PAUL S. CHINOWSKY

Director, Program in Environmental Design Professor, Department of Civil, Environmental, and Architectural Engineering

I. EARNED DEGREES

Ph.D.	1991	Stanford University	Civil Engineering
MArch	1988	California Polytechnic State University	Computer-Aided Engineering
BArch	1987	California Polytechnic State University	Architecture (Minor: Computer Science) ¹

II. EMPLOYMENT

	l	
2018 – Present	Director	University of Colorado Boulder
		Program in Environmental Design
2015 - 2018	Associate Vice Provost for	Office of Undergraduate Education
	Student Success	University of Colorado Boulder
2012 - 2015	Director	Mortenson Professor of Sustainable
		Development and Director, Mortenson
		Center for Engineering in Developing
		Communities
2010 - Present	Professor	University of Colorado at Boulder
		Civil, Environmental, and Arch. Engr
2002 - 2010	Associate Professor	University of Colorado at Boulder
		Civil, Environmental, and Arch. Engr
2005 - 2010	Visiting Professor	Loughborough University
		Civil and Environmental Engineering
2000- 2002	Associate Professor	Georgia Institute of Technology
		Civil and Environmental Engineering
1994 - 2000	Assistant Professor	Georgia Institute of Technology
		Civil and Environmental Engineering
1991 - 1994	Principal Analyst	Stone & Webster Advanced Systems
		Development Services
1994 - 1994	Lecturer	Boston University
		Department of Computer Science

III. TEACHING

A. PhD STUDENT PRIMARY ADVISOR

Adam Swanson

Starting Semester: Fall 2014 Completion: Spring 2017

Research: Financing of Development Infrastructure

Kyle Kwiatkowski

Starting Semester: Fall 2012 Completion: Spring 2017

Research: Climate Impact on Transportation

Xavier Espinet Alegre Starting Semester: Fall 2012 Completion: Spring 2016

¹ Note: First three years of curriculum are joint between architecture and architectural engineering degree programs

Research: Decision Making in Transportation

Amy Schweikert

Starting Semester: Spring 2013 Completion: Spring 2016

Research: Climate Impact on Transportation

Shanaaz Jaafari

Starting Semester: Spring 2009 Completion: Summer 2015

Research: Developing Countries and Sustainable Design

Dilip Kumar

Starting Semester: Fall 2008 Completion: Fall 2014

Research: Infrastructure Assets

Yohannes Gebralnik

Starting Semester: Fall 2010 Completion: Spring 2013

Research: Systems Model of Alternative Energy

Emily Schmidt

Starting Semester: Fall 2010 Completion: Spring 2013

Research: Systems Model of Rural Land Development Policies

Charles Fant

Starting Semester: Fall 2011 Completion: Fall 2013

Research: Water Supply for Energy Analysis

John O'Brien

Starting Semester: Fall 2006 Completion: Fall 2012

Research: Social Network Analysis in Engineering Firms

Stephen Sewalk

Starting Semester: Fall 2006 Completion: Spring 2010

Research: Alternative Financing of Energy Projects

Current Position: Assistant Professor, University of Denver

Paul Flack (co-advisor with Prof. Ken Strzepek)

Starting Semester: Fall 2004 Completion: Summer 2007

Research: Public-Private-Partnerships in South Africa Water Development Current Position: Lead hydrologist, Department of State Parks, State of Colorado

Colleen Butler

Starting Semester: Spring 2003 Completion: Summer 2005 Research: Leadership Characteristics of Construction Professionals

Current Position: Independent Consultant

Gena Abraham

Starting Quarter: Spring 1998 Completion: Spring 2002

Research: Success Factors in Construction Organizations

Current Position: Commissioner, Department of Transportation, State of Georgia

Angela Birkes (Co-Advisor with Prof. Nelson Baker)

Starting Quarter: Spring 1996 Completion: Fall 1999

Completion: Fall 1999

Research: Multimedia Databases for Civil Engineering

Current Position: Independent Consultant

James Meredith

Starting Quarter: Summer 1997

Completion: Fall 1999

Research: Strategic Planning in Construction Current Position: Independent Consultant

Robin Goodman

Starting Quarter: Fall 1995 Completion: Summer 1998

Research: A Taxonomy of Knowledge Requirements for Construction Executives

Current Position: Strategy Analyst, IxL Communications

B. PhD COMMITTEE MEMBERSHIP

Seth Murray, University of Colorado (2020)

Laura Kohler, University of Colorado (2016)

Jose Guevara-Maldonado, Virginia Tech (2017)

Alia Khan, University of Colorado (2016)

Jeff Walters, University of Colorado 2015

John Wanberg, University of Colorado, 2014

Alia Khan, University of Colorado

Aaron Brown, University of Colorado, 2014

Kate Linkins, University of North Texas 2012

Pekka Huovinen, Helsinki University of Technology

Melissa DiMarco, Columbia University, Graduated 2011

Hakan Unsal, Columbia University, Graduated 2010

Nilo Tsung, University of Colorado, Graduated 2010

Du Yon Kim, Yonsei University, Korea, Graduated 2009

Kamal Ouda Civil Engineering, University of Colorado, Graduated 2010

Apostol Panayatov - UC Denver, Graduated 2009

Kang Jian, PhD Student Civil Engineering, Nanyang Technological University, Singapore 2007

Elhami Nasr, Civil Engineering, University of Colorado, Graduated 2006

Alphonso Bastias, Civil Engineering, University of Colorado, Graduated 2005

Susan Bogus, Civil Engineering, University of Colorado, Graduated 2003

Kyung Soon Chen, Civil Engineering, University of Colorado, Graduated 2003

Steven Mulva, Civil Engineering, Georgia Tech, 2000 - 2002

Annie Pierce, Civil Engineering, Georgia Tech, 1996-1999

Francisco Maldonado, Civil Engineering, Georgia Tech, 1996-1999 K.C. Shin, Civil Engineering, Georgia Tech, 1996-1999

C. MS STUDENTS

MS Thesis Students Primary Advisor

Sarah Goldstein (2018) Climate Change Impacts

Nikki Van den Heever (2018) Infrastructure Criticality

Marie Delaux (2015) Developing Cities lessons

Amy Schweikert (2013) Rural Road Development in Developing Countries

Michael Reeve (2013) Energy Independent Design

Mark Hasemeyer (2012) Energy Modeling in Haiti

Kirsten McAfee (2012) Safety Culture in Colorado DOT

Jaime Morales (2011), Critical Success Factors in Low-Income Housing Development

Kyle Manahan (2010), Climate Impact on Infrastructure in Africa

Liron Yovel (2009), Cultural Factors in Entering Chinese Markets

Victor Gallotti (2008), Social Network Analysis in Construction Projects

Allison Realph (2005), Learning Organizations in Construction

John Poole (2003), Emotional Intelligence in Construction

Kathy Elliot (2000), Environmental Impact Analysis of Olympic Construction

MS Project Students Primary Advisor

Neal Dawes, 2015

Emily Booth, 2014

Suzy Belmont, 2014

Lauren Schmeisser, 2012

Edward Schloss, 2010

Troy Brown, 2009

Hugh O'Winter 2009

Tyler Whittaker, 2009

Christi Welter, 2008

Bryce Word, 2008

Nathan Paukovits, 2008

Rachel Stonecypher, 2008

Iwen Tsang, 2007

Arie Opdahl, 2007

Landon Raby, 2007

Casey Bartholomew, 2007

Robert Keas, 2006

Richard Engleman, 2006

Paul Doherty, 2005

Jaime Loeb, 2004

Ida Mae Cohen, 2004

Nydia Ortega, 1999

Chris Chelette, 1999

Bruce Estok, 1998

Patrick Schwertdner, 1998

Sergio Botero, 1997

Diana Mack, 1997

Alexander Blanco, 1996

Joseph Armstrong, 1996

Raul M. Perez Veve, 1996 Jose C. Alva, 1996 Paul F. Jarvis, 1996 Sean Kent, 1995 Jim Meredith, 1995 Jeff Robinson, 1995 Andres Pinzon, 1995 Babatunde Banjo, 1995 Annelis Santana, 1995 Gonzalo Luciani, 1995 Asif Sani, 1995

D. UNDERGRADUATE STUDENTS

Undergraduate Honors Thesis Advisor

Sebastian Elverskog Climate Change Impact on Development, 2019-2020

Jake Norris Climate Impact of School Design, 2020-2021
Alexandra Erickson Communication of Climate Risk, 2020-2021

Undergraduate Research Internship

Sarah Goldstein Climate Change Impacts, 2014-2017 Nikki Van den Heever Infrastructure Criticality, 2014-2017 Madison Marshall Climate Change Tools, 2013-2014

Meaghan Byrd Strategic Management in Construction, 1999-2000

E. OTHER TEACHING ACTIVITIES

CU Curriculum Development

- 1. New Course: Project Policy, Planning, and Implementation A new required undergraduate course for Environmental Design focusing on the early phases of project development including both financial and regulatory requirements.
- 2. New Certificate: Global Engineering A new undergraduate certificate for students in the College of Engineering and Applied Science focusing on exposure to global issues and global team participation.
- 3. New Course: Disaster Response and Humanitarian Recovery A new course for graduate level civil engineering students focusing on the unique needs of disaster recovery zones including response and recovery operations.
- 4. New Course: Globalization A new course for graduate level civil engineering students focusing on the challenges of competing in a global environment. Issues such as emerging market entrance, political, economic, and cultural challenges are introduced in conjunction with the development of an international design project.
- 5. New Course: Construction Organizations In response to discussions with industry leaders, Construction Organizations has been introduced to provide students with an executive viewpoint of the construction industry. The course represents one of the few executive level courses for construction students in the United States. Students have the opportunity to conduct case analysis studies while developing business plans for a new civil engineering organization.
- 6. New Course: IT in Construction A new course for graduate level construction students that spotlights emerging and new technologies in the construction field. Students have the opportunity to try new technologies while learning how to assess technology requirements and evaluate emerging technologies.

Teaching Grants

1. Learning Networks – Selected to be part the University of Colorado's President Teaching and Learning Collaborative in 2008-2009, the study examines whether group projects are developing Learning Networks. Concepts from Social Network Analysis are being used to study student groups.

Continuing Education Courses

- 1. Successful Implementation of New Processes, Construction Industry Institute A one-day intensive course introducing organization leaders to the barriers faced when implementing new practices and how to overcome the barriers.
- 2. An Implementation Approach to Consulting, Zurich North America A half-day course focusing on how to develop construction industry clients through the use of an implementation success approach.
- 3. Strategic Management for Engineering, American Council of Engineering Companies A two-part course focused on introducing engineering company executives to current trends in organization management.
- 4. Small Business Development for Construction, Associated General Contractors A multiple course series designed to provide small businesses with the infrastructure to pursue non-traditional contract opportunities.
- 5. Management Education for Construction Organizations, State of Georgia Mentor-Protégé program Presented as part of the Governor's Mentor-Protégé Program, this course was designed to enhance the management practices of small and minority construction firms.
- 6. Strategic Management in Civil Engineering Organizations, American Society of Civil Engineers Dr. Chinowsky developed a two-day course for ASCE based on his book, Strategic Corporate Management in Civil Engineering.

IV. SCHOLARLY ACCOMPLISHMENTS

A. PUBLISHED BOOKS AND CHAPTERS

- Jacobs, J.M., M. Culp, L. Cattaneo, P. Chinowsky, A. Choate, S. DesRoches, S. Douglass, and R. Miller, 2018: Transportation. In Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, pp. 479–511. doi: 10.7930/NCA4.2018.CH12
- Cervigni, Raffaello, Losos, Andrew, Chinowsky, Paul, and Neumann, James (editors) (2017).
 Enhancing the Climate Resilience of Africa's Infrastructure (Conference Edition released December 2016), World Bank Group (135 pages)

Chapters by Chinowsky Include:

Strzepek, Kenneth, Neumann, James, Chinowsky, Paul, and Cervigni, Raffaello, *Methodology* (11 pages)

Chinowsky, Paul, Espinet, Xavier, and Helman, Jacob, Risks of Inaction (17 pages)

Chinowsky, Paul, Losos, Andrew, Neumann, James, Strzepek, Kenneth, and Cervigni, Raffaello, *Adaptation Analysis* (22 pages).

- 3. Chinowsky, Paul S. (editor) (2013). Construction Technology: Critical Concepts in Construction, 4-Volume Set, Taylor and Francis (1,600 pages). Introduction to each volume by Chinowsky Chinowsky, Paul S. General Introduction: Construction Technology: Where are we now: promises and potential (15 pages).
- 4. Chinowsky, Paul S., Schweikert, Amy, Hughes, Gordon (2013). "The Economics of Adaptation in the Infrastructure Sector," in **Economics of Climate Change in East Asia**, Westphal, Michael, Hughes, Gordon, and Brommelhorster, Jorn (editors), Asian Development Bank.
- 5. Chinowsky, Paul S. and Songer, Tony (editors) (2011). **Organization Management in Construction**, Taylor and Francis, London (250 pages).

Chapters by Chinowsky include:

Chinowsky, Paul S. Culture and Networks in Construction Organizations (20 pages)

Toole, T. Michael and Chinowsky, Paul S. *Enhancing Innovation in the Construction Organization* (20 pages)

- Songer, Anthony D. and Chinowsky, Paul S. *Leadership in the Construction Organization* (20 pages)
- 6. Chinowsky, Paul S. and Taylor, John (2007). "Leadership and Team Development in Construction," in Revaluing Construction: A W065 'Organisation and Management of Construction' Perspective, CIB, pgs. 54-65.
- 7. Garvin, Michael, Edum-Fotwe Francis, and Chinowsky, Paul S. (editors) (2007). **Proceedings of the 2007 ASCE/CIB Construction Congress**, May, 2007, Grand Bahama Island, Bahamas, CIB, (1,300 pages).
- 8. Chinowsky, Paul S. (2001). Successful Directions, PM Publishing, Atlanta, (102 pages).
- 9. Chinowsky, Paul S. (2000). **Strategic Corporate Management in Civil Engineering**, Oxford University Press, New York (395 pages).
- 10. Chinowsky, Paul S. and Teicholz, Paul. "The CAADIE Project: Adding Knowledge-Based Paradigms to Architectural Layout Generation." Chapter 3 of **Integrated Facility Engineering**, Gordon and Breach Publishers, Novato, CA.
- 11. Chinowsky, Paul S. (1996). "Insight: Educating Design Professionals." Chapter 7 of **The Executive Architect**, John Wiley and Son, New York, pgs. 257-263.

B. PROCEEDINGS EDITOR

1. Taylor, John E. and Chinowsky, Paul S. (editors) (2010). Proceedings of the First Engineering

- **Project Organization Conference**, November 2010, Lake Tahoe, CA, Engineering Project Organization Society, 400 pages.
- 2. Chinowsky, Paul S. and Levitt, Raymond E. (editors) (2009). **Proceedings of the Fourth Specialty Conference on Leadership and Management in Construction**, November 2009, Lake Tahoe, CA CIB, 240 pages.
- 3. Chinowsky, Paul S. and Levitt, Raymond E. (editors) (2008). **Proceedings of the Third Specialty Conference on Leadership and Management in Construction**, October 2008, Lake Tahoe, CA CIB, 220 pages.
- 4. Songer, Tony and Chinowsky, Paul S, and Carrillo, Patricia. (editors) (2006). **Proceedings of the Second Specialty Conference on Leadership and Management in Construction**, CIB, (600 pages).
- 5. Chinowsky, Paul S. and Songer, Tony (editors) (2004). **Proceedings of the 2004 ASCE Specialty Conference on Leadership and Management in Construction**, PM Publishing, (175 pages).
- 6. Molenaar, Keith R. and Chinowsky, Paul S. (editors) (2003). **Proceedings of the 2003 ASCE Construction Congress**, March, 2003, Honolulu, Hawaii, ASCE Press, (1,500 pages).
- 7. Songer, Anthony D. and Chinowsky, Paul S. (editors) (2001). **Proceedings of the ASCE Specialty Conference on Fully Integrated Project Processes**, ASCE Press, Reston, Virginia, (175 pages).
- 8. Vanegas, Jorge and Chinowsky, Paul S. (editors) (1996). **Proceedings of the ASCE Third Congress on Computing in Civil Engineering**, ASCE Press, New York, (2,500 pages).

C. REFEREED PUBLICATIONS

Articles in Refereed Archival Journals

- 1. Kwiatkowski, K. P., Stipanovic Oslakovic, I., Ter Maat, H., Hartmann, A., Chinowsky, P., & Dewulf, G. P. (2020). Modeling Cost Impacts and Adaptation of Freeze–Thaw Climate Change on a Porous Asphalt Road Network. *Journal of Infrastructure Systems*, 26(3), 04020022.
- 2. Chinowsky, P., Helman, J., Gulati, S., Neumann, J., & Martinich, J. (2019). Impacts of climate change on operation of the US rail network. *Transport policy*, 75, 183-191.
- 3. Arndt, C., Chinowsky, P., Fant, C. *et al.* Climate change and developing country growth: the cases of Malawi, Mozambique, and Zambia. *Climatic Change* **154**, 335–349 (2019). https://doi.org/10.1007/s10584-019-02428-3
- 4. Paul S. Chinowsky & Amy Javernick-Will (2019) High-value, collaborative networks, Construction Management and Economics, DOI: 10.1080/01446193.2019.1607513
- 5. Chinowsky, P., Robinson, B., & Robinson, S. (2018). Analyzing the dynamics of social networks by combining psychometric measures with social network analysis. *Engineering project organization journal*, *8*, 100-122.
- 6. Schweikert, A., Espinet, X. & Chinowsky, P. The triple bottom line: bringing a sustainability framework to prioritize climate change investments for infrastructure planning. *Sustain Sci* **13**, 377–391 (2018). https://doi.org/10.1007/s11625-017-0431-7
- 7. Sakhrani, Vivek, Chinowsky, Paul, and Taylor, John E. (2017). "Grand Challenges in Engineering Project Organization," Engineering Project Organization Journal, Volume 7.
- 8. Kwiatkowski, Kyle and Chinowsky, Paul (2017). "Climate Change Adaptation as an Organizational System in Transportation Infrastructure Organization: Identifying Processes and Institutional Elements," Transport Policy.
- 9. Chinowsky, Paul, Helman, Jacob, Gulati, Sahil, Neumann, James, and Martinich, Jeremy (2017). "Impacts of Climate Change on Operations of the US Rail Network," Transport Policy.
- 10. Schweikert, Amy, Chinowsky, Paul, and Espinet, Xavier (2017). "The Triple Bottom Line: Bringing a Sustainability Framework to Prioritize Climate Change Investments for Infrastructure," Sustainability Science. doi:10.1007/s11625-017-0431-7

- 11. Schmidt, Emily, Chinowsky, Paul, Robinson, Sherman, and Strzepek, Kenneth (2017). "Determinants and Impact of Sustainable Land Management (SLM) Investments: A Systems Evaluation in the Blue Nile Basin, Ethiopia," Agricultural Economics. DOI: 10.1111/agec.12361
- 12. Walters, J. P., & Chinowsky, P. S. (2016). Planning rural water services in Nicaragua: A systems-based analysis of impact factors using graphical modeling. *Environmental Science & Policy*, 57, 93-100.
- 13. Melvin, A.M., Larsen, P., Boehlert, B., Neumann, J.E., Chinowsky, P., Espinet, X., Martinich, J., Baumann, M.S., Rennels, L., Bothner, A. and Nicolsky, D.J., (2016). Climate change damages to Alaska public infrastructure and the economics of proactive adaptation. *Proceedings of the National Academy of Sciences*, p.201611056.
- 14. Espinet, X., Schweikert, A., van den Heever, N., & Chinowsky, P. (2016). Planning resilient roads for the future environment and climate change: Quantifying the vulnerability of the primary transport infrastructure system in Mexico. *Transport Policy*, 50, 78-86.
- 15. Espinet, Xavier, Schweikert, Amy, and Chinowsky, Paul (2015). "Robust-Based Prioritization Framework for Resilient and Sustainable Transport Infrastructure Adaptation Investments under Uncertainty of Climate Change," ASCE Journal of Risk and Uncertainty in Engineering Systems, 10.1061/AJRUA6.0000852, E4015001.
- 16. Schweikert, Amy, Espinet, Xavier, Goldstein, Sara, and Chinowsky, Paul (2015). "Resilience versus Risk: Assessing Cost of Climate Change Adaptation to California's Transportation System and the City of Sacramento, California," Transportation Research record, 2532: 10.3141/2532-02.
- 17. Chinowsky, Paul S., Schweikert, Amy, Strzepek, Niko, and Strzepek, Kenneth (2015). "Infrastructure and Climate Change: a study of impacts and adaptations in Malawi, Mozambique, and Zambia," Climatic Change, 130(1): 49-62.
- 18. Chinowsky, Paul S., Schweikert, Amy, Strzepek, Niko, and Strzepek, Kenneth (2015). "Road Infrastructure and Climate Change in Vietnam," Sustainability, 7(4), 5452-5470.
- 19. Twerefou, D.K.; Chinowsky, P.; Adjei-Mantey, K.; Strzepek, N.L. (2015) "The Economic Impact of Climate Change on Road Infrastructure in Ghana," *Sustainability*, 7(9), 11949-11966.
- 20. Chinowsky, Paul S., Schweikert, Amy, Hughes, Gordon, Hayles, Carolyn, Strzepek, Niko, Strzepek, Kenneth, and Westphal, Michael (2015). "The Impact of Climate Change on Road and Building Infrastructure: A Four-Country Study," International Journal of Disaster Resilience in the Built Environment, 6(4):382-396.
- 21. Wanberg, John, Javernick-Will, Amy, Chinowsky, Paul and Taylor, John (2015). "The Effects Of Organizational Divisions On Knowledge Sharing Networks In Multi-Lateral Communities Of Practice," Engineering Project Organization Journal, 5(2-3):118-132.
- 22. Wanberg, John, Javernick-Will, Amy, Chinowsky, Paul and Taylor, John (2014). "Knowledge Pipelines: Structural effects and relational preference in multinational communities of practice," ASCE Journal of Construction Engineering and Management, 10.1061/(ASCE)CO.1943-7862.0000955.
- 23. Sandekian, R., Chinowsky, P., & Amadei, B. (2014). "Engineering for Developing Communities at the University of Colorado Boulder: A Ten Year Retrospective," *International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship*, 62-77.
- 24. Sewalk, Stephen and Chinowsky, Paul S. (2014). "Constructing and Financing the Future Energy Infrastructure" International Journal of Construction Project Management, 6(2).
- 25. Schweikert, A., Chinowsky, P., Kwiatkowski, K., Johnson, A., Shilling, E., Strzepek, K., & Strzepek, N. (2014). "Road Infrastructure and Climate Change: Impacts and Adaptations for South Africa," ASCE Journal of Infrastructure Systems, 10.1061/(ASCE)IS.1943-555X.0000235.
- 26. Chinowsky, Paul S. and Hoffman, Rod (2014). "Long-Term Viability of Mid-Size Engineering Firms," ASCE Journal of Management in Engineering, 10.1061/(ASCE)ME.1943-5479.0000328.
- 27. Schweikert, Amy, Chinowsky, Paul, Kwiatkowski, Kyle, and Espinet, Xavier (2014). "The Infrastructure Planning Support System: Analyzing the Impact of Climate Change on Road Infrastructure and Development," Transport Policy, 35(9): 146-153.

- 28. Chinowsky, Paul S., Schweikert, Amy, Strzepek, Niko, and Strzepek, Kenneth (2014). "Infrastructure and Climate Change: A Study of Impacts and Adaptations in Malawi, Mozambique, and Zambia" Climatic Change, 1-14.
- 29. Neumann, James E., Price, Jason, Chinowsky, Paul, Wright, Leonard, Ludwig, Lindsay, Streeter, Richard, Jones, Russell, Smith, Joel B., Perkins, William, Jantarasami, Lesley, and Jeremy Martinich (2014). "Climate Change Risks to US Infrastructure: Impacts on coastal development, roads, bridges, and urban drainage," Climatic Change.
- 30. Javernick-Will, Amy, Sanaei, Maryam, and Chinowsky, Paul (2013). "Transferring knowledge within and between generations in communities of practice," Construction Management and Economics, 31(9): 994-1007.
- 31. Chinowsky, Paul S., Price, Jason C. and Neumann, James (2013). "Assessment of Climate Change Adaptation Costs for the U.S. Road Network," Global Environment Change, 23(4): 764-773.
- 32. Toole, T. Michael, Hallowell, Matthew, and Chinowsky, Paul S. (2013). "A Tool for Improving Construction Organizations' Innovation Capabilities," Engineering Project Organization Journal, 3(1): 32-50.
- 33. Chinowsky, Paul, Schweikert, Amy, Strzepek, Niko, Manahan, Kyle, Strzepek, Kenneth, and Schlosser, C. Adam (2013). "Climate Change Adaptation Advantage For African Road Infrastructure," Climatic Change, 117(1-2): 345-361.
- 34. Tsung, Nilo, Corotis, Ross, Chinowsky, Paul, and Amadei, Bernard (2013). "A Retrospective Approach to Assessing the Sustainability of the Grand Canal of China," Journal of Structure and Infrastructure Engineering, 9(4):297-316.
- 35. Chinowsky, P. and Arndt, C. (2012) "Climate Change and Roads: A Dynamic Stressor-Response Model." Review of Development Economics, 16(3):448-462.
- 36. Arndt, C., P. Chinowsky, K. Strzepek, and J. Thurlow (2012). "Climate Change, Growth and Infrastructure: The Case of Mozambique." Review of Development Economics, 16(3):463-475.
- 37. Chinowsky, Paul S. and Taylor, John E. (2012). "Networks In Engineering: An Emerging Approach To Project Organization Studies," Engineering Project Organization Journal 2(1):15-26
- 38. Wright, Len, Chinowsky, Paul, Strzepek, Kenneth, Jones, Russell, Streeter, Richard, Smith, J.B., Mayotte, Jean-Marc, Powell, Anthony, Jantarasami, Lesley, and Perkins, William (2012). "Vulnerability of United States Bridges to Potential Increases in Flooding from Climate Change," Mitigation and Adaptation of Strategies for Global Change, 17(8): 939-955.
- 39. Chinowsky, Paul S. (2011). "Engineering Project Organization: Defining a Line of Inquiry and a Path Forward," Engineering Project Organization Journal, 1(1), 3-10.
- 40. Chinowsky, Paul S., Hayles, Carolyn, Schweikert, Amy and, Strzepek, Niko (2011). "Climate Change As Organizational Challenge: Comparative Impact On Developing And Developed Countries," Engineering Project Organization Journal, 1(1), 67-80.
- 41. Chinowsky, Paul S., Taylor, John E., and DiMarco, Melissa (2011). "Project Network Interdependency Alignment," Journal of Management in Engineering, 27(3), 170-179.
- 42. Hallowell, Matthew, Esmaeli, Behzad, and Chinowsky, Paul S. (2011). "Safety Risk Interactions among Highway Construction Work Tasks," Construction Management and Economics, 29(4), 417-429.
- 43. Hughes, Gordon, Chinowsky, Paul, Strzepek, Ken (2010). "Adapting to Climate Change Results for Water Infrastructure in OECD Countries," Utilities Policy.
- 44. Chinowsky, Paul S., Strzepek, Kenneth, and Opdahl, Arie (2010). "Adaptive Climate Response Models for Infrastructure", Journal of Infrastructure Systems, ASCE.
- 45. Chinowsky, Paul S., Diekmann, James, and O'Brien, John (2010). "Project Organizations as Social Networks," Journal of Construction Engineering and Management, ASCE, 136(4).
- 46. Chinowsky, Paul S., Diekmann, James, and Galotti, Victor (2008). "A Social Network Model for Construction," Journal of Construction Engineering and Management, ASCE, 134(10). 804-812.

- 47. Larsen, Peter H., Goldsmith, Scott, Smith, Orson, Wilson, Meghan, Strzepek, Kenneth, Chinowsky, Paul, and Saylor, Ben (2008). "Estimating the Future Costs of Alaska Public Infrastructure at Risk From Climate Change," Global Environmental Change, 18(3), 442-457.
- 48. Songer, Tony, Chinowsky, Paul, and Butler, Colleen (2008). "Leadership Behaviour in Construction Executives,", Construction Information Quarterly, Chartered Institute of Building, UK, 10(2), 59-66.
- 49. Chinowsky, Paul S. (2008). "A Staircase Model for Successful Practice Implementation," Journal of Management in Engineering, ASCE, 24(3), 187-195.
- 50. Chinowsky, Paul S., Molenaar, Keith, and Bastias, Alfonso (2007), "Measuring Achievement of Learning Organizations in Construction," Journal of Engineering, Construction, and Architectural Management, 14(3), 215-227.
- 51. Chinowsky, Paul S. and Carrillo, Patricia (2007). "The Knowledge Management to Learning Organization Connection," Journal of Management in Engineering, ASCE, 23(3). 122-130.
- 52. Chinowsky, Paul S. and Molenaar, Keith R. (2007). Learning Organizations in Construction, Journal of Management in Engineering, 23(1), 27-34, ASCE
- 53. Butler, Colleen and Chinowsky, Paul S. (2006). "Leadership Characteristics of Construction Professionals," *Journal of Management in Engineering*, ASCE, 22(3), 119-125.
- 54. Chinowsky, Paul S., Brown, Hyman, Realph, Allison, and Szajanman, Alberto (2006). "Developing Knowledge Landscapes Through Project-Based Learning," *Journal of Professional Issues and Education*, American Society of Civil Engineers, 132(2), 118-124.
- 55. Carrillo, Patricia and Chinowsky, Paul (2006). "Exploiting Knowledge Management: The Construction and Engineering Perspective," *Journal of Management in Engineering*, ASCE, 22(1), 2-10.
- 56. Chinowsky, Paul S. and Diekmann, James E. (2004). "Construction Engineering Management Educators: Deteriorating Community," *Journal of Construction Engineering and Management*, ASCE, 130(5), 751-758.
- 57. Chinowsky, Paul S. and Rojas, Eddy (2003). "Virtual Teams: Guide to Successful Implementation", *Journal of Management in Engineering*, ASCE, 19(3), 98-106.
- 58. Chinowsky, Paul S. (2002). "Integrating Management Breadth in Civil Engineering Education," *Journal of Professional Issues and Education*, American Society of Civil Engineers, 128(3), 138-143.
- 59. Chinowsky, Paul S. (2001). "Strategic Management In Engineering Organizations," *Journal of Management in Engineering*, 17(2), 60-67, American Society of Civil Engineers.
- 60. Chinowsky, Paul S. and Byrd, Meghann (2001). "Strategic Management in Design Firms," *Journal of Professional Issues and Education*, 127(1), 30-37, American Society of Civil Engineers.
- 61. Kuprenas, John A., Chinowsky, Paul S., Harano, Winifred (2000). "Strategic Planning in Engineering Organizations: A Case Study," *Journal of Management in Engineering*, 16(5), 34-40, American Society of Civil Engineers.
- 62. Chinowsky, Paul S. and Meredith, James E. (2000). "Strategic Management in Construction," *Journal of Construction Engineering and Management*," 126(1), 1-9, American Society of Civil Engineers.
- 63. Goodman, Robin E. and Chinowsky, Paul S. (2000). "A Taxonomy of Knowledge Requirements for Construction Executives," *Journal of Management in Engineering*, 16(1), 80-89, American Society of Civil Engineers.
- 64. Chinowsky, Paul S. (1999). "Benchmarking The World Wide Web In Student Collaboration," *Journal of Computing in Civil Engineering*, 13(4), 254-260, American Society of Civil Engineers.
- 65. Chinowsky, Paul S. (1999). "Introducing Strategic Corporate Management in Engineering Education," *Journal of Construction Education*, 3(1), 3-12, Associated Schools of Construction.

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- 28. Chinowsky, Paul S. and Kingsley, Gordon (2007). "An Analysis of Current QBS Contracting Practices," Research Report, American Council of Engineering Companies.
- 29. Chinowsky, Paul S. (2007). "A Guide to Successful New Practice Implementation," Research Summary, Construction Industry Institute.
- 30. Chinowsky, Paul S. (2007). "A Guide to Successful New Practice Implementation," Implementation Resource Guide, Construction Industry Institute.
- 31. Larsen, Peter H., Goldsmith, Scott, Smith, Orson, Wilson, Meghan, Strzepek, Kenneth, Chinowsky, Paul, and Saylor, Ben (2007). "Estimating the Future Costs of Alaska Public Infrastructure at Risk From Climate Change," University of Alaska.
- 32. Chinowsky, Paul S. (2006). "A Guide to Successful New Practice Implementation," Research Report, Construction Industry Institute.
- 33. Chinowsky, Paul S. and Molenaar, Keith (2006). "Learning Organizations in Construction," Research Report, Construction Industry Institute.
- 34. Chinowsky, Paul S. and Molenaar, Keith (2005). "Learning Organizations in Construction," Research Summary, Construction Industry Institute.
- 35. Kingsley, Gordon and Chinowsky, Paul (2005). "Standardizing Consultant Management Practices," Georgia Department of Transportation.
- 36. Kingsley, Gordon and Chinowsky, Paul (2004). "Organization Impact on DOT Contracting Operations," Georgia Department of Transportation.
- 37. Chinowsky, Paul and Songer, Anthony (2004). "The Construction Engineering Professional of 2020" NSF.
- 38. Chinowsky, Paul S. and Rojas, Eddy (2003). Virtual Teams: A Guide To Successful Implementation" Construction Industry Institute, March 2003.
- 39. Chinowsky, Paul S. (2000). "Strategic Management Practices in the AEC Industry," AECStrategies,LLC Report.
- 40. Chinowsky, Paul S. and Molenaar Keith (2000). "Georgia Construction Economic Impact Study." Georgia Institute of Technology Report.
- 41. Chinowsky, P., Adame, R., Cavanaugh, K., Hunter, W., and Slemon, C. (1994). "Submarine Integrated Automated Damage Control System Baseline Functional Element Specification Version 2," Stone & Webster Engineering Company Report 19445.04-M(C)-01.
- 42. Cavanaugh, K., Slemon, C., Adame, R., and Chinowsky, P. (1994). "Submarine Integrated Automated Damage Control System Phase 4 Program Summary Report," Stone & Webster Engineering Company Report 19445.04-M(C)-02.
- 43. Chinowsky, P., and Teicholz, P. (1991). "The Application of Knowledge-Based Paradigms to Architectural Layout Generation," CIFE Technical Report, Center for Integrated Facility Engineering, Stanford University.
- 44. Ichioka, Y., Teicholz, P., and Chinowsky, P. (1991). "An Approach to Automated Architectural Floor Layout Generation with Case-Based Reasoning," CIFE Technical Report #44A, Center for Integrated Facility Engineering, Stanford University.
- 45. Chinowsky, P., and Teicholz, P. (1990). "A Knowledge-Based Layout Generation System," CIFE Working Paper #7, Center for Integrated Facility Engineering, Stanford University.

Technical Manuals

- 1. Chinowsky, P., and Waid, M.W. (1994). STONErule Training Reference Manual Process Call Option, Stone & Webster Advanced Systems Development Services, Inc.
- 2. Chinowsky, P. (1992). STONErule/VGE Reference User Training Manual. Stone & Webster Engineering Corporation.
- 3. Chinowsky, P. (1992). STONErule User Training Manual. Stone & Webster Engineering Corporation.

E. PRESENTATIONS

Keynote Presentations

- 1. Addressing Climate Threats to Strategic Organization Assets, Keynote, Asset Management Ecosystem Conference, Denver, April 29, 2019
- Chinowsky, Paul S. Keynote Lecture, "Barriers to Innovation in the Construction Industry," Construction Management Association of America Annual Leadership Conference, New Orleans, LA, May 2013.
- 3. Chinowsky, Paul S., Keynote Lecture, "EPOS, EPOJ, and EPOC: A Launch," Engineering Project Organization Conference, Lake Tahoe, CA, November 2010.
- 4. Chinowsky, Paul S. Keynote Lecture, "Implementing New Processes in Nuclear Construction," National Nuclear Security Agency Annual Meeting, Orlando, FL, August 2009.
- 5. Chinowsky, Paul S. Keynote Lecture, "A Social Network Model for Construction," Northwest Construction Council Annual Meeting, Seattle, WA, November 2007.
- 6. Chinowsky, Paul S., Keynote Lecture, "Strategic Directions for Transportation Companies," H.W.Lochner Annual Meeting, October, 2006.
- 7. Chinowsky, Paul S., Keynote Lecture, "Breaking Barriers to New Practice Implementation," CII Product Implementation Workshop, Tampa, FL, April 2006.

Plenary Presentations

- 1. Chinowsky, Paul S. (2015). "Climate Modeling and Insurance Vulnerability," National Association of Insurance Commissioners," Baltimore, MD, November 2015.
- 2. Chinowsky, Paul S. (2009). Project Network Interdependency Alignment," Fourth Specialty Conference on Leadership and Management in Construction, Lake Tahoe, CA, November, 2009.
- 3. Chinowsky, Paul S. (2009). "Organization Impact on Design Build Success," DBIA Regional Conference, Denver, CO.
- 4. Chinowsky, Paul S. (2009). "Implementation Keys to Success," Emerson Engineering Annual Conference, Orlando, FL.
- 5. Chinowsky, Paul S. (2008). "Perspectives on Implementation Champions," CII Board of Advisors Annual Conference, Chicago, IL.
- 6. Chinowsky, Paul S. (2007). "Implementing New Practices," CII Annual Conference, Orlando, FL.
- 7. Chinowsky, Paul S., Invited Lecture, Knowledge Management in Construction and Engineering, Loughborough University, Loughborough, UK, May 2006.
- 8. Chinowsky, Paul S. (2005). "Current Trends in Leadership," CII Annual Conference, Dallas, TX.
- 9. Chinowsky, Paul S. (2005). "Current Trends in Leadership," CII Construction Productivity Conference, Austin, TX.
- 10. Chinowsky, Paul S. (2004). "Integrating Breadth in the Construction Curriculum," 2004 ASCE Specialty Conference on Leadership and Management in Construction, Hilton Head, SC.

11. Chinowsky, Paul S. (1998). "Delivering Design-Build Projects through the Web", DBIA Annual Conference, Chicago, IL.

Other Presentations

What climate change plans is state government making?, Anthem Ranch, April 2019

High-Value, Collaborative Networks, presented with Amy Javernick-Will at EPOC 2019

The Impact of Climate Change: Projected Adaptation Costs for Boulder County, Colorado Boulder Cultural Organizations Summit, August 2019

"Measuring the Impact of Climate Change on Corporate Assets," Anthesis Inc, May 2018.

"George Norlin Legacy to the University of Colorado," CU Board of Regents, June 2018.

"George Norlin - Legacy and Leadership," Library Archives Research Series, August 2018

"George Norlin: Leadership and Legacy," Presented to CU Advocates, October 2018.

"Climate Change Impact on Boulder County," Boulder County Commissioners, April 10, 2018.

"Changing Climate – Business and Technical Impacts," Webinar - ACEC, July 2018.

"Successful Teams: Analyzing Your Organization for Strategic Success," ACEC, February 2017.

"The Impact of Climate Change on Opportunities for Engineering Services," ACEC, Nov 2017.

"Reimagining History Through Stories," Workshop Presented to Build Colorado, Sept 21-22, 2017

"Climate Change and Role of Professional Societies," University College London, November 2017

"The Impact of Climate Change on Opportunities for Engineering Services," ACEC, Nov 2016.

"Successful Teams: Analyzing Your Organization for Strategic Success," ACEC, August 2016.

"Infrastructure Vulnerability in Sub-Saharan Africa," World Bank, June 2016.

"The Impact of Climate Change on Opportunities for Engineering Services," ACEC, April 2016.

"Measuring Climate Impact on Infrastructure," HDR Engineering, March 2016.

"Climate Impact on Forest Roads," US Department of Forestry, February 2016.

"Successful Teams: Analyzing Your Organization for Strategic Success," ACEC, February 2016.

"Resiliency versus Risk: An Adaptation Challenge," Colorado Municipal League, October 2015

"Climate Impacts on Transportation Infrastructure," National Transportation Lab, October 2015.

"African Vulnerability to Climate Change," African Development Bank, September 2015.

"Insurance Vulnerability and Climate Modeling," SwissRe, August 2015.

"The Zero Mile Corridor Impact by Climate," Georgia Conservancy, July 2015.

"Climate modeling and Urban Resilience," Urban Land Institute, May 2015

"Climate Change Adaptation Modeling," Global Cities, May 2015

"Climate modelling solutions and infrastructure projects," Skanska International, April 2015

"IPSS: A Tool for Global Climate Analysis," The Rockefeller Foundation, April 2015

"Infrastructure Vulnerability in Sub-Saharan Africa," World Bank, March 2015

"Measuring Climate Impact on Infrastructure," MHW Engineering, December 2013

"IPSS for Climate Impact Modeling," Stratus Consulting, November 2013

"The IPSS System for Climate Modeling" World Bank, June 2013

"Putting Implementation to Work," CII Implementation Workshop, April 2013.

"Climate Impact on Infrastructure" USAID, March 2013

"Climate Change Impact in East Asia," Asian Development Bank, February 2012.

"Climate Change in Southern Africa," United Nations, March 2012.

"Virtual Global Team Development," URS Corp, July 2012.

"Climate Change as Economic Opportunity," ACEC-National, July 2012.

"The Experience Reference Index," CII Implementation Workshop, October 2012.

"Vision to Action: Enhancing CII Implementation," CII Board of Advisors, November 2012.

"Climate Change as Economic Opportunity," ACEC-California, December 2012.

"Infrastructure Planning Support System," UNDP, February 2011.

"Climate Change Impact on African Infrastructure," World Bank, March 2011.

"Climate Change Impact on Mozambique Roads," World Bank Africa Region, June 2011.

"Climate Change Impact on Infrastructure," University of Denver, June 2011.

- "Infrastructure Impact from Climate Change in Africa," United Nations, August 2011.
- "Network Analysis in Construction Organizations," Colorado State University, November 2011.
- "Communications Support of Implementation," CII Product Implementation Workshop, Houston, TX, October 2011.
- "Infrastructure Adaptation to Climate Change," UNU Workshop on Climate Change Impacts, Washington DC, September, 2010.
- "Implementation: the People Factor," CII Product Implementation Workshop, Houston, TX, November 2010.
- "Project Network Interdependency Analysis," Poster Presented at the CII Annual Conference, Orlando, FL, August 2010.
- "Web-based Implementation," CII Product Implementation Workshop, Fort Lauderdale, FL, April 2010.
- "Introduction to the Implementation Assistant," CII Product Implementation Workshop, Houston, TX, October 2009.
- "High Performance Organizations," Poster Presented at the CII Annual Conference, Reno, NV, August 2009.
- "Enhancing Innovation in the EPC Industry," CII Product Implementation Workshop, Scottsdale, AZ, April 2009.
- "Barriers and Strategies in New Practice Implementation," CII Product Implementation Workshop, Chicago, IL, October 2008.
- "Social Networks in Leading Project Teams," ASU Leadership Research Advisory Council, Tempe, AZ, September 2008.
- "An Implementation Model for Customer Value," Zurich North America Executive Council, Chicago, IL, July, 2008.
- "A New Model for Best Practice Implementation," CII Product Implementation Workshop, Ft. Lauderdale, FL, April 2008.
- (panel member), "CIFE: The First Generation," CIFE 20th Anniversary Conference, Stanford, CA, April, 2008.
- "A New Model for Best Practice Implementation," CII Product Implementation Workshop, Dallas, TX, April 2007.
- "A New Model for Best Practice Implementation," CII Product Implementation Workshop, Atlanta, GA, October 2007.
- "A Quantitative Study of QBS Procurement," 2006 Annual Conference of the ACEC State Chapters, Dec. 2006.
- Invited Lecture, "A Stairstep Model For Implementation Success," CII Product Implementation Workshop, Chicago, IL, September, 2006.
- Panelist, Making Virtual Teams Work in Construction, CII Product Implementation Workshop, Tampa, FL, April 2006.
- "A New Model for Best Practice Implementation," CII Product Implementation Workshop, Tampa, FL, April 2006.
- Strategic Directions for Engineering and Construction, Presented at the 2005 AIA/ACEC Leadership Summit, San Diego, December 2005.
- "Ethics in Construction," Colorado Society of Professional Estimators, Denver, May 2005.
- "Electronic Solutions for Contractor Selection." Presented at the National Association for State Facility Administrators Western Conference, Tuscon, AZ, Oct. 2004.
- "Comprehensive Contractor Evaluation and Selection" Presented at the 2004 Georgia Association of State Facility Administrators, Atlanta, GA.

F. Software

Chinowsky, Paul S. and Strzepek, Kenneth (2015). The Infrastructure Planning Support System, Available at www.resilient-analytics.com. Software for analyzing climate impact costs. Used by local,

national, and international customers.

Chinowsky, Paul S. (2009). The Implementation Assistant, a Web-Based Application, Developed for the Construction Industry Institute, Available at www.construction-institute.org.

G. Technology Start-Up

Resilient Analytics (co-founded with Ken Strzepek) (2015). Resilient Analytics is a Technology Transfer Office start-up that focuses on providing climate adaptation analytics on a global basis. Clients include The World Bank, United Nations, EPA, Georgia Conservancy and others.

V. SERVICE

A. PROFESSIONAL CONTRIBUTIONS

Boards and Advisory Councils

Board Member, Historic Boulder, 2020-Present

California Office of the Governor, Climate Science Working Group, Invited Member, 2020-Present

Organization and Chairmanship of Conferences

- 1. Conference Co-Chair, Engineering Project Organization Conference, Virtual, June 2020.
- 2. Conference Co-Chair, Engineering Project Organization Conference, Vail, CO, June 2019.
- 3. Conference Co-Chair, Engineering Project Organization Conference, Lake Tahoe, CA, June 2017.
- 4. Conference Co-Chair, Engineering Project Organization Conference, Winter Park, CO, July 2014.
- 5. Conference Co-Chair, Engineering Project Organization Conference, Winter Park, CO, July 2013.
- 6. Conference Co-Chair, Engineering Project Organization Conference, Rheden, The Netherlands, August 2012.
- 7. Conference Chair, Engineering Project Organization Conference, Estes Park, CO, August 2011.
- 8. Conference Chair, Engineering Project Organization Conference, Lake Tahoe, CA, November 2010.
- 9. Technical Committee, 2010 ARCOM Conference, Salford, UK, September 2010.
- 10. Moderator and co-coordinator, DBIA Regional Conference, Denver, CO September, 2009.
- 11. Conference Chair, Specialty Conference on Leadership and Management 2009, Lake Tahoe, CA, November 2009.
- 12. Conference Chair, CIB Specialty Conference on Leadership and Management 2008, CIB, Lake Tahoe, CA, October 2008.
- 13. Conference Chair, ASCE-CIB Construction Research Congress 2007, ASCE-CIB, Grand Bahama Island, May 2007.
- 14. Conference Chair, ASCE Specialty Conference on Leadership and Management 2006, ASCE, Grand Bahama Island, May 2006.
- 15. Conference Chair, ASCE Specialty Conference on Leadership and Management 2004, ASCE, Hilton Head, SC, March 2004.
- 16. Conference Chair, ASCE Construction Congress 2003, ASCE, Honolulu, HI, March 2003.
- 17. Technical Committee, ASCE Specialty Conference on Computing in Civil Engineering, ASCE, Washington, DC, November 2002.
- 18. Track Coordinator, Civil Engineering, ASEE 2001 Southeast Regional Conference, ASEE, Charleston, SC, April 2001.
- 19. Technical Committee, Workshop on Fully Integrated and Automated Project Processes, ASCE, Blacksburg, VA, September, 2000.
- 20. Technical Committee, Sixth Congress on Computing in Civil Engineering, ASCE, Stanford, CA, August, 2000.
- 21. Technical Co-Chair, Third Congress on Computing in Civil Engineering, ASCE, Anaheim, CA, June, 1996.

Technical Committee Service

Engineering Project Organization Society

Co-Founder and Chairman 2010 - Present

Inter-Governmental Panel on Climate Change (IPCC)

Contributing Author, IPCC Report 5

CIB (International Construction Research Organization)

Co-Chair of Task Group on Leadership in Construction, 2007-2009

Construction Industry Institute

Academic Representative, Implementation Strategy Committee, 2006 - 2015 Member, Research Committee, 2009-2010

American Society of Civil Engineers

Member, Executive Committee, Education Division, Construction Institute, ASCE, 2003-2008.

Chair, ASCE Construction Research Council, 2001-2002

Chair, TCCIT Committee On the Coordination of Computing Activities (COCOA), 2000-2002

Secretary, ASCE TCCIT Committee on Education, 1999-2000

Council on Professional Practice, Committee on Engineering Management and Business Practices, Corresponding Member 1998-2001

American Society of Engineering Educators

Chairman, Southeast Region, Civil Engineering Section, 1998-2000, Member, 1995-Present

International Social Network Association

Member, 2012 - Present

Technical Journal Editor or Editorial Board

Editor, Journal of Engineering Project Organizations, Taylor & Francis, January 2011- Present. Member, Editorial Board, Journal of Engineering, Construction, and Architectural Management,

Member, Editorial Board, Journal of Construction Engineering

Guest Editor, ASCE journal of Construction Engineering and Management, Issue on Governance of Global Projects, April 2010.

Specialty Editor, ASCE Journal of Construction Engineering and Management

Member, Editorial Board, Journal of Engineering and Construction Leadership

Member, Editorial Board, ASCE Journal of Management in Engineering

Technical Journal Referee

Climatic Change

Building and Environment

Computing in Civil Engineering, ASCE

Construction Engineering and Management, ASCE

Engineering Management, ASCE

Automation in Construction

Journal of Construction Education, Associated Schools of Construction

Journal of Engineering Education, ASEE

Journal of Engineering, Construction and Architectural Management

Construction Economics and Management

Canadian Journal of Civil Engineering

Project Management Journal

B. UNIVERSITY SERVICE

University of Colorado

Founder and Coordinator, Provost's Faculty Leadership Institute, 2013-Present

Member, Campus Faculty Diversity Action Committee, 2020-Present

Board Member, Center for the American West, 2020 - Present

Member, CU Boulder Academic Affairs Budget Advisory Committee (AABAC), 2020-2022

Coordinator, CU Boulder First-Year Seminar Program, 2017-2018

Member, A&S Reorganization Committee, 2018

Chair, ARPAC RAP Review Task Force, 2017

Member, Boulder Faculty Assembly, Faculty Affairs Committee (2008 – 2011, 2012-2013), Chair 2010-2012

Member, Boulder Faculty Assembly, Executive Committee (2010 – 2012), Vice-Chair (2012-2013), Chair (2013-2015)

Member, University of Colorado Faculty Council Personnel Committee (2011-2012), Chair 2012-2013

Co-Chair, Faculty Council Mid-Career Task Force (2011-2013)

Member, Academic Affairs Salary Dispute Committee, (2011-2013)

Member, Environmental Design Primary Unit Evaluation Committee (2012-2013)

Member, University Sustainability Visioning Committee (2012-2013)

Member, University Facility Department Review Committee (2012-2013)

Member, Flagship 2030 Faculty Affairs Task Force (2007 – 2008)

Member, Strategic Planning Committee, College of Engineering and Applied Science (2007-2008) Co-Developer and Co-Coordinator, College Undergraduate Certificate in Global Engineering (2012-2013)

Member, Mortenson Center Executive Committee (2010 – 2012)

Co-Coordinator, Civil Systems Graduate Program, Department of Civil, Env. And Arch.

Engineering, Current

Member, Graduate Committee, Department of Civil, Env. And Arch. Engineering (2007 – 2009) (2011-213)

Associate Chair, Department of Civil, Env. And Arch. Engineering (2008 – 2010)

Member, Department Search Committee, Department of Civil, Env. And Arch. Engineering (2007-2008)

 $Member, Executive\ Committee,\ Department\ of\ Civil,\ Env.\ And\ Arch.\ Engineering\ (2004-2007)$

Member, Curriculum Committee, Department of Civil, Env. And Arch. Engineering (2002 – 2005)

External Academic Organizations

Member, International Advisory Panel, Innovative Manufacturing and Construction Research Centre, Loughborough University (2006 – 2011)

Panelist, National Science Foundation, CAREER Award Selection

Tenure Reviewer, Penn State

Tenure Reviewer, University of Nebraska

Tenure Reviewer, Oregon State University

Tenure Reviewer, University of Florida

Tenure Reviewer, American University of Beirut

Tenure Reviewer, University of Washington

Promotion Reviewer, Boise State University

VI. GRANTS AND CONTRACTS

1. "Resilience of Informal Settlements"

CU College of Engineering RISE Seed Grant

2020, \$8,000 Role: Co-PI

2. "Revisiting Qualifications-based Selection in Engineering Projects,"

American Council of Engineering Companies,

2019-2020, \$84,400

Role: PI

3. AAU Demonstration Site: Professionalizing Educational Practice through Measurement and

Assessment: Materials, Infrastructure, and Cultural Support

American Association of Universities Amount: \$499,634 (7/13 – 6/16)

Role: Co-PI, PI: Prof. Noah Finkelstein, Physics

4. An On-line planning tool for climate change resiliency development

USAID

Amount: 99,800 (10/13 - 6/15)

Role: PI

5. Satellite Evaluation of Road Quality

US DOT

Amount: \$300,000 (9/12 - 6/14)

Role: Investigator, PI: Prof. Bill Emery, Aerospace Engineering

6. Enhancing Safety Methods in the Workforce

Colorado DOT

Amount: \$114,000 (1/12 – 12/17) Role: PI, Co-PI: Prof. Matt Hallowell 7. Development Under Climate Change

United Nations University (WIDER) Amount: \$350,000 (3/12 – 12/13)

Role: Principal Investigator

8. VOSS: Creating Global, Multi-lateral, Knowledge-Sharing Communities of Practice

National Science Foundation Amount: \$399,000 (10/11 – 10/14)

Role: Co-PI with Amy Javernick-Will (PI) and John Taylor, Virginia Tech

9. Integrated Bio-Physical and Sectoral Modeling for Robust Development Path Assessment

United Nations University (WIDER) Amount: \$147,000 (12/10 – 12/11)

Role: Principal Investigator

10. Infrastructure Planning Model for Developing Countries

University of Copenhagen Amount: \$120,000 (3/10-/3/11) Role: Principal Investigator

11. Economics of Adaptation Change: Country Case Studies

World Bank

Amount: \$330,000 (\$150,000 to Chinowsky)

(01/10 - 12/10)

Role: Co-Principal Investigator (Ken Strzepek Co-PI)

12. Safety Integration into 3-D Modeling

Bentley Systems

Amount: \$28,000 (All student support to jointly supported student) (09/09 - 07/10)

Role: Co-Principal Investigator (Matt Hallowell Co-PI)

13. Global Infrastructure Impacts of Climate Change

World Bank

Amount: \$200,000 (\$50,000 to CU) (01/09 – 07/09) Role: Principal Investigator on CU Component

14. Visualization of Network Diagrams

CU Innovation Seminar: Visual Art/Visual Science: Technology, Aesthetics, Investigation

Amount: \$1,750 (7/09 - 05/10)

Role: PI

15. Case Studies in Innovation in the EPC Industry

Construction Industry Institute

Amount: \$85,000 (\$65,000 to Chinowsky) (10/08 – 10/09)

Role: Co-PI with Profs. Ken Strzepek and Mike Toole (Bucknell University)

16. High Performance Project Delivery

Parsons-Brinkerhoff

Amount: \$55,000 (10/08 - 9/10)

Role: Principal Investigator

17. Characterizing and Valuing Climate Change Impacts on Infrastructure in the United States

Environmental Protection Agency

Amount: \$120,000 (\$10,000 to Chinowsky) (12/08 – 6/09)

Role: Investigator to Stratus Consulting as PI

18. Innovation in the EPC Industry

Construction Industry Institute

Amount: \$135,000 (\$75,000 to Chinowsky) (11/06 – 10/08)

Role: Co-PI with Profs. Ken Strzepek and Mike Toole (Bucknell University)

19. A Multi-Perspective Study on Safety Performance at the Colorado DOT

Colorado DOT

Amount: \$89,000, (06/07 – 03/09)

Role: Principal Investigator

20. A Quantitative Study of QBS Procurement

American Council of Engineering Companies

Amount: \$93,000 (11/06-6/08)

Role: Principal Investigator

21. A Communications-Based Approach to Infrastructure Recovery

SGER, National Science Foundation

Amount: \$35,000 (11/07 - 8/08)

Role: Principal Investigator

22. Barriers to New Practice Implementation

Construction Industry Institute

Amount: \$33,500 (11/05 - 6/09)

Role: Principal Investigator

23. Travel Grant for Visiting Professorship

Loughborough University

Amount: \$7,500 (5/06)

24. Development of New Climate Change Entrepreneurship Course

Kettering Family Foundation

Amount: \$25,000 (8/06-12/06)

Role: Investigator and Co-Instructor

25. Development of Utility Policy Course

Internal Grant from Electrical Engineering

Amount: \$10,000 (7/05) Role: Principal Investigator

26. Learning Organizations in Construction

Construction Industry Institute

Amount: \$149,360 (\$125,000 to Chinowsky) (6/03 - 6/06)

Role: Co-PI with Prof. Keith Molenaar

27. Strategies to Strengthen Consultant Management in the Georgia Department of Transportation - 2

Georgia DOT

Amount: \$52,530 (8/04 - 3/05)

Role: Co-PI with Prof. Gordon Kingsley (Georgia Tech)

28. Strategies to Strengthen Consultant Management in the Georgia Department of Transportation - 1

Georgia DOT

Amount: \$250,000 (8/01 - 3/03) (\$56,000 to CU)

Role: Investigator with Prof. Gordon Kingsley (Georgia Tech)

29. Workshop on the Construction Engineering Professional in 2020

National Science Foundation Amount: \$35,000 (5/02)

Co-PI With Prof. Tony Songer, (Virginia Tech)

30. Making Virtual Teams Work

Construction Industry Institute Amount: \$150,000 (4/00 – 10/01)

Role: Principal Investigator

31. Georgia Construction Economic Impact Study

Georgia Construction Industry Alliance

Amount: \$35,000 (1/99-9/99)

Role: Co-principal Investigator with Prof. Keith Molenaar

32. AEC Technology Collaboration Benchmarking

Japanese Ministry of Industry and Technology

Amount: \$200,000 (\$25,000 to Georgia Tech) (1/99-6/00)

Role: Co-principal Investigator with Dr. Renate Fruchter (Stanford) and Prof. Mike Martin (UC Berkeley)

33. A Strategic Study of Construction Reclamation

Metric Construction

Amount: \$35,000 (6/98-9/99) Role: Principal Investigator

34. Construction Operations Analysis

Georgia State Finance and Investment Corporation

Amount: \$7,500 (10/98-1/99) Role: Principal Investigator

35. Advanced Construction Technologies

M.W. Kellogg Construction Amount: \$15,000 (12/97 – 5/98) Role: Principal Investigator

36. Design for Disassembly, Environmentally Conscious Construction

Center for Sustainable Technology Amount: \$21,000 (9/1/96 - 6/30/96)

Role: Principal Investigator

37. An Integrated, Case-Based Environment for Design

EduTech

Amount: \$23,165 (4/1/95 - 4/1/96)

Role: Co-principal Investigator with Prof. Bruce Lonnman (College of Architecture)

38. Microsoft Infrastructure Instructional Lab Grant

Microsoft Corporation

Amount: \$63,000 (Software) (2/97-6/98).

Role: Principal Investigator

39. Fully Integrated and Automated Project Processes

Construction Industry Institute

Amount: \$50,000, (\$5,000 to Georgia Tech) (2/1/98 – 1/1/99) Role: Investigator (Prof. Tony Songer, PI, University of Colorado)

40. Collaborative Learning Based on Real-World, Engineering Related Tasks

ARPA

Amount: \$500,000 (\$10,000 to CEE) (9/1/95 - 6/30/97)

Role: Investigator (Prof. Janet Kolodner, PI, GT College of Computing)

Consulting Clients

World Bank, 2013-2016

MORF Consulting, 2014-2020

United Nations, 2012-2015

Environmental Protection Agency, 2009, 2010-2016

URS Engineering, 2011-2012

Asian Development Bank, 2011-2013

Stratus Consulting Group, 2009 - 2012

National Round Table on the Environment and the Economy, Canada, 2010

Wright-Pierce Engineers, 2010

Tennessee Valley Authority, 2009

Emerson Engineering, 2009

Smithsonian Institution, 2009

Zurich North America, 2008

Larson Design Group, 2008, 2010, 2012

State of Alaska, 2007

Degenkolb Engineers, 2007

Construction Industry Institute, 2004 - 2008

American Council of Engineering Companies, 2002 – 2008

Douglas County Schools, 2003

Atlanta Public Schools, 2001 – 2003

State of Georgia, 1999 - 2002

J.A. Jones Constructon, Charlotte, NC, 1999

Emerging Solution, Inc., Atlanta, GA, 1999

Metric Construction, Atlanta, GA, 1998

Jole Construction, BRAZIL, 1998

Construction Estimating Expert, 1998

Construction Estimating Expert, Donald Betner, et.al v. Georgia-Pacific Corp., 1996

Atlanta Public Schools, 1995

VII. HONORS AND AWARDS

Professional

Pathfinder Award, Engineering Project Organization Society, 2017

Best Paper Award, Transportation Research Board Conference, 2015.

Best Paper Award, Humanitarian Technology Conference, 2014.

ASCE, Journal of Management in Engineering, Best Peer Reviewed Paper Award, 2012

Distinguished Service Award, Engineering Project Organization Society, 2011

Best Paper Award, EPOC Conference, 2010

Best Paper Award, LEAD Conference 2009.

Construction Industry Institute, Distinguished Professor Award, 2009

Emerald Publishing, Outstanding Reviewer Award, Journal of Engineering, Construction and Architectural Management, 2009

Emerald Publishing, Outstanding Paper Award, Journal of Engineering, Construction and Architectural Management, 2008

ASCE LEAD 2008 Conference, Best Paper Presentation, 2008

ASCE, Journal of Management in Engineering, Best Peer Reviewed Paper Award, 2007

Construction Industry Institute, Researcher of the Year, 2007

Metro-Atlanta Engineers Council, Georgia Engineering Educator of the Year, 2001

Best Paper Award, WebNet 96.

Institute

BFA Chinowsky Innovation Award, 2015 (Perpetual award created in honor of my work as BFA Chair)

Excellence in Leadership Program Fellow, 2013-2014

Department of Civil, Env. And Arch. Engineering, Department Service Award, 2009

Department of Civil, Env. And Arch. Engineering, Research Development Award, 2007

School of Civil and Environmental Engineering Nominee, Georgia Tech Outstanding Young Faculty Award, 2000

CETL Class of 69 Teaching Fellowship, 1996

VIII. Resilient Analytics, Inc Projects (Since Technology Spinoff in 2015)

Project Title	Client	Dates	Role	Abstract
Welsh National Housing Climate Impact Analysis	Cardiff Metropolitan University	2020-2021	Project Co-Leads	Analyze historic housing stock in Wales to develop adaptation policies against climate change impacts
Kenyan Transportation Climate Vulnerability Analysis	World Bank	2020-2021	Specialist Subcontractor	Analysis of adaptation opportunities across Kenyan transportation network
Multi-National Corporate Site Vulnerability Analysis	Various International Companies	2020-2021	Project Co-Leads	Climate impact analysis of multi- national corporate sites for multiple clients including Hanes Brands, NVIDIA, Ingredion, and Republic Industries
National K-12 School Heat Study	Center for Climate Integrity	2020-2021	Project Lead	Analysis of future air conditioning requirements due to climate change in 99,000 K-12 schools across the United States
Chautauqua Historic Site Preservation Strategy	City of Boulder	2019-2021	Project Lead	Development of long-term preservation strategy for the Chautauqua Historic Site including climate threats and adaptation strategies.
Australian Sea Level Rise Study	Center for Climate Integrity	2019-2020	Project Lead	Analysis of costs associated with protecting infrastructure from sea level rise along the Australian coastline.
National Canadian Cost Impact of Climate Change	Canadian Institute for Climate Choices	2019-2020	Specialist Subcontractor	Project specialists for cost impacts on a national level for roads, rail, and bridges. Determine costs for reactive and proactive approaches to climate change adaptation. Modelled impacts of precipitation and temperature on road types in cold weather as well as impacts on airports and other infrastructure.
Community Climate Impact Studies	Florida local governments	2019-2020	Specialist Subcontractor	Project specialists for cost impacts on a community level for roads, buildings, and bridges. Determine costs and options for reactive and proactive approaches to climate change adaptation. Modelled impacts of precipitation, sea level rise, flooding, and temperature on infrastructure in the island and small community environments.
Hillsborough County, Florida Climate Toolkit	Hillsborough County, Florida	2018-2019	Specialist Subcontractor	Development of resilience toolkit for Hillsborough County transportation agencies.
National Sea Level Rise Adaptation Study	Center for Climate Integrity	2018-2019	Project Lead	Analysis of costs associated with protecting infrastructure from sea level rise along the contiguous 48 states.
Water Infrastructure Impact Study	Association of Metropolitan	2018-2020	Project Lead	Analysis of temperature impacts to water utilities in five cities including

	Water Agencies			worker impact and physical infrastructure impact. Focused on operational, design, and capital investment options
Economic Impact of Infrastructure Interruption	US EPA	2018-2019	Specialist Subcontractor	Provide interruption analysis for roads and rail infrastructure throughout the US for integration with economic analysis. This project required an analysis of impacts and delays due to repair requirements for roads and rail throughout all climate zones.
Tajikistan Transport Network Vulnerability	Asian Development Bank	2018	Specialist Subcontractor	Developed and provided analysis tools as well as logistical support for Tajik government for strategic road planning in terms of climate change impacts.
Vulnerability of the US Bridge Network to Climate Stressors	US EPA	2016-2017	Specialist Subcontractor	Analyze the effect of climate change on bridges in the contiguous 48 states.
Vulnerability of the US Road Network to Climate Stressors	US EPA	2016	Specialist Subcontractor	Analyze the effect of climate change on the primary road network in the contiguous 48 states.
Hillsborough County Coastal Analysis	Hillsborough County, Florida	2016	Specialist Subcontractor	Provide input on adaptation options for redesign of coastal road assets.
Sub-Saharan Economic Impact of Climate Change to Roads	World Bank	2016	Specialist Subcontractor	Continuation of Africa analysis to now include risk analysis, bridge analysis, and multiple output capabilities
Climate Impact on US Rail System	US EPA	2015-2016	Specialist Subcontractor	Analyze the effect of climate change on the rail system of the contiguous 48 states.
Climate Analysis of the Mission Zero Corridor	Ray C. Anderson Foundation, Georgia	2015-2016	Project Lead	Analyze the effect of climate change and potential adaptations for the I-85 highway in southwest Georgia
Moldova Infrastructure Analysis	World Bank	2015-2016	Specialist Subcontractor	Analyze climate change impacts on roads and buildings in the country of Moldova
Analysis of Climate Impact on Alaskan Infrastructure	US EPA	2015-2016	Specialist Subcontractor	Analyze the impact of climate change on the broad set of Alaskan infrastructure including the impacts of potential permafrost thaw.
Africa Climate Change Impacts on Road Infrastructure	World Bank	2013-2015	Specialist Subcontractor	Analysis of climate impacts on proposed African investments in Sub- Saharan Africa. Using the IPSS tool to analyze proposed projects through 2050