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Narrative

Appointed as Associate Dean for Graduate and International Programs at the University Nebraska-Lincoln (UNL) College of Engineering (COE) in October 2018. Served as Chair of the Department of Civil Engineering (CIVE) from August, 2013 to September 2018 and concurrently held the Donald R. Voelte, Jr. and Nancy A. Keegan Professorship in Engineering in November of 2013. Prior to joining UNL, was an Assistant, Associate and the inaugural John A. and Harriette K. Shaw Professor of Civil Engineering at the Pennsylvania State University (PSU). While at PSU performed following administrative roles: (1) Coordinator of PSUs Structural Engineering and the Larson Transportation Institute's (LTI – Regional University Transportation Center) Civil Infrastructure and Testing Laboratory; to (2) Director of LTIs Transportation Infrastructure Program; and (3) Director of PSUs Protective Technology Center. Joined PSU in 1999 after receiving a M.S. and Ph.D. from the Georgia Institute of Technology. Prior to attending Georgia Tech, was a Structural Inspection Engineer with Burgess and Niple, Ltd., in Columbus, Ohio. Received Bachelors of Science in Civil Engineering from the Ohio State University in 1990. Fellow of the American Society of Civil Engineers (ASCE) and registered Professional Engineer in Georgia, Nebraska and Pennsylvania.

Summary of Key Administrative and Academic Activities

Administrative Responsibilities

COE Associate Dean for Graduate and International Programs:
Manage staff of 4 individuals and interface with appropriate constituencies inside and outside UNL to ensure Graduate and International Programs are of high quality, innovate and of high quality to support growing and dynamic College of Engineering. In association with directing and coordinating graduate student recruitment and activities in COE, specific duties include:

1. Developing and implementing a COE Graduate Program Strategic Plan.
2. Developing relationships with relevant regional, national and international organizations and institutions.
3. Actively support recruitment and retention of exceptional women and men into COE Graduate Programs vis support of high quality programs and development of new and innovative recruiting tools, means and methods.
4. Supporting development and growth of timely and innovative graduate programs.
5. Developing and supporting a graduate student community.
6. Managing awards and fellowships that support and promote faculty and graduate student activities.
7. Manage data collection activities that support current and future initiatives.
8. Work with key constituencies to ensure programs and students they produce are meeting needs.

In association with directing and coordinating international programs and activities in the COE, specific duties include:

1. Defining role in association with COE and UNL International Programmatic activities.
2. Developing and implementing initial COE International Program Strategic Plan.
3. Developing relationships with relevant regional, national and international organizations and institutions.
4. Developing tools to manage, support and grow international activities. Supporting development and growth of timely and innovative graduate programs.
5. Manage data collection activities that support current and future initiatives.
6. Work with key constituencies to ensure programs are meeting needs.

UNL CIVE Department Chair:
Had extensive involvement in external outreach activities involving regional and national leaders in the civil engineering professional community and focused on potential and current UNL CIVE donors to help support visions and goals for the profession, the University, the College or Engineering and the Department. Primary administrative emphasis was assuring sustained and high level of scholarship via: (1) hiring and supporting excellent faculty; (2) promotion of exceptional and effective pedagogy locally and nationally via support of effective and innovative instruction in the classroom and in teaching and research labs; (3) support of advanced research that reflected institutional missions and effectively contributed to the betterment of society via basic and applied contributions to the state-of-the-art; and (4) elevating the importance of effective service to the institution, profession, state of Nebraska, nation and world via development and refinement of robust evaluation processes that accurately reflected impact. Active engagement and leadership in association with strategic planning processes for multiple supervisors. Focused on internal fiscal stewardship via active involvement in budget development and management with a proven track record of effective fiscal responsibility under various levels of budget constraint. Enthusiastically committed to furthering equity, diversity and inclusion at all levels.

Common theme associated with all administrative positions is promoting a welcoming and safe environment where all stakeholders are engaged contributors to enhancing the institution's reputation as a cutting-edge leader within its peer group.

Research and Teaching Activities
Research focus areas: (1) real-time assessment of infrastructure health and development and implementation of improved decision-making tools; (2) behavior of bridges of irregular geometry (horizontally curved and skewed bridges) under various demands; and (3) optimizing and enhancing structural component and system performance under extreme demands, including blast and impact. Areas have incorporated material development, computer modeling, experimental studies and field-testing to achieve objectives. External funding in association with ongoing or completed projects over $11M, with nearly $1.75M as Principal Investigator. Published nearly fifty refereed journal articles, technical notes and proceedings articles from research, with majority of articles being co-authored by current or former graduate advisees. Number of additional proceedings articles published with refereed abstracts. Contributions to multiple poster sessions and numerous technical presentations and invited talks. Supervised or co-supervised 9 Doctors of Philosophy students, 19 Masters of Science and integrated Bachelors/Masters of Science students, 11 Masters of Engineering or non-thesis Masters degreed students, 5 Undergraduate Honors students and 3 NSF REU students. Supervised 4 post-doctoral scholars.

Taught or co-taught multiple undergraduate courses in Civil and Architectural Engineering in the U.S. and abroad. Courses focus on engineering mechanics, advanced and historical methods of structural analysis, structural health monitoring, steel and prestressed concrete design and bridge and building design. Served as advisor/co-advisor for PSUs ASCE Student Chapter and ASCE/AISC Student Steel Bridge Team. Received 2 Faculty Advisor Certificates of Commendation from ASCE and the Penn State Engineering Society (PSES) 2005 Outstanding Advising Award for advising activities.

Summary of Relevant Administrative Experiences, Accomplishments, and Philosophies

Strategic Planning
Examples of strategic planning leadership activities as COE Associate Dean for Graduate and International Programs to date:

- Initiating Strategic Planning process in concert with campus wide and COE processes.
- Overseeing Masters of Engineering strategic planning process.
- Directly engaging important internal Graduate and International Program stakeholders.

Examples of strategic planning leadership activities as Chair of UNL CIVE:

- **CIVE strategic planning exercises** starting fall semester of 2017. These activities encompassed: faculty group discussions by rank using expert facilitators from UNL's Social and Behavioral Sciences Research Consortium (SSBRC); subsequent development and execution of a faculty survey by SSBRC using information gleaned from the group discussions and development of a summary report that outlines the faculty's vision for the department, student preparation, departmental culture and professional support; the completion of visioning activities at spring faculty meetings and retreat; and the formation of faculty-driven Department Action Team's whose activities will feed strategic plan development during the fall semester of 2018.
- I was asked to serve as **the only Department Chair representative on the 25-member Executive Committee of UNL's Nebraska Commission of 150** in the fall of 2017. The Commission charged with developing a vision for the future of the University as it approaches its 150th anniversary on Feb. 15, 2019. Over 125 additional stakeholders were asked to serve on seven subcommittees, focusing on: mission and values; student experience; research, scholarship and creative activity; engagement in Nebraska and beyond; economic development and innovation; internal operations and infrastructure; and campus community and faculty roles. I serve as a member of the economic development and innovation subcommittee.

Research and Related Scholarly Activities
Examples of research and related scholarly leadership activities as Chair of UNL CIVE:

- I **supported faculty** in various capacities who received the following federal research awards and honors recognizing their research success:
    - 2018
        - U.S. Dept. of Agriculture-NIFA Research Award (1 faculty member, Co-PI, $780K)
    - 2017
        - DOE Office of Energy Efficiency and Renewable Energy Industrial Assessment Center (IAC) Research Award (1 faculty member, Co-PI, $1.6M)
        - U.S. Dept. of Agriculture-NIFA Research Award (2 faculty members, PI and Co-PI, $1.2M)
        - USAID Grant to Support Development of Graduate-Level Hydraulics Program at Afghanistan's Kabul Polytechnic University (1 faculty member, Co-PI, $216K)
        - NSF REU (8 faculty members, Pi/Co-PIs, $350K)
        - ASCE State of the Art Award (1 faculty member)
    - 2016
        - USDOT Regional University Transportation Center (1 faculty member, PI, $13.75M)

        - DOD-Offutt Air Force Base-STRATCOM NSRI Research Award (3 faculty members, PI and Co-PIs, $933K)
        - U.S. DOE Nuclear Energy University Program (NEUP) Research Award (1 faculty member, PI, $800K)
        - NSF CMMI Research Award (1 faculty member, PI, $260K)
        - Grand Prize for University Research by the American Academy of Environmental Engineers & Scientists (1 faculty member)
        - ASCE Rudolph Hering Medal (2 faculty collaborators)
    - 2015
        - DOD-Offutt Air Force Base-STRATCOM NSRI Research Award (4 faculty members, PI and Co-PIs, $1.3M)
        - NSF-EPSCOR Research Award (2 faculty members, Co-PIs, $900K)
        - NSF-IRES Research Award (1 faculty member, PI, $250K)
        - Grand Prize for University Research by the American Academy of Environmental Engineers & Scientists (2 faculty collaborators)
        - Fellow of the American Association for the Advancement of Science (1 faculty member)
        - Fellow of the Water Environment Federation (WEF)
    - 2014
        - NSF-USDA Water Sustainability and Climate Program Research Award (3 faculty members, PI and Co-PIs, $600K)
        - U.S. Dept. of Agriculture-NIFA Research Award (1 faculty member, Co-PI, $600K)
        - NSF CAREER Research Award (1 faculty member, PI, $400K)
        - FAA (1 faculty member, PI, $275K)
        - USDOT Tier 1 University Transportation Center (1 faculty member, PI, Co-PI, $240K)
        - Engineers without Borders Top Faculty Advisor Award
- I **oversaw an increase in external research awards** credited to CIVE from $2.9M in FY ’14 to over $6M in FY ’17.
- To **promote and support interdisciplinary research**, I spearheaded an effort focused on big data and rural bridge health that culminated in activities involving UNL College of Engineering faculty and University of Nebraska-Omaha (UNO) College of Information and Science faculty. This effort has included 3 workshops, 2 funded using a NSF BD Spokes Planning grant entitled “Big Data Innovations for Bridge Health,” and development of a BD Spokes full research grant proposal involving multiple faculty from UNL and UNO. The grant was awarded in 2018.

Faculty and Student Development and Fundraising Activities

Examples of faculty and student development and fundraising leadership activities as Chair of UNL CIVE:

- I was **actively involved in Nebraska University Foundation development activities** supporting CIVE and College of Engineering initiatives. These efforts produced over $500K of donations to CIVE since 2014. I truly enjoy working with supportive alumni, organizations and industry to identify and achieve shared visions.
- During my time as Chair, **13 new faculty were fully or partially hired in CIVE**, 4 faculty retired, and 2 departed for other institutions. I lead the successful recruitment of 9 of the 13 new hires at the Assistant and Associate Professor levels, with 8 being tenure/tenure track faculty, 2 being Professors of Practice (teaching faculty) and 1 being a research faculty member. A research faculty member hired into another unit also became affiliated with CIVE. Via these hires and

affiliations, CIVEs gender diversity increased by 60% to constitute 23% of the faculty. Continued growth in gender and ethnic diversity amongst the UNL CIVE faculty *must* occur to increase diversity in our field.

- I **increased faculty interaction** by (1) mandating that all faculty meetings for our co-located Department (21 faculty in Lincoln, 14 faculty in Omaha) be in person, (2) instituting faculty brownbags and sponsored lunches to discuss teaching, research and service activities and (3) by developing group mentoring activities to discuss concerns and needs.
- I **successfully encouraged and supported faculty** interested in attending ASCEs ExCEEd teaching workshop.
- I was selected as a BTAA Department Executive Officer (DEO) Fellow and to join their Academic Leadership Program. I sit on UNLs DEO Advisory Committee and am actively **involved in planning, participating and leading campus wide leadership development activities**.
- I **supported student development** via dedication of CIVE resources to help defray student professional and honorary group costs to travel to and participate in leadership development activities and student competitions.
- I **supported and relied on CIVEs Student Leadership Council**, made up of student professional and honorary group leaders, for valuable information and feedback related to CIVE operations and initiatives.
- I **supported formation of a Department Graduate Student Association**.

Curricular Innovation and Change

Examples of curricular innovation and change leadership activities as Chair of UNL CIVE:

- I was one of 4 current or former academics invited to **attend three *Future of the Engineering Profession Summits*** during the 2017-18 academic year, events organized by an ad-hoc group of consulting engineers from across the country. The summit's attendees are critically examining the current state of engineering, speculating about its future, and striving to think critically and innovatively about what engineering will become and how the field can best address myriad, large scale opportunities that exist. One of the primary outcomes of these Summits was to work the formation of the Engineering Change Lab-USA that mimics the Change Lab developed in Canada. I am a member of the Steering Committee. I volunteered the University of Nebraska-Lincoln to host the first all three summits.
- I am co-Chairing the Programming Committee for American Society of Civil Engineers (ASCE) is sponsoring a Civil Engineering Education Summit, to be held on the campus of Southern Methodist University (SMU), May 28-30, 2019
- As Secretary of ASCEs Department Heads Coordinating Council and as a Corresponding Member of ASCEs Body of Knowledge 3 Task Committee**,** I was deeply involved in a number of activities related to **advancing the civil engineering curriculum**. These included helping produce a letter to ASCEs current President, signed by 131 Department Heads and Chairs, expressing concerns about the current direction of the field of civil engineering and offering to collaborate on discussions that focus on the future of civil engineering education and the future of our field. As a result of this letter and subsequent conversations, I was one of eight Department Heads and Chairs who spoke to ASCEs Board of Direction in July of 2017.
- To support my **strong belief in the importance of undergraduate research**, as Chair of UNL CIVE I was co-PI on a successful proposal to the National Science Foundation to create a Research Experience for Undergraduates program entitled "Sustainability of Horizontal Civil Networks in Rural Areas." The award, received in 2017, was the first Department-level REU award for UNL CIVE and supports 10 undergraduate students. To better position the Department

to receive the NSF grant, I allocated CIVE resources in 2015 and 2016 to self-fund summer REU programs for 5 students each summer.

- I was PI on a **proposal submitted to the 2017 National Science Foundation *REvolutionizing engineering and computer science Departments* (RED)** program. The proposal was entitled "Civil Engineering Education for the Future – Breaking Barriers to Address Big Problems (CEE the Future)" and its objectives were to:
    - Transform civil engineering education at UNL through development of curriculum focused on solutions to globally-important problems outlined through the U.N. Sustainable Development Goals and the NAE Grand Challenges.
    - Research how policy, department culture, and faculty participation, attitudes, and interactions are associated with broad, successful, sustainable institutional change within CIVE in order to contribute to scientific knowledge and disseminate best practices in undergraduate engineering education to the broader engineering and STEM community, and
    - Research how student participation in a revolutionary civil engineering curriculum is associated with changes in attitudes about civic engagement, problem solving, soft skills, and engineering identity, compared to students in a traditional curriculum and to describe and evaluate student practices related to these learning gains.

  While unsuccessful, this proposal, involving multiple CIVE faculty and UNL DBER and Social and Behavioral Science experts, spurred formation of ad-hoc "Teaching and Learning Circle" group within CIVE that regularly brings together approximately 10 faculty (out of 35 CIVE faculty) to discuss and explore various means and methods to address these objectives (e.g. initiation of course incubator projects; development of ePortfolios for students and faculty; development and dissemination of high-impact educational practices). I directed CIVE resources to support the DBER and Social and Behavioral Science faculty prior to and after the proposal so that collaborations and research would continue to help realize curricular and cultural changes.
- To further illustrate my **commitment to curricular innovation**, I encouraged and supported faculty attendance and participation at curriculum assessment, development and innovation conferences, symposia and workshops. I used Department funds to support faculty that attended the American Society of Engineering Education's Annual Conference and the Accreditation Board for Engineering and Technology's (ABETs) Annual Symposium. I attended Rose-Hulman's *Making Academic Change Happen (MACH) Workshop* with a colleague who was supported using Department funds and supported the same colleague's travel to Purdue's EPICS Workshop.
- As a member of the Big Ten Academic Alliance's (Big10+) Civil Engineering Chairs/Heads working group, I planned and Chaired two meetings during the 2016-17 Academic Year **focused on civil engineering education** (the yearly face-to-face meeting and an additional, remote meeting). As a result of these discussions, I helped spearhead the generation and submission of a letter from group to ASCEs President expressing concern over the implications of a student essay question associating quality teaching with professional licensure.

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Research Focus Areas

- *Structural Health Monitoring*
- *Curved and Skewed Concrete and Steel Bridges Behavior and Optimization*
- *Force Protection and Structural Resiliency*
- *Advanced Computational Modeling*
- *Laboratory and Field-Testing of Structures*
- *Advanced Materials for Structural Engineering*

Education

Ph.D. in Civil Engineering, August 1999, The Georgia Institute of Technology

(*Studies of a Full-Scale Horizontally Curved Steel I-Girder Bridge System under Self-Weight,* supervisor: Abdul H. Zureick, co-supervisor: Roberto T. Leon)

MS in Civil Engineering, December 1995, The Georgia Institute of Technology

BS in Civil Engineering, December 1990, The Ohio State University

Professional History

10/18 – present	**Associate Dean for Graduate and International Programs**, College of Engineering, The University of Nebraska-Lincoln, Lincoln, Nebraska.
7/13 – 9/18	**Voelte-Keegan Professor and Chair**, Department of Civil Engineering, The University of Nebraska-Lincoln, Lincoln, Nebraska.
7/11 – 7/13	**John A. and Harriette K. Shaw Professor**, Department of Civil and Environmental Engineering, The Pennsylvania State University, University Park, Pennsylvania.
7/09 – 7/13	**Director, Protective Technology Center (PTC)**, Department of Civil and Environmental Engineering, The Pennsylvania State University, University Park, Pennsylvania.
9/08 – 2/09	**Visiting Professor**, School of Engineering, Tecnun, The Technical Campus of the University of Navarra, San Sebastian, Spain.
9/05 – 7/13	**Structural Engineer (part-time)**, Envinity, Inc, State College, Pennsylvania.
9/05 – 5/06 &	**Director, Transportation Infrastructure Program**, The Thomas D. Larson

9/06 – 9/08	Pennsylvania Transportation Institute, The Pennsylvania State University, University Park, Pennsylvania.
7/05 – 6/11	**Associate Professor**, Department of Civil and Environmental Engineering, The Pennsylvania State University, University Park, Pennsylvania.
8/99 – 6/05	**Assistant Professor**, School of Civil and Environmental Engineering, The Pennsylvania State University, University Park, Pennsylvania.
2/98 – 9/98	**Associate Engineer**, Construction Technology Laboratories, Skokie, Illinois.
9/94 – 8/99	**Graduate Research Assistant**, School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, Georgia.
12/90 - 9/94	**Structural Inspection Engineer**, Burgess and Niple, Ltd., Columbus, Ohio.
3/90 - 12/90	**Undergraduate Research Assistant**, Department of Civil Engineering, The Ohio State University, Columbus, Ohio.
6/89-1/90	**Drafter/Lab Technician**, Resource International, Westerville, Ohio.

Professional Certification

State of Nebraska Professional Engineer Certification, 6/12/2015, Lic # E15662.

Commonwealth of Pennsylvania Professional Engineer Certification, 3/10/2000, Lic. # PE056283E.

State of Georgia Professional Engineer Certification, 7/14/1997, Lic. # PE023752 (inactive).

State of Ohio Engineer in Training Certification, 1990.

Publications

Refereed Journal Articles

1. **Eftekhar Azam, S., Linzell, D.G. & Rageh, A.** "Damage Detection in Structural Systems Utilizing Artificial Neural Networks and Proper Orthogonal Decomposition." *Structural Control and Health Monitoring*, https://doi.org/10.1002/stc.2288, 2018.
2. **Rageh, A., Linzell, D.G. & Eftekhar Azam, S.** "Automated, Strain-Based, Output-Only Bridge Damage Detection." *Journal of Civil Structural Health Monitoring*, https://doi.org/10.1007/s13349-018-0311-6, 2018.
3. **Khan, E. Lobo, J.A. and Linzell, D.G.**, "Live Load Distribution and Dynamic Amplification on a Curved Prestressed Concrete Transit Rail Bridge." *ASCE Journal of Bridge Engineering*, v23, n 6, June, https://doi.org/10.1061/(ASCE)BE.1943-5592.0001236, 2018.
4. **Reese, L., Qiu, T., Linzell, D., and Rado, Z.** "Field-Scale Testing and Numerical Investigation of Soil-Boulder Interaction under Vehicular Impact using FEM and Coupled FEM-SPH Formulations," *International Journal of Protective Structures*, n7, n1, https://doi.org/10.1177/2041419615622728, 2016.
5. **Issa-El-Khoury, G.1, Linzell, D.G. and Geschwindner, L.F.** "Flexure–shear interaction influence on curved, plate girder web longitudinal stiffener placement," *Journal of Constructional Steel Research*, v120, April, Pages 25–32, http://doi.org/10.1016/j.jcsr.2015.12.021, 2015.

6. **Xuhui H., Biao W., Yunfeng, Z., Dongyang, H., and Linzell, D.** "Dynamic characteristics and seismic response analysis of a long-span steel-box basket-handle railway arch bridge," *Journal of Vibroengineereing*, v17, n5, August, pp. 2422-2432, ISSN 1392-8716, 2015.
7. **Gencturk, B., Linzell, D.G. and Zhou, Y.**, "Introduction - Special Issue on Field Testing of Bridges and Buildings," *ASCE Journal of Structural Engineering*, v141, 1 pp., https://ascelibrary.org/doi/abs/10.1061/%28ASCE%29ST.1943-541X.0001171, 2015.
8. **Chen, C.-C. and Linzell, D.**, "Numerical Simulations of Dynamic Behavior of Polyurea Toughened Steel Plates under Impact Loading," *Journal of Computational Engineering*, v2014, Article ID 416049, December, 7 pp., http://dx.doi.org/10.1155/2014/416049, 2014.
9. **Kinney, S., Linzell, D. and O'Hare, E.**, "Assessment of Load Sharing Members in an Anti-ram Bollard System," *International Journal of Protective Structures*, v5, n4, December, pp. 417-434, https://doi.org/10.1260/2041-4196.5.4.417, 2014.
10. **Reese, L., Qiu, T., Linzell, D., O'Hare, E. and Rado, Z.**, "Field Tests and Numerical Modeling of Vehicle Impacts on a Boulder Embedded in Compacted Fill," *International Journal of Protective Structures*, v5, n4, December, pp. 435-452, https://doi.org/10.1260/2041-4196.5.4.435, 2014.
11. **Lee, S., Kamada, T., Uchida, S. and Linzell, D.**, "Imaging Defects in Concrete Structures Using Accumulated SIBIE," *Construction and Building Materials*, v67, September, pp.180–185, http://doi.org/10.1016/j.conbuildmat.2014.05.018, 2014.
12. **Sharafbayani, M. and Linzell, D.**, "Optimizing Horizontally Curved, Steel Bridge, Cross-Frame Arrangements to Enhance Construction Performance." *ASCE Journal of Bridge Engineering*, v 19, n 7, July, http://dx.doi.org/10.1061/(ASCE)BE.1943-5592.0000593#sthash.eaHTmm6f.dpuf, 2014.
13. **Issa-El-Khoury, G., Linzell, D.G. and Geschwindner, L.F.,** "Computational Studies of Horizontally Curved, Longitudinally Stiffened, Plate Girder Webs in Flexure," *Journal of Constructional Steel Research*, v93, February, pp. 97–106, http://doi.org/10.1016/j.jcsr.2013.10.018, 2014.
14. **Seo, J., Linzell, D.G. and Hu, J.W.**, "Nonlinear Seismic Response Analysis of Curved and Skewed Bridge System with Spherical Bearings," *Advances in Civil Engineering*, Vol. 2013, Article ID 248575, 7 pp., http://dx.doi.org/10.1155/2013/248575, 2013.
15. **Seo, J. and Linzell, D.G.** "Nonlinear Seismic Response and Parametric Examination of Horizontally Curved Steel Bridges using 3-D Computational Models," *ASCE Journal of Bridge Engineering*, v18, n3, pp. 220–231, http://dx.doi.org/10.1061/(ASCE)BE.1943-5592.0000345#sthash.dxvXPZAE.dpuf, 2013.
16. **Seo, J. and Linzell, D.,** "Use of response surface metamodels to generate system level fragilities for existing curved steel bridges," *Engineering Structures*, v52, pp. 642–653, http://doi.org/10.1016/j.engstruct.2013.03.023, 2013.
17. **Sharafbayani, M. and Linzell, D.G.**, "Effect of Temporary Shoring Location on Horizontally Curved Steel I-Girder Bridges during Construction," *ASCE Journal of Bridge Engineering*, v17, n3, pp. 537-546, http://dx.doi.org/10.1061/(ASCE)BE.1943-5592.0000269#sthash.uYFDh8um.dpufv, May 2012.
18. **Kim, W.-S., Laman, J.A. and Linzell, D.G.,** "Prediction of Concrete Integral Abutment Bridge Unrecoverable Displacements," *American Concrete Institute Andy Scanlon Symposium on Serviceability and Safety of Concrete Structures: From Research to Practice*, SP-284-11, 20 pp., March, 2012.

19. **He, X.H., Sheng, X.W., Scanlon, A., Linzell, D.G. and Yu, X.D.,** "Skewed Concrete Box Girder Bridge Static and Dynamic Testing and Analysis," *Engineering Structures*, v39, pp. 38-49, http://doi.org/10.1016/j.engstruct.2012.01.016, 2012.
20. **Seo, J. and Linzell, D.G.,** "Horizontally Curved Steel Bridge Seismic Vulnerability Assessment," *Engineering Structures*, v34, pp. 21-32, http://doi.org/10.1016/j.engstruct.2011.09.008, 2012.
21. **Sharafbayani, M., Linzell, D.G. and Chen, C.-C.,** "Web Plumb Influence on Skewed I-girder, Steel Bridges during Construction," *Bridge Structures*, v7, pp. 115-122, http://dx.doi.org/10.3233/BRS-2011-025, 2011.
22. **Nevling, D.L. and Linzell, D.G.**, "Curved Girder Deformation Prediction Effectiveness using First Order, Linear Geometric Finite Element Models," *ASCE Practice Periodical on Structural Design and Construction*, v16, n2, pp. 56-61, http://dx.doi.org/10.1061/(ASCE)SC.1943-5576.0000076#sthash.XRjMbIqq.dpuf, May 2011.
23. **Seo, J., Linzell, D.G. and Rado, Z.**, "Computational and Experimental Modification of Portable Sign Structure Design Following NCHRP 350 Criteria," *International Journal of Crashworthiness*, v16, n2, pp. 111-116, http://dx.doi.org/10.1080/13588265.2010.514771, April 2011.
24. **Linzell, D.G. and Nadakuditi, V.P.**, "Parameters Influencing Seismic Response of Horizontally Curved, Steel, I-Girder Bridges," *Steel and Composite Structures*, v11, n1, pp. 21-38, http://dx.doi.org/10.12989/scs.2011.11.1.021, 2011.
25. **Seo, J. and Linzell, D.**, "Probabilistic Vulnerability Scenarios for Horizontally Curved, Steel, I-Girder Bridges under Earthquake Loads," *Transportation Research Record, Journal of the Transportation Research Board No. 2202*, pp. 206-211, http://dx.doi.org/10.3141/2202-24, 2010.
26. **Chen, C.-C. and Linzell, D.G.,** "Modeling End Notched Flexure Tests to Establish Cohesive Element Mode II Fracture Parameters," *Engineering Fracture Mechanics*, v77, pp. 1338-1347, http://doi.org/10.1016/j.engfracmech.2010.03.017, 2010.
27. **Coughlin, A.M., Musselman, E.S., Schokker, A.J. and Linzell, D.G.,** "Behavior of Portable Fiber Reinforced Concrete Vehicle Barriers Subjected to Blasts from Contact Charges," *International Journal of Impact Engineering*, v37, pp. 521-529, http://doi.org/10.1016/j.ijimpeng.2009.11.004, 2010.
28. **Linzell, D.G. and Shura, J.F.,** "Erection behavior and grillage model accuracy for a large radius curved bridge," *Journal of Constructional Steel Research*, v66, pp. 342-350, http://dx.doi.org/10.1061/(ASCE)BE.1943-5592.0000593#sthash.d9KWAdti.dpuf, March 2010.
29. **DePolo, D.S. and Linzell, D.G.,** "Evaluation of Live-Load Lateral Flange Bending Distribution for a Horizontally Curved I-Girder Bridge," *ASCE Journal of Bridge Engineering*, v13, n5, pp. 501-510, http://dx.doi.org/10.1061/(ASCE)1084-0702(2008)13:5(501)#sthash.Iei3p2PN.dpuf, September/October 2008.
30. **Seo, J.-W., Linzell, D.G. and Rado, Z.,** "Crash Performance of X-Shaped Support Base Work Zone Temporary Sign Structures," *International Journal of Crashworthiness*, v13, n4, pp. 437-450, http://dx.doi.org/10.1080/13588260802221393, August 2008.
31. **Kim, W.S., Laman, J.A. and Linzell, D.G.,** "Live Load Radial Moment Distribution for Horizontally Curved Bridges," *ASCE Journal of Bridge Engineering*, v12, n6, pp. 727-736,

http://dx.doi.org/10.1061/(ASCE)1084-0702(2007)12:6(727)#sthash.oo8knQMF.dpuf, November 2007.

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32. **Linzell, D.G. and Rado, Z.,** Portable Sign Crash Test, Pennsylvania Transportation Institute Report No. PTI 2008-04, December 2007, 103 pp.

33. **Martukanitz, R., Kidd, M., Riley, M., Leeman, A., Forrest, D., Lussier, K., Erskine, R., Christopolous, H., Necaise, D., Mustain, B., Sieve, M., Kihl, D., Jonassen, D., Zebrowski, R., Weiland, M., Russell, N., Linzell, D., Blomquist, P., Porter, N., Holdren, R., Yancey, R., and Koppenhoefer, K.,** Development and Implementation of Collarless Construction Techniques for DDG-1000, Phase II and Phase III Final Report, Applied Research Laboratory, Pennsylvania State University, File No. 07-026, July 2007, 209 pp.

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35. **Chehab, G.R., Kale, V. and Linzell, D.G.**, Evaluation Study of Algrip™ Slip-Resistant Flooring Products, Pennsylvania Transportation Institute Report No. PTI 2006-15, January 2006, 58 pp.

36. **Tikalsky, P.J. and Linzell, D.G.**, Dynamic Load Effects of Motorsport Vehicles, Phase I: Arena Slab on Grade, Pennsylvania Transportation Institute Report No. PTI 2006-08, December 2005, 18 pp.

37. **Hiltunen, D.R., Johnson, P.A., Laman, J.A., Linzell, D.G., Miller, A.C., Niezgoda, S.L., Scanlon, A., Schokker, A.J. and Tikalsky, P.J.**, "Interstate 99 Research, Final Report," Pennsylvania Transportation Institute Report No. PTI 2005-02, October 2004, 324 pp.

38. **Linzell, D.G.**, "The Pennsylvania State University Department of Civil and Environmental Engineering, Structural Testing Laboratory, Testing Report, Creative Pultrusions Superloc™ Composite Sheetpiling System, 1-12-04 Test", Creative Pultrusions, January 2004, 3 pp.

39. **Linzell, D.G. Laman, J.A. and Nevling, D.L.**, "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridges Through Comparison with Measured Response of an In-Service Structure – Draft Final Report", Professional Service Industries, Inc. for the Federal Highway Administration, September 2003, 249 pp.

40. **Laman, J.A., Linzell, D.G., Leighty, C.A. III and Fennema, J.L.**, "Methodology to Predict Movement and Stresses in Integral Abutment Bridges; University-Based Research, Education and Technology Transfer Program; Agreement No. 359704, Work Order 80. Final Report," Pennsylvania Department of Transportation, March 2003, 206 pp.

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44. **Linzell, D.G. and Boothby, T.E.**, "Creative Pultrusions Superloc™ Composite Sheetpiling System Testing, Final Report – Phase II," Creative Pultrusions, April 2002, 36 pp.

45. **Sabuwala, T. and Linzell, D.G.**, "Finite Element Analysis of Steel Beam-to-Column Connections Subjected to Blast Loads," U.S. Army Corps of Engineers, Engineering Research and Development Center, July 2002, 180 pp.

46. **Linzell, D.G. Laman, J.A. and Nevling, D.L.**, "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridges Through Comparison with Measured Response of an In-Service Structure – Field Test Summary," Professional Service Industries, Inc. for the Federal Highway Administration, June 2002, 63 pp.

47. **Linzell, D.G. Laman, J.A. and Nevling, D.L.**, "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridges Through Comparison with Measured Response of an In-Service Structure – Instrumentation and Field Test Plan," PTI Report No. 2002-32, Prepared for Professional Service Industries, Inc. for the Federal Highway Administration, April 2002, 64 pp.

48. **Linzell, D.G. and Nicholson, T.D.,** "McAllister Building Steel Coupon Tests: Overview and Testing Results," Penn State Office of the Physical Plant, November 2001, 10 pp.

49. **Linzell, D.G. Laman, J.A. and Nevling, D.L.**, "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridges Through Comparison with Measured Response of an In-Service Structure – Phase 1 Report: Literature Review, Definition of Analytical Methods, and Instrumentation Plan," Professional Service Industries, Inc. for the Federal Highway Administration, September 2001, 30 pp.

50. **Laman, J.A., D.G. Linzell, and Leighty, C.,** "I-99 Advanced Technology Test Bed, Work Order 80: Methodology to Predict Movement and Stresses in Integral Abutment Bridges: Work Plan and Literature Review," Pennsylvania Department of Transportation, April 2001, 24 pp.

51. **Linzell, D.G. and Laman, J.A.**, "I-99 Advanced Technology Test Bed, Work Order 79: Prediction of Movement and Stresses in Curved and Skewed Bridges, Work Plan and Literature Review," Pennsylvania Department of Transportation, April 2001, 37 pp.

52. **Linzell, D.G. and Boothby, T.E.**, "Creative Pultrusions Superloc™ Composite Sheetpiling System Testing, Final Report," Creative Pultrusions, April 2001, 60 pp.

53. **Linzell, D.G. and Laman, J.A.**, "Field Testing of Bridge #21: Muddy Run Road over Muddy Run, PTI Report No. 2001-17," Prepared for the County of Chester, Pennsylvania, August 2000, 39 pp.

Poster Sessions

1. **Nalwala, M., Steelman, J.A. and Linzell, D.G.**, "Explosive and Blast Effects on Ultrahigh Molecular Weight Polyethylene Retrofitted Structures," University of Nebraska-Lincoln Undergraduate Research Fair, April 11, 2018.
2. **Fang, C. and Linzell, D.G.**, "Impact-resistant Behavior of Reinforced Concrete Pier Columns," University of Nebraska-Lincoln-Lincoln Graduate Research Fair, April 5, 2017.
3. **Rageh, A. and Linzell, D.G.**, "Optimizing Steel Railway Truss Bridge Health Monitoring," University of Nebraska-Lincoln-Lincoln Graduate Research Fair, April 5, 2017.
4. **O'Hare, E.V., Linzell, D.G. and Rado, Z.**, "Development of Shallow Foundation Streetscape Vehicular Anti-Ram (SVAR) Systems through Modeling and Testing," Minisymposium 5.3: Numerical Modeling and Engineering Design for Impact and Blast Problems, 12th U.S. National Congress on Computational Mechanics, Raleigh, NC, July 22-25, 2013.
5. **Seo, J. and Linzell, D.**, "Probabilistic Vulnerability Scenarios for Horizontally Curved, Steel, I-Girder Bridges under Earthquake Loads," TRB Seventh International Bridge Engineering Conference, San Antonio, Texas, December 2010.
6. **Linzell, D.G.**, "Testing of Metallic Decking under Simulated Surface Loads," 2010 ASCE Structures Congress and Exposition, Poster Session 2, May 14, 2010.
7. **Chen, C-C., Linzell, D. and Sharafbayani, M.** (2010), "Prediction of Movement and Stresses in Curved and Skewed Bridges: Parametric Studies," LTI Student Showcase and Exhibition, Transportation Research Board 89th Annual Meeting, Washington D.C., January 11, 2010.
8. **Sharafbayani, M., Linzell, D., Chen, C-C., and Seo, J.** (2010), " Prediction of Movement and Stresses in Curved and Skewed Bridges: Development of Representative Bridges," LTI Student Showcase and Exhibition, Transportation Research Board 89th Annual Meeting, Washington D.C., January 11, 2010.
9. **Seo, J., Linzell, D. and Rado, Z.** (2007), " Portable Sign Crash Simulation and Test," PTI Student Showcase and Exhibition, Transportation Research Board 86th Annual Meeting, Washington D.C., January 23, 2007.
10. **Nevling, D. and Linzell, D.** (2007), " Prediction of Movement and Stresses in Curved and Skewed Bridges," PTI Student Showcase and Exhibition, Transportation Research Board 86th Annual Meeting, Washington D.C., January 23, 2007.
11. **Seo, J., Linzell, D. and Rado, Z.** (2007), " Portable Sign Crash Simulation and Test," Transportation Engineering Safety Conference (TESC) Student Showcase, State College, PA, December, 8 2006.
12. **Shura, J. and Linzell, D.** (2005), " The Effects of Horizontal Curvature on Warping during Construction of a Steel Plate Girder Bridge with Large Radii," PTI Student Showcase and Exhibition, Transportation Research Board 84th Annual Meeting, Washington D.C., January 11, 2005.
13. **Nevling, D. and Linzell, D.** (2003), "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridges Through Comparison with Measured Response of an In-Service Structure," PTI Student Showcase and Exhibition, Transportation Research Board 82nd Annual Meeting, Washington D.C., January 14, 2003.

14. **Lobo, J.A. and Linzell, D.** (2003), " Effects of Geometric Imperfections on Curved Girder Bridges," PTI Student Showcase and Exhibition, Transportation Research Board 82nd Annual Meeting, Washington D.C., January 14, 2003.
15. **Lobo, J.A. and Linzell, D.G.** (2002), "Effects of Geometric Imperfections and Construction Sequencing on Curved Girder Bridges," 5th Annual Pennsylvania Transportation Institute Transportation Conference, Penn State University, July 24.
16. **Bell, B., Nevling, D. and Linzell, D.** (2002), "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridges through Comparison with Measured Response of an In-Service Structure/Behavioral Response of Horizontally Curved Plate Girders Under Construction Loads," PTI Student Showcase and Exhibition, Transportation Research Board 81st Annual Meeting, Washington D.C., January 15, 2002.
17. **Colon, J., Norton, E. and Linzell, D.** (2002), "Response of a Skewed Composite Bridge Floor System to Construction Processes," PTI Student Showcase and Exhibition, Transportation Research Board 81st Annual Meeting, Washington D.C., January 15, 2002.

Presentations

Conferences/Seminars

1. **Gandhi, R., Khazanchi, D., Linzell, D., Ricks, B. and Sim, C.,** "Developing Smart Big Data Pipelines to Address Challenges of Bridge Infrastructure health in the US," presented at the Leverage IoT, Communication, Social Media and Data Science to Protect Civil Infrastructure and Save Lives Seminar, Pre-OTC GCE NODE NORTEX Data Science Cluster, Houston, TX, May 2018.
2. **Fang, C. and Linzell, D.G.**, "Numerical Simulation of RC Bridge Columns under Vehicle Collision and Explosion," ASCE Structures Congress 2018, April 19-21, 2018, Fort Worth, TX.
3. **Rageh, A., Eftekhar Azam, S., and Linzell, D.G.**, "Automated Damage Detection in Floor System Bracing," ASCE Structures Congress 2018, April 19-21, 2018, Fort Worth, TX.
4. **Rageh, A., Eftekhar Azam, S., and Linzell, D.G.,** "Nondestructive Fatigue Life Evaluation of Steel Railway Bridges," presented at the AFF10(1) Subcommittee Meeting at the 2018 Transportation Research Board Annual Meeting, January, 2018.
5. **Linzell, D.G., Wood R.L., Wittich, C.E., Puckett, J.A., Steelman, J.A. and Zhu J.,** "Outdoor Laboratory: Platte River Bridges as a Testbed for Bridge Health," presented at the AFF40 Committee Meeting at the 2018 Transportation Research Board Annual Meeting, January, 2018.
6. **Rageh, A., Khan, E. and Linzell, D.G.**, "Analytical Modeling and Field Testing Plan for a Railway Through-Truss," *ASCE Structures Congress 2017*, April 6–8, 2017, Denver, Colorado, DOI: 10.13140/RG.2.2.16737.71527.
7. **Rageh, A., Khan, E. and Linzell, D.G.**, "Analytical Modeling and Field Testing Plan for a Railway Through-Truss," *ASCE Structures Congress 2017*, April 6–8, 2017, Denver, Colorado, DOI: 10.13140/RG.2.2.16737.71527.
8. **Frankl, B.A. and Linzell, D,** "Horizontal Curvature Influence on Shear in Steel Plate Girders," Transportation Research Board 95th Annual Meeting, Washington D.C., January 2016.

9. **O'Hare, E.V., Linzell, D.G. and Rado, Z.**, "Streetscape Vehicular Anti-Ram (SVAR) System Development: An Integrated Experimental-Computational Approach," Minisymposium 5.3: Numerical Modeling and Engineering Design for Impact and Blast Problems, 12th U.S. National Congress on Computational Mechanics, Raleigh, NC, July 22-25, 2013.
10. **O'Hare, E.V., Linzell, D.G. and Rado, Z.,** "Development of Shallow Foundation Streetscape Vehicular Anti-ram Systems through Modeling and Testing," 83rd Shock and Vibration Symposium, New Orleans, LA, November 2012.
11. **Reese, L.D., Linzell, D.G. Qiu, T. and Rado, Z.,** "Development of Landscape Vehicular Anti-ram Systems using Computational and Experimental Methods," 83rd Shock and Vibration Symposium, New Orleans, LA, November 2012.
12. **Veggeberg, K., Uzzolino, J.R. and Linzell, D.G.,** "Testing Anti-Ram Barrier Protection Systems at the Larson Institute Crash Safety Research Facility," 83rd Shock and Vibration Symposium, New Orleans, LA, November 2012.
13. **O'Hare, E.V. and Linzell, D.G.,** "Computational Assessment of Steel-Jacketed Bridge Pier Column Performance under Blast Loads," 11th US National Congress on Computational Mechanics, Minneapolis, MN, July, 2011.
14. **Sharafbayani, M., Linzell, D.G. and Chen, C.-C.**, "Web Plumb Influence on Skewed I-girder, Steel Bridges during Construction," 6th New York City Bridge Conference, July, 2011.
15. **Chen, C.-C. and Linzell, D.G.,** "Finite Element Modeling of End Notched Flexure (ENF) Tests with Cohesive Elements to Establish Polyurea-Steel Bond Strength," 10th US National Congress on Computational Mechanics, Columbus, OH, July, 2009.
16. **Bennett, C.R., Lin, M., Swanson, J.A. and Linzell, D.G.**, "Experimental Verification of AASHTO-LRFD Distribution Factors for High Performance Steel Bridges," presented at the AFF20 Committee Meeting at the 2009 Transportation Research Board Annual Meeting, January, 2009.
17. **Linzell, D.G.,** "AASHTO/NSBA Steel Bridge Collaboration TG 13, Analysis of Steel Bridges, Update on Activities," Speaker at the AFF20 Committee Meeting of the 2007 Transportation Research Board Annual Meeting, January, 2007.
18. **Linzell, D.G.,** "AASHTO/NSBA Steel Bridge Collaboration TG 13, Analysis of Steel Bridges, Update on Activities," Speaker at the AFF20(1) Subcommittee Meeting of the 2007 Transportation Research Board Annual Meeting, January, 2007.
19. **Chen, C.-C., Alpman, E., Linzell, D.G. and Long, L.**, "Computational Studies of Polyurea Coated Steel Plate Under Blast Loads," Minisymposium of Computational Methods in Impact Engineering, 9th US National Congress on Computational Mechanics, San Francisco, CA, July, 2007.
20. **Linzell, D.G. "Current Research Areas – Steel Bridges,"** ASCE Steel Bridges Committee Meeting, 2007 Structures Congress, Long Beach, CA, May, 2007.
21. **Long, L.N., Anderson, J.B., Linzell, D.G., Alpman, E., Chen, A.** "Computational and Experimental Characterization of Coating Materials for Blast Mitigation," 7th World Congress on Computational Mechanics (WCCM VII), Mini-Symposium: Prevention of Structural Collapse due to Blast and Impact Loads Generated by Terrorist Attacks, Los Angeles, CA, July 20, 21, 2006.

22. **Bennett, C.R., Swanson, J.A., and Linzell, D.G.** "Fatigue Characteristics of HPS-70W Connections," 51st Annual Structural Engineering Conference, The University of Kansas, Lawrence, KS, March, 2006.
23. **Linzell, D.G. and Maneetes, H.**, "The Effects of Cross Frame and Bracing Parameters on Dynamic Response of a Curved Steel Bridge," presented at the Bracing for Steel Bridges II – I-Girders session, 2005 ASCE Structures Congress, April, 2005.
24. **Kayser, C.R., Swanson, J.A. and Linzell, D.G.**, "Bolted and Welded Splice Connections Utilizing HPS-70W," presented at the AFH70 Committee Meeting at the 2005 Transportation Research Board Annual Meeting, January, 2005.
25. **Linzell, D.G.,** "Collarless Construction for DD(X) Hydrostatic Testing – PSU Data Overview," presented at the Collarless Construction Team Meeting, October 2004.
26. **Kayser, C.R., Swanson, J.A. and Linzell, D.G.**, "Response of Skewed HPS Bridge Girders to Live Loads," presented at the ASCE Compression and Flexural Members Committee Meeting, 2004 Structures Congress, May, 2004.
27. **Linzell, D.G., Nevling, D.L. and Laman, J.A.**, "Numerical Study of Curved Steel Bridge Response under Traffic Loads – Comparison to Field Data," presented at the ASCE Steel Bridge Committee Meeting, 2004 Structures Congress, May, 2004.
28. **Linzell, D.**, "Curved Steel Bridges in the United States – Where We've Been, Where We're At, Where We're Going," presented at the ASCE Central Pennsylvania Section Structures Meeting, March 2004.
29. **Linzell, D.G. and Swanson, J.A.**, "Numerical and Field Studies of a Semi-Integral Abutment, Skewed, HPS Bridge During Deck Placement," invited speaker at the A2C02(1) presented at the Subcommittee Meeting of the 2004 Transportation Research Board Annual Meeting, January, 2004.
30. **Bennett, A.T., Linzell, D.G. and Laman, J.A.**, "Analysis of Lateral Bending and Torsional Stresses in a Skewed Composite Prestressed Bridge during Construction," presented at the 6th Annual Pennsylvania Transportation Institute Transportation Conference, Penn State University, July 16-17, 2003.
31. **DePolo, D.E., Linzell, D.G. and Laman, J.A.**, "Field and Numerical Evaluation of the Distribution of Warping Behavior in a Horizontally Curved I-Girder Bridge," presented at the 6th Annual Pennsylvania Transportation Institute Transportation Conference, Penn State University, July 16-17, 2003.
32. **Laman, J.A., Linzell, D.G., Leighty C.A. and Fennema, J.**, "Integral Abutment Bridges: Methodology to Predict Movement and Stresses," presented at the A2C05 Committee Meeting at the 2003 Transportation Research Board Annual Meeting, January, 2003.
33. **Lobo, J.A. and Linzell, D.G.**, "Analysis of Steel Curved Girder Bridges with Geometric Imperfections," presented at the A2C02(1) Subcommittee Meeting at the 2003 Transportation Research Board Annual Meeting, January.
34. **Kayser, C., Swanson, J.A. and Linzell, D.G.**, "High Performance Steel Bridge Girders: Verification of Performance and Design Criteria," presented at the A2C02 Committee Meeting at the 2003 Transportation Research Board Annual Meeting, January, 2003.
35. **Laman, J.A. and Linzell, D.G.,** "Methodology to Predict Movement and Stresses in Integral Abutments," *PennDOT Research Newsletter*, 2nd Ed., April-June 2002.

36. **Bell, B.J., Linzell, D.G. and Laman, J.A.**, "Behavioral Response of Horizontally Curved Plate Girder Bridges Under Construction Loads," presented at the 5th Annual Pennsylvania Transportation Institute Transportation Conference, Penn State University, July 24, 2002.
37. **Norton, E.K., Linzell, D.G. and Laman, J.A.**, "Response of a Skewed Composite Steel-Concrete Bridge Floor-System to Placement of the Deck Slab," presented at the 5th Annual Pennsylvania Transportation Institute Transportation Conference, Penn State University, July 24, 2002.
38. **Nevling, D.L., Linzell, D.G. and Laman, J.A.**, "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridges Through Comparison with Measured Response of an In-Service Structure," presented at the 5th Annual Pennsylvania Transportation Institute Transportation Conference, Penn State University, July 24, 2002.
39. **Linzell, D.G.**, "Curved Steel Bridges in the United States – A Historical Perspective," invited presented at the Intensive Course In Steel Bridge Engineering, SUNY-Buffalo, June, 2002.
40. **Linzell, D.G. and Laman, J.A.**, "PSU Curved Bridge Field Testing Research," presented at the Curved Girder Bridge Project Meeting, FHWA TFHRC, February, 2002.
41. **Linzell, D.G. and Laman, J.A.**, "Evaluating and Monitoring Full-Scale Steel Bridge Response to Construction and Traffic Loads," presented at the A2C02(1) Subcommittee Meeting of the 2002 Transportation Research Board Annual Meeting, January, 2002.
42. **Laman, J.A., Linzell, D.G., Leighty, C.A. and Fennema, J.**, "Integral Abutment Bridges: Methodology to Predict Movement and Stresses," presented at the A2C05 Committee Meeting of the 2002 Transportation Research Board Annual Meeting, January, 2002.
43. **Linzell, D.G., Laman, J.A., Bell, B.J., Colon, J.C. and Lobo, J.A.**, "Prediction of Movement and Stresses in Curved and Skewed Bridges," presented at the A2C05 Committee Meeting of the 2002 Transportation Research Board Annual Meeting, January, 2002.
44. **Linzell, D.G., Laman, J.A. and Nevling, D.L.,** "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridges Through Comparison with Measured Response of an In-Service Structure," presented at the A2C05 Committee Meeting of the 2002 Transportation Research Board Annual Meeting, January, 2002.
45. **Linzell, D.G. Nevling, D.L., Kollias, A.A. and Laman, J.A.**, "Experimental and Numerical Response of a 1915 Riveted Through-Girder Bridge," presented at the 4th Annual Pennsylvania Transportation Institute Transportation Conference, Penn State University, July 19, 2001.
46. **Linzell, D.**, "Comparisons Between Measured Response and Analytical Predictions for Horizontally Curved Girders During Construction," presented at the A2C02(1) Subcommittee Meeting of the 2001 Transportation Research Board Annual Meeting, January, 2001.
47. **Linzell, D.**, "Cost Effective High Performance Steel Short Span Bridge Designs," presented at the Bridge Task Force Meeting at the AASHTO T-14 Committee Meeting, Sacramento, CA., August 9, 2000.
48. **Linzell, D.**, "High Performance Steel Design Options for Short Span Bridges," presented at the Transportation Research Forum, Penn State University, August 2, 2000.

49. **Fritch, A. and Linzell, D.**, "The Use of High Performance Steel for Short Span Bridge Design in Pennsylvania," presented at the 3rd Annual Pennsylvania Transportation Institute Transportation Conference, Penn State University, July 20, 2000.
50. **Linzell, D.**, "FHWA Curved Steel Bridge Research Project Erection Studies," presented at the Research Council for Curved Bridges Meeting #5, Federal Highway Administration Turner-Fairbank Highway Research Center, Washington, D.C., October 1, 1999.
51. **Linzell, D., Zureick, A., Leon, R.T., and Grubb, M.**, "FHWA Experimental Studies of Curved Steel Bridge Behavior During Construction," presented at the 2nd Annual Pennsylvania Transportation Institute Transportation Conference, Penn State University, July 29, 1999.
52. **Linzell, D., Zureick, A., and Leon, R. T.**, "FHWA Experimental Studies of Curved Steel Bridge Behavior During Construction," presented at the 1999 ASCE Structures Congress: Structural Engineering in the 21st Century, April 1999.

Invited Talks or Keynote Speeches

1. **Wood, R., Wittich, C., and Linzell, D.G.** (2018), "Cather & Pound Halls Demolition," Thirty-Eighth Annual Structural Conference, Structural Engineers Association of Nebraska, Friday, September 21, 2018.
2. **Wood, R., Wittich, C., and Linzell, D.G.** (2018), "Implosion of Cather & Pound Halls: Research Findings," 2018 AIA Nebraska Annual Conference, September 21, 2018.
3. **Linzell, D.G.** (2018), "YOU are our future…how can WE make you better in the future? Where could (should?) civil engineering education be headed?," 2018 ASCE Region 3/6/7 Workshop for Section and Branch Leaders/Student Chapter Leaders, January 27, 2018.
4. **Linzell, D.G.** (2018), "Attracting the Younger Generation to Civil Engineering & Construction," presented at the Nebraska Concrete Paving Association 39th Annual Concrete Paving Workshop, January 17, 2018.
5. **Linzell, D.G.** (2017), "The Future of Civil Engineering Education – One (Over-)Educated Person's Perspective," University of Nebraska Chi Epsilon Induction Ceremony, November 30, 2017.
6. **Linzell, D.G.** (2017), "Transportation Infrastructure Health Monitoring in the Big (Actually SMART) Data Age – Activities in the Heartland," presented at the University of Houston, April 14, 2017.
7. **Linzell, D.G.** (2017), Welcome Address, 34th Annual Geotechnical Seminar, GEO-Omaha, February 10, 2017.
8. **Dingman, P., Traynowicz, M., Szerszen, M., and Linzell, D.G.** (2016), Press Conference Announcing Re-Opening of Bridge J-143, Lancaster County, Nebraska, December, 9, 2016.
9. **Linzell, D.G.** (2015), "Structural Engineering Research Focusing on Being "Passively Aggressive", Studies Involving Bridges, Buildings and a Few Things In-Between," presented at the Ohio State University, April 15, 2015.
10. **Linzell, D.G.** (2015), Welcome Address, 32nd Annual Geotechnical Seminar, GEO-Omaha, February 13, 2015.

11. **Linzell, D.G.** (2014), "More," Commencement Address, UNL Graduate and Professional Degrees Ceremony, December.
12. **Mainstone, D., Linzell, D.G.** (2014), "Art Talk: Di Mainstone and Collaborators," Bemis Center for Contemporary Arts, Omaha, October.
13. **Linzell, D.G.** (2014), "A Summary of Infrastructure Research Activities – from Bridges to Buildings with a Few Stops in Between," presented at the Indian Institute of Technology, Delhi, February.
14. **Linzell, D.G.** (2014), "Aggressively Passive Structural Engineering Research, Bridges to Buildings and Some Things In-Between," presented at the January lunch meeting of the Nebraska Society of Professional Engineers, January.
15. **Linzell, D.G. and Moen, C.** (2013), "Designing Members for Torsion," 2013 North American Steel Construction Conference (NASCC), April.
16. **Linzell, D.G.** (2011), "Effective Skewed Bridge Practices," 29th Annual International Bridge Conference Workshop 10, June.
17. **Linzell, D.G.** (2009), "PTC and ISERRT Collaborations," University of North Carolina at Charlotte, November.
18. **Linzell, D.G.** (2008), "A.T.G 2020 Vision, Highway and Bridge," DMJM-Harris, June.
19. **Linzell, D.G.** (2008), "State-of-the-Art Technological Developments in Concrete," 31st Annual Penn State University Airport Conference Preconference Workshop, March.
20. **Linzell, D.G.** (2007), Penn State University College of Engineering Tablet PC Lunch Meeting, October.
21. **Linzell, D.G.** (2007), Johns Hopkins University Invited Seminar Series, October.
22. **Linzell, D.G.** (2006), NSBA SCEF Meeting, August.
23. **Linzell, D.G.** (2006), AASHTO/NSBA Symposium, March.
24. **Linzell, D.G.** (2005), Collarless Construction Workshop, Penn State Applied Research Lab, Naval Sea Systems Command, October.
25. **Linzell, D.G.** (2004), "Collarless Construction for DD(X) Hydrostatic Testing – PSU Data Overview," presented at the Collarless Construction Team Meeting, October.
26. **Linzell, D.G.** (2004), "Collarless Construction for DD(X): Review of Hydrostatic Testing – PSU Data," presented at the Collarless Construction Team Meeting, August.
27. **Martukanitz, R.T. and Linzell, D.G.** (2004), "Collarless Construction for DD(X): Program Review Prepared for the Leadership Integrated Program Team (LIPT)," presented at the LIPT Meeting, August.
28. **Linzell, D.G. and Swanson, J.A.** (2004), "Numerical and Field Studies of a Semi-Integral Abutment, Skewed, HPS Bridge During Deck Placement," invited speaker at the A2C02(1) presented at the Subcommittee Meeting of the 2004 Transportation Research Board Annual Meeting, January.
29. **Linzell, D.G.** (2002), "Curved Steel Bridges in the United States – A Historical Perspective," invited presented at the Intensive Course in Steel Bridge Engineering, SUNY-Buffalo, June, 2002.
30. **Linzell, D.G.** (1999), "FHWA Curved Steel Bridge Research Project – Erection Studies," Penn State Structure Seminar Series, October.

Research Funding

The University of Nebraska-Lincoln, Lincoln (Total Awarded Amount $628,169):

(May 2018 – November 2018), "STTR: Non-Destructive Concrete Interrogator and Strength of Materials Correlator," Karagozian & Case Inc., Prime Sponsor STTR: Navy, $81,768 (Co-Principal Investigator)

(*June 2018 – August 2019*), "Load Rating of Existing Continuous Stringers on Louisiana's Bridges," Louisiana Tech University, Prime Sponsor Louisiana State University-LTRC, $60,750 (Principal Investigator)

(March 2017 – February 2020), "REU Site: Sustainability of Horizontal Civil Networks in Rural Areas," National Science Foundation, $352,698 (Co-Principal Investigator)

(September 2016 – August 2018), "BD Spokes Planning: Midwest - Big Data Innovations for Bridge Health," Subaward from the University of Nebraska-Lincoln-Omaha, Prime Sponsor: The National Science Foundation, $12,662, (Principal Investigator)

(July 2015 – October 2018), "Protocol to Evaluate and Load Rate Existing Bridges," Supplemental Award, Nebraska Department of Transportation, $18,924 (Principal Investigator)

(July 2015 – December 2016), "Steel Pin and Hanger Assembly Replacement Options," Nebraska Department of Roads, $20,257 (Principal Investigator)

(July 2013 – December 2014), "U.S. Department of State Master Cooperative Agreement No. S-DSASD-10-CA-202, Univ. of Nebraska Subaward," The Pennsylvania State University, $99,764 (Principal Investigator)

Pennsylvania State University (Total Awarded Amount $10,555,437):

(*July 2012 – July 2013*), "Incremental Sheet Forming," PSU Applied Research Lab/U.S. Navy, $64,701. (Principal Investigator)

(*January 2011 – May 2012*), "Testing of Reinforced Concrete Beams," U.S. Department of the Army (Phase II SBIR for Carlyle Consulting, LLC), $119,559. (Principal Investigator)

(*January 2011 – May 2012*), "Technical Expertise for Reviewing Construction Plans and Actions for a Skewed Steel Bridge," Creamer-Sanzari Joint Venture, $30,797. (Principal Investigator)

(*July 2010 – July 2015*), "Research, Development, Testing and Evaluation (RDT&E) of Vehicle Anti-Ram Barriers," Funding Opportunity Number DSPPSP-10-CA-WHA-052110, U.S. Department of State, Bureau of Diplomatic Security, Physical Security Division, Office of Physical Security Programs, $6,976,672. (Co-Principal Investigator)

(*July 2010 – July 2012*), "The Impact of Marcellus Gas Development on the Rural Transportation Infrastructure," PSU Marcellus Initiative for Outreach and Research, $57,500. (Co-Principal Investigator)

(*March 2010 – June 2010)*, "ARA Heavy Window Assembly Static Load Pressure Testing," Applied Research Associates, $66,671. (Principal Investigator)

(*May 2009 – June 2010)*, "Static Load Pressure Testing," Concurrent Technologies Corporation, $139,391. (Principal Investigator)

(*August 2007 – August 2010)*, "Guidelines for Analyzing Curved and Skewed Bridges and Designing Them for Construction," Pennsylvania Department of Transportation, MAUTC, $408,252. (Principal Investigator)

(*May 2007 – September 2007)*, "Concurrent Technologies Purchase Order No. 070500311," Concurrent Technologies Corporation, $5,904. (Principal Investigator)

(*June 2006 – December 2007)*, "Portable Sign Crash Test," Pennsylvania Department of Transportation, MAUTC, $169,400. (Co-Principal Investigator)

(*November 2005 – December 2006*), "Lascor Strength Testing," Office of Naval Research (through PSU Applied Research Lab), $100,000. (Principal Investigator)

(*August 2005 – March 2009*), "Computational Chemistry of Explosions, Blasts and their Neutralization," Office of Naval Research, $622,000. (Co-Principal Investigator)

(*June 2005 – August 2006*), "Prediction of Movement and Stresses in Curved and Skewed Bridges," Pennsylvania Department of Transportation, $123,787. (Principal Investigator)

(*June 2005 – December 2005*), "Evaluation Study of Algrip Slip Resistant Flooring Products," Ross Technologies Corp., $24,780. (Co-Principal Investigator)

(*June 2005 – December 2005*), "Collarless Construction Fatigue Testing," Office of Naval Research (through PSU Applied Research Lab), $71,837. (Principal Investigator)

(*May 2005 – December 2005*), "Dynamic Load Effects of Motorsport Vehicles: Phase I," ClearChannel Communications, $7,673. (Co-Principal Investigator)

(*January 2004 – December 2004*), "Laboratory Testing of SuperLoc™ Composite Sheetpiling, Winter 2004," Creative Pultrusions, Inc., $3,000. (Principal Investigator)

(*September 2003 – December 2004*), "Collarless Construction Instrumentation," Office of Naval Research (through PSU Applied Research Lab), $38,583. (Principal Investigator)

(*August 2003 – October 2004*), "Interstate 99 Interim Research Activities," Pennsylvania Department of Transportation, $410,671. (Co-Principal Investigator)

(*May 2002 – November 2002*), "Laboratory Testing of SuperLoc™ Composite Sheetpiling, Phase III" Creative Pultrusions, Inc., $12,800. (Principal Investigator)

(*September 2001 – September 2003*), "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridges Through Comparison with Measured Response of an In-Service Structure - Phase 2: Model Calibration, Field Testing, Analytical Study," Professional Service Industries/FHWA, $134,866. (Principal Investigator)

(*September 2001 – August 2002*), "Laboratory Testing of SuperLoc™ Composite Sheetpiling, Phase II" Creative Pultrusions, Inc., $5,099. (Principal Investigator)

(*July 2001 – September 2002*), "Protective Technology Research, Development and Implementation in Support of DOD Force Protection Needs," Department of Defense, $177,360. (Co-Principal Investigator)

(*May 2001 – November 2001*), "McAlister Building Material Testing," PSU OPP, $3,800. (Principal Investigator)

(*October 2000 – March 2003*), "Prediction of Movement and Stresses in Curved and Skewed Bridges – Phase I," Pennsylvania Department of Transportation, $349,982. (Principal Investigator)

(*October 2000 – March 2003*), "Methodology to Predict Movement and Stresses in Integral Abutments – Phase I," Pennsylvania Department of Transportation, $375,574. (Co-Principal Investigator)

(*October 2000 – October 2001*), "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridges through Comparison with Measured Response of an In-Service Structure - Phase 1: Literature Search, Definition of Analysis Methods, Preliminary Analysis," Professional Service Industries/FHWA, $38,369. (Principal Investigator)

(*October 2000 – April 2001*), "Laboratory Testing of SuperLoc™ Composite Sheetpiling," Creative Pultrusions, Inc., $10,000. (Principal Investigator)

(May 2000 – December 2000), "Field Monitoring of Bridge # 21, County of Chester, PA," County of Chester, $6,409. (Principal Investigator)

Teaching

Courses taught at the University of Nebraska-Lincoln, Lincoln:

Introduction to Bridge Engineering

Courses taught at the Pennsylvania State University:

Structural Analysis

Matrix Structural Analysis

Steel Design

Senior Capstone Course in Structural Engineering

Ancient and Medieval Structural Design (through PSU Architectural Engineering Dept.)

Structural Analysis by Classical Methods (graduate course)

Steel Bridge Systems (graduate course)

Bridge Engineering I (graduate course)

Bridge Engineering II (graduate course)

Statically Indeterminate Structures (graduate course)

Infrastructure Health Monitoring (graduate course)

Courses taught at Tecnun:

Laboratorio de Estructuras, Infrastructure Health Monitoring (InSHM)

Courses taught at the Georgia Institute of Technology:

Statics

Mechanics of Solids

Graduate Students Supervised

Pennsylvania State University:

Timothy Nicholson (M Eng, 2001), "McAlister Building Steel Coupon Testing."

Hathairat Maneetes (MS, 2002), "The Effects of Cross Frames and Lateral Bracing on the Dynamic Response of Curved Steel I-Girder Bridges During Construction."

Tapan Sabuwala (MS, 2002), "Finite Element Analysis of Steel Beam-to-Column Connections Subjected to Blast Loads."

Tze-Wei Choo (M Eng, 2003), "The Response of a Continuous Skewed Steel Bridge Superstructure under Various Deck Placement Methods during Construction."

Jose Colon (M Eng, 2003), "Finite Element Analysis of Lenticular Truss Bridges."

John Lobo (MS, 2003), "Effects of Geometric Imperfections on Horizontally Curved Steel Girder Bridges."

Panit Vanachayangkul (M Eng, 2003), "Effective Methods for Replication of Crossframe Stiffness in Bridge Grillage Models."

Deanna Nevling (MS, 2003), "Evaluation of Level of Analysis Methodologies for Horizontally Curved I-Girder Bridge through Comparisons with Measured Response of an In-Service Structure."

Bradley Bell (MS, 2004), "Effects of Erection Procedures on the Response of Horizontally Curved I-Girder Bridges."

Aaron Bennett (MS, 2004), "Analysis of Lateral Bending and Torsional Stresses in a Skewed Composite Prestressed Concrete Bridge during Construction."

David DePolo (MS 2004), "Evaluation of Lateral Flange Bending for a Horizontally Curved I-Girder Bridge."

Amir Ahmad Hedayati (M Eng, 2004), "Comparison of Finite Element Modeling and Grillage Modeling of a Bridge Deck with Cross Bracings."

Matthew Kostick (MS, Fall 2004), "Evaluation of Design Code Prestress Loss Prediction Methods for Use with Pennsylvania High Strength Concrete."

Joseph Fleishmann (M Eng, Spring 2005), "A Study of the Effects of Changes in Unbraced Length on Bending and Warping Stress Distribution in a Horizontally Curved, Steel, I-Girder Bridge."

Jason Shura (MS, Spring 2005), "The Effects of Horizontal Curvature on Warping during Construction of a Steel Plate Girder Bridge with Large Radii."

Richard Myers, (M Eng, Fall 2007), "Kontek Barrier Evaluation". (Co-supervised w/ A. Schokker)

Andrew Kubic, (M Eng, Fall 2007), "Simple Span Made Continuous Bridge Performance Evaluation".

Andrew Coughlin, (MS, Summer 2008), "Contact Charge Blast Performance of Fiber Reinforced and Polyurea Coated Concrete Vehicle Barriers." (Co- supervised w/ A. Schokker)

Venkata Nadakuditi, (MS, Summer 2008), "Effects of Cross Frames and Diaphragms on Forced Excitation of a Horizontally Curved Steel I- Girder Bridge."

Deanna Nevling, (PhD, Fall 2008), "Development of Guidelines for Erection Procedures for Horizontally Curved Steel I-Girder Bridges through Analysis of a Parametric Group of Bridges."

Chien-Chung Chen, (PhD, Summer 2009), "A Study of Blast Effects on Elastomer Coated Steel Components."

Junwon Seo, (PhD, Summer 2009), "Seismic Fragility Curves of a Family of Curved Steel Bridges."

Lynsey Reese (MS, Summer 2009), "Critical Member Removal and Load Redistribution of Deteriorated Truss Bridges."

Gaby Issa-El-Khoury (PhD, Architectural Engineering, Summer 2010), "Optimization of Longitudinal Web Stiffener Location in Horizontally Curved Plate Girders." (Co-supervised w/ L. Geschwindner)

Omar Ashour (Integrated BS/MS, Fall 2010), "Effects of Replacing Cross Frames with Diaphragms on Curved Bridge Construction Response."

Edward O'Hare (MS, Summer 2011), "Computational Assessment of Steel-Jacketed Bridge Pier Column Performance under Blast Loads."

Shane Murphy (MS, Summer 2012), "Skewed Steel Bridge Cross-Frame Response to Truck Loading."

Mohammad Sharafbayani, (PhD, Fall 2012), "Evaluation of Bracing Systems in Horizontally Curved Steel I-Girder Bridges"

Chris Noveral (Integrated BS/MS, Summer 2013), "Investigation of a Basic HSS Connection for Load Sharing in Anti-Ram Vehicle Barriers."

Scott Kinney (MS, Summer 2013), "Assessment of Load Sharing Members in an Anti-Ram Bollard System Subjected to Vehicle Impacts."

Kendra Jones (MS, Summer 2013), "Blast Response of Polyurea Coated Stone Cladding."

Edward O'Hare (PhD Summer 2015 - Co- Advisor Doctoral Committee Special Member) "Behavior of Concrete-Filled Tube Through-Beam Connections Subjected to Varying Load Rates."

Tanit Jaissa-Ard (PhD Summer 2015 - Co- Advisor Doctoral Committee Special Member) "Statistically-Based Air Blast Load Factors Based on Imprecise Parameter Statistics for Reinforced Concrete Wall."

Lynsey Reese (PhD Fall 2015 - Co- Advisor Doctoral Committee Special Member) "Experimental Testing and Numerical Modeling of Geomaterials Interacting with Rigid Bodies Under Impact Loading."

University of Nebraska-Lincoln:

Chandana Balakrishna (MS, Summer 2018), "Examination of Steel Pin and Hanger Options - Retrofit to Replacement."

Bernard Frankl (PhD, Summer 2017) "Buckling and Shear Capacity of Horizontally Curved Steel Plate Girders."

Nicole Jaber (Non-Thesis MS, Summer 2014).

Kevin Williams (Non-Thesis MS, Summer 2014).

Corbin Mundt (Non-Thesis MS, Fall 2014).

Ahmed Rageh (MS expected Fall 2017), "Cost-Effective Structural Health Monitoring Instrumentation Plans for a Steel Railway Bridge."

Chen Fang (PhD expected Spring 2019), "Structural Hardening/Resilience of Bridge Pier against Vehicle Impact and Explosion Loads."

Undergraduate Honors Students Supervised

Pennsylvania State University:

Victoria Christini (BSCE, 2003)

Nathan Myers (BSCE, 2004)

Nicholas Cervo (BSCE, 2006)

Nathan Myers (BSCE, 2004)

Daniel Reynolds (BSCE 2009)

Tyler Goodman (BSCE 2013)

Undergraduate NSF REU Students Supervised

University of Nebraska-Lincoln:

Samantha Lopez, University of Texas-Rio Grande Valley, Summer 2018.

Trey Seibel, Nebraska Wesleyan University, Summer 2017.

Samuel Lozano, Oregon Institute of Technology, Summer 2016.

Undergraduate Research Supervised

University of Nebraska-Lincoln:

Murtaza Nalwala, Fall 2016-present.

Post-Doctoral Researchers

University of Nebraska-Lincoln:

Dr. Yashar Eftekhar Azam, Spring 2017-present.

Dr. Easa Khan, Summer 2015 - Summer 2016.

Pennsylvania State University:

Dr. Jason Sanchez (DTRA Fellow Faculty Mentor), Spring 2010 – Fall 2012.

Dr. Chien-Chung Chen, Fall 2009 – Fall 2010.

Visiting Scholars

Pennsylvania State University:

Dr. Guochang Li, Shenyang Jianzhu University, January 2018- May 2018.

Dr. Sanghun Lee, Tohoku Gakuin University, March 2011 – May 2012.

Jian Xia, Fujian Academy of Building Research, September 2010 – March 2011.

Dr. Song Zhensen, Shanghai-Jiaotong University, Fall 2009 – February 2011.

University Committee/Advisory Activities

The University of Nebraska-Lincoln:

Department of Civil Engineering

Co-Chair, ABET Ad-Hoc Committee, Fall 2016-present.

Chair, Social Events Committee, Fall 2014 - Spring 2016.

Chair, Undergraduate Advising Committee, Fall 2015 – Spring 2016.

Co-Chair, Undergraduate Advising Committee, Fall 2014-Spring 2015

College of Engineering

Co-Chair, Durham School Director Search Committee, Fall 2014-Spring 2015

Building Planning Steering Committee, Fall 2016 - present.

University of Nebraska-Lincoln

The Nebraska Commission of 150 Executive Steering Committee, Spring 2018-present.

Dean's Search Committee, Spring 2018-present.

Task Force on Professional Conduct, Spring 2017-present.

Water Sciences Laboratory Advisory Board, Fall 2016-present.

Department Executive Officer Advisory Committee, Fall 2015-present

Committee on Institutional Cooperation's Academic Leadership Program, Fellow, 2014-2015.

Committee on Institutional Cooperation's Department Executive Officers Seminar Participant, 2013-2014.

Pennsylvania State University:

Civil and Environmental Engineering Department Surcharge Committee, Member, Fall 1999-Summer 2001.

Civil and Environmental Engineering Department Laboratory Committee, Member, Fall 2000-Summer 2001.

Civil and Environmental Engineering Department Budget Committee, Member, Spring 2001-Summer 2001.

Civil and Environmental Engineering Department Surcharge and Laboratory Committee, Member, Fall 2001 – Fall 2002.

Civil and Environmental Engineering Department Engineering Open House Committee, Chair, Fall 2001- Fall 2002.

Civil and Environmental Engineering Department Surcharge and Laboratory Committee, Chair, Fall 2002 – Fall 2005.

Civil and Environmental Engineering Department Structures Laboratory Coordinator, Fall 1999-Spring 2004.

Civil and Environmental Engineering Department Spend-An-Engineering Day Department Representative, Spring 2000-Summer 2001.

Civil and Environmental Engineering Department Engineering Open House Faculty Co-Chair, Fall 2000-Summer 2001.

Civil and Environmental Engineering Department Graduate Committee, Member, Fall 2004 – Summer 2005.

Civil and Environmental Engineering Department ASCE/AISC Student Steel Bridge Co-Advisor, Fall 1999 – Fall 2001.

Civil and Environmental Engineering Department ASCE/AISC Student Steel Bridge Advisor, Fall 2001 – Fall 2007.

Civil and Environmental Engineering Department ASCE Student Chapter Advisor, Fall 2004 – Fall 2007.

Civil and Environmental Engineering Department Cato Park Laboratory Coordinating Committee, Member, Fall 2003 – Summer 2005

Civil and Environmental Engineering Department Promotion and Tenure Committee, Member, Fall 2005 – Spring 2008.

Civil and Environmental Engineering Department Civil Infrastructure Testing and Evaluation Laboratory (CITEL) Coordinating Committee, Chair, Fall 2005 – Summer 2008.

Civil and Environmental Engineering Department Group Coordinating Committee, Member, Fall 2005 – Summer 2008.

Civil and Environmental Engineering Department Research Strategies, Opportunities and Issues Committee, Member, Fall 2010 – Summer 2011.

Civil and Environmental Engineering Department Research Strategies, Opportunities and Issues Committee, Chair, Fall 2011– present.

College of Engineering Faculty Advisory Council, Member, Spring 2011 – Spring 2013.

College of Engineering Faculty Advisory Council, Chair, Undergraduate Studies Committee, Fall 2012 – Spring 2013.

Pennsylvania Transportation Institute Marketing Innovation Group (MIG), Fall 2003 – Spring 2013.

Faculty Search Committee, Department of Architectural Engineering, Member, Fall 2004 – Spring 2005.

Thomas D. Larson Pennsylvania Transportation Institute, Transportation Infrastructure Program (TIP), Director, Fall 2005- Summer 2006, Fall 2006-Summer 2008.

Civil and Environmental Engineering, Director, Protective Technology Center, Summer 2009 – Summer 2013.

Pennsylvania State University, Member, Homeland Security Coordination Council, Summer 2009 – Summer 2013.

Outreach

Professional committee activities:

Engineering Change Lab – USA: Steering Committee, Member, 2017-present.

Nebraska Board of Engineers and Architects: Member, 2015-2016.

Technical committee activities:

AASHTO/NSBA Steel Bridge Collaboration: Task Group 13 - Analysis of Steel Bridges, Member, 2007-present.

American Iron and Steel Institute: Bridge Task Force, Member, 1999-2001; Design Advisory Group, Member, 2001-2005.

American Society of Civil Engineers: Body of Knowledge 3 Task Committee, Corresponding Member, 2017-present; Bridge and Tunnel Security Committee, Member, 2009-present; Committee on Accreditation, Corresponding Member, 2018-present; Committee on Composite Construction, Member, 2006-2012; Committee on Compression and Flexural Members, Member, 2001-2007; Committee on Compression and Flexural Members, Secretary, 2002-2003; Committee on Compression and Flexural Members, Chair, 2003-2007; Department Heads Coordinating Council, Secretary, 2017-present; Department Heads Coordinating Council, Member, 2015-present; Steel Bridge Committee, Member, 2000-2005; Steel Bridge Committee, Secretary, 2005, 2007; Steel Bridge Committee, Chair, 2009-2013; Technical Administrative Committee on Metals, Member, 2003-2007; Technical Administrative Committee on Bridges, Member, 2009-2013.

Structures Stability Research Council: Executive Committee, Member, 2016-present; Task Group 14: Horizontally Curved Girders, Member, 2000-2007; Task Group 14: Horizontally Curved Girders, Chair, 2007-2010; Task Group 4: Steel Bridges, Chair, 2010-present.

Transportation Research Board: Committee AFF20: Steel Bridges, Member, 2017-present, 2005-2014; Subcommittee AFF20(1): Methods of Analyzing Steel Bridges, Member, 2000-2007; Subcommittee AFF20(1): Methods of Analyzing Steel Bridges, Secretary, 2007-2011; Subcommittee AFF20(1): Methods of Analyzing Steel Bridges, Chair, 2011-2014.

Journal editorship:

Special Issue on Field Testing of Bridges and Buildings, ASCE Journal of Structural Engineering, v141, 2014, Co-Editor.

Memoria de Trabajos de Difusión Científica y Técnica (Journal of Scientific and Technical Publishing), University of Montevideo, Editorial Board (2012 – Present).

The Open Construction and Building Technology Journal, Editorial Board, 2007-present.

ASCE Journal of Bridge Engineering, Associate Editor, 2002-2006.

Journal paper reviews:

ASCE Journal of Bridge Engineering, ASCE Journal of Composites for Construction, ASCE Journal of Structural Engineering, Computer-Aided Civil and Infrastructure Engineering, Composite Construction in Steel and Concrete VI , Earthquake Spectra , Engineering Structures, International Journal for Computational Methods in Engineering Science & Mechanics , Journal of Bridge Structures, Journal of

Constructional Steel Research, Journal of the Transportation Research Board, Steel and Composite Structures, Structural Engineering International, Structural Engineering and Mechanics, Structural Health Monitoring.

Books edited:

Ziemian, R.D. (Ed.) (2010), *Guide to Stability Criteria for Metal Structures*, John Wiley and Sons, Revisions and Updates to Ch. 6, Plate Girders.

Books reviewed:

13 reviews of full texts, text proposals reviewed for various publishers.

External Proposals Reviewed:

University of Delaware University Transportation Center (UDUTC) 2011 Proposal Review: "Investigation of Load Path Redundancy in Aging Steel Bridges – Phase 2," Righman-McConnell, J.

West Virginia University Senate Grant for Research and Scholarship 2010 Proposal Review: "Redundancy Assessment of Steel Truss Bridges," Barth, K.

University Transportation Research Center (City College Of New York) 2010 Proposal Review: "Analyzing Damage of Cast-iron Subway Tunnels Subject to Internal Blast Loading," Liu, H.

University of Delaware University Transportation Center (UDUTC) 2010 Proposal Review: "Investigation of Load Path Redundancy in Aging Steel Bridges," Righman-McConnell, J.

West Virginia University Senate Grant for Research or Scholarship 2002-2003 Proposal Review: "Evaluation of Positive Moment Ductility in Composite Steel Bridge Girders," Barth, K.

South Carolina Research Initiative Grant Proposal Review: "Rapid Assessment Techniques for Bridge Structures," Gassman, S., Petrou, M., Harries, K. and Pierce, C.

Research Proposal Review Panels:

National Science Foundation: Fall 2006, Spring 2011

Short Courses:

Nebraska Department of Transportation: "Bridge Engineering Training Course," D. Linzell, G. Morcous, J Puckett

Awards Received

Pennsylvania State University:

Penn State Engineering Society (PSES) *2005 Outstanding Advising Award*.

American Society of Civil Engineers:

ASCE Committee on Student Activities *2006 Faculty Advisor Certificate of Commendation*.

ASCE Committee on Student Activities *2007 Faculty Advisor Certificate of Commendation*.

ASCE, Fall 2010, *Elected as Fellow*.

ASCE Structural Engineering Institute, Fall 2018, *Elected as Fellow*.