

Curriculum Vitae

Roy Everett Sturgill, Jr., P.E.

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Education

University of Kentucky, Lexington, Kentucky

Doctor of Philosophy, Civil Engineering, December, 2018

Program Area: Construction Engineering & Project Management

Dissertation Title: *Risk Management and Practice Alignment for Utility Coordination on Transportation Projects*

Advisor: Gabriel B. Dadi, Ph.D., P.E.

Graduate Certificates: Applied Statistics

Virginia Polytechnic Institute and State University, Blacksburg, Virginia

Master of Science, Civil Engineering, December 2004

Program Area: Construction Engineering and Project Management

Project Title: *A Flowchart Based Interpretation of Division I of Virginia Department of Transportation's Road and Bridge Specifications*

Advisor: Michael C. Vorster, Ph.D., P.E.

Graduate Certificates: Engineering Education, Preparing the Future Professoriate

University of Kentucky, Lexington, Kentucky

Master of Business Administration, August, 2003

Bachelor of Science, Civil Engineering, May 2003

Minor: Mathematics

Industry Experience

Kentucky Transportation Cabinet

Oct. 2011-Oct. 2012, Transportation Engineer Specialist, Central Office Division of Highway Design, Frankfort, KY

Coordinator for the Statewide Constructability Review Program, editor for the Quality Matters Newsletter, conduct and report studies as needed, and Scholarship Coordinator for the Civil Engineering Technology Scholarship

Dec. 2008-Oct. 2011, Transportation Engineer Specialist, Central Office Division of Construction, Frankfort, KY

Central Office Construction Liaison to District 7. Other duties were to maintain and update the Construction Guidance Manual, support the technical branch and assist with administration of the division website, review and accept statewide schedule submittals, conduct and report special studies as needed, and administrator for the Civil Engineering Technology Scholarship.

Jan. 2007-Dec. 2008, Engineer in Training, Central Office Division of Construction, Frankfort, KY

Duties to maintain and update the Construction Guidance Manual, support the technical branch and assist with administration of the division website, review and accept statewide schedule submittals, conduct and report special studies as needed.

May 2003-Aug. 2003, May 2001-Aug. 2001, and May 1999-Aug. 1999, Scholarship Trainee/Transportation Engineering Assistant, District 12, Pikeville, KY
Highway project inspection, administration, and assistance to transportation engineers.

Research Experience

Iowa State University, Department of Civil, Construction and Environmental Engineering
July 2019-present, Assistant Professor, Ames, Iowa

Teaching, Research and Service associated with utility engineering and coordination as well as construction engineering and management.

University of Kentucky, Kentucky Transportation Center

Oct. 2012-June 2019, Research Engineer, Lexington, KY

Conduct and lead research on various topics including utility engineering and coordination among varying contracting methods; utility location, relocation, and One Call requirements; green and sustainable infrastructure; project administration and scheduling; constructability review; construction staffing; project closeout and as-built plans; e-construction and electronic material ticketing; construction guidance development; post-award administration of alternative contracting methods; personnel safety; contractor performance and evaluation; differential bridge end settlement; commercial vehicle screening; and inland waterway operations.

Virginia Polytechnic Institute and State University, American Infrastructure, Inc. (consulted research)

Mar. 2006-Dec. 2006, Research Assistant, Blacksburg, VA

Conduct and lead research involving the preparation of project documents and contracts, attain study approvals through VT-IRB, make company visits through Pennsylvania and Maryland to conduct surveys, develop flowcharts, conduct post-event surveys, compile data and guidance, and report out to company executives.

Virginia Polytechnic Institute and State University

May 2004-Dec. 2006, Graduate Research Assistant, Blacksburg, VA

Conducted, prepared, and presented research predominantly related to the use of flowcharts for creating and reviewing processes within construction contract documents. This work involved acting as a co-investigator on research with the Virginia Department of Transportation developing and using flowcharts to revise and re-write the Virginia Department of Transportation's General Provisions section of their Road and Bridge Specifications Manual. Assisted in the VDOT-VT Partnership for Project Scheduling research program.

University of Kentucky, Kentucky Transportation Center, Structures Laboratory

Sept. 2000-Apr. 2002, Lab Assistant, Lexington, KY

Work primarily involved the tensile testing of composite materials with tasks such as preparing test specimens, performing tests, recording and analyzing results as well as maintaining, organizing, and cleaning the lab space and equipment. Work also included assisting the research and development of Kentucky's disaster response manual.

Teaching Experience

Kentucky Community and Technical College System, Bluegrass Community and Technical College
Jan. 2012-May 2014, Adjunct Instructor, Civil Engineering Technology, Lexington, KY

CET 200: Civil Engineering Materials, instructor of record; planned and delivered course: Fall 2012, Fall 2013 (Student evaluation not conducted)

CET 210: Structural Analysis & Design, instructor of record; planned and delivered course: Spring 2013, Spring 2014 (Student evaluation not conducted)

CET 295: Independent Problems: Print and Specifications Reading, instructor of record; developed, planned and delivered as a new course: Fall 2012, Fall 2013 (Student evaluation not conducted)

CET 295: Independent Problems: Case Studies in Civil Engineering Technology, instructor of record; developed, planned and delivered as a new course: Spring 2012, Spring 2013, Spring 2014 (Student evaluation not conducted)

University of Kentucky, College of Engineering

Jan. 2013-May 2013, Adjunct Instructor, Dept. of Civil Engineering, Lexington, KY

CE 303: Introduction to Construction Engineering, instructor of record; planned and delivered course: Spring 2013 (Student Evaluation 3.3/4)

Virginia Polytechnic Institute and State University, College of Engineering

Aug. 2003-May 2004, Graduate Teaching Assistant, Dept. Civil and Environmental Engineering, Blacksburg, VA

CEE 4014: Estimating, Production, and Cost Engineering, assisted with course instruction, administered online assessments, maintained online course webpage, managed ABET documentation, grading and general course duties

University of Kentucky, College of Engineering

Aug. 2002-May 2003, Teaching Assistant, Dept. of Civil Engineering, Lexington, KY

CE 429: Civil Engineering Systems Design, assisted with course instruction, managed construction lab facilities for course, grading and general course duties

Peer Reviewed Journal Publications

Al-Shabbani, Z., Sturgill, R., and Dadi, G. Developing a Pre-Task Safety Briefing Tool for Kentucky Maintenance Personnel. *Transportation Research Record: Journal of the Transportation Research Board*. ISSN: 0361-1981. <https://doi.org/10.1177/0361198118792327>. August 25, 2018.

Wang, X., Al-Shabbani, Z., Sturgill, R., Kirk, A., and Dadi, G. Estimating Earthwork Volume Calculations Using Unmanned Aerial Systems. *Transportation Research Record: Journal of the Transportation Research Board*. ISSN: 0361-1981. Issue No. 2630, pp.1-8. 2017

Li, Y., Taylor, T., Dadi, G. and Sturgill, R. Modeling Long-Term Highway Staffing Requirements for State Transportation Agencies. *Transportation Research Record: Journal of the Transportation Research Board*. ISSN: 0361-1981. Issue No. 2612, pp. 76-84. 2017.

Zhai, D., Shan, Y., Sturgill, R., Taylor, T., and Goodrum, P. Using Parametric Modeling to Estimate Highway Construction Contract Time. *Transportation Research Record: Journal of the Transportation Research Board*. ISSN: 0361-1981. Issue No. 2573, pp. 1-9. 2016

Sturgill, R. and Vorster, M.C. Visually Improving Construction Contract Administration. *Transportation Research Record: Journal of the Transportation Research Board*. ISSN: 0361-1981. Issue No. 1946, pp.12-21. 2006

Peer Reviewed Conference Publications and Presentations (*Presenter)

- Newcomer, C., Withrow, J., Sturgill, R.E., and Dadi, G.B.* “Towards an Automated Asphalt Paving Construction Inspection Operations.” *International Council for Research and Innovation in Building and Construction: Information Technology for Construction, CIB W78-2018*. Chicago, IL. Oct. 1-3, 2018.
- Al-Shabbani, Z.*, Sturgill, Jr., R.E., and Dadi, G.B. “Improving Safety Performance of Transportation Maintenance Workers through Pre-Task Safety Talk Program.” *2018 Construction Research Congress (ASCE-CRC)*. New Orleans, L.A. April 2-5, 2018.
- Sturgill, Jr., R.E. *, Taylor, T.R.B., and Dadi, G.B. “A Case Study of Utility Coordination within a Major Design-Build Transportation Project.” *2018 Construction Research Congress (ASCE-CRC)*. New Orleans, L.A. April 2-5, 2018.
- Al-Shabbani, Z., Sturgill, R.E.*, and Dadi, G.B.* “Developing a Pre-Task Safety Briefing Tool for Kentucky Maintenance Personnel.” *Transportation Research Board 97th Annual Meeting*, Washington, D.C. January 7-11, 2018.
- Sturgill, R.E.*, Taylor, T.R.B., and Dadi, G.B. (2018). “A Case Study of Utility Coordination within Design-Build Procurement.” *Transportation Research Board 97th Annual Meeting*, Washington, D.C. January 7-11, 2018.
- Zhang, J., Taylor, T.R.B.*, Sturgill Jr., R.E., Dadi, G.B., and Stamatiadis, N. “Predictive Risk Modeling of Differential Bridge Settlement.” *Lean and Computing in Construction Congress*. Heraklion, Crete, Greece. July 4-12, 2017.
- Stamatiadis, N.*, Sturgill, R., Amiridis, K., and Taylor, T. “Estimating Constructability Review Benefits for Highway Projects.” *Lean and Computing in Construction Congress*. Heraklion, Crete, Greece. July 4-12, 2017.
- Stamatiadis, N.*, Sturgill, R., and Amiridis, K. “Benefits from Constructability Reviews.” *World Conference on Transport Research, WCTR 2016*. Shanghai, China. July 10-15, 2016. *Transportation Research Procedia*. Volume 25, pp 2889-2897. <https://doi.org/10.1016/j.trpro.2017.05.275>. 2017.
- Wang, X.*, Al-Shabbani, Z., Sturgill, R., Kirk, A., and Dadi, G. “Estimating Earthwork Volume Calculations Using Unmanned Aerial Systems.” *Transportation Research Board 96th Annual Meeting*. Washington, D.C. January 8-12, 2017.
- Li, Y.*, Taylor, T., Dadi, G. and Sturgill, R. “Modeling Long-Term Highway Staffing Requirements for State Transportation Agencies.” *Transportation Research Board 96th Annual Meeting*. Washington, D.C. January 8-12, 2017.
- Sturgill, Jr., R.E.*, Wang, X., and Dadi, G.B.* “Mobile Information Technology Device Strategies, Uses, and Needs across State Transportation Agencies.” *Transportation Research Board 96th Annual Meeting*. Washington, D.C. January 8-12, 2017.
- Zhang, J., Taylor, T.R.B., Sturgill, Jr., R.E.*, and Dadi, G.B. “Risk Model of Differential Settlement at Bridge Ends.” *Transportation Research Board 96th Annual Meeting*. Washington, D.C. January 8-12, 2017.

- Wang, X.*, Sturgill, Jr., R.E., and Dadi, G.B. “Analyzing Use and Policies for Mobile Information Technology Devices within State Departments of Transportation”. *2016 Construction Research Congress (ASCE-CRC)*. San Juan, Puerto Rico May 31-June 2, 2016.
- Zhai, D., Shan, Y.*, Sturgill, R.*, Taylor, T., and Goodrum, P. “Using Parametric Modeling to Estimate Highway Construction Contract Time.” *Transportation Research Board 95th Annual Meeting*. Washington, D.C. January 10-14, 2016.
- Sturgill, R., Stamatiadis, N., Goodrum, P. “Quantification of Benefits from Constructability Reviews.” (Poster Session) *Transportation Research Board 94th Annual Meeting*. Washington, D.C. January 11-15, 2015.
- Li, Y.*, Sturgill, R., Taylor, T., and Mansfield, M. “Improving the effectiveness of contractor evaluation at the Kentucky Transportation Cabinet.” *Transportation Research Board 94th Annual Meeting*. Washington, D.C. January 11-15, 2015.
- Sturgill, R.*, Van Dyke, C., McCormack, S., Kreis, D. “Case Analysis of Inherent Programmatic Sustainability Resulting from Application of Context-Sensitive Design Principles.” *Transportation Research Board 94th Annual Meeting*. Washington, D.C. January 11-15, 2015.
- Taylor, T., *Brockman, B., *Zhai, D., Goodrum, P., and Sturgill, R. “Accuracy Analysis of Selected Tools for Estimating Contract Time on Highway Construction Projects.” *2012 Construction Research Congress (ASCE-CRC)*. West Lafayette, IN. May 21-23, 2012.
- Sturgill, R. and Vorster, M.C. “Visually Improving Construction Contract Administration.” (Poster Session) *Transportation Research Board 85th Annual Meeting*. Washington, D.C. January 22-26, 2006.
- Sturgill, R. and Vorster, M.C. “A Visual Approach to Construction Contract Processes.” (Poster Session) *Construction Industry Institute Annual Conference: Leadership of Tomorrow—Bridging the Gap*. Grapevine, TX. July 19-21, 2005.
- Sturgill, R. and Vorster, M.C. “A Visual Approach to Construction Contract Processes.” (Poster Session) *Construction Industry Institute Construction Project Improvement Conference*. Austin, TX. September 11-13, 2005.
- Sturgill, R.* and Vorster, M.C. “A Visual Approach to Drafting and Interpreting Construction Contract Administrative Processes.” *Construction Research Council Ph.D. Scholars Workshop, Construction Institute of the American Society of Civil Engineers*. Virginia Polytechnic Institute and State University, Blacksburg, VA., October 21, 2005.

Technical Reports and Other Publications

- Al-shabbani, Z., Sturgill, R., and Dadi, G. Safety Concepts for Workers from an OSHA Perspective. Kentucky Transportation Center Research Report. KTC-17-14/SPR15-508-1F. <https://doi.org/10.13023/KTC.RR.2017.14>. 2017.

- Johnson, T., Michaels, D., Sturgill, R., and Taylor, T. Streamlined Project Closeout for Construction at KYTC. Kentucky Transportation Center Research Report. KTC-17-12/SPR13-460-1F. <https://doi.org/10.13023/KTC.RR.2017.12>. 2017.
- Sturgill, R., Taylor, T., and Li, Y. Effective Utility Coordination: Application of Research and Current Practices. *National Cooperative Highway Research Program, Synthesis Report 506*. ISBN 978-0-309-38993-6. 2017.
- Taylor, T., Sturgill, R., and Li, Y. Practices for Establishing Contract Completion Dates for Highway Project. *National Cooperative Highway Research Program, Synthesis Report 502*. ISBN 978-0-309-38984-6. 2017.
- Zhang, J., Taylor, T., and Sturgill, R. Bridge End Settlement Evaluation and Prediction. Kentucky Transportation Center Research Report. KTC-16-23/SPR14-486-1F. <https://doi.org/10.13023/KTC.RR.2016.23>. 2016.
- Dadi, G., Sturgill, R., and Wang, X. Uses of Mobile Information Technology Devices in the Field for Design, Construction, and Asset Management. *National Cooperative Highway Research Program, Synthesis Report 491*. ISBN 978-0-309-27212-4. 2016.
- Gibson, B., Wallace, C., and Sturgill, R. Synthesis of Public-Private Partnerships: Potential Issues and Best Practices for Program and Project Implementation and Administration. Kentucky Transportation Center Research Report. KTC-15-13/SPR15-500-1F. <http://dx.doi.org/10.13023/KTC.RR.2015.13>. 2015.
- Wallace, C., McCormack, S., Gibson, B., and Sturgill, R. Marketing and Economic Development Analysis for the Maysville-Mason County Port Authority. Kentucky Transportation Center and Maysville-Mason County Port Authority Research Report. Sept. 2015.
- Sturgill, R., Taylor, T., Ghorashinezhad, S., and Zhang, J. Methods to Expedite and Streamline Utility Relocations for Road Projects. Kentucky Transportation Center Research Report. KTC-14-15/SPR460-13-1F. <http://dx.doi.org/10.13023/KTC.RR.2014.15>. 2014.
- Kreis, D., Sturgill, R., Howell, B., Van Dyke, C., and Voss, D. S. Inland Waterway Operational Model & Simulation Along the Ohio River. Kentucky Transportation Center Research Report. KTC-14-13/MTIC3-14-1F. <http://dx.doi.org/10.13023/KTC.RR.2014.13>. Multimodal Transportation Infrastructure Consortium (MTIC, a Tier 1 University Transportation Center) Report. 2014.
- McCormack, S., Sturgill, R., Howell, B., Van Dyke, C., and Kreis, D. Green Infrastructure. Kentucky Transportation Center Research Report. KTC-14-10/SPR447-12-1F. <http://dx.doi.org/10.13023/KTC.RR.2014.10>. 2014.
- Taylor, T., Sturgill, R., McDowell, M., Deep, A., and Goodrum, P. Contractor Evaluations in the Contractor Selection Process. Kentucky Transportation Center Research Report. KTC-14-02/SPR486-12-1F. <http://dx.doi.org/10.13023/KTC.RR.2014.02>. 2014.
- Stamatiadis, N., Goodrum, P., Shocklee, E., Sturgill, R., and Wang, C. Tools for Applying Constructability Concepts to Project Development (Design). Kentucky Transportation Center Research Report. KTC-13-15/FRT190-11-1F. <http://dx.doi.org/10.13023/KTC.RR.2013.15>. 2013.

Taylor, T., Goodrum, P., Brockman, M., Bishop, B., Shan, Y., Sturgill, R., and Hout, K. Updating the Kentucky Contract Time Determination System. Kentucky Transportation Center Research Report. KTC-13-22/SPR411-11-1F. <http://dx.doi.org/10.13023/KTC.RR.2013.22>. 2013.

Requested Presentations (Selected)

University of Kentucky, Kentucky Transportation Center, Various Presentations Oct. 2012-present, Research Engineer, Lexington, KY

Sturgill, R. "Utility Conflict Identification." 2018 ACEC-KY/FHWA/KYTC Partnering Conference. Louisville, KY. (40-minute session, delivered twice) Sept. 4-6, 2018.

Sturgill, R. "Highway Plans 101." 1st Annual United States Territorial Peer Exchange. Denver, CO. (4-hour session on plan development and organization based on Federal Highway Administration guidance) August 22-24, 2018.

Sturgill, R. and Dadi, G. "Safety Metrics/Safety Awareness Tool." Employee Safety & Health, Annual Meeting and Training Session. Burkesville, KY. (30-minute session) July 17-19, 2018.

Sturgill, R. "E-ticketing Research." Plantmix Asphalt Industry of Kentucky Summer Meeting. Lexington, KY. (20-minute session) June 1-2, 2018.

Sturgill, R., Franklin, K., and Parks, N. "Developing the Skills of a Good Utility Coordinator." 2018 AASHTO Committee on Right of Way, Utilities, and Outdoor Advertising Control Annual Conference. Baltimore, MD. (1.5-hour session) April 22-26, 2018.

Sturgill, R. and McCleve, J. "An Evolving Understanding of Utility Coordination and Utility Engineering in DOT Programs." 2018 Kentucky Society of Professional Engineers Annual Convention. Owensboro, KY. (50-minute session) April 18-20, 2018.

Sturgill, R. "Redefining Construction As-Built Plans." Winter 2018 KYTC Section Engineers' Meeting. Cadiz, KY. (30-minute session) Feb. 6-8, 2018.

Courtwright, A., Lam, J., McCreary, D., Dadi, G., and Sturgill, R. "Preventative Safety Metrics." Winter 2018 KYTC Section Engineers' Meeting. Cadiz, KY. (30-minute session) Feb. 6-8, 2018.

Sturgill, R., and Taylor, T. "KYTC Utility Coordination Training Overview." 2017 ACEC-KY/FHWA/KYTC Partnering Conference. Louisville, KY. (40-minute session, delivered twice) Aug. 15-17, 2017.

Sturgill, R., Dadi, G., and Al-Shabbani, Z. "SPR 15-508: Safety Concepts for Workers from an OSHA Perspective." Employee Safety & Health, Annual Meeting and Training Session. Burkesville, KY. (30-minute session) July 25-26, 2017.

Sturgill, R., Van Dyke, C., McCormack, S., Kreis, D. "Case Analysis of Inherent Programmatic Sustainability Resulting from Application of Context Sensitive Design Principles." 2017 AASHTO Subcommittee on the Environment-Subcommittee on Design Joint Annual Conference. Des Moines, IA. (Poster session) July 16-20, 2017.

Sturgill, R. and Waddle, S. “Construction Guidance Manual Revisions Update.” Winter 2017 KYTC Section Engineers’ Meeting. Lexington, KY. (30-minute session) Feb. 7-9, 2017.

Dadi, G., and Sturgill, R. “Current State of Mobile IT Device Use in Maintenance.” 2016 AASHTO Subcommittee on Maintenance Annual Conference. Clark County, NV. (50-minute session) July 18-21, 2016.

Sturgill, R., McCormack, S., Wallace, C., and Gibson, B. “Marketing and Economic Development Analysis for the Maysville-Mason County Port Authority.” Mason County Chamber of Commerce Public Meeting. Maysville, KY. (50-minute session) Nov. 5, 2015.

Sturgill, R., Taylor, T., and McCleve, J. “Expediting Utility Relocations.” 2015 Kentucky Society of Professional Engineers Annual Convention. Covington, KY. (50-minute session) April 8-10, 2015.

Sturgill, R. “Guidance Manual Revision.” Winter 2015 KYTC Section Engineers’ Meeting. Lexington, KY. (30-minute session) Feb. 24-26, 2015.

Research Projects (Sturgill (PI): \$ 732,390; Sturgill (Co-PI): \$ 2,105,266)

Dadi, G. (PI) and Sturgill, R. (Co-PI), “Electronic Ticketing of Materials for Construction Management.” Funded by the National Cooperative Highway Research Program. NCHRP 20-05 Topic 50-07. Oct. 2018-present, \$45,000.

Taylor, T. (PI) and Sturgill, R. (Co-PI), “Utility Coordination Efficiency, Safety, Cost, and Schedule Impacts using various Contracting Methods.” Funded by the National Cooperative Highway Research Program. NCHRP 20-07 Task 407. Oct. 2018-present, \$100,000.

Taylor, T. (PI) and Sturgill, R. (Co-PI), “Risk-Based Construction Inspection.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-19-569. July 2018-present, \$200,000.

Dadi, G. (PI) and Sturgill, R. (Co-PI), “Development, Implementation, and Tracking of Preventative Safety Metrics.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-19-568. July 2018-present, \$173,000.

Dadi, G. (PI) and Sturgill, R. (Co-PI), “Developing a Preventative Safety Scoring Mechanism for Employee Safety and Health.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-18-56-5. Dec. 2017-June 2018, \$28,000.

Taylor, T. (PI) and Sturgill, R. (Co-PI), “Redefining Construction As-Built Plans to Meet Current KYTC Needs.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-18-555. July 2017 – June 2019. \$150,000

Dadi, G. (PI) and Sturgill, R. (Co-PI), “E-Tickets and Advanced Technologies for Efficient Construction Inspection.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-18-554. July 2017 – June 2019. \$165,000

- Sturgill, R. (PI) and Dadi, G. (Co-PI), “Development and Execution of Utility Coordination Guidance and Training in Kentucky.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-17-56-4. March 2017-present \$80,000.
- Taylor, T. (PI) and Sturgill, R. (Co-PI), “Implications of State Department of Transportation (DOTs) Participation in the One Call Process as an Underground Facility Operator.” Funded by the National Cooperative Highway Research Program. NCHRP 20-07 Task 389. January 2017–present. \$99,653.
- Sturgill, R. (PI-local), “A Guidebook for Post-Award Contract Administration for Highway Projects Delivered Using Alternative Contracting Methods.” Sub award to University of Colorado-Boulder (Molenaar, \$500,000). Funded by the National Cooperative Highway Research Program. NCHRP 08-104. Sept. 2016-present, \$9,971.
- Taylor, T. (PI) and Sturgill, R. (Co-PI), “Effective Construction Project Staffing Strategies for Transportation Agencies.” Funded by the National Cooperative Highway Research Program, NCHRP 20-107. June 2016– present. \$499,613.
- Taylor, T. (PI) and Sturgill, R. (Co-PI), “Effective Practices for Establishing Contract Completion Dates for Highway Projects.” Funded by the National Cooperative Highway Research Program. NCHRP 20-05 Topic 47-09. Nov. 2015-Jan. 2017, \$45,000.
- Sturgill, R. (PI) and Taylor, T. (Co-PI), “Effective Utility Investigations to Optimize Safety and Savings.” Funded by the National Cooperative Highway Research Program. NCHRP 20-05 Topic 47-14. Nov. 2015-Jan. 2017, \$45,000.
- Taylor, T. (PI) and Sturgill, R. (Co-PI), “Streamlined project closeout for construction at KYTC.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-16-515. July 2015– June 2017. \$165,000
- Dadi, G. (PI) and Sturgill, R. (Co-PI), “Usage of Mobile IT Devices in the Field for Design, Construction and Asset Management.” Funded by the National Cooperative Highway Research Program. NCHRP 20-05 Topic 46-06. Nov. 2014-Jan. 2016, \$40,000.
- Sturgill, R. (PI), “Renovation of the Construction Guidance Manual & Resources.” Funded by the Kentucky Transportation Cabinet, Division of Construction. KHIT-93. Sept. 2014-present. \$149,895.
- Sturgill, R. (PI), “Marketing and Economic Development Opportunity Identification Services for the Maysville-Mason County Public Port Authority.” Funded by the Maysville-Mason County Public Port Authority. Sept. 2014-Jan. 2015. \$20,000.
- Sturgill, R. (PI), “Sustainable Infrastructure Design Implementation.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-15-57-1. July 2014-June 2015. \$21,000.

- Sturgill, R. (PI) and Dadi, G. (Co-PI), “Safety Concepts for Workers from an OSHA Perspective.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-15-508. July 2014– June 2017. \$165,768.
- Sturgill, R. (PI), “Design Build and Alternative Technical Concepts Process.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-15-501. July 2014– present. \$240,756.
- Gibson, B. (PI) and Sturgill, R. (Co-PI), “Public-Private Partnership Synthesis.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-15-500. July 2014– June 2015. \$50,000.
- Taylor, T. (PI) and Sturgill, R. (Co-PI), “Differential bridge end settlement evaluation and prediction.” Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-14-486. July 2013 – June 2016. \$225,000
- Taylor, T. (PI) and Sturgill, R. (Co-PI), “Methods to expedite and streamline utility relocations for road projects Funded by the Federal Highway Administration (80%) and the Kentucky Transportation Cabinet (20%). KYSPR-13-460. July 2012-June 2014. \$120,000.

Training and Implementation Activities

University of Kentucky, Kentucky Transportation Center, Technology Transfer Program

Oct. 2012-present, Research Engineer, Lexington, KY

Grade and Drain Level 1: reviewed and revised course materials

Basic Plan Reading: conducted course training (1 session to date)

The Americans with Disabilities Act: Sidewalk Facilities for Public Rights-of-Way: co-developed and conducted course training (5 sessions to date)

University of Kentucky, Kentucky Transportation Center, Various Training

Oct. 2012-present, Research Engineer, Lexington, KY

TRB Webinar: Practices for Establishing Contract Time for Highway Projects: assisted in development and delivery of the webinar. Webinar ID: 569-972-627. 299 users logged in. July 12, 2018.

American Society of Civil Engineers, Utility Engineering and Surveying Institute’s Utility Coordination School: leading development of national training and certification program, July 2018-present

Kentucky Transportation Cabinet Utility Coordination Training: leading development of Kentucky’s training and certification program, Jan. 2017-present

Green Infrastructure for Kentucky: Introductory Training & Workshop for FHWA’s INVEST: developed and conducted training. KYTC District 3 and District 5, March 2015.

Green Infrastructure for Kentucky: Detailed Workshop for FHWA’s INVEST: developed and conducted training. KYTC District 3, June 2015.

KYTC Highway Design Webinar: Introduction to Working Days: developed and delivered webinar. July 22, 2015. <https://www.youtube.com/watch?v=pXxtYYc-rGA&feature=youtu.be>

KYTC Contract Time Decision Support Tool Training: developed decision support tool and YouTube training videos.

<https://www.youtube.com/watch?v=te35Anb0Zl8>

<https://www.youtube.com/watch?v=14GNEqokwdw>

<https://www.youtube.com/watch?v=wJLQ-9mNh0I>

KYTC Contractor Evaluation Decision Support Tool Training: developed decision support tool and YouTube training video. <https://www.youtube.com/watch?v=DQkgF2ytiP8>

Kentucky Transportation Cabinet, Central Office

Jan. 2007-Oct. 2012, Transportation Engineer, Division of Construction/Highway Design

Conducted and assisted in various trainings including topics of scheduling, estimating, structures, grade and drain, and professional engineering examination review sessions.

Professional Registration

Iowa Licensed Professional Engineer, November 2019, IA PE # P25629 (Active)

Kentucky Licensed Professional Engineer, June 2008, KY PE # 26119 (Active)

Leadership in Energy and Environmental Design Green Associate (LEED-GA), November 2009 (Inactive)

Greenroads Sustainable Transportation Professional, STP α , among the initial 25 credentialed, November 2012 (Inactive)

Certifications and Training Attended

ASCE-UESI Utility Investigation School: Trenchless Technology Center, Louisiana Tech University, Ruston, Louisiana, February 26-March 2, 2018.

National Highway Institute, 134006 Utility Coordination for Highway Projects Training: Burkesville, KY. Sept. 27-28, 2016.

National Highway Institute, 134006A Introduction Utility Coordination for Highway Projects Training: Online. Sept. 20, 2016

MicroStation I for Civil Professionals, Kentucky Engineering Center, 2011

InRoads I, Kentucky Engineering Center, 2011

KYTC Advanced Leadership Academy

American Concrete Institute Level 1 Certified

Asphalt Field Technician Certified

KYTC Structures Inspection Certified

KYTC Grade & Drain Inspection (Level 1 and 2) Certified

Traffic Control Technician & Supervisor ATSSA Certified

OSHA 10-Hour Certification (Expired)

Virginia Tech, Citizen Scholar Engagement: Recognized for Using Academic Skills and Knowledge in Service to Society, Oct. 2006.

Virginia Tech, Graduate Education Development Institute (GEDI): Pedagogical Training, Aug. 2006.

Virginia Tech, Preparing the Future Professoriate—Global Perspectives Program (PFP-GPP):
Based at Virginia Tech Steger Center for European Studies and Architecture (CESA), Villa Maderni, Riva San Vitale, Switzerland (University of Zurich, Eidgenössische Technische Hochschule Zürich (ETH), École polytechnique fédérale de Lausanne (EPFL), Politecnico d' Milano), May 2006.

University of Kentucky, MBA International Experience: Two-week manufacturing experience at the University of Dijon, France, six-week Denmark International Study (DIS) Program, University of Copenhagen, Denmark, June-July, 2002.

Service Activities

Member and paper review, Transportation Research Board, Standing Committee on Construction Management (AFH 10), 2013-present.
Friend, Transportation Research Board, Information Technology in Construction Subcommittee (AFH 10(1)), 2013-present
Friend, Transportation Research Board, Standing Committee on Project Delivery Methods (AFH 15), 2016-present
Friend, Transportation Research Board, Standing Committee on Utilities (AFB 70), 2016-present
Member, ASCE, UESI Utility Coordination Committee, 2018-present
Member, AASHTO Committed on Right of Way, Utilities, and Outdoor Advertising Control-Technical Subcommittees (Utility Mapping, GIS & SUE; Utility Project Scoping & Coordination; Utility Accommodation & Safety), 2017-present
Member, KYTC's Utilities Stakeholder Council, 2017-present
Reviewer, ASCE Journal of Infrastructure Systems
Reviewer, ASCE Construction Research Congress
Leader, Saint John School, Robotics Club, Georgetown, KY, August 2013-May 2016.
Member, KCTCS Civil Engineering Technology, Industry Advisory Committee, Lexington, KY, Jan. 2013-present

Current Affiliations

American Society of Civil Engineers, Member (Construction Institute, Utility Engineering and Surveying Institute), 2017-present

Honors and Awards

Kentucky State Transportation Cabinet Scholarship Recipient
Academic Excellence Scholarship
National Alpha Lambda Delta
UK Alpha Lambda Delta
Chi Epsilon
Golden Key Honor Society,
University Scholars Program
Carol Martin Gatton College of Business and Economics Scholarship
Omicron Delta Kappa
Pratt Fellowship

Tau Beta Pi
Vecellio Fellowship
Myers-Lawson School Outstanding Graduate Student