

## Jake Smithwick, Ph.D.

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Department of Engineering Technology and Construction Management  
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### EDUCATION

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**Ph.D., Construction Management, June 2016**

*Arizona State University – Tempe, AZ*

**M.P.A., Public Administration, December 2015**

*Arizona State University – Tempe, AZ*

**M.S., Construction Management, May 2012**

*Arizona State University – Tempe, AZ*

**B.S., Computer Information Systems, May 2008**

*Arizona State University – Tempe, AZ*

### PUBLICATIONS

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**Refereed Journal Papers – Under Review**

(**Bold is graduate student author**)

1. Chen, D., Smithwick, J., Mayo, G., Barclay, N., and **Patil, C.** (2019). “Determination of Weight Factors for Cost Benefit Analysis and Fund Allocation in PMS,” *International Journal of Pavement Engineering*. *Under Review*.
2. **Aldossari, K.**, Lines, B., Smithwick, J., Hurtado, K., and Sullivan, K. (2019). “Employee Reactions to Adoption of Alternative Project Delivery Methods within the AEC Industry,” *ASCE Journal of Management in Engineering*. *Under Review*.
3. **Aldossari, K.**, Lines, B., Smithwick, J., Hurtado, K., and Sullivan, K. (2019). “titled Best Practices of Organizational Change for Adopting Alternative Project Delivery Methods,” *Engineering, Construction and Architectural Management*. *Under Review*.
- 4.

**Refereed Journal Papers – Published**

1. **Kasana, D.**, Smithwick, J., Mayo, G., and Cavalline, T. (2019). “Enhanced Product Evaluation Tools for State Transportation Agencies to Overcome Commonly Faced Challenges,” *ASCE Journal of Management in Engineering*. DOI: 10.1061/(ASCE)ME.1943-5479.0000756. *Accepted for publication*.

2. **Patil, G.**, Chen, D., Mayo, G., Smithwick, J., and Barclay, N. (2019). "SCAN-BIM-FEA: A Structural Integrity Investigation in Curtain Walls," *Journal of Facility Management Education and Research*. Accepted for publication.
3. Pesek, A., Smithwick, J., **Saseendran, A.**, and Sullivan, K. (2019). "Information Asymmetry on Heavy/Civil Projects: Deficiencies Identification by Contractors and Owners," *ASCE Journal of Management in Engineering*. DOI: 10.1061/(ASCE)ME.1943-5479.0000694
4. **Shalwani, A.**, Lines, B., and Smithwick, J. (2019). "Differentiation of Evaluation Criteria in Design-Build and Construction Manager at Risk Procurements: An Empirical Comparison between Delivery Methods," *ASCE Journal of Management in Engineering*. DOI: 10.1061/(ASCE)ME.1943-5479.0000707.  
**\* Editor's Choice Article**
5. **Dodd, J.**, Smithwick, J., and Bown, M. (2018). "Competitive Benchmarking in FM Customer/Occupant Satisfaction Surveys," *Journal of Facility Management Education and Research*. DOI: <https://doi.org/10.22361/jfmer/00067>
6. Smithwick, J., Schleifer, T., **Sawyer, J.**, and Sullivan, K. (2018). "Quantifying the Impact of the Great Recession on the AEC Industry – A Call to Reevaluate Home Office Overhead Costs," *International Journal of Construction Education and Research, ASC*. DOI: <https://doi.org/10.1080/15578771.2018.1473308>. *In Press*.
7. **Call, S.**, Sullivan, K., and Smithwick, J. (2018). "Employment Barriers into US Healthcare Facilities Management Industry for New Facilities Management Graduates," *Journal of Facility Management Education and Research*. DOI: <https://doi.org/10.22361/jfmer/99694>.
8. Lines, B. and Smithwick, J. (2018). "Best Practices for Organizational Change Management within Electrical Contractors," *International Journal of Construction Education and Research, ASC*. DOI: <https://doi.org/10.1080/15578771.2018.1479723>.
9. Gajjar, D., Smithwick, J., and Sullivan, K. (2018). "Improving Janitorial Contract Performance with Facility Management Performance Scorecards," *Journal of Facility Management Education and Research*. DOI: <https://doi.org/10.22361/jfmer/94925>.
10. **Call, S.**, Sullivan, K., and Smithwick, J. (2018). "The US Healthcare Facilities Management Industry's State of Hiring from Facilities Management Academic Programs," *Journal of Facility Management Education and Research*. DOI: <https://doi.org/10.22361/jfmer/93922>. *In Press*.
11. **Haverstic, T.**, Sullivan, K., and Smithwick, J., (2017). "Impact of Solar Reflectance Attenuation and Roof Cleaning on a Cool Roof: Assessing Return on Investment for Facility Management," *Journal of Facility Management Education and Research*. DOI: <https://doi.org/10.22361/jfmer/81613>
12. **Whitcraft, D.**, Sullivan, K., Saseendran, A., and Smithwick, J., (2017). "Case Study of Load Shifting Using Thermal Energy Ice Storage in Public Facilities," *Journal of Facility Management Education and Research*. DOI: <https://doi.org/10.22361/jfmer/81612>
13. **Hurtado, K.**, Smithwick, J., Pesek, A. and Sullivan, K., (2017). "Public School Facility Underfunding: A New Tool to Maximize Construction Dollars and Improve Performance

Outcomes,” *International Journal of Construction Education and Research*, ASC. DOI: <https://doi.org/10.1080/15578771.2017.1316800>

14. **Shirey, W.**, Sullivan, K., Lines, B., and Smithwick, J., (2017). “Application of Lean Six Sigma to Improve Service in Healthcare Facilities Management: A Case Study,” *Journal of Facility Management Education and Research*. DOI: <https://doi.org/10.22361/jfmer/78724>
15. **Cluff, C.**, Stone, B., Sullivan, K. and Smithwick, J., (2017). “Nauvoo Illinois Historic Site: A Facilities Management Perspective,” *Journal of Facility Management Education and Research*. DOI: <https://doi.org/10.22361/jfmer/78725>
16. Perrenoud, A., Smithwick, J., **Hurtado, K.** and Sullivan, K., (2015). “Project Risk Distribution during the Construction Phase of Small Building Projects,” *Journal of Management in Engineering, ASCE*. DOI: 10.1061/(ASCE)ME.1943-5479.0000417.04015050
17. Lines, B. C., Sullivan, K. T., Smithwick, J. B., and Mischung, J. (2015). “Overcoming resistance to change in engineering and construction: Change management factors for owner organizations,” *International Journal of Project Management*, Vol. 33(5), pp. 1170-1179. DOI:10.1016/j.ijproman.2015.01.008.
18. Smithwick, J., Thurston, A., Hurtado, K., Kashiwagi, D., & Sullivan, K. (2014). “Student Engagement in the Facility Management Profession through Mentorship,” *International Journal of Facility Management*, Vol. 5(2), pp. 1-11.
19. Lines, B., Perrenoud, A., Sullivan, K., and Smithwick, J. (2014). “Implementing New Project Delivery Strategies: Development of a Web-Based Multimedia Tool to Support Owner Project Team Training,” *International Journal of Construction Education and Research, ASC*, DOI: 10.1080/15578771.2014.930541.
20. Smithwick, J., Shultz, T., Sullivan, K., and Kashiwagi, D. (2013). “A model for the Creation of Shared Assumptions and Effective Preplanning,” *International Journal of Facility Management*, Vol. 4 (3), pp. 16-27.
21. Smithwick, J., Sullivan, K., and Kashiwagi, D. (2013). “Utilization of a Best Value Structure on a City’s Park Renewal and Upgrade Program,” *Journal for the Advancement of Performance Information and Value, CIB*, Vol. 5 (1), pp. 50-58.
22. Kashiwagi, D., Smithwick, J., Kashiwagi, J., and Sullivan, K. (2010). “Case Study of a Best Value Manufacturer,” *Journal for the Advancement of Performance Information and Value, CIB*, Vol. 2 (1), pp. 57-86.

### **Refereed Conference Proceedings**

1. **Dodd, J.**, Smithwick, J., Bown, M., and **Kasana, D.** (2019). “Benchmarking Facility Size, Type of Space, and Maintenance Costs/Rentable Square Foot.” In *Proceedings, Associated Schools of Construction 55<sup>th</sup> Annual International Conference*, Denver, CO, pp. 305-313, April 10-12, 2019.
2. **Delvinne, H. H.**, Hurtado, K., **Saseendran, A.**, Smithwick, J., and Sullivan, K. (2019). “Impacts of Project Scope on Solicitation Performance: A Cross-Disciplinary Study.” In *Proceedings, Associated Schools of Construction 55<sup>th</sup> Annual International Conference*, Denver, CO, pp. 603-610, April 10-12, 2019.

3. **Shalwani, A. S.**, Lines, B. C., **Kasana, D. V.**, **Dodd, J. R.**, and Smithwick, J. B. (2019). “Effect of Risk Prolongation on Cost and Schedule of a Project.” In *Proceedings, Associated Schools of Construction 55th Annual International Conference*, Denver, CO, pp. 571-577, April 10-12, 2019.
4. Smithwick, J. and **Dodd, J.** (2018). “Developing an Effective Scope of Work (SOW).” In *Proceedings, 2018 ACM on SIGUCCS Annual Conference*, Orlando, FL, pp. 77-80, October 7-10, 2018, DOI: 10.1145/3235715.3235723
5. **Shalwani, A.S.**, Lines, B.C., Smithwick, J.B., **Hurtado, K.C.**, and Sullivan, K.T. (2018). “Relationship of Construction Engineering and Management Student Performance with Personality Traits: HEXACO and Emotional Intelligence.” In *Proceedings, Associated Schools of Construction 54th Annual International Conference*, Minneapolis, MN, pp. 273-280, April 18-20, 2018.
6. **Carter, M.**, Gehrig, B., and Smithwick, J. (2018). “Collaborative Learning Methods in Construction Management Education,” In *Proceedings, Associated Schools of Construction 54th Annual International Conference*, Minneapolis, MN, April 18-20, 2018.
7. **Hurtado, K.**, Savicky, J., Sullivan, K., Smithwick, J., and Gajjar, D. (2018). “Construction Portfolio Management Model for Institutions,” In *Proceedings, American Society of Civil Engineers (ASCE) Construction Research Congress* (pp. 168-177). New Orleans, LA.
8. Lines, B., **Shalwani, A.**, and Smithwick, J. (2018). “Effectiveness of Qualifications-Based Selection Criteria in Design-Build and Construction Manager at Risk Procurements: An Empirical Analysis,” In *Proceedings, American Society of Civil Engineers (ASCE) Construction Research Congress* (pp. 137-147). New Orleans, LA.
9. **Hurtado, K.**, **Saseendran, A.**, Sullivan, K., Smithwick, J., Lines, B., and Stone, B. (2018). “Team Selection Mechanics: Qualifications, Availability, and the Human Element,” In *Proceedings, American Society of Civil Engineers (ASCE) Construction Research Congress* (pp. 158-164). New Orleans, LA.
10. Smithwick, J., **Dodd, J.**, and **Hurtado, K.** (2017). “Snapshot Benchmarking in the Operation and Maintenance of Constructed Facilities,” *2017 Associated Schools of Construction Conference*, Seattle, WA, April 6-7, 2017.
11. Smithwick, J., Lines, B., **Sawyer, J.**, and Sullivan, K. (2017). “An Analysis of Construction Overhead Expenses During the ‘Great Recession’,” *2017 Associated Schools of Construction Conference*, Seattle, WA, April 6-7, 2017.
12. **Hurtado, K.**, Perrenoud, A., Smithwick, J., and Sullivan, K. (2017). “Linking Contractor Planning and Risk Prediction to Project Performance,” *2017 Associated Schools of Construction Conference*, Seattle, WA, April 6-7, 2017.  
**\* ASC 2017 Best Paper – Honorable Mention (2<sup>nd</sup> place)**
13. **Hurtado, K.**, Smithwick, J., Sullivan, K., and Savicky, J. (2016). “Design and Implementation of a Practice-Based Course in Contracting and Project Management,” *123<sup>rd</sup> ASEE Annual Conference & Exposition*, New Orleans, LA, June 26-29, 2016. 10.18260/p.26671

14. Pesek, A., Smithwick, J., Hurtado, K., and Sullivan, K. (2016). "Utilization of Value and Risk Assessments in Transportation Procurement: A Case Study of a New Highway Corridor," *Construction Research Congress 2016*, San Juan, PR, May 31 – June 2, 2016. pp. 448-465. doi: 10.1061/9780784479827.046.
15. Smithwick, J., Hurtado, K., Perrenoud, A., and Sullivan, K. (2016). "The Effect of Pre-planning on Public Works Projects: A Policy Perspective," *2016 Associated Schools of Construction Conference*, Provo, UT, April 13-16, 2016.
16. Hurtado, K., Smithwick, J., Pesek, A., and Sullivan, K. (2016). "Charting Contractor Performance in Public School Construction: A Longitudinal Case Study," *2016 Associated Schools of Construction Conference*, College Station, TX, April 22-25, 2016.  
**\* ASC 2016 Best Paper Award**
17. Smithwick, J., Hurtado, K., Thurston, A., and Sullivan, K. (2015). "Mentorship: Sustaining Knowledge in the Facilities Management Profession," *122<sup>nd</sup> ASEE Annual Conference & Exposition*, Seattle, WA, June 14-17, 2015. 10.18260/p.24485
18. Mischung, J., Smithwick, J., Sullivan, K., and Perrenoud, A. (2015). "Using Skills-Based Emotional Intelligence Training to Improve Team Performance in Construction Management Programs," *122<sup>nd</sup> ASEE Annual Conference & Exposition*, Seattle, WA, June 14-17, 2015. 10.18260/p.25017
19. Gajjar, D., Kashiwagi, D., Sullivan, K., Smithwick, J. (2015). "Case Study in the Application of the Project Definition Rating Index and Best Value Procurement System to a Sprayed Polyurethane Foam Roofing Project." *2015 Project Management Symposium*, College Park, MD, USA (June 7-8, 2015).
20. Smithwick, J., Lines, B., Barlish, K., Gajjar, D., Sullivan, K. (2015). "Value-based Approach to IT Networked Services Delivery: A Case Study." *2015 Project Management Symposium*, College Park, MD, USA (June 7-8, 2015).
21. Smithwick, J., Gajjar, D., Perrenoud, A., Sullivan, K., Kashiwagi, D. (2015) "Project Preplanning Best Practices for Educational Facilities: A Case Study." *2015 Project Management Symposium*, College Park, MD, USA (June 7-8, 2015).
22. Smithwick, J., Lines, B., Mischung, J., Sullivan, K., and Kashiwagi, D. (2015). "Minimizing Construction Project Schedule Delays through Risk Management and Performance Information," *2015 Associated Schools of Construction Conference*, College Station, TX, April 22-25, 2015.
23. Mischung, J., Perrenoud, A., Smithwick, J., and Sullivan, K. (2015). "A Review of Emotional Intelligence and Considerations for EI's Use Within Construction Management Programs," *2015 Associated Schools of Construction Conference*, College Station, TX, April 22-25, 2015.
24. Sawyer, J., Lines, B., Perrenoud, A., Smithwick, J., and Sullivan, K. (2015). "Qualifications Based Selection of Construction Services: Evaluation Criteria That Best Differentiate Contractor Qualifications," *2015 Associated Schools of Construction Conference*, College Station, TX, April 22-25, 2015.

25. Gajjar, D., Kashiwagi, D., Sullivan, K., Kashiwagi, J., and Smithwick, J. (2015). "Performance Measurement System for Maintenance of SPF Roofing System: A 4 Year Case Study," *2015 Associated Schools of Construction Conference*, College Station, TX, April 22-25, 2015.
26. Lines, B., Sullivan, K., and Smithwick, J. (2014). "An Action Research Approach to Implementation of Alternative Project Delivery Methods within Architectural, Engineering, and Construction Owner Organizations: Overcoming Resistance through Education," *Construction Research Congress 2014*, Atlanta, GA, May 19-21, 2014. pp. 2084-2095. doi: 10.1061/9780784413517.212.
27. Smithwick, J., Mischung, J., and Sullivan, K. (2014). "Impact of Estimating Software on Student Performance for Simple Quantity Takeoff Calculations," *2014 Associated Schools of Construction Conference*, Washington, D.C., March 26-28, 2014.
28. Kashiwagi, D., Gajjar, D., Smithwick, J., and Kashiwagi, J. (2013). "Implementation of a Real-Time Information System for a Roofing Manufacturer," *New Developments in Structural Engineering and Construction*, Honolulu, HI, June 18-23, 2013.
29. Smithwick, J. and Sullivan, K. (2013). "Application of a Risk Management Structure to Minimize Schedule Deviations Under a Commodities Contract," *2013 Associated Schools of Construction Conference*, San Luis Obispo, CA, April 9-13, 2013.
30. Smithwick, J., Sullivan, K. and Stone, B. (2012). "Risk Management Structure for Value-Based Commodity Contracts," *RICS International Research Conference*, Las Vegas, NV, September 11-13, 2012.
31. Smithwick, J. and Kashiwagi, D. (2012) "Best Value System Documents Performance of City's Public Works Department Projects." *RICS International Research Conference*, Las Vegas, NV, September 11-13, 2012.
32. Kashiwagi, J., Smithwick, J., Sullivan, K., and Kashiwagi, D. (2009). "Neogard, The History and Formation of a Best Value Manufacturer," *2<sup>nd</sup> Construction Industry Research Achievement International Conference (CIRAIC 2009)*, Kuala Lumpur, Malaysia, November 3-5, 2009.

### Technical Reports

1. Smithwick, J. and Lines, B. (2019). *Personality & Aptitude Assessment of Top-Performing Electrical Contractor Project Managers*. ELECTRI International. Bethesda, MD.
2. International Facility Management Association. (2019). *Operations and Maintenance Benchmarks: A Qualitative Analysis of Facility Practices*. Houston, TX.
3. Smithwick, J., Mayo, G., and Kasana, D. (2019). Product Evaluation Tracking Tools and Product Categories Final Report FHWA/NC/2018-08.
4. Mayo, G., Smithwick, J., and Gooljar, R. (2019). Preventive Maintenance Criteria Validation Final Report 2019-10.
5. International Facility Management Association. (2018). *Operations and Maintenance Benchmarks Report* (No. 101-18-2016). Houston, TX.

6. Hildreth, J., Smithwick, J., and Freeland, C. (2018). Preventive Maintenance Criteria Validation Final Report 2017-05.
7. Lines, B. and Smithwick, J. (2018). “Organizational Change Adoption: Best Practices for Electrical Contractors,” ELECTRI International. Bethesda, MD.

## **ACADEMIC TEACHING EXPERIENCE**

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### **Instructor**

#### *Facility Management Financial Analysis (CMET 6145) – Fall 2018 [New Course]*

- 3 Credit Hours.
- 19 students.
- Provide students with tools to conduct strategic financial decision making, including time value analysis, financial risk and return, financing methods for capital acquisition, and capital forecasting.

#### *Construction Planning Lab (CMET 4129L) – Fall 2016; Fall 2017, Fall 2018*

- 1 Credit Hour.
- 59 students.
- Methods for planning construction operations and projects for directed projects with an emphasis on developing schedules and cost estimates to reflect the plan.

#### *Project Scheduling & Control (CMET 4126 / CMET 5126) – Fall 2017; Fall 2019*

- 3 Credit Hours.
- 58 students.
- Provide students with methods for planning, scheduling, and controlling construction projects, emphasizing manual and computer-based techniques for critical path method scheduling, resource management, construction cost control, and reporting practices.

#### *Safety & Risk Management (CMET 6240) – Spring 2018, Spring 2019, Spring 2020*

- 3 Credit Hours.
- 29 students.
- Provide students with the theory and practice of construction safety, methods to improve safety at construction sites, and introduce them to IARM (Identification, Assess, Response and Management) of Construction Risk.

#### *Construction Means and Methods (ETCE 2221) – Spring 2017; Spring 2018, Spring 2020*

- 3 Credit Hours.
- 104 students.
- Provide students with a comprehensive knowledge of the construction means, methods, and equipment used in the construction of civil engineering projects and building construction.

#### *Alternative Project Delivery Methods (CMET 6180) – Spring 2017*

- 3 Credit Hours.
- 20 students.
- Discuss alternative project delivery methods for civil engineering systems, construction procurement methods, contract management, performance measurement, and other related topics.

*Research & Analytical Methods (CMET 6160) – Fall 2016*

- 3 Credit Hours.
- 21 students.
- Analytical and research techniques applicable to construction and facility management problems. Topics of study include defining research problems, experiment design, measurement, sampling, and analysis.

*Construction Estimating (CON 383) – Fall 2015 (Teaching Practicum)*

- 4 Credit Hours.
- 60 students.
- Covered all divisions within the CSI MasterFormat, takeoff sheets, bid documents, labor and productivity, estimating considerations within various delivery methods, and estimating software.
- Personally redesigned course to move to a flipped classroom (in-class labs, online lectures), and tighter integration of estimating software systems.

*RFP Development, Response, and Metrics (CON 494) – Spring & Fall 2015 Semesters [New Course]*

- 3 Credit Hours.
- 30 multidisciplinary (construction, engineering, supply chain, business) students.
- Developed entirely new course, including all lectures, lab materials, and homework assignments
- Topics Covered: Contract Structures, Sustainable Procurement Systems, Contract Performance, Analyzing Performance Capabilities, Contract Documents, Legal, Project Pre-Planning.

## **INDUSTRY SEMINARS AND SHORT-COURSES EXPERIENCE**

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### **Invited Talks / Presentations**

1. Tymvios, N. and Smithwick, J. (2020). “The Need to Improve Facility Operations, Maintenance, and Repair (OM&R) Safety through Early Design Interventions”. American Society of Civil Engineers – Construction Institute. February 22, 2020. Los Angeles, CA, United States (17 Attendees).
2. Smithwick, J. (2020). “Buying Roofing Systems – Learn Industry Best Practices That Provide Value Webinar”. Center for Procurement Excellence. February 20, 2020. (15 Attendees).
3. Smithwick, J. (2020). “Move Your RFP from a C to an A – Five Things You Can Do Today Webinar”. Canadian Healthcare Engineering Society. February 19, 2020. (30 Attendees).
4. Smithwick, J. (2020). “Construction Proposal Development Best Practices Webinar.” February 7, 2020. (8 Attendees).
5. Smithwick, J. and Lynch, J. (2019). “Emergency Management: Practical Tools and Resources That Every FM Needs Webinar”. International Facility Management Association. December 4, 2019. (147 Attendees).
6. Smithwick, J., Mayo G., and Tymvios, N. (2019). “Safety is not Just for Construction Anymore: 3 Tools That FM’s Can Use to Elevate Their Safety Programs! Webinar”. International Facility Management Association. November 6, 2019. (119 Attendees).



7. Smithwick, J. (2019). “Succession Planning and Institutional Knowledge Management Benchmarking: Tackle What Seems Like an Uphill Battle”. National Facilities Management and Technology . November 14, 2019. Orlando, FL, United States (130 Attendees).
8. Smithwick, J. (2019). “Great Teams Lead to Great Projects: People You Hire Matter!”. National Facilities Management and Technology . November 13, 2019. Orlando, FL, United States (80 Attendees).
9. Smithwick, J. (2019). “Best Value Procurement Best Practices”. Center for Procurement Excellence. November 7, 2019. Baltimore, MD, United States (51 Attendees).
10. Smithwick, J. (2019). “Furniture Services Contracting and Management Best Practices Webinar”. International Facility Management Association. October 9, 2019. (119 Attendees).
11. Smithwick, J. (2019). “Move Your RFP from a C to an A! 5 Things You can Do TODAY!”. Central Association of Physical Plant Administrators. September 30, 2019. Winnipeg, MB, Canada (20 Attendees).
12. Smithwick, J. (2019). “Developing an Effective Scope of Work for Operations & Service Contracts”. Canadian Healthcare Engineering Society. September 24, 2019. Saskatoon, SK, Canada (40 Attendees).
13. Smithwick, J. (2019). “Procurement Training Workshop”. Center for Procurement Excellence. September 16, 2019. Seattle, WA, United States (34 Attendees).
14. Smithwick, J. (2019). “Developing the Business Case for Preventative Maintenance – Understand the true ROI of ‘Run to Fail’ Webinar”. International Facility Management Association. August 14, 2019. (39 Attendees).
15. Smithwick, J. (2019). “Move Your RFP from a C to an A+! Five Things You Can Do TODAY Webinar”. National Association of College Auxiliary Services. August 1, 2019. (35 Attendees).
16. Smithwick, J. (2019). “Master Planning & Design Development Consulting Services Pre-Proposal Meeting”. Brooklyn Park Recreation and Parks. July 31, 2019. Brooklyn Park, MN, United States (30 Attendees).
17. Smithwick, J. (2019). “Recommendations for Proposal Evaluations in Professional Architectural and Engineering Services”. Brooklyn Park Recreation and Parks. July 31, 2019. Brooklyn Park, MN, United States (12 Attendees).
18. Smithwick, J. (2019). “Developing an Effective Scope of Work for Operations & Service Contracts Webinar”. International Facility Management Association. July 24, 2019. (549 Attendees).
19. Smithwick, J. (2019). “Expertise-driven Project Delivery (XPD): Kickoff”. Brooklyn Park Recreation and Parks. July 19, 2019. Brooklyn Park, MN, United States (12 Attendees).
20. Smithwick, J. (2019). “Benchmarking Practices and Preparing for the Future of Facility Management: A Case Study”. European Facility Management Network. June 13, 2019. Dublin, Ireland (40 Attendees).

21. Smithwick, J. (2019). “Best Practices in Janitorial Services Contracting and Performance Measurement Webinar”. International Facility Management Association. June 5, 2019. (404 Attendees).
22. Smithwick, J. (2019). “Engaging with Academia and Institutions of Higher Learning Webinar”. International Facility Management Association. May 22, 2019. (104 Attendees).
23. Smithwick, J. (2019). “Succession Planning and Knowledge Management: Tackle what seems like an uphill battle Webinar”. International Facility Management Association. May 8, 2019. (256 Attendees).
24. Smithwick, J. (2019). “Move Your RFP From Grade C to an A+: Five Things You Can Do Today! Webinar”. Center for Procurement Excellence. May 2, 2019. (59 Attendees).
25. Smithwick, J. (2019). “Roof Leaks Got Your Customers Waist High in Problems? Use Benchmarking to Get the Problem Fixed ... Permanently! Webinar”. International Facility Management Association. April 24, 2019 (192 Attendees).
26. Smithwick, J. (2019). “Developing an Effective Customer Satisfaction Survey Webinar”. International Facility Management Association. March 27, 2019. (50 Attendees).
27. Smithwick, J. (2019). “Developing an Effective Scope of Work for Operations & Service Contracts”. National Facilities Management and Technology . March 26, 2019. Baltimore, MD, United States (190 Attendees).
28. Smithwick, J. (2019). “Project Delivery Systems: What works & what doesn’t Webinar”. International Facility Management Association. March 20, 2019. (65 Attendees).
29. Smithwick, J. (2019). “Procurement Ethics and Best Practices”. Center for Procurement Excellence. March 13, 2019. Los Angeles, CA, United States (105 Attendees).
30. Smithwick, J. (2019). “Leveraging Human Factor Personality Profiles to Enhance FM Team Performance Webinar”. International Facility Management Association. February 27, 2019. (70 Attendees).
31. Smithwick, J. (2019). “Expertise-driven Project Delivery (XPD): A Best Value Tool”. City of Brooklyn Park, Minnesota. February 8, 2019. Brooklyn Park, MN, United States (15 Attendees).
32. Smithwick, J. (2019). “Operations and Maintenance Benchmarks: A Qualitative Analysis of Facility Practices Webinar”. International Facility Management Association. January 31, 2019 (55 Attendees).
33. Smithwick, J. (2019). “Tools for the Hiring, Promotion, and Talent Development of Electrical Contractor Personnel”. ELECTRI International. January 17, 2019. Phoenix, AZ, United States (50 Attendees).
34. Sullivan, K. and Smithwick, J. (2018). “Facility Benchmarking Panelist”. Committee on Facilities Staffing Requirements for Veterans Health Administration, The National Academies of Sciences, Engineering, and Medicine. December 14, 2018. Washington, D.C., United States (15 Attendees).

35. Smithwick, J. (2018). “Move Your RFP from a C to an A+! Five Things You Can Do TODAY”. Government Contract Management Symposium. December 4, 2018. Washington, D.C., United States (45 Attendees).
36. Smithwick, J. (2018). “Developing an Effective Scope of Work”. Government Contract Management Symposium. December 3, 2018. Washington, D.C., United States (35 Attendees).
37. Smithwick, J. (2018). “Procurement Reform Best Practices: Five Things You Can Do Today!”. Center for Procurement Excellence. November 8, 2018. Newburgh, NY, United States (19 Attendees).
38. Smithwick, J. (2018). “Procurement Reform Best Practices: Five Things You Can Do Today!”. Center for Procurement Excellence. November 7, 2018. Albany, NY, United States (13 Attendees).
39. Smithwick, J. (2018). “Managing the Labor Crisis & Measuring Customer Satisfaction: Two New Tools to Help Your Business”. *Sheet Metal & Air Conditioning Contractors' National Association Annual Convention*. October 16, 2018. San Diego, CA, United States (20 Attendees).
40. Lines, B. and Smithwick, J. (2018). “Managing the Labor Crisis & Measuring Customer Satisfaction: Two New Tools to Help Your Business”. *Sheet Metal & Air Conditioning Contractors' National Association Annual Convention*. October 15, 2018. San Diego, CA, United States (12 Attendees).
41. Smithwick, J. (2018). “Improving the Selection Process - Five Things You Can Do Today”. *COAA – Georgia Chapter*. October 11, 2018. Sandy Springs, GA, United States (60 Attendees).
42. Smithwick, J. (2018). “Developing Effective Scopes of Work (SOWs)”. *Association for Computing Machinery's SIGUCCS 2018*. October 9, 2018. Orlando, FL, United States (15 Attendees).
43. Smithwick, J. (2018). “Move Your RFP from a C to an A+! Five Things You Can Do Today”. *IFMA World Workplace*. October 4, 2018. Charlotte, NC, United States (40 Attendees).
44. Smithwick, J. (2018). “Developing an Effective Scope of Work for Operations & Service Contracts”. *IFMA World Workplace*. October 4, 2018. Charlotte, NC, United States (130 Attendees).
45. Smithwick, J. (2018). “Move Your RFP from a C to an A+! Five Things You Can Do Today”. *IFMA Utilities Council*. September 30, 2018. Charlotte, NC, United States (25 Attendees).
46. Smithwick, J. (2018). “Move your RFP from a C to an A”. *National Association of College Auxiliary Services - East Conference*. June 19, 2018. Saratoga Springs, NY, United States. (18 Attendees).
47. Smithwick, J. (2018). “How to Improve Your RFP from a Grade C to an A+”. *Center for Procurement Excellence – Spring Webinar*. May 24, 2018. (141 Attendees).
48. Smithwick, J. (2018). “Improving the Selection Process - Five Things You Can Do TODAY”. *Construction Owners Association of America (COAA) 2018 Spring Conference*. May 10, 2018. Pittsburgh, PA, United States (115 Attendees).

49. Smithwick, J. (2018). “Move your RFP from a C to an A; Contract Management Cycle: Execute, Implement, Evaluate”. *NACAS Institute for Leadership & Management*. April 21, 2018. Charleston, SC, United States (16 Attendees).
50. Smithwick, J. (2018). “Making the Case: Using Performance Measurements”. *Center for Procurement Excellence National Conference*. February 13, 2018. Tempe, AZ, United States (120 Attendees).
51. Smithwick, J. (2017). “Developing an Effective Scope of Work”. *National Association of College Auxiliary Services - National Conference*. November 7, 2017. Colorado Springs, CO, United States (40 Attendees).
52. Smithwick, J. (2017). “How do your Business Services Measure Up?”. *National Association of College Auxiliary Services - National Conference*. November 7, 2017. Colorado Springs, CO, United States (50 Attendees).
53. Smithwick, J. (2017). “Research & Best Practices for Facility Owners”. *International Facility Management Association – Airport Council*. October 17, 2017. Houston, TX, United States (25 Attendees).
54. Smithwick, J. (2017). “Flexible Overhead: Agile Strategies That Increase Electrical Contractor Profitability”. *New Orleans, NECA*. October 11, 2017. New Orleans, LA, United States (25 Attendees).
55. Smithwick, J. (2017). “Team Alignment & Collaboration: Developing High Performing Teams”. *Texas Public Owners’ Conference*. August 11, 2017. College Station, TX, United States (45 Attendees).
56. Smithwick, J. (2017). “Expertise-driven Project Delivery for Facility Owners Short Course”. *UNC Charlotte*. August 9, 2017. Charlotte, NC, United States (20 Attendees).
57. Smithwick, J. (2017). “Flexible Overhead: Agile Strategies That Increase Electrical Contractor Profitability”. *Central Indiana NECA*. August 5, 2017. Indianapolis, IN, United States (30 Attendees).
58. Smithwick, J. (2017). “Early Career Award Final Research Update”. *ELECTRI International*. July 14, 2017. Boston, MA, United States (110 Attendees).
59. Smithwick, J. (2017). “Flexible Overhead: Agile Strategies That Increase Electrical Contractor Profitability”. *Oregon-Columbia Chapter of National Electrical Contractors Association (NECA)*. May 8, 2017. Portland, OR, United States (50 Attendees).
60. Smithwick, J. (2017). “Expertise-driven Project Delivery: Hands-on Workshop”. *Oregon Health & Science University*. May 8, 2017. Portland, OR, United States (7 Attendees).
61. Smithwick, J. (2017). “How do your Business Services measure up?”. *National Association of College Auxiliary Services – South Conference*. April 25, 2017. New Orleans, LA, United States (85 Attendees).
62. Smithwick, J. (2017). “Operations and Maintenance Benchmarking: Results from IFMA’s Recent”. *IFMA Facility Fusion*. April 5, 2017. Las Vegas, NV, United States (75 Attendees).

63. Smithwick, J. (2017). “Future Leader Meeting: Better Proposals and Overhead Management”. *NorCal of National Electrical Contractors Association (NECA)*. March 24, 2017. Pleasanton, CA, United States (15 Attendees).
64. Smithwick, J. (2017). “Flexible Overhead: Agile Strategies That Increase Electrical Contractor Profitability”. *Central Ohio Chapter of National Electrical Contractors Association*. March 22, 2017. Columbus, OH, United States (45 Attendees).
65. Smithwick, J. (2017). “Flexible Overhead: Agile Strategies That Increase Electrical Contractor Profitability”. *Atlanta Electrical Contractors Association*. March 3, 2017. Atlanta, GA, United States (60 Attendees).
66. Smithwick, J. (2017). “Pre-Proposal Meeting for Nisku Spine Road Phase 1Aii”. *Leduc County*. February 17, 2017. Edmonton, AB, Canada (40 Attendees).
67. Smithwick, J. (2017). “How do your FM Services Measure Up?”. *IFMA-SAME (Society of American Military Engineers)*. February 9, 2017. San Antonio, TX, United States (50 Attendees).
68. Smithwick, J. (2017). “Best Value Educational Session”. *Leduc County*. January 27, 2017. Edmonton, AB, Canada (50 Attendees).
69. Smithwick, J. (2017). “Early Career Award Research Update”. *ELECTRI International*. January 20, 2017. Santa Barbara, CA, United States (110 Attendees).
70. Smithwick, J. (2017). “Flexible Overhead: Agile Strategies That Increase Electrical Contractor Profitability”. *National Electrical Contractors Association - Memphis Chapter*. January 17, 2017. Memphis, TN, United States (8 Attendees).
71. Smithwick, J. (2016). “Flexible Overhead: Risk Management Strategies for the Global Construction Market”. *International Contractors Association of Korea*. December 9, 2016. Seoul, Gyeonggi, South Korea (175 Attendees).
72. Smithwick, J. (2016). “Flexible Overhead: Agile Strategies That Increase Electrical Contractor Profitability”. *National Electrical Contractors Association - Washington, D.C. Chapter*. November 9, 2016. Baltimore, MD, United States (12 Attendees).
73. Smithwick, J. (2016). “Procurement Expertise in FM: A New Approach for Custodial Services Contracts”. *International Facility Management Association – World Workplace 2016*. October 6, 2016. San Diego, CA, United States (80 Attendees).
74. Smithwick, J., Mryglod, D., and Roggeveen, C. (2016). “Next Practices in Project Delivery Drives Roadway Success”. *American Public Works Association – Public Works Expo*. September 1, 2016. Minneapolis, MN, United States (30 Attendees).
75. Smithwick, J. (2016). “A Value-based Approach for Historical Facility Renovation”. *Dallas County*. June 14, 2016. Dallas, TX, United States (15 Attendees).
76. Smithwick, J. (2016). “The Successful Contractor of the Future: How to Prosper in a Cyclical Industry”. *Merchants Bonding Masters Surety Roundtable*. June 9, 2016. Park City, UT, United States (18 Attendees).

77. Smithwick, J. (2016). “Best Practices for Custodial and Facilities Services”. *Northern Alberta Institute of Technology (NAIT)*. March 14, 2016. Edmonton, AB, Canada (40 Attendees).
78. Smithwick, J. (2016). “Common Pitfalls of Construction”. *Arizona Builders Alliance*. February 5, 2016. Phoenix, AZ, United States (38 Attendees).
79. Smithwick, J. (2016). “Simplifying the IT Scope Development Process”. *Association for College and University Technology Advancement (ACUTA)*. January 18, 2016. New Orleans, LA, United States (27 Attendees).
80. Smithwick, J. (2016). “In-Depth Training for Best Practices in Procurement and Project Delivery”. *Northern Alberta Institute of Technology (NAIT)*. January 12, 2016. Edmonton, AB, Canada (23 Attendees).
81. Smithwick, J. (2015). “A Best Value Business Model: Flexible Overhead.” *Construction Financial Management Association (CFMA), Silicon Valley Chapter*. October 21, 2015. San Jose, CA, United States (53 Attendees).
82. Smithwick, J. (2015). “Advanced Risk Management Techniques in the Procurement Process.” *Alliance for Construction Excellence (ACE)*. April 15, 2015. Phoenix, AZ, United States (25 Attendees).
83. Smithwick, J. (2015). “Forecast of Current Construction Market & Trends.” *American Society of Professional Estimators (ASPE), Chapter Six*. April 14, 2015. Phoenix, AZ, United States (20 Attendees).
84. Smithwick, J. (2015). “Leadership vs. Management: Making the Transition.” *Construction Owners Association of America (COAA)*. April 1, 2015. Cleveland, OH, United States (85 Attendees).
85. Smithwick, J. (2015). “Application of Value-Based Project Delivery to Recreation and Parks Management.” *Alberta Recreation and Parks Association (ARPA)*. October 24, 2014. Jasper, AB, Canada (105 Attendees).
86. Smithwick, J. (2015). “Value Based Project Delivery: Minimize Costs by Leveraging Expertise” *Alberta Recreation and Parks Association (ARPA)*. October 23, 2014. Jasper, AB, Canada (48 Attendees).
87. Smithwick, J. (2014). “Best Value Approach to Parks Management.” *Minnesota Recreation and Park Association (MnRPA)*. September 25, 2014. Blaine, MN, United States (45 Attendees).
88. Smithwick, J. (2014). “Skills Needed for Successful Proposals – Suppliers’ Roundtable.” *Association of Corporate Travel Executives (ACTE)*. September 25, 2014. Minneapolis, MN, United States (25 Attendees).
89. Smithwick, J. (2014). “Ground-breaking Techniques to Enhance Your Sourcing Practices.” *Association of Corporate Travel Executives (ACTE)*. September 25, 2014. Minneapolis, MN, United States (45 Attendees).

90. Smithwick, J. (2014). “Holistic Project Delivery... Solutions to Common Owner Frustrations.” *Construction Owners Association of America (COAA)*. September 11, 2014. State College, PA, United States (193 Attendees).
91. Smithwick, J. (2014). “Proven Techniques to Enhance Your Sourcing Practices.” *Association of Corporate Travel Executives (ACTE)*. July 8, 2014. Dallas, TX, United States (12 Attendees).
92. Smithwick, J. (2013). “Next Practices: Best Value Project Delivery.” *Construction Management Association of America (CMAA)*. February 13, 2013. Phoenix, AZ, United States (25 Attendees).
93. Smithwick, J. (2012). “Alternative Project Delivery: A Valued-Based Approach.” *Royal Institute of Chartered Surveyors (RICS) – Southwest Chapter*. September 20, 2012. Phoenix, AZ, United States (20 Attendees).

### **Professional Short Courses**

1. Creating a Winning Proposal: Recommendations for Success in Alternative Project Delivery  
*San Diego, California, United States – June 4, 2019*
  - Role: lead instructor, presented 100% of content, and developed all course materials.
  - 15 attendees from large multi-national construction firm.
  - Hands-on workshop for preparing a proposal in alternative project delivery.
  - Duration: 6.5 hours (1 Day).
2. Alternative Project Delivery Interview Training and Hands-on Workshop  
*Phoenix, Arizona, United States – May 10, 2019*
  - Role: lead instructor, presented 100% of content, and developed all course materials.
  - 10 attendees from construction firm.
  - Interview training and hands-on workshop for alternative project delivery.
  - Duration: 5 hours (1 Day).
3. Value-Based Project Delivery: Becoming a Better Buyer and Seller  
*Halifax, Nova Scotia, Canada – June 10 & 11, 2014*
  - Role: Co-instructor and presented 50% of content.
  - 25 attendees from public agencies & Architecture, Engineering, and Construction firms.
  - Training for AEC Firms to become more competitive in value-based proposal processes.
  - Duration: 16 hours (2 Days).
4. Best Practices in Schools Construction Project Delivery  
*Anoka, Minnesota, United States – August 5, 21, & September 19, 2013*
  - Role: lead instructor, presented 100% of content, and developed all course materials.
  - 18 attendees from school districts’ construction and procurement departments.
  - Three-part series covering scoping, proposal analysis, and performance measurement.
  - Duration: 12 hours (Three Days @ 4 Hours each).
5. Keys to Successful Proposals in Alternative Project Delivery  
*Greater Minneapolis-St. Paul metropolitan area, Minnesota, United States – 2012 to 2013*
  - Role: lead instructor, presented 100% of content, and developed all course materials.
  - 73 attendees from various Architecture, Engineering, and Construction firms.
  - Review traits of successful proposals, submittal examples, performance measurement.
  - Duration: 21 hours (Seven Courses @ 3 Hours Each).

### **Other Professional Seminars**

1. “Research Design & Planning in Facilities Management.” *International Facility Management Foundation*. October 9, 2015. Denver, CO, United States (20 Attendees).
2. “Utilizing Non-Governmental Organizations to Create Transparency within Public Agencies.” *American Society for Public Administration*. March 9, 2015. Chicago, IL, United States (15 Attendees).
3. “Value-Based Project Delivery Results in the State of Minnesota.” *2014 Best Value Conference*. January 14, 2014. Tempe, AZ, United States (90 Attendees).
4. “Performance Contracting: Recommendations for Construction Owners.” *Breakfast Meet and Greet, sponsored by Knutson Construction*. May 21, 2013. Iowa City, IA, United States (35 Attendees).
5. “Construction Risk Management Concepts in Primary Educational Institutions.” *Elk River Intermediate School District #728*. January 10, 2013. Elk River, MN, United States (10 Attendees).
6. “Best Value Legislation Leads to Higher Performance and Increased Accountability.” *Northeast Conference on Public Administration (NECoPA)*. November 3, 2012. Boston, MA, United States (10 Attendees).
7. “Progress in Advancing Best Value Policy in Minnesota.” *2012 Best Value Conference*. February 16, 2012. Tempe, AZ, United States (120 Attendees).
8. “Tri-University Furniture Contract: Case Study of Facilities Commodities Contract” *2009 Best Value Conference*. February 11, 2009. Tempe, AZ, United States (150 Attendees).

## **RESEARCH AND INDUSTRY EXPERIENCE**

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### **Assistant Professor**

*Department of Engineering Technology and Construction Management*

*The William States Lee College of Engineering*

*The University of North Carolina at Charlotte, Charlotte, NC. 2016 – Present (3 years)*

#### **ROLES AND RESPONSIBILITIES**

- Teach courses in project planning, graduate research methods, facility management, construction means and methods, project scheduling
- Research expertise: construction and facility finance, corporate overhead, risk management, project delivery, performance measurement, organizational culture and agility



## SPONSORED RESEARCH FUNDING

<b>Year</b>	<b>Sponsor</b>	<b>Title</b>	<b>Role</b>	<b>Total \$</b>
2019	International Facility Management Association	Workspace Planning, Asia, and Europe O&M Benchmarking	Lead PI	\$ 100,000
2018	International Facility Management Association	FM Benchmarking Information System & Healthcare Benchmarks	Lead PI	\$ 175,000
2018	New Horizons Foundation	Customer Satisfaction Measurements that Stand Out from the Competition	Lead PI	\$ 52,000
2018	New Horizons Foundation	Tools for the Hiring, Promotion, and Talent Development of Sheet Metal and Mechanical Contractor Personnel	Lead PI	\$ 7,500
2018	North Carolina Department of Transportation	Freight Planning Tool for Ferry Division	Co-PI	\$ 91,996
2017	North Carolina Department of Transportation	Product Evaluation Tracking Tools and Product Categories	Lead PI	\$ 93,480
2017	International Facility Management Association	Facility Management Knowledge Translation and the Management of “Best Practices”	Lead PI	\$ 11,075
2017	North Carolina Department of Transportation	Development of Life Cycle Cost Analysis (LCCA) for the Vessels in the Ferry Fleet and the Development of an Asset Management Plan for the Remaining Ferry Assets	Co-PI	\$ 133,656
2016	International Facility Management Association	Operations and Maintenance Benchmarking Report	Lead PI	\$ 37,000
2016	ELECTRI International	Flexible Overhead: Agile Strategies That Increase Electrical Contractor Profitability	Lead PI	\$ 9,000
2016	North Carolina Department of Transportation	Preventive Maintenance Criteria Validation	Co-PI	\$ 198,670
			<b>Total</b>	<b>\$ 909,377</b>

## PHD COMMITTEE CHAIRED

1. Dodd, Justin. “Facility Management Benchmarking Information Systems.” December 2021.
2. Kasana, Dipin. “Construction Project Risk Predication Model.” December 2021.

## MS THESIS SUPERVISIONS CHAIRED

1. Violet, Kurrisa. “Risk- and value-focused Selection of Construction Subcontractors.” December 2020.
2. Mahendrababu, Monisha. “Customer Performance Measurements of Sheet Metal and Air Conditioning Contractors.” December 2018.
3. Kasana, Dipin. “A Strategic Approach to DOT Product Evaluation Tracking.” July 2018.
4. Dodd, Justin. “Best Practices for Facility Management Benchmarking.” May 2018.

## PHD COMMITTEE MEMBER

1. Shalwani, Amirali. “An Empirical Analysis of the Relationship Between Project Team Control Actions of the Root-Cause Sources and the Cost and Schedule Growth.” May 2020.

## MS THESIS COMMITTEE MEMBER

1. Mallard, Jesse. “Facility Operations and Maintenance Nomenclature Classification for Visual Analytics.” December 2020.

2. Poulos, George. “3D Scanning Guidance for Facility Managers.” December 2020.
3. Bansal, Akshay. “Guidance for Use of Industrial Waste By-Product in Concrete”. December 2020.
4. Chalmers, Jeff. “Best Practices for Facility Healthcare Benchmarking – A Delphi Study.” December 2020.
5. Bodily, Jordan. “Exploratory Study of the Use of Unmanned Aerial Vehicles for Building Inspection: A Roofing Inspection Case Study.” January 2020.
6. Rice, Michael. “Why Pay Only Once When You Can Pay Twice?” October 2019.
7. Rennert, Andrew. “Identifying Misconceptions Between Management and Employees Regarding Implementation, Application and Reporting Within Computerized Maintenance Management Systems.” October 2019.
8. McKilligan, Ryan. “Evaluation of Emerging Sustainable Residential Construction Technologies in the Twin Cities Metro Area.” July 2019.
9. Goud, Rishabh. “Distress Detection of Road images Using Deep Learning.” May 2019.
10. Kumar, Amit. “A Predictive Maintenance Optimization Framework for Pavement Management.” May 2019.
11. Saunders, Christina. “Quantifying Fire Hazards of Sustainable Initiatives in the Built Environment.” December 2018.
12. Patil, Gouree. “Scan-BIM-FEA Structural Integrity Investigation in Curtain Wall.” December 2018.
13. Subramanian, Balagee. “A Framework for Long Term Asset Management Plan Using Asset Priority Index and Condition Index for the North Carolina Ferry System.” December 2018.
14. Thakur, Reetika. “A Methodology to Account for Seasonal Population Shifts in North Carolina.” December 2018.
15. Patil, Chaitali. “Assessment of Weight Factors through Cost Benefit Analysis (CBA) for Pavement Management Systems.” December 2018.
16. Morgan, Tyler. “Data Envelopment Analysis for the Shipyard Manpower Efficiency.” December 2018.
17. Shapiro, Seth. “Real Time Project Management for Youth from Low Income Single Parent Households.” July 2018.
18. Raja, Daxil. “Service Life Prediction of the Vessels in the Ferry Fleet.” May 2018.
19. Thalin, Billy. “Transitioning Workplace Environments.” November 2017.
20. Ziffer, Steven. “Standardized Training and Accountability Measure’s Impact on Key Performance Indicators.” July 2017.
21. Dadvar, Atefeh. “Analysis of HEXACO and Emotional Intelligence Factors in Construction Management Students.” July 2017.
22. Carter, Mikkea. “Incorporating Collaborative Learning Methods in Architecture, Engineering, and Construction Education.” May 2017.
23. Karanja, Pauline. “State of Practice for Condition Assessment Methods and Metrics.” May 2017.
24. Jha, Anurag. “Impact of Fixed Firefighting Systems on Road Tunnel Resilience.” May 2017.
25. Shirey, William. “Application of Lean Six Sigma to Improve Service in Healthcare Facilities Management: A Case Study.” April 2017
26. Cluff, Casey. “Nauvoo Illinois Historic Sites: A Facilities Management Perspective.” April 2017.
27. Apt, Michael. “Diversification to Democracy.” April 2017.
28. Trammel, Jacob. “Modeling Oil Quality using Engine Operation Parameters.” December 2016.

#### MS COMPREHENSIVE EXAM

1. Thakur, Lavisha. “Summary of Office of Civil Rights (OCR) supportive services and educational programs for NC DBE/SBE.” November 2018. Committee member.
2. Gopalkrishnan, Nikhil. “What Every Construction Engineer Needs to Know about Planning Earthmoving Operations”. November 2018. Chair.
3. Bethala, Mounica. “What Every Construction Engineer Needs to Know about Planning Earthmoving Operations”. November 2018. Committee member.
4. Rane, Yashwant. “Integration of Construction Safety Procedures into Building Information Models (BIM)”. November 2017. Committee member.
5. Hocutt, Teresa. “Construction Cost Changes in Multi-Family Housing in North Carolina.” November 2017. Committee chair.
6. Gallegos, Jorge. “Thermal Performance of Lightweight Aggregates.” August 2016. Committee member.

#### **Staff Research Manager**

*School of Sustainable Engineering and The Built Environment  
Arizona State University, Tempe, AZ. 2008 – 2016 (8 years)*

#### ROLES AND RESPONSIBILITIES – ACROSS THE PROJECT DELIVERY CYCLE

- Pre-Contract & Procurement
  - Developed, wrote, and/or reviewed 116 Request for Proposals (RFP), with total project value of \$573 million.
  - Reviewed and analyzed 494 architecture, engineering, construction, and other services vendor proposals.
  - Presented 29 pre-bid educational meetings to 950 industry personnel.
- Contract Negotiation and Pre-Planning
  - Facilitated contract negotiation between client and contractor teams for 116 projects.
  - Trained teams on risk management best practices during contract award procedures.
  - Developed client project milestone schedules.
- Organizational Training
  - Supported 24 owner and manufacturer organizations (3 private companies, 3 school districts, 8 public universities, 3 cities, 2 counties, 3 states, and 2 DOTs).
  - Provided 12 proposal evaluation training sessions to 107 owner personnel.
  - Led 14 strategic planning meetings and discussions with 134 owner executives.
  - Conducted more than 40 debriefing sessions with client and vendor teams after contract award.

#### **Building Envelope and Roof Inspector**

*Independent consulting. 2002 – 2014 (12 years)*

#### ROLES AND RESPONSIBILITIES

- Conducted 2,000 physical inspections (74.2 million square feet) of various building envelope, waterproofing, and roofing systems throughout the United States.
- Documented site conditions (blistering, delamination, etc.), investigated the source of leaks, and collected customer satisfaction information.
- Completed Spray Polyurethane Foam Alliance (SPFA) Course 101-I “Fundamentals of Spray Polyurethane Foam & Covering Systems for the Independent Inspector.”

## **Military: SSgt, Training Supervisor and Emergency Response Planner**

944<sup>th</sup> Fighter Wing – Civil Engineering Squadron, Emergency Management Flight  
US Air Force Reserve, Luke AFB (Glendale, AZ). 2004 – 2010 (6 years)

### **ROLES AND RESPONSIBILITIES**

- Performed base emergency planning, coordinated site layout with first response civil engineering teams, and supported local municipalities with emergency response planning.
- Served as lead instructor for emergency response courses (1,000+ personnel).
- Developed / programmed asset and training database computer system.
- 2009 Airman of the Year, 944 FW

## **CERTIFICATIONS AND PROFESSIONAL DEVELOPMENT**

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2019 Design Build Institute of America (DBIA) Educator Workshop  
2018 Building a Stronger Curriculum with Kiewit  
2017 Sustainability Curriculum Workshop @ UNC Charlotte  
2016 HeavyBid 101  
2016 Autodesk Revit Architecture 2015 Fundamentals  
2015 Sustainability Facility Professional, SFP (from IFMA)  
2014 Facility Management Professional, FMP (from IFMA)

## **SERVICE**

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### **Academic Journal**

- Co-Editor, *Journal of Facility Management Education and Research*, 2016 – Present
- Reviewer, *Journal of Management in Engineering*, 2016 – Present
- Reviewer, *International Journal of Construction Education and Research*, 2016 – Present
- Reviewer, *Journal of Professional Issues in Engineering Education and Practice*, 2015 – Present
- Reviewer, *American Review of Public Administration*, 2016 – Present

### **University and Department**

- Facility Safety Engineer Search Committee, Lee College of Engineering, 2019
- Faculty Search Committees (2), ETCM, 2019 – Present
- University Faculty Council Representative for ETCM department, 2017 – Present
- Co-Advisor, ASC Student Competition Team, 2016 – Present
- Co-Advisor, IFMA Charlotte Student Chapter, 2016 – Present
- Mentor, CMET 4272 Capstone Team, Fall 2016 – Present

### **Industry**

- Corporate Secretary and Board Member, Center for Procurement Excellence, 2016 – Present
- Secretary, Associated Schools of Facility Management, 2016 – Present

### **Academic Conference Review Committee**

- 54<sup>th</sup> Annual International Conference of the Associated Schools of Construction (ASC), April 18-20, 2018, Minneapolis, MN, United States.
- 2018 Construction Research Congress (CRC): Construction Planning and Control; Contracting and Legal Issues; and Construction Education tracks, April 2-5, 2018, New Orleans, LA, United States.

- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2017*, October 18-20, 2017, Houston, TX, United States.
- *124<sup>th</sup> 2017 American Society for Engineering Education (ASEE) Annual Conference & Exposition*, June 25-28, 2017, Columbus, OH, United States.
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace Europe 2017*, May 30-31, 2017, Stockholm, Sweden.
- *53<sup>rd</sup> Annual International Conference of the Associated Schools of Construction (ASC)*, April 5-8, 2017, Seattle, WA, United States.
- *123<sup>rd</sup> 2016 American Society for Engineering Education (ASEE) Annual Conference & Exposition*, June 26-29, 2016, New Orleans, LA, United States.
- *2016 Construction Research Congress (CRC)*, May 31 – June 2, 2016, San Juan, Puerto Rico.
- *52<sup>nd</sup> Annual International Conference of the Associated Schools of Construction (ASC)*, April 13-16, 2016, Provo, UT, United States.
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2015*, October 7-9, 2015, Denver, CO, United States.
- *122<sup>nd</sup> 2015 American Society for Engineering Education (ASEE) Annual Conference & Exposition*, June 14-17, 2015, Seattle, WA, United States.
- *51<sup>st</sup> Annual International Conference of the Associated Schools of Construction (ASC)*, April 22-25, 2015, College Station, TX, United States.
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2014*, September 18-19, 2014, New Orleans, LA, United States.
- *50<sup>th</sup> Annual International Conference of the Associated Schools of Construction (ASC)*, March 26-28, 2014, Washington, DC, United States.
- *Royal Institute of Chartered Surveyors (RICS) COBRA 2012: Construction, Building, and Real Estate Conference*, September 11-13, 2012, Las Vegas, NV, United States.

#### **Academic Conference Proceedings Organizing Committee**

- *Associated Schools of Facility Management Fall Colloquium*, October 2, 2018, Charlotte, NC, United States.
- *2018 Construction Research Congress (CRC): Construction Planning and Control track chair*, April 2-5, 2018, New Orleans, LA, United States.
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2017*, October 18-20, 2017, Houston, TX, United States.
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace Europe 2017*, May 30-31, 2017, Stockholm, Sweden.
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2016*, October 4-7, 2016, San Diego, CA, United States [technical chair].
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2015*, October 7-9, 2015, Denver, CO, United States [technical chair].
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2014*, September 18-19, 2014, New Orleans, LA, United States.
- *Royal Institute of Chartered Surveyors (RICS) COBRA 2012: Construction, Building, and Real Estate Conference*, September 11-13, 2012, Las Vegas, NV, United States.

#### **Conference Moderator**

- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2017*, October 18-20, 2017, Houston, TX, United States.
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace Europe 2017*, May 30-31, 2017, Stockholm, Sweden.

- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2016*, October 4-7, 2016, San Diego, CA, United States [technical chair].
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2015*, October 7-9, 2015, Denver, CO, United States.
- *122nd 2015 American Society for Engineering Education (ASEE) Annual Conference & Exposition*, June 14-17, 2015, Seattle, WA, United States.
- *International Facility Management Association (IFMA) Academic & Research Track – World Workplace 2014*, September 18-19, 2014, New Orleans, LA, United States.
- *Royal Institute of Chartered Surveyors (RICS) COBRA 2012: Construction, Building, and Real Estate Conference*, September 11-13, 2012, Las Vegas, NV, United States.

## **HONORS AND AWARDS**

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- 2019 Graduate Award in Teaching Excellence, William States Lee College of Engineering
- 2018 Outstanding Reviewer, *Journal of Professional Issues in Engineering Education and Practice*
- 2017 Best Paper Honorable Mention, 53<sup>rd</sup> Annual Conference, Associated Schools of Construction
- 2016 Best Paper, 52<sup>nd</sup> Annual Conference, Associated Schools of Construction
- 2009 Airman of the Year, 944FW Luke Air Force Base, Glendale, AZ
- 2007 Air Reserve Forces Meritorious Service Medal, First Oak Leaf Cluster