102 FM Radio, Portland, interviewed September 7, 2004

KXL 750 AM Radio, Portland, interviewed September 7, 2004

Portland Business Journal, cited in “Portland ranks no. 24 for traffic delays,” September 7, 2004

Willamette Week Best of Portland Issue, featured as **Best Traffic Overlord**, August 2004

Portland Business Journal, quoted in “Region’s transportation policies raise concern,” August 27, 2004

The Oregonian, cited in Editorial “Going slow on speed change,” August 24, 2004

Willamette Week, interviewed June 25, 2004.

Clark County Columbian, quoted in “Clearing traffic faster: are technology and roving crews making a difference?” March 7, 2004

Portland Business Journal, interviewed December 5, 2003

Pittsburgh (Pennsylvania) *Tribune-Review*, interviewed December 5, 2003

Portland Business Journal, featured July 23, 2003

KGW Channel 8, Portland, interviewed October 2003

Daily Vanguard, quoted in “Light rail coming to PSU,” July 16, 2003

The Oregonian, featured in [advertisement](#), 2003

Detroit Free Press (Michigan), quoted in “In a jam: when your commute is driving you crazy, learn a lesson from the people who know better,” February 7, 2003

dailywireless.com, Intelligent Transportation, featured on November 16, 2002

PSU Magazine, featured in “[Damn That Traffic Jam](#),” article by John Kirkland, Spring 2002

Portland State University, Office of Marketing and Communications, featured in Radio Ad, 2002

PSU Insights, featured in “Faculty member recognized for work in transportation studies,”
February 2003
Engineering Investment Portfolio, Oregon University System, featured faculty, 2002
Daily Vanguard, quoted in t “Grants fund ongoing cultural and scientific research at PSU,”
October 5, 2001
Engineering News Record, quoted in “Crisis spurs search for creative financing,” November 20,
1995.

Scholarly Works in Progress

1. Berkow, M., Chee, J., Bertini, R.L. and Monsere, C., “[Transit Performance Measurement and Arterial Travel Time Estimation and Using Archived AVL Data.](#)”
2. Bertini, R.L., Horowitz, Z., Tuft, K. and Matthews, S. “[Techniques for Mining Truck Data to Improve Freight Operations and Planning.](#)”
3. Bertini, R.L., Lindgren, R.V., Helbing, D. and Schonhof, M. “[Empirical Observations of Dynamic Traffic Flow Phenomena on a German Autobahn.](#)” [Abstract]
4. Bertini, R.L., Strathman, J., Tantiyanugulchai, S., Malik, S. and El-Geneidy, A. “[Multimodal ITS Data Integration and Performance Measurement in Portland, Oregon.](#)”
5. Bertini, R.L., Lasky, M. and Monsere, C. “[Validating Predicted Rural Corridor Travel Times from an Automated License Plate Recognition System: Oregon’s Frontier Project.](#)”
6. Bertini, R.L., Lindgren, R., Helbing, D. and Schönhof, M. “[Empirical Analysis of Flow Features on a German Autobahn.](#)”
7. Bertini, R.L., Byrd, A. and Yin, T. “[Performance Measures for the Portland Metropolitan Region,](#)” May 2004.
8. Bertini, R.L., Byrd, A., Yin, T., and Hauger, K. “[Travel Demand Modeling for Oregon Highway 217 Using Archived Inductive Loop Detector Data.](#)”
9. Bertini, R.L. and El-Geneidy, A. “[Techniques for Evaluating the Performance of Pre-Timed Ramp Meters.](#)”
10. Bertini, R.L. and Leal, M. “[Generating Performance Measures from Portland’s Archived Advanced Traffic Management System Data.](#)”

Student Awards

Name	Degree	Dates	Awards
Lynn Peterson	MSCE	2003–	TransNow Fellowship, Maseeh Fellowship
Dan Johnson	BSCE	2003–03	Coral Sales Scholarship, PSU University Community Service Award, NIATT Summer Traffic Signal Workshop
Sutti Tantiyanugulchai	MSCE	2001–03	ITE District 6 Best Paper Award, Northwest Transportation Conference Poster Award
Monica Leal	MSCE	2000–02	WTS Graduate Scholarship, PSU Center for Academic Excellence Award, Northwest Transportation Conference Poster Award

Shazia Malik	MSCE	2001–03	WTS Scholarship, Northwest Transportation Conference Poster Award
Ahmed El-Geneidy	Ph.D., Urban Studies	2001–03	FHWA Fellowship, ITS Oregon Fellowship, PSU Travel Fellowship, Northwest Transportation Conference Poster Award
Chris Pangilinan	BSCE	2002–04	Presidential Fellowship, Eisenhower Graduate Fellowship, ITE Traffic Bowl Award, ASCE Oregon Section Scholarship, Northwest Transportation Conference Poster Award, PSU CEE Outstanding Senior, MCECS Outstanding Senior, PSU President's Award for Undergraduate University Service, FHWA STIPDG Program
Mike Rose	MURP	2003–04	Northwest Transportation Conference Poster Award, PSU Center for Transportation Studies Student of the Year, TransNow Fellowship
Steve Hansen	MURP	2003–05	TransNow Student Conference Poster and Presentation Awards, TransNow Fellowship
Casey Nolan	MURP	2003–05	TransNow Fellowship
Thareth Yin	MSCE	2003–05	Northwest Transportation Conference Poster Award, FHWA Fellowship, ITS Oregon Scholarship
Nivedita Doijode	MSCE	2003–05	Outstanding Graduate Teaching Assistant Award
Paul Bender	Ph.D., Urban Studies	2003–04	TransNow Fellowship, Northwest Transportation Conference Poster Award
Carolyn Bonner	MURP	2003–04	WTS Scholarship
Neil Byrne	BSCE	2003– 2004	Northwest Transportation Conference Poster Award
Violet Gordon	BSCE	2003–04	Coral Sales Scholarship, Northwest Transportation Conference Poster Award
Matthew Dorado	BSCE	2003–07	Scholarly and Creative Grant for Undergraduates, ITE Traffic Bowl Second Place
Matt Lasky	MURP	2004	TransNow Student Conference Poster Award, TransNow Fellowship
Andy Delcambre	BSCS	2004–05	TransNow Student Conference Poster and Presentation Awards
Steve Boice	MSCE	2004–	PSU AAA Fellowship, ITE District 6 Outstanding Graduate Student Award 2006, PSU Outstanding Graduate Research Assistant Award, NIATT Summer Traffic Signal Workshop, TransNow Fellowship
Erin Qureshi	BSCE	2004–05	FHWA STIPDG Program, Coral Sales Scholarship, Baden-Wuerttemberg Landesstiftung Fellowship, ITE Traffic Bowl Second Place

Aaron Breakstone	MURP	2004–06	PSU AAA Fellowship
Rodger Gutierrez	BSCE	2005	ITE Traffic Bowl First Place, Coral Sales Scholarship
Zachary Horowitz	MSCE	2005–06	ITS Oregon Fellowship, ITE Traffic Bowl First Place, Council of University Transportation Centers Neville A. Parker Award
Nick Carey	BSCE	2005–07	ITE Traffic Bowl Second Place
Delia Chi	MURP	2005–07	OTREC Fellowship
Max Coffman	MURP	2005–07	Presidential Management Fellow, PSU AAA Fellowship, PSU Transportation Student of the Year, OTREC Student of the Year, Eno Fellow, ITS Oregon Fellowship, OTREC Fellowship
Jonathan Horowitz	BSCE	2005	ITE Traffic Bowl Second Place
Sirisha Kothuri	Ph.D., CEE	2006–	Oregon Sports Lottery Graduate Scholarship, CEE Outstanding Graduate Research Assistant, WTS Graduate Fellowship, Eisenhower Graduate Fellowship, Maseeh Fellowship
Kate Lyman	MURP	2005–07	OTREC Fellowship
Tim Welch	BSCS	2006	WesternITE Editorial Award
Amber Springberg	MURP	2004–06	OTREC Fellowship
Kartik Srinivas	MURP	2005–06	Ernie Bonner Fellowship from the School of Urban Studies and Planning
River Hwang	BSCE	2004–06	FHWA STIPDG Program, CEE Undergraduate Achievement Award, Scholarly and Creative Grant for Undergraduates, WTS Scholarship (Portland Chapter), WTS Sharon D. Banks International Scholarship (International), Coral Sales Scholarship
Benjamin Zielke	MSCE	2006–07	ITE Traffic Bowl Second Place
Michael Wolfe	MSCE	2006–	ITE Traffic Bowl Second Place, OTREC Fellowship
Matt Berkow	MURP	2006–	OTREC Fellowship, TransNow Student Conference Presentation Award, Oregon APA Student Achievement in Planning Certificate of Merit
Oren Eshel	MURP	2006–	OTREC Fellowship, PSU Transportation Student of the Year, OTREC Student of the Year
Rafael Fernandez-Moctezuma	Ph.D., Computer Science	2006–	ITS Oregon Scholarship, AAA Graduate Fellowship
Enas Fayed	MSCE	2007–	TransNow Student Conference Poster Award
Huan Li	MSCE	2007–	ITS Oregon Scholarship, Region X Student Conference Poster Award, AAA Fellowship
Josh Crain	BSCE	2006–	Member of winning team for 2006 ITE James Kell

			Student Competition, Coral Sales Scholarship, OTREC Scholarship, ITS Oregon Scholarship 2009
Jerzy Wieczorek	MS Statistics	2007–	OTREC Fellowship, AAA Fellowship
Alex Bigazzi	BSCE	2007–	Coral Sales Scholarship, AAA Fellowship, National Science Foundation Graduate Fellowship, Eisenhower Graduate Fellowship Award, College of Engineering and Computer Science President’s Award
Meead Saberi	MSCE	2007	Region X Student Conference Presentation Award, Eisenhower Graduate Fellowship Award