MONITORING BUSINESS RESILIENCE AFTER EARTHQUAKES: EERI’S PILOT PROGRAMS IN CA AND OK

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ABSTRACT

Earthquake Engineering Research Institute (EERI) developed a resilience-based framework for monitoring community resilience after earthquakes. Based on this framework, an interdisciplinary workgroup composed of engineers and social scientists developed a series of surveys and deployment strategy to monitor business resilience over time. The surveys allow quick data collection of building damage right after the earthquake and monitoring of business impact and recovery over time. In this presentation, we discuss the resilience-based framework, its application on tracking business resilience, and pilot studies in Napa, CA and Cushing, OK. We describe a technique for integrating baseline information (i.e. geographic information, epicenter, ground shaking intensity, etc.) with random sampling of businesses in the study area before the reconnaissance. With the help of GIS, Google map, and on-line smart phone based survey platform, the EERI reconnaissance team was able to effectively and timely collect information on building damage and business impact after the Cushing, OK earthquake.

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