

National Center for Disaster Preparedness

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RECOVERY
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AT THE **CROSSROADS** OF **LONG-TERM RECOVERY:**

JOPLIN, MISSOURI SIX MONTHS AFTER THE MAY 22, 2011 TORNADO

A Case Study

Recommended Citation

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About the National Center for Disaster Preparedness

Founded in 2003, the National Center for Disaster Preparedness (NCDP) is an academically-based resource center at Columbia University's Earth Institute dedicated to the study, analysis and enhancement of the nation's ability to prepare for, respond to, and recover from major disasters, including terrorism. The NCDP has a wide-ranging research, training and education, and advocacy agenda, with a special interest in megadisasters. NCDP staff and faculty have testified at Congressional hearings, conducted briefings for senior government officials, and have presented at numerous scientific conferences and meetings.

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PEOPLE INTERVIEWED FOR THIS REPORT

Public Sector/Emergency Management

- **Steve Castaner**, Branch Chief, Long-Term Community Recovery, FEMA Region VII
- **R. Mark Rohr**, City Manager
- **Keith Stammer**, Director, Joplin - Jasper County Emergency Management Agency

School System

- **C.J. Huff**, Superintendent, Joplin Schools
- **Ashley Micklethwaite**, President, Board of Education, Joplin Schools

Medical /Health System

- **Gary Duncan**, President and CEO, Freeman Health System
- **Dan Pekarek**, Director, Joplin Health Department
- **Gary Pulsipher**, President and CEO, St. John's Regional Medical Center
- **Terry Wachter**, Vice President of Mission, St. John's Regional Medical Center

Business Community

- **Christine Bryant**, Membership Director, Joplin Area Chamber of Commerce
- **Jane Cage**, CFO/COO Heartland Technology Solutions and Co-Chair, Citizens Advisory Recovery Team (CART)
- **Kim Cox**, CEO, Ozark Gateway Association of Realtors
- **Tonya Sprenkle**, Vice President, Joplin Area Chamber of Commerce

Faith-Based Organizations

- **Lowell Lane**, Director of Operations, Joplin Family Worship Center
- **Cliff Mansley**, Pastor, New Creation Church of Joplin
- **Jay St. Clair**, Community Outreach Minister, College Heights Christian Church

NGOs

- **Bruce Bailey**, Executive Director, Americorps St. Louis
- **Wendi Douglas**, Executive Director, Carthage Convention and Visitors Bureau and President, Jasper County Community Organizations Active in Disasters
- **Michelle Ducre**, Director of Development, Southwest Missouri Region, Community Foundation of the Ozarks
- **John Joines**, CEO, Economic Security Corporation of Southwest Area
- **Lisa Knutzen**, President, Board of Directors, Community Foundation of Southwest Missouri
- **Tammy Walker**, Director of Community Development, Economic Security Corporation of Southwest Area

EXECUTIVE SUMMARY

In December 2011, researchers from Columbia University's National Center for Disaster Preparedness (NCDP) interviewed key officials and community leaders in Joplin, Missouri in order to document the major themes of the recovery effort approximately six months after the May 22 tornado. That disaster killed 161 people and injured 1,500 others. It destroyed or severely damaged a major hospital and much of the health infrastructure, ten public school buildings, about 7,500 homes, 523 small businesses and several major big box stores. It displaced one third of the population of 50,000.

Various factors offered a favorable foundation for recovery. This disaster did not entail massive disruptions to basic utilities or massive ongoing threats to public safety or public health. As the tornado largely missed the retail hub, it mainly spared the city government's fiscal base (but it had a much more significant impact on the real estate tax-dependent school system). The scale of physical destruction and loss of life "felt" large to residents, resulted in a widespread identification with the suffering of those who had experienced losses, and elicited a large and enduring national outpouring of assistance and support from all sectors of society.

Post-tornado Joplin exhibited barely any polarization or political conflict over the direction and control of recovery. Many informants noted that both the Midwestern and Christian character of the community had made residents come to each other's assistance on a massive and sustained basis. The business and faith-based communities were well-established partners with each other and with local government. Prior collaborative efforts related to downtown redevelopment, increasing high school graduation rates, promoting regional economic development, and recovering from periodic major ice storms and lesser tornados, had accustomed diverse stakeholders to working with each other. A highly involved and visible governor, who spearheaded state-led disaster relief funding, was another noteworthy factor. Finally, our informants had immense confidence that both the economic strength and social values of their community had survived the tornado intact.

Within a few weeks to a few months of the storm, four critical actions and accomplishments oriented Joplin towards a positive recovery trajectory. First, city government coordinated the US Army Corps of Engineers' removal of three million cubic yards of debris (more than the total resulting from the destruction of the World Trade Center) in a mere 68 days. Second, the school system assembled replacement facilities that allowed the public schools to reopen on schedule only 85 days after the disaster. Third, the sponsor of the destroyed hospital committed to build a new, comparable size facility in Joplin and retain its workforce in the area until the new hospital was built. The city's other major hospital both ramped up its service level dramatically and accelerated a significant physical expansion. Fourth, a group of civic leaders and interested citizens organized the Citizens Advisory Recovery Team ("CART") within two weeks of the tornado, as a platform for long-term recovery planning. Consisting of volunteers from a broad cross section of the community, CART received technical, logistical and operational support from FEMA. At the end of a four-month community engagement and brainstorming process, CART delivered to the City Council a series of recommendations leaning heavily towards elements of the physical environment that would be susceptible to change and improvement as part of the reconstruction process. These included the location and nature of commercial and mixed use districts; residential building, design and energy efficiency standards; sidewalks and bike paths; new schools and school tornado shelters; a trail system; and a memorial. Shortly thereafter, the Mayor charged a task force consisting of representatives of the public school system, the business community and the city government with narrowing down the recommendations and figuring out how to implement them.

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In addition, the same network of non-profits and churches that had mobilized to assist victims of prior disasters sprang into action. Various parties assembled home sites, donated building materials and volunteered their labor—in aggregate nearly \$1.6 million—for seven new homes whose construction was broadcast nationwide on the program Extreme Makeover: Home Edition. Major benefactors such as the Jolie-Pitt and Danforth Foundations, Rush Limbaugh and Sheryl Crow jump-started a plethora of relief and redevelopment funds. The Governor's office rapidly announced funding for long-term community mental health needs, housing, economic development and fiscal relief. Joplin also experienced an influx of two to three volunteers for every permanent resident of the city.

Six months after the tornado, Joplin's recovery had made significant strides, but appeared to be at a crossroads. Local leadership across all sectors faced hard decisions about how to apply millions of dollars of federal and state redevelopment grants and tax incentives and philanthropic donations. They also had to deal with long-term community mental health issues, maintain a level of intensity and involvement among a population that already had endured so much, sustain the cooperative atmosphere of the first six months, and minimize contention as specific resource allocation decisions were made.

introduction

In December 2011, two researchers from Columbia University’s National Center for Disaster Preparedness (NCDP) conducted informal, loosely-structured interviews of 60-90 minutes with local officials and community leaders in Joplin, Missouri.

A third colleague, an acute care pediatric specialist, interviewed health care providers and school system personnel for a companion study of the pediatric care system’s response to the tornado.¹ Our objective was to document the major threads and themes of the recovery effort at approximately six months after the killer tornado of May 22, 2011—to present a snapshot of recovery at six months, so to speak.

We used a combination of reputational and nomination sampling to identify the types of stakeholders likely to be motivated or required by their jobs or societal roles to participate actively in long term recovery activities. We also relied upon newspaper coverage prior to our visit and recommendations from other Joplin residents. Unless otherwise indicated, we derived all of the information in this report solely from the interviews and did not independently confirm respondent information. We interviewed the people identified at the beginning of this report, usually one on one, but occasionally in groups of two or three.² We digitally recorded all interviews with our subjects’ consent, and obtained a professional transcript of each recording. We subsequently reviewed the transcripts without employing content analysis software.

The physical backdrop of Joplin at six months beyond the tornado offered revealing markers of progress, particularly to the member of the Columbia team who had visited the Gulf Coast six-month after Hurricane Katrina. Debris had long since been cleared away, and the only visible evidence that evoked the concept of “devastation” was the wreckage of St. John’s Regional Medical Center, Joplin High School and the odd, teetering house that had not yet been demolished. As none of us ever had been to Joplin before, the block upon block of empty lots, or lots with slabs or foundations, interspersed with randomly placed new homes under construction, seemed more like a virgin area

being developed for the first time than the remainder of what had been a densely built up and heavily populated area.

We knew upon arriving in Joplin that a number of crucial steps towards recovery already had been completed, in addition to the removal of virtually all of the rubble. The public schools had reopened in mid-August after a frantic summer scramble to assemble temporary facilities. Brad Pitt, Angelina Jolie and former U.S. Senator John Danforth had donated \$1 million among the three of them to seed major relief and economic development efforts. The long-standing Community Organizations Active in Disasters had stood up a Long Term Recovery Committee, as it had after recent ice storms and much smaller tornados, and begun the arduous tasks of case management and meeting basic human needs for thousands of displaced households. Both the Tulsa affiliate of Habitat for Humanity and Extreme Makeover: Home Edition had come to Joplin and erected new homes amid much fanfare.³ A FEMA-assisted long term recovery planning process recently had wrapped up and made an important presentation to the Joplin City Council. Missouri’s governor Jay Nixon had been spending a substantial amount of time in Joplin to offer financial and moral support, most recently at an emotional six month commemoration ceremony. Much, in short, already had occurred.

In our background reading we had been particularly struck by the seeming absence of rancor among the Joplin citizens and leaders whose stories had made their way into the national media. We’d been impressed and moved by the stories of fantastic heroism, selflessness, and creativity among the people who had held the community together in the initial weeks after the tornado. We’d been intrigued by the prideful pledges we’d seen on various Joplin recovery

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introduction

websites, that Joplin was going to show the rest of America how to do recovery right. And we'd made a note to ourselves to pay close attention to how the six month milestone affected the population's level of energy, commitment, civility and collaboration.

It was apparent by the end of our visit that in selecting this particular group of informants, we had ended up focusing perhaps disproportionately on just one dimension of long term recovery, i.e., the portion assisted by FEMA's Emergency Support Function #14. This was the Citizens Advisory Recovery Team, as discussed at length in this report. We gave relatively little attention to business recovery activities through the Joplin Area Chamber of Commerce or

other business-oriented organizations. Likewise to the disaster case management, social and human services-oriented activities of the Long Term Recovery Committee created by the Jasper County Community Organizations Active in Disasters. Finally, although many of the people we interviewed mentioned that the state government had been extraordinarily helpful in innumerable ways, we did not have an opportunity to meet with anyone from the State Division of Economic Development or the State Housing Task Force during our time in Joplin. It is likely that this report does not completely represent the state government's support during the first six months after the tornado.

summary of MAJOR DAMAGES/LOSSES

On May 22, 2011, the City of Joplin, Missouri and some of its surrounding communities lived through one of the worst tornados in U.S. history.

In the prior sixty years there had been only 56 tornados in the United States registering as EF-5, and a storm of that strength had not touched down in Missouri since 1957.⁴ The official National Weather Service report described the Joplin tornado as follows:

“The tornado was rated EF-5 on the Enhanced-Fujita Scale, with its maximum winds estimated at more than 200 mph. The path of the entire tornado was 22.1 miles long and was up to 1 mile in width. The EF-4/EF-5 damage path was roughly 6 miles long...and generally ½ to ¾ of a mile wide along the path.”⁵

The EF4-EF5 damage path, known as the “scar zone,” was entirely within the City of Joplin, and catastrophic damage occurred to many sectors of the city. Various eyewitness accounts from Joplin report that the tornado touched ground for an incredible 22 minutes, leading to its characterization as a “grinder.” Public officials and local medical institutions consistently report that the storm killed 161 people and injured at a minimum 1,000 to 1,500 others. These deaths resulted in a fatality rate comparable to that from Hurricane Katrina.⁶

Joplin, with a permanent resident population of approximately 50,000 is the regional economic hub for a multi-county region that covers parts of Missouri, Oklahoma, Kansas, and Arkansas. City officials regularly report that the city’s daytime population swells to as many as 250,000 people who come to work, shop, and take advantage of the city’s health, medical and educational services and cultural amenities. The tornado totally destroyed one of the two major hospitals in Joplin, 367-bed Mercy St. John’s Regional Medical Center. It leveled or severely damaged large portions of the community’s health infrastructure, including medical offices, six nursing homes, two dialysis centers, eight mental health facilities serving

varied populations, four home health care agencies, a hospice agency and a detox center.⁷ It produced more than three million cubic yards of rubble.⁸

During its rampage through Joplin, the storm destroyed six of the public school system’s school and administration buildings and badly damaged four others.⁹ It totally destroyed approximately 4,000 homes and severely damaged approximately 3,500 others, accounting collectively for 34-38% of the city’s total housing stock.¹⁰ In so doing, it displaced close to one third of the city’s entire population (estimates range from 14,000 to 17,000 people), killed many household pets and separated others from their owners.¹¹ According to one estimate, in the weeks following the tornado, 1308 pets were sheltered, of which 522 were reunited with their families and 745 adopted.¹²

Informants told us that the path of the storm disproportionately destroyed rental units. One reported that rentals constituted 80% of all units destroyed and damaged.¹³ Other informants indicated that as many as 4,000 of the 14,000-17,000 total residents displaced were lower income individuals.¹⁴ The tornado also destroyed 116 subsidized rental units owned by Joplin Housing Authority. Almost immediately the rental market vacancy rate dropped to zero as displaced households absorbed all available units. In early December 2011, the rental market was so tight that word of mouth had largely supplanted formal listings as the mechanism to ration the rare units that became available.¹⁵

According to the Joplin Area Chamber of Commerce, more than 500 businesses sustained damage from the tornado, of which about half were totally destroyed, and roughly one-third were Chamber members. At the six month marker, the Chamber estimated that at

summary of MAJOR DAMAGES/LOSSES

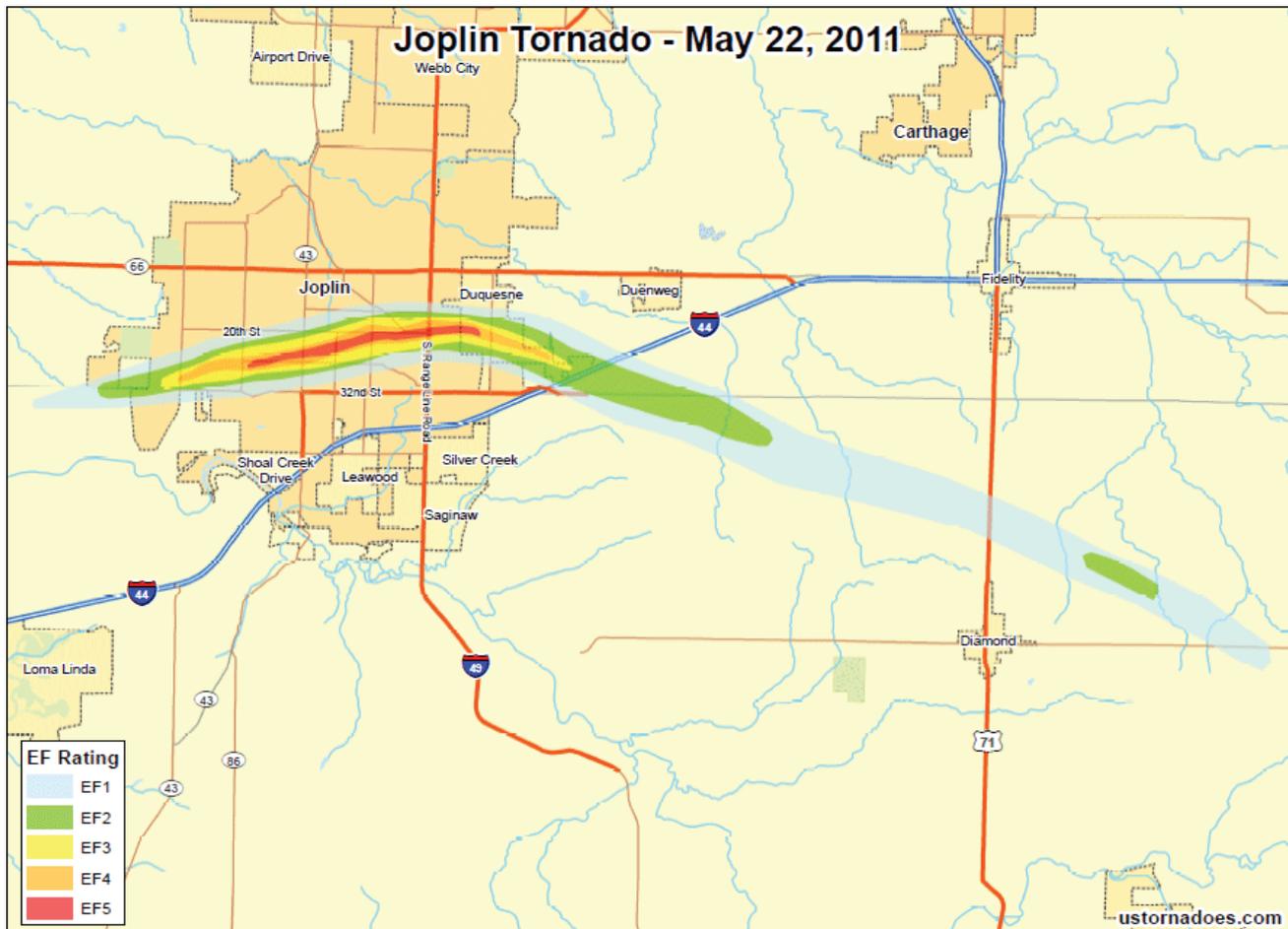
least 400 of the damaged businesses had reopened at their original location or somewhere else locally, 40-50 were at the permitting or rebuilding stage, and another 30 did not intend to reopen.¹⁶ The Chamber knew the status of all but approximately 30 of the affected firms. In addition to many small businesses, the Walmart and Home Depot big box stores along Range Line Road—anchors of the retail strip that is the core of the city's economic base—were totally destroyed.¹⁷ Estimates of the temporary job losses associated with all of these business disruptions ranged from as low as 1200 to as

high as 4500.¹⁸

The NCDP team did not search out testimony about the disaster's mental health impacts, but in mid-November, Joplin mental health professionals told a national conference that they already had observed a number of unsettling trends which they attributed at least in part to widespread trauma. These included significant increases in suicides, child sexual abuse, alcohol and drug use, domestic violence, problem gambling, rapes and criminal arrests, generally.¹⁹

Figure 1

Joplin Tornado Map, May 22, 2011 (Source: United States Tornadoes, <http://www.ustornadoes.com/2013/05/22/joplin-missouri-ef5-tornado-may-22-2011/>)



the context OF RECOVERY

Recovery obviously does not occur in a vacuum or on a blank slate. Numerous environmental and other pre-disposing factors strongly influence the way a community perceives and confronts its recovery challenges and the resources the community can marshal for that purpose.

This section describes three sets of factors that appeared significant to the NCDP observers: (1) the **nature of the damage** sustained by different sectors of the community, (2) the **social and political environment** of Joplin, and (3) the broader **community's pre-tornado experiences**. Our overall impression was that these factors, collectively, created a favorable foundation for recovery. It is important to keep in mind that our focus in this study begins long after the intense period of search and rescue, of performing life-saving medical procedures, clearing the roads, of restoring electricity and water, of reuniting families and saying farewell to those loved ones that were lost.

The Nature of the Damage

As daunting as the challenges facing the City of Joplin have been all around, this disaster fortunately did not entail massive disruptions to basic utilities—electricity, gas, water and sewer—or massive threats to public safety or public health. While the municipality itself lost two fire stations and a police station and various pieces of public safety equipment, it did not lose its command center or its city hall, nor did it suffer any long-term damage to its telecommunications facilities. Even more importantly, the storm's intensity actually spared most underground utilities, by snapping trees like twigs rather than uprooting them en masse. Steve Castaner, the FEMA representative for Emergency Support Function 14, told us, "What we've seen [i.e., FEMA] in other disasters is that trees are so uprooted, which destroys all of this infrastructure underground. And that's a huge burden to overcome long-term because you don't see it. [Local officials] say, 'well, we can't turn on the water because we've got all these lines broken. Or we can't turn the water on because all

the sewer lines are broken. And there's nowhere for it to go. We don't know where it's all broken. It's going to take months for us to figure all that out.'" Reflecting on the May 22 Joplin tornado, Castaner noted that from his perspective as the lead FEMA representative to Joplin for ESF #14, he did not perceive damage to underground utilities as one of the most significant problems.

As much damage as the tornado did to the city's business community and a few spots along the Range Line Road retail district, it saved its worst fury for assets that did not generate a significant portion of the city's revenue—the housing stock, the schools and St. John's Regional Medical Center. During the 2009 and 2010 fiscal years, property tax revenues had made up less than 1.25% of the city's total revenues.²⁰ In contrast, sales and motor vehicles taxes made up 45-50% of total revenues. Thus the impairment of assessed valuation caused by the destruction of so many homes and businesses did not fundamentally challenge the city's ability to operate and pay its bills. In fact, as of NCDP's visit, the City Manager had observed a modest increase (10-15%) in sales tax revenues.²¹ Given the surge of permitting for repairs and reconstruction that began almost as quickly as the city cleared away the debris, municipal fee revenues also likely increased quite significantly.

The facts that the municipality itself sustained a manageable amount of physical damage and did not appear to have taken a huge hit to its revenue stream were very positive factors for recovery. As traumatic as the events were to members of municipal government on a personal level, the threats to municipal government's continued functioning were not as great

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the context OF RECOVERY

those faced by either the public school system (which lost much of its physical plant and for which property taxes made up about one third of total revenues for the 2009-2010 and 2010-2011 school years) or the regional health care system (which lost nearly half of its acute care hospital beds in an instant).

Without minimizing the challenges and burdens that municipal officials faced month after month, they were not, it appeared to us, placed in perpetual crisis mode. They did not need to worry as much as officials in other disaster locales about the city's ultimate economic viability or its solvency, or face a period of months without being able to demonstrate palpable,

tangible improvements in physical conditions, or respond to a continuous exodus of overtaxed or overwhelmed citizens. As they did not have to invest 100 percent of their efforts to restoring a water or sewer system or preventing the outbreak of infectious disease, the political and administrative leadership of Joplin was able to devote a substantial portion of their personal resources—physical, emotional and political—to promoting and participating in various broad-based recovery efforts in the larger community.

While the tornado did not impose upon the City of Joplin (or, as it turned out, either the school system or the health care system) physical damage beyond

Figure 2

Residents of Joplin, Mo, walk west on 26th Street after a tornado hit on Sunday evening, May 22, 2011. (AP Photo/Mike Gullett)



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its means to handle, the damage to housing exposed systemic underinsurance among both owners and renters. Director of Emergency Management Keith Stammer reported that the great majority of the people who were totally uninsured were renters rather than homeowners. Kim Cox, the CEO of the regional board of realtors, said that after all the FEMA “temporary housing units” were delivered, installed and occupied, her organization sent a team to do a five to six question survey of the tenants. Virtually all of them had been renters before the tornado, and 91% of them had no renters’ insurance. Many informants raised the specter of dispossessed residents having insufficient

funds to rebuild or to acquire the means of furnishing a new rental. As will be discussed later, various community based efforts in Joplin already were attempting to address some of this shortage in private insurance by mobilizing massive donations of household items, construction materials, and volunteer labor to rebuild and repair what insurance would not pay for.

Approaching six months after the disaster, several informants reflected palpable concern about both the psychological consequences of that milestone and how the pace of recovery would impact individual residents’ decisions to remain in, or return to

Figure 3

A man carries a young girl who was rescued after being trapped with her mother in their home (AP Photo/Mike Gullett)



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Joplin. In the words of Gary Duncan, then the CEO of Freeman Health System (the hospital system that did not suffer extensive physical damage), "I think we're going to know a lot more next spring [Spring 2012] about whether or not people stay, because psychologically, post disaster trauma or stress...really hits at about six months. We're in that zone now where we're going to see if people are finally going to go 'Okay, I've had enough of this, I'm out of here,' or if we are going to be able to keep them in place...If the jobs don't come back soon enough, they could leave town and I don't think we know what's going to happen yet." The scale of physical destruction and loss of life "felt" large to residents. According to Jane Cage, a Joplin businesswoman who served as a co-chair of the Citizens Advisory Recovery Team, "Everybody in Joplin, almost, knows somebody who died. I mean everybody knows someone who lost his house, it's unavoidable." This reflected a widespread identification with the losses throughout the city.

Finally, the scale of this disaster relative to the physical geography of Joplin may have elicited a larger and more enduring outpouring of assistance and support from all sectors of society than would have met a smaller scale disaster. In this regard, Keith Stammer noted that the May 22 tornado proved "It is quite possible to have a disaster that's too big to fail."

The Social and Political Environment

Intense polarization or political conflict often constrains recovery in post-disaster settings.²² In our Joplin interviews, we saw virtually no evidence of such conflict in the city's civic or political culture. There was no evidence of a well-developed network of community-based organizations or interest groups that asserted, aspired to, or contested leadership or political influence. Our informants did not make disparaging or backhanded remarks about other sectors of the community. They unanimously were confident that Joplin's elected officials would act with dispatch to pursue the

recovery strategies that citizens had proposed during fall 2011, and that they would not purposefully defer critical recovery decisions until after April 2012 local elections.

While disputed political terrain undoubtedly exists in Joplin as it does everywhere else, it appears to be a less significant factor in recovery in Joplin than in other communities. Michelle Ducre, the Southwest Missouri Director of Development for the Community Foundation of the Ozarks, in comparing Joplin to her home town of New Orleans, said, "I don't see the politics or the red tape or the craziness. [New Orleans is] still not fully recovered because of the silliness that's going on. [In Joplin], I'm the outsider looking in. I'm not a native of the community. But here's what's so cool. If you want a seat at the table you pretty much have it. There's not been anybody that I've seen in the seven years I've been here denied access to the process if they wanted to be a part of it."

Several informants noted that the community generally has a "take care of yourself, don't wait around for others to take care of you" approach to life. Gary Pulsipher, the CEO of Mercy St. John's Regional Medical Center put it this way: "there is a little bit of a Midwestern kind of spirit...that it's just up to you. You can't expect a lot of people to come in and help...this is the hand we've been dealt so let's just move on. You can complain and whine about it, but it's just what we have to do so let's get after it." In the words of the City Manager Mark Rohr, "I grew up in Ohio. And I thought Ohio was conservative, [but] Ohio looks like California compared to Missouri. So you're not going to get a lot of fluffy stuff...there's a real conservative pragmatic nature."

Many people expressed the belief that it was the Christian character of the community (at least as much as the Midwestern character) that had made Joplin residents come to each other's assistance on such a massive and sustained basis, essentially without regard to

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what state and federal government had done. Joplin is an environment in which faith-based organizations appear to be acknowledged and recognized as routine, dependable and essential actors in the delivery of

social services, and as partners of local government and the schools. As described in the following section, before the disaster, local churches had been significant partners of both city government and the public

Figure 4

A resident salvages items from a devastated Joplin, Mo. home. St. John's Regional Medical Center in background. (AP Photo/Charlie Riedel)



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school system in ongoing projects and programs. As Jay St. Clair, the community outreach minister for a local church pointed out, “this faith component, this undercurrent that was there before [the tornado], that was building. The tornado has stirred that up...it didn’t create it, it just stirred up what was already there and magnified it.”²³

At least two major meetings of the Citizens Advisory Recovery Team were hosted by local churches. Faith-based organizations also have been a major source for tapping into both volunteer labor and donations of cash and materials on a regional and national basis, and played a leading role in disaster case management (as they do in many areas of the country). Wendi Douglas, the president of Jasper County Community Organizations Active in Disasters, put it this way: “I would say churches are almost like a triage center for the disaster victims. They’re able either to meet survivor needs or send them where they need to be. Churches are able to say, ‘Here’s what we have for you today, you might want to try this location or that location.’ And I think that they do that spiritually as well. Maybe a minister or a counselor at the Church would interview somebody who has issues and then establish if they need to keep meeting at that location or if they need to see a licensed professional.”²⁴

Joplin is an environment in which the business community, as embodied in the Joplin Area Chamber of Commerce, is a full partner with local government in local and regional economic development. According to its website, the Joplin Chamber was one of thirty-eight chambers in the United States (out of a total of 6,936) to receive the highest level “five-star” accreditation from the United States Chamber of Commerce. According to membership director Christine Bryant, it has held that five-star rating for the last twenty-five years. Its membership includes approximately 1,000 firms, 80% of which have fewer than ten employees. It has a strong regional focus that is reflected in programs like the Joplin Regional Prosperity Initiative—an

economic growth initiative initially focused on Missouri’s Jasper and Newton Counties but now expanded to include another five counties in Missouri, Kansas and Oklahoma for which Joplin is the regional economic center.²⁵ Our Joplin Chamber informants believe that as a result of its regional relationships, other regional chambers spontaneously offered them aid after the tornado, when 178 of the Joplin Chamber members were devastated and many suspended their dues payments. Several of these sister chambers bought one-year courtesy memberships in the Joplin Area Chamber of Commerce in order to help buffer its loss of revenues. Others loaned staff to help the Joplin Chamber assist its devastated members.

Without exception, our informants had immense faith in the power and durability of Joplin. The tornado had not, in their view, fundamentally diminished or impaired the retail economic engine that makes Joplin the regional hub for southwest Missouri and the surrounding counties in Kansas, Oklahoma and Arkansas, a fact reflected in the data that the permanent resident population of Joplin is close to 50,000, whereas the average daytime population is between 250,000 and 270,000.²⁶

A highly involved and visible governor was another noteworthy factor. Before NCDP’s fieldwork, we had learned of Democratic Governor Jay Nixon’s rapid efforts to procure an array of state funding to assist in Joplin’s long-term recovery. That included funds for the massive debris removal and for a pediatric trauma treatment facility, low income housing tax credits and other housing subsidies. It also included state income tax credits to encourage voluntary donations to several relief funds designed to assist local businesses (see the section “Marshaling Recovery Resources”). A January 2012 Joplin Globe article reported that Governor Nixon had been to Joplin sixty-seven times since the tornado, or every three and a half days on average.²⁷

the context OF RECOVERY

Governor Nixon's personal attention to Joplin appears even more significant in light of the fact that Joplin and the surrounding counties had voted overwhelmingly for his Republican opponent (approximately 60%) in the 2008 General Election, that Republican candidates for the U.S. House of Representatives recently have garnered local majorities of 65-75%, and that Republican candidates for the district seats in the Missouri legislature periodically run unopposed.²⁸

Gary Duncan, then CEO of Freeman Health System, recalled a particularly upbeat exchange between Governor Nixon and Joplin civic leaders: "The governor was a huge part of the momentum down here. He was here every other day. He was saying 'Let's get 'er done.' In fact, I remember at one meeting he said, 'I haven't overruled so many regulations in all my life as the last three weeks.' And we sat up and gave him a hand and said, 'Right on, Governor. Keep it up. Keep it up.'"

Prior Experiences That May Have Helped Joplin Act Quickly and Effectively

The Columbia researchers observed evidence that prior collaborative efforts among different sectors of the community had, at a minimum, accustomed diverse stakeholders to working with each other and, at best, created genuine relationships of trust and mutual reliance. It appears that whether as a matter of policy or by good fortune, many elements of the Joplin community have subscribed to the dictum of Rob O'Brian, president of the Joplin Area Chamber of Commerce: "A disaster is no place to form relationships."²⁹

Joplin's downtown renewal began in 2001 with a formal planning process that involved much citizen participation and culminated in a formal downtown revitalization plan. In the last decade, many storefronts along Main Street have had facelifts that

preserved and restored architecturally distinctive features. In addition, the community has embraced and supported a monthly "ThirdThursday" when downtown stores with limited regular hours open for business and restaurants stay open late, accompanied typically by an art walk, food vendors, and live music. Various downtown-oriented civic groups have emerged to promote a more vibrant downtown. City Manager Mark Rohr suggested that the history of public participation in downtown revitalization was a precursor to the Citizens Advisory Recovery Team (CART) that emerged in June 2011 to consider a long-term disaster recovery strategy. "...The downtown... was extremely run down a few years ago," said Rohr, "and now – it looks nice. It's not a full commercial success, which I acknowledge, but it's better than what it was. But what that has done is it showed people possibilities."³⁰

Bright Futures has two key elements. One is a clearinghouse mechanism, in which teachers and other school system employees identify resources that individual students need: the school partners, in response, attempt to satisfy those needs. The second element involves customized programs in which the partners provide their schools' students with mentoring, tutoring, reading assistance, volunteers to support school and parent-teacher organization activities and trips, and in which churches incorporate prayer for their partner schools in their services. Based upon how well Bright Futures has been received locally, the Joplin Schools shared the framework with other school districts and ultimately set up a stand-alone 501(c) (3) corporation called Bright Futures USA to disseminate the concept nationally.³¹

We also heard from Jay St. Clair about what he considered a very successful pre-tornado collaboration between the City of Joplin and the College Heights Christian Church, where he is the community outreach minister. It involved an area known locally as "the Last Resort," described by St. Clair as "the epicenter

the context OF RECOVERY

of drug activity and prostitution and violence” in that section of Joplin, a person’s “last stop before jail or the streets.”³² This collaboration entailed church acquisition of a small apartment building through a 501(c)(3) corporation called “God’s Resort,” the creation of the city’s first “neighborhood improvement district,” neighborhood clean-up and home improvements by church volunteers, repairs to streets, sidewalks and streetlights, increased police presence and increased social services.³³

As a result of a recent unfortunate history of major ice storms and relatively small tornados, the Joplin area has an existing association known as Jasper County Community Organizations Active in Disasters (COAD), established in 2005.³⁴ COAD is an all-volunteer organization with 25-30 permanent members, 10-15 active members, but no paid staff or public funding.³⁵ Its mission is to “mitigate, prepare, respond and recover” from disasters. Year in and year out, it has conducted monthly or quarterly meetings. On the “prepare” side of its mission, COAD worked actively with the City of Joplin and Jasper County emergency management department in pandemic flu education and training.³⁶ For the COAD, mitigation typically means things like trimming trees in anticipation of ice storms, cleaning household chimneys, etc. COAD handles the “recovery” portion of its mission by standing up a Long Term Recovery Committee (LTRC) when there is a calamity. The function of the LTRC is to meet individual and household needs above and beyond what is available from the whole panoply of government disaster assistance programs—a combination of providing case management and marshaling private resources. As described in the section “Marshaling Recovery Resources,” the Long Term Recovery Committee was constituted within days of the May 22 disaster.

Other existing collaborative relationships across diverse elements of the community also likely set the stage for various recovery-related activities. The contractual arrangement whereby the Joplin Area

Chamber of Commerce performs economic development functions for the City of Joplin, along with the previously mentioned Joplin Regional Prosperity Initiative led to the creation of, and strongly influenced the deliberations of the “economic development sector” of the Citizens Advisory Recovery Team.³⁷ The Jasper and Newton Counties Community Health Collaborative—an association that includes Joplin’s two major hospital systems, the city and county health departments, the United Way and other organizations interested in promoting the “Healthy People” agenda of the U.S. Department of Health and Human Services—has been active since 1999 in coordinating efforts that foster walking, healthy eating and cessation of smoking.³⁸ The Collaborative operates within the framework of The Alliance of Southwest Missouri, a state-recognized umbrella organization for approximately 200 non-profit organizations in Jasper and Newton Counties that work to “strengthen families and prevent unhealthy and unsafe behaviors.”³⁹ Several informants told us that for at least 15 years, an informal association called the Joplin Ministerial Alliance has promoted cooperative relationships among Joplin’s numerous denominations and churches, primarily through monthly prayer meetings of the participating pastors.⁴⁰ Finally, the public school system had conducted a leadership training program several months before the tornado. This eight-session, 30-hour program had provided a comprehensive overview of the challenges facing the public schools to a diverse cross-section of approximately 30 community leaders from the business sector, health care systems, faith-based organizations, charitable organizations and local government.⁴¹ As discussed under “Catalytic Recovery Efforts,” this leadership program helped both the school system and other community leaders respond energetically to the school superintendent’s challenge to begin the 2011-2012 school year on schedule.

major RECOVERY MILESTONES

The Joplin Tornado Recovery Chronology (Table 1) lists many of the major decisions that parties had made by the time of our visit, and extends that forward to early May 2012 based upon media coverage.

TABLE 1. JOPLIN TORNADO RECOVERY CHRONOLOGY (2011-2012)

DATE	# DAYS AFTER THE TORNADO	EVENT
2011		
May 22	0	Tornado
May 22	0	Joplin Tornado added to existing Presidential Disaster Declaration DR-1980.
May 24	2	FEMA Opens First Disaster Recovery Center in Joplin.
May 24	2	School Superintendent announces schools will reopen August 17 on time.
May 24	2	Long Term Recovery Committee Established as subcommittee of COAD; fund account created.
May 25	3	Sisters of Mercy Health System announces it will build new hospital in Joplin to replace destroyed St. John's Regional Medical Center, and that it will attempt to keep many St. John's employees in the Mercy System until then.
May 27	5	Bright Futures Joplin and other organizations establish RebuildJoplin.org.
May 30	8	Community Foundation of Southwest Missouri establishes Joplin Tornado First Response.
May 30	8	Freeman Health Systems decides to accelerate build-out of floors 5& 6 in Freeman West and add other expanded capacity.
Jun 10	19	Jolie Pitt Foundation donates \$500,000 to Joplin Recovery Fund.
Jun 20	29	Danforth Foundation donates \$500,000 to Joplin Tomorrow Foundation.
Jun 24	33	State Department of Economic Development allocates \$7 million of Missouri business income tax credits to encourage \$14 million of donations to Joplin Area Chamber of Commerce Business Recovery Loan Fund, Joplin Tomorrow Foundation and other recovery programs.

major RECOVERY MILESTONES

TABLE 1. JOPLIN TORNADO RECOVERY CHRONOLOGY (2011-2012) (CONTINUED)

DATE	# DAYS AFTER THE TORNADO	EVENT
Jun 30	39	Citizens Advisory Recovery Team (CART) holds first formal meeting.
Jul 5	44	City of Joplin and FEMA announce that up to 346 temporary units to be installed at site near regional airport.
Jul 6	45	Governor Nixon announces \$2 million allocated for new Child Trauma Treatment Center in Joplin.
Jul 12	51	First CART Community Input Meeting.
Jul 19	58	Governor Nixon announces \$90 million of low income housing tax credits over ten years.
Aug 1	71	Governor Nixon announces that State of Missouri will absorb entire non-federal share of debris removal.
Aug 5	75	First families move into FEMA temporary housing units near airport.
Aug 7	77	Joplin completes removal of 3 million cubic yards of debris, in time to quality for 90% federal share.
Aug 9	79	United Arab Emirates announces donation of \$1 million to help give every Joplin HS student a personal computer when school reopens.
Aug 16	86	Second CART Community Input Meeting.
Aug 16	86	Mercy System announces location of new hospital.
Aug 17	87	Joplin public schools open on schedule for the 2011-2012 school year.
Sep 13	104	The Community Foundation of Southwest Missouri awards \$300,000 from the Joplin Recovery Fund to a variety of NGOs active in provision of social, human and legal services.
Oct 19 (week of)	150	Builders and approximately 13,000 volunteers erect seven new homes in connection with television program Extreme Makeover: Home Edition.

major RECOVERY MILESTONES

TABLE 1. JOPLIN TORNADO RECOVERY CHRONOLOGY (2011-2012) (CONTINUED)

DATE	# DAYS AFTER THE TORNADO	EVENT
Nov 7	169	CART presents its recommendations, "Listening to Joplin," to City Council, which accepts the report and charters an "Implementation Task Force" to develop a plan of action to move forward (see 1-19-2012).
Nov 9	171	Walmart store destroyed in tornado reopens for business.
Nov 30	192	Joplin Council approves first eight projects for assistance with Low Income Housing Tax Credits.
Dec 1	193	Reopening on Main Street of "Dude's Donuts," a community institution in business for 57 years.
Dec 31	223	Lilly Endowment, Inc. of Indianapolis grants \$1.5 to the Community Foundation of Southwest Missouri to promote home construction and rebuilding.
2012		
Jan 4	227	City of Joplin announces it has issued building permits for the repair and reconstruction of more than half of all the homes destroyed 5-22-11.
Jan 4	227	FEMA awards \$20 million to support construction of new Mercy Hospital Joplin and nearly \$2 million to Joplin Schools for various repair and construction projects.
Jan 10	233	Ozark Center dedicates "Will's Place," the pediatric trauma center announced in early July.
Jan 11	234	Home Depot store destroyed in tornado reopens for business.
Jan 19	242	At a joint meeting of the Joplin City Council, the Joplin Board of Education, the board of directors of the Joplin Area Chamber of Commerce and the Duquesne Board of Alderman, all four bodies unofficially endorse the recommendations of the Implementation Task Force.
Jan 20	243	Joplin awarded \$45.2 million for recovery from supplemental Community Development Block Grant appropriation.
Jan 29	252	Demolition commences on St. John's Regional Medical Center.
Jan 30	253	Ozark Center, Freeman Health System's mental health operation, reopened the last of the eight facilities damaged or destroyed by tornado.

major RECOVERY MILESTONES

TABLE 1. JOPLIN TORNADO RECOVERY CHRONOLOGY (2011-2012) (CONTINUED)

DATE	# DAYS AFTER THE TORNADO	EVENT
Mar 5	288	White House announces that President Obama to deliver address at Joplin High School graduation ceremonies.
Mar 8	291	The Community Foundation of Southwest Missouri awards \$1.5 million from the Joplin Recovery Fund to a local consortium to build 100 homes largely with volunteer labor.
Mar 13	296	Freeman opens fifth floor in Freeman Hospital West Hall Tower.
Mar 19	302	Joplin City Council, following on CART Implementation Task Force Recommendations, adopts changes to its zoning and building design guidelines.
Apr 2	316	After receiving letters of interest from six firms, City of Joplin enters into formal negotiations with a Texas real estate development company to act as "master developer" to initiate up to \$800 million of redevelopment projects for the City.
Apr 3	317	Voters in the Joplin School District approved a \$62 million bond issue to fund the construction of new schools to replace those destroyed by tornado.
Apr 12	326	Governor Nixon gives special approval enabling Mercy Health System to build a custom interstate highway interchange for new Joplin hospital.
Apr 18	332	Joplin Tornado First Response Fund opens for first round of funding applications.
Apr 27	341	City of Joplin makes final curbside pickup of residential debris (after this date, homeowners must cart debris themselves to approved disposal sites).
Apr 5	349	City of Joplin opens a new fire station that had been approved before the tornado, viewed as an expansion of capacity rather than as a replacement for the two destroyed by the tornado.

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Within days of the tornado many different elements among the Joplin community made critical decisions that have had a profound impact on the course of recovery: creating and sustaining momentum, encouraging people who lost their homes to stay in the area and rebuild their lives in Joplin, and fostering public support for specific programmatic initiatives. This section discusses the major recovery decisions and actions that were most significant to our informants.

Expedited Debris Removal

The City of Joplin, in collaboration with FEMA, the U.S. Army Corps of Engineers, the Governor, the Missouri National Guard, and other state agencies moved heaven and earth to remove the estimated three million cubic yards of tornado debris within 68 days.⁴² This amount of debris was slightly more than the amount resulting from the destruction of the World Trade Center on September 11, 2001 (and about 7% and 3% of the debris resulting from Hurricanes Andrew and Katrina, respectively).⁴³ On May 29, the federal government originally had committed to pick up 75 percent of the debris removal costs incurred through August 7, 2011 (75 days after the tornado). This effectively left 68 days during which the federal government would absorb the lion's share of the cleanup costs. The urgency to meet that deadline only increased when the federal government increased its share of costs incurred by August 7 to 90 percent.⁴⁴

This effort, referred to as "Expedited Debris Removal," had several ramifications. First, the effort saved the city and state government millions of dollars, by accomplishing most of the debris removal during a window when the non-federal matching share was reduced from 25% to 10%. Furthermore, the tangible evidence that all levels of government were working to clear the decks at a breakneck pace encouraged homeowners and other real estate and business owners to move forward with their reconstruction and rebuilding planning. Several informants also believed that the

rapid clearing of lots contributed to the city government's decision to lift what had been an unpopular 60-day moratorium on new construction (but not repairs) that began June 23. Lifting the ban in turn contributed to a public perception that government would support and encourage rather than stymie their efforts to restore their properties.⁴⁵

The removal of virtually all debris by early August also had an undeniable positive psychological impact. As noted before, the empty appearance of the scar zone at six months evoked a newly-annexed area that was being developed for the first time. This was in sharp contrast to the "war zone" analogy that many of our informants (and media reports) used to describe central Joplin in the weeks immediately following the storm. The removal of constant reminders of destruction allowed residents, developers, planners and other government officials to visualize the possibilities for rebuilding, improvements and renewal.

Comparing the efficacy of the city government in December 2011 to during the debris removal period, City Manager Mark Rohr observed, "We're in control, but it's less control than we had before. And let me explain what I mean by that. I can make you clean your lot up [but] I can't make you rebuild your property. What I can do is try to give you some level of confidence that your neighbor is going to rebuild his property and things are going to come back and things are going to be all right. So my role and the city's role at this point is to try to present as much stability to

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Figure 5

Expedited Debris Removal, Before and After (Suzanne Everson/FEMA)

24th and Kentucky Avenue – Joplin, Missouri



first week of June, 2011



first week of August, 2011

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you and to let you know how things are going to come back and how things are going to be better in certain respects so that you feel comfortable being part of the masses that are going to rebuild. So we're in charge, but it's actually, ironically enough, less control than we had during debris removal."⁴⁶

School Reopening Decision

Less than 48 hours after the tornado Dr. C.J. Huff, the schools superintendent, announced that the public schools would reopen for the 2011-12 school year on

schedule, in just 85 days. By the time Huff made this announcement, he and his senior staff already had obtained a physical assessment of what facilities the school system had lost—six of ten schools severely damaged or destroyed, including Joplin High School. Although some of his information later turned out to be inadequate (and the damage was greater than he originally thought), this rapid damage assessment was critical in his determination that the school system had enough resources left to cobble together a package of facilities by August 17. Ashley Micklethwaite, then

Figure 6

Joplin High School football team before their home-opener, September 2011. (AP Photo/Paul Sancya)



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president of the Board of Education, confirmed that Dr. Huff made this announcement without consulting with the Board.⁴⁷

Huff and his team met the August 17 deadline with a 95% student retention rate, indicating that the school system had lost only slightly more students than it typically did over summer vacation.⁴⁸ Several informants specifically mentioned that Huff's decision to reopen schools on time not only motivated high levels of community participation, but probably kept many people from moving out of the area.⁴⁹

When asked why he was comfortable making such an ambitious commitment in the depths of the post-storm chaos, Huff recalled his thought process: "It was important to start our schools on time for a number of reasons. One of them was to get our kids out of the rubble as soon as we possibly could, get them in safe places, and start doing the mental health assessments that needed to be done and providing what support we could to kids and families."⁵⁰ He also made it clear that his decision to make this pledge was based upon a high degree of confidence that he had a strong and deep network of supportive relationships throughout the community that would enable the school system to make good on it.

Huff indicated that the school district had been engaged in major facilities planning activities for months before the tornado, and already had thought through many of the projects it is now beginning to put into place, including safe rooms in all the schools. "We'd been talking about 21st century education prior to the storm and what new facilities need to look like. Now it's actually gotten easier from the standpoint that we get to create the vision. We already had a vision but now we've really solidified what we want the vision to look like. Now we can build the building around that vision as opposed to trying to fit the vision into an existing box. We did a lot of strategic planning prior to this. We'd been having dialogue around facilities and programming with our community. We all know what

they want us to do. So 95 percent of the deliberation already had happened before May 22nd."⁵¹

According to Huff, the school district was well into a long-term construction program when the storm hit, and this also played a big role in his decision to reopen on schedule. "We had the relationships there. We'd just been through two and a half hard years of construction projects with three brand new middle schools. We had relationships with architects and general contractors and knew their capacity and what they were capable of accomplishing." This also extended to relationships developed with city permitting, fire and health officials. "If there was ever a roadblock I just had to make a phone call and say 'hey, we're getting hung up on this one, can you help us out?' It would be taken care of within the minute."⁵²

Ashley Micklethwaite, the President of the Board of Education, expressed essentially the same sentiment: "The [School] Board knows our City Council members and vice versa. We know our city manager. We have informal dinners with them. We didn't have to build those bridges...that trust was already there. Our board trusts our administrators. We trust each other. There's not a lot of internal politics and fighting for the most part. It rears its head up every once in a while. Especially as people get tired. But what we had in place allowed us to do what we did."⁵³

Other Joplin Schools Actions

Although the decision to reopen the schools on time was the most ambitious commitment the Joplin Schools made, it was not their only significant decision in the immediate aftermath of the storm. With the health and safety of the district's children in mind, the school district decided not only to hold summer school on schedule, but to extend that program from its normal termination on July 4 through the end of July, and to provide transportation for the students for the first time. According to Huff, the district did not know at the time (and still did not know as of our interview)

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whether any state or federal agency ultimately would reimburse the district for these extraordinary expenses. They made the decision to dip into the school system's emergency reserves anyway.

During the summer, families that had lost their homes to the tornado and relocated outside of the city limits learned that Joplin Schools would provide their children free transportation to attend what would have been their neighborhood school in Joplin. According to Huff, the schools had made good on that offer to students living in the FEMA temporary housing near the regional airport, as well as in Galena, Kansas and Neosho, MO.⁵⁴ The CART co-chair Jane Cage reported that "at least 400 kids" were receiving free transportation under this program.⁵⁵ This was another instance where the school system subordinated certainty of reimbursement to what it perceived as the right thing to do for its children and their families.

During fall of 2011, as the school system was struggling to adapt to the temporary physical plant it had assembled over the summer, give the students an educational experience that was as close to normal as possible under the circumstances, and address the emotional trauma of students who had experienced the tornado, the system decided to offer a first time "winter camp" in association with the YMCA and Boys and Girls Clubs. This full-day, meals-included program for grades K-12 ran for the eight school holidays bracketing Christmas. The district pursued this largely out of concern, based upon historical evidence, that the holidays would see a significant uptick in child abuse and neglect.⁵⁶

For all that the school system did to provide safe havens for its student population and to provide motivations for parents to keep their families nearby while the system rebuilt itself, Huff and the Board of Education did not overlook the concerns of the teachers and school system staff. Soon after the tornado, despite the hit taken by the property tax base that generated a substantial portion of the school

system's revenue, Huff informed the entire district staff that he and the Board would not revisit the previously approved 2011-2012 school year budget or lay off anyone.

Health Systems Decisions

Within the first week to ten days following the tornado, the two major hospitals in Joplin announced decisions that were significant not just for their own organizations but also for local government and for individuals, businesses, non-profit organizations and faith-based organizations considering what Joplin might look like at the end of the recovery process.

In a matter of days, the CEO of the Sisters of Mercy Health System (Mercy), the owner of the destroyed St. John's Regional Medical Center, announced that the system would build a new, comparable size hospital in Joplin. Mercy also offered the St. John's professional staff strong financial incentives to stay in the area and in the Mercy "family" until the new hospital was up and running and ready to employ them. Mercy announced the site of the new hospital in August.⁵⁷ Later that month, as it proceeded with planning for the demolition of St. John's, Mercy began discussions with Joplin Schools and the city government about donating portions of the St. John's site for a new school building and a new city park, respectively.⁵⁸

Under Mercy's so-called "talent share" program, other regional units of the Mercy System could employ displaced St. John's staff at those facilities' normal rates, and Mercy made up the difference between what the person had been earning at St. John's and what the other Mercy unit paid them.⁵⁹ This spared many of St. John's nearly 2500 employees the prospect of unemployment, relocation or a reduction in income.⁶⁰

St. John's management strongly encouraged its staff to exhaust all possibilities for finding a temporary position in a regional Mercy System facility—even if that entailed a long commute—before proposing to

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participate in the Talent Share program through a competitive hospital.⁶¹ All but a handful of St. John's staff members found a posting in another Mercy unit, to the chagrin of Mercy's Joplin competitor, the Freeman Health System, which had a great need to augment its staff.⁶²

Mercy had been trying to restructure and reposition St. John's since acquiring control of that facility eighteen months before the tornado; issues included certain competitive disadvantages, an older building with primarily double-occupancy rooms, and a demoralized staff.⁶³ Abruptly, the tornado forced Mercy to remedy its St. John's problems in a newly-designed and conceived facility as opposed to within an existing physical plant. This is similar to the challenge and opportunity the tornado offered the school system. Fortunately for Joplin, Mercy was well covered by insurance for both physical damage and business interruption at St. John's Regional Medical Center. St. John's CEO Gary Pulsipher estimated that insurance would cover significantly more than half of the cost of constructing the new hospital and supporting the St. John's staff for three years within the talent share program.

Furthermore, Mercy had the corporate, system-level resources to dedicate what amounted to a SWAT team of analysts and executives to make the fast decisions to remain in Joplin and offer security to the professional staff. Gary Pulsipher's remark, "I can't imagine trying to do that as a stand-alone hospital," underscored that Joplin's recovery may have benefitted from the fact that it was his own hospital that was destroyed rather than nearby Freeman West, which was not part of a large multi-state network of hospitals.⁶⁴

The Board of Directors of Freeman Health System, which was shouldering (and would continue to bear) the brunt of the loss of hospital capacity, also quickly declared its intentions. Within one week, Freeman decided to begin building out floors five and six in the Freeman West Hospital Hall Tower Building, which

would add as many as 58 private beds. Freeman already had been considering when and how to deploy those unfinished floors, but the loss of the St. John's capacity, the stresses that placed on Freeman as the sole surviving acute care hospital in Joplin, and Mercy's decision to build a new hospital—one with many more single-occupancy rooms—caused Freeman to accelerate its build-out of floors five and six. In that same period shortly after the tornado, the Freeman Board also decided to immediately set up a twelve-bed step down intensive care unit and add twenty more psychiatric beds at Freeman Hospital East.

The CEO of Freeman Health System, Gary Duncan, expressed some frustration that even though "people realize that Freeman's really pumping out the service here," his organization's yeoman efforts to serve the community since the destruction of St. John's had not garnered nearly the same degree of positive buzz as Mercy's periodic announcements related to the construction of the new hospital.⁶⁵ It was evident from several informants' remarks that the two hospital systems are intensely competitive, and in more than just a business sense. FEMA's Steve Castaner perceived that "the two-hospital dynamic here runs to the bone in this community. It drives a lot of decisions."⁶⁶ Explaining how (if at all) this rivalry between two of the region's most venerable institutions and largest employers has impacted the recovery process so far is beyond our data, but an extremely interesting question for future research.

Extreme Makeover: Home Edition

A number of parties collaborated to assemble the sites, building materials and labor to build seven homes through the television program *Extreme Makeover: Home Edition*. According to John Joines of Economic Security Corporation of Southwest Area, his organization assembled approximately \$95,000 of funding to acquire eleven 50-foot wide lots on a single street. More than half of that amount came

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from the Congressionally-chartered Neighborhood Reinvestment Corporation (doing business as NeighborWorks America) and the remainder from other donors.⁶⁷ The City of Joplin consolidated those properties and then re-subdivided them into seven 75-80 feet wide lots in order to satisfy the requirements of Extreme Makeover. All the building materials and labor were donated. The seven new homes

were constructed over the period of one week in late October, with an average cost basis (including \$13,000 for each site) of roughly \$225,000.⁶⁸ Even without assigning any value to the efforts of the Extreme Makeover production team, this project represented an aggregate donation of nearly \$1.6 million. It also provided the city with a lot of positive national publicity.

Figure 7

Joplin residents stand for a moment of silence during a memorial service. (AP Photo/Charlie Riedel)



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Many of our informants observed that Joplin benefitted from a large network of connections to financial and human resources with which to pursue reconstruction, rebuilding and recovery in general.

That network included the Sisters of Mercy Health System based in suburban St. Louis, which provided the resources not only to replace St. John's Regional Medical Center but to supplement the income of most of its displaced work force for an extended period of time. It also included the Missouri state government. Within two months of the tornado, Governor Nixon's office announced in rapid succession state funding addressing long-term community mental health needs, housing development, economic development and the fiscal burden of the debris removal process.

Celebrities and philanthropists with personal ties to southwestern Missouri made signature donations to support recovery efforts, and numerous individual and corporate donors followed suit. The Ozark Gateway Association of Realtors and the Joplin Area Chamber of Commerce received financial and material contributions from sister organizations from across Missouri and out of state. Economic Security Corporation of Southwest Area played a major role in assembling the funding for acquisition of the "Extreme Makeover" building sites and, as the administrator of the Jasper County Housing Authority, in providing rental units to families dispossessed when the tornado destroyed Joplin Housing Authority units. Several prominent local organizations (including Joplin Schools, Economic Security Corporation and the Joplin Area Chamber of Commerce) collaborated in quickly bringing online the RebuildJoplin.org clearinghouse to facilitate the matching of needs and resources, while numerous local non-profit organizations and churches activated their own regional and national networks to mobilize donations of cash, materials and volunteers.

Within a few months of the Columbia team's visit, federal agencies also had contributed substantially to

the recovery effort. HUD awarded Joplin more than \$45 million for recovery from a supplemental appropriation of Community Development Block Grant funds in January 2012, and FEMA awarded more than \$125 million to various Joplin entities under the Stafford Act's Public Assistance Program. The remainder of this section highlights the primary non-federal financial contributions to the recovery effort.

Major Philanthropic Actions

On June 10, the Jolie Pitt Foundation donated \$500,000 to the Joplin Recovery Fund established by the Community Foundation of the Ozarks (CFO). CFO created this fund to "focus on the mid- to long-term redevelopment efforts of non-profits working on the civic, economic, human services and educational needs created by the disaster."⁶⁹ In its first round of awards (September 13, 2011) the Joplin Recovery Fund disbursed a total of \$300,000 to local not-for-profit organizations.⁷⁰

On June 20, former U.S. Senator from Missouri John Danforth announced a \$500,000 donation by the Danforth Foundation to the Joplin Tomorrow Foundation, a new entity whose goal was to raise \$10 million to help tornado-impacted businesses recover and attract new businesses into the region. Donors to the Joplin Tomorrow Foundation also are eligible for credits against Missouri business income tax obligations (see "Major Recovery Funding from the State of Missouri").

Other major philanthropy included a \$100,000 donation to the city by radio talk host Rush Limbaugh, \$130,000 realized through the auction of a vintage Mercedes that singer Sheryl Crow donated to the

marshaling RECOVERY RESOURCES

Joplin Schools, and a matching gift of \$130,000 from the people who purchased the donated vehicle.⁷¹

These were the largest individual gifts. Michelle Ducre of the Community Foundation of the Ozarks explained, however, that since the tornado, donors had established approximately fifteen new funds for various purposes and beneficiaries, all to be held and disbursed through CFO.⁷²

One of the first (and, in the view of many informants, more important) web-based portals for mustering resources for tornado relief and recovery was “Rebuild Joplin,” a spinoff from the Joplin Schools’ “Bright Futures” program mentioned before. Building upon the clearinghouse component of Bright Futures that matches needs and resources, rebuildjoplin.org became a major online venue where aid seekers could indicate “we need this” and aid providers could indicate “we have this available.”

According to school superintendent C.J. Huff and former Board of Education President Ashley Micklethwaite, the Bright Futures Advisory Board created this portal within 72 hours of the storm.⁷³ Another respondent confirmed that “Rebuild Joplin” went live online within a week of the tornado. Although primarily a clearinghouse, the Rebuild Joplin website also gave people the option of donating cash. Informants from the Joplin Area Chamber of Commerce indicated that their organization had helped ensure that the website gave special prominence to charities and NGOs well-known to the Chamber, among the roughly 50 places listed where people could make cash donations.

Major Recovery Funding from State of Missouri

This support included:

- \$2 million for a new pediatric mental health center, in anticipation that the community—in particular

children--would experience long-lived impacts of the trauma sustained May 22 and that there would be a long-term need for treatment services. Governor Nixon announced this funding July 6, 2011. The facility, run by Freeman Health System’s mental health services affiliate The Ozark Center, opened January 2012 as “Will’s Place.” It was named for a young man killed in the storm on the way home from the Joplin High School graduation.⁷⁴

- A \$122 million package of state assistance to stimulate the construction of new rental and owner-occupied housing.⁷⁵ The centerpiece of this package was the availability of \$90 million of low income housing tax credits (LIHTC) for new housing development in Joplin. This represented \$9 million per year (\$4.5 million of Federal tax credits and \$4.5 million of Missouri tax credits) for 10 years. Before NCDP’s visit to Joplin, local media covering proposals for such subsidized housing developments already had reported on the appearance of “not in my backyard” type sentiments.

Kim Cox, the CEO of the Ozark Gateway Association of Realtors mentioned that already in early December, barely one month after the Citizens Advisory Recovery Team had completed its planning process and offered recommendations for a long-term strategy to the Joplin City Council, the facts on the ground might compromise the city’s ability to take advantage of the low income housing tax credits. Individual homeowner decisions to repair or rebuild their damaged or destroyed homes, and developer purchases of newly vacant lots already had resulted in \$100,000 new homes going up next to \$300,000 new homes, and in some degree limited the impact of any new zoning or design standards the city ultimately might adopt. But those individual actions also might have comprised any developer’s ability to assemble a large enough number of adjacent parcels to support subsidized apartment developments of any scale.⁷⁶

marshaling RECOVERY RESOURCES

Another informant told us that this problem of assembling adjacent properties already was so severe that several developers, anxious to take advantage of the LIHTC, had assembled big parcels in areas outside the tornado zone, in more affluent neighborhoods where they were encountering stiff resistance.⁷⁷

- \$7 million of state business income tax credits from the Missouri Department of Economic Development, intended to stimulate up to \$14 million of corporate and individual donations to the Joplin Area Chamber of Commerce's "Business Recovery Loan Program" and the previously mentioned Joplin Tomorrow Foundation.⁷⁸ These two programs provide various kinds of financing to businesses directly impacted by the storm, and to new businesses that wish to relocate in Joplin. In general, businesses (and individuals with business income) may apply fifty percent of such donations as credits against their Missouri business income tax liability.⁷⁹
- \$50 million of state economic development bonding capacity to help Joplin area manufacturers and expanded eligibility under two state small business assistance programs.
- A commitment from the State of Missouri to absorb the full non-federal share of the debris removal, releasing the City of Joplin from that financial burden.⁸⁰

The COAD's Long-Term Recovery Committee

Having previously mounted long term recovery committees in response to several tornados, floods and ice storms, the Jasper County COAD was well-prepared to quickly organize a long term recovery committee of 50-60 organizations following the 2011 Tornado.⁸¹ Many of the NGOs and churches that were active in prior long term recovery committees had remained members of COAD, and these organizations jumped

into the newly-constituted committee. The churches have extensive networks—among themselves, regionally in and around Joplin, and nationally through their denominations. Several informants told us that local churches were instrumental in recruiting volunteers; obtaining donations from their national organizations, affiliated religious schools and individual wealthy congregation members; housing and feeding volunteers; sheltering people displaced by the tornado; and providing household goods, food, clothes, furniture, big and small appliances, cleaning supplies, clean-up crews, building materials and skilled construction labor. All of this assistance was above and beyond what people received from government programs.

An Abundance of Volunteers

By early December, Joplin had attracted, received, processed, registered, housed and fed 114,000 volunteers. City Manager Mark Rohr told us that he'd heard estimates of an additional 42,000-57,000 unregistered volunteers who went directly into neighborhoods to help out in various ways. This translates into 2-3 volunteers for every permanent resident of the city. Joplin's success in mobilizing volunteer support would itself be worth an entire study. Several factors, however, appear to have been critical to this successful mobilization of volunteer efforts.

One is the previously-discussed ability of Joplin's many churches, spanning a wide variety of Christian denominations, to tap into regional and national networks. Although we are not aware of any analysis to date of the affiliations of the registered volunteers, informant comments and local newspaper coverage suggests that a large percentage of the volunteers came as a result of a connection to a church, Bible College or other Christian organization with a presence in Joplin.⁸² Informants also told us that numerous Joplin churches recruited, housed and fed a continuous influx of volunteers.

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Barely two weeks before the tornado, the local American Red Cross chapter had entered into an agreement with Missouri Southern State University (MSSU), located just northeast of Joplin, to use MSSU's nearly 1000-person capacity dormitory (along with associated gymnasiums, the health facility, and the cafeteria) as an emergency shelter and volunteer management area. According to Joplin's emergency management director Keith Stammer, the MSSU facility provided housing for some portion of the volunteers as well as temporary emergency shelter for displaced Joplin residents.⁸³

Another factor was Joplin's proximity to St. Louis and, therefore, to the skills and resources of Americorps St. Louis and its experienced emergency response teams. The first Americorps team reached Joplin before sunrise on May 23. It immediately began organizing the processing of volunteers at the MSSU facility—registering, giving basic health and safety advice, assigning volunteers to projects and transporting them safely into Joplin and other impacted communities. The City Manager and Director of Emergency Management both lauded the well-run and efficient system that Americorps quickly established and maintained for months on end, particularly the fact that the Americorps operation largely prevented volunteers from unintentionally impeding or complicating the activities of professional responders and municipal employees.⁸⁴

Keith Stammer was effusive: "We love Americorps. Those kids came in and hit the ground like buzz saws, plus, several of them have real geek skills that would help a lot, particularly in terms of volunteer management."⁸⁵

A final factor was the region's ability to mobilize resources other than the volunteers themselves, through the many organizations that participated in the Long Term Recovery Committee, through the Ozark Gateway Association of Realtors, the Joplin Area Chamber of Commerce and others. These organizations collectively ensured that the volunteers, especially those engaged in clearing sites, cleaning and demolishing buildings, and repairing damaged structures, would not be short of the needed tools and materials.

As of our visit, local officials expected this surge of both volunteers and material to be a major financial benefit to Joplin, to the extent that FEMA ultimately would agree to apply the value of donated labor and supplies to the city's required matching share for federal assistance under the Stafford Act. A preliminary analysis by the city's finance director in January 2012 estimated that FEMA would value those amounts at nearly \$18 million.⁸⁶

the CITIZENS ADVISORY RECOVERY TEAM (CART) PROCESS

The Citizens Advisory Recovery Team or “CART” process refers to a planning process for long-term recovery that got underway in earnest in late June 2011.

The team consisted of individuals from a broad cross section of the community, including city government, the two major hospitals, the chamber of commerce, large and small businesses, the public school system, a community foundation, the real estate and builder community, banks, utilities, public health, a university and the Missouri Department of Economic Development.⁸⁷ All CART members were volunteers who also had full time jobs. Participation was in an individual capacity, not as representatives of their employers or any particular sector or segment of the community. Other than the CEOs of Mercy St. John’s Regional Medical Center and Freeman Health System, the team did not include individuals whose primary focus was the delivery of social, health or human services or disaster case management. Nor did it include people employed by churches, community-based organizations, federal agencies or advocacy groups. Notably, it included few individuals involved with the operations of the COAD or Long Term Recovery Committee.⁸⁸ It was a self-selected organization in the sense that people who already knew each other and had some comfort level with each other came together to meet a commonly perceived need. Several informants noted that City Manager Mark Rohr and Chamber president Rob O’Brian both played a key role in recruiting and organizing the team.⁸⁹

The CART process also received technical, logistical and operational support from FEMA through what had been known as “Emergency Support Function #14 (ESF #14), Long-Term Community Recovery.”⁹⁰ The Emergency Support Functions collectively are an element of the National Response Framework, the organizational structure and procedures that the federal government utilizes to deliver federal aid when

disasters occur, primarily during the crisis periods and short term recovery.⁹¹ FEMA professionals from Kansas City, Topeka, Phoenix, Seattle, Springfield (MO), Denver and Sacramento, led by Steve Castaner, Branch Chief for Long-Term Community Recovery in Region VII, provided ESF #14 support for this disaster by facilitating and supporting the CART process.⁹²

During FEMA’s earliest meetings with the individuals who ultimately would comprise CART, the focus was on the options available to them—how they could organize themselves, the varied objectives they could set, the different kinds of processes they could pursue, and the range of roles FEMA could play in any such process. According to Steve Castaner, FEMA did not push anyone in the direction of the CART process that actually occurred, but rather let the structure and process emerge organically in accordance with local preferences and capacity. CART “was a result of our communication with them on some strategies that they could use, using the FEMA ESF #14 ‘self-help guide’ and using some recommendations from our side as far as how to get set up. But they ultimately made all those final decisions.”⁹³

Based upon FEMA’s contacts with Joplin leaders during the first few weeks after the tornado, the ESF #14 team went to Joplin expecting to be dealing with a very self-directed group. According to Castaner, “We had an idea going in that they were a high-capacity community, that a relatively small number of civic leaders had lost a family member or their home, that there still was a lot of infrastructure functional in the community. So we knew going in that we probably were not going to do a formal recovery plan for them. We had a general idea that we were going to play a

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a technical assistance role, a little backroom-type role. We weren't going to be out front" as FEMA had been in other ESF #14 engagements.⁹⁴ Although Castaner and other FEMA staff had periodic direct contact with the City Manager and president of the chamber of commerce, on a day to day basis, they interacted primarily with the CART members.

Although there may have been informal CART organizational activity earlier, our knowledge begins with a June 30, 2011 meeting where the CART members divided the team into four subgroups or "sectors," and selected a chair and co-chair for each: Housing and Neighborhoods, Schools and Community Facilities, Infrastructure and Environment, and Economic Development.⁹⁵ From then until the middle of August, CART focused on obtaining citizen input. CART encouraged residents of Joplin to put forward any and all ideas for things they would like to change or improve about their city as it recovered, without consideration of practicalities or politics. A CART presentation to the City Council summarized the process as follows:

"The first citizen input meeting was held during two sessions on July 12th at Memorial 9th and 10th Grade Center and was attended by approximately 350 residents. Large white boards were stationed around the room with questions related to each sector. Residents were encouraged to write their ideas and responses on sticky notes that were affixed to the boards. The result was a 50 page booklet that contained every piece of feedback we received. Sector groups studied the responses to determine prevailing themes. The second input meeting at College Heights Christian School on August 17th allowed residents to 'vote' on priorities with dots posted underneath each theme. Officials from HUD, the EPA and the AIA (American Institute of Architects) spoke to residents to suggest how sustainable methods could be applied across all sectors as

well as possible assistance that could be received from government programs."⁹⁶

Between the first and second citizen input sessions, CART selected a chair and co-chair. Chair Jane Cage pithily described the level of expertise and commitment in the CART: "I have the City Manager, the Superintendent of Schools, the president of the Chamber, and the president of the utility company. It's a bunch of 'type A's' who like to look at the big picture but not really the details. So it's a big group to say grace over."

CART sought input other ways besides large citizen meetings. It hosted a booth at the 2011 Boom Town Days festival and at three of the downtown "Third Thursday" events.⁹⁷ Members canvassed students at the MSSU campus and attended a summer evening event at the FEMA temporary housing site near the airport. CART received approximately 1500 responses from its varied fact finding activities.⁹⁸ Beyond the public input-oriented activities, CART—with help from FEMA ESF-14—held two workshops for CART members and other citizens who participated in the four sectors even though not formally members of the team. These workshops focused on design, architectural and planning issues, and the use of decision making tools to help prioritize projects.

At the end of the citizen input phase of the process, CART members perceived pressure to get the remaining process over with quickly.⁹⁹ They felt this pressure from people and businesses with real estate decisions that they had put on hold pending the CART recommendations, and from the Mayor, who wanted the Council to be able to take some specific actions and demonstrate to the electorate that it was on the case. Jane Cage constituted an executive committee including herself and the CART co-chair, the chairs of the four sectors, plus Troy Bolander (the city's planner),

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Steve Castaner (FEMA), and Sallie Hemenway from the state Department of Economic Development. This executive committee distilled the diffuse citizen input into an overarching vision statement and a set of goals for each sector. After reviewing the results with the entire CART, the executive committee finalized a report for the City Council. CART formally presented its report, "Listening to Joplin," to the City Council on November 7. The Council made a symbolic/ceremonial gesture of "accepting" the report without endorsing it.¹⁰⁰ Table 2 shows the top recommendations for each

sector.

At this point, CART members were concerned about how to sustain momentum beyond the presentation to the Council. They were keenly aware that their report included recommendations that were completely outside the legal purview of the City government; some were the sole or primary responsibility of the school district or the chamber of commerce. Jane Cage strongly credited then Mayor Michael Woolston with proposing the solution.

TABLE 2. MAJOR RECOMMENDATIONS FROM "LISTENING TO JOPLIN," NOVEMBER 7, 2011

CART SECTOR	TOP FIVE PRIORITY PROJECTS
Housing and Neighborhoods	<ol style="list-style-type: none">1. Establish Pilot Neighborhood – Includes green space, walking ability, underground utilities, connectivity, and sense of community.2. Establish Pilot Neighborhood Houses – Include energy efficient housing, recommended building techniques, and sustainable sizing and proximity.3. Create a Neighborhood Architectural Advisory Board – Composed of city leaders, architects, builders, and community leaders; Provides expertise on best practices, would allow fast track of ideas and review of resources.4. Stricter enforcement of existing nuisance codes. Provide public awareness campaign. Review nuisance and zoning codes for possible improvements.5. Distribute city-wide educational materials regarding insurance information to the citizens, both renters and homeowners.
Schools and Community Facilities	<ol style="list-style-type: none">1. House Franklin Technical Center and new Joplin High School in one building.2. Build storm shelters within new schools.3. Provide a method for 9th graders to better assimilate into high school.4. Build a memorial to commemorate tornado and its victims.5. Develop a Center for Arts and Entertainment.

the CITIZENS ADVISORY RECOVERY TEAM (CART) PROCESS

TABLE 2. MAJOR RECOMMENDATIONS FROM “LISTENING TO JOPLIN,” NOVEMBER 7, 2011 (CONTINUED)

CART SECTOR	TOP FIVE PRIORITY PROJECTS
Infrastructure and Environment	<ol style="list-style-type: none"> 1. Require bike lanes for all new street construction where streets are functioning as a collector level or greater. 2. Install sidewalks on both sides of street in devastation zone and new developments of all types (residential, commercial, industrial). 3. Create a Joplin Creek Trail System that links into parks/green areas of all types, especially in conjunction with flood plain areas. Focus upon development of a significant trail system within our community to foster walking, jogging, running, and biking by our residents. 4. Create water retention and bio swale areas in public parks (where appropriate) to capture and slow storm water runoff. Add rain gardens with planting of native species and appropriate tree plantings. 5. Establish city-wide curbside recycling and more recycling receptacles at public facilities and events.
Economic Development	<ol style="list-style-type: none"> 1. Establish four key corridors (these were identified) for near-term and long-term commercial, multi-family and mixed use development. 2. Develop and enforce guidelines to raise the appearance, materials and landscaping of commercial construction city-wide. 3. Pursue and support the development of a medical school, possibly in partnership with Missouri Southern State University or other host. 4. Develop a Virtual Spec Building. 5. Establish and develop workforce housing projects to re-establish and maintain a quality workforce.

After the presentation, the Mayor charged an “Implementation Task Force” with setting priorities among the wish list in the report, and figuring out how to implement them. This task force consisted of the CART Executive Committee and representatives of three major constituencies:

- The Superintendent of Schools and 2 Board of Education members,

- The chair and President of the Chamber, and
- The City Manager and 2 members of the Council.

Although this had not been settled for certain as of NCDP’s visit, members of this Implementation Task Force were contemplating a single presentation to a joint meeting of the full City Council, the full Board of Education and the full Chamber Board.

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the CITIZENS ADVISORY RECOVERY TEAM (CART) PROCESS

As shown in Table 2, the recommendations in “Listening to Joplin” leaned heavily towards elements of the physical environment that would be susceptible to change and improvement as part of the reconstruction process. These included the location and nature of commercial and mixed use districts; residential building, design and energy efficiency standards; sidewalks and bike paths; new schools and school tornado shelters; a trail system; and a memorial. But there also were undeniable, if more subtle acknowledgements of other types of concerns that the community hoped to be able to address.

The priority for a formal high school orientation program for Joplin’s young teenagers to facilitate the transition from middle school reflected long-standing community concerns about the quality of public education and high school graduation rates (the same concerns that motivated and energized the Bright Futures program). The priority for insurance education stemmed from an awareness of how many homeowners and renters who experienced storm losses were either totally uninsured or greatly underinsured. The strong public desire for walking trails and bike lanes reflected a desire to create more opportunities for exercise and healthy life patterns as well as a desire to make nature more accessible.

Figure 8

CART Citizen Input Meeting (Elissa Jun/FEMA)



joplin's recovery in six months

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Joplin's recovery trajectory appeared related to a complex constellation of contextual factors, including the political and social environment, the dynamics of the local and regional economy, the competence and effectiveness of local governance (not just in the public sector but in all sectors), cultural norms regarding cooperation and competition, and prior experience with major disruptive events.

In Joplin's case, this was reflected in the Council-Manager form of municipal government and the method of electing Council members both from specific zones and at large; the fairly homogeneous Christian religious makeup of the community; Joplin's status as the economic hub of a multi-state region; the recent history with localized tornados and ice storms that resulted in an experienced COAD and prior successful long term recovery committees; a long-established chamber of commerce with strong regional connections and experience in running economic development programs; a public school system that recently had been engaged in a strategic planning process and a major construction program; a large and diverse faith-based community that had established collaborative relationships across its members and with the schools and municipal government; and the existence of two major not-for-profit health systems.

Beyond these fundamental elements, Joplin appears to have a highly competent administrative structure and processes in its day to day, normal operations. FEMA's ESF#14 staff, as mentioned previously, quickly sized up Joplin as a "high-capacity" community which had been "very successful."¹⁰¹ FEMA presumably was aware of the city government-led efforts to revitalize the downtown; of the success of the Bright Futures collaboration among the public schools, faith-based community and chamber of commerce; of the fact that the Joplin Area Chamber of Commerce was a productive economic development agent for the city and region, as well as a long-time recipient of 5-star accreditation

from the United States Chamber of Commerce; of the nearly 50-year presence of the Economic Security Corporation of Southwest Area and its success in attracting millions of federal housing and social services dollars into Joplin; of the track record of churches and social service agencies mobilizing resources to assist victims of prior smaller scale emergencies; and of the sheltering arrangement that had been established among Missouri Southern State University, the Greater Ozarks Regional Chapter of the American Red Cross and the City of Joplin as prudent preparation for a catastrophe nobody knew was coming.

Evidence of Joplin's strong pre-disaster capacity to handle its affairs is found in the second round of siren warnings before the tornado crossed the city, in the rapidity with which the city manager got up in a helicopter to assess the damage through night vision goggles and in how quickly the city's public works department cleared the streets. It is found in the haste with which School Superintendent C.J. Huff obtained an assessment of how many school buildings he had left and his confidence that the school system staff could replace the lost space in less than three months. It can be seen in the immediate and sustained efforts mounted by the Ozark Gateway Association of Realtors and the JACC to establish communications with, and assist their membership. It is found in how effectively city officials managed the U.S. Army Corps of Engineers and the contractors who removed the debris. It existed in the guise of the "Area D Multi-Agency Coordination Center" that enabled Joplin's

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emergency management team to quickly mobilize support from other local and state emergency response departments. Perhaps most of all, it's found in the incredible inventiveness and improvisation of the staffs at St. John's Regional Medical Center, Freeman Hospital West, the major EMS providers and the rest of the local medical and health care system in responding to a disaster that was beyond all mandated parameters for planning, drilling and exercising.

Like most other communities in the United States, Joplin had not invested in a diverse tool-kit specifically with recovery from a natural disaster in mind. Once the tornado had occurred, however, various members of the community rapidly activated tools and mechanisms for recovery, including the Citizens Advisory Recovery Team process, the FEMA ESF #14 technical and logistical support, the housing study commissioned by the City Manager, the Joplin Business Recovery and Expansion Initiative spearheaded by the JACC, and the request for information from potential master developers. They also promptly created conduits for the collection of external recovery assistance dollars including (among others) the Long Term Recovery Committee's assistance fund, the Community Foundation of the Ozark's Joplin Recovery Fund and First Response Fund, the JACC's Business Recovery Fund, and the Joplin Tomorrow Foundation. The State's special allocations of low income housing tax credits and state business income tax credits also fall in this category, as they were intended to direct private sources of capital towards Joplin's recovery rather than elsewhere. The network of faith based organizations and their ongoing mission activities were latent recovery capacities that the churches dramatically scaled up following the disaster.

Some academic theories of recovery assert that following a disaster, the achievement of the results that people care about most depends upon achievement of

outcomes that don't factor directly (or perhaps even consciously) into the way individuals, families and households think about their well-being. For example, in order ultimately to get new housing and jobs, to repair infrastructure, and to create an environment that citizens accept and remain bonded to, there must be continuity of the public sector. In the context of Joplin, an impaired or incapacitated local government could not have managed the debris removal, participated in a CART process, worked with state and federal government to get tax credits and grants, or evaluated competing proposals from developers.

There also must be an environment that supports households and businesses in making their independent decisions to remain, rebuild and reinvest. This does not necessarily mean that government must subsidize or attempt to steer such individual decisions in a particular direction. At a minimum, though, government must try to minimize the obstacles that complicate or frustrate individual and group initiative. It appears that the City of Joplin supported its citizens' and businesses' desires to rebuild first and foremost by removing the rubble in record time and promptly lifting the construction moratorium area by area as it became clear that construction would no longer interfere with debris removal. The leaders of the public schools and of the Mercy and Freeman health systems, through their early and dramatic decisions, did everything in their power to instill a degree of confidence that recovery would occur rapidly and to encourage fence-sitters to reinvest in homes and businesses in Joplin. The diverse community actors who contributed to the CART process, realizing that some residents, business owners and outside investors were deferring decisions until CART finished its work, completed their exercise in barely four months (July through October) under very difficult conditions.

Many disaster researchers argue that a community that

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actually articulates where it hopes a recovery process will lead and the kinds of ultimate recovery outcomes it hopes to attain will be more likely to engage in coordinated and integrated activities towards those ends after a disaster, than a community that isn't explicit about its goals. Furthermore, a community that has a strong foundation—a resilient economic base, an amenable political culture, competent and effective organizations and leaders, and a tradition of cooperation and collaboration across sectors—as well as the tools and capacities to keep all sectors operating post-disaster and to gather community input and build consensus, will be more likely to articulate its recovery objectives.

In Joplin, the CART process distilled more than 1500 pieces of citizen input into a precise, concrete, and—most participants believe—achievable set of objectives for local government, the school system, the public health system, the business community, the local non-profit network and faith-based organizations. Although Joplin's long-term recovery from a disaster that displaced close to one third of its population was just beginning as of NCDP's interviews, these CART recommendations subsequently influenced specific public and private decisions about the selection of a "master developer," zoning and land use changes, allocation of low income housing tax credits, and the disbursement of grants from some of the philanthropic funds established by donors after the tornado.

Figure 9

Spirit Tree, Joplin (Christopher Mardorf/FEMA)



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⁴ <http://www.spc.noaa.gov/faq/tornado/f5torns.html>.

⁵ Central Region Service Assessment, Joplin, Missouri Tornado - May 22, 2011, National Oceanic and Atmospheric Administration, National Weather Service, http://www.nws.noaa.gov/os/assessments/pdfs/Joplin_tornado.pdf.

⁶ The denominators are the Census estimated population of the applicable MSA in 2005 and 2011 for New Orleans and Joplin, respectively.

⁷ These statistics derived primarily from presentations at a conference entitled "Public Health & Medical Disaster Response in Action: The Joplin Story," offered by the Center for Preparedness Education at Creighton University School of Medicine and the University of Nebraska Medical Center, available at <http://www.preped.org/resources/Presentations.htm>.

⁸ Rohr Interview.

⁹ <http://www.joplinschools.org/domain/60>.

¹⁰ Rohr Interview. The range is based on Rohr's statement that the pre-tornado housing inventory was between 20,000 and 22,000 units.

¹¹ Joines and Rohr Interviews.

¹² See presentation by Ryan Nicholls at "Public Health & Medical Disaster Response in Action: The Joplin Story," <http://www.preped.org/resources/Presentations.htm>.

¹³ St. Clair Interview.

¹⁴ Joines Interview.

¹⁵ Cox Interview.

¹⁶ Bryant and Sprenkle Interview.

¹⁷ These companies opened new stores the following November and January, respectively.

¹⁸ Joines Interview and presentation by Dennis Manley at "Public Health & Medical Disaster Response in Action: The Joplin Story," <http://www.preped.org/resources/Presentations.htm>.

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- ³³ Joplin Globe, September 22, 2008, "Joplin, Church Tackling Cleanup," http://www.joplinglobe.com/joplin_metro/x212155081/Joplin-church-tackling-cleanup, and January 28, 2010, "First neighborhood project nearing end," http://www.joplinglobe.com/joplin_metro/x338298068/First-neighborhood-project-nearing-end. City of Joplin, MO, June 5, 2009. City Works with Area Groups in Neighborhood Cleanup Efforts.
- ³⁴ Douglas Interview.
- ³⁵ Douglas and Stammer Interviews.
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- ³⁷ Email communication May 4, 2012 between Tonya Sprenkle, Joplin Area Chamber of Commerce and authors.

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³⁸ Wachter Interview and <http://livesmartswmo.com/about-us/history-of-the-community-health-collaborative/> .

³⁹ <http://www.theallianceofswmo.org/about-us>.

⁴⁰ Lane, St. Clair and Wachter Interviews.

⁴¹ Huff Interview and phone conversation with Kim Vann, May 25, 2012.

⁴² Rohr Interview.

⁴³ The statistics on debris from the other disasters are from a presentation prepared in connection with the development of the Seattle UASI Disaster Debris Management Plan.

See <http://conferences.wsu.edu/forms/emergencyprep/presentations09/d7.ppt>, slide #4, AND http://www.ch2m.com/corporate/news_room/news_story.asp?story_id=432.

⁴⁴ Rohr, Mark. Joplin: The Miracle of the Human Spirit. 2012. Tate Publishing and Enterprises, LLC. Mustang, Oklahoma.

⁴⁵ Cox and Joines Interviews. In recollections published in May 2012, City Manager Mark Rohr stated that the most important reasons for his recommendation—and the City Council’s decision—to impose the 60 day moratorium related to minimizing impediments to achieving full debris removal by the August 7 federal matching deadline, and that his subsequent decisions to serially lift the moratorium in different parts of the city clearly followed the progress of debris removal on a section by section basis. Giving the CART process more time to develop citizens’ redevelopment preferences and goals by slowing down the pace of rebuilding was a secondary or tertiary objective of the moratorium. Rohr, *The Miracle of the Human Spirit*, p. 113.

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⁴⁷ Micklethwaite Interview.

⁴⁸ Huff Interview.

⁴⁹ Ducre and Knutzen Interviews.

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⁵⁶ Huff Interview.

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⁵⁷ Mercy System Press release August 16, 2011, "St. John's Mercy Reveals Site of New Hospital," <http://www.koamtv.com/story/15278492/st-johns-mercy-reveals-site-of-new-hospital>.

⁵⁸ Pulsipher Interview. See also Rohr, *The Miracle of the Human Spirit*, p. 184.

⁵⁹ Pulsipher Interview. According to John Joines of Economic Security Corporation of Southwest Area, Walmart also retained on payroll most of the staff of the destroyed Joplin store, temporarily distributing them to other Walmart stores in the region until the Joplin store reopened.

⁶⁰ Employment figure from Joplin Area Chamber of Commerce, 2010 Community Profile, p. 48.

⁶¹ Per email correspondence with G. Pulsipher May 24, 2012, only ten to fifteen St. John's employees ended up working at a unit of Freeman Health System.

⁶² Duncan Interview.

⁶³ Pulsipher Interview.

⁶⁴ Pulsipher Interview.

⁶⁵ Duncan Interview.

⁶⁶ Castaner Interview.

⁶⁷ Author correspondence with John Joines 7/10/2012.

⁶⁸ Joines Interview.

⁶⁹ Community Foundation of the Ozarks, June 10, 2011, "Jolie-Pitt Foundation Contributes to Joplin Recovery Fund," <http://www.cfozarks.org/2011/06/10/jolie-pitt-foundation-contributes-to-joplin-recovery-fund/>.

⁷⁰ Community Foundation of the Ozarks, September 16, 2011. "First Joplin Recovery Fund Grants Awarded," <http://www.cfozarks.org/2011/09/16/first-joplin-recovery-fund-grants-awarded>. The second round of Joplin Recovery Fund, 3/21/12 looked much different, and included a \$1.5 million grant to a consortium of the Long Term Recovery Committee, Rebuild Joplin and various churches, to buy building supplies that volunteer laborers would use to rebuild 100 homes. It also included a \$250,000 grant to Rebuild Joplin and the St. Bernard Project for housing activities and a \$125,000 grant to Habitat for tornado shelters.

⁷¹ Joplin Globe, August 22, 2011. "Classic Mercedes Roadster Raises \$130,000 for fund to Benefit Joplin Schools," <http://www.joplinglobe.com/tornadomay2011/x1592795395/Classic-Mercedes-Roadster-raises-130-000-for-fund-to-benefit-Joplin-schools>, and Joplin Globe, September 15, 2011. "Couple who bought Mercedes Make Their Own Donation to Joplin School District," <http://www.joplinglobe.com/local/x1660694221/Couple-who-bought-Mercedes-make-their-own-donation-to-Joplin-School-District>.

⁷² Ducre Interview. See <http://www.cfozarks.org/about-the-joplin-recovery-fund/joplin-tornado-funds/>.

⁷³ Huff and Micklethwaite Interviews.

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⁷⁴ Missouri Governor Jay Nixon News Release. July 6, 2011. "Gov. Nixon announces \$2 million to establish the Joplin Child Trauma Treatment Center," http://governor.mo.gov/newsroom/2011/Gov_Nixon_announces_2_million_to_establish_the_Joplin_Child_Trauma_Treatment_Center.

⁷⁵ Missouri Governor Jay Nixon News Release. July 19, 2011. "Jumpstart Joplin will support both immediate construction and rehab of single-family homes, as well as long-term development of both single and multifamily homes for the city's working families," http://governor.mo.gov/newsroom/2011/Gov_Nixon_announces_more_than_122_million_in_targeted_resources_in_Joplin_region.

⁷⁶ Cox Interview.

⁷⁷ Cage Interview.

⁷⁸ Missouri Governor Jay Nixon News Release. June 24, 2011. "Gov. Nixon announces \$75 million in new resources for Joplin-area businesses to assist rebuild and recovery from May 22 tornado," http://governor.mo.gov/newsroom/2011/Gov_Nixon_announces_75_million_in_resources_to_assist_rebuilding_Joplin_businesses.

⁷⁹ Missouri Department of Economic Development, "Neighborhood Assistance Tax Credit Program." <http://ded.mo.gov/upload/NAP.pdf>.

⁸⁰ Missouri Governor Jay Nixon News Release. August 1, 2011. "State will pay full 10 percent of state/local share of Joplin expedited debris removal costs, Gov. Nixon says," http://governor.mo.gov/newsroom/2011/State_will_pay_full_ten_percent_share_of_Joplin_expedited_debris_removal_costs.

⁸¹ Knutzen and Stammer Interviews.

⁸² Lane, Mansley, St. Clair, Cox Interviews.

⁸³ Stammer Interview.

⁸⁴ Rohr and Stammer Interviews.

⁸⁵ Stammer Interview.

⁸⁶ Joplin Globe January 17, 2012, "Volunteers, donations saved City \$17.7 million," <http://www.joplinglobe.com/local/x1267396629/Volunteers-donations-saved-city-17-7-million>.

⁸⁷ The formal, official report of this process is entitled "Listening to Joplin," available at <http://joplinareacart.com/wp-content/uploads/2011/11/Listening-to-Joplin-Report-to-City-Council-FINAL.pdf>.

⁸⁸ However, CART received support from a contingent of interested volunteers who were not formal members, but which included a half-dozen people working in the sectors that were not present in CART itself. "Listening to Joplin," pp.8, 10, 14, 17.

⁸⁹ Cage and Cox Interviews.

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citations

⁹⁰ In 2012, as part of the rollout of the National Disaster Recovery Framework (NDRF), FEMA announced that it was merging the ESF #14 functions into the “Recovery Support Functions” established in the NDRF.

⁹¹ <http://www.fema.gov/emergency/nrf/#>.

⁹² FEMA Region VII at the time designated this “ESF-14” rather than “ESF #14.”

⁹³ Castaner Interview.

⁹⁴ Castaner Interview.

⁹⁵ City Manager Rohr later recalled June 30, 2011 as the first formal CART meeting. Rohr, *The Miracle of the Human Spirit*, p.150.

⁹⁶ *Listening to Joplin*, p.5.

⁹⁷ Castaner email June 5, 2012.

⁹⁸ *Listening to Joplin*, p.5.

⁹⁹ Cage and Cox Interviews.

¹⁰⁰ *Joplin Globe*, November 7, 2011. Council hears public’s priorities for recovery,” <http://www.joplinglobe.com/tornadomay2011/x459218460/Council-hears-public-s-priorities-for-recovery>.

¹⁰¹ Castaner Interview.