

## **CURRICULUM VITAE**

**Susan Bogus Halter, PhD, PE**

AGC Endowed Chair Professor

Department of Civil, Construction & Environmental Engineering

MSC01 1070, 1 University of New Mexico

Albuquerque, NM 87131-0001

### **Education**

Ph.D., Civil Engineering, University of Colorado Boulder, 2004

Emphasis: Construction Engineering and Management

M.S., Civil and Environmental Engineering, University of Wisconsin-Madison, 1992

Emphasis: Environmental Engineering

B.S., Civil and Environmental Engineering, University of Wisconsin-Madison, 1989

### **Academic Experience**

2017 - present: Professor, University of New Mexico

2010 –2017: Associate Professor, University of New Mexico

2004 –2010: Assistant Professor, University of New Mexico

### **Industry Experience**

1989-1999: Project Manager/Project Engineer, CH2M HILL

### **Recognition and Honors**

- AGC Endowed Chair, 2016-present
- 2020 Outstanding Educator Award, National Associate of Home Builders Student Chapters
- 2016 Senior Faculty Teaching Award, UNM School of Engineering
- 2013 Harrison Faculty Recognition Award, UNM School of Engineering
- 2012 UNM Sigma Xi Chapter, Young Investigator Award
- 2009 Robert J. Stamm Teaching Excellence Award, UNM Dept of Civil Engr.
- 2008 Junior Faculty Teaching Award, UNM School of Engineering
- 2005 ExCEED Teaching Fellow
- Tau Beta Pi, 1986 to present
- Chi Epsilon, 1986 to present

## Publications

\* Student advised by Susan Bogus Halter

\*\* Post-doc mentored by Susan Bogus Halter

### *Peer-Reviewed Journal Articles*

1. Han, Fei\* and **Bogus, Susan M.** (2020) “Development of Resilience Measures for Assessing the Performance Discrepancy for Water Infrastructure Project Delivery” *ASCE Journal of Management in Engineering*, DOI: 10.1061/(ASCE)ME.1943-5479.0000800 (published online April 27, 2020)
2. Simma, Krishna Chaitanya Jagadeesh\*, Mammoli, Andrea, and **Bogus, Susan M.** (2019) “Real-Time Occupancy Estimation Using WiFi Network to Optimize HVAC Operation” *Procedia Computer Science*, Volume 155, 2019, Pages 495-502, ISSN 1877-0509, <https://doi.org/10.1016/j.procs.2019.08.069>.
3. Jafari, Amirhosein, Valentin, Vanessa, and **Bogus, Susan M.** (2018) “Identification of Social Sustainability Criteria in Building Energy Retrofit Projects” *ASCE Journal of Construction Engineering and Management*, 145(2), DOI: 10.1061/(ASCE)CO.19437862.0001610.
4. Zhang, Su\*, Lippitt, Christopher, **Bogus, Susan M.** (2017) “Pavement Surface Condition Estimation Based on Geospatial Modeling” *Annals of GIS*, doi: 10.1080/19475683.2017.1325404.
5. Zhang, Su\*, **Bogus, Susan M.**, Lippitt, Christopher D., and Migliaccio, Giovanni C. (2017) “Estimating Location Adjustment Factors for Conceptual Cost Estimating Based on Nighttime Light Satellite Imagery.” *ASCE Journal of Construction Engineering and Management*, 143(1), January 2017, doi: 10.1061/(ASCE)CO.1943-7862.0001216.
6. Zhang, Su \*, Lippitt, Christopher D., **Bogus, Susan M.**, and Neville, Paul R.H. (2016) “Characterizing Pavement Surface Distress Conditions with Hyper-Spatial Resolution Natural Color Aerial Photography.” *Remote Sensing*, 8, 392, doi: 10.3390/rs8050392.
7. Zhang, Su\*, Lippitt, Christopher D., **Bogus, Susan M.**, Loerch, Andrew, and Sturm, Jennie O. (2016) “The Accuracy of Aerial Triangulation Products Automatically Generated from Hyper-spatial Resolution Digital Aerial Photography,” *Remote Sensing Letters*, 7:2, 160-169, doi: 10.1080/2150704X.2015.1121299.
8. Valentin, Vanessa and **Bogus, Susan M.** (2015) “Assessing the Link between Public Opinion and Social Sustainability in Building and Infrastructure Projects,” *Journal of Green Building*, 10(3), 184-197.
9. Cong, Chen, Zhang, Guohui, Zong, Tian, **Bogus, Susan M.**, and Yang, Yin. (2015) “Hierarchical Bayesian Random Intercept Model-based Cross-level Interaction Decomposition for Truck Driver Injury Severity Investigations,” *Accident Analysis & Prevention*, 85 (2015) 186-198.
10. Zhang, Su\*, **Bogus, Susan M.**, Lippitt, Christopher D., Neville, Paul R.H., Zhang, Guohui, Chen, Cong, and Valentin, Vanessa. (2015) “Extracting Pavement Surface Distress

- Conditions Based on High Spatial Resolution Multispectral Digital Aerial Photography,” *Photogrammetric Engineering and Remote Sensing*, Sep 2015, 81(9), 709-720.
11. Wu, Qiong, Chen, Feng, Zhang, Guohui, Liu, Xiaoyue Cathy, and **Bogus, Susan M.** (2014) “Mixed Logit Model-based Driver Injury Severity Investigations in Single- and Multi-Vehicle Crashes on Rural Two-lane Highways,” *Accident Analysis and Prevention*, 72, 105-115.
  12. Chen, Cong, Zhang, Su\*, Zhang, Guohui, **Bogus, Susan M.**, and Valentin Vanessa. (2014) “Discovering Temporal and Spatial Patterns and Characteristics of Pavement Distress Condition Data on Major Corridors in New Mexico,” *Journal of Transport Geography*, 38, 148-158.
  13. Migliaccio, G.C., **Bogus, Susan M.**, and Cordova-Alvidrez, A.A.\* (2014) “Continuous Quality Improvement Techniques for Data Collection in Asset Management Systems.” *ASCE Journal of Construction Engineering and Management*, Apr 2014, 140(4).
  14. Gatti, Umberto C.\*, Migliaccio, Giovanni C., **Bogus, Susan M.**, and Schneider Suzanne. (2014) “An exploratory study of the relationship between construction workforce physical strain and task level productivity,” *Construction Management and Economics*, 32(6), 548-564.
  15. **Bogus, Susan M.**, Migliaccio, G.C., and Jin, R.\* (2013) “Study of the Relationship between Procurement Duration and Project Performance in Design-Build Projects: Comparison between Water/Wastewater and Transportation Sectors,” *ASCE Journal of Management in Engineering*, 29(4), 382-391.
  16. Gatti, Umberto\*, Migliaccio, G.C., **Bogus, Susan M.**, Priyadarshini, Shalini, and Scharrer, Amelia.\* (2013) “Using Workforce’s Physiological Strain Monitoring to Enhance Social Sustainability of Construction,” *ASCE Journal of Architectural Engineering*, Sep 2013, 19(3), 179-185.
  17. Shane, J.S., **Bogus, S.M.**, and Molenaar, K.R. (2013) “Municipal Water/Wastewater Project Delivery Performance Comparison,” *ASCE Journal of Management in Engineering*, 29(3), 251-258.
  18. **Bogus, S.M.**, Diekmann, J.E., Molenaar, K.R., Harper, C., Patil, S., and Lee, J.S. (2011) “Simulation of Overlapping Design Activities in Concurrent Engineering.” *ASCE Journal of Construction Engineering and Management*, 137(11), 950-957.
  19. **Bogus, Susan M.**, Migliaccio, Giovanni C., and Cordova, Arturo A.\* (2010) “Assessment of Data Quality for Evaluations of Manual Pavement Distress.” *Transportation Research Record: Journal of the Transportation Research Board*, No. 2170, 1-8.
  20. Jones, Birk\* and **Bogus, Susan M.** (2010) “Decision Process for Energy Efficient Building Retrofits: The Owner’s Perspective.” *Journal of Green Building*, 5(3), 131-146.
  21. Migliaccio, Giovanni C., **Bogus, Susan M.**, and Chen, Ao\*. (2010) “Effect of Duration of Design-Build Procurement on Performance of Transportation Projects” *Transportation Research Record: Journal of the Transportation Research Board*, No. 2151, 67-73.

22. **Bogus, Susan M.**, Shane, Jennifer S., and Molenaar, Keith R. (2010) “Contract Payment Provisions and Project Performance: An Analysis of Municipal Water and Wastewater Facilities.” *Public Works Management & Policy*. 15(1), 20-31.
23. **Bogus, Susan M.**, Song, Jongchul\*\*, Waggerman, Raymond\*, and Lenke, Lary R. (2010) “Rank Correlation Method for Evaluating Manual Pavement Distress Data Variability.” *ASCE Journal of Infrastructure Systems*. 16(1), 66-72.
24. Blacud, Nicolas A.\*, **Bogus, Susan M.**, Molenaar, Keith R., and Diekmann, James E. (2009) “Sensitivity of Construction Activities Under Design Uncertainty.” *ASCE Journal of Construction Engineering and Management*. 135(3), 199-206.
25. **Bogus, Susan M.**, Molenaar, Keith R., and Diekmann, James E. (2006) “Strategies for Overlapping Dependent Design Activities.” *Construction Management and Economics*, 24(7-9), 829-837.
26. **Bogus, Susan M.**, Molenaar, Keith R., and Diekmann, James E. (2005). “A Concurrent Engineering Approach to Reducing Design Delivery Time.” *ASCE Journal of Construction Engineering and Management*, 131(11), 1179-1185.
27. Molenaar, Keith R., **Bogus, Susan M.**, and Priestly, Jenny M. (2004). “Design/Build for Water/Wastewater Facilities: State of the Industry Survey and Three Case Studies.” *ASCE Journal of Management in Engineering*, 20(1), 16-24.

#### **Book Chapters**

1. Shane, Jennifer S. and **Bogus, Susan M.** (2012) “Chapter 2 – Benefits and Challenges of Design-Build.” *Design-Build for Water and Wastewater Projects*. American Water Works Association, Denver, CO.
2. **Bogus, Susan M.** and Molenaar, Keith, R. (2012) “Chapter 17 – Options for Evaluating Design-Builder Proposals.” *Design-Build for Water and Wastewater Projects*. American Water Works Association, Denver, CO.

#### **Peer-Reviewed Conference Papers (full paper peer-reviewed)**

1. Garrido Martins, Claudia\*, **Bogus, Susan M.** and Valentin, Vanessa (2019) “Conceptual Quantitative Model to Group Risks in Fast-Track Construction Projects” *Proceedings of the International Conference on Computing in Civil Engineering*, Atlanta, GA, June 2019.
2. Simma, Krishna Chaitanya Jagadeesh\*, Valentin, Vanessa and **Bogus Susan M.** (2019) “Evaluation of Post-Wildfire Flood Impacts on Earth Dams: A Pareto Approach” *Proceedings of the International Conference on Computing in Civil Engineering*, Atlanta, GA, June 2019.
3. Metro, K\*, Hernández, J., Harper, C., and **Bogus, S.** (2019) “Workforce Resiliency for Careers at Public Transportation Agencies” *Proceedings of the CSCE 7<sup>th</sup> International Construction Specialty Conference*, Montreal, Quebec, Canada, June 2019, Paper CON-155.
4. Simma, Krishna Chaitanya J.\*, **Bogus, Susan M.**, and Mammoli, Andrea (2019) “Wi-Fi Router Network-Based Occupancy Estimation to Optimize HVAC Energy Consumption”

- Proceedings of the CSCE 7<sup>th</sup> International Construction Specialty Conference*, Montreal, Quebec, Canada, June 2019, Paper CON-17.
5. Garrido Martins, C. \*, **Bogus, S. M.**, and Valentin, V. (2019) “Assessment of Project Risks in Fast-Track Construction Projects: An Evaluation of Risk Mitigation Responses” *Proceedings of the CSCE 7<sup>th</sup> International Construction Specialty Conference*, Montreal, Quebec, Canada, June 2019, Paper CON-96.
  6. Metro, Kristal\*, Hernández, Julia, **Bogus, Susan**, Harper, Christofer, Kommalapati, Raghava and Choe, Doeun (2019) “Recruiting, Retaining, and Promoting for Careers at Transportation Agencies” *Proceedings of the 2019 TranSET Conference*, San Antonio, TX, Paper 05001, Published online: 09 April 2019, DOI: <https://doi.org/10.1051/mateconf/201927105001>.
  7. Zhang,Su, **Bogus, Susan**, Baros, Shirley, Neville, Paul and Dow, Ryan\* (2019) “Karst Sinkhole Detecting and Mapping Using Airborne LiDAR - A Conceptual Framework” *Proceedings of the 2019 TranSET Conference*, San Antonio, TX, Paper 02005, Published online: 09 April 2019, DOI: <https://doi.org/10.1051/mateconf/201927102005>.
  8. Chennareddy, Rahulreddy, **Bogus Halter, Susan** and Taha, Mahmoud M. Reda (2019) “Fit-in GFRP Liner for Retrofitting Corroded Metal Culverts” *Proceedings of the 2019 TranSET Conference*, San Antonio, TX, Paper 01013, Published online: 09 April 2019, DOI: <https://doi.org/10.1051/mateconf/201927101013>.
  9. Chennareddy, Rahulreddy, Riad, Amr, **Bogus, Susan M.** and Taha, Mahmoud Reda (2019) “Fit-In Glass Fiber Reinforced Polymer (GFRP) Profile Liner for Retrofit of Corroded Metal Culverts” *Compendium*, 2019 Transportation Research Board Annual Meeting, Washington, D.C., Paper 19-02053, January 2019.
  10. Han, Fei\* and **Bogus, Susan M.** (2018) “Evaluating Construction Work Disruptions Using Resilient Short-Interval Scheduling: A Case Study” *Proceedings of the Construction Research Congress 2018: Construction Project Management* New Orleans, LA, April 3-4, 2018, pp. 533 – 543.
  11. Zhang, Su\*, **Bogus, Susan M.**, Lippitt, Christopher D. and Sprague, Jesse E. (2018) “Geospatial Technologies for Collecting Construction Material Information” *Proceedings of the Construction Research Congress 2018: Infrastructure and Facility Management* New Orleans, LA, April 3-4, 2018, pp. 660 – 669.
  12. Anderson, Michele\*, **Bogus, Susan M.** and Taha, Mahmoud Reda (2018) “Preserving Historical Concrete Structures with Modern Construction Methods” *Proceedings of the Construction Research Congress 2018: Infrastructure and Facility Management*, New Orleans, LA, April 3-4, 2018, pp. 562 – 571.
  13. Nickbeen, Parya\*, **Bogus, Susan M.** and Valentin, Vanessa (2018) “Tracking Student Retention Using System Dynamics Modeling” *Proceedings of the Construction Research Congress 2018: Sustainable Design and Construction and Education*, New Orleans, LA, April 3-4, 2018, pp. 128 – 138.
  14. Zhang, Su\*, Lippitt, Christopher, and **Bogus, Susan** (2018) “An Adaptive Two-Stage Survey Method for Development of a Remote Sensing Network for Time-Sensitive Detection of

- Fine-Scale Damage to Transportation Infrastructure” *Compendium*, 2018 Transportation Research Board Annual Meeting, Washington, D.C., Paper 18-01854, January 2018.
15. Han, Fei\* and **Bogus, Susan M.** (2017) “Defining a Resilience Framework for Project Delivery” *Proceedings of the 2017 CSCE/CRC Construction Specialty Conference*, Vancouver, BC, Canada, May 31 – June 3, 2017.
  16. Metro, Kristal\*, **Bogus, Susan M.**, and Himmelberger, Heather (2017) “The Impact of Limited Resources on Asset Management and Infrastructure Resilience” *Proceedings of the 2017 CSCE/CRC Construction Specialty Conference*, Vancouver, BC, Canada, May 31 – June 3, 2017.
  17. Nickbeen, Parya, Valentin, Vanessa, **Bogus, Susan M.**, and Ballard, Amy (2017) “Using the DACUM Process to Develop an Industry-Directed Construction Education Curriculum” *Proceedings of the 2017 CSCE/CRC Construction Specialty Conference*, Vancouver, BC, Canada, May 31 – June 3, 2017.
  18. Garrido Martins, Claudia, Valentin, Vanessa, and **Bogus, Susan M.** (2017) “Risk Assessment in Fast-Track Construction Projects: A conceptual model” *Proceedings of the 2017 CSCE/CRC Construction Specialty Conference*, Vancouver, BC, Canada, May 31 – June 3, 2017.
  19. Sanabria, Natalia, Valentin, Vanessa, **Bogus, Susan M.** (2017) “Comparing Neural Networks and Ordered Probit Models for Forecasting Pavement Condition in New Mexico” *Compendium*, 2017 Transportation Research Board Annual Meeting, Washington, D.C., Paper 17-01037, January 2017.
  20. Zhang, Su\*, **Bogus, Susan M.**, Lippitt, Christopher D. (2016) “Estimating Infrastructure Condition Based on Inferential Geospatial Modeling,” *Proceedings of the 2016 Construction Research Congress*, San Juan, PR, May 31-June 2, 2016.
  21. Jafari, Amirhosein, Valentin, Vanessa, and **Bogus, Susan M.** (2016) “Assessment of Social Indicators in Energy Housing Retrofits,” *Proceedings of the 2016 Construction Research Congress*, San Juan, PR, May 31-June 2, 2016.
  22. Zhang, Su\*, Lippitt, Christopher, **Bogus, Susan**, and Zhang, Guohui. (2016) “Quantifying the Impact of Road Lighting Conditions on Nighttime Vehicle Crash Rates Using Nighttime Light Satellite Imagery.” *Compendium*, 2016 Transportation Research Board Annual Meeting, Washington, D.C., Paper 16-5949, January 2016.
  23. Chen, Cong, Zhang, Guohui, Zong, Tian Z., and **Bogus, Susan**. (2016) “Investigating Truck Driver Injury Severity Using a Hierarchical Bayesian Random Intercept Model with Cross-level Interactions.” *Compendium*, 2016 Transportation Research Board Annual Meeting, Washington, D.C., Paper 16-4556, January 2016.
  24. Zhang, Su\*, **Bogus, Susan M.**, and Lippitt, Christopher D. (2015) “Pavement Surface Permanent Deformation Detection and Assessment Based on Digital Aerial Triangulation,” *Proceedings of the 2015 ASCE International Workshop on Computing in Civil Engineering*, Austin, TX, June 21-23, 2015.

25. Zhang, Su\*, **Bogus, Susan M.**, and Lippitt, Christopher D. (2015) "Infrastructure Condition Assessment Based on Low-cost Hyper-Spatial Resolution Multispectral Digital Aerial Photography," *Proceedings of the 5<sup>th</sup> International / 11<sup>th</sup> Construction Specialty Conference*, Canadian Society for Civil Engineering, Vancouver, British Columbia, June 8-10, 2015.
26. Zhang, Su\*, **Bogus, Susan M.** and Lippitt, Christopher D. (2015) "Pavement Distress Condition Assessment Using Aerial Photographs at Differing Spacial Resolutions." *Compendium*, 2015 Transportation Research Board Annual Meeting, Washington, D.C., Paper 15-4949, January 2015.
27. Wu, Qiong, Chen, Feng, Zhang, Guohui, Liu, Xiaoyue, Wang, Hua, and **Bogus, Susan**. (2015) "Analysis of Driver Injury Severities in Single-Vehicle and Multivehicle Crashes on Rural Two-Lane Highway." *Compendium*, 2015 Transportation Research Board Annual Meeting, Washington, D.C., Paper 15-5476, January 2015.
28. Zhang, Su\*, and **Bogus, Susan M.** (2014) "Use of Low-Cost Remote Sensing for Infrastructure Management," *Proceedings of the 2014 Construction Research Congress*, Atlanta, GA, May 19-21, 2014, pp. 1299-1308.
29. Sanabria, Natalia, Kalhor, Elmira, Valentin, Vanessa, **Bogus, Susan M.**, and Zhang, Guohui. (2013) "Computational GIS and Agent-Based Model Development for Routing Optimization to Facilitate Pavement Condition Data Collection," *Proceedings of the 2013 ASCE International Workshop on Computing in Civil Engineering*, Los Angeles, CA, June 23-25, 2013, pp. 371-378. (doi: 10.1061/9780784413029.047)
30. Han, Fei\* and **Bogus, Susan M.** (2013) "Defining an Agile Construction Management System," *Proceedings of the 2013 Annual Conference of the Canadian Society for Civil Engineering*, Montreal, Ontario, Canada, May 2013.
31. Kalhor, Elmira, Valentin, Vanessa, **Bogus, Susan M.**, Zhang, Guohui, and Sanabria, Natalia. (2013) "Application of an Ordered-Probit model in Infrastructure Asset Management: The Case of Pavement Condition Assessment," *Proceedings of the 2013 Annual Conference of the Canadian Society for Civil Engineering*, Montreal, Ontario, Canada, May 2013.
32. Zhang, Su\*, **Bogus, Susan**, Neville, Paul R.H., Zhang, Guohui, Chen, Cong, and Valentin, Vanessa. (2013) "Aerial Photograph-based Pavement Surface Distress Detection and Assessment." *Compendium*, 2013 Transportation Research Board Annual Meeting, Washington, D.C., Paper 13-3156, January 2013.
33. Chen, Cong, Zhang, Su\*, Zhang, Guohui, **Bogus, Susan**, and Valentin, Vanessa. (2013) "Analysis of Pavement Surface Distress Condition on Major Corridors in New Mexico." *Compendium*, 2013 Transportation Research Board Annual Meeting, Washington, D.C., Paper 13-3155, January 2013.
34. Valentin, Vanessa and **Bogus, Susan M.** (2012) "Public Opinion as an Indicator of Social Sustainability of Construction Projects," *Proceedings of the 2012 International Conference on Sustainable Design and Construction*, Fort Worth, TX, November 2012, pp. 561-568. (doi: 10.1061/9780784412688.067)
35. Gatti, U.C.\*, Migliaccio, G.C., **Bogus, S.M.**, and Schneider, S. (2012) "Using Wearable Physiological Status Monitors for Analyzing the Physical Strain-Productivity Relationship for

- Construction Tasks.” *Proceedings of Computing in Civil Engineering 2012*. Clearwater Beach, FL, June 17-20, 2012, pp. 577-585.  
(doi:<http://dx.doi.org/10.1061/9780784412343.0073>)
36. Scharrer, Amelia\* and **Bogus, Susan M.** (2011) “The Effect of Partnership Programs on Improving Safety in Construction Companies.” *Proceedings of the CIB W099 Conference 2011*. Washington, DC, August 2011.
  37. Forns-Samso, Francisco\*, **Bogus, Susan M.**, and Migliaccio, Giovanni C. (2011) “Use of Building Information Modeling in Facilities Management.” *Proceedings of the Annual Conference - Canadian Society for Civil Engineering*, Ottawa, Ontario, Canada, June 2011, v 3, pp. 1815-1824.
  38. Gatti, Umberto\*, Scharrer, Amelia\*, Migliaccio, Giovanni C., and **Bogus, Susan M.** (2011) “Using Workforce’s Physiological Strain Monitoring to Enhance Social Sustainability of Construction” *Proceedings of the ICSDC 2011: Integrating Sustainability Practices in the Construction Industry*, Kansas City, MO, March 2011, pp. 180-186.  
(doi: [http://dx.doi.org/10.1061/41204\(426\)24](http://dx.doi.org/10.1061/41204(426)24))
  39. **Bogus, Susan M.**, Migliaccio, Giovanni C., and Cordova, Arturo A.\* (2010) “Performance of Manual Condition Surveys Using Inter-Rater Agreement Measurements” *Proceedings of the CIB 2010 World Congress*, The Lowry, Salford Quays, United Kingdom, May 10-13, 2010.
  40. Migliaccio, Giovanni C., **Bogus, Susan M.**, and Chen, Ao\*. (2010) “Relationship between Design-Build Procurement Duration and Project Success” *Proceedings of the CIB 2010 World Congress*, The Lowry, Salford Quays, United Kingdom, May 10-13, 2010.
  41. **Bogus, Susan M.**, Shane, Jennifer S., Molenaar, Keith R. (2010) “Comparison of Water/Wastewater Project Performance by Project Delivery System and Payment Provision” *Proceedings of the 2010 ASCE Construction Research Congress*, Banff, Alberta, Canada, May 2010, pp. 859-868. (doi: 10.1061/41109(373)86)
  42. Phillips, H. Clay\*, **Bogus, Susan M.** and Ross, Timothy J. (2009) “An Approach to Classifying Uncertainties in Construction Schedules.” *Proceedings of the 2009 ASCE Construction Research Congress*, Seattle, WA, April 2009, pp. 876-885. (doi: 10.1061/41020(339)89)
  43. **Bogus, Susan M.** and Howe, Kerry J. (2008) “Innovative Design-Build Approach to Project-Based Learning” *Proceedings of the 2008 ASEE Gulf-Southwest Annual Conference*, Albuquerque, NM, March 2008.
  44. McCuskey, M., RedaTaha, M.M., and **Bogus S.** (2007) “A Robust Sustainability Metric Using Possibility Distributions” *Proceedings of the 2007 ASCE International Workshop on Computing in Civil Engineering*. Pittsburgh, PA, July 2007, pp. 494-501.
  45. Blacud, Nicolas A.\*, **Bogus, Susan M.**, Molenaar, Keith R., and Diekmann, James E. (2007) “Beginning Construction Under Design Uncertainty” *Proceedings of the 2007 ASCE Construction Research Congress*. Bahamas, May 2007.



46. Hyderabad, Suhasini\* and **Bogus, Susan M.** (2007) “AHP-Based Selection Model for Best Sustainable Practices for Construction Projects” *Proceedings of the 2007 ASCE Construction Research Congress*. Bahamas, May 2007.
47. Gutierrez, Brian C.\* and **Bogus, Susan M.** (2007) “The Facility Ramifications of Implementing Lean in a Batch Manufacturing Plant” *Proceedings of the IGLC-15: International Group for Lean Construction Conference*. Lansing, MI, July 2007, pp. 391-399.
48. Lee, Jae-Seob, Molenaar, Keith R., **Bogus, Susan M.**, and Diekmann, James E. (2006) “An Activity Overlapping Algorithm for Construction.” *Proceedings of the Joint International Conference on Computing and Decision Making in Civil and Building Engineering*. Montreal, Canada, June 2006, pp. 3827-3834.
49. **Bogus, Susan M.** and Rounds, Jerald L. (2006) “Incorporating Leadership Skill Development in Construction Training Programs.” *Proceedings of the ASCE/CIB Conference on Leadership and Management in Construction*. Bahamas, May 2006 pp. 135-140.
50. Gilchrist, Tracy\* and **Bogus, Susan.** (2006) “Sustainable Construction Materials and Procedures for U.S. National Park Service Projects.” *Proceedings of the CSCE International Construction Specialty Conference*. Calgary, Canada, May 2006.
51. **Bogus, Susan M.**, Diekmann, James E., and Molenaar, Keith R. (2005). “Evaluating the Consequences of Overlapping Dependent Activities.” *Proceedings of the ASCE Construction Research Congress*. San Diego, CA, April 2005, pp. 725-734.
52. **Bogus, Susan**, Diekmann, James E., and Molenaar, Keith R. (2002). “A Methodology to Reconfigure the Design-Construction Interface for Fast-Track Projects.” *Proceedings of the ASCE & EG-ICE Joint Workshop on Information Technology in Civil Engineering*. Washington, DC, November 2002, pp. 258-272.
53. **Bogus, Susan** and Diekmann, James (2001). “Digital Integration of Design Data and Construction Products: Applications in Education and Training.” *Proceedings of the ASCE Special Conference on Fully Integrated and Automated Project Processes in Civil Engineering*. Blacksburg, VA, January 2002, pp. 456-461.
54. **Bogus, Susan**, Songer, Anthony D., and Diekmann James (2000). “Design-Lead Lean.” *Proceedings of the International Group for Lean Construction Eighth Annual Conference (IGLC-8)*, Brighton, England, July 2000.

### Funded Research Projects

1. New Mexico Department of Transportation - \$1,200,000
  - a. Project Title: Management of NMDOT LTAP
  - b. Project Duration: Sep 2019 – Sep 2023
  - c. PI: Dr. Susan Bogus

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2. New Mexico Department of Transportation - \$576,500
  - a. Project Title: Management of NMDOT LTAP
  - b. Project Duration: Apr 2017 – Sep 2019
  - c. PI: Dr. Greg Rowangould; co-PI: Dr. Susan Bogus
  
3. Louisiana State Univ. / USDOT Univ. Transportation Center - \$2,790,000 (est. 5-year total)
  - a. Project Title: Transportation Consortium of South-Central States (Tran-SET)
  - b. Project Duration: Jan 2017 – Dec 2021
  - c. PI: Dr. Susan Bogus
  
4. New Mexico Department of Transportation - \$54,829
  - a. Project Title: CMAQ Best Practices Scan
  - b. Project Duration: Jan 2017 – Jun 2017
  - c. PI: Dr. Greg Rowangould; co-PI: Dr. Susan Bogus
  
5. New Mexico Department of Transportation - \$19,387
  - a. Project Title: Workplan Development for NMDOT LTAP
  - b. Project Duration: Aug 2016 – Aug 2017
  - c. PI: Dr. Susan Bogus; co-PI: Dr. Greg Rowangould
  
6. National Science Foundation - \$884,573
  - a. Project Title: NM Green: Advancing Sustainable Construction Technology Education
  - b. Project Duration: May 2016 – May 2020
  - c. PI: Dr. Susan Bogus; co-PI: Dr. Vanessa Valentin
  
7. USDOT Research and Innovative Technology Administration (RITA) - \$1,288,500
  - a. Project Title: Development of a Remote Sensing Network for Time-Sensitive Detection of Fine Scale Damage to Transportation Infrastructure
  - b. Project Duration: Oct 2014 – Jan 2017
  - c. PI: Dr. Christopher Lippitt; co-PI: Dr. Susan Bogus
  
8. ELECTRI International (Electrical Contracting Foundation) – \$45,000
  - a. Project Title: From Field to Office: A Management Training Program
  - b. Project Duration: Mar 2014 – May 2015
  - c. PI: Dr. Susan Bogus
  
9. University of New Mexico Research Allocation Committee - \$9,040
  - a. Project Title: Infrastructure Condition Assessment Using Low-Cost Remote Sensing Techniques
  - b. Project Duration: Jul 2013 – Dec 2014
  - c. PI: Dr. Susan Bogus; co-PI: Dr. Christopher Lippitt
  
10. New Mexico Department of Transportation (Maint. Bureau) – \$356,980
  - a. Project Title: NMDOT Pavement Evaluation Program 2012
  - b. Project Duration: Feb 2012 – Dec 2012
  - c. PI: Dr. Susan Bogus; co-PIs: Dr. Vanessa Valentin, Dr. Guohui Zhang
  
11. New Mexico State Univ./NMDOT (Research Bureau) – \$50,995
  - a. Project Title: Improving NMDOT’s Pavement Condition Surveys and Estimating HPMS Data

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- b. Project Duration: Jan 2010 – Jan 2012
  - c. PI: Dr. Susan Bogus; co-PI: Dr. Giovanni Migliaccio
12. New Mexico Department of Transportation (Maint. Bureau) – \$1,269,174
- a. Project Title: Pavement Evaluation Program
  - b. Project Duration: Jan 2007 – Dec 2010 (stopped in 2009 due to state funding issues)
  - c. PIs: Dr. Susan Bogus; Dr. Giovanni Migliaccio; Mr. Lary Lenke
13. Water Design Build Council –\$45,000
- a. Project Title: Comparative Evaluation of Design-Build vs Design-Bid-Build
  - b. Project Duration: Nov 2007 – April 2009
  - c. PI: Dr. Susan Bogus
14. ELECTRI International (Electrical Contracting Foundation) – \$78,000
- a. Project Title: Best Practices for Evaluating Pre-Assembly Options
  - b. Project Duration: Jan 2007 – May 2008
  - c. PI: Dr. Susan Bogus; Co-PI: Dr. Jerald Rounds
15. Sandia National Labs (SURP) – \$40,000
- a. Project Title: Integrating Design and Construction Processes to Reduce Project Delivery Time
  - b. Project Duration: Oct 2006 – Sep 2007
  - c. PI: Dr. Susan Bogus
16. New Mexico Department of Transportation – \$299,000
- a. Project Title: Pavement Evaluation Project
  - b. Project Duration: Jan 2006 – Dec 2006
  - c. PIs: Mr. Lary Lenke; Dr. Susan Bogus
17. University of Colorado / National Science Foundation –\$29,000
- a. Project Title: Methodology to Reconfigure the Design-Construction Interface
  - b. Project Duration: Jan 2006 – Aug 2007
  - c. PI: Dr. Susan Bogus