



**Eric Green**, PE, GISP, PhD Candidate  
Research Engineer  
Traffic Operations and Safety Section  
Kentucky Transportation Center  
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## **Profile**

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Mr. Green has been working for the Kentucky Transportation Center since 1998. He is currently a research engineer in the Traffic Operations and Safety section. His focuses are in safety analysis and asset management. Mr. Green has conducted research in areas such as identification of high crash locations, secondary crashes, distracted driving, intersection crash rates and pavement marking performance. Mr. Green has also been involved in the development and maintenance of several software packages used by the Kentucky Transportation Cabinet and other agencies. He has developed software for GPS-based data collection, asset management, crash analysis, mapping and database integration. Mr. Green is involved in a sign retro-reflectivity training course given to the transportation cabinet and local Kentucky governments. Mr. Green also teaches an engineering course on civil engineering applications using GIS. He is involved with Kentucky's traffic records improvement group known as KTRAC. He works closely with Kentucky's Highway Safety Improvement Program team in an effort to implement the Highway Safety Manual in Kentucky's safety prioritization.

Mr. Green has also been working closely with his direct supervisor to learn more about the Program Manager duties. He helps with the development of Traffic and Safety's budget and has created a spreadsheet to help with time and money allocation in the section. He is PI on several projects each year and often delegates responsibility to younger research engineers/scientist. This, along with the management of our student workers, has allowed Mr. Green to develop supervisory skills – freeing up Mr. Pigman for other tasks. He has become very familiar with funding sources KTC has been very successful in procuring. These funding sources have allowed Traffic and Safety to grow – particularly in advancing the Center's knowledge in highway safety. More recently, Mr. Green has become more involved in KTC's IT needs. He has participated in IT-related discussions and has helped make decisions that have already shown great promise in advancing KTC's IT.

## **Areas of Expertise**

- Highway Safety
- Manual on Uniform Traffic Control Devices
- Asset Management
- Crash Analysis
- Spatial Analysis

## **Education**

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Master of Science, Civil Engineering, University of Kentucky, 2002  
Bachelor of Science, Civil Engineering, University of Kentucky, 2000  
PhD Candidate in Civil Engineering, University of Kentucky (expected 2017)

## **Professional Experience**

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2002-Present Research Engineer, Traffic Operations and Safety  
Kentucky Transportation Center, University of Kentucky

1998-2002 Research Assistant, Traffic Operations and Safety  
Kentucky Transportation Center, University of Kentucky

## **Professional Registration, Memberships, and Technical Committees**

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Professional Engineer (KY, No. 23983)

Certified Geographic Information Systems (GIS) Professional (GISP) (No. 22980)

Southern District Institute of Transportation Engineers, Chair  
Committee "Technical Knowledge"

Kentucky's Governor's Highway Safety Program, Member  
Committee "Traffic Records Advisory Committee"  
Co-Chair, 2011-2012

Transportation Research Board  
Member, GIS Committee, ABJ60  
Member, Law Enforcement Committee, ANB40  
Friend, Highway Safety Management Subcommittee, ANB10(1)

GIS-T Planning Committee  
Member since 2011  
Program Chair 2016-Present

## **Teaching Experience**

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CE525 GIS Applications in Civil Engineering, University of Kentucky, Taught annually since Spring 2012

Police Training Workshop – A workshop that explains issues related to crash data improvements to police officers. Taught 3 times since 2012

Kentucky Retro Training, Training course for government employees explaining how to properly maintain sign retro-reflectivity using several methods approved by the MUTCD. Taught 6 times since 2011

Cabinet NTVI Training – Training course for cabinet employees explaining how to properly conduct a nighttime visual sign inspection. Taught 6 times since 2011.

Crash Workshop, A training course to teach users how to access and analyze crash data. Taught 1 time in 2013 and 4 more planned in 2014.

## **Publications**

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1. E.R. Green, K.R. Agent. "Evaluation of the Locations of Kentucky's Traffic Crash Data", Roadway Safety and Simulation Conference, Indianapolis, IN; Transportation Research Board: Washington, DC, 2011
2. E.R. Green, J.G. Pigman, J.R. Walton, S. McCormack. "Identification of Secondary Crashes and Recommended Countermeasures", 91st Annual TRB, Washington, DC; Transportation Research Board: Washington, DC, 2012
3. E.R. Green, J.R. Ripy, X. Xu, M. Chen. "Conflation Methodologies to Incorporate Consumer Travel Data into State HPMS Data Sets", 92nd Annual TRB, Washington, DC; Transportation Research Board: Washington, DC, 2013
4. D.W. Harwood, R.R. Souleyrette, E.R. Green, M.A. Fields. "Comparison of Countermeasure Selection Methods for Use in Road Safety Management", 93rd Annual TRB, Washington, DC; Transportation Research Board: Washington, DC, 2014
5. E. C. Davis, E.R. Green, N. Stamatiadis, G. A. Winchester, R. R. Souleyrette, J.G.

Pigman. "Highway Safety Manual Methodologies and Benefit-Cost Analysis In Program-Level Segment Selection And Prioritization", Roadway Safety and Simulation Conference, Orlando, FL; University of Central Florida & the University of Tennessee, 2015

6. E.R. Green, M.A. Fields. "A Methodology to Prioritize the Locations of Cable Barrier Installations in Kentucky", Roadway Safety and Simulation Conference, Orlando, FL; University of Central Florida & the University of Tennessee, 2015
7. E.R. Green, C. Blackden, M.A. Fields. "Spatial Database For Intersections", 95th Annual TRB, Washington, DC; Transportation Research Board: Washington, DC, 2016

## **Research Reports**

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8. K.R. Agent, E.R. Green. "2001 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-01-21 / KSP1-01-2F. University of Kentucky, Lexington, KY. 2001
9. K.R. Agent, E.R. Green. "Evaluation of Kentucky's Click It or Ticket Campaign" Kentucky Transportation Center Report KTC-01-18 / KSP 1-01-1I. University of Kentucky, Lexington, KY. 2001
10. K.R. Agent, E.R. Green, R.E. Langley. "Evaluation of Kentucky's You Drink and Drive. You Lose Campaign" Kentucky Transportation Center Report KTC-02-28 / KSP1-02-2F. University of Kentucky, Lexington, KY. 2002
11. K.R. Agent, J.G. Pigman, M.L. Barrett, E.R. Green. "Analysis of Traffic Crash Data in Kentucky (1997-2001)" Kentucky Transportation Center Report KTC-02-22 / KSP2-01-1F. University of Kentucky, Lexington, KY. 2002
12. E.R. Green, K.R. Agent. "Evaluation of High Traffic Crash Corridors" Kentucky Transportation Center Report KTC-02-08 / SPR 231-01-1F. University of Kentucky, Lexington, KY. 2002
13. K.R. Agent, E.R. Green. "2002 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-02-20 / KSP1-02-1F. University of Kentucky, Lexington, KY. 2002
14. K.R. Agent, E.R. Green. "2003 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-03-23 / KSP1-03-1F. University of Kentucky, Lexington, KY. 2003
15. E.R. Green, K.R. Agent, M.L. Barrett, J.G. Pigman. "Roadway Lighting And Driver Safety" Kentucky Transportation Center Report KTC-03-12 / SPR 247-02-1F. University of Kentucky, Lexington, KY. 2003
16. E.R. Green, K.R. Agent. "Crash Rates At Intersection" Kentucky Transportation Center Report KTC-03-21 / SPR 258-03-2I. University of Kentucky, Lexington, KY. 2003
17. K.R. Agent, E.R. Green, R.E. Langley. "Evaluation of Kentucky's Buckle Up Kentucky: It's the Law & It's Enforced Campaign" Kentucky Transportation Center Report KTC-03-26 / KSP1-03-1I. University of Kentucky, Lexington, KY. 2003
18. K.R. Agent, J.G. Pigman, M.L. Barrett, E.R. Green. "Analysis of Traffic Crash Data in Kentucky (1998 - 2002)" Kentucky Transportation Center Report KTC-03-28 / KSP2-02-1F. University of Kentucky, Lexington, KY. 2003
19. K.R. Agent, L. O'Connell, E.R. Green, D. Kreis, J.G. Pigman, N. Tollner, E. Thompson. "Development Of Procedures For Identifying High-crash Locations And Prioritizing Safety Improvements" Kentucky Transportation Center Report KTC-03-15 / SPR 250-02-1F. University of Kentucky, Lexington, KY. 2003
20. K.R. Agent, J.G. Pigman, E.R. Green. "Effect of Pavement Resurfacing on Traffic Safety" Kentucky Transportation Center Report KTC-04-02 / SPR 257-03-1F. University of Kentucky, Lexington, KY. 2004

21. K.R. Agent, E.R. Green. "2004 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-04-19 / KSP1-04-1F. University of Kentucky, Lexington, KY. 2004
22. K.R. Agent, E.R. Green. "Evaluation of Kentucky's Buckle Up Kentucky: It's the Law and It's Enforced 2004 Campaign" Kentucky Transportation Center Report KTC-04-18 / KSP1-04-1F. University of Kentucky, Lexington, KY. 2004
23. E.R. Green, K.R. Agent. "Evaluation of the Accuracy of GPS as a Method of Locating Traffic Collisions" Kentucky Transportation Center Report KTC-04-08 / SPR 276-04-1F. University of Kentucky, Lexington, KY. 2004
24. K.R. Agent, E.R. Green. "2005 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-05-22 KSP1-05-2F. University of Kentucky, Lexington, KY. 2005
25. E.R. Green, K.R. Agent, J.G. Pigman. "Analysis of Traffic Crash Data in Kentucky (2000 - 2004)" Kentucky Transportation Center Report KTC-05-19 KSP2-05-1F. University of Kentucky, Lexington, KY. 2005
26. K.R. Agent, E.R. Green. "Evaluation of Kentucky's Buckle Up Kentucky: It's the Law & and It's Enforced"" Kentucky Transportation Center Report KTC-05-18 KSP1-05-1I. University of Kentucky, Lexington, KY. 2005
27. E.R. Green, K.R. Agent, J.G. Pigman. "Evaluation of Auto Incident Recording System (AIRS)" Kentucky Transportation Center Report KTC-05-09 SPR 277-03-1F. University of Kentucky, Lexington, KY. 2005
28. J.G. Pigman, K.R. Agent, E.R. Green. "Evaluation of Work Zone Safety Operations and Issues" Kentucky Transportation Center Report KTC-06-08 SPR 287-05-1F. University of Kentucky, Lexington, KY. 2006
29. K.R. Agent, E.R. Green, R.E. Langley. "Evaluation of Kentucky's Buckle Up Kentucky: It's the Law & and It's Enforced 2006 Campaign" Kentucky Transportation Center Report KTC-06-17 KSP1-06-1I. University of Kentucky, Lexington, KY. 2006
30. E.R. Green. "Development of a Traffic Sign Inventory System (Sign Click)" Kentucky Transportation Center Report KTC-06-18 SPR 318-06-1F. University of Kentucky, Lexington, KY. 2006
31. K.R. Agent, E.R. Green. "2006 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-06-27 KSP1-06-1I. University of Kentucky, Lexington, KY. 2006
32. K.R. Agent, E.R. Green. "Analysis of Traffic Crash Data in Kentucky (2001 - 2005)" Kentucky Transportation Center Report KTC-06-29 KSP2-06-1F. University of Kentucky, Lexington, KY. 2006
33. K.R. Agent, E.R. Green, R.E. Langley. "Evaluation of Kentucky's Buckle Up Kentucky: It's The Law & It's Enforced 2007 Campaign" Kentucky Transportation Center Report KTC-07-23/KSP1-07-1I. University of Kentucky, Lexington, KY. 2007
34. K.R. Agent, E.R. Green. "2007 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-07-24/KSP1-06-2F. University of Kentucky, Lexington, KY. 2007
35. E.R. Green, K.R. Agent, J.G. Pigman. "Analysis of Traffic Crash Data in Kentucky (2002 - 2006)" Kentucky Transportation Center Report KTC-07-26/KSP2-07-1F. University of Kentucky, Lexington, KY. 2007
36. N. Dunaway, E.R. Green, J.G. Pigman, M.L. Barrett. "Use of Reflective Armbands to Improve Adolescent Pedestrian and Pedalcyclist Safety" Kentucky Transportation Center Report KTC-07-15/PL11-06-1F. University of Kentucky, Lexington, KY. 2007
37. K.R. Agent, E.R. Green. "Crash History after Installation of Traffic Signals (Warranted vs. Unwarranted)" Kentucky Transportation Center Report KTC-08-01/SPR 328-07-1I. University of Kentucky, Lexington, KY. 2008

38. K.R. Agent, E.R. Green. "Use of Edge Line Markings on Rural Two-Lane Highways" Kentucky Transportation Center Report KTC-08-02/SPR 330-07-1I. University of Kentucky, Lexington, KY. 2008
39. E.R. Green, K.R. Agent. "Evaluation of Pavement Marking Performance" Kentucky Transportation Center Report KTC-08-21/SPR 330-07-2I. University of Kentucky, Lexington, KY. 2008
40. E.R. Green, K.R. Agent. "Evaluation of Kentucky's 'Click It or Ticket' 2008 Campaign" Kentucky Transportation Center Report KTC-08-22/KSP1-08-1I. University of Kentucky, Lexington, KY. 2008
41. E.R. Green, K.R. Agent. "2008 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-08-26/KSP1-08-2F. University of Kentucky, Lexington, KY. 2008
42. E.R. Green, K.R. Agent, J.G. Pigman. "Analysis of Traffic Crash Data in Kentucky (2003 - 2007)" Kentucky Transportation Center Report KTC-08-29/KSP2-08-1F. University of Kentucky, Lexington, KY. 2008
43. C. Sun; T. Beckham; T. Hopkins; J.G. Pigman; E.R. Green; K.R. Agent. "Guardrail Location Rating System Users' Manual" Kentucky Transportation Center Report KTC-09-17/SPR-358-08-1F. University of Kentucky, Lexington, KY. 2009
44. E.R. Green. "Evaluation Plan for the Ticketing Aggressive Cars and Trucks (TACT) Program in Kentucky" Kentucky Transportation Center Report KTC-09-03/KSP1-09-1F. University of Kentucky, Lexington, KY. 2009
45. K.R. Agent, E.R. Green. "Evaluation of the Use of Snowplowable Raised Pavement Markers" Kentucky Transportation Center Report KTC-09-09/SPR330-07-3I. University of Kentucky, Lexington, KY. 2009
46. K.R. Agent, E.R. Green. "2009 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-09-15/KSP1-09-1F. University of Kentucky, Lexington, KY. 2009
47. E.R. Green, K.R. Agent, J.G. Pigman. "Analysis of Traffic Crash Data in Kentucky (2004 - 2008)" Kentucky Transportation Center Report KTC-09-16/KSP2-09-1F. University of Kentucky, Lexington, KY. 2009
48. E.R. Green, K.R. Agent. "2010 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC\_10\_12\_KSP1\_10\_1F. University of Kentucky, Lexington, KY. 2010
49. K.R. Agent, E.R. Green, R.E. Langley. "2010 Driver Attitudes and Awareness Survey" Kentucky Transportation Center Report KTC\_10\_15\_KSP4\_10\_1F. University of Kentucky, Lexington, KY. 2010
50. E.R. Green, K.R. Agent, J.G. Pigman. "Analysis of Traffic Crash Data in Kentucky (2005 - 2009)" Kentucky Transportation Center Report KTC\_10\_14\_KSP2\_10\_1F. University of Kentucky, Lexington, KY. 2010
51. E.R. Green. "Evaluation Plan for the Ticketing Aggressive Cars and Trucks (TACT) Program in Kentucky" Kentucky Transportation Center Report KTC\_10\_02\_KSP1\_10\_1F. University of Kentucky, Lexington, KY. 2010
52. E. R. Green, K.R. Agent. "Evaluation of the Locations of Kentucky's Traffic Crash Data" Kentucky Transportation Center Report KTC-10-16/KSP3-10-1F. University of Kentucky, Lexington, KY. 2010
53. J.G. Pigman, K.R. Agent, E.R. Green. "DISTRACTED DRIVING - Preliminary Analysis and Survey" Kentucky Transportation Center Report KTC-10-06/SPR-56-10-1F. University of Kentucky, Lexington, KY. 2010
54. E.R. Green, K.R. Agent, J.G. Pigman. "Kennedy Interchange Crash Study" Kentucky Transportation Center Report KTC-10-17/FR181-10-1F. University of Kentucky, Lexington, KY. 2010

55. K.R. Agent, E.R. Green. "2011 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-11-13/KSP1-11-1F. University of Kentucky, Lexington, KY. 2011
56. E.R. Green, K.R. Agent, J.G. Pigman. "Analysis of Traffic Crash Data in Kentucky (2006 - 2010)" Kentucky Transportation Center Report KTC-11-15/KSP2-11-1F. University of Kentucky, Lexington, KY. 2011
57. E.R. Green, J.G. Pigman, J.R. Walton, S. McCormack. "Identification of Secondary Crashes and Recommended Countermeasures" Kentucky Transportation Center Report KTC-11-06/SPR-10-402. University of Kentucky, Lexington, KY. 2011
58. M.A. Fields, E.R. Green, K.R. Agent. "Pavement Markings" Kentucky Transportation Center Report KTC-11-22 SPR 330-07-2I. University of Kentucky, Lexington, KY. 2011
59. E.R. Green, K.R. Agent, J.G. Pigman. "Analysis of Traffic Crash Data in Kentucky (2007 - 2011)" Kentucky Transportation Center Report KTC-12-13/KSP2-11-1F. University of Kentucky, Lexington, KY. 2012
60. E.R. Green, K.R. Agent. "2012 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-12-10/KSP1-11-1F. University of Kentucky, Lexington, KY. 2012
61. K.R. Agent, E.R. Green, R.E. Langley. "2012 Driver Attitudes and Awareness Survey" Kentucky Transportation Center Report KTC-12-12/KSP4-11-1F. University of Kentucky, Lexington, KY. 2012
62. E.R. Green, K.R. Agent. "Kentucky Safety Belt Methodology" Kentucky Transportation Center Report KTC-12-11/KSP1-11-2F. University of Kentucky, Lexington, KY. 2012
63. E.R. Green, K.R. Agent, J.G. Pigman. "Analysis of Traffic Crash Data in Kentucky (2008 - 2012)" Kentucky Transportation Center Report KTC-13-13/KSP2-11-1F. University of Kentucky, Lexington, KY. 2013
64. K.R. Agent, E.R. Green, R.E. Langley. "2013 Driver Attitudes and Awareness Survey" Kentucky Transportation Center Report KTC-13-12/KSP4-12-1F. University of Kentucky, Lexington, KY. 2013
65. E.R. Green, K.R. Agent. "2013 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-13-08/KSP1-12-1F. University of Kentucky, Lexington, KY. 2013
66. L.O'Connell, E.R. Green, R.R. Souleyrette. "Assessment Program for Kentucky Traffic Records" Kentucky Transportation Center Report KTC-15-02/OHS-14-1F. University of Kentucky, Lexington, KY. 2015
67. E.R. Green, K.R. Agent, J.G. Pigman, M.A. Fields. "Analysis of Traffic Crash Data in Kentucky (2009 - 2013)" Kentucky Transportation Center Report KTC-14-07/KSP2-13-1F. University of Kentucky, Lexington, KY. 2014
68. E.R. Green, K.R. Agent, M.A. Fields. "2014 Safety Belt Usage Survey in Kentucky" Kentucky Transportation Center Report KTC-14-06/KSP1-12-1F. University of Kentucky, Lexington, KY. 2014
69. O'Connell, Lenahan; Green, Eric R.; and Souleyrette, Reginald R., "Assessment Program for Kentucky Traffic Records" (2015). Kentucky Transportation Center Research Report. 1485.
70. Agent, Kenneth R.; Green, Eric R.; and Fields, Michael A., "2015 Safety Belt Usage Survey in Kentucky" (2015). Kentucky Transportation Center Research Report. 1551.
71. Green, Eric R.; Blackden, Christopher L.; and Fields, Michael A., "Spatial Database For Intersections" (2015). Kentucky Transportation Center Research Report. 1490.
72. Green, Eric R.; Agent, Kenneth R.; Pigman, Jerry G.; and Fields, Michael A., "Analysis of Traffic Crash Data in Kentucky (2010-2014)" (2015). Kentucky Transportation Center Research Report. 1550.
73. Chen, Mei; Zhang, Xu; and Green, Eric R., "Analysis of Historical Travel Time Data"

- (2015). Kentucky Transportation Center Research Report. 1556.
74. Howell, Brian K.; Agent, Kenneth R.; and Green, Eric, "Creating a Highway Information System for Safety Roadway Features" (2015). Kentucky Transportation Center Research Report. 1499.
  75. Souleyrette, Reginald R.; Howell, Brian K.; Green, Eric R.; and Staats, William Nicholas, "Estimation of Average Daily Traffic on Local Roads in Kentucky" (2016). Kentucky Transportation Center Research Report. 1549.
  76. Agent, Kenneth R.; Green, Eric R.; and Fields, Michael A., "2016 Safety Belt Usage Survey in Kentucky" (2016). Kentucky Transportation Center Research Report. 1555.
  77. Green, Eric R.; Agent, Kenneth R.; Pigman, Jerry G.; and Fields, Michael A., "Analysis of Traffic Crash Data in Kentucky (2011-2015)" (2016). Kentucky Transportation Center Research Report. 1553.
  78. Agent, Kenneth R.; Green, Eric R.; and Fields, Michael A., "Analysis of Farm Vehicle Crashes and Safety Belt Usage" (2016). Kentucky Transportation Center Research Report. 1552.