



KITTELSON LLC

FORENSIC TRANSPORTATION ENGINEERING

MARC A. BUTORAC, P.E., PTOE, PMP
SENIOR PRINCIPAL ENGINEER

EDUCATION

- Bachelor of Science, University of Idaho, 1993
- Master of Science, Texas A&M University, 1997

PROFESSIONAL STATUS

- Licensed Professional Civil Engineer, State of Oregon, License No. 57986 PE
- Licensed Professional Civil Engineer, State of Washington, License No. 35806
- Licensed Professional Civil Engineer, State of Idaho, License No. 9244
- Licensed Professional Civil Engineer, State of Florida, License No. 55246
- Licensed Professional Civil Engineer, State of Maryland, License No. 32784
- Licensed Professional Civil Engineer, State of Montana, License No. 16661
- Licensed Professional Civil Engineer, State of New Mexico, License No. 18539
- Licensed Professional Civil Engineer, State of Texas, License No. 124083
- Certified Professional Traffic Operations Engineers, Institute of Transportation Engineers
- Certified Project Management Professional, Project Management Institute

PROFESSIONAL ASSOCIATIONS

- American Council of Engineering Companies Oregon, National Director Elect, Past President, ODOT Liaison Steering Committee Past Co-Chair, ODOT Liaison Committee Member
- Institute of Transportation Engineers, Member, Past President (Oregon Chapter)
- TRB Access Management Committee Chairman, Past Manual Subcommittee Chair
- University of Idaho Civil Engineering Department Advisory Board, Former President
- Women's Transportation Seminar, Member
- Society of Marketing Professional Services (SMPS), Member

PROFESSIONAL EXPERIENCE

KITTELSON & ASSOCIATES, INC., 1993-Present

Transportation System Planning

Solid transportation planning background that has been effectively demonstrated through comprehensive plan/transportation system plans prepared for the Cities of Ashland, Boardman, Florence, Heppner, Ione, Irrigon, Klamath Falls, Lexington, Madras, and Monmouth, OR; Clackamas, Crook, Gilliam, Sherman, and Wasco Counties in the State of Oregon; and the City of Silsbee, Texas. As part of his transportation system planning work, Mr. Butorac developed alternative and non-traditional roadway standards, access management ordinances and plans, development ordinances, and transportation system development charges.

Corridor Planning and Access Management

Experience in transportation planning and public involvement proved instrumental in the success of several highway corridor and access management plans. These plans include the award-winning SE 172nd/190th Corridor Plan, I-5 Medford Viaduct, OR 126 Corridor Refinement Plan, OR 201 Corridor Plan, US 395 Corridor Refinement Plan, US 730 Corridor Refinement Plan, Scappoose Rail Crossing Corridor Study, Biggs Junction Refinement Plan, Boones Ferry Corridor Study, Molalla Avenue Boulevard and Bikeway Improvement Plan, Hermiston-Umatilla Highway 395 Corridor Land Use/Transportation Plan, and Highway 18 Corridor Study. While managing the Hermiston-Umatilla Highway 395 Corridor Land Use/Transportation Plan, played an integral role in the development of one of the first policy-driven access management plans in the State of Oregon.

Private Development Related Transportation Impact Studies

Managed and/or overseen over 500 successful public and private development projects in the over a dozen states for commercial, industrial, institutional, and residential developers. These projects include developing, reviewing, obtaining approvals, and designing parking lot facilities and access points to adjacent roadway facilities. Regularly reviews and designs commercial and industrial parking lot facilities and conducts parking lot safety audits for existing facilities. In addition to developing appropriate mitigation measures and evaluating site access/internal circulations issues, is well-versed in presenting to planning commissions, city councils, and neighborhood group.

Parking Lot Review and Design

Regularly reviews and designs commercial, office, institutional, residential, and industrial parking lot facilities and conducts parking lot safety audits for existing parking facilities. In addition, serves as an expert witness for condemnation cases involving associated parking lot/garage circulation, traffic control (signing & striping), wayfinding, and supply impacts. Has developed the “*Four Color*” parking lot analysis and evaluation procedures used within Kittelson & Associates and regularly presents on parking design and circulation, including presentations to architects and civil engineers firms, and at the Northwest Parking Association (NWP) and ITE Intermountain Conferences.

Multimodal Operations and Corridor Planning

Has evaluated multimodal needs in over 16 Transportation System Plans (TSPs) and five specific active transportation plans. In addition, has developed specific multimodal corridor plans and was instrumental in the development of the *OR 43* corridor design that includes fully protected “Dutch-style” signalized intersections and *Oregon Avenue* which includes two-way protected bikeways spurred through a public health driven process. Through this work, understands and actively plans, designs, and assesses the operational and safety tradeoffs of various modes in developing ADA compliant projects which can be effectively constructed and maintained. Currently leading *NCHRP 03-120 - Assessing Interactions Between Access Management Treatments and Multimodal Users* and part of Kittelson’s team developing *ODOT’s Urban Design Guidelines* and *Metro’s Livable Street Design Guidelines*.

Interchange Justification Reports (IJR) and Area Management Plans (IAMP)

Managed and participated in numerous IJR and IAMPs, including the North Ontario/I-84, Glencoe Road/US 26, East Newberg/99W, Oregon 219 (Newberg)/99W, US 730/I-82, US 395/I-84, Dundee/99W, OR99W/OR18 (Dayton), OR18/99W (McMinnville), Springwater/US26 (Gresham), I-84/Chenoweth, Springwater/US 26, US 730/I-84, Laurel Lane/I-84, and the Barnhart Road/I-84 IAMPs in Oregon; and IJR in Alaska (Richardson Highway MP 351), Montana (I-90/Johnson Lane), and Washington State (I-5/NW La Center Road). Brings an educational approach to the IAMP/IJR public involvement process that

allows communities to better understand the need for certain interchange forms, local circulation systems, and access management within the vicinity of interchanges. Couples this experience with role in authoring NCHRP Synthesis 332: *Access Management on Crossroads in the Vicinity of Interchanges*.

National Research

In addition to facilitating transportation planning and traffic engineering services, served as principal investigator and participated in numerous research projects, including National Cooperative Highway Research Program (NCHRP) Synthesis 332: *Access Management on Crossroads in the Vicinity of Interchanges*; NCHRP Synthesis 351: *Access Right, Geometric, and Operational Guidelines for Multiple Lane Ramp Meters*; and NCHRP 3-99: *Access Management Application Guide (AMAG)*. Currently serving as the principal investigator for NCHRP 03-120 *Assessing Interactions Between Access Management Treatments and Multimodal Users*. Also played a pivotal role in developing the dual-lane ramp meter design strategies for the State of Texas through development of Research Report 1295-2. In addition to federal and state sponsored research, has been involved in several private sector-sponsored research projects involving site design, trip generation, and parking generation. Versatile principal investigator and researcher.

PUBLICATIONS

- With Karen Dixon, Robert Layton, Jim Gattis, Del Huntington, NCHRP 3-99 Project: *Development and Application of Access Management Guidelines* [ON-GOING]
- Institute of Transportation Engineers (ITE) Access Management Web Seminar Presentation (*Access Management Principles and Practices*), 2010.
- Hughart, Matt, and Mr. Butorac. *Oregon, USA's Interchange Area Management Plans (IAMP)*. ITE Journal, Vol. 80, No. 1, January 2010.
- *Designing and Managing Interchanges in Collaboration with the Public: An Interchange Area Management Plan Case Study*. Presentation at the 8th Access Management Conference - Baltimore, Maryland, 2008.
- Overview of NCHRP Synthesis 332 on *Access Management in the Vicinity of Interchanges*. Presentation at the TRB 85th Annual Meeting – Washington D.C., 2007.
- A Review of Oregon's Innovative Interchange Area Management Plans. Presentation at the 7th Access Management Conference - Park City, Utah, 2006
- Overview of NCHRP Synthesis 332 on *Access Management in the Vicinity of Interchanges*. Presentation at the 7th Access Management Conference - Park City, Utah, 2006.
- With Del Huntington, NCHRP Synthesis 351 – *Access Rights*. National Highway Cooperative Research Program. National Academy of Sciences, 2006.
- With Jerilyn Wen. NCHRP Synthesis 332 – *Access Management of Crossroads in the Vicinity of Interchanges*. National Highway Cooperative Research Program. National Academy of Sciences, 2004.
- With Del Huntington. *Access Management Road Trip Workshop*. Workshop at the 6th Access Management Conference – Vail, Colorado. 2004.
- With co-author C. Brehmer. *Trip Generation Characteristics of Discount Supermarkets*. ITE Journal. Institute of Transportation Engineers, November 2003.
- With Carroll Messer. *A Dual-Lane Flow Signal Plan for Texas*. Texas Transportation Institute. Texas A&M University, November 1997.

- With Michael Kyte, Z. Tian, J. Kuhn, H. Poffenroth, and B. Robertson. *Saturation Headways at Stop-Controlled Intersections*. University of Idaho, December 1993.

LEGAL SERVICES/EXPERT WITNESS

Served as an expert witness for civil and land use cases associated with transportation engineering, planning, and policy related issues. Grasp of the issues and broad transportation knowledge and experience has proven invaluable in providing clients with expert consultation and testimony on cases ranging from traffic control related accidents to local improvement district allocation studies. Has represented multiple public and private entities throughout career.

- State of Oregon v. Tualatin Aloha Co., LLC, Washington County Circuit Court Case Number C151261CV
- State v. Lindquist Holdings, LLC; Meadow Ridge Farms, Inc. & Yamhill County, Yamhill County Circuit Court Case No. 13CV03476
- State v. Lindquist, Stuart, Yamhill County Circuit Court Case No. 13CV03477
- Thurston County No. 08-2-13869-6
- State v. McDonald's Corporation et al., Marion County Circuit Court Case No. 13C18997
- State v. Knez Realty Group, Clackamas County Circuit Court Case No. CY13020861
- State of Oregon v Tore 93 Deschutes County Circuit Court Case #12CV1281
- State v. Estacada Oil Company, dba Northwest Petroleum, Inc., et al, Clackamas Circuit Case No: CV13050910
- State v. Keith L. Wilson Construction, Clackamas County Circuit Court Case No. CV13040903
- State of Oregon v. Reed (Pioneer 76), Marion County Circuit Court Case No. 14C14149
- Donzellie v. Wild River Association, Deschutes County Circuit Court Case No. 14CV0224
- Yazmin Barajas v. OCI Beaumont, LLC and Ikechukwy Obodo, District Court of Jefferson County, TX Cause No. A-195,925
- Hollie Dean Poor and Tammy Poor v. Love's Travel Stops & Country Stores, Inc., C.R., England, Inc. and James Randolph Erwin, Jr., District Court of Franklin County, TX Cause No. 11829
- State of Oregon v. Kimmel-American Lumber, Jackson County Circuit Court.
- Carl Hasselback v. Derrick Corporation and Randall Benderson Trust, State of New York Supreme Court: County of Erie, Index No.: 601401/2012.
- State of Oregon v. Peterson Crossing, Multnomah County Civil Court Case No. 17CV36174