

Region hit hard by 1993 floods showed economic resiliency, study indicates

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With the first wave of clean-up efforts behind them, residents of communities affected by this year's Midwest floods may find hope in a University of Illinois study on the economic impact of the 1993 flood that devastated much of the same region.

"Viewing the regional economy as a whole suggests significant economic resiliency to the flood," according to U. of I. urban and regional planning doctoral student Yu Xiao. Her recently completed dissertation focuses on adjustments in the local labor market and overall economic impacts of the 1993 flood on 516 Midwest communities. Xiao's research also includes an in-depth case study of Grafton, Ill., a tourist town at the junction of the Mississippi and Illinois rivers that was singled out by the Federal Emergency Management Agency for its flood-mitigation and recovery efforts.

Despite having the distinction of being the costliest U.S. flood of the 20th century – resulting in \$20 billion in economic losses – the 1993 flood "caused very minimal or only temporary negative economic impacts in the year of the event, measured by gross domestic product, the unemployment rate and the number of businesses," Xiao said. "Two years after the event, there were no discernable aggregate effects on these economic indicators at the regional, state and county levels."

And amid all the mud, muck and destruction, there were even a few silver linings.

According to Xiao, who presented her research findings earlier this month at the Association of Collegiate Schools of Planning-Association of European Schools of Planning Joint Congress in Chicago and at the Annual Hazards Research and Applications Workshop in Broomfield, Colo., the gross domestic product of counties that experienced flood damage in 1993 received a "significant boost in 1994."

She also noted a "sharp drop in unemployment levels in the Midwest one year after the flood, possibly owing to increased job opportunities for clean-up and reconstruction and recovery-related sales." In addition, counties with high rates of out-migration in 1993 saw reciprocal rates of in-migration the following year, "possibly caused by displaced flood victims returning to their counties of residence," she said.

While such findings may be cause for optimism for those still mired in recovery efforts resulting from this year's flooding – as well as for those who may be impacted by future disasters – Xiao's research revealed that there's actually more to the economic-recovery picture in many communities than what appears on the surface.

"Her overall finding is that places are resilient, but they don't necessarily recover to what they once were," said professor Ed Feser, who is Xiao's adviser and the interim head of the department of urban and regional planning. "The economic impacts are discernible but mostly went away quickly in the aggregate." Yet, he added, "the aggregate outcomes often mask changes in the distribution of activity in specific places."

For example, Feser said, "Grafton has a very different social and demographic mix today than before the flood."

Xiao credits the Clinton administration's quick response in earmarking funds for the Midwest's recovery, noting that total federal assistance covered more than a quarter of the flood losses. However, she said, "red

tape" thwarted recovery efforts for residents and business owners alike.

"Government business assistance programs, such as the Small Business Administration loans, were infrequently used by Grafton's business owners because of the amount of paperwork required to access funds and time lags in processing applications," Xiao said.

Communitywide, the rebuilding process took more than five years. During that time, she said, many residents – especially those at the lower end of the economic spectrum, with fewer options for affordable replacement housing – had no choice but to leave the area. That, in turn, affected the return of certain businesses.

One such example was a mom-and-pop-style grocery/hardware store that had been within walking distance of a mobile-home park, which was not rebuilt as originally planned. Xiao interviewed the store owner, who said it took two years to get the store running again.

"Before the flood, he had a successful business and hired seven people," she said. "His building and inventory were both shot (after the flood). He started his business again, but because the population had shrunk so much, not many customers were coming in. He could only afford to hire one or two employees back, and still didn't make ends meet. He just couldn't withstand the frustrations, so he filed for bankruptcy."

Grafton's population base never returned to its previous level of 950. Today, there are 25 percent fewer residents. The new base includes a number of transplants, attracted by new housing developments built on the city's bluffs.

That changing demographic, Xiao said, "is more inclined to shop at Wal-Mart or Macy's in nearby communities, rather than a small, local grocery." And while commercial businesses have moved in to fill voids

left when previous businesses failed, the nature of the enterprises have shifted, in part to serve the needs of the tourist trade.

Xiao said her research points to a variety of strategies that communities and government agencies might adopt to better respond to and recover from floods or other natural disasters such as earthquakes and hurricanes. "For businesses, the message is that they should think in terms of newly emerged situations instead of just going back to the way things were. That will never happen."

For governmental agencies providing assistance, "the process for distributing government loans needs to be improved – speeding up the process and cutting through red tape," she said. "The quicker you can determine the relocation process, the more likely the community will be more cohesive in the end."

In addition to its implications for communities and governments, Xiao's work is also notable for its contributions to the field of disaster-recovery research.

"Existing literature only looks at community or business reorganization, treating these separately," she said. "In my work, I try to understand how community recovery efforts and business recovery efforts are interrelated."

Another contribution to the field is the development of new evaluation models.

"We don't have very good methods for understanding what is happening," she said, noting that existing methods are "very crude."

"Instead of looking at a community alone, I try to look at 'twins' – communities with similar pre-flood economic climates, geographic

structures and similar social dynamics, and controlling for those factors.

"That way I can measure the flood effect only, instead of – for instance – effects of an economic recession, and use this better method to tease out the flood effects separate from other variables. In the field of disaster research, this type of controlling for other factors has been weak."

Source: University of Illinois at Urbana-Champaign

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