



KITTELSON LLC

FORENSIC TRANSPORTATION ENGINEERING

MARTIN T. PIETRUCHA, PH.D., P.E.
SENIOR PRINCIPAL

EDUCATION

- *Ph.D., Civil Engineering*, University of Maryland, College Park, Maryland 1990
- *M.S., Civil Engineering*, University of California, Berkeley, California 1978
- *B.S., Civil Engineering (magna cum laude)*, New Jersey Institute of Technology, Newark, New Jersey 1977

EXPERIENCE

August 1990 – date; The Pennsylvania State University

Professor Emeritus of Civil Engineering (January 2022 – date), **Professor of Civil Engineering**, (July 2009 – December 2021), **Associate Professor of Civil Engineering** (July 1996 – June 2009), **Assistant Professor of Civil Engineering** (August 1990 – June 1996), Department of Civil and Environmental Engineering

Duties and responsibilities: Instruct undergraduate and graduate students in several facets of transportation engineering (highway engineering, traffic engineering, human factors, transportation policy, funding, and finance). Advise graduate students and serve on graduate degree committees. Served in many administrative roles including:

Undergraduate Officer (see entry below), Graduate Officer, and Department Executive Committee. As a member of the Faculty Senate, represented the department and college in matters related to the ideal of shared administration-faculty governance of the university.

Undergraduate Program Officer (1996-1999, 2000-2001)/**Coordinator** (2016-December 2021), Department of Civil and Environmental Engineering

Duties and responsibilities: Perform a wide variety of activities in support of the department's undergraduate education mission including:

- advising students (and advising faculty regarding how to advise students);
- supervising the operation and maintenance of student recordkeeping;
- evaluating student academic petitions;
- participating in student recruitment (e.g., high school visits, Spend a Summer Day) and student activities related to academics and orientation (e.g., New Student Orientation, President's New Student Convocation, Change of Assignment Meeting);
- performing course, curricular, and entrance to major reviews;
- fielding inquiries from parents and employers; and
- maintaining liaison with the college and university on all academic/advising-related activities.

Faculty Research Associate, The Thomas D. Larson Pennsylvania Transportation Institute (August 1990 – date)

Duties and responsibilities: Act as principal investigator or co-principal investigator on numerous research projects for the Federal Highway Administration (FHWA), the National Cooperative Highway Research Program (NCHRP), the Pennsylvania Department of Transportation and several private sector clients in the area of human factors as they relate to transportation safety and operations.

Director, Engineering Systems Program (April 2014 – June 2017)

Duties and responsibilities: Oversee the startup of a new multi-disciplinary program in engineering systems – a field that is at the nexus of engineering, management, and social science. Engineering systems brings together practitioners from diverse fields, such as: systems architecture, systems analysis, systems engineering, operations research, engineering management, economics, public policy, and law, to deal with important problems affecting society today and in the future.

- Recruited over 100 faculty members to become program affiliates.
- Began planning and implementing program activities including: research activities, master's degree program, continuing education courses, speaker series, extramural fundraising, and communication and public relations efforts.

Director, Mid-Atlantic Universities Transportation Center (MAUTC) (July 2008 – June 2016)

Duties and responsibilities: Provide strategic direction and administrative oversight for MAUTC, a federally-funded, nationally-competed, regional transportation research, educational, and outreach center composed of Penn State, Morgan State University (MD), University of Maryland, University of Virginia, Virginia Tech, and West Virginia University.

- Increased the breadth and scope of the center's activities by initiating the use of pooled funds for research and outreach.
- Plan, fund, market, and operate one of the center's annual regional transportation conferences that attracts over 500 professionals from the Mid-Atlantic region and beyond.

Director, The Thomas D. Larson Pennsylvania Transportation Institute (July 2008 – December 2015)

Duties and responsibilities: Provided strategic direction and administrative oversight for the institute reporting to the Dean of Engineering. Coordinated relations with all public and private research sponsors, various research centers internal and external to the university, university academic unit heads and deans, and university governmental affairs and advancement officials. Institute research contract awards totaled in excess of \$30 million for the 2014-15 fiscal year. The institute consists of 60 supported faculty, 60 technical/clerical staff, 75 graduate students, and 100 undergraduates from multiple colleges of the university.

- Assisted the University Corporate Relations Office to have the university selected by The Volvo Group as its first academic preferred partner in North America to identify and research worldwide issues in commercial transportation. The Volvo Group companies include: Volvo Trucks, Volvo Buses, Volvo Construction Equipment, Renault Trucks, Nissan Diesel and Mack Trucks.
- Work with Penn State's Office of Governmental Affairs to plan and schedule trips for key members of the institute to visit legislators and staff members of the Pennsylvania State Legislature or United States Congress.

Director, Transportation Operations Program, The Thomas D. Larson Pennsylvania Transportation Institute (July 2006 – August 2008)

Duties and responsibilities: Served as part of the institute's administrative and management team reporting to the Director. Coordinated proposal preparation, managed program budget, and recruited new faculty and staff to implement program-based activities.

- Led the expansion of the program's business portfolio from the traditional areas of highway design, transportation planning, and traffic operations to one that now includes transportation policy, transportation economics, transportation funding and finance, and operations research. This required identifying and recruiting new faculty as program participants.

Director, Science, Technology, and Society (STS) Program (July 2001 – June 2007)

Duties and responsibilities: Provided strategic leadership and administrative management for Penn State's STS Program—an interdisciplinary, intercollege unit administered through the university's College of Engineering, which seeks to understand the relationships among political systems, social traditions, and human values, and endeavors to learn how these relationships are influenced by science and technology, and in turn, how these relationships affect science and technology. Designated a college "program" (because it does not offer degrees), at the undergraduate level the

program listed more course sections and classroom seats than half of the undergraduate engineering majors.

- Took over administratively troubled program; instituted improved faculty recruiting, hiring, and budgeting procedures. Enhanced relations with other college programs, which eventually led to a doubling in the number of the program's faculty and budget.
- As the first engineer to administer this program, redirected the efforts of the program faculty in their research and teaching to create a more positive symbiosis with the College of Engineering, which led to greater collaborative efforts between program and engineering faculty members.

February 1989 – August 1990; National Research Council, Transportation Research Board

Program Officer, TRB Division B, Studies and Information Services

Duties and responsibilities: Responsible for the administration and management of the Synthesis of Highway Practice Program for the NCHRP.

December 1985 – February 1989; Center for Applied Research, Inc.

Principal Engineer

Duties and responsibilities: Acted as principal investigator or senior staff engineer for several FHWA and NCHRP contracts dealing with topics such as: motorist compliance with traffic control devices, delineation for work zone traffic control, pedestrian safety on suburban and rural highways, ramp signing for trucks, and in-vehicle urban freeway navigation and information systems.

February 1984 – December 1985; BioTechnology, Inc.

Senior Staff Engineer, Transportation Division

Duties and Responsibilities: Performed as senior technical staff member on an FHWA contract dealing with motorist comprehension of regulatory, warning, and symbol signs; and the development of emergency zone signing.

August 1983 – February 1984; Edwards and Kelcey, Inc.

Senior Engineer, Traffic Engineering Division

Duties and Responsibilities: Performed several accident and safety studies that were used to identify highway hazards and recommend remedial measures for high accident locations for two major New Jersey state highway rehabilitation projects. Involved in other design aspects of the traffic engineering field including: signal system design, development of signing and marking plans for various projects, and estimating transportation demand.

December 1980 – August 1983; University of Maryland

Faculty Research Assistant, Department of Civil Engineering, Transportation Studies Center

Duties and responsibilities: Worked on several Maryland State Highway Administration sponsored projects dealing with traffic safety. Some of these projects involved the training of state personnel in planning, design, and operational methods that would improve traffic operations and safety on Maryland roads.

August 1978 – December 1980; State of New Jersey, Department of Community Affairs

Principal Engineer, Hackensack Meadowlands Development Commission

Duties and responsibilities: Performed the design review of all traffic-related, highway improvements made by land developers and other public agencies in the area under the commission's jurisdiction. Took part, as a senior project engineer, in an Urban Mass Transportation Administration project studying transit services in the Meadowlands.

PROFESSIONAL REGISTRATION

Professional Engineer, New Jersey (License # 24GE02862200)

PROFESSIONAL ACTIVITIES

American Society of Civil Engineers (1977-1978; 1996-date); current grade: Fellow

Corresponding Member, International Activities Committee (1999-2001)

Chair, Traffic and Highway Safety Committee (1996-1998)

Member, Traffic and Highway Safety Committee (1991-1998; 2008-2012)

Member, Transportation Security Subcommittee (2012-2015)

Institute of Transportation Engineers (1978-date); current grade: Fellow

Member, Transportation Education Council (1994-date)

Member, Executive Committee, Transportation Education Council (1995-2001)

Chair, Executive Committee, Transportation Education Council (1999-2001)

Vice-Chair, Executive Committee, Transportation Education Council (1995-1998)

Secretary, Executive Committee, Transportation Education Council (1995-1996)

Member, Transportation Safety Council (1998-2008)

Member, Committee on District and Section Technical Activities (1990-1994)

Member, Committee on Traffic Engineering Driver Education Curricula (1988-1991)

Member, District 2 Technical Committee (1989-1990)

Chair, District 2 Technical Committee (1989-90)

Member, Public Relations Committee, New York Metropolitan Section (1978-1980)

National Research Council, Transportation Research Board

Member, Committee on the Conduct of Research (2012-2018)

Member, Task Force on Mastering the Management of Transportation Research and Innovation Programs (2013-2018)

Member, Committee on the Social and Economic Effects of Transportation (2007-2015)

Member, Committee on Traffic Control Devices (1994-2012)

Chair, Committee on Traffic Control Devices (1995-2001)

Member, Joint Subcommittee on the Development of the Highway Safety Manual (1999-2001)

Chair, User Liaison Task Force, Joint Subcommittee on the Development of the Highway Safety Manual (1999-2001)

Member, Joint Subcommittee on the Development of the Human Factors Handbook (1999-2008)

Member, Committee on User Information (1987-1989, 1990-1995)

Chair, Subcommittee on In-vehicle Information Systems (1994-1995)

Vice-Chair, Subcommittee on In-vehicle Information Systems (1991-1994)

Member, Planning Committee for Annual Human Factors Workshop (1985-1990)

Chair, Planning Committee for Annual Human Factors Workshop (1988)

Council of University Transportation Centers

Member, Executive Committee (2009-2015)

Immediate Past President (2014-2015)

President (2013-2014)

Vice President (2012-2013)

Secretary (2011-2012)

Treasurer (2010-2011)

American Road and Transportation Builders Association

Member, Executive Committee (2015-2019)

Member, Research and Education Division, Board of Directors (2009-2014)

President (2015-2016)

Vice President (2014-2015)

Intelligent Transportation Society of America

Member, Commercial Vehicle and Freight Mobility Forum Leadership Committee (2010-2015)
Member, Committee on Education and Training (1999-2002)
Member, Committee on Safety and Human Factors (1991-1999)
Member, Committee on Advanced Traffic Management Systems (1991-1997)

Commission Internationale d'Eclairage

Consultant, TC 4-38, Technical Committee on Daytime Visibility Requirements for Roadway Signs (1995-2000)

American Society for Engineering Education (1990-1991; 1998-1999)

National Society of Professional Engineers (1985-1992)

HONORS/AWARDS

Sigma Xi (Scientific Research Society of North America)
Tau Beta Phi (National Engineering Honor Society)
Chi Epsilon (National Civil Engineering Honor Society)
Penn State Engineering Society Outstanding Teaching Award 2001
Penn State Engineering Society Outstanding Advising Award 2018
Penn State Department of Civil and Environmental Engineering Student Choice Graduate Teaching Award Fall 2018

PUBLICATIONS

Journals

Pietrucha, M. T. and K. S. Opiela. "Safe Accommodation of Pedestrians at Intersections," Transportation Research Record 1385, pp. 12-21. National Research Council, Transportation Research Board, Washington, DC (1993).

Plummer, C. W., M. T. Pietrucha, and J. M. Mason. "Design of Interchange At-Grade Ramp Terminals," Transportation Research Record 1385, pp. 155-161. National Research Council, Transportation Research Board, Washington, DC (1993).

Pietrucha, M. T. "Development of an Emergency Zone Sign," Transportation Research Record 1421, pp. 36-44. National Research Council, Transportation Research Board, Washington, DC (1993).

Brydia, R. E. and M. T. Pietrucha. "An Analysis of the Influence of Perception-Reaction Time on Case III Intersection Sight Distance," Transportation Research Record 1445, pp. 189-197. National Research Council, Transportation Research Board, Washington, DC (1994).

Knoblauch, R. L., M. T. Pietrucha, and M. Nitzburg. "Field Studies of Pedestrian Walking Speed and Start-up Time," Transportation Research Record 1538, pp.27-38. National Research Council, Transportation Research Board, Washington, DC (1996).

Garvey, P. M., M. T. Pietrucha, and D. T. Meeker. "Effects of Font and Capitalization on Legibility of Guide Signs," Transportation Research Record 1605, pp.73-79. National Research Council, Transportation Research Board, Washington, DC (1997).

Kuhn, B.T., P. M. Garvey, and M. T. Pietrucha. "Model Guidelines for Visibility of On-Premise Advertisement Signs," Transportation Research Record 1605, pp.80-87. National Research Council, Transportation Research Board, Washington, DC, (1997).

Garvey, P. M., M. T. Pietrucha, and D. T. Meeker. "Development of a New Road Sign Alphabet," *Ergonomics in Design*, Volume 6, Number 3, pp. 7-11. Human Factors and Ergonomics Society, Santa Monica, CA (1998).

Pietrucha, M. T., T. R. Pieples, and P. M. Garvey. "An Evaluation of the Pennsylvania Road Safety Audit Pilot Program," *Transportation Research Record* 1734, pp. 12-20. National Research Council, Transportation Research Board, Washington, DC (2000).

Donnell, E. T., D. W. Harwood, K. M. Bauer, J. M. Mason, and M. T. Pietrucha. "Cross Median Collisions on Pennsylvania Interstates and Expressways," *Transportation Research Record* 1784, pp. 91-99. National Research Council, Transportation Research Board, Washington, DC (2002).

Fang, F.C., L. Elefteriadou, K. K. Pecheux, M. T. Pietrucha. "Using Fuzzy Clustering of User Perception to Define Levels of Service at Signalized Intersections," *Journal of Transportation Engineering*, Volume 129, Number 6, pp. 657-663. American Society of Civil Engineers, Reston, VA (2003).

Garvey, P.M., K.N. Chirwa, D.T. Meeker, M.T. Pietrucha, A.Z. Zineddin, R.S. Ghebrial, and J. Montalbano. "New Font and Arrow for National Park Service Guide Signs," *Transportation Research Record* 1862, pp. 1-9. National Research Council, Transportation Research Board, Washington, DC, (2004).

Zineddin, AZ, P.M. Garvey, and M.T. Pietrucha. "Impact of Sign Orientation on Premise Commercial Signs," *Journal of Transportation Engineering*, Volume 131, Number 1, pp. 11-17. American Society of Civil Engineers, Reston, VA (2005).

Lee, D; M.T. Pietrucha, and S. Sinha. "Application of Fuzzy Logic to Evaluate Driver Perception of Variable Message Signs," *Transportation Research Record* 1937. National Research Council, Transportation Research Board, Washington, DC (2005).

Poister, TH; P.M. Garvey, A.Z. Zineddin, M.T. Pietrucha, and C.L. Smith. "Developing Roadway Ride Quality Standards from the Customer's Perspective," *Transportation Research Record* 1940. National Research Council, Transportation Research Board, Washington, DC (2005)

Pietrucha, M.T., E.T. Donnell, P. Lertworwanawich, and L. Elefteriadou. "A Study on the Effects of Traffic Volume, Traffic Speed, Mounting Height, and Lateral Offset on the Visibility of On-Premise Commercial Signs," *Journal of Transportation Engineering*, Volume 132 Number 11. American Society of Civil Engineers, Reston, VA (2006).

Lee, D., M. T. Pietrucha, and E.T. Donnell. "Incorporation of Transportation Experts Opinions of Median Safety Using a Hierarchical Fuzzy Inference System" *Transportation Research Record* 1961. National Research Council, Transportation Research Board, Washington, DC (2006).

Meeker, D.T., M.T. Pietrucha, and P.M. Garvey. "A Proportionally Based Format System for Conventional Road Guide Signs," *Transportation Research Record* 1973. National Research Council, Transportation Research Board, Washington, DC, (2006).

De la Riva, M., P.M. Garvey, and M.T. Pietrucha. "The Impact of Highway Safety Flares on Driver Behavior" *Transportation Research Record* 1980. National Research Council, Transportation Research Board, Washington, DC, (2006).

Lee, D., T. Kim, and M.T. Pietrucha. "Incorporation of Transportation User Perception into Evaluation of Service Quality of Signalized Intersections Using Fuzzy Aggregation," *Transportation Research Record* 2027. National Research Council, Transportation Research Board, Washington, DC, (2007).

Lee, D., C. Lee, and M. T. Pietrucha. "Evaluation of Driver Satisfaction of Travel Information on Variable Message Signs Using Fuzzy Aggregation," *Journal of Advanced Transportation* Volume 42, Number 1. The University of Calgary; Calgary, Alberta; Canada, (2008).

Farber, D., M.T. Pietrucha, and A. Lakhtakia. "Systems and Scenarios for a Philosophy of Engineering," Interdisciplinary Science Reviews, Maney Publishing, London, (2008).

Meeker, D.T., M.T. Pietrucha, and P.M. Garvey. "Proportion Based Format System for Freeway and Expressway Guide Signs," Journal of Transportation Engineering, American Society of Civil Engineers, Reston, VA, (2010).

Pietrucha, M.T. "A Transportation Policy Roadmap: How Can We Get from Here to There?" The Speaker's Journal on Pennsylvania Policy, Pennsylvania House of Representatives, Legislative Office of Research Liaison, Harrisburg, PA, (2010).

Garvey, P.M., S.J. Damin, Deptuch, D. and M.T. Pietrucha. "Relative Visibility Of Internally Versus Externally Illuminated On-premise Signs," Transportation Research Record 2149, National Research Council, Transportation Research Board, Washington, DC (2010).

Wu, K.F., S.C. Himes, and M.T. Pietrucha. "Evaluation of the Effectiveness of the Federal Highway Safety Improvement Program," Transportation Research Record 2318, National Research Council, Transportation Research Board, Washington, DC (2012).

Wu, K.F., S.C. Himes, and M.T. Pietrucha. "Examining Fatal Crash Reductions by First Harmful Events Since the Introduction of Federal Highway Safety Improvement Program," Transportation Research Record 2364, National Research Council, Transportation Research Board, Washington, DC (2013).

Garvey, P.M., Klena, J., Eie, W., Meeker, D.T. and M.T. Pietrucha. "Legibility of Clearview Typeface and Standard Highway Alphabets on Negative and Positive Contrast Signs," Transportation Research Record 2555, National Research Council, Transportation Research Board, Washington, DC (2016).

Kersavage, K., Guler, S. I., & Pietrucha, M. T. "Analysis of Colored Variable Message Signs for Visibility and Comprehensibility," Transportation Research Record 2674, National Research Council, Transportation Research Board, Washington, DC (2020).

Proceedings

Pietrucha, M. T. Testing Traffic Control Device Comprehension. Transportation Research Circular 324, pp 6-9. (1987).

Pietrucha, M. T. Transportation Management Techniques for Local and Regional Mobility. Proceedings, Managing Traffic and Transportation 1992, pp. 282-291, Amsterdam, The Netherlands (April 1992).

Brydia, R. E. and M. T. Pietrucha. General Purpose Computer Software for Transportation Engineering Applications. Proceedings, 4th International Conference on Microcomputers in Transportation, pp. 695-706, American Society of Civil Engineers, Baltimore, MD (July 1992).

Pietrucha, M. T. and C. W. Plummer. Design Considerations for Pedestrian Sensitive Geometric Features. Proceedings, Institute of Transportation Engineers Annual Meeting, pp. 23-27, Washington, D.C. (August 1992).

Goulias, K. G., J. Chung, M. T. Pietrucha, J. Ma, A. J. Khattak, and K. Raynar. A Method for Congestion Management, Access Control, and Impact Simulation Using GIS. Proceedings, 1995 ITE International Conference, pp. 235-239, Institute of Transportation Engineers, Ft. Lauderdale, FL (April 1995).

Pietrucha, M. T., R. S. Hostetter, and L. S. Staplin. Markings and Delineation for Older Drivers. Proceedings, Institute of Transportation Engineers Annual Meeting, pp. 614-618, Denver, CO (August 1995).

Garvey, P.M., M. T. Pietrucha, and D. Meeker. Development of a new guide sign alphabet (abstract only). Proceedings of the Human Factors and Ergonomics Society 40th Annual Meeting, p. 1285, Philadelphia, PA (September 1996).

Poe, C. M., J. M. Mason, and M. T. Pietrucha. Traffic Engineering Education Plan Using Alternative Media. Proceedings, Institute of Transportation Engineers Conference "Moving Forward in a Scaled Back World," pp. 179-183 (March 1996).

Watts, R. and M. T. Pietrucha. Analysis of Neighborhood Form and its Impact on the Suburban Transportation System. Proceedings, Institute of Transportation Engineers Conference, "Transportation and Sustainable Communities," pp. 175-179. (March 1997).

Garvey, P. M., M. Gates, and M. T. Pietrucha. Engineering Improvements to Aid Older Drivers and Pedestrians. Proceedings, American Society of Civil Engineers Conference, "Traffic Congestion and Traffic Safety in the 21st Century," pp. 222-228. (June 1997).

Koza, P., A. Flannery, and M. T. Pietrucha. Conflict Analysis of U. S. Roundabouts. Proceedings, Institute of Transportation Engineers Annual Meeting, CD-ROM publication, (August 1997).

Harwood, D. W., M. T. Pietrucha, K. Fitzpatrick, and M. D. Wooldridge. Design of Intersections on Divided Highways. Proceedings, International Symposium on Highway Geometric Design Practices. Published in Transportation Research Circular 1998/01, pp 29:1 14. (1998).

Kuhn, B. T., P. M. Garvey, and M. T. Pietrucha. On Premise Sign Legibility and Illumination. Proceedings, Institute of Transportation Engineers Annual Meeting, CD-ROM publication, (August 1999).

Pecheux, K. K., M. T. Pietrucha, and P. P. Jovanis. User Perception of Level of Service at Signalized Intersections: Methodological Issues. Proceedings, Fourth International Symposium on Highway Capacity. Published in Transportation Research Circular 2000/06, pp. 322-335. (July 2000).

Garvey, P. M., A. Z. Zineddin, and M.T. Pietrucha. Letter Legibility for Signs and Other Large Format Applications. Proceedings, The Human Factors and Ergonomics Society 45th Annual Meeting, pp. 1443-1447. (September 2001).

Zineddin, A.Z., P. M. Garvey, R. A. Carlson, and M. T. Pietrucha. Effects of Practice on Font Legibility. Proceedings, The Human Factors and Ergonomics Society's 47th Annual Meeting, Denver, CO (October 2003).

Farber, D. and M.T. Pietrucha. "Cultivating Strategic Imagination in the Next Generation Engineering Systems Transportation Professional," Third International Engineering Systems Symposium, Delft, The Netherlands (2012).

Books or parts of books

Pietrucha, M. T., K. S. Opiela and C. W. Plummer. Intersection Design Considerations for Pedestrians. Chapter in Design and Safety of Pedestrian Facilities, Institute of Transportation Engineers, Washington, D.C., (1994).

Pietrucha, M. T. Establishing the Need for Traffic Signing. Chapter in the Traffic Sign Handbook, Institute of Transportation Engineers, Washington, D.C., (1997).

Schaie, K. W. and M. T. Pietrucha (Eds.). Mobility and Transportation in the Elderly. Springer, New York, New York. (2000).

Pietrucha, MT, Article on "Ergonomics" for the "Encyclopedia of Science, Technology, and Ethics," MacMillan and Company, New York, New York, (2005).

Articles

Pietrucha, M. T., R. L. Knoblauch, K. S. Opiela, and K. L. Crigler. Motorist Compliance with Standard Traffic Control Devices. Public Roads, Volume 53, Number 4, pp. 131-138, U.S. Department of Transportation, Federal Highway Administration, Washington, D.C. (March 1990).

Pietrucha, M. T. Human Factors Issues Related to Work Zone Safety. Transportation Builder, Volume 7, Number 5, pp. 40-42, American Road and Transportation Builders, Washington, D.C. (May 1995)

Pietrucha, M.T. and E.C. Crow. Ensuring the Continued Mobility of Maturing Pennsylvanians. Dimensions, Summer 1995, p. 5, The Penn State Downtown Center, Harrisburg, PA (June 1995).

Pietrucha, M.T. The Older Driver in Highway Safety Research. Part of the permanent collection of papers for the Pennsylvania State University Gerontological Colloquia Series. The Pennsylvania State University Gerontology Center, University Park, PA. (April 1995).

Pietrucha, M.T. "A Researcher's Perspective on Transportation Policymaking," Transportation Builder, American Road and Transportation Builders Association, Washington, DC, (2010).

Research reports

Knoblauch, R. L. and M. T. Pietrucha. Motorists' Comprehension of Regulatory, Warning, and Symbol Signs-Volume I: Executive Summary. Prepared by BioTechnology, Inc., Falls Church, VA, for U.S. Department of Transportation, Federal Highway Administration, Washington, D.C. (November 1985).

Pietrucha, M. T. and R. L. Knoblauch. Motorists' Comprehension of Regulatory, Warning, and Symbol Signs-Volume II: Final Report. Prepared by BioTechnology, Inc., Falls Church, VA, for U.S. Department of Transportation, Federal Highway Administration, Washington, D.C. (November 1985).

Pietrucha, M. T. and R. L. Knoblauch. Motorists' Comprehension of Regulatory, Warning, and Symbol Signs-Volume III: Appendices. Prepared by BioTechnology, Inc., Falls Church, VA, for U.S. Department of Transportation, Federal Highway Administration, Washington, D.C. (November 1985).

Knoblauch, R. L., B. Tustin, S. A. Smith, and M. T. Pietrucha. Investigation of Exposure Based Pedestrian Accident Areas. Prepared by the Center for Applied Research, Great Falls, VA, for the U.S. Department of Transportation, Federal Highway Administration, Washington, D.C. (November 1986).

Smith, S. A., K. S. Opiela, L. L. Impett, M. T. Pietrucha, R. L. Knoblauch, and C. Kubat. Planning and Implementing Pedestrian Facilities in Suburban and Developing Rural Areas. (National Cooperative Highway Research Program Report: 294A - Research Report). Prepared by JHK and Associates, Alexandria, VA, Center for Applied Research, Inc., Great Falls, VA and RTKL Associates, Inc., Baltimore, MD for the National Research Council, Transportation Research Board, Washington, D.C. (June 1987).

Smith, S. A., K. S. Opiela, L. L. Impett, M. T. Pietrucha, R. L. Knoblauch, and C. Kubat. Planning and Implementing Pedestrian Facilities in Suburban and Developing Rural Areas. (National Cooperative Highway Research Program Report 294B - State-of-the-Art Report). Prepared by JHK and Associates, Alexandria, VA, Center for Applied Research, Inc., Great Falls, VA and RTKL Associates, Inc., Baltimore, MD for the National Research Council, Transportation Research Board, Washington, D.C. (June 1987).

Pietrucha, M. T., K. S. Opiela, R. L. Knoblauch, and K. L. Crigler. Motorist Compliance with Standard Traffic Control Devices. Prepared by the Center for Applied Research, Great Falls, VA, for the U.S. Department of Transportation, Federal Highway Administration, Washington, D.C. (May 1989).

Pietrucha, M. T. and M. L. Patten. Strategic Plan for the Traffic Engineering Function within the Pennsylvania Department of Transportation. Final Report to the Pennsylvania Department of Transportation (October 1993).

Hostetter, R. S., M. T. Pietrucha, L. S. Staplin, and M. Obermeyer. Pavement Markings and Delineation for Older Drivers-Volume I: Final Report. Final Report to the Federal Highway Administration (November 1994).

Pietrucha, M. T., R.S. Hostetter, L. S. Staplin, and M. Obermeyer. Pavement Markings and Delineation for Older Drivers-Volume II: Executive Summary. Final Report to the Federal Highway Administration (November 1994).

Knoblauch, R. L., M. Nitzburg, R. E. Dewar, J. Templer, and M. T. Pietrucha. Older Pedestrian Characteristics for Use in Highway Design. Final Report prepared by the Center for Applied Research, Great Falls, VA, for the U.S. Department of Transportation, Federal Highway Administration, Washington, D.C. (1995).

Harwood, D. W., M. T. Pietrucha, K. Fitzpatrick, M. D. Wooldridge, and R. E. Brydia. Median Intersection Design. Final Report to the National Cooperative Highway Research Program. (May 1995).

Pietrucha, M. T., M. D. Wooldridge, K. S. Lococo, L. S. Staplin, R. S. Hostetter, and P. M. Garvey. The Development of Driver Performance Instructional Materials for Non-novice Drivers. Final Report to the Pennsylvania Department of Transportation. (December 1995).

Pietrucha, M. T., P. C. Carlson, and R. S. Hostetter. Synthesis of Information Related to Intersection Accidents. Final Report to the Pennsylvania Department of Transportation. (December 1995).

Garvey, P. M., M. Gates, and M. T. Pietrucha. Synthesis of Older Driver Research. Final Report to the Pennsylvania Department of Transportation. (December 1995).

Harwood, D. W., J. M. Mason, R. E. Brydia, M. T. Pietrucha, and G. L. Gittings. Intersection Sight Distance. Final Report to the National Cooperative Highway Research Program. (1996).

Kuhn, B. T., P. M. Garvey, and M. T. Pietrucha. Sign Visibility: Research and Traffic Safety Overview. Final Report to the United States Sign Council. (July 1996).

Kuhn, B. T., M. T. Pietrucha, and P. M. Garvey. Development of a Safety Audit Process for Pennsylvania. Final Report to KPMG Peat Marwick for the Pennsylvania Department of Transportation. (August 1996).

Kuhn, B. T., P. M. Garvey, and M. T. Pietrucha. Sign Legibility: The Impact of Color and Illumination on the Legibility of Typical On-Premise Sign Font Legibility, United States Sign Council, Philadelphia, PA, (March 1998).

Crow, E. C., M.T. Pietrucha, et al. (12 others). Improving Safe Mobility of Aging Citizens, Federal Highway Administration and the Pennsylvania Department of Transportation, August 1998.

Pietrucha, M. T. and P. M. Garvey. Pennsylvania Road Safety Audit Pilot Program, Pennsylvania Department of Transportation, Harrisburg, PA, March 1999.

Mason, J. M., E. T. Donnell, D. R. Harwood, K. M. Bauer, J. M. Sada, and M. T. Pietrucha. Median Safety Study (Interstates and Expressways), Pennsylvania Department of Transportation, Harrisburg, PA, June 2001.

Garvey, P. M., A. Z. Zineddin, M. T. Pietrucha, D. T. Meeker, and J. Montabano. Development and Testing of a New Sign Font for National Park Service Signs, United States Department of the Interior, National Park Service, December 2001.

Garvey, P. M., D. T. Meeker, M. T. Pietrucha, R. S. Ghebriel, K. N. Chirwa, and A. Z. Zineddin. Evaluation of Critical National Park Service Sign Issues, United States Department of the Interior, National Park Service, December 2002.

Mahoney, K. M., R. J. Porter, E. T. Donnell, D. Lee, and M. T. Pietrucha. Evaluation of Centerline Rumble Strips on Lateral Vehicle Placement And Speed on Two Lane Highways, Pennsylvania Department of Transportation, Harrisburg, PA, June 2003.

Poister, T., P.M. Garvey, M.T. Pietrucha, R. Ghebrial, and C. Smith. Ride Quality Thresholds from the Motorist's Perspective. Pennsylvania Department of Transportation, Harrisburg, PA September 2003.

Garvey, P.M., C. Ramaswamy, R.S. Ghebrial, M. de la Riva, and M.T. Pietrucha. Relative Visibility of Internally and Externally Illuminated On Premise Signs. United States Sign Council, Bristol, PA February 2004.

de la Riva, M, P.M. Garvey, and M.T. Pietrucha, MT. Deployment Procedures for Highway Safety Flares, Orion Safety Products, Easton, MD June 2004.

Pietrucha, MT, "FHWA Road Safety Audit Guidelines and Checklist, Chapter 3 - Road Safety Audit Process," Federal Highway Administration, Washington, DC November 2004.

Garvey, P.M. and Pietrucha, M.T. (2005). Electronic Message Center Research Review. United States Sign Council, Bristol, PA June 2005.

Garvey, P.M., S.J. Damin, and M.T. Pietrucha. Pavement Markings; State of the Practice, Pennsylvania Department of Transportation, Harrisburg, PA March 2008.

Garvey, P.M., Pietrucha, M.T., Damin, S.J., and Deptuch, D. Internal vs. External On-Premise Sign Lighting: Visibility and Safety in the Real World, United States Sign Council Foundation, Bristol, PA February, 2009.

Garvey, P.M., S.J. Damin, and M.T. Pietrucha. Evaluation of Striped Vertical Panels in Temporary Traffic Control Zones, Pennsylvania Department of Transportation, Harrisburg, PA March 2009.

Pietrucha, MT, Thomchick, EA, Thomas, DJ, Liu, Y, and Hostettler, M. Twenty Year Strategic Facility Infrastructure Roadmap for Pennsylvania Department of Transportation Driver Licensing Centers, Pennsylvania Department of Transportation, Harrisburg, PA January 2009.

Myers, JR, Ruberto, GR, Paccella, RA, Ventura, JA, Boehman AL, Briggs, RJ, Stager, PA, Pietrucha, MT, Bloser, S, Anstrom, J. Feasibility Study for Liquefied Natural Gas Utilization for Commercial Vehicles on the Pennsylvania Turnpike, Pennsylvania Turnpike Commission, Harrisburg, PA October 2012.

Pietrucha, M.T., Report on the PennDOT–PaCTU Transportation Research Workshop for Pennsylvania Department of Transportation, Harrisburg, PA May 2015.

Guler, S. I., Kersavage, K., Pietrucha, M. T. Evaluation of Colored VMS Boards, Pennsylvania Department of Transportation. July 2018.

PRESENTATIONS

“Continuing Education Needs of the Transportation Engineer” at the District 2 Annual Meeting of the Institute of Transportation Engineers, Harrisburg, PA, November 1982.

“Current Traffic Control Device Problems” at the 65th Annual Meeting of the Transportation Research Board, Washington, D.C., January 1986.

“Driver Compliance and Misunderstood Traffic Control Devices” at the Annual Meeting of the Virginia Section of the Institute of Transportation Engineers, Richmond, VA, June 1988.

“Motorist Compliance with Traffic Control Devices” for the Washington, D.C.-Baltimore Section of the Institute of Transportation Engineers, College Park, MD, June 1990.

Paper Discussant at the 61st Annual Meeting of the Institute of Transportation Engineers in the Technical Session, "New Strategies for Older Drivers," Milwaukee, WI, September 1991.

“Pedestrian Friendly Intersection Design” at the 12th International Pedestrian Conference, Bethesda, MD, October 1991.

“Design Considerations for Pedestrian Sensitive Geometric Features” at the 12th International Pedestrian Conference, Bethesda, MD, October 1991.

“Barriers to the Implementation of Traffic Control Device Research” at the 71st Annual Meeting of the Transportation Research Board, Washington, D.C., January 1992.

“Design Considerations for Pedestrian Sensitive Geometric Features” at the Annual Meeting of the Institute of Transportation Engineers, Washington, D.C., August 1992.

“Institutional Barriers to IVHS” for the Cumberland Valley Section of the Society of Automotive Engineers, Greencastle, PA, October 1992.

“Introduction to Intelligent Vehicle Highway Systems/Road Transport Informatics” for the Science and Technology Interest House at the Pennsylvania State University, University Park, PA, March 1994.

“Older Driver Issues” at the Pennsylvania State Conference for the White House Conference on Aging, Harrisburg, PA, October 1994.

“Comprehensive Access Management” at the Annual Conference of the Pennsylvania Planning Association, State College, PA, October 1994.

“Teleconferencing Experiences in Graduate Education” at the 1995 Institute of Transportation Engineers International Conference, Ft. Lauderdale, FL, April, 1995.

“Improving Highway Guide Sign Typography” at the mid-year meeting of the American Association of State Highway and Transportation Officials Standing Subcommittee on Traffic Engineering, Seattle, WA, June, 1995.

“Markings and Delineation for Older Drivers” at the Annual Meeting of the Institute of Transportation Engineers, Denver, CO, August 1995.

“Types of Accidents, Road Design, and Signage” at the “Rx for Safer Driving: Health Care Conference on Older Driver Issues,” Harrisburg, PA, November 1995.

“Everything You Wanted to Know About Human Factors But Were Afraid to Ask” at the District 2 Annual Meeting of the Institute of Transportation Engineers, Gaithersburg, MD, October 1996.

“Measures for Increasing the Safe Mobility of Older Citizens” at the Pennsylvania Traffic and Safety Conference, State College, PA, December 1996.

“Research on Sign Alphabets” for the 30th Annual Human Factors in Transportation Workshop at the 76th Annual Meeting of Transportation Research Board, Washington, D.C., January 1997.

“Analysis of Neighborhood Form and its Impact on the Suburban Transportation System” at the Institute of Transportation Engineers Conference, “Transportation and Sustainable Communities,” Tampa, FL, March 1997.

“Engineering Improvements to Aid Older Drivers and Pedestrians” at the American Society of Civil Engineers Conference, “Traffic Congestion and Traffic Safety in the 21st Century,” Chicago, IL, June 1997.

“Intersection Sight Distance Research” at the American Society of Civil Engineers Conference, “Traffic Congestion and Traffic Safety in the 21st Century,” Chicago, IL, June 1997.

“The Traffic Casualty Rate: A New Measure of Highway Safety?” at the District 2 Annual Meeting of the Institute of Transportation Engineers, Philadelphia, PA, June 1997.

“Conflict Analysis of U.S. Roundabouts” at the Institute of Transportation Engineers Annual Meeting, Boston, MA, August 1997.

“On Premise Sign Legibility and Illumination” at the Institute of Transportation Engineers Annual Meeting, Las Vegas, NV, August 1999.

“Signs that Confuse, Signs that Distract – the Impact of Official and Commercial Signs on Driver Behavior and Performance” for the 33rd Annual Human Factors in Transportation Workshop at the 79th Annual Meeting of Transportation Research Board, Washington, D.C., January 2000.

“An Evaluation of the Pennsylvania Road Safety Audit Pilot Program” at the Transportation Research Board Annual Meeting, Washington, DC, January 2000.

“Risk Management for Pros” at the 19th Annual Torts Seminar, Pennsylvania Office of the Attorney General, State College, PA, August 2000.

“The Transportation Engineer of the Future” at the Pennsylvania Traffic and Safety Conference, State College, PA, December 2000.

“Opportunities to Increase the Use of User Perception in Making Engineering Decisions” at the Pennsylvania Traffic and Safety Conference, State College, PA, December 2000.

“Incorporating User Perception into Conventional Engineering Measures of Effectiveness” at the Transportation Research Board Conference on Advanced Modeling Techniques and Quality of Service in Highway Capacity Analysis Truckee, CA, July, 2001.

“Challenges in Transportation Management: An Educator’s Point of View at the Annual Meeting of the Middle Atlantic Section of the Institute of Transportation Engineers, Pittsburgh, PA, September 2001.

“Pennsylvania’s Transportation Engineering Education Plan” at the Pennsylvania Traffic and Safety Conference, State College, PA, December 2001.

“Bring Science to Sign Regulation” at the American Planning Association Annual Meeting, Chicago, IL, April 2002.

“The Clearview Highway Type System: Development, Research, and Application Concepts” at the Pennsylvania Traffic and Safety Conference, State College, PA, December 2002.

Effects of Practice on Font Legibility” at the Human Factors and Ergonomics Society’s 47th Annual Meeting, Denver, CO, September 2003.

“A Transportation Curriculum for the Future” at the Pennsylvania Traffic and Safety Conference, State College, PA, December 2003.

"Legibility of Arrows for National Park Service Guide Signs," for the Transportation Research Board Annual Meeting, Washington, DC, January 2004.

“A New Font and Arrow for National Park Service Guide Signs," for the Transportation Research Board Annual Meeting, Washington, DC, January 2004.

"Driver Awareness of Road Sign Colors and Shapes," for the Transportation Research Board Annual Meeting, Washington, DC, January 2004.

"Moving More with Less: Accommodating Transportation and Biodiversity," for the 4th Annual Goddard Forum, Harrisburg, PA, May 2004.

"Scenario Analysis for the Deployment of Clean Energy Transportation Technology” for the 4th Annual Goddard Forum, Harrisburg, PA, May 2004.

"Developing Roadway Ride Quality Standards from the Customer's Perspective," for the Transportation Research Board Annual Meeting, Washington, DC, January 2005.

"Impact of Highway Safety Flares on Driver Behavior," for the Transportation Research Board Annual Meeting, Washington, DC, January 2006.

"Proportion-Based Format System for Conventional Road Guide Signs," for the Transportation Research Board Annual Meeting, Washington, DC, January 2006.

"Proportion Based Format System for Freeway and Expressway Guide Signs," for the Transportation Research Board Annual Meeting, Washington, DC, January 2007.

"Incorporation of Transportation User Perception into Evaluation of Service Quality of Signalized Intersections Using Fuzzy Aggregation," for the Transportation Research Board Annual Meeting, Washington, DC, January 2007.

"Research Based Design Decisions," for the Society of Environmental Graphic Design Annual Meeting, National Harbor, MD, June 2008.

"Issues in Sustainable Logistics Management," for the conference Developing Global Sustainability - U.S./China Partnerships, Ann Arbor, MI, May 2010.

"Developing and Sustaining Partnerships," for the Council of University Transportation Centers Annual Meeting, College Station, TX, June 2010.

"Best Practices Related to Research Problem Identification, Scoping, and Programming," for the American Association of State Highway and Transportation Officials' Research Advisory Committee Annual Meeting, Salt Lake City, UT, July 2011.

"A Survey of Practices Related to Research Problem Identification, Scoping, and Programming," for the American Association of State Highway and Transportation Officials' Research Advisory Committee Annual Meeting, Burlington, VT, July 2012.

"UTC (University Transportation Center) Program Basics," for the American Association of State Highway and Transportation Officials' Research Advisory Committee Annual Meeting, Burlington, VT, July 2012.

"Issues Related to the Preparation and Delivery of Research Reports," for the American Association of State Highway and Transportation Officials' Research Advisory Committee Annual Meeting, Burlington, VT, July 2012.

"CUTC 101: An Introduction to the Council of University Transportation Centers (CUTC)," Council of Transportation Centers Annual Meeting, Memphis, TN, June 2013.

"The Elusive Nature of Transportation Research," for the Oklahoma Transportation Research Day, Oklahoma City, OK, September 2013.

Farber, Darryl (Presenter & Author), Pietrucha, Martin T (Author Only), International Symposium Next Generation Infrastructure, "A socio-technical analysis of interdependent infrastructures among the built environment, energy and transportation systems at the Navy Yard and the Philadelphia Metropolitan Region, USA," University College London, Vienna, Austria, Oral Presentations. (October 1, 2014).

Farber, Darryl (Presenter & Author), Pietrucha, Martin T (Author Only), Industrial Engineering and Systems Engineering Department Graduate Seminar, "A socio-technical analysis of interdependent infrastructures among the built environment, energy and transportation systems at the Navy Yard and the Philadelphia Metropolitan Region, USA," Texas A&M University, College Station, TX, Seminars. (November 19, 2014).

Farber, Darryl (Presenter & Author), Pietrucha, Martin T (Author Only), ME Seminar, "A Strategic Analysis of Interdependent Infrastructures among the Built Environment, Energy, and Transportation Systems at the Navy Yard and the Philadelphia Metropolitan Region, USA," University of Maryland, Department of Mechanical Engineering, College Park, MD, Seminars. (December 9, 2014).

Pietrucha, Martin T (Panel Member), 2014 Transportation Engineering and Safety Conference, "Back to the Transportation Future - 1994," Larson Institute, Penn State, University Park, PA, Panels. (December 11, 2014).

Farber, Darryl (Presenter & Author), Pietrucha, Martin T (Author Only), Seminar, "A Strategic Analysis of Interdependent Infrastructures among the Built Environment, Energy, and Transportation Systems at the Navy Yard and the Philadelphia Metropolitan Region, USA," NYU-Center for Urban Science and Progress, New York University, Seminars. (December 11, 2014).

Farber, Darryl (Presenter & Author), Pietrucha, Martin T (Author Only), International Symposium Next Generation Infrastructure, "A socio-technical analysis of interdependent infrastructures among the built environment, energy and transportation systems at the Navy Yard and the Philadelphia Metropolitan Region, USA," University College London, Vienna, Austria, Oral Presentations. (October 1, 2014).

"A Conversation on Pairing Training and Career: A University-based Education Perspective," for the American Association of State Highway and Transportation Officials' Research Advisory Committee Annual Meeting, Portland, OR July 2015.

Pietrucha, M. (Panel Member), Transportation Engineering and Safety Conference, Pennsylvania State University, University Park, PA, "Diversity and Inclusion: Moving the Needle to Help Transform our Profession." (December 2018).

Farber, D., Pietrucha, M. T. (Co-Developer of Presentation), Human-Machine-Ecology: A Workshop on the Emerging Risks, Opportunities, and Governance of Artificial Intelligence, Princeton University (and others), Princeton, NJ, "Applying More Intelligence to Understand the Interdependencies among Critical Infrastructure Sociotechnical Systems." (January 10, 2019).

Pietrucha, M. T. (Panelist), 25th Annual Transportation Engineering and Safety Conference, Pennsylvania State University, University Park, PA, "Re-Branding the Transportation Professional: A Workforce Challenge." (December 12, 2019).

Posters

"Transportation Engineering Program for Women and Minorities" for the Innovations in Engineering Education Exposition, University Park, Pennsylvania, November 1995.

"Development of a New Guide Sign Alphabet" for the 40th Annual Meeting of the Human Factors and Ergonomics Society, Philadelphia, Pennsylvania, September 1996.

"User Perception of Quality of Service at Signalized Intersections" for the Transportation Research Board Annual Meeting, Washington, DC, January 2000.

"Evaluation of Average Delay as a Measure of Effectiveness for Signalized Intersection Level of Service Analysis" for the Transportation Research Board Annual Meeting, Washington, DC, January 2001.

"Cross-Median Collisions on Pennsylvania Interstates and Expressways" for the Transportation Research Board Annual Meeting, Washington, DC, January 2002.

"Using Fuzzy Clustering of User Estimated Delay to Define Level of Service at Signalized Intersections" for the Transportation Research Board Annual Meeting, Washington, DC, January 2002.

"Application of Fuzzy Logic to Evaluate Driver Perception of Variable Message Signs," for the Transportation Research Board Annual Meeting, Washington, DC, January 2005.

"Hierarchical Fuzzy Inference System to Evaluate Expert Opinions on Median Safety," for the Transportation Research Board Annual Meeting, Washington, DC, January 2006.

"Examining Fatal Crash Reductions by First Harmful Events Since the Introduction of the Federal Highway Safety Improvement Program," for the Transportation Research Board Annual Meeting, Washington, DC, January 2013.

"Strategic Analysis and Risk Management of Infrastructure Systems Interdependencies in the Philadelphia Metropolitan Region," 4th International Engineering Systems Symposium, Council of Engineering Systems Universities, Stevens Institute of Technology, Hoboken, NJ, Posters and Oral Presentations. (June 8, 2014).

"Evaluation of the Use of Registration Stickers on Vehicle License Plates" for the Transportation Research Board Annual Meeting, January 2017.

"Evaluating Drivers' Stop-Line Violation Behavior at Signalized Intersections" for the Transportation Research Board Annual Meeting, January 2019.

RESEARCH PROJECTS, GRANTS, COMMISSIONS, AND CONTRACTS

Project Title: "An unrestricted gift in support of research of Dr. Martin T. Pietrucha"

PI: Martin Pietrucha

Sponsor: Alcoa Technical Center

Period of Performance: 9/12/2013-9/11/2018

Total Budget: \$1,000

Candidate's Role: Principal Investigator

Award #: 155293

Project Title: "Pennsylvania Department of Transportation Evaluation of Colored VMS Boards Work Order (WO) 004"

PI: Martin Pietrucha

Sponsor: COP: Department of Transportation

Period of Performance: 12/12/2017-7/27/2018

Total Budget: \$53,512

Candidate's Role: Principal Investigator

Award #: 4400015622

Project Title: "Horizontal Sightline Offset Design Criteria, Exceptions, and Mitigation Strategies"

PI: Eric Donnell

Sponsor: MRIGlobal

Period of Performance: 5/1/2015-5/31/2018

Total Budget: \$101,446

Candidate's Role: Co-PI

Award #: 674-110933-1

Project Title: "Warning Beacons for Front Line Service Worker Safety"

PI: Philip Garvey

Sponsor: Rensselaer Polytechnic Institute

Period of Performance: 9/1/2013-8/31/2017

Total Budget: \$236,253

Candidate's Role: Co-PI

Award #: A12557

Project Title: "Mid-Atlantic Universities Transportation Center"

PI: Martin Pietrucha

Sponsor: U.S. Department of Transportation

Period of Performance: 1/1/2012-6/30/2016

Total Budget: \$6,897,600

Candidate's Role: Principal Investigator

Award #: DTRT12-G-UTC03

Project Title: "Gift in Support of Larson Institute's Research Related to Commercial Signs (from James and Sharon Weinel)"

PI: Martin Pietrucha

Sponsor: Miscellaneous Sponsor Code

Period of Performance: 1/1/2015-12/31/2015

Total Budget: \$100,000

Candidate's Role: Principal Investigator

Award #: 167148

Project Title: "Pennsylvania Consortium of Transportation Universities (PaCTU)"

PI: Martin Pietrucha

Sponsor: COP: Department of Transportation

Period of Performance: 4/30/2015-8/28/2015

Total Budget: \$11,875

Candidate's Role: Principal Investigator

Award #: 4400008014

Project Title: "The Development of Optimal On-premise Electronic Message Center (EMC) Lighting Levels and Sign Lighting Measurement Techniques, Phase 2"

PI: Philip Garvey

Sponsor: United States Sign Council

Period of Performance: 1/1/2013-12/31/2014

Total Budget: \$40,159

Candidate's Role: Co-PI

Award #: 149865

Project Title: "Evaluating the Clearview Typeface System for Negative Contrast Signs Project"

PI: Philip Garvey

Sponsor: Michigan Department of Transportation

Period of Performance: 5/14/2013-8/13/2014

Total Budget: \$35,000

Candidate's Role: Co-PI

Award #: 2012-0754

Project Title: "Evaluating the Clearview Typeface System for Negative Contrast Signs"

PI: Philip Garvey

Sponsor: Maryland State Highway Administration

Period of Performance: 2/15/2013-7/31/2014

Total Budget: \$34,951

Candidate's Role: Co-PI

Award #: 143775

Project Title: "A Pilot Distance Learning Graduate Education Certificate Program to Educate the Transportation Leaders of the 21st Century"

PI: Martin Pietrucha

Sponsor: U.S. Department of Transportation

Period of Performance: 7/1/2008-6/30/2013

Total Budget: \$1,115,920

Candidate's Role: Principal Investigator

Award #: DTFH61-08-G-00008

Project Title: "The Development of Optimal On-Premise Electronic Message Center (EMC) Lighting Levels and Sign Lighting Measurement Techniques"

PI: Philip Garvey

Sponsor: United States Sign Council

Period of Performance: 8/1/2012-1/31/2013

Total Budget: \$45,923

Candidate's Role: Co-PI

Award #: 146021

Project Title: "University Transportation Centers Program: Region 3 UTC"

PI: Martin Pietrucha

Sponsor: U.S. Department of Transportation

Period of Performance: 9/5/2007-1/31/2013

Total Budget: \$7,629,000

Candidate's Role: Principal Investigator

Award #: DTRT07-G-0003

Project Title: "Intergovernmental Agreement"

PI: Martin Pietrucha

Sponsor: COP: Department of Transportation

Period of Performance: 11/27/2006-11/25/2011

Total Budget: \$132,418

Candidate's Role: Principal Investigator

Award #: 510602

Project Title: "Evaluation of the Use of Registration Stickers"

PI: Philip Garvey

Sponsor: COP: Department of Transportation

Period of Performance: 7/19/2010-4/18/2011

Total Budget: \$68,772

Candidate's Role: Faculty

Award #: 355I01

Project Title: "Performance-Based Analysis of Geometric Design of Highways and Streets"

PI: Venky Shankar

Sponsor: National Academy of Sciences

Period of Performance: 7/14/2006-12/13/2009

Total Budget: \$600,000

Candidate's Role: Research Associate

Award #: HR 15-34

Project Title: "Internal vs. External On-Premise Sign Lighting: Visibility and Safety in the Real World"

PI: Philip Garvey

Sponsor: United States Sign Council

Period of Performance: 7/1/2008-2/28/2009

Total Budget: \$58,000

Candidate's Role: Co-PI

Award #: 105569

Project Title: "Mid-Atlantic Universities Transportation Center"
PI: John Mason
Sponsor: U.S. Department of Transportation
Period of Performance: 6/22/1999-7/31/2008
Total Budget: \$7,106,800
Candidate's Role: Co-PI
Award #: DTRS99-G-0003

Project Title: "The Effects of On-Premise Sign Lighting Level on Nighttime Sign Legibility and Traffic Safety"
PI: Martin Pietrucha
Sponsor: United States Sign Council
Period of Performance: 5/1/2007-4/30/2008
Total Budget: \$75,000
Candidate's Role: Principal Investigator
Award #: 95615

Project Title: "Alternatives to Design Speed for Selection of Roadway Design Criteria"
PI: Kevin Mahoney
Sponsor: Midwest Research Institute
Period of Performance: 5/13/2004-5/12/2007
Total Budget: \$127,867
Candidate's Role: Co-PI
Award #: 467-110360-1

Project Title: "New Product Evaluation for Low Volume Roads"
PI: Barry Scheetz
Sponsor: COP: Department of Transportation
Period of Performance: 10/15/2003-3/5/2007
Total Budget: \$762,405
Candidate's Role: Research Associate
Award #: 350A07-002

Project Title: "Design of Construction Work Zones on High-Speed Highways"
PI: Kevin Mahoney
Sponsor: National Academy of Sciences
Period of Performance: 8/6/2003-10/30/2006
Total Budget: \$499,999
Candidate's Role: Co-PI
Award #: HR 3-69

Project Title: "Pavement Marking Retroreflectivity - Earmark for the Pennsylvania Transportation Institute of the Pennsylvania State University"
PI: Eric Donnell
Sponsor: U.S. Department of Transportation
Period of Performance: 9/8/2004-3/7/2006
Total Budget: \$338,102
Candidate's Role: Co-PI
Award #: DTFH61-04-H-00046

Project Title: "Hablamos Juntos: Improving Patient-Provider Communications for Latinos"
PI: Martin Pietrucha
Sponsor: Society for Environmental and Graphic Design (SEGD)
Period of Performance: 8/1/2004-1/31/2006
Total Budget: \$25,000
Candidate's Role: Principal Investigator
Award #: 76623

Project Title: "Ride Quality Thresholds from the Motorist's Perspective"
PI: Philip Garvey
Sponsor: COP: Department of Transportation
Period of Performance: 10/4/2001-12/31/2003
Total Budget: \$146,000
Candidate's Role: Co-PI
Award #: 08-370003

Project Title: "Motorist Response to Highway Safety Flares"
PI: Philip Garvey
Sponsor: Orion Safety Products
Period of Performance: 6/1/2003-11/30/2003
Total Budget: \$48,000
Candidate's Role: Research Associate
Award #: 67796

Project Title: "Field Evaluation of On-Premise Sign Visibility"
PI: Philip Garvey
Sponsor: United States Sign Council
Period of Performance: 2/1/1999-10/4/2003
Total Budget: \$56,692
Candidate's Role: Research Associate
Award #: UNNUMBERED

Project Title: "Safety of U-Turns at Unsignalized Median Openings"
PI: Martin Pietrucha
Sponsor: Midwest Research Institute
Period of Performance: 11/6/2000-5/5/2003
Total Budget: \$19,972
Candidate's Role: Principal Investigator
Award #: 403-110115-1

Project Title: "Effect of Font on the Readability of Park Service Signs"
PI: Philip Garvey
Sponsor: U.S. Department of the Interior
Period of Performance: 9/22/2000-12/31/2002
Total Budget: \$111,592
Candidate's Role: Co-PI
Award #: 4000-8-9028

Project Title: "Median Safety Study"
PI: John Mason
Sponsor: COP: Department of Transportation
Period of Performance: 1/4/2000-6/3/2001
Total Budget: \$154,207
Candidate's Role: Co-PI
Award #: 359704

Project Title: "Driver Safety Public Information and Education Campaign"
PI: Martin Pietrucha
Sponsor: Kelly Michener, Inc.
Period of Performance: 7/28/1997-7/27/2000
Total Budget: \$103,500
Candidate's Role: Principal Investigator
Award #: 360

Project Title: "PennDOT Safety Audit Process Pilot Program"
PI: Martin Pietrucha
Sponsor: COP: Department of Transportation
Period of Performance: 12/10/1997-1/31/1999
Total Budget: \$17,500
Candidate's Role: Principal Investigator
Award #: 359528

Project Title: "Lateral Acceleration on Horizontal Curves"
PI: Martin Pietrucha
Sponsor: U.S. Department of Transportation
Period of Performance: 8/16/1995-12/31/1997
Total Budget: \$77,232
Candidate's Role: Principal Investigator
Award #: DTFH61-95-C-00085

Project Title: "Determination of Illumination of Color on the Legibility of Typical on-Premise Sign Fonts"
PI: Philip Garvey
Sponsor: United States Sign Council
Period of Performance: 10/1/1996-7/31/1997
Total Budget: \$3,500
Candidate's Role: Co-PI
Award #: UNNUMBERED RESEARCH AGREEMENT

Project Title: "Determination of the Impact of Illumination and Color on the Legibility of Typical On-Premise Sign Fonts"
PI: Philip Garvey
Sponsor: United States Sign Council
Period of Performance: 3/1/1996-9/30/1996
Total Budget: \$53,500
Candidate's Role: Co-PI
Award #: UNNUMBERED RESEARCH AGREEMENT

Project Title: "Determination of the Impact of Illumination and Color on the Legibility of Typical On-Premise Sign Fonts"

PI: Philip Garvey

Sponsor: United States Sign Council

Period of Performance: 3/1/1996-9/30/1996

Total Budget: \$53,500

Candidate's Role: Co-PI

Award #: UNNUMBERED RESEARCH AGREEMENT

Project Title: "Study Legibility of Conventional Road Guide Sign Typography and Format"

PI: Martin Pietrucha

Sponsor: 3M Company

Period of Performance: 1/1/1996-6/30/1996

Total Budget: \$4,000

Candidate's Role: Principal Investigator

Award #: UNNUMBERED

Project Title: "Modification of the Policies and Publications of the PA DOT to Address Safety Considerations"

PI: Martin Pietrucha

Sponsor: KPMG Peat Marwick

Period of Performance: 4/14/1995-6/13/1996

Total Budget: \$171,534

Candidate's Role: Principal Investigator

Award #: UNNUMBERED

Project Title: "Access Management Guidelines"

PI: Martin Pietrucha

Sponsor: COP: Department of Transportation

Period of Performance: 6/30/1993-11/15/1995

Total Budget: \$55,108

Candidate's Role: Principal Investigator

Award #: 259208

Project Title: "Delineation of Hazards for Older Drivers"

PI: Martin Pietrucha

Sponsor: Comsis Corporation

Period of Performance: 8/12/1992-9/29/1995

Total Budget: \$26,278

Candidate's Role: Principal Investigator

Award #: UNNUMBERED

Project Title: "Freestanding Sign Visibility"

PI: Martin Pietrucha

Sponsor: United States Sign Council

Period of Performance: 4/1/1995-8/31/1995

Total Budget: \$19,614

Candidate's Role: Principal Investigator

Award #: UNNUMBERED

Project Title: "Median Intersection Design"
PI: Martin Pietrucha
Sponsor: Midwest Research Institute
Period of Performance: 12/1/1992-5/15/1995
Total Budget: \$126,099
Candidate's Role: Co-PI
Award #: 274-3328-1

Project Title: "Review of the PennDOT Traffic Engineering Function"
PI: Martin Pietrucha
Sponsor: COP: Department of Transportation
Period of Performance: 4/13/1993-4/13/1995
Total Budget: \$17,405
Candidate's Role: Principal Investigator
Award #: 250056

Project Title: "Intersection Sight Distance"
PI: John Mason
Sponsor: Midwest Research Institute
Period of Performance: 6/1/1993-11/30/1994
Total Budget: \$142,820
Candidate's Role: Co-PI
Award #: 261-3106-1

Project Title: "Developing an AVCS Research Program to Improve Safety on Rural Roadways"
PI: Martin Pietrucha
Sponsor: COP: Department of Transportation
Period of Performance: 3/14/1992-3/10/1993
Total Budget: \$74,473
Candidate's Role: Principal Investigator
Award #: 259204