

## Michael H. Schrader, Ph.D., PE

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### CURRENT EMPLOYMENT

Researcher, Institute for Physical Infrastructure & Transportation (IPIT), University of Wisconsin-Milwaukee, Milwaukee WI  
[schradem@uwm.edu](mailto:schradem@uwm.edu), 810-858-2640

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### EDUCATION

*Ph.D.* in Civil Engineering (Transportation), Wayne State University, August 2018  
*M.S.* in Civil Engineering, University of Tennessee, May 1990  
*B.S.* in Civil Engineering, University of Missouri, December 1987

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### EXPERIENCE

<b>Researcher</b>	June 2021 - present
Institute for Physical Infrastructure and Transportation University of Wisconsin - Milwaukee	
<b>Program Coordinator</b>	August 2019 – June 2021
Civil Engineering Technology – Fresh Water Resources Gateway Technical College, Kenosha, WI	
<b>Assistant Professor, Transportation Engineering (Fixed Term)</b>	August 2018 – August 2019
Civil and Mechanical Engineering Department Minnesota State University, Mankato	
<b>Adjunct Faculty</b>	August 2016 – May 2018
Mechanical Engineering Department Wayne State University, Detroit MI	
<b>City Traffic Engineer</b>	August 2015 – June 2016
City of Charleston, WV	
<b>Research/ Teaching Associate</b>	January 2013 – August 2015
Department of Civil & Environmental Engineering Wayne State University, Detroit, MI	
<b>Michael H Schrader, PE, Civil – Traffic Engineer</b>	November 2011 – January 2013
Consultant Bartlesville, OK	
<b>Traffic Operations Engineer</b>	November 2004 – November 2011
City of Tulsa, OK	
<b>City Engineer/Public Works Director/Planning Director</b>	March 2004 – September 2004
City of Balch Springs, TX	
<b>Project Engineer</b>	November 2002 – March 2004
USInfrastructure of Oklahoma ,Tulsa, OK	
<b>T2S2, Engineering &amp; Planning Consultants</b>	May 2000 – November 2002
Grand Prairie, TX	
<b>County Transportation Planner</b>	March 1999 – May 2000
Dallas County, TX	
<b>Michael H Schrader, PE, Civil – Traffic Engineer</b>	March 1998 – March 1999
Little Rock, AR	
<b>Transportation Engineer</b>	March 1996 – March 1998
Metroplan, Little Rock, AR	
<b>Traffic Operations Engineer</b>	November 1994 – March 1996
Little Rock, Arkansas	

## Civil Engineer

MHS Engineering, Inc., Farmington, MO

May 1993 – November 1994

## Traffic Operations Engineer (Special Projects)

Springfield, IL

May 1990 – May 1993

## Structural Engineer

McDonnell Douglas Corporation, Saint Louis, MO

January 1988 – January 1989

## Instructor

University of Missouri (1987); University of Tennessee (1989 – 1990); Wayne State University (2015, 2016- 2018); Minnesota State University (2018 – 2019); Gateway Technical College (2019 – 2021); University of Wisconsin - Milwaukee (2021)

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## STUDIES AND PUBLICATIONS:

1. Schrader, M.H. (1986) An in-depth analysis of Sixth Street between Elm Street and Conley Avenue (And other adjacent streets). University of Missouri Columbia.
2. Schrader, M.H. (1987) How to improve traffic flow on West Broadway without widening it. University of Missouri Columbia.
3. Schrader, M.H. (1989) Politics and Planning: Coexistence or Conflict? A report on the effects of politics on the planning process. University of Tennessee.
4. Schrader, M.H. (1990) The Effect of Turn Signal Usage on Delay at Three-Legged Intersections
5. (Unabridged). (Master's Thesis) University of Tennessee.
6. Schrader, M.H. (1992) Route 66: the evolution of the American road. Sangamon State University.
7. Schrader, M.H. (1998) The effect of turn signal usage on delay at three legged intersections. *In the proceedings of the 77th Annual Meeting of the Transportation Research Board*, Washington, DC.
8. Schrader, M.H. (1999) Study of the effectiveness of selected school zone traffic control devices. *Transportation Research Record: Journal of the Transportation Research Board*, 1692 (1), 24-29.
9. Schrader, M.H. (2001) A holistic approach for evaluating proposed traffic operational changes. Total Transportation System Solutions.
10. Schrader, M.H., & Hoffpauer, J.R. (2001). Methodology for evaluating highway-railway grade separations. *Transportation Research Record: Journal of the Transportation Research Board*, 1754(1), 77-80.
11. Schrader, M.H. (2002) A holistic approach to thoroughfare system improvements. *In the proceedings of the 81st Annual Meeting of the Transportation Research Board*, Washington, DC.
12. Schrader, M.H. (2002) A Q&D method for evaluating roadway performance. Total Transportation System Solutions.
13. Schrader, M.H., & Bjorkman, D.J. (2006) Methodology for prioritizing signal structure assembly replacement. *In the proceedings of the 85th Annual Meeting of the Transportation Research Board*, Washington, DC.
14. Schrader, M.H., & Schrader, J.N. (2007) "Are Current Traffic Signal Head Placement Design Standards Adequate?" *In the proceedings of the 2007 Oklahoma State Science & Engineering Fair*, Ada, OK, and *In the proceedings of the 2014 Spring Meeting of the Great Lakes Section of the Institute of Transportation Engineers*, Indianapolis, IN.
15. Schrader, M.H. (2007) Temporal and spatial variations in trip generation and parking characteristics at a small urban college. In the proceedings of the Missouri Valley Section of

- the Institute of Transportation Engineers, St. Louis, MO.
16. Schrader, M.H., & Schrader, G.M. (2007) Solvents' effective use on traffic sign graffiti. In the proceedings of the Bartlesville Regional Science & Engineering Fair, Bartlesville, OK.
  17. Schrader, M.H. (2007) Expert Witness Do's and Don'ts: A Hopefully Helpful and Handy Guide. *In the proceedings of the November 2007 meeting of the Tulsa Section of the Oklahoma Society of Professional Engineers*, Tulsa, OK.
  18. Schrader, M.H. (2008) A Tiger of an event: hosting a major PGA tournament. *In the proceedings of the Midwestern District of the Institute of Transportation Engineers*, Chicago, IL.
  19. Schrader, M.H. (2013) Is Poisson always valid? Wayne State University.
  20. Schrader, M.H, Schrader, J.N., & Hummer, J.E. (2013) The effect of weather on retroreflectivity. Wayne State University.
  21. Schrader, M.H. (2014) At the Core - How maximizing communication of the fastest billion dollar public highway project helped overcome the largest scandal in UDOT history. Wayne State University.
  22. Schrader, M.H. (2014) Spatial analysis of signalized intersections sampled for possible removal in the City of Detroit. Wayne State University.
  23. Schrader, M.H. (2014) Evaluating crisis communication using a methodical holistic sampling (MHS) prominence evaluation (PE) index. Wayne State University.
  24. Schrader, M.H. (2014) Detroit: The environmental influence of the French on an American city. Wayne State University.
  25. Schrader, M.H., & Schrader, J.N. (2015) A quantitative method for evaluating crisis communication. *In the proceedings of the 6th Annual Midwest Graduate Research Symposium*, Toledo, OH.
  26. Schrader, M.H., & Hummer, J.E. (2015) An estimate of potential savings from removing traffic signals in a depopulating urban area. *Public Works Management & Policy*, doi:10.1177/1087724X15579915
  27. Schrader, M.H., & Hummer, J.E. (2016) Changing traffic patterns: when signals become obsolete. *In the proceedings of the 21st Annual Michigan Traffic Safety Summit*, East Lansing, MI.
  28. Hummer, J.E., Reese, M.P., Dunlop, J.H., Harden, B.M., & Schrader, M.H. (2017) Quasicouplet: preserving mobility while freeing urban street space. *In the proceedings of the 5th Urban Street Symposium*, Raleigh, NC.
  29. Schrader, M.H. (2019) Method for analyzing alternative geometries at unsignalized intersections. *In the proceedings of the 2019 Annual Meeting of the Institute of Transportation Engineers*, Austin, TX.
  30. Prottoy, P., & Schrader, M.H. (2019) Comparing roundabout performance with signalization. *In the proceedings of the 2019 MWITE/MOVITE Conference*, St. Louis, MO.
  31. Schottroff, L.K., Franko, B., Rasmussen, J., & Schrader, M.H. (2019). Effects of weather on sign retroreflectivity. *In the proceedings of the 2019 MWITE/MOVITE Conference*, St. Louis, MO.

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## SYNERGISTIC ACTIVITIES

Member, Committee on Transportation Law, Transportation Research Board	2002-2018
Member, Chi Epsilon (Civil Engineering Honor Society)	inducted 1986
Member, Institute of Transportation Engineers	1989 - present