

CURRICULUM VITAE
LOUISE K. COMFORT

CONTACT INFORMATION

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EDUCATION

Ph.D., Yale University, Political Science, 1975

University of Hamburg, Germany, Studies in Political Sociology and German Language, 1960-61

M.A., Political Science, University of California, Berkeley, 1960

B.A., Political Science and Philosophy, with honors, Macalester College, St. Paul, MN, 1956

APPOINTMENTS:

Professor Emerita, Graduate School of Public and International Affairs, University of Pittsburgh, 2022 - present

Professor, Graduate School of Public and International Affairs, University of Pittsburgh, 1999 -2021

Director, Center for Disaster Management, Graduate School of Public & International Affairs 2009-2017

Associate Professor, University of Pittsburgh, 1984, tenured, 1986 -1998

TEACHING AREAS

Organizational Theory and Design; Organizational Analysis, Organizational Dynamics and Change Processes; Policy Design and Implementation; Public Policy Analysis; Public Management; Information Technology, Systems Theory, Systems Thinking and Public Policy; Quantitative Methods II.

ACADEMIC EXPERIENCE

University of California, Berkeley, Visiting Researcher, CITRIS, 06/16/2022 to present.

Nanjing University, Nanjing, China. Concurrent Professor, School of Government, 2019.

University of California, Berkeley. Affiliated Scholar, Policy Lab, Center for Information Technology Research in the Interest of Society, (CITRIS) 2018 - June 2022.

Visiting Lecturer, Department of Political Science, Fall Term, August 15 – December 15, 2018.

Middle East Technical University, Ankara, Turkey. Visiting Scholar, Disaster Management Implementation and Research Center, May 12 – June 13, 2014.

Inner Mongolia University, Huhhot, China. Visiting Scholar, School of Public Management, 2010.

National ChengChi University, Taipei, Taiwan. Visiting Professor, Department of Public Administration. Lectures on Disaster Management and Research Methods. Dec. 8 – 22, 2006.

Universidad Nacional de Córdoba, Córdoba, Argentina. Fulbright Senior Scholar, Instituto de Investigación y Formación en Administración Pública. Lectures and professional design of curricular specialization in disaster management, August 11-26, 2006.

Ritsumeikan University, Kyoto, Japan. Visiting Professor, Department of Geography. Intensive course on GIS and Disaster Management. May 30-June 6, 2004.

Kobe University, Kobe, Japan. Visiting Professor, Research Center for Urban Safety and Security, School of Engineering, July 17, 1999 – March 31, 2000.

University of Pittsburgh. Graduate School of Public and International Affairs, Associate Professor, 1984 – 1999, tenured in 1986.

Leiden University, Netherlands. Visiting Professor, Department of Public Administration, September 7-October 1, 1993.

University of California, Berkeley. Research Associate and Visiting Scholar, Institute of Governmental Studies, May 1, 1988-April 30, 1989; June-August 1990; June-August 1991; February-August 1994; Summers, 1995-1998; 2000-2012; 2013; 2015-2016.

University of California, Berkeley. Visiting Lecturer (Associate Professor rank), School of Business Administration, Spring Semester 1984.

California State University, Hayward. Lecturer and Research Associate (Associate Professor rank), Department of Public Administration and Department of Management Sciences, 1983-84.

Golden Gate University, San Francisco. Professional Lecturer (Associate Professor rank), Doctoral Program in Public Administration, 1982-1984.

San Jose State University. Associate Professor, Master's Program in Public Administration and Department of Political Science, 1980-1982.

San Jose State University. Assistant Professor, Master's Program in Public Administration and Department of Political Science, 1976-1980.

San Jose State University. Visiting Lecturer, Master's Program in Public Administration and Department of Political Science, 1975-1976.

Holy Names College, Oakland, CA. Assistant Professor of Political Science, 1966-1971

Center for Advanced Study in the Behavioral Sciences, Stanford, CA. Research Assistant to Yehezkel Dror, 1962-63

Princeton University, Center for International Studies. Research Associate, *Civic Culture* Project. Gabriel Almond, Principal Investigator, 1959-1960

WORK IN PROGRESS

My present research focuses on the problem of linking information technology to organizational learning and performance in organizations that function in complex, dynamic environments. I am working in two areas: decision-making processes under uncertainty and organizational design to improve performance in complex systems.

Designing Smart, Sustainable Risk Reduction in Hazard-Prone Communities: Modeling Risk Across Scales of Time and Space. This research addresses hazard reduction across multiple scales of risk by developing a new generation of socio-technical digital twin that integrates models of physical infrastructure systems and virtual networks of communication with social games to *engage community stakeholders' awareness and commitment to collective action*. I serve as Co-PI on an interdisciplinary team of engineers, computer scientists, urban planners, and wildfire modelers. Using a conceptual framework of complex adaptive systems, this project investigates whether *community learning processes* that focus on cognition and action will mitigate wildfire risk in the short-term and lead to sustainable adaptation to recurring risk conditions in the long-term. The *sociotechnical digital twin* provides a macro view of risk at the regional scale, as well as detailed views of interactions at the micro scale, essential to manage operations. *Translating risk information into formats* that are easily understood by different groups and embedding learning processes in gaming scenarios to advance risk reduction is transformative. A major goal is to shift the perspective from reaction to extreme events after they occur to anticipation of risk and mitigation of potential losses before hazards occur. This project is funded under the National Science Foundation's Smart & Connected Communities program, October 1, 2022 – September 30, 2025.

Mapping the communication and coordination networks in response to the Kahramanmaraş, Türkiye Earthquakes, 6 February 2023. This reconnaissance study, conducted with Turkish colleagues, Burcak Erkan, Middle East Technical University, Ankara and Suleyman Celik, Anadolu University, Eskisehir, seeks to identify both social and technical networks involved in managing response operations

following the 6 February 2023 earthquakes that struck the greater region of Kahramanmaraş, Türkiye. Three methods of data collection and analysis are used in the study: a) review of official plans and regulations for mitigating seismic risk, as well as situation reports and official reports from agencies engaged in disaster operations; b) semi-structured interviews with disaster managers in public, non-profit national and international organizations, as well as professional experts in related disciplines; and c) field observations of response and recovery operations in the damaged cities and towns. Based on documented data, the analysis will support recommendations for strengthening communities to cope with earthquake hazards, enabling them to move beyond resilience to an antifragile state in coping with future seismic risk. The study is supported by a Quick Response grant administered through the Natural Hazards Center, University of Colorado, Boulder, supported by the National Science Foundation Award #1635593.

PUBLICATIONS

Books:

- Comfort, L.K. and H.P. Rahayu, Eds. 2023. *Hazardous Seas: A Sociotechnical Framework for Early Tsunami Detection and Warning*. Washington, DC: Island Press. 2023.
- Comfort, L.K. and M.L. Rhodes. Eds. 2022. *Global Risk Management: The Role of Collective Cognition in Response to COVID-19*. Routledge Publications, September.
- Comfort, L.K. 2019. *The Dynamics of Risk: Changing Technologies and Collective Action in Seismic Events*. Princeton: Princeton University Press, Studies in Complexity. 2019. The book received the 2020 Don K. Price Best Book Award, Section on Science, Technology and Environmental Policy, *American Political Science Association*, August. 2020.
- Helsloot, I., A. Boin, B. Jacobs, and L.K. Comfort. 2012. *Mega-Crises: Understanding the Prospects, Nature, Characteristics and Effects of Cataclysmic Events*. Springfield, IL: Charles C. Thomas, Publisher.
- Comfort, L.K., A. Boin, and C.C. Demchak. 2010. *Designing Resilience: Preparing for Extreme Events*. Pittsburgh: University of Pittsburgh Press.
- Rosenthal, U., A. Boin, and L.K. Comfort. 2001. *Managing Crises: Threats, Dilemmas and Opportunities*. Co-editor with U. Rosenthal and A. Boin, and author. Springfield, IL: Charles C. Thomas, Publisher.
- Comfort, L.K. 1999. *Shared Risk: Complex Systems in Seismic Response*. Oxford and New York: Pergamon Press.
- Comfort, L.K. 1988. *Managing Disaster: Strategies and Policy Perspectives*, editor, and co-author, see chapters cited below. Durham, NC: Duke University Press.
- Comfort, L.K. 1982. *Education Policy and Evaluation: A Context for Change*, Elmsford, NY: Pergamon Press, Inc.

Refereed Articles and Special Issues:

- Comfort, L.K. 2022. Cognition, Collective Action, and COVID-19: Managing Crises in Real Time, *Public Performance & Management Review*, Vol. 45, Iss. 4: 894-915.
- Ansell, C., L.K. Comfort, A. Keller, T. LaPorte, and P. Schulman. 2021. The Loss of Capacity in Public Organizations: A Public Administration Challenge. *Perspectives on Public Management and Governance*. Vol. 4, Iss. 1:24-29.
- Comfort, L.K., K. Soga, M. McElwee, C. Ecosse, B. Zhao. 2021. Collective Action in Communities Exposed to Recurring Hazards: The Camp Fire, Butte County, California, November 8, 2018. *International Journal on Advanced Science, Engineering and Information Technology (IJASEIT)*. Manuscript received 15 Oct. 2020; revised 29 Jan. 2021; accepted 2 Feb. 2021. Date of publication 17 Feb. 2021.

- Comfort, L.K. and H. Zhang. 2020. Operational Networks: Adaptation to Extreme Events in China. *Risk Analysis*. Vol. 40, Iss. 5, pp: 981-1000. <https://doi.org/10.1111/risa.13442>
- Comfort, L.K. 2020. Collective Cognition, Action, and Complex Time: Managing Response to COVID-19 on a Global Scale. *International Journal of Policy Studies* 11(2), 2020, 123-147.
- Comfort, L.K., N. Kapucu, K. Ko, S. Menoni, and M. Siciliano. 2020. Crisis Decision-Making on a Global Scale: Transition from Cognition to Collective Action under Threat of COVID-19. *Public Administration Review*, Vol. 80, Iss. 4, pp. 616–622.
- Comfort, L.K., K. Soga, M. Stacey, M. McElwee, C. Ecosse, J. Dressler, and B. Zhao. 2019. *Collective Action in Communities Exposed to Recurring Hazards: The Camp Fire, Butte County, California, November 8, 2018*. Natural Hazards Center, University of Colorado, Boulder, QR 300.
- Comfort, L.K., T.W. Haase, G. Ertan, and S.R. Scheinert. 2019. The Dynamics of Change Following Extreme Events: Transition, Scale, and Adaptation in Systems Under Stress. *Administration & Society*. <https://doi.org/10.1177/0095399719869991>
- Comfort, L.K., J. Yeo, and S.R. Scheinert. 2019. Organizational Adaptation under Stress: Tracing Communication Processes in Four California County Health Departments during the H1N1 Threat, April 28, 2009 – March 11, 2011. *American Review of Public Administration*. Vol. 49, 2: 159-173. First published online, July 6, 2018.
- Comfort, L.K. and J. Joshi. 2017. Scalability and Sustainability in Uncertain Environments: Transition to Recovery from the 2015 Gorkha, Nepal, Earthquakes. *Earthquake Spectra*: December 2017, Vol. 33, No. S1, pp. S385-S401.
- Yeo, J., & Comfort, L.K. 2017. An Expected Event, but Unprecedented Damage: Structure and Gaps of Large-Scale Response Coordination of The 2011 Thailand Floods. *Disaster Prevention and Management: An International Journal*, 26(4), 458-470.
- Comfort, Louise K., Bert, Jennifer, and Song, Jee Eun. 2016. ‘Wicked Problems in Real Time: Uncertainty, Information, and the Escalation of Ebola.’ *Information Polity*. Vol. 27, No. 3: 273 – 289.
- Comfort, L.K. 2016. Editor and Co-Author. Building Community Resilience to Global Hazards: A Sociotechnical Approach. *Safety Science*, Special Issue. Volume 90, Pp. 1-106 (December).
- Erkan, B., G. Ertan, J. Yeo, and L.K. Comfort. 2016. Risk, Profit, or Safety: Sociotechnical Systems under Stress. *Safety Science*. Vol.88 (October): Pp. 199–210.
- Chalfant, Brian and Louise K. Comfort. 2015. Dynamic Decision Support for Managing Risk: Mapping Regional Resources in Allegheny County, Pennsylvania. *Safety Sci.*, <http://dx.doi.org/10.1016/j.ssci.2015.09.013>
- Zhang, Haibo, Xiazu Zhang, Louise Comfort, and Mengyao Chen. 2015. The Emergence of an Adaptive Response Network: The April 20, 2013 Lushan, China Earthquake. *Safety Sci.*, <http://dx.doi.org/10.1016/j.ssci.2015.11.012>
- Santos, Rodrigo, Daniel Mosse, Taieb Znati, and Louise K. Comfort. 2015. Design and Implementation of a Witness Unit for Opportunistic Routing in Tsunami Alert Scenarios. *Safety Sci.* <http://dx.doi.org/10.1016/j.ssci.2015.09.014>
- Ai, F., L. K. Comfort, Y. Dong, and T. Znati. 2015. A Dynamic Decision Support System based on Geographical Information and Mobile Social Networks: A model for tsunami risk mitigation in Padang, Indonesia. *Safety Sci.*, <http://dx.doi.org/10.1016/j.ssci.2015.09.022>
- Hardy, Karim and Louise K. Comfort. 2015. Dynamic decision processes in complex, high-risk operations: The Yarnell Hill Fire, June 30, 2013. *Safety Science*., Vol. 71, pp. 39-47.
- Oh, Namkyung Aya Okada, and Louise K. Comfort. 2014. Building Collaborative Emergency Management Systems in Northeast Asia: A Comparative Analysis of the Roles of International Agencies. *Journal of Comparative Policy Analysis: Research and Practice*. Vol, 16:1,pp. 94-111.
- Kees Boersma, Louise Comfort, Jelle Groenendaal & Jeroen Wolbers. 2014. Editorial: =Incident Command Systems: A dynamic tension among goals, rules, and practice. *Journal of Contingencies*

- and *Crisis Management*. Vol. 22, Iss. 1, pp. 1-4. This editorial serves as the introduction to a special issue on Incident Command Systems edited by the four authors. The entire issue includes pp. 1-67.
- Comfort, Louise K. & Sandra L. Resodihardjo. 2013. Leadership in Complex Adaptive Systems. *International Review of Public Administration*. Vol. 18, No. 1, pp. 1-4. This article served as the Introduction to a special Symposium on Leadership in Complex Adaptive Systems edited by Louise K. Comfort and Sandra L. Resodihardjo, published in *IRPA*, Vol. 18, No. 1.
- Comfort, Louise K. and Aya Okada. 2013. Emergent Leadership In Extreme Events: A Knowledge Commons For Sustainable Communities. *International Review of Public Administration*. Vol. 18, No. 1, pp. 61-77. This article is included in a special Symposium on Leadership in Complex Adaptive Systems edited by Louise K. Comfort and Sandra L. Resodihardjo, published in *IRPA*, Vol. 18, No. 1.
- Comfort, L.K., A. Okada, and G. Ertan. 2013. Networks of Action in Catastrophic Events: The March 11, 2011 Tohoku Disasters. Special Issue, *Earthquake Spectra*, **29 (S1)**, S387–S402.
- Comfort, LK, S. Scheinert, J. Yeo, S. Stebbins, R. Schuh, L. Duran, and M. Potter. 2013. Using Bayesian Influence Diagrams to Assess Organizational Performance in 4 California County Health Departments, April-July 2009. Research Brief Report. *Journal of Public Health Management and Practice*. 19 March 2013: 1-3. doi: 10.1097/PHH.0b013e31828bf6f6
- Skertich, Robert L., David E.A. Johnson and Louise K. Comfort. 2013. A Bad Time for Disaster: Economic Stress and Disaster Resilience. *Administration & Society*. Vol.45, Iss. 2:145-166.
- Comfort, Louise K. and Clayton Wukich. 2013. Developing Decision-Making Skills for Uncertain Conditions: The Challenge of Educating Effective Emergency Managers. *Journal of Public Affairs Education*. Vol. 19, No. 1 (FEMA Symposium): 58-72.
- Comfort, L. K., T. Znati, M. Voortman, Xerandy, and L. E. Freitag. 2012. Early Detection of Near-Field Tsunamis Using Underwater Sensor Networks. *Science of Tsunami Hazards*, vol. 31, Iss. 4: 231-243.
- Comfort, L.K., Guest Editor. 2012. Designing Disaster Resilience and Public Policy. *Journal of Comparative Policy Analysis*. Special Issues, Vol. 14, Iss. 2 and Iss. 3.
- Boulos, G., L.J. Huggins, M.D. Siciliano, H. Ling, J. Yackovich, Jr., D. Mossé, L.K. Comfort. 2012. Designing Resilience for Communities at Risk: Sociotechnical Decision Support for Near-field Tsunamis. *Journal of Comparative Policy Analysis*. Special Issue. Vol. 14, Iss. 2, Pp.160-174.
- Comfort, L.K., W.L. Waugh, Jr. and B.A. Cigler. 2012. Emergency Management Research and Practice in Public Administration: Emergence, Evolution, Expansion, and Future Directions. *Public Administration Review*. 30 APR 2012, DOI: 10.1111/j.1540-6210.2012.02549.
- Comfort, LK. 2012. Reflections on the Triple Disasters, March 11, 2011, from an American Perspective. *Emergency Management Studies*, 9, 1-10. (Published in Tokyo, Japan)
- Zagorecki, A., J. Ristvej, L. Comfort, and T. Lovecek. 2012. Executive Dashboard Systems for Emergency Management. *Communications*. Vol. 2, pp. 82-89.
- Comfort, L.K., M.D. Siciliano and A. Okada. 2011. Resilience, Entropy, and Efficiency in Crisis Management: The January 12, 2010 Haiti Earthquake. *Risk, Hazards, and Crisis in Public Policy*. Vol. 2, Iss.3, Art.1. <http://www.psocommons.org/rhcpp/vol2/iss3/art1/>
- Comfort, LK. M.EERI; McAdoo, B.; Sweeney, P; Stebbins, S.; Siciliano, MD; Huggins, LJ; Serrant, T; Scheinert, SR; Augenstein, J, and Krenitsky, N. 2011. Transition from Response to Recovery: A Knowledge Commons to Support Decision Making following the January 12, 2010 Haiti Earthquake. Special Issue on January 12, 2010 Haiti Earthquake. *Earthquake Spectra*., October. 109105EQS, pp. 1-21.
- Comfort, Louise K. 2011. Distributed cognition: The basis for coordinated action in dynamic environments. *Journal of Emergency Management*. Vol.9 (Special Issue 1), pp.41-46.
- Johnson, D.E.A., A. Zagorecki, J. M. Gelman, and L.K. Comfort. 2011. "Improved Situational Awareness in Emergency Management through Automated Data Analysis and Modeling." *Journal of Homeland Security and Emergency Management*. Vol. 18, Iss. 1, Article 40.

- Comfort, L.K., M.D. Siciliano and A. Okada. 2011. Resilience, Entropy, and Efficiency in Crisis Management: The January 12, 2010 Haiti Earthquake. *Risk, Hazards, and Crisis in Public Policy*. Vol. 2, Iss.3, Art.1. <http://www.psocommons.org/rhcpp/vol2/iss3/art1/>
- Comfort, L.K. M.EERI; McAdoo, B.; Sweeney, P; Stebbins, S.; Siciliano, MD; Huggins, LJ; Serrant, T; Scheinert, SR; Augenstein, J, and Krenitsky, N. 2011. Transition from Response To Recovery: A Knowledge Commons to Support Decision Making following the January 12, 2010 Haiti Earthquake. Special Issue on January 12, 2010 Haiti Earthquake. *Earthquake Spectra.*, October. 109105EQS, pp. 1-21.
- Johnson, D.E.A., A. Zagorecki, J. M. Gelman, and L.K. Comfort. 2011. "Improved Situational Awareness in Emergency Management through Automated Data Analysis and Modeling." *Journal of Homeland Security and Emergency Management*. Vol. 18, Iss. 1, Article 40.
- Comfort, Louise K. Michael D. Siciliano, and Aya Okada. 2010. Risque, résilience et reconstruction: le tremblement de terre haïtien du 12 janvier 2010. *Télescope*, vol. 16, n° 2, pp. 37-58.
- Comfort, Louise K., Thomas A. Birkland, Beverly A. Cigler, and Earthea Nance. 2010. Retrospectives and Prospectives on Hurricane Katrina: Five Years and Counting. *Public Administration Review*. September-October, 2010, pp. 669 – 678.
- Comfort, Louise K., Namkyung Oh, and Gunes Ertan. 2009. The Dynamics of Disaster Recovery: Resilience and Entropy in Hurricane Response Systems 2005-2008. *Public Organization Review* 9:309-323.
- Comfort, Louise K., Daniel Mosse and Taieb Znati. 2009. Managing Risk in Real Time: Integrating Information Technology into Disaster Risk Reduction and Response. *Commonwealth: A Journal of Political Science*, Vol. 15, pp. 27-46.
- Comfort, Louise K. 2007. Crisis Management in Hindsight: Cognition, Communication, Coordination, and Control. *Public Administration Review*. Vol. 67. Special Issue, Administrative Failure in the Wake of Katrina. December. Pp. S188-S196.
- Comfort, Louise K. 2007. Inter-Organizational Design for Disaster Management: Cognition, Communication, Coordination, and Control. *Journal of Seismology and Earthquake Engineering, Spring and Summer*, Vol. 9, No. 1, 2: 61 – 71.
- Comfort, Louise K. and Naim Kapucu. 2006. Inter-organizational Coordination in Extreme Events: The World Trade Center Attacks, September 11, 2001. *Natural Hazards*. Vol. 39: 309-327. Received, 9 November 2003. Accepted, 9 June 2005.
- Comfort, Louise K. and Thomas W. Haase. 2006. Communication, Coherence, and Collective Action: The Impact of Hurricane Katrina on Communications Infrastructure. *Public Works Management and Policy*. Vol. 11, No. 1, 1-16.
- Comfort, Louise K. 2006. Cities at Risk: Hurricane Katrina and the Drowning of New Orleans. *Urban Affairs Review*, Vol. 41, Iss. 4: 501-516.
- Comfort, Louise K. 2005. Fragility in Disaster Response: Hurricane Katrina, 29 August 2005. *The Forum*: Vol. 3: No. 3, Article 1. <http://www.bepress.com/forum/vol3/iss3/art1>.
- Comfort, Louise K. 2005. Risk, Security and Disaster Management." 2005. *Annual Review of Political Science*. Vol. 8: 335-356. June. First published online as a Review in Advance on Mar. 17, 2005.
- Comfort, Louise K., Kilkon Ko and Adam Zagorecki. 2004."Coordination in Rapidly Evolving Systems: The Role of Information." *American Behavioral Scientist*. Vol. 48, No. 3: pp. 295-313.
- Comfort, LK, M. Dunn, D. Johnson, A. Zagorecki, and R. Skertich. 2004. Coordination in Complex Systems: Increasing Efficiency in Disaster Mitigation and Response. *International Journal of Emergency Management*, Vol. 2, Nos. 1-2, pp. 62-80.
- Comfort, Louise K. 2003. Hazard Reduction and Response in Metropolitan Regions. *Regional Development Dialogue*. Vol.24, No. 1, Spring, 2003, pp. 151-163.
- Comfort, Louise K. 2003. Assessment of Homeland Security Initiatives: Commonwealth of Pennsylvania. Invited paper. Century Foundation Study on Homeland Security at the State Level. Century Foundation, New York, New York.

- Comfort, Louise K. 2003. Managing Intergovernmental Response to Terrorism and Other Extreme Events. *Publius*. Vol. 32, No. 4: pp. 29-49.
- Comfort, Louise K. 2002. Institutional Re-orientation and Change: Security as a Learning Strategy." 2002. *The Forum*, Vol. 1, Issue 2, Article 4, pp. 1-5. <http://www.bepress.com/forum/vol1/iss2/art4/>
- Comfort, Louise K. 2002. Rethinking Security: Organizational Fragility in Extreme Events. *Public Administration Review*. Vol 62, Special Issue (September): 98-107.
- Comfort, Louise K. 2002. Be Prepared! Simulating Sociotechnical Systems in Disaster Environments to Anticipate Robot and Human Responses. *IEEE Robotics and Automation Magazine*, Vol. 9, No. 3 (September): 13-16.
- Comfort, Louise K. 2002. Governance under Fire: Organizational Fragility in Complex Systems. In *Governance and Public Security*. Syracuse, NY: Campbell Public Affairs Institute, Maxwell School of Citizenship and Public Affairs, Syracuse University: pp. 113-127.
- Comfort, L.K., Y. Sungu, D. Johnson, and M. Dunn. 2001. Complex Systems in Crisis: Anticipation and Resilience in Dynamic Environments. *Journal of Crises and Contingencies*, Vol. 9, No. 3: 144-58.
- Comfort, Louise K. 2000. Disaster: Agent of Diplomacy or Change in International Affairs?" 2000. *Cambridge Review of International Affairs*. Winter, Vol. XIV, No. 1: 277-294.
- Comfort, Louise K. 2000. Response Operations following the Chi-Chi (Taiwan) Earthquake: Mobilizing a Rapidly Evolving, Interorganizational System. *Journal of the Chinese Institute of Engineers*, Vol. 23, No. 4: 479-492.
- Comfort, Louise K. 2000. Anticipating Fire: A Sociotechnical Approach to Mitigation. *Technology*. Vol. 7:33-42. An earlier version of this paper was presented at the Conference on Architectural Surety in Albuquerque, New Mexico, May 14-16, 1997.
- Comfort, Louise K. 1999. The Impact of Information Technology upon Disaster Mitigation and Management." Consiglio Nazionale delle Ricerche.. *La Protezione Civile verso gli Anni 2000*. Firenze, Area della Ricerca di Firenze: 171-180.
- Comfort, LK, B. Wisner, S. Cutter, R. Pulwarty, K. Hewitt, A. Oliver-Smith, J. Wiener, M. Fordham, W. Peacock, F. Krimgold. 1999. "Reframing Disaster Policy: The Global Evolution of Vulnerable Communities." *Environmental Hazards*. Vol. 1, No. 1:39-44.
- Comfort, LK, A. Tekin, E. Pretto, B. Kirimli, D. Angus and Other Members of the International, Interdisciplinary Disaster Research Group. 1998. "Time, Knowledge, and Action: The Effect of Trauma upon Community Capacity for Action." *International Journal of Mass Emergencies and Disasters*, Vol. 16, No. 1(March): 73-91.
- Zajac, Gary and LK Comfort. 1997. "'The Spirit of Watchfulness': Public Ethics as Organizational Learning." 1997. *Journal of Public Administration Research and Theory*. Vol. 7, No. 4 (October): 541-569.
- Helmicki, A.J., A.E. Aktan, M. Kam, and LK Comfort. 1997. "Information Technology in Civil Infrastructure System Monitoring: Opportunities and Issues." *International Workshop on Structural Health Monitoring*. Lancaster, PA: Technomic Publishing Co., Inc.:396-409.
- Comfort, LK, Ed. 1997. *Initiating Change: Theory and Practice*. Editor and co-author, Special Issue of the *American Behavioral Scientist*, Sage Publications, Vol. 40, No. 3 (January). Two essays are included in this volume. They are:
- Comfort, LK. "Models of Change: A Dialogue between Theory and Practice." *American Behavioral Scientist*, Vol. 40, No. 3, January, 1997: 259-263.
- Comfort, LK. "Toward a Theory of Transition in Complex Systems." *American Behavioral Scientist*, Vol. 40, No.3, January,1997:375-383.
- Guidelines for Disaster Management: Proceedings, United Nations Interregional Seminar on International Disaster Management*. 1996. United Nations, NY: Department of Development Support and Management Services. As a consultant to the United Nations for the organization and conduct of the Interregional Seminar on Disaster Management in Jakarta, Indonesia, December 13 - 18, 1993, I served as principal editor for the proceedings. This volume includes five papers invited

- by the United Nations as background material for the seminar and two concept papers summarizing the principal recommendations from the seminar. The seminar and the resulting concept papers led to the establishment of the United Nations Global Programme for the Integration of the Science of Disasters and Public Administration, established in January, 1996. The papers include:
- An Interactive, Intelligent, Spatial Information System for International Disaster Management: A Developmental Model. Concept Paper submitted January 20, 1994. 1996. *Guidelines*: 45-50.
 - An International Network for Improving Public Administration Systems in Crisis Management." Concept Paper submitted September 20, 1994. 1996. *Guidelines*: 51-54.
 - Shared Risk: A Dynamic Model of Organizational Learning and Action." Presented at the Interregional Conference in Jakarta, Indonesia, December 13-18, 1993. 1996. *Guidelines*: 219-236.
 - An Interdisciplinary Quick Assessment Strategy to Support Decision-Making in Disaster Operations: The Costa Rica Earthquake, April 22, 1991." 1996. *Guidelines*: 237-264.
 - Turning Disaster into Development: Designing Policy for Complex Environments in Latin America, with Associates." 1996. *Guidelines*:265-274.
- Comfort, L.K. 1996. Information Technology and the Reduction of Global Risk. *The ASPEP Journal* 1996. Falls Church, VA: American Society for Emergency Planners (November):40-49. This paper is also available on CD-Rom. *Proceedings of the International Symposium on Spectral Sensing Research*. Theme: Crisis Support. Melbourne, Victoria, Australia, 26 November-1 December, 1995.
- Comfort, LK and Kevin Pitts. 1996. "Improving Emergency Management: A Total Quality Management Approach." *International Journal of Public Administration*, Vol. 19, Nos. 11 & 12 (November):2141-2166.
- Comfort, LK. Editor and Co-author. Special Issue on Risk in remembrance of Aaron Wildavsky, *Journal of Contingencies and Crisis Management*, Vol. 2, No. 3, September, 1994.
- Comfort, LK. 1994. "Risk and Resilience: Interorganizational Learning following the Northridge Earthquake of January 17, 1994." *Journal of Contingencies and Crisis Management*, Vol. 2, No. 3, (September):174-188.
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 "Initiating Change: A Dialogue between Theory and Practice." *Journal of Public Administration Research and Theory*, Vol. 4, No. 3 (July 1994):323-325.
- "Self Organization in Complex Systems." *Journal of Public Administration Research and Theory*, Vol. 4, No. 3 (July1994): 393-410. This article was reprinted with editorial permission in United Nations. 1997. *Guidelines for Disaster Management: Proceedings, United Nations Interregional Seminar on International Disaster Management*. United Nations, NY: Department of Development Support and Management Services:245-258. An earlier version of this paper was presented at the International Seminar on *Sociedad y Prevencion de Desastres*, convened by the Committee of Mexican Social Sciences, Universidad Autonomo de Mexico, Mexico City, DF, February 26-28, 1994.
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RELATED RESEARCH

Principal investigator, Quick Response Grant, Mapping communication, coordination networks in response to Kahramanmaraş Earthquakes, February 6, 2023. Natural Hazards Center, University of Colorado, Boulder. \$5,000. March 4 – August 21, 2023.

Co-principal investigator, with Kenichi Soga. Designing Smart, Sustainable Risk Reduction in Hazard-Prone Communities, 2023. National Science Foundation grant #2230636, SCC-IRG Track 1. \$2,500,000. 2022-2025. University of California, Berkeley.

Co-principal investigator with Kenichi Soga. Marin County Risk Evacuation Tool, University of California, Berkeley, Agreement #922025. Sonoma Technology, 06/15/22-03/31/23. \$190,400.

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Co-Principal Investigator with Kenichi Soga. Collective Action in Communities Exposed to Recurring Hazards: The Camp Fire, Northern California, November 8, 2018 Quick Response Grant 300, National Science Foundation administered by Natural Hazards Center, University of California, Boulder. December 2018 – December 2019. \$4,320.

Co-Principal Investigator, Collaborative Research RSB: A Sequential Decision Framework to Support Trade Space Exploration of Multi-Hazard Resilient and Sustainable Building Designs. This research is an interdisciplinary project conducted in collaboration with Penn State University and the School of Engineering at Pitt. It examines an iterative decision process involving sequential estimates of sustainable building designs, given changing exposure to hazards and risk. The research is supported by National Science Foundation grant #1455424, \$380,811, 3/1/2015—2/28/2020.

Principal Investigator, National Science Foundation grant #OCE 1331463, Hazards SEES Type 2: From Sensors to Tweeters: A Sustainable Sociotechnical Approach for Detecting, Mitigating, and Building Resilience to Hazards, September 1, 2013 – August 31, 2019, \$3,000,000.

Principal Investigator, Scalability and Sustainability in Uncertain Environments: Recovery from the Nepal Earthquakes of April 25 and May 12, 2015. National Science Foundation RAPID: grant #1559687, October 1, 2015-September 30, 2016, \$46,347.

Principal Investigator, Sociotechnical Systems under Stress, National Science Foundation, **RAPID**: CMMI-1447234, \$34,139. August 1, 2014 – July 31, 2015. This project was a collaborative project between the Center for Disaster Mitigation, GSPIA and the Disaster Management and Implementation Research Center, METU, Ankara, Turkey and also supported by GSPIA and the European Center of Excellence, University of Pittsburgh.

Principal Investigator, Developing Community Resilience to Disaster in the Caribbean Region, Widgeon Foundation, \$41,670. January 1, 2013– August 31, 2014.

Principal Investigator, Dynamic Decision Support for Managing Regional Resources, Sponsor: Federal Emergency Management Agency, \$35,000. May 1, 2013-April 30, 2014.

Co-principal Investigator with Taieb Znati, Computer Science, Building Community Resilience to Global Hazards: A Sociotechnical Approach, Global Academic Partnership grant, Global Studies Center, \$20,000. November 1, 2013 – June 30, 2014.

Principal Investigator, Caribbean Disaster Network – Research in Haiti. University Center for International Studies. November 1, 2013 – June 30, 2014. \$3,500.

Principal Investigator, I-Corps: Dynamic Decision Support for Emergency Managers, National Science Foundation, \$50,000, October 1, 2012 – March 31, 2013.

Principal Investigator, Cataloguing the Actions of Workforce Investment Boards during National Disasters. National Association of Workforce Investment Boards, \$5,000. 2/1/13-6/30/13.

Principal Investigator, Reconnaissance Field Study, March 11, 2011 Tohoku Disasters, Japan, October 29 – November 3, 2011

Principal Investigator, Real-Time Robust Decision Making during Emergency Operations. This project focused specifically on the decision space in which practicing managers select options for action in uncertain environments. The project builds on long-standing research on decision making and was conducted in collaboration with computer scientists, fire department personnel, and researchers at the MITRE Corporation, \$94,443. 9/1/2011-6/30/2012.

Project Lead Investigator, Arm 4, Decision Support Systems. Initially designed to investigate processes of interactive communication, coordination, and control that characterize the “public health system” and budgeted at \$2.7 million, this project was sharply curtailed by federal funding

cuts in 2011-2012. Funded through the Center for Public Health Practice, University of Pittsburgh by the Centers for Disease Control and Prevention cooperative agreement number 1P01TP000304-02 REVISED. The project concluded its fourth year on August 15, 2012. Funding was eliminated for the planned fifth year, October 1, 2008 – September 30, 2012.

Principal Investigator. “Documenting Networks in Disaster Response & Transition to Recovery in Haiti Earthquake.” Widgeon Foundation, \$29,791. Duration: 2/20/10- 1/11/11.

Principal Investigator, RAPID: Networks in Transition from Response to Recovery following the Haiti Earthquake. National Science Foundation. \$39,884. Duration: 3/15/10 – 3/14/11.

Principal Investigator: DRU: Designing Resilience for Communities at Risk: Improving Decision Making to Support Collective Action under Stress. National Science Foundation, #0729456. \$734,995. Duration: 9/1/07 - 8/31/2012

Principal Investigator, “Vulnerability Assessment for Flooding in the Pittsburgh Metropolitan Region.” The Pittsburgh Foundation. \$37,500. August 1, 2006 – July 31, 2007.

Principal Investigator, “Vulnerability Assessment for Flooding in the Pittsburgh Metropolitan Region.” The McCune Foundation. \$75,000. October 1, 2006 – August 31, 2007.

Principal Investigator, “Vulnerability Assessment for Flooding in the Pittsburgh Metropolitan Region.” The Buhl Foundation \$37,200. October 1, 2006 – August 31, 2007.

These three grants represent a collaborative effort of local Pittsburgh foundations to support a trial demonstration of the IISIS prototype in twenty-seven municipalities in the Monongahela Valley that are exposed to recurring risk of flooding.

Co-principal Investigator, “SGER: Exploratory Research on Sensor Based Infrastructure for Early Tsunami Detection.” With Daniel Mosse, Principal Investigator and Taieb Znati, Co-principal Investigator, Department of Computer Science. National Science Foundation Small Grant for Exploratory Research #0549119. \$199,214. September 2005 – August, 2006 (With one year no-cost extension to May, 2007).

Principal Investigator, Interactive, Intelligent, Spatial Information System (IISIS): A Community Model. Continuing research on the redesign and refinement of the IISIS prototype and modules. MountainTop Technologies, Inc. \$25,000. July 15, 2005 – June 30, 2006.

Principal Investigator, “Exploring the Dynamic Interaction among Physical, Constructed, and Organizational Systems in the Great Sumatran Earthquake and Tsunami Disaster, 26 December 2004. Conducted jointly with researchers from the Pacific Disaster Center, Maui; Bandung Institute of Technology, Bandung, Indonesia, and Department of Geography, Chulalongkorn University, Bangkok, Thailand. University of Pittsburgh, \$7,000. March 3-12, 2005.

Principal Investigator, “Modeling Fragility in Sociotechnical Systems: A Transportation Study.” Principal Investigator, with Milos Hauskrecht, Department of Computer Science and Jeen Shang Lin, Department of Civil Engineering. National Science Foundation Small Grant for Exploratory Research, #0416754. \$60,000. February 2004- July 2005.

Co-principal Investigator, “Secure CITI: A Secure Critical Information Technology Infrastructure for Disaster Management.” With Daniel Mosse, Principal Investigator and Rami Melhem, Co-principal Investigator, Department of Computer Science. National Science Foundation Grant ITR grant #ITR0325353. (\$2,800,000), September 1, 2003-August 31, 2009.

Co-Principal Investigator, A Demonstration of the Integrated, Interactive, Spatial Information System, with Additional Modules of Decision Support. With Panos Chrysanthis and Alexandros Labrinidis. MountainTop Technologies, Inc. \$10,000. 2004. The project received a second grant for \$25,080, July 15-December 31, 2005.

Co-principal Investigator, “Hazard Reduction and Response in Metropolitan Regions: An Interdisciplinary Model,” with Hassan Karimi, School of Information Sciences. Global Academic Partnership Program, University Center for International Studies (\$25,000) and High Performance Computing Center (\$25,000), University of Pittsburgh. June 1, 2002 – May 31, 2003.

Co-principal Investigator, “Terrorism and Corporate Crisis Management: The Strategic Effect of the September 11 Attacks.” With John R. Harrald, Principal Investigator, Julie Ryan, Co-principal Investigator, National Science Foundation Award #0219953. 9/1/02–8/31/03. \$224,024.

Senior Researcher, “Observing and Documenting the Inter-Organizational Response to the September 11 Attacks.” John R. Harrald and Joseph L. Barbera, George Washington University, Co-principal investigators. National Science Foundation Grant #CMS0139309. \$25,000. September 20, 2001 – June 30, 2002.

Member, Reconnaissance Team, World Seismic Safety Institute and Earthquakes in Megacities Initiative, to the Gujarat, India Earthquake, February 23 – March 5, 2001. This research was supported by grants from the Hewlett Fund, Graduate School of Public and International Affairs, University of Pittsburgh, (\$1,000); the Natural Hazards Center, University of Colorado, Boulder (\$1,000); and the National Science Foundation (\$10,613).

Member, Reconnaissance Team, Research Center for Urban Safety and Security, Kobe University, to the ChiChi, Taiwan Earthquake, Taiwan, October 2-10, 1999.

Principal Investigator, “Information Technology and Efficiency in Disaster Response.” National Science Foundation Quick Response Grant for Field Study following the Izmit, Turkey Earthquake of August 17, 1999. \$3,000.

Principal Investigator, “An Interactive, Intelligent, Spatial Information System for Disaster Management: A Community Model.” The Buhl Foundation, \$37,500, July 1, 1997 - June 30, 1998. The project received a continuing grant, \$100,000, from The Buhl Foundation to fund the research from July 1, 1998 through December 31, 1999. The project has been supported by the University of Pittsburgh from January 1 – December 31, 2000. This project received a grant of \$150,360 from the Public Entity Risk Institute, Fairfax, VA to conduct a trial demonstration project of the IISIS prototype in the Pittsburgh Metropolitan Region, February 1, 2001 – January 31, 2001. This grant was extended with two small planning grants totaling \$15,000 to explore its application to the Delaware Valley Metropolitan Region in Southeastern Pennsylvania.

Principal Investigator, “Shared Risk: Self Organization in Seismic Response.” Graduate School of Public and International Affairs, \$1,000 for translation of Armenian news reports on the 1988 Armenian earthquake.

Principal Investigator, “The Impact of Information Technology upon Disaster Mitigation and Management.” National Science Foundation, March 1, 1997 - September 30, 1997. \$19,997. Related to this award is a request to University of Pittsburgh Research Centers for a Sun Ultra Workstation. Request granted for \$2,500 from the Graduate School of Public and International Affairs. Request granted for \$8,700 from the Office of Research. Total amount for workstation: \$11,200.

Co-Principal Investigator, “An Interactive, Intelligent, Spatial Information System for Disaster Management: A Community Model.” With Shi Kuo Chang, Department of Computer Science. Three related grants were received from three organizations to support research on this project from May 1, 1996 to December 31, 1996. They are: Michael Baker Corporation: \$5,000 in direct contribution and \$35,000 in in-kind contribution of services; The Pittsburgh Foundation, \$37,500; and the Howard Heinz Endowment, \$20,000. In addition, an internship was granted by the National Institute for Environmental Renewal to fund staff work for three months, June-August, 1996: \$4,500. Total direct funding received for project in 1996: \$67,000; total direct and in-kind contributions received in 1996: \$102,000.

Principal Investigator, "Self Organization in Emergency Medical Response: The Great Hanshin, Japan Earthquake of January 17, 1995." Field research in Japan supported by the Natural Hazards Research and Applications Information Center, University of Colorado, Boulder and the University of Pittsburgh, May 5 - 17, 1995.

Principal Investigator, "Self Organization in Disaster Response: The Northridge Earthquake of January 17, 1994." Small Grant for Exploratory Research, National Science Foundation, #BCS 94-10896, \$5,000. Grant supported field research in Los Angeles following the January 17, 1994 Northridge

Earthquake. Findings from this research are incorporated into my book, *Shared Risk: Self Organization in Seismic Response*, cited above.

Principal Investigator, "Self Organization in Response and Recovery from Disaster: The Maharashtra Earthquake of September 30, 1993". Field research in India supported by the Natural Hazards Research and Applications Information Center, University of Colorado, Boulder and the University of Pittsburgh, December 18-26, 1993.

Principal Investigator, "An Interactive, Intelligent, Spatial Information System for Hazardous Materials Management: A Community Model." \$30,000. Developmental research grant awarded by Allegheny County Emergency Management Agency, May 15, 1993-March 31, 1994. Grant extended, \$5,000, April 1- August 31, 1994. Second year renewal: \$41,400. 1994-1995. Additional component: "A Hazardous Materials Commodity Flow Study in Allegheny County, Pennsylvania." \$10,350, January 1 - June 30, 1995.

Principal Investigator, "Turning Disaster into Development: Designing Policy for Complex Environments in Latin America." Heinz Foundation, \$3,000. This funding was used to support a workshop in Pittsburgh that focused on disaster and related environmental issues in Latin America. Participants included researchers from Mexico, Costa Rica, Peru, and Colombia, as well as four U.S. universities. The purpose of the workshop was to initiate research on problems of shared interest and concern among US and Latin American nations.

Co-Investigator and Team Member, Interdisciplinary Turkish-American Research Team, "Medical Response to the March 13, 1992 Erzincan Earthquake." June 29-July 17, 1992. Field Research in Turkey supported by the Universities of Pittsburgh, Ankara, Ege and the Turkish Government. Office of Research, University of Pittsburgh, \$1,000.

Principal Investigator, Center for Latin American Studies: "Shared Risk: A Dynamic Model of Organizational Learning and Action." \$2,500. Grant was used for revision and completion of data analysis for manuscript, *Shared Risk: Self Organization in Seismic Response*. January 1, 1992-December 31, 1992.

Principal Investigator, "An Interdisciplinary Quick Assessment Strategy for Disaster Management." Project supported field research in Costa Rica, April 24-May 8, 1991. Funding source: Natural Hazards Research and Applications Information Center, University of Colorado, Boulder. \$3,000.

Co-Investigator and Team Member, Reconnaissance Study, Earthquake Engineering Research Institute, El Cerrito, CA and the National Science Foundation. A Quick Response Study of the Loma Prieta Earthquake of October 17, 1989. Field research on interorganizational coordination and communication in disaster operations in Northern California.

Co-Investigator and Team Member, Disaster Reanimatology Study of the Earthquake in Armenia on December 7, 1988. A Collaborative Study by the International Resuscitation Research Center, University of Pittsburgh and the Institute of Reanimatology of the USSR Academy of Medical Sciences, Moscow, USSR. Field research in Moscow and Armenia, March 12-26, 1989.

Principal Investigator, "Interorganizational Coordination in International Disaster Assistance: The December 7, 1988 Earthquake in Soviet Armenia." Funding sources: Natural Hazards Research and Applications Information Center, University of Colorado, Boulder and Center for Russian and East European Studies, University of Pittsburgh. Project supported field research in Armenia and Moscow in March, 1989. \$5,000.

Co-Investigator, "Managing Risk: The Design and Implementation of the Emergency Preparedness and Community Right-to-Know Act of 1986." Funding source: Environmental Protection Agency. This study was conducted in collaboration with the Graduate School of Public Policy, Survey Research Center, and Institute of Governmental Studies, University of California, Berkeley. \$9,900.

Team Leader, Interdisciplinary Committee on Disasters, University of Pittsburgh, with Joel Abrams, Bruce Buchanan, John Camillus and Edmund Ricci. Funding sources: Pittsburgh Foundation, Pittsburgh, PA and the Federal Emergency Management Agency, Cooperative Agreement No. EMW-K-1024, 1988-89. \$33,500.

Principal Investigator, "Interorganizational Coordination in Disaster Management: A Model for an Interactive Information System," National Science Foundation Grant #CES 88-04285, 1989. \$30,000.

Co-Investigator, Quick Response Study Team on Economic and Social Issues, Ecuadorian Earthquakes, March 5-6, 1987, Committee on International Disasters, National Research Council. Project supported field research and data collection in Ecuador in 1987. \$6,000.

Principal Investigator, "Information in International Disaster Assistance: The Ecuadorean Earthquakes of March 5-6, 1987," Tinker Field Research Grant supported travel to Ecuador, 1987. Office of Research Grant supported data entry and analysis. \$3,000.

Principal Investigator, "An Analysis of Group Homes in Allegheny County Neighborhoods," sponsored research project funded by the United Mental Health Council, Allegheny County, Pennsylvania, February 15-August 15, 1987. \$17,500.

Principal Investigator, "Interorganizational Coordination in International Disaster Assistance: The 10 October 1986 Salvadorean Earthquake," project funded by the Natural Hazards Research and Information Applications Center, University of Colorado; research centers at the University of Pittsburgh and the Heinz Endowment, Pittsburgh, PA. Grants supported data collection and field research in El Salvador, October, 1986. \$9,000.

Project Coordinator, "Adaptation of the Integrated Emergency Management Information System to Allegheny County, Pennsylvania," funded by the Office of Research, University of Pittsburgh, July, 1986. \$1,000.

Principal Investigator, "The Decision-Making Process in International Disaster Relief and Recovery Assistance: The Mexican Earthquakes, September 19-20, 1985," project funded by the Natural Hazards Research and Information Applications Center, University of Colorado; research centers at the University of Pittsburgh and the Heinz Endowment, Pittsburgh, PA. Grants supported field research and data collection in Mexico, September-December, 1985. \$9,000.

Principal Investigator, "The Role of Information in Emergency Management," awarded by the Natural Hazards Research and Applications Information Center, University of Colorado for a quick-response study of the May 31, 1985 Tornado Disaster in Pennsylvania, June 1985. \$3,000.

Project Coordinator, Interdisciplinary Research Team, California State University, Hayward, "COMMON GROUND: Defining Effective Public/Private Problem-Solving Processes in Selected East Bay Cities," San Francisco Foundation, 1984. \$10,000.

Project Director, "Instructional Simulation of Interorganizational Decision-Making," awarded by the Committee on Teaching, Academic Senate, University of California, Berkeley, Spring 1984. \$1,000.

Affirmative Action Faculty Development Grants, San Jose State University, Spring and Fall Semesters, 1979. Grants supported writing of manuscript for *Education Policy and Evaluation*, cited above. \$2,000.

Principal Investigator, "A Survey of Selected District and State Educational Administrators and State Legislators Regarding the Implementation of the Elementary and Secondary Education Act in California, 1966-1976," San Jose State University Foundation, Summer 1976. \$5,000.

Co-Investigator, "The Evaluation of Federally Funded Programs in Education," with Eileen Marie Cronin, Director, Raskob Learning Institute, Holy Names College, Raskob Foundation, Wilmington, DE, 1975-1976. \$10,000.

Selected Field Research, Workshops, Reports, Conference Papers, and Presentations: 2010-2020.

Quick Response Report 300. L. Comfort, K. Soga, M. Stacey, M. McElwee, C. Ecosse, J. Dressler, B. Zhao. *Collective Action in Communities Exposed to Recurring Hazards: The Camp Fire, Butte County, November 8, 2018.* Natural Hazards Center, University of Colorado, Boulder. <https://hazards.colorado.edu/research/quick-response-report/archives>

Field Demonstration: Padang, Indonesia. September 7-8, 2016. Participation in IOWAVE2016, Tsunami preparedness exercise, Indian Ocean Tsunami Warning and Mitigation System, UNESCO.

Field Demonstration: Padang, Indonesia, August 13, 2015. Hazard SEES Land-based communications network. Interdisciplinary project to demonstrate prototype decision support system for early tsunami detection with participants from University of Pittsburgh, Carnegie Mellon University, Northwestern University, Woods Hole Oceanographic Institution, Bandung Institute of Technology, Andalas University, Padang, Indonesia. Supported by NSF Grant #OCE 1331463.

Field Study: Lushan, China. Visit to site of Lushan Earthquake, April 20, 2013. Conducted interviews with emergency managers at Lushan County Office of Emergency Services. June 28-29, 2015.

Field Study: Kathmandu, Bhaktapur, and surrounding region, Nepal. Reconnaissance visit to devastated areas of Kathmandu and surrounding region. Conducted interviews with officials, managers who had responsibility for disaster, recovery operations. June 30 – July 4, 2015.

Invited Speaker/ Participant: NSF Workshop on Multi-Disciplinary Research on Disaster Response Logistics, Arlington, VA. December 1-2, 2014.

Field Study, Disaster Recovery in Fukushima Prefecture, Fukushima, Japan, September 1-3, 2014.

Invited Speaker, Seminar on Disaster Resilience, Tokyo University, Tokyo, Japan, September 1, 2014.

Field Study, Sociotechnical Systems under Stress: The 13 May 2014 Soma Mine Disaster. Interviews conducted at five locations in Turkey: Soma, Manisa, Ankara, Istanbul, Zonguldak, May 15- June 15, 2014.

Invited Speaker, Seminar on Disaster Mitigation, City of Kaynasli, Kaynasli, Turkey, May 22, 2014.

Field Study, *Developing Community Resilience to Disaster* conducted in collaboration with faculty and students at Quisqueya University and the State University of Haiti, Port au Prince, Haiti, April 27-30, 2014.

Presenter, Panel: Emergency Management: Lessons from the Past; Innovations for the Future. Annual Conference, American Society of Public Administration, Washington, DC, March 15-18, 2014.

Panelist, Why was Boston Strong? Conference on Boston Marathon Bombings, Kennedy School, Harvard University, Cambridge, MA, March 14, 2014.

Moderator/Discussant, Panel, Smarter Government in Taiwan, Annual Conference, American Society of Public Administration, Washington, DC, March 15-18, 2014.

Presentation, LK Comfort, J. Yeo, M. Voortman, and B. Colella. Dynamic Decision Support for Emergency Managers. Response Directorate, Federal Emergency Management Agency, Washington, DC, March 12, 2013.

Invited Participant, Review of Commercial Mobile Alert System (CMAS), National Research Council, Washington, DC, February 21, 2013.

Moderator, Comfort LK. Disaster Management in 2011: A Global Perspective. Center for Disaster Management Workshop. O'Hara Student Center, University of Pittsburgh, Pittsburgh, PA, Friday, April 13, 2012.

Invited Participant, Comfort LK. *Workshop on Organizational Reliability*, Vanderbilt University, Nashville, TN, May 4-5, 2012

Panelist, Comfort LK (March 3, 2012) Catastrophic Disasters: Katrina, Haiti, BP Oil Leak, Snowstorms: A Katrina Taskforce Update. Annual Conference, American Society of Public Administration. Las Vegas, Nevada.

Moderator, Comfort LK (November 3, 2011) Policy Informatics: A Knowledge Commons for Complex Systems – Comparative Perspectives. Annual Research Conference, Association for Public Policy and Management, Washington, DC. November 3-5, 2011.

Co-author, Okada, Aya and LK Comfort, “Black Swan” in Northeastern Japan: Interdependent Systems, Escalating Disaster on March 11, 2011. Annual Research Conference, Association for Public Policy and Management, Washington, DC. November 3-5, 2011.

Field Research, Comfort LK and Aya Okada. Reconnaissance Study of Recovery from 2011 Tohoku Disasters, Miyagi and Iwate Prefectures, Japan. October 29 – November 3, 2011.

Invited Lectures on Disaster Management, Comfort LK. Alliance for Urban Disaster Risk Reduction, Kobe University, Kobe, Japan, October 27-28, 2011.

Panelist. Comfort LK. (May 12, 2011) Public Health in Disaster. Conference on Humanitarian Assistance/Disaster Relief, US Naval War College. Newport, RI. Invited panelist.

Panelist. Comfort LK, Huggins LJ, Okada A, Colella B, Cui J, Dunn MW, Voortman M. (April 19, 2011) Centers of Excellence: Managing Crises in Public Health. How Organizations Think About the Unthinkable: A Risk Management Workshop about Avoiding, Managing and Mitigating Crises. University of California, Washington, DC. Presentation by Comfort LK.

Panelist. Comfort, LK (March 11-13, 2011). Public Administration within Complex, Adaptive Governance Systems,” ASPA Conference, Baltimore, MD, March 2011

Presentation, Comfort LK, Voortman, MJ. (February 23-24, 2011). Decision Support Dashboard. Public Health Adaptive System Studies. Annual Conference, 2011 Public Health Preparedness Summit, National Association of City and County Health Organizations, Atlanta, GA.

Presentation. Comfort LK, Voortman MJ, Huggins LJ, Okada A. (February 3, 2011) Designing a Regional Public Health System Collaborative Research Meeting with MITRE Corporation Researchers, University of Pittsburgh, Pittsburgh, PA.

Presentation. Comfort LK, Huggins LJ, Siciliano MD, Scheinert, SR, Okada A. (6 January 2011) Interdisciplinary Research on Sociotechnical Systems Civil, Mechanical, Manufacturing and Innovation Grantees Workshop, National Science Foundation, Atlanta, GA. Poster presentation by L. Comfort.

Presentation. Comfort LK and Mosse D. (December 13, 2010). Designing Resilience for Communities at Risk: An Early Tsunami Detection and Warning System. National Science Foundation Specialists’ Workshop. University of California, Santa Barbara, CA. Invited presentation.

Presentation. Comfort LK, Connelly SS, Cannon GC, Voortman M. (7 December 2010) An Engineering Dashboard for Hospital Systems. MITRE Corporation Research Meeting. Fairfax, VA. Invited presentation.

Invited Presentation. Comfort, LK (September 30-October 1, 2010). Haiti Workshop for RAPID Awardees. National Science Foundation. Arlington, VA.

Panelist. Comfort LK. (11 Jul 2010) Slippery Like Oil: Presidential Power and Disaster Decision Making. Natural Hazards Workshop. Broomfield, CO. Invited panelist. Presentation made by Comfort LK.

Invited Speaker, 2010. *Haiti’s Recovery: Getting Beyond the Challenges to Achieve Positive Outcomes*, American Society of Public Administration, Annual Conference, San Jose, CA, April 12.

Panelist, 2010. *The Katrina Task Force: American Society of Public Administration*, Annual Conference, San Jose, CA, April 11.

Moderator, 2010. *Balancing Support and Accountability in Disaster Recovery: Lessons from Katrina*, American Society of Public Administration, Annual Conference, San Jose, CA, April 9.

Participant and Presenter, 2010. *A Dashboard for Hospital Engineering Systems*, Public Health Adaptive Systems Studies Site Visit, Centers for Disease Control & Prevention, Pittsburgh, PA, April 7-8.

Report, 2007. Workshop II: “Socio-Technical Aspects of Cost-Effective, Sensor-Based Infrastructure for Tsunami Detection and Monitoring.” University of California. Berkeley, California. November 16 & 17, 2006. Co-author with Daniel Mosse, Taieb Znati, and Thomas Haase. Supported by National Science Foundation Small Grant for Exploratory Research #0549119. September, 2005 – August, 2006. Extension granted to February 28, 2007.

Field Reports submitted to funding agencies summarizing field research activities include the following disasters: Pennsylvania Tornadoes, May 31, 1985; Mexico City Earthquake, September 19, 1985; San Salvador Earthquake, October 10, 1986; Ecuadorian Earthquakes, March 5, 1987; Whittier Narrows,

California Earthquake, October 1, 1987; Armenian Earthquakes, December 7, 1988; Loma Prieta Earthquake, California, October 17, 1989; Costa Rica Earthquake, April 22, 1991; Erzincan, Turkey, March 13, 1992; Killari, Maharashtra State, India, September 30, 1993; Northridge Earthquake, California, January 17, 1994; Hanshin, Japan Earthquake, January 17, 1995; Marmara, Turkey Earthquake, 17 August 1999; Duzce, Turkey Earthquake, November 12, 1999; ChiChi, Taiwan Earthquake, 21 September 1999; Gujarat, India Earthquake, 26 January 2001; Sumatran Earthquake and Tsunami, 26 December 2004; Padang, West Sumatra Earthquake 2009; Haiti Earthquake, 2010; Tohoku, Japan Earthquake and Tsunami, 11 March 2011, Soma, Turkey Mine Fire, 13 May 2014. Nepal Earthquakes, April 25, 2015; Kahramanmaraş, Türkiye Earthquakes, 6 February 2023.

TEACHING EXPERIENCE:

Courses offered include:

Doctoral seminars: Organizational Theory; Complex, Adaptive Systems; Multivariate and Network Analysis; Theories of Social Science and Public Policy; Systems Theory; Systems Thinking and Public Policy; Public Policy Field Seminar.

Master's seminars: Policy Analysis, Policy Design and Implementation, Advanced Information Technology and Public Management; Managing Emergencies and Disasters; Quantitative Methods II.

Capstone seminar: “The Digital Divide: Information Technology in Public and International Affairs.”

Doctoral dissertations chaired: 36 dissertations between 1986 and 2022.

Doctoral dissertation committees, member: 37 dissertations between 1986 and 2022.

RECENT CONSULTING EXPERIENCE

Consultant, AFAD (Turkish Disaster Management Agency). Ankara, Turkey, Oct. 1- Dec. 31, 2014.

Consultant, U.S. Department of State Antiterrorism Assistance Program, Conducted through American University, June, 2007 – January, 2010.

Consultant, Dirección de Prevención y Atención de Desastres, Municipalidad de Bogotá, Colombia, February 22-26, 2005.

Consultant, Inter-American Development Bank. "Indicators Project for Disaster Risk Management-Operation ATN/JF-7907-RG. Universidad Nacional de Colombia, the Instituto de Estudios Ambientales, IDEA. Workshop in Barcelona, Spain, June 9 – July 11, 2003.

Consultant, United Nations International Conference on the “Integration of Public Administration with the Science of Disasters.” Sponsored by the Division of Development Support for Management Services, United Nations, in Beijing, China, January 18-28, 1997.

RECENT PROFESSIONAL SERVICE, 2010-2023.

Member, Pandemic Task Force, American Society of Public Administration, 2020-2023.

Member, Planning Committee, National Science Foundation Workshop on Convergence, April- June 2021.

Member, Committee of Visitors, Review Panel for National Science Foundation, Directorate for Engineering, Division of Civil, Mechanical, and Manufacturing Innovation, May-July, 2015

Member, Scientific Advisory Board, NORDFORSK, (Nordic research cooperation & infrastructure) Oslo, Norway

Member, Public Policy Committee, Earthquake Engineering Research Institute

External Evaluator, Tenure and Promotion Committees: University of Oklahoma, University of Delaware, University of Colorado, Denver; University of Central Florida, University of North Texas,

North Carolina State University, State University of New York, Albany; University of Massachusetts at Amherst.

- Member, Program Committee**, International Conference on Digital Government Research, Arizona State University, May 27-29, 2015.
- Editor**, *Safety Science*, 2012-2013; Associate Editor, 2013-present.
- Social Science Editor**, *Natural Hazards Review*, October 1, 2017-present.
- Book Review Editor**, *Journal of Comparative Public Policy*, 2006 – 2014.
- Member, Editorial Boards**, *Earthquake Spectra*, *Administration & Society*, *Journal of Contingencies and Crisis Management*, *State and Local Government Review*.
- Member**, *Scientific Board*, *Global Earthquake Model*, 2010 – 2015
- Member**, Panel to review Cyber Security Governance, National Academy of Public Administration, March 2014- April 2015.
- Member**, Panel to review National Weather Service Operations, National Academy of Public Administration, November 2, 2012 – April 5, 2013.
- Member**, Katrina Task Force, American Society for Public Administration, 2005 – present.
- Member**, Site Visit Team, Engineering Research Centers Program, National Science Foundation to Center for Collaborative Adaptive Sensing of the Atmosphere, University of Massachusetts, Amherst, 2008, 2009, University of Oklahoma, 2010.
- Member**, Review Panels, National Science Foundation, 2008, 2009, 2010, 2011, 2012, 2013. 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021,
- Member**, Review Panels, Department of Homeland Security. 2013-2014.
- Member**, Earthquake Engineering Research Institute Reconnaissance Team, Padang Earthquake, Padang, Indonesia, October 8 – 13, 2009.
- Invited Lecturer**, Japan International Cooperation Agency Training Course for International Disaster Managers, Kobe University, Kobe, November: 2004, 2005, 2006, 2007, 2008, 2009, 2010.
- Member**, Mosher Award Committee, American Society for Public Administration, 2005-2006
- Member**, Ethics Committee, American Political Science Association. 2003-2006.
- Reviewer**, *American Political Science Review*, *Public Administration Review*, *Administration & Society*, *Journal of Public Administration & Theory*, *Journal of Public Policy & Management*, *Earthquake Spectra*, *Public Administration Quarterly*, *Publius*, *Disasters*, *Policy Studies Review*, *International Journal of Mass Emergencies and Disasters*, *American Review of Public Administration*, *European Journal of Policy Studies*.

SELECTED PUBLIC SERVICE

- Member**, Public Safety Pillar, Local Government Academy, Pittsburgh, PA. 2009-2017.
- Participant**, Region 13 Counter-terrorism Task Force Community Group, 1998-2017.
- Member**, Public Policy Committee, Earthquake Engineering Research Institute.
- Presenter**, “Hurricane Katrina: Test of Policy and Practice in Disaster Response” at Flood Symposium, *Weathering the Storm: Lessons from Hurricanes Ivan and Katrina*. Friday, September 15, 2006, Wyndham Garden Hotel, University Place, Pittsburgh, PA. Sponsored by the University of Pittsburgh Graduate School of Public Health, Center for Public Health Preparedness
- Chair**, Board of Directors, Emergency Information Infrastructure Partnership, 2000-2005.
- Member**, Emergency Information Infrastructure Planning Group, co-sponsored by the National Emergency Managers Association and the Federal Emergency Management Agency, 1996 – 2000.
- Presenter**, Demonstration of a Prototype Interactive, Intelligent Spatial Information System, Engineering District 2, Pennsylvania Department of Transportation, Clearfield, PA, October, 2007 and Bureau of Highway Transportation and Safety Engineering, Harrisburg, March 7, 2008.

Presenter, Demonstration of a Prototype Interactive, Intelligent Spatial Information System, Co-Principal Investigator with S.K. Chang, Federal Emergency Management Agency, Washington, DC, September 25, 1995

Presenter, Demonstration of a Prototype Interactive, Intelligent Spatial Information System, with S.K. Chang, at the Information Technology and Communications Conference, co-sponsored by the Federal Emergency Management Agency and the National Emergency Managers Association, Mt. Weather, VA, August 22-24, 1995

Member, Sub-committee on Information Technology, Advisory Committee to the Federal Emergency Management Agency, 1994-1996

FELLOWSHIPS AND HONORS

2020 Don K. Price Book Award, Science, Technology, and Environmental Politics Section, American Political Science Association.

2020 Fred Riggs Lifetime Achievement Award, SICA, American Society of Public Administration, April 3, 2020

Phi Beta Kappa, Honorary Member, Macalester College, 2017

Distinguished Citizen Award, Macalester College, 2016.

Visiting Scholar, Middle East Technical University, Ankara, Turkey, May-June, 2014

Recipient, Provost's Award for Mentoring, University of Pittsburgh, 2008

Fellow, National Academy of Public Administration, Elected November 2006

Fellow, Fulbright Senior Scholar, Instituto de Investigación y Formación en Administración Pública. Universidad Nacional de Córdoba, Córdoba, Argentina, August 12 – 26, 2006.

Invited Member, XIIth Meeting of Experts, United Nations Programme on Public Administration and Finance, United Nations, New York, NY, July 31 - August 11, 1995

Invited Member, National Review Panel on Fire Administration, National Academy for Public Administration, Washington, DC, 1993-1995

Invited Member, National Review Panel on Federal Policy on the Seismic Retrofit of Buildings, National Academy of Public Administration, December 1996-October, 1997.

Nominee, Excellence in Mentoring Award, University of Pittsburgh, 2006-2008.

Who's Who of American Women, 1996

Nominee, Excellence in Teaching Award, Graduate School of Public and International Affairs, 1995-1996

Who's Who in the East, 1994

International Who's Who of Women, 1990

Teaching Excellence Award, Graduate School of Public and International Affairs, University of Pittsburgh, 1989-1990

Sigma Xi, University of Pittsburgh, 1986

Who's Who in the West, 1982

Predoctoral Fellowship for Dissertation Research, Council on West European Studies, Yale University, 1972

University Fellowship, Yale University, 1962

Pi Sigma Alpha, University of California, Berkeley, 1957

Sorptionist Fellowship for Graduate Study in Political Science, North Central Region, 1956

Pi Gamma Mu, Macalester College, 1956

Izaak Walton Prize for Conservation, Macalester College, 1956.

PROFESSIONAL AFFILIATIONS

American Political Science Association
American Society for Public Administration
Association of Public Policy and Management
American Association of Advancement of Science
Public Management Research Association
Earthquake Engineering Research Institute
Society for Risk Analysis

LANGUAGES

German, Spanish, French: Intermediate Skills.

Italian: Basic Skills.

Japanese: Beginning.

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