

**Dorothy A. Reed, PhD, PE**  
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**a. Professional Preparation**

	<u>Institution</u>	<u>Major</u>	<u>Degree and Date</u>
Undergraduate:			
	University of South Carolina	Civil Engineering	BSCE, magna cum laude, 1976
Graduate:			
	Princeton University	Civil Engineering	MSE, 1977 Ph.D., 1980
Postdoctoral:			
	National Bureau of Standards, Gaithersburg, Maryland (now called NIST)	Wind Engineering	1980-1982

**b. Appointments**

Professor of Civil and Environmental Engineering; Sept. 1994-present; Department of Civil and Environmental Engineering, University of Washington, Seattle, WA.

Adjunct Professor of Industrial and Systems Engineering, University of Washington, Seattle, WA, 2012-present.

Associate Dean of Academic Affairs, College of Engineering; August 1994-97; University of Washington, Seattle, WA.

Associate Professor of Civil Engineering (with tenure), September 1988-1994; Department of Civil and Environmental Engineering, University of Washington, Seattle, WA.

Assistant Professor of Civil Engineering, September 1983-1988; on leave from January-December, 1987; Department of Civil Engineering, University of Washington, Seattle, WA.

NSF Visiting Assistant Professor of Civil Engineering, January - December, 1987; Department of Civil Engineering, Carnegie-Mellon University, Pittsburgh, PA.

Research Structural Engineer, November 1982-August 1983; NRC-NBS Postdoctoral Research Associate, November 1980-82; National Bureau of Standards, Center for Building Technology, Gaithersburg, MD (now called The National Institute of Standards and Technology).

Research/Teaching Assistant; Fall 1976-Summer 1980; Department of Civil Engineering; Princeton University, Princeton, NJ.

**c. Products**

**Five publications most relevant to the proposal:**

- 1) Reed, D.A. "Building a Resilient Community through Improved Infrastructure." Infrastructure Resilience to Natural Disasters Session RA200, *Structures Congress 2013*, ASCE, Pittsburgh, PA, May 2-3, 2013.
- 2) Reed, D.A., Mark D. Powell and Julie Westerman, "Energy Infrastructure Damage for Hurricane Rita." *Natural Hazards Review* (ASCE), July 15, 2010, Vol. 11, No.3.
- 3) Reed, D.A., Mark D. Powell and Julie Westerman, "Energy Supply System Performance for Hurricane Katrina," *Journal of Energy Engineering* (ASCE), 2010.
- 4) Reed, D.A., K.C. Kapur and R.D. Christie, "Methodology for Assessing the Resilience of Networked Infrastructure," *IEEE Systems Journal*, Vol. 3, No. 2, June 2009, pp. 174-180.

- 5) McDaniels, T.L., S.E. Chang, K. Peterson, J. Mikawoz, and D.A. Reed, "Empirical Framework for Characterizing Infrastructure Failure Interdependencies," *Journal of Infrastructure Systems*, Vol.13, No.3, 2007, pp.175-184.

**Five other significant publications:**

- 1) Reed, D.A., "Electric Utility Distribution Analysis for Winter Storms," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol. 96, 2008, pp. 123-140.
- 2) Reed, D.A., J. Preuss and J. Park, "The Influence of Context on Lifeline Behavior: Local Policies under Wind Storm and Earthquake Scenarios," *Natural Hazards Journal*, 2006, Vol. 39, 289-307.
- 3) Park, Jaewook, Nobuoto Nojima and D.A. Reed, "Nisqually Earthquake Utility Analysis," *Earthquake Spectra*, Vol. 22, No.2, 2006, pp. 491-510.
- 4) Reed, D.A., J. Preuss and J. Park, "Context and Resiliency: Influences on Electric Utility Lifeline Performance," *Infrastructure Risk Management Processes: Natural, Accidental and Deliberate Hazards*, Ed. by C. Taylor and Erik VanMarcke, ASCE Publications 2006, pp. 118-144.
- 5) Chang, S.E., T.L. McDaniels and D.A. Reed, "Mitigation of Extreme Events: Electric Power Outage and Infrastructure Failure Interactions," *The Economic Impacts of Terrorist Attacks*. Ed. By Harry W. Richardson, Peter Gordon and James E. Moore II, Cheltenham, UK: Edward Elgar Publishing, 2005, pp. 70-90.

**d. Synergistic Activities**

- 1) Professional Registration (Civil): Washington State, License Number 43214.
- 2) American Society of Civil Engineers, Structural Wind Engineering Committee of the Technical Council on Wind Engineering, President (Chair), 2011-present.
- 3) American Association for Wind Engineering, Board of Directors, 2011-present, and co-chair with Dr. Anurag Jain, of Weidlinger and Associates, of the 12<sup>th</sup> Americas Conference on Wind Engineering, Seattle, Washington, June 18-20, 2013.
- 4) Conducted field surveys for Hurricanes Katrina, Rita, Gustav, Isaac and Sandy.
- 5) Puget Sound Academic Engineer of the Year Award, 2014.

**e. Collaborators And Other Affiliations**

- i. **Recent Collaborators (within the past 48 months):** Prof. William Bender, UW; Prof. Linda N. Boyle, University of Washington; Prof. Cynthia Chen, University of Washington; Dr. Anne Cope, IBHS; Prof. Carol Friedland, LSU; Dr. Akie Hisagi, Bunka Gakuen University, Tokyo, Japan; Dr. Anurag Jain, Weidlinger and Associates; Prof. Kailash Kapur, University of Washington; Prof. Amy Kim, University of Washington; Dr. Murray Morrison, IBHS; Wolf Read, University of British Columbia; and Prof. Rae Zimmerman, NYU.
- ii. **Graduate and Postdoctoral Advisors:** Prof. Robert H. Scanlan, (deceased), Dr. Emil Simiu, NIST.
- iii. **Thesis Advisor (MSCE and PhD) and Post-Scholar Sponsor over the past five years:** Shuoqi Wang (University of Washington); Hiram Mechling III, (private practice, wind energy) [Master's]; Matthew Godsey, (private practice) [Master's]; Carolyn Cook Prewitt, Magnusson Klemencic Associates (Seattle) [Master's]; Dr. Jaewook Park, Lease Crutcher Lewis Construction, Seattle, WA; Doug Olson, Washington State Department of Transportation, [Master's]; Dr. Jinkyu Yu, Seattle Structural Associates; Total number of graduate students advised: 40.