

## Nikifiros Stamatiadis, Ph.D., P.E.

### Professional Preparation

Institution and Location	Degree	Year	Field of Study
Aristotle University of Thessaloniki, Greece	B. Sc.	1983	Surveying Engineering
Michigan State University, E. Lansing, MI	M. Sc.	1985	Transportation Engineering
Michigan State University, E. Lansing, MI	Ph.D.	1990	Transportation Engineering

### Appointments

Professor, University of Kentucky, Lexington, KY: 2002 – present  
Associate Professor, University of Kentucky, Lexington, KY: 1996-2002  
Assistant Professor, University of Kentucky, Lexington, KY: 1990-1996  
Teaching Assistant, Michigan State University, E. Lansing, MI: 1989 – 1990  
Graduate Research Assistant, Michigan State University, E. Lansing, MI: 1984 – 1989

### Areas of Research Specialization

Highway geometric design; Traffic safety; Driver behavior; Elderly and young drivers; Traffic simulation; and Non-motorized transportation (pedestrians and bicyclists)

### Recent Publications

1. Amiridis, K.\*, Stamatiadis, N., and Kirk, A. 2018 "Safety-Based Decisions for Left-Turn Phasing," *Advances in Transportation Sciences*, 2018 Special Issue, Vol. 1, pp. 1-12.
2. Stamatiadis, N., Psarianos, B, Apostoleris, K. and Taliouras, P.\* 2018 "The Need for Nighttime Design Consistency Evaluation: An Exploratory Study," *Advances in Transportation Studies*, Vol. 46, pp. 57-66.
3. Stamatiadis, N., Cafiso, D. and Pappalardo, G. 2017 "Use of Technology to Improve Bicycle Mobility in Smart Cities," accepted for publication *Procedia*
4. Stamatiadis, N. and Kirk, A. 2017 "Overcoming Practical Design Implementation Issues," accepted for publication to the *Advances in Transportation Studies*.
5. Amiridis, K.\*, Stamatiadis, N., and Kirk, A. 2017 "Safety Based Signalized Intersection Left-Turn Phasing Decisions," *Journal of the Transportation Research Board*, 2619, pp.13-19.
6. Stamatiadis, N., Kirk, A., Jasper, J. and Wright, S. 2017 "A Functional Classification System to Aid Contextual Design," *Journal of the Transportation Research Board*, 2638, pp. 18-25.
7. Stamatiadis, N., Kirk, A., King, M., and Chellman, R. 2017 "Development of a Multitmodal Context Sensitive Functional Classification System," submitted for publication to the *ITE Journal*.
8. Stamatiadis, N., Sallee, T.\* and Kirk, A. 2016 "Left turn guidance based on crossing conflict analysis," *Advances in Transportation Studies*, Vol. 2, pp. 17-26.
9. Stamatiadis, N. 2016 "Effects of Passengers on Older Driver Safety," *Journal of Ergonomics*, Vol. 6.1, 1000151.
10. Wang, C.\* and Stamatiadis, N. 2016 "Sensitivity Analysis of New-Simulation Based Conflict Metrics," Vol. 82, *Safety Science*, pp. 399-409.
11. Mavromatis, S., Stamatiadis, N., Psarianos, B., and Yiannis, G. 2015 "Controlling Crest Vertical Curvature Rates Based On Variable Grade Stopping Sight Distance Calculation," *Journal of the Transportation Research Board*, 2521, pp. 30-43.
12. Stamatiadis, N. and Psarianos, B. 2015 "Impacts of Design Exceptions on Highway Safety," accepted for publication to the *International Journal of Transportation*.
13. Stamatiadis, N., Hedges, A.\*, and Kirk, A. 2015 "A Simulation-Based Approach in Determining Permitted Left-Turn Capacities," *Transportation Research, Part C*, Vol 55, pp. 486-495.
14. Mavromatis, S., Stamatiadis, N., Psarianos, B., and Yiannis, G. 2015 "Controlling Crest Vertical Curvature Rates Based On Variable Grade Stopping Sight Distance Calculation," *Journal of the Transportation Research Board*, 2521, pp. 30-43.
15. Stamatiadis, N., Sturgill, R., and Goodrum, P. 2014 "Quantification of the Benefits from Constructability Reviews," submitted for publication to the *ASCE Journal of Construction Engineering and Management*.
16. Stamatiadis, N. and Kirk, A. 2014 "Simulation-Based Guidelines for Road Diets," Vol. 2, *Advances in Transportation Studies International Journal*, pp. 5-16.
17. Wang, C.\* and Stamatiadis, N. 2014 "Evaluations of Simulation-based Surrogate Safety Measure,"

Vol. 71, *Accident Analysis and Prevention*, pp. 82-92.

18. Wang, C.\* and Stamatiadis, N. 2014 "The Derivation of a New Surrogate Measure of Crash Severity," *Journal of the Transportation Research Board*, 2432, pp.37-45.
19. Stamatiadis, N., Goodrum, P., Shocklee, E., and Wang, C. 2013 "A Quantitative Analysis of a State Transportation Agency's Experience with Constructability Reviews," *ASCE Journal of Construction Engineering and Management*, Vol. 140, No. 2, 04013041.
20. Wang, C.\* and Stamatiadis, N. 2013 "Surrogate Safety Measure for Simulation-Based Conflict Study," *Journal of the Transportation Research Board*, Record 2386, pp. 72-80.
21. Cafiso, S., DiGraziano, A., and Stamatiadis, N. 2013 "Context Sensitive Approach for Network Selections of Infrastructure Transportation Projects," *Journal of the Transportation Research Board*, Record 2358, pp 59-68.
22. Stamatiadis, N., Kirk, A.\* and Agarwal, N.\* 2012 "Intersection Design Tool for Alternative Evaluation," *Procedia – Social and Behavioral Sciences*, Vol. 53, pp. 601-610.
23. Transportation Projects," *Journal of the Transportation Research Board*, Record 2358, pp 59-68.
24. Psarianos, B. and Stamatiadis, N. 2012 "Speed Management in Rural Roads in Greece," *Journal of Civil Engineering and Architecture*, Vol. 6, No. 9, pp. 1083-1092.
25. Stamatiadis, N. and Hartman, D. 2011 "Context Sensitive Solutions vs. Practical Solutions: What Are the Differences?" *Journal of the Transportation Research Board*, Record 2262, pp 173-180.
26. Kirk, A.\* , Jones, C.\* , and Stamatiadis, N. 2011 "Improving Intersection Design Practices," *Journal of the Transportation Research Board*, Record 2223, pp 1-8.
27. Stamatiadis, N., Kirk, A., Hartman, D., and Pigman, J. 2009 "Quantifying the benefits of Context Sensitive Solutions," NCHRP 642, Transportation Research Board, Washington, DC.
28. Kirk, A.\* , Jones, C.\* , and Stamatiadis, N. 2011 "Improving Intersection Design Practices," *Journal of the Transportation Research Board*, Record 2223, pp 1-8.
29. Stamatiadis, N., Pigman, J., Lord, D., Sacksteder, J., and Ruff, W. 2011 "Safety Impacts from Design Elements Tradeoffs," *ASCE Transportation Journal*, Vol. 133, No. 5, pp. 333-340.

#### **Recent Research Awards**

1. Stamatiadis, N., Segura, C., and Green, E. "Improving Bicycle Infrastructure Using SPIN Bike-Share Data," University of Kentucky Sustainability Office, 2018. \$40,000 (in progress)
2. Stamatiadis, N. "Evaluation of Socioeconomic Factors in Kentucky Crashes," *Federal Highway Administration and Kentucky Transportation Cabinet*, 2018. \$50,000 (in progress)
3. Stamatiadis, N. "NCHRP Synthesis 50-11 Alternative Intersection Design and Selection," National Cooperative Highway Research Program, *Transportation Research Board*, 2018. \$45,000 (under review)
4. Stamatiadis, N. and Green, E. "Synthesis on the Contributing Factors and Effective Countermeasures for Low Volume Roadway fatality Rates in the Southeast," *Louisiana Transportation Research Center*, 2018. \$39,997 (under review)
5. Stamatiadis, N. and Nambisan, S. "Identifying Policy Approaches for Extending the Safe Mobility of Older Adults," *AAA Foundation for Traffic Safety*, 2018. \$256,259 (under review)
6. Stamatiadis, N. and Kirk, A. "NCHRP 15-52A, Facilitating Implementation of the Context-Sensitive Functional Classification System for More Flexibility in Geometric Design," National Cooperative Highway Research Program, *Transportation Research Board*, 2016. \$50,000
7. Stamatiadis, N. and Kirk, A. "Impacts of Design Exceptions on Highway Safety," *Federal Highway Administration and Ohio Department of Transportation*, 2017. \$135,000 (in contract negotiations)
8. Kirk, A. and Stamatiadis, N. "Access Management Light," *Federal Highway Administration and Kentucky Transportation Cabinet*, 2015. \$90,000
9. Green, E., Stamatiadis, N., and Souleyrette, R. "Integrating Roadway Data with Crash Data while Optimizing Segmentation for Safety and Planning," *Federal Highway Administration and Kentucky Transportation Cabinet*, 2015. \$180,000
10. Green, E., Pigman, J., Stamatiadis, N., and Souleyrette, R. "Evaluation and Implementation of Highway Safety Manual Methodologies," *Federal Highway Administration and Kentucky Transportation Cabinet*, 2015. \$200,000 (in progress)
11. Stamatiadis, N. and Kirk, A. "NCHRP 15-52, Developing a Context-Sensitive Functional Classification System for More Flexibility in Highway Design," National Cooperative Research Program, *Transportation Research Board*, 2014. \$250,000

12. Stamatiadis, N. "Development of Safety Course Material," U.S. Department of Transportation and Southeastern Transportation Center 2014. \$80,000
13. Green, E. and Stamatiadis, N. "Crash Analysis Workshop," *Federal Highway Administration and Kentucky Transportation Cabinet*, 2014. \$35,000
14. Stamatiadis, N. "Integrated Simulation and Safety: Intersection Safety," *U.S. Department of Transportation and Southeastern Transportation Center*, 2014. \$246,000
15. Stamatiadis, N. and Kirk, A. "Geometric Design Training-Part II," *Federal Highway Administration and Kentucky Transportation Cabinet*, 2013. \$120,000
16. Kirk, A. and Stamatiadis, N. "Left-Turn Guidelines for Signalized Intersections," *Federal Highway Administration and Kentucky Transportation Cabinet*, 2013. \$130,000
17. Stamatiadis, N. and Kirk, A. "Transition Zone Design," *Federal Highway Administration and Kentucky Transportation Cabinet*, 2012. \$130,000

### **Awards and Honors**

1. Best Technical Paper Award, Transportation Research Board AFB10 Geometric Design Committee, 2017.
2. Greek Diaspora Fellow, National Technical University of Athens, Athens, Greece, AY 17-18.
3. Fulbright Fellow, University of Catania, Catania, Italy, AY 16-17.
4. University of Kentucky, Raymond-Blythe Professor of Civil Engineering, 2003-present.
5. University of Kentucky, Great Teacher Award 2002.
6. James M. Robbins Excellence in Teaching Award, Cumberland District, Chi Epsilon, 1999.
7. Best Technical Paper Award, Sponsored, Southern District of Institute of Transportation Engineers, 1999, 1998, and 1997.

### **Summary of Accomplishments**

1. *Research*: A total of 85 graduate students and 12 undergraduate students have participated over my tenure at UK in my research program. Through contributing to this research, students gain a diverse education in Transportation Engineering, including traffic safety, highway design, traffic simulation and modeling, human factors, and traffic operations. During the various research projects, students become familiar with various types of research approach, data collection and analysis, and synthesis of findings. In addition to funding from state and regional agencies, I have received five NCHRP awards dealing with safety issues of highway design (2001 and 2004), a third dealing with performance measuring of Context Sensitive Solutions projects (2006), a fourth dealing with design exceptions in urban areas (2008) and a fifth dealing with restructuring of the functional classification system (2014). The dissemination of my research includes 68 papers in peer-reviewed journals, 75 conference papers, 64 technical reports, more than 200 conference presentations in national and international conferences, and more than 60 invited lectures and presentations. Over the last 16 years, I have been involved in the area of Context Sensitive Solutions that resulted in national and international prominence being considered one of the pioneers in this area.
2. *Teaching*: Obtained UK Great Teacher Award in 2002 and the Robbins Teaching Award for the Cumberland District from Chi Epsilon in 1999. Taught "Transportation Engineering", "Airport Design", "Transportation Systems Design", "Traffic Characteristics", "Geometric Design of Roadways", and "Issues on Highway Safety". Have also taught long distance courses through web delivery and conducted workshops and webinars for professionals as part of continuous education efforts.
3. *Professional Services*: Chair of TRB AFB05T Context Sensitive Solutions Task Force (2009-2015) Faculty Advisor for ITE and EWB Student Chapter; Member of professional organizations such as TRB; ASCE; ITE and PE.