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EDUCATION AND TRAINING

Ph.D., Department of Civil Engineering, Texas A&M University, August 14, 2009

M.S., Department of Civil Engineering, University of Kentucky, May 6, 2001

B.S. Department of Civil Engineering, University of Kentucky, December 17, 1999

GRANTS RECEIVED

Taylor, T. (PI) and Sturgill, R. (Co-PI), "Utility coordination efficiency, safety, cost, and schedule impacts using various contracting methods." NCHRP 20-07 Task 407. October 2018 – December 2019. \$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 – June 2021. \$200,000

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

Taylor, T. (PI), Sturgill, R. (CoPI), and Li, Y. (Co-PI). "Implications of state departments of transportation participation in the one call process as an underground facility operator." NCHRP 20-07 Task 389. December 2016 – February 2018. \$99,583.

Is there a demographic craft labor cliff that will affect project performance? Funded by the Construction Industry Institute. PI with Co-PI Paul Goodrum (University of Colorado-Boulder). September 2013 – August 2015. \$132,024

Taylor, T. (PI), Goodrum, P. (Co-PI), Molenaar, K. (Co-PI), Sturgill, R. (Co-PI), Vareen, S. (Co-PI), Waddle, S. (Co-PI), and Li, Y. (CoPI), "Effective construction project staffing strategies for transportation agencies." NCHRP 20-107. June 2016 – June 2018. \$499,613.

Taylor, T. (PI) and Sturgill, R. (Co-PI), "Effective practices for establishing contract completion dates for highway projects." NCHRP Synthesis Topic 47-09. November 2015 – December 2016. \$45,000.

Sturgill, R. (PI) and Taylor, T. (Co-PI), "Effective utility coordination: Application of research and current practices." NCHRP Synthesis Topic 47-14. November 2015 – January 2017. \$45,000 (Taylor \$22,500)

Goodrum, P. (PI) and Taylor, T. (Co-PI), "Improving the U.S. workforce development system." Funded by the Construction Industry Institute. RT-335. September 2015 – September 2018. \$235,000. (Taylor \$110,000)

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

Methods to expedite and streamline utility relocations for road projects. Funded by the Kentucky Transportation Cabinet. PI with Co-PI Roy Sturgill. July 2012 – June 2014. \$120,000

Bride end settlement evaluation and prediction. Funded by the Kentucky Transportation Cabinet. PI with Co-PI Roy Sturgill. July 2013 – June 2016. \$200,000.

Effective project scoping practices to improve on-time and on-budget delivery of highway projects. Funded by the National Cooperative Highway Research Program. Funded by the National Cooperative Highway Research Program. NCHRP 8-88. Co-PI with PI Stuart Anderson (Texas A&M University) and Co-PIs Paul Goodrum, Cesar Quiroga (Texas Transportation Institute). July 2012 – July 2014. \$250,000.

Forecasting construction staffing requirements for future projects. NCHRP Synthesis 20-05T Topic 43-13. PI with Co-PI William Maloney. November 2011 – November 2012. \$40,000.

PEER-REVIEWED JOURNAL PUBLICATIONS (PREVIOUS 4 YEARS)

1. Al Battah*, M., Goodrum, P., and Taylor, T. A new metric of workforce availability among construction occupations and regions. ASCE Practice Periodical on Structural Design and Construction. In Press.

2. *Karimi, H., Taylor, T., Dadi, G., Goodrum, P., and Srinivasan, C. (2018) The Impact of Skilled Labor Availability on Construction Project Cost Performance. *ASCE Journal of Construction Engineering and Management*. 144(7):
3. Li, Y., *Li, J., Taylor, T., and Ford, D. (2017) Impact of labor controls on tipping point dynamics in large complex project. *Systems Research and Behavioral Science*. DOI: 10.1002/sres.2504.
4. *Karimi, H., Taylor, T., and Goodrum, P. (2017) Analysis of the impact of craft labour availability on North American construction project productivity and schedule performance. *Construction Management and Economics*. 35(6): 368-380. DOI: 10.1080/01446193.2017.1294257
5. Kermanshachi, S., Anderson, S., Goodrum, P., and Taylor, T. (2017) Project scoping process model development to achieve on-time and on-budget delivery of highway projects. *Transportation Research Record: Journal of the Transportation Research Board*. Volume 2630: 147-155. DOI: 10.3141/2630-18.
6. Li, Y., Taylor, T., Sturgill, R., and Dadi, G. (2017) Modelling long term highway workforce requirements for state transportation agencies. *Transportation Research Record: Journal of the Transportation Research Board*. Volume 2612: 76-84 DOI: 10.3141/2612-09.
7. Albarrah, M., Shan, Y., Goodrum, P., and Taylor, T. Relationships between cycles of economic expansion in construction and craft worker' job satisfaction and preferences. *Canadian Journal of Civil Engineering*. 44(1): 29-32.
8. Karimi, H., Taylor, T., Goodrum, P., and Srinivasan, C. (2016) Quantitative Analysis of the Impact of Craft Worker Availability on Construction Project Safety Performance. *Construction Innovation*. 16(3): 307-322.
9. Zai, D., Shan, Y., Sturgill, R., Taylor, T., and Goodrum, P. (2016) Estimating highway construction contract time using parametric modeling. *Transportation Research Record: Journal of the Transportation Research Board No. 2573*. DOI: 10.3141/2573-01
10. Dadi, G., Goodrum, P., Taylor, T., and Maloney, W. Communication of spatial engineering information through 3D CAD and 3D printed models. *Journal of Visualization in Engineering*. 2(9), DOI: 10.1186/s40327-014-0009-8.
11. Dadi, D., Taylor, T., Goodrum, P., and Maloney, W. 2014. Performance of 3D printed models as a means for spatial engineering information visualization. *Canadian Journal of Civil Engineering*. 41(10), 869-877.
12. Li, Y. and Taylor, T. 2014. Managing design error risk on highway construction projects. *ASCE Journal of Construction Engineering and Management*. 10.1061/(ASCE)CO.1943-7862.0000878 , 04014044.
13. Dadi, D., Goodrum, P., Taylor, T. Carswell, M. 2014. Mental workload of construction professionals and students using 2D and 3D spatial engineering information. *ASCE Journal of Construction Engineering and Management*. 140(5): 04014001: 1-8.

HONORS AND AWARDS

Henry Mason Lutes Award for Excellence in Engineering Education, University of Kentucky College of Engineering, 2016
 University of Kentucky Department of Civil Engineering Chi Epsilon Outstanding Teacher in Civil Engineering Award, 2016.
 Great Teacher Award, University of Kentucky Alumni Associate/Omicron Delta Kappa, 2015
 ELECTRI Early Career Award Winner, ELECTRI International, 2010
 Dana Meadows Award, System Dynamics Society, 2009

PROFESSIONAL SERVICE

Member, Transportation Research Board, Construction Management Committee (AFH10), 2010 – present.
 Member, Transportation Research Boards, Utilities Committee (AFB70), 2017 – present
 Member, Transportation Research Board, Information Technology in Construction Subcommittee, 2011 – present
 Academic Committee Member, Construction Industry Institute, 2010 – present
 Member, Construction Research Congress, 2010 – present