

Joplin, Missouri, Regional Disaster and Economic Recovery and Resiliency Strategy

In response to May 22, 2011 Disasters:
Jasper, Newton, and McDonald Counties

This report was funded by the Economic Development Administration and compiled with material and support from multiple public and private agencies and organizations to provide the most comprehensive collection of information about current progress and future projects of the region's recovery and resiliency.

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Cover Photo: *Known locally as "The Volunteer House", this home came to represent a touchstone for the thousands of volunteers that came to provide comfort and help Joplin remove debris and rebuild the city. Many volunteers left encouraging messages. Originally located at 20th Street and Joplin Street, the house was given to the City of Joplin to incorporate into a possible future community memorial.*

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Figure 1. Spring 2011: Aftermath of Storms

Executive Summary

A series of cataclysmic weather events struck Jasper, Newton, and McDonald Counties in southwestern Missouri, leaving towns flooded, residents homeless, and a third of Joplin destroyed. The region experienced unusually severe weather including heavy rains, strong winds, hail, and tornados on 12 of 48 consecutive days in the spring of 2011.

In April, heavy rains caused the Elk River to flood, primarily affecting the cities of Noel and Pineville in central McDonald County. The flooding was the worst in nearly 70 years, with $1.75 million in damage. Sixteen county roads and bridges, and three City of Pineville roads were damaged by the flooding. McDonald County estimated approximately $550,000 in damaged transportation, potable water, and stormwater infrastructures.[i]

An Enhanced Fujita-5 (EF-5) tornado with winds in excess of 200 mph at its peak cut a six-mile long, three-quarter mile wide path of destruction through central Joplin and neighboring City of Duquesne (**Figure 2**.) The supercell thunderstorm tracked from southeastern Kansas into southwestern Missouri and produced a tornado that resulted in 161 fatalities and more than 1,300 injuries, making it the deadliest single U.S. tornado since 1947, as shown in **Table 1** below.

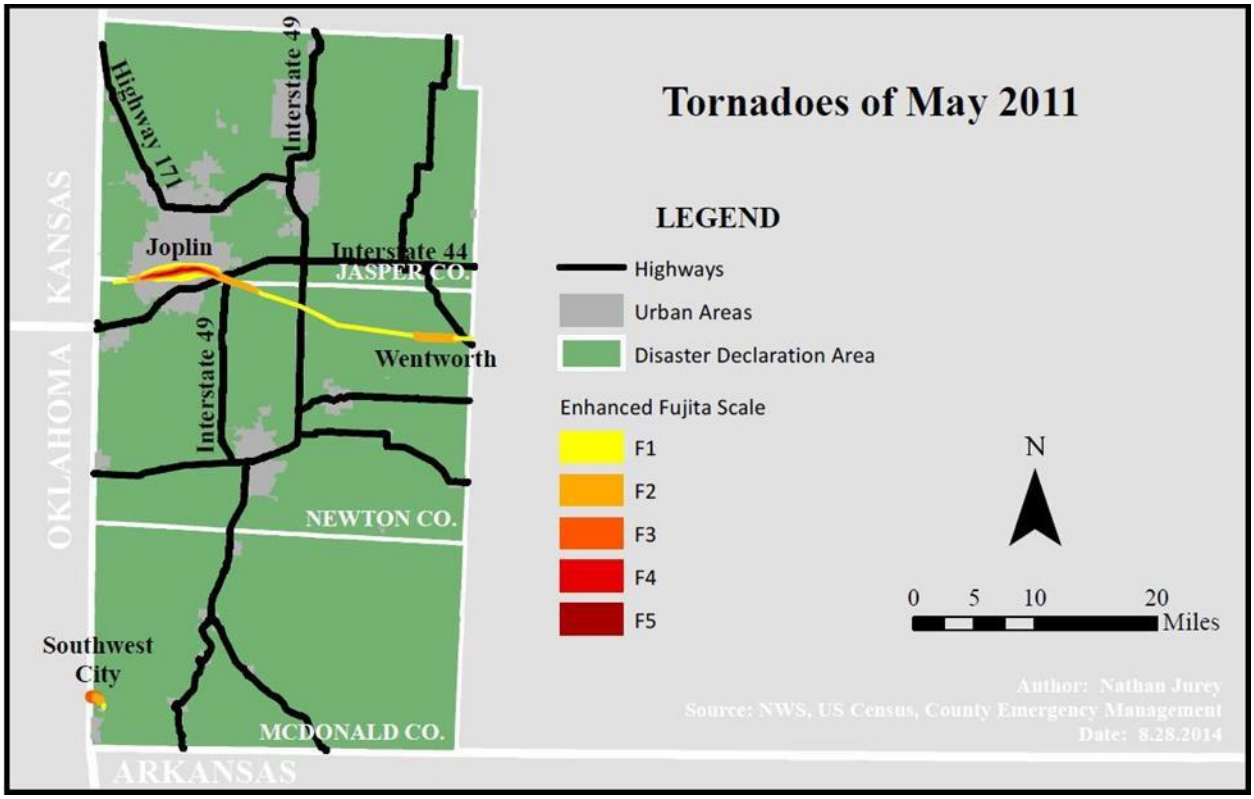


Figure 2. Path of May 2011 Tornado[iii]

The tornado damaged or demolished homes, businesses, and public buildings, travelling a total of 10 miles and destroying nearly a third of the city. Damages totaled more than $2.8 billion, making it the costliest single tornado in U.S. history.[ii]

10 Deadliest Tornadoes in U.S. History		
1. Tri-state (Missouri, Illinois, Indiana)	March 18, 1925	695 deaths
2. Natchez, Miss.	May 6, 1840	317 deaths
3. St. Louis, Mo.	May 27, 1896	255 deaths
4. Tupelo, Miss.	April 5, 1936	216 deaths
5. Gainesville, Ga.	April 6, 1936	203 deaths
6. Woodward, Okla.	April 9, 1947	181 deaths
7. Joplin, Mo.	**May 22, 2011**	**161 deaths**
8. Amite, La. and Purvis, Miss.	April 24, 1908	143 deaths
9. New Richmond, Wis.	June 12, 1899	117 deaths
10. Flint, Mich.	June 8, 1953	116 deaths

Table 1. 10 Deadliest Tornadoes in U.S. History

The numbers are staggering: 7,571 homes and approximately 531 commercial buildings were damaged or destroyed, an estimated 9,200 residents were displaced, and more than 5,000 employees in the Joplin metropolitan area were affected. Nearly 3 million cubic yards of residential debris was left in its wake.

At that same timeframe, a separate EF-3 tornado touched down in the Southwest City area, crossing the Oklahoma/Missouri border that evening. The storm travelled 1.43 miles, with a maximum width of 800 yards before it dissipated. Two houses near the Oklahoma/Missouri border were destroyed, and the tornado cleared a path between a row of poultry processing plants and a residence north of Southwest City.

A commercial garage and one of the poultry facilities was damaged [iv]. The tornado dissipated before it reached the Simmons Foods processing plant, one of the largest employers in Southwest City[v]. According to the National Climatic Data Center,[vi] two people were injured, and the storm caused an estimated $1 million in damage.

During the tornado recovery phase, a flash flood occurred within the region. Two communities within Newton County most impacted by flooding were Neosho and Seneca. Neosho experienced flooding in low-lying areas along Neosho Boulevard and downtown.

While much of the infrastructure was minimally affected, flood water damaged an estimated $500,000 worth of public property. The Federal Emergency Management Agency (FEMA) Flood Buyout Program from the early 2000s [vii] authorized the construction of several dams, mitigating damage. In total, the flooding impacted eight different communities and hindered recovery efforts.

Regional Overview

The counties of Barton, Jasper, Newton and McDonald are located in southwestern Missouri, and are part of the four-state region including Oklahoma, Kansas, Missouri and Arkansas. These counties are designated as Economic Development Districts by the USDOC EDA. Only Jasper, Newton and McDonald Counties were impacted between April 19 and June 6, 2011.

Joplin is located in both Jasper and Newton counties. The city has a current population of 50,789, according to the 2013 U.S. Census, with a density of approximately 1,500 people per square mile. The population decreased by 1.2 percent from 2010 to 2011, and since 2011 the population has increased by 2.5 percent. It is the hub of the Jasper and Newton County metropolitan statistical area (MSA); its overall population of 173,000 makes it Missouri's fourth-largest MSA. The daytime population swells to 220,000, while the population within a 40-mile radius of Joplin is 400,000.

Located at the junction of Interstates 44 and 49, and U.S. 71, and along historic Route 66, Joplin is home to Missouri Southern State University, Ozark Christian College, and Messenger College. Joplin's major industries include agriculture, education, health and social services, manufacturing and retail trade.

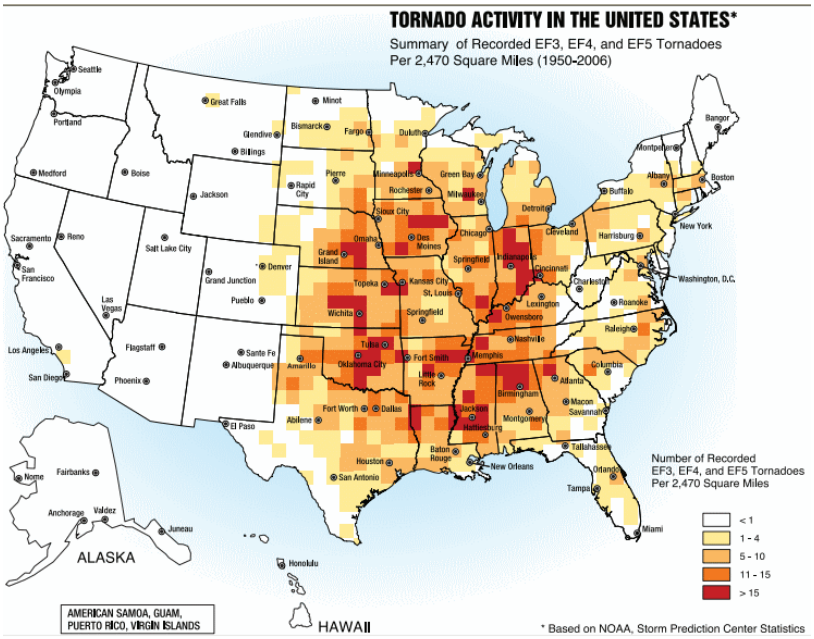


Figure 3 Tornado Alley Statistics

The region is located within Tornado Alley, a section of the central U.S. that experiences a high frequency of tornadoes each year, typically in late spring and occasionally in early fall. The area is prone to supercell thunderstorms that produce tornadoes rated EF-1 or higher.

Disaster Impact Analysis

April 25 Flooding

Within Noel city limits, water levels rose up 15 feet higher than the water level depth of the Elk River. Flood waters peaked at 20 feet south of town. On Indian Creek however, the waters did not rise over the bridge on Highways 90 or 59. Many of the trailers and campgrounds located within the floodplain near Easy Street were damaged.

A few miles upstream, several houses and parts of Highway 59 were underwater, and 15 residents were evacuated by boat from their homes by the McDonald Emergency Response Team. Nearby infrastructure damages included a sewer treatment plant and a lift station. Affected infrastructure within Noel was restored through funding from the FEMA Disaster Declaration program.[viii]

Pineville was heavily impacted by floodwaters, especially the downtown area which was under water. The city ball fields and a lift station were severely affected, along with a city road, large culvert, and a submerged restroom facility at the Elk River Access Point. Pineville's damaged infrastructure was repaired or replaced through the FEMA Disaster Declaration program.[ix]

May 22 Tornado

The tornado initially touched down that evening 1/2 mile southwest of the intersection of JJ HWY & and west 32nd street (Newton Road) just east of the Kansas border and tracked east-northeast. Damage was minor in the rural areas southwest of Joplin, with only tree damage reported.

Continuing on an east-northeasterly path, the tornado crossed 32nd Street where it produced EF-2 to low-end EF-3 damage from Iron Gates Road, east to Schifferdecker Avenue. Wildwood Ranch Residential and Business Park sustained light damage. Low-end EF-4 damage occurred just west of Schifferdecker Avenue, where smaller commercial buildings sustained heavy damage. As the storm grew in intensity and moved east, residential neighborhoods were severely damaged. **Figure 4** shows the intensity of the storm along its track.

Crossing Schifferdecker Avenue, the tornado moved east toward McClelland Boulevard at 20–25 miles per hour. Large swaths of residential areas were heavily damaged or destroyed. The tornado's width was nearly three-quarters of a mile.

At full strength, the tornado destroyed homes, sweeping them from their foundations. Steel-reinforced concrete porches and driveways were lifted and moved. Vehicles were tossed into other homes or, in some cases, rolled over and completely crushed. The tornado struck St. John's Regional Medical Center (RMC) causing major structural damage.

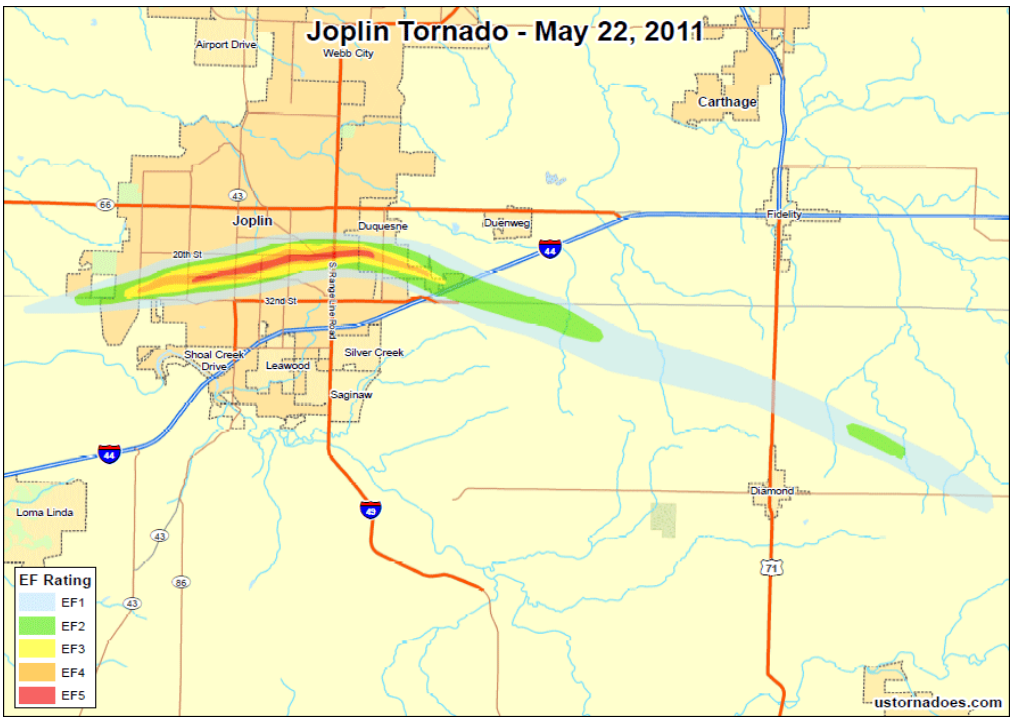


Figure 4. Intensity of Joplin Tornado Path[x]

Severe damage occurred along the storm's track east of Range Line Road. Lumber, rocks, tree limbs, and other debris were embedded into wood and stucco walls. Wood-framed homes disintegrated. Franklin Technical Center was destroyed, as was the newest section of Joplin High School, and the outer walls of the older section were damaged.

At South Range Line Road and 20th Street, EF-4 and low-end EF-5 damage occurred. Numerous commercial buildings were demolished. The tornado scoured asphalt in a parking lot west of Home Depot and a portion of the Walmart parking lot. Both retail stores were destroyed. The adjacent Joplin–Webb City South Industrial Park, a major commercial and industrial center, sustained catastrophic damage. A significant portion of a large, neighboring apartment complex was devastated.

The tornado weakened as it passed east of Range Line Road. EF-3 and low-end EF-4 damage occurred on a path forged nearly a half-mile wide. The tornado tracked east, then east-southeast through Duquesne, where more businesses and homes were damaged or destroyed.

Joplin's largest industrial area, Crossroads Industrial Park, sustained moderate damage. Vehicles were blown across Interstate 44. Dozens of tractor-trailers were toppled into the interstate ditches as the storm moved through the southeastern city limits. Vehicles were flipped and crushed near the U.S. Route 71 (Exit 11) interchange.

As the storm continued to weaken it moved into the rural areas of southeastern Jasper County and northeastern Newton County as an EF1. Damage there was minor to moderate, and some outlying residential homes and smaller commercial structures were damaged or destroyed.

After briefly intensifying again to an EF2, the funnel lifted east of Diamond, 4.8 miles north-northeast from Granby. The tornado's total track length was at least 22 miles (NOAA).

May 23 Flooding

In Seneca, the Newton County Emergency Response Team evacuated 20-30 rural residents by boat as Little Lost Creek flood waters rose rapidly. The effort lasted approximately two hours, and the water finally began to recede before midnight. By morning, the water level returned to normal but not without leaving damage.

A significant amount of damage was caused by a large flooded culvert located near the intersection of Old 60 Drive and Highway 43. A majority of a city park located upstream from the culvert was submerged under four feet of water and much of the bank eroded. A 12-inch water main pipe ruptured near this same area.

Seneca experienced approximately $1,025,000 in public property damages from the flooding.[xi] The damage ranged from impaired streets, to broken water mains, to damaged city and county vehicles. Funding from the FEMA Disaster Declaration program replaced infrastructure damaged from the floods. The city was able to stabilize the banks along the park and mitigate the stream channel, which is flowing once again.[xii]

Immediate Post-Disaster Impacts

Joplin Economy

The disaster significantly affected the local economy by displacing residents and employees, and damaging and destroying vital infrastructure. The storm path crossed major commercial corridors in Joplin, severely damaging or destroying 553 businesses. Approximately 446 businesses, or 90%, are back in operation as of May 2014. Sixty businesses have indicated they will not rebuild or reopen, and 150 new businesses have since opened in the area.[xiii] Table 2 highlights the financial costs of the disaster and ensuing implications to the local economy.

Between 4,500 and 5,000 public and private sector employees were impacted by the tornado, but now more than 90% of jobs have been recovered. This is attributable to the fact that many jobs were at major employers such as St. John's RMC (now Mercy Hospital) and Walmart, both of which decided to rebuild. Prior to the disaster, the local economy was steady, although smaller businesses were struggling. After the disaster, multiple large employers kept workers on their payrolls even though their businesses were destroyed. This was a defining factor for the area's economic stability immediately after the tornado.

The ensuing large number of volunteers, along with resources and support, helped increase regional spending, increasing Joplin's sales tax revenue by 14% a year after the tornado. To date, nearly $200 million in federal, state and local money, as well as public and private funds, have been earmarked for recovery. Future city and county tax revenue depends on the continued rebuilding and redevelopment in the area. Although short-term sales tax revenue has grown due to rebuilding activity, diverse income sources are needed to continue this growth to ensure revenues are sustained after the immediate rebuilding activities subside.

Joplin's labor force is well-balanced, with no single industry sector representing more than 15% of the overall employment base. Top employment sectors include manufacturing, health care and social assistance, government, retail trade, accommodation and food services, and transportation and warehousing.[xiv]

Future economic development is reliant on an enhanced and modernized infrastructure to support projected populations and forecasted needs of industry and business. The leadership and citizens of Joplin have supported the initiative to rebuild on a bigger and better scale, setting a nationally recognized standard for disaster recovery by demonstrating a strong community spirit, cooperation and a "can-do" attitude. Rebuilding plans involve more sustainable green alternatives, as well as new facilities encouraging healthier lifestyles. Plans include securing a stable and reliable water source for the city and region, according to the Tri-State Water Coalition and Spring River Planning Group. The end result will be a vibrant business community and enhanced neighborhoods that are safer and better prepared, supported by more resilient infrastructure and facilities.

Joplin-Duquesne Tornado Costs

Property Impacted	Claims Received	Claims Expected	Losses Paid $	Losses Incurred $
Commercial Property	2,142	2,159	986,829,440	1,320,220,325
Residential Property	8,647	8,784	535,724,886	554,388,779
Commercial Auto	309	309	4,377,076	4,783,049
Private Auto	6,982	7,117	47,898,047	51,084,766
Other Commercial	313	315	15,031,287	19,210,900
Total	18,393	18,683	1,589,860,736	1,949,687,819
County Mutuals	1,477	1,516	61,789,887	67,876,781
TOTAL	19,870	20,199	$1,651,650,623	$2,017,564,600

Table 2. 2012 Figures[xv]

Joplin Medical Facilities

Prior to May 22, 2011, St. John's RMC and the Freeman Health System provided the area with medical care, serving as the city's emergency medical services (EMS).

St. John's was directly in the tornado's path. Parking space blocks weighing 200-300 lb, were tossed 30-60 yards. Large, steel-reinforced concrete steps outside of the medical arts building were shifted and cracked. Concrete walls toppled and steel beams were bent and twisted. The hospital was declared structurally unsafe and was subsequently demolished during the recovery. Freeman Health System sustained minor damage and continued to function in the days following the tornado.

Prior to the disaster, both hospitals were within two miles of each other. St. John's leadership determined it would be prudent to rebuild in another area of the community, lessening the likelihood that another disaster could threaten both hospitals at the same time.

Joplin School District

Joplin focused on preparing schools to open without delay for the new school year. When classes commenced on August 17, 2011, 95% of the student body attended school. The Joplin School District currently operates out of several temporary facilities, and 3,200 students attend school in provisional classrooms. **Figure 5** illustrates the moves from temporary locations and back to "home" schools. A two-and-a-half year plan to rebuild schools reached a milestone January 9, 2014; when three new schools opened: Irving Elementary, Soaring Heights Elementary, and East Middle School. These schools alone accommodate more than 1,300 students who were previously attending classes at temporary facilities.



Figure 5. Joplin School Temporary Relocation Map

Joplin School District locations that were damaged or destroyed:

- East Middle School/Elementary
- Irving Elementary
- Roi S. Wood Administration Building
- South Middle School
- Kelsey Norman Elementary
- St. John's Elementary
- Cecil Floyd Elementary
- Emerson Elementary
- Joplin High School and Franklin Technology Center

School funding, which is directly proportional to the assessed value of neighborhoods, took a major hit after the storm. The school district is trying to overcome this obstacle. In addition to rebuilding schools that were damaged or destroyed, the Joplin School District plans to retrofit the remaining schools using FEMA Hazard Mitigation Grant Program (HMGP) funding. The project includes FEMA tornado-safe shelters, which provide near-absolute levels of protection for the students, staff and community. The HMGP is a supplemental program that provides funding to states for mitigating damage from future disasters.

Joplin Housing

The housing sector was hit especially hard during the storm, as single- and multi-family dwellings and apartment complexes accounted for the majority of damage. Because the tornado touched down on the western side of the city and indiscriminately tore through residential areas, occupants of all demographics and income levels were affected.

The City of Joplin estimates approximately 7,500 housing units received some level of damage. Approximately 4,000 homes were destroyed and 3,500 more dwellings were damaged, impacting nearly 17,000 residents. Homes declared uninhabitable after the storm displaced approximately 9,200 residents in Joplin.

Joplin Property Damage:

- Emergency Alert Sirens–Three destroyed
- Fire Stations–No. 2 and No. 4 destroyed
- Fire Apparatus from Stations No. 2 and 4
- Parks–Joplin Senior Citizens Center damaged
- Parks–Cunningham Aquatic Center and Park destroyed
- Parks–Parr Hill Park destroyed
- Parks–Garvin Park destroyed
- Parks–Mohaska Park severely damaged
- Parks–Ewert Park damaged
- Police–South Police Branch minor damage
- Public Works–Five Metro Area Public Transit System (MAPS) trolley shelters destroyed and seven shelters damaged
- Public Works–Curbs, streets, sidewalks, lights, signs and signals destroyed and damaged
- Public Works–Vacant building structure located at 20th and Connecticut Streets destroyed
- Information Systems–CISCO Aironet damaged

Joplin Environmental

In the initial hours after the storm, gasoline leaks were discovered near several damaged or destroyed service stations. A large debris fire burned near St. John's RMC, and broken natural-gas lines resulted in many smaller fires throughout the city. No major chemical spills or other ecological crises were reported. A small anhydrous-ammonia leak from a valve at the Jasper Products Trucking Company was sealed by the company's hazardous materials crew. Other potential hazards included miner liquid fuel and chemical leaks, as well as toxic residue from fires.

The Environmental Protection Agency (EPA) monitored air quality in the days and weeks following major cleanup efforts to ensure safe working environments. Funding provided by the EPA was used to clean up residential and commercial areas where lead-contaminated soil was blown in by the tornado as a result of wide areas remaining from historic contaminated areas and mining activities being continually remediated.

An EPA Emergency Response Team inspected the area and 40 other sites and found no significant toxic releases.

Missouri state officials relaxed environmental regulations, expediting waivers allowing limited burning of wood-based debris during the cleanup. A new landfill was authorized and created just over the Missouri state line in Galena, Kan.

Regional Farms and Agriculture

The U.S. Department of Agriculture (USDA) reports more than $1.4 million in claims were submitted by crop and livestock disaster insurance programs in Jasper, Newton and McDonald Counties in 2011.

Joplin Nonprofits

In the subsequent months and years after the disaster, many smaller nonprofit organizations saw a decrease and delay in annual foundation funding, likely due to the focus directed toward cleanup and recovery efforts. Reliable community and privately-funded sources reported that resources were redirected to disaster-related needs. As a result, nonprofits with programs unrelated to disaster recovery reported operational shortfalls and increased pressure for fundraising.

Domestic Pets

More than 1,300 displaced pets were taken to emergency animal shelters by local animal control staff. Through the course of the recovery effort, approximately 500 pets were reunited with their families. An adoption event with more than 5,700 volunteers and participants from 24 states found homes for nearly 745 homeless pets, including cats, dogs, ferrets, rabbits, and exotic birds. The unclaimed homeless dogs and cats were spayed or neutered at no charge before they were released for adoption.

The Joplin Humane Society and the American Society for the Prevention of Cruelty to Animals (ASPCA) were flooded with nearly three times the amount of animals they are usually able to accommodate. To handle this influx, two vacant warehouses next to the shelter were modified into air- conditioned kennels and an adoption center. A parking area outside a former used appliance store was converted into an owner's waiting room, complete with volunteer stations, a seating area and a station for taking pet identification photos.



Figure 6. Post-disaster Animal Rescues

Regional Recovery



Figure 7. Community in Recovery

The cities and counties impacted by the disaster recovered using a variety of methods. The communities of Seneca and Noel recorded the type of damage resulting from the disaster and subsequently encouraged citizens to identify and incorporate commercial and residential standards for reconstruction. Other cities, such as Joplin, encouraged its citizens to create grassroots initiatives to help plan recovery efforts. Each city justified a different response because of the unique factors in each area.

City of Joplin leadership engaged and enabled citizens to collaborate in planning and recovery efforts to develop a scope of recovery and build broad consensus while moving forward. While other disaster-impacted cities have tried to coordinate all facets of recovery efforts, Joplin empowered the community and private sector entities to lead and coordinate recovery. This example of successful innovation received national recognition.

In the immediate days after the disaster, FEMA officials visiting Joplin cited the city's reopening of major thoroughfares were the quickest they've seen after such a major event. The open roads and thoroughfares contributed significantly to the success of the immediate response, clean up, and ensuing rebuilding efforts.

Short-Term Regional Recovery and Resiliency Measures

Each community focused on critical recovery efforts, including debris removal, restoring utility services and repairing public infrastructure. Much of the debris removal and infrastructure restoration in Joplin, Seneca and Pineville was completed by city employees and contract workers funded primarily through FEMA.

As part of cleanup efforts, the city regularly emphasized community needs and encouraged volunteerism, allowing public and private organizations to direct and manage some 180,017 volunteers. More than one million hours of public service has been completed to date.

The value of the volunteer efforts went beyond the physical and psychological impacts; it resulted in a positive economic effect on recovery, as well as a community grant match with FEMA. The number of volunteer hours worked lessened the total cost of recovery, allowing the city to apply remaining funds to continuing needs.[xvi]

Throughout the region, a series of communication campaigns were implemented by local media outlets. Radio proved to be a powerful medium, keeping citizens updated with information about available public and nonprofit services, food and water locations, and distribution centers. Although other social and media sources played roles, radio broadcasts provided comprehensive current and accurate information.[xvii]

Immediately following the May 22 tornado, a large number of public and private organizations started an initiative to help those with urgent needs. The Long-Term Recovery Committee (LTRC) was charged with this task and helped organize many of the post-disaster programs. In June, the LTRC was named as a temporary working committee of the Jasper County Community Organization Active in Disasters. The goal was to coordinate with agencies, organizations and faith-based entities to find and assist tornado survivors with unmet needs. The LTRC consisted of 152 agencies and 119 individual members.

In addition to support provided by federal, state, and local agencies, 21 area organizations partnered with the LTRC to provide disaster relief to survivors. This included basic needs such as meals and housing, mental health services, support groups, financial and legal aid, and burial services.

The relief resulted in more than 159,000 meals served. More than 1,000 households received volunteer help or financial aid in the clean-up/rebuilding phase. Nearly 50,000 people utilized mental health services. In total, more than 275,000 citizens received some sort of assistance as of July 2013, according to the LTRC.

On May 23, Newton County Emergency Management moved quickly to provide assistance to those impacted by the flooding in Seneca. Damages that occurred as a result of the flooding were also inventoried for future mitigation during the rebuilding phase.



Figure 8. Habitat for Humanity

Regional Redevelopment Vision and Project Planning

Each community had different ideas when it came to envisioning and planning for the future. In some areas, only a limited response was necessary because flooding is a common event. For Noel and Seneca, the redevelopment vision and project planning evolved into a list of smaller steps to improve their situations. The lesson learned is that easily attainable plans and goals make a big difference in the long run.



Figure 9. CART Logo

A broader vision was required in Joplin due to the magnitude of the destruction. Joplin created the Citizen Advisory Recovery Team (CART), a diversified group of local citizens and community leaders to guide the city through the recovery process. CART's objective is to obtain and analyze citizen input, formulate ideas and present projects to the community, appropriate organizations, City Council, and the hired Master Developer.

After nearly 6 months of community planning, on November 7, 2011, CART presented its recommendations to the Joplin City Council for consideration and adoption. The city validated CART's report and created CART Implementation Task Force to the lead public and private entities in the redevelopment effort. The task force included

leadership from CART and representatives from Joplin and Duquesne, Joplin School District and the Joplin Area Chamber of Commerce.

The Joplin City Council also appointed the Joplin Redevelopment Corporation to recruit a Master Developer to coordinate the city's redevelopment through the ensuing projects and ideas, and participate in public-private partnerships involved in the recovery effort. After a thorough search, in July 2012, Joplin hired Wallace Bajjali Inc. to collaborate to design and coordinate a master redevelopment plan for the community.

Since the disaster, the City of Joplin, as well as numerous partners and stakeholders, have worked to expand on the city's aggressive post-tornado planning document, *Blueprint for the Future.* It captures ideas and completed developments that not only define the community's past, but also provide a clear direction for the future. The devastation, while traumatic and deeply scarring, created an opportunity for the community to re-assess its master plan and determine what the new Joplin should be.

The ensuing strategic planning process was formally led by the CART and comprised of a broad cross section of community leaders, citizens and subject-matter experts organized to solicit and evaluate community input to answer questions. For nearly 6 months, CART held public meetings and forums, canvassing the community soliciting feedback from citizens.

The result was the creation of a vision to "Build Joplin Back - Bigger and Better than Before." The concept goes beyond rebuilding needs, extensively addressing quality of life issues to make Joplin a dynamic community for the 21st century:

- Education
- Economy
- Recreation and arts
- Cultural opportunities

Just prior to the disaster, the Joplin Parks and Recreation Department completed the 2010 Citizen Survey which identified multiple needs. In 2014, the department launched an additional survey to gauge citizen response to recovery efforts and to identify additional shortfalls and needs. In 2012 and 2014, Joplin also commissioned two studies closely monitoring the regrowth and population needs, ultimately aiding officials in making informed decisions about housing sector needs, public amenities, public-private partnership opportunities and programs moving forward.

Joplin continues to receive a tremendous outpouring of support for replacement of assets lost in the storm. With this process well underway, the focus shifts from immediate recovery to long-term community rebuilding and economic revitalization needs. This is a significant opportunity for Joplin and it will fundamentally change the fabric of the community and region.

The Wallace Bajjali Inc. Redevelopment Plan, adopted by the City Council, identifies a series of major reconstruction and recovery projects spanning infrastructure, environmental needs, and residential and commercial sectors.

These projects, coupled with additional plans from the city and community, capitalize on the idea that if quality jobs are created in Joplin, people will come; and if high-quality amenities are built in Joplin, the “cool factor” will increase, and people will stay.

An estimated 6% of the Joplin population left the city after the disaster and a majority remains in adjacent communities, according to the 2014 Joplin Housing Needs Assessment completed by Bowen National Research. Joplin must not only recover population loss by attracting these residents back to the city, but gain new residents and provide growth. Also highlighted was the need to develop a redesigned and enhanced modern community. Through major anchor retail and housing developments, and investments in new and upgraded infrastructure projects, the city can meet its population-gain objectives. Numerous business starts and expansions (AT&T, Heartland Solutions, Corning, Leggett & Platt, and Mercy Hospital) are planned for the area, along with new infrastructure projects and ongoing revitalization, leveraging its economic position and creating hundreds of jobs in the coming years.

With roughly $400 million in anticipated public and private sector investments underway or earmarked for the area, Joplin is poised for continued economic growth, creating robust housing and employment markets. City officials, community organizations, the Chamber of Commerce, and the Master Developer intend to incentivize this growth through modernized community enhancements, a robust housing market, and quality jobs.

To facilitate this plan, the EDA provided a two-year grant to hire two disaster recovery coordinators to organize projects, identify funding sources, and advance adopted strategies for Joplin, Duquesne, and surrounding communities. The priority initiatives include the Chamber of Commerce and Industrial Development Board business and industrial park investments, the Joplin School District’s Franklin Technology Center workforce investment programs, the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Program-Disaster Recovery (CDBG-DR1) and (CDBG-DR2) proposed projects, and a host of city and regional transportation and infrastructure investments.

The Joplin Redevelopment Corporation, a Missouri Chapter 353, was also significantly modified after the disaster. Pre-tornado, the corporation was utilized as a tax abatement entity for the city of Joplin. Post-disaster, the corporation’s board was tasked to contract with the Master Developer to aggregate land acquisition and coordinate redevelopment projects approved by the council. As of 2014, the corporation has acquired more than 50 acres of parcels for major medical, housing, and commercial redevelopment efforts, collecting more than $8 million in funding to date for acquisition. The JRC was also a co-applicant for the awarded $20 million EDA library relocation grant and also received $4 million in Distressed Areas Land Assemblage Tax Credits from the State of Missouri.

This is a critical time for the future of the Joplin area. The major initiatives are interconnected, funded by multiple sources, and located throughout the recovery area along with the communities surrounding Joplin impacted by the tornado. Joplin’s initiatives focuses on replacing lost housing, corporate offices and businesses, and public facilities, creating synergy between the redevelopment area through downtown Joplin and Main Street. Anchor developments are planned to connect areas of the city through a network of trails and other

infrastructure enhancements. The concentration on long-term recovery efforts on rebuilding resiliency, economic vitality and utilizing hazard mitigation will provide a substantial foundation for the future of Joplin.

Jasper, Newton, and McDonald Counties Objectives

Jasper, Newton and McDonald Counties cooperated with their emergency management departments and local partners to identify needs and coordinate their recovery. Past experience and historical knowledge directly influenced the quick response time and efficient recovery process. To facilitate recovery in the tri-county region, the HSTCC consulted county hazard mitigation plans, local economic development meetings, and the Transportation Advisory Committee. The engagements leveraged local knowledge, improving the long-term viability and resiliency of the surrounding areas.



Figure 10. River Bank Stabilization Funded by FEMA at City Park in Seneca.

Expedited Infrastructure Replacement

Jasper, Newton and McDonald Counties worked to rebuild all damaged infrastructure from the federally declared disaster. Damages in areas surrounding Joplin totaled $4.7 million.

Flood Mitigation

Decrease the amount of flooding and storm water runoff

First and foremost, stormwater runoff and stream-bank erosion must be studied before any effective policies can be implemented. The economic impacts of flooding need to be understood

to improve decision-making processes. Sources of stormwater runoff include intensive agricultural use and urban hard surfaces. Once the flooding threat is mitigated, necessary actions may be implemented to minimize and control the amount of runoff allowed in each watershed region.

The tourism industry in McDonald County is specifically interested in alleviating flooding because its success is tied directly to the river.

Possible funding sources include:

- FEMA Flood Mitigation Project Grants
- USDA Agriculture & Food Research Initiative: Water for Agriculture Challenge Areas
- USDA Emergency Watershed Protection Program

Promote measures that reduce flood damages and financial impacts

Several programs exist to reduce flood damage and the associated financial impact, but the programs need better promotion and more participation. Furthermore, local leaders must encourage owners and residents in the floodplain to move and enforce the existing building restrictions on properties. Communities must adopt and impose floodplain ordinances, restricting new building construction in order to be effective. For example, flood buyout programs help relocate residences and businesses to areas outside the floodplain. Finally, discrepancies in floodplain boundaries may be hindering development in certain areas, requiring examination and adjustments made to rectify the situation.

Possible funding sources include:

- FEMA Flood Mitigation Project Grants
- USDA Agriculture & Food Research Initiative: Water for Agriculture Challenge Areas
- USDA Emergency Watershed Protection Program
- National Flood Insurance Program (NFIP)

Improve transportation network resiliency toward flooding

Many low-water crossings exist throughout the counties. While only a few crossings are located between housing areas and economic centers, it is still necessary to take preventative measures to keep the region’s transportation network from flooding. For example, the highway near Indian Creek in Stella, Missouri, is a highly used traffic way that can be elevated to decrease chances of flooding.

Possible funding sources include:

- FEMA Flood Mitigation Project Grants
- Missouri Department of Transportation (MoDOT)

Ensure current dam infrastructure is adequately addressed

Several dams are located in Jasper, Newton and McDonald Counties. Specifically, the dam in Noel needs to be structurally inspected and its economic impact fully analyzed. Pending the study, a new ownership structure of the Noel dam may need to be created.

Furthermore, some dams outside of the region, like in Arkansas, may impact McDonald County if those dams are compromised. Coordination between Arkansas and Missouri must occur to ensure the safety of Missouri citizens.

Possible funding source: FEMA Flood Mitigation Project Grants

Tornado Preparedness

Improve reliability and coverage of the tornado warning system

One integral component of emergency preparedness is a reliable and comprehensive warning system. If the siren malfunctions or the coverage is not consistent, people may not have an adequate warning and time to be proactive in saving lives and securing property. Counties need to improve and expand the warning system coverage when feasible. Identified areas for warning sirens include the Walmart area near Jane, the communities of Rocky, Powell, Longview and Tiff City. Additional sirens may be needed near Goodman and Noel.

Possible funding source: FEMA Preparedness Grants

Encourage Shelters and Safe Rooms

Increase personal safety

Community shelters and individual safe rooms are widely recognized as a safety measure against tornados and other threatening weather. To reduce the number of fatalities, communities must seek funding for retrofitting and building shelters and individual safe rooms. Specifically noted for this initiative are schools in Noel, Goodman, White Rock and Rocky.

Possible funding source: FEMA Preparedness Grants

Emergency Management Capacity

Educate the public on mitigation, preparedness, response and recovery

Citizens must understand the importance of disaster planning. Local governments need to emphasize this message to gain public support to further emergency management efforts. Education is the first step, and each county should strive to educate and engage the public in pre-disaster preparations with the end result of less damage and no loss of life.

Possible funding sources include:

- FEMA Preparedness Grants
- FEMA Emergency Management Performance Grant

Improve Geographic Information Systems (GIS)

Maintain current building parcel data for hazard risk assessment

Quickly assessing damages after a disaster is extremely beneficial when applying for an emergency declaration and associated disaster funding. GIS programs provide this tool to capture information for quick estimation if the parcel data is available to the county. Each county should continually update its building parcel for use in day-to-day operations and not just for emergencies.

Possible funding sources include:

- FEMA Preparedness Grants
- FEMA Emergency Management Performance Grant

Assess County Emergency Response Services

Improve coordination efforts between local and county responders

Immediately after the Joplin tornado, Jasper County needed extra emergency response resources quickly and Newton County Emergency Management Department had the assets to assist Jasper. The ability to share and coordinate response efforts across jurisdictional boundaries is integral to fast and timely responses. Counties need real-time assessments of emergency response services to improve coordination efforts and evaluate whether regional, state and perhaps national assistance is needed. A county-by-county inventory is one way to capture this information.

Possible funding sources include:

- FEMA Preparedness Grants
- FEMA Emergency Management Performance Grant

Expand Training Opportunities

Cross-train personnel

Emergency management departments are only as effective as their staff. Thus, counties should expand emergency management training opportunities for all staff and peripheral agency staff. This will improve the quality and effectiveness of emergency management response to emergencies by including cross training and a better understanding of the overall scenario.

Possible funding sources include:

- FEMA Preparedness Grants
- FEMA Emergency Management Performance Grant

Implement Reverse 911 (Newton/Jasper)

Providing reverse 911 services to citizens greatly improves the warning system for all types of emergencies. Broadcasting geographically specific messages via telephone increases the effectiveness of any emergency warning system. Both Jasper and Newton Counties are pursuing reverse 911 programs.

Possible funding sources include:

- FEMA Preparedness Grants
- FEMA Emergency Management Performance Grant

Improve Hazard Mitigation Planning

The HSTCC continues to support updates and implementation of county hazard mitigation plans. These living documents provide the framework in which to improve disaster preparedness, response and recovery, and resiliency in the region. County emergency management departments use these plans to provide guidance and training, and ensure coordination with regional and state agencies.

Possible funding source: FEMA Preparedness Grants and EDA Funding

Diversify Transportation Network

Ensure Comprehensive Transportation Planning

The HSTCC continues its involvement in transportation planning by facilitating the Transportation Advisory Committee's work in prioritizing projects in the region. Collaboration in transportation planning provides an opportunity for the HSTCC to offer guidance toward improving the resiliency of infrastructure systems locally and regionally.

Possible funding source: MoDOT

Improve Bicycle/Pedestrian Access

Increasing the bicycle and pedestrian access in the region will expand the transportation network and provide alternative transportation methods and more accessible routes following a disaster. Projects to improve access include adding sidewalks, along with bicycle and pedestrian amenities, installing "Share the Road" signage, and creating trails.

Potential bicycle and pedestrian projects in the region include:

- Sidewalk improvement program to repair and construct new sidewalks (county-wide)
- Sidewalks on Highway 59 (Downtown to Tyson Foods, in Noel)
- "Share the Road" signs on Highways 59 and 71(Newton County to Pineville)
- Street crossing on Business Highway 71 (Patterson & Spring Valley Road intersection in Anderson)
- Street crossing on Business Highway 71 (Indian Creek Bridge in Anderson)

- Pedestrian grade, separated crossing at railroad (School Street to Garner to Old 71 in Goodman)
- Sidewalk connections on Harmon Street (St. John's St. Hill into subdivision in Pineville)
- Shoulders and/or sidewalks on Highway J from Highway 59 to Depot Street (Diamond)
- Sidewalks to Freeman Road from soccer fields to Benton and Coler from College to Harmony (Neosho)
- 800 additional feet of sidewalk (Americans with Disabilities Act (ADA) compliant) on both sides of Ozark Street for bikes/pedestrians from Highway A to Indian Creek (Stella)
- Widen and add bike/pedestrian accommodations on Baker Boulevard from Central to Fairview (Carthage)
- Replace bridge and add pedestrian improvements over railroad on Highway 96 east of the entrance to city (Carthage)
- Improve access and connectivity from Hall Street to Highway 171 (Webb City)
- Add inner and outer bicycle trails (Carthage)
- Connect wetlands habitat to King Jack Park & Ruby Jack Trail (Webb City, Carterville and Carthage)
- Add bike/pedestrian accommodations to Highway Z from City Park to Terrill Lane (Carl Junction)
- Add/improve sidewalks on Main Street from elementary school to City Park (Carterville)
- Add pedestrian tunnel on Highway 171 (Webb City)
- Add sidewalks on Highway E from Fairview Elementary to River Street (Carthage)
- Add bike/pedestrian facilities on Buena Vista from Highland to 13th Street (Carthage)

Possible funding sources include:

- MoDOT Moving Ahead for Progress in the 21st Century (MAPS-21) Grants
- MoDOT Transportation Investment Generating Economic Recovery (TIGER) Grants

Expand Public Transit Opportunities

Increasing public transit access in the region will multiply the transportation options available to residents. Diversified transportation provides flexibility and redundancy should disaster affect transportation. Specifically, expansion and improvements are needed along with Older Adults Transportation Service throughout the region, Metro Area Public Transit System in the Joplin metropolitan area, and trolley services in Duenweg and Webb City.

Possible funding sources: MoDOT MAP-21 and TIGER Grants

Improve Air Transportation Services

Upgrading air transportation and services will provide additional options in the event that major roadways are damaged or closed. During a disaster, better air transportation facilities allow necessary goods and services to be delivered quickly, provide for emergency, medical and evacuation fixed bases for operation.

Specifically, McDonald County seeks to add helipads for medical use and Newton County wants to improve the apron, runway and taxiway, and install perimeter fencing.

Possible funding sources: MoDOT MAP-21 and TIGER Grants

Increase Transportation Network Capacity

Expanding the transportation network capacity in the region will improve overall safety and shorter times for evacuations if needed. The process for this includes conducting studies, adding signage, turn lanes, shoulders, improving bridges, widening lanes, and extending roads.

Transportation projects for the region include:

- Construct new Bella Vista Bypass to extend Interstate 49 to the Arkansas state line
- Add crossover cables on Interstate 49 (Interstate 44 to H Highway)
- Bridge improvements/replacement on Highway 43 (Honey Creek J0240 in Southwest City)
- Add shoulders and turn lane on Highway 43 (Honey Creek Bridge, South from 76 Highway)
- Add guardrails/cables on Highway 59 (county-wide)
- Evaluate access issues on Old Highway 71 (North of Wolfden Road in Pineville)
- Add shoulders on Highway 76 (county-wide)
- Add shoulders on Highway 90 (county-wide)
- Add guardrails on Highway 90 (Saratoga Hill bridge in Southwest City)
- Improve bridge on Highway 90 (bridge over Little Sugar Creek)
- Realign, add signage and turn lane improvements on Highway 90 (at Brush Creek Road in Jane)
- Study Interstate 44 for capacity improvements
- Improve Schifferdecker bridge over Shoal Creek (Joplin)
- Widen Highway V from Interstate 49 to Route 59, widen and add shoulders at 59/V/J and improve grading issues (Diamond)
- Add signal light on Highway 86 and Gateway Drive (Neosho)
- Add turn lane onto South Street at Highway HH near Freeman Road (Neosho)
- Add left turn signal onto Business Highway 71, on Highway Alternate 71 near Waldo Hatler Intersection (Neosho)
- Improve bridge at Highway VV near Undercliff and Tipton Ford Bridge
- Reduce tight curve on Highway D (Boulder City)
- Add right and left turn lanes at Dollar General on Highway 59 and Ruby Street (Diamond)
- Build overpass on Highway 43 over railroad (Seneca)
- Add new interchange on Interstate 49 at Highway 171 (Carthage)
- Turn Highway HH into 5-lanes from 571 to Russell Smith Way (Carthage)
- Improve bridge on Highway D from 1 mile south of Highway 96 to 425 (Oronogo)
- Study and widen right turn lanes at Hawthorne, Gum & Sunset on 171 Highway from KS State Line to Fir Road (Airport Drive and Carl Junction)

- Widen 7th Street (Duenweg)
- Add two roundabouts on Highway 571 at Phelps Boulevard and Walmart entrance (Carthage)
- Study improvements to increased traffic on Interstate 44 (Jasper County)
- Widen Highway 43 to 4-lanes from Stones Corner north to Airport; add left turn lane onto Gum Road (Airport Drive)
- Repair/replace five bridges over railroad (Carthage)
- Extend 17th Street to Highway 249 for truck access (Webb City)
- Upgrade three bridges on Garrison (Carthage)
- Add rail overpass/grade separation on Highway 171 near Highway Z (Carl Junction)

Possible funding sources: MoDOT, MAP-21, and TIGER Grants

Recover Housing Market

Understand the impacts of disaster on the housing market

While the housing market outside of the Joplin area was not directly damaged, it was affected as many communities reported an influx of new residents displaced by the tornado. These final numbers are not known and may have significantly changed housing trends and projections in the surrounding areas. A housing market study and analysis is needed for each county in order to assess the new housing market caused by the 2011 disasters.

Possible funding source: FEMA, CDBG Program

Rebuild Housing Inventory

The housing available for rent and lease has decreased and prices have increased. Communities need to rebuild and recover the housing stock according to what a housing market study suggests. Not all housing affected has been rebuilt, and the HSTCC will continue to help reduce the housing shortage, especially for those with lower incomes.

Possible funding source: FEMA and CDBG Program

Establish Economic Vitality and Resiliency

Create a regional Comprehensive Economic Development Strategy

The Comprehensive Economic Development Strategy (CEDS) is currently being developed by the HSTCC as part of a rolling five-year planning and update process. The CEDS is a strategic document that provides direction for economic development initiatives that will guide in building an enduring economy in the region. The process includes gathering of local knowledge and information from other community-endorsed plans. The CART plays an integral role in the development of the CEDS. Disaster preparedness and upgrading infrastructure resiliency is a priority. The HSTCC will ensure that these objectives are part of the CEDS.

Possible funding source: EDA Planning Grant

Improve Business Continuity

Businesses are easily impacted by disasters, and downtime can cause significant repercussions for revenues and strategic planning goals. Thus, specific initiatives, such as the creation of a revolving loan fund for affected businesses, will improve the business continuity of the region. Low-cost loans would bridge the gap between loss of revenue, facilities, and workers until the business is re-established.

Possible funding sources:

- EDA Disaster Relief Opportunity – Revolving Loan Fund
- USDA Business and Industry Guaranteed Loan Program
- USDA Farm Operating Loan Program
- Small Business Association (SBA) Low-Interest Disaster Loan

Expand the Workforce

Jasper received status as ACT® Certified Work-Ready County, and Barton and Newton Counties have submitted their applications. A Work-Ready designation ratifies that businesses, industry, employees, policy makers, educators, and economic developers understand what skills and goals are required by prospective employers. Those skills are evaluated and measured, and the gap is reduced through cooperation and collaboration between the business sector and educational policy initiatives.

Possible funding source: U.S. Department of Labor Employment & Training Administration Workforce Investment Act: National Emergency Grants

Develop New Markets and Emerging Industries

A growing economy is a resilient economy, and new markets and emerging industries are key factors. Specifically, industrial development should be encouraged in local foreign trade zones (FTZ). This can be done through improvements, such as connecting FTZ areas to major rail lines, and exploring and pursuing new market trends. Neosho is pursuing a FTZ in the industrial park to tap into the potential manufacturing sector of value-added goods shipped via a widened Panama Canal.

Emerging industries like alternative energy needs investigation. The MARET Center at Crowder College is a leader in solar energy research, and businesses in the region should be encouraged to invest in alternative energies and take advantage of the region's manufacturing knowledge of solar energy. Educational institutions can consider new training and vocational programs for the future.

The tourism industry could significantly add to the region's economy by showcasing local events and destinations. Farmer's markets are starting up around the region: Webb City, Joplin, Neosho, Newton County, etc. Initiatives to improve these markets and in tandem with the tourism industry can help strengthen the economy while simultaneously expanding local food sources.

Possible funding sources include:

- USDA Business and Industry Guaranteed Loan Program
- USDA Farmers Market Promotion Program
- USDA Rural Business Enterprise Grant Program
- USDA Rural Business Opportunity Grant

Update Comprehensive Community Plans

The HSTCC will work with at least one community to create a comprehensive plan in the next year. Community plans play a key role in ensuring that regional strategies are implemented at the local level.

Possible funding sources: EDA Planning Grant and MoDOT

Improve Environmental Planning Initiatives

The HSTCC will provide environmental planning services through its solid waste program and a newly created board called the Environmental Advisory Committee. The committee will help prioritize environmental projects in the region and find potential funding. This program will secure funding for projects such as the improvement of flood control measures and other better quality of life initiatives like alternative energy.

Possible funding source: Missouri Department of Conservation

City of Joplin Recovery Objectives and Projects

- Expand economic opportunities for job growth, quality employment, education, and training
- Create destination activity centers to include retail, commercial, and recreational anchors, and other amenities across the recovery area
- Encourage population growth through modernization and improved infrastructure, quality employment opportunities, and housing stock
- Use the recovery and rebuilding efforts as a catalyst to build upon existing goals for development and redevelopment
- Establish a community memorial to those lost in the storm and a volunteer recognition space.

Commercial and Public Sector Projects

26th and Main Retail and Mixed-Use

Working with Joplin's Master Developer, 26th and Main is planned as the future location of a mixed-use and retail development, anchoring the Main Street Southtown area. This project will further the ongoing revitalization of the downtown area, connecting south Main to the downtown revitalization efforts underway.

Possible funding sources:

- Private debt
- HUD-CDBG

Consolidated Post Office/State Facility

Discussions continue with the Joplin Master Developer and U.S. Postal Service to consolidate two facilities into one all-purpose facility at a to-be-determined location. The vacated postal property would be redeveloped and incorporated into the recovery plan and projects.

Possible funding sources: Private debt and tax increment financing (TIF) funding

Hope Valley Tax Increment Financing District

The Hope Valley Development Project is a private venture, proposing a mixed-use commercial plan that allows for future economic growth through business and traveler services, retail, food and beverage and entertainment establishments. In addition to addressing storm water control functions and restoring degraded ecosystems, nearly two miles of walking trails will complement newly designed streams and water pools as proposed in preliminary conceptual planning. This includes the massive undertaking of rehabilitating 24 acres of under-used land through a detailed environmental engineering plan that is now approved and permitted by the U.S. Army Corp of Engineers.

This effort works in cooperation with the EPA, FEMA, and the Missouri Department of Natural Resources (MDNR). This revitalization of the environment paves the way for full economic development of approximately 95 acres that would otherwise remain economically unproductive and not useful for the city and county.

The project is currently proposed for the Silver Creek Galleria area along South Range Line Road and 44th Street. It consists of approximately 150 acres of retail and hospitality developments to include national retailers, restaurants, recreation activities, and hotels. The overall plan includes enhancements and restoration of Silver Creek that bisects the property, including trails, wildlife friendly native plantings, and ponds and wetlands. While not directly in the recovery area, this area is directly adjacent to the South Range Line area directly in the tornado's path. This project intends to spur significant growth to southeast Joplin and the recently incorporated Village of Silver Creek.

Possible funding sources:

- Private debt
- Tax Increment Financing

Convention Center and Hotel

Both downtown and I-44 locations are being considered for this much-needed facility. It has been long recognized that Joplin lacks the hotel rooms and meeting capacity to attract major conventions and tradeshows. The Master Developer and the Hope Valley developer are determining the viability of such projects.

Possible funding sources:

- Private debt
- Tax Increment Financing
- EDA

Medical Sector Projects

Mercy Hospital and Medical Office Buildings

The devastated St. John's RMC is being reconstructed as Mercy Hospital at 50th Street and Hearnes Boulevard (South Main) along the I-44 corridor. The hospital, supported by nearly $1 billion in private funding, is expected to be complete in early 2015. At 26th and McClelland, the Master Developer has acquired land to develop a large medical office facility to offset the multiple facilities that were lost in the storms. Although construction isn't complete, the hospital is already a major economic influence along South Main Street in Joplin, encouraging small businesses to relocate in the vicinity.

Possible funding sources:

- Private debt
- FEMA Mitigation Funding
- HUD-CDBG

Medical Education/University Complex

Discussions are underway between the City of Joplin and Missouri Southern State University about expanding the Kansas City University of Medical Biosciences programs into the Joplin area. Multiple sites are being considered.

Possible funding sources: Private debt and HUD-CDBG

Mental Health Programming

Joplin relies on outside organizations to provide public mental health programs. The community and local providers, including Joplin School District and the Ozark Center, have expressed the need for training and educational funding support to expand services. The targeted groups to receive the services include children, teens, parents or caretakers, families, and adults. Public and private agencies will work together to coordinate care and collaborate on new programs.

A wide range of recovery programs were designed post disaster to help survivors, responders, and the community recover. Programs advance understanding about how disasters affect all segments of the population, teach coping skills, and provide support.

Education and training programs will focus on:

- Supporting Joplin Schools Check and Connect Student Engagement Program for at risk youth

- Examining organizational reactions to disaster
- Building effective and positive coping skill
- Providing needed support among groups and organizations
- Connecting community and residents to additional programs and resources, including physical and mental healthcare providers

Possible Funding Sources: HUD CDBG

In 2014, Joplin provided $332,000 of CDBG-DR1 funding for the Joplin School District's mental health needs. Additional funding has been designated for other community services in this sector.

Neighborhood Sector Projects

Housing and Neighborhoods

A year following the tragedy, the recovery process has made significant progress. Of the 586 individuals and families living in FEMA trailers, by 2012 only 150 trailers remained. Affected residents were working with Joplin, FEMA, and private agencies to secure housing. Allowing for a FEMA-approved one-year extension by the summer of 2013, citizens remaining in trailers were placed in area residences and all FEMA trailers were removed. This set a precedent for a disaster of this magnitude.

Housing needs identified through analysis since the disaster prompted modification of an existing program and created the Joplin Housing Assistance Program (JHAP). In 2013, nearly $13 million of its awarded $47 million HUD CDBG-DR1 grant funds were allocated for homeownership programs. Joplin continues to focus its housing resources on rebuilding and repopulating the recovery area, increasing the number of affordable housing units, and improving opportunities for homeownership for low- and moderate-income (LMI) families. In coordination with Joplin, an outside firm was retained to conduct application processing and ensure adherence to CDBG program guidelines. This program requires the total amount of homebuyer closing and/or down payment assistance is less than $1,000 or greater than $30,000 for individual homebuyers. To date, JHAP has provided nearly $6 million of assistance for over 215 homes. This has been a notable success in repopulation and infill objectives across the recovery area.

The Joplin City Council approved an agreement with the Joplin Housing Authority in 2014 to help more than 80 low-income residences affected by the tornadoes. The agreement provides $290,000 for tenant-based rental assistance and is funded by the 2012 CDBG-DR Fund. The assistance helps low-income families subsidize their rent when post-disaster rental prices fluctuated. Joplin also authorized $210,000 to repair damaged homes that private insurance and FEMA recovery programs could not cover. This includes parking lot repairs and landscaping.

Duquesne received Missouri State HUD CDBG funding for housing rehabilitation and reconstruction assistance to residences. To date, two reconstruction projects are complete, and one reconstruction project and one rehabilitation job are substantially complete. In addition, multiple reconstruction ventures are scheduled to start and additional applications for

reconstruction are under review. The totality of the funding will be obligated through this rehabilitation and reconstruction. There is still demand for the program, so the city is in discussions with the state about whether there might be additional state funding available.

As of November 2014, 92% percent of residences have been rebuilt, are under construction, or have permits to do so and 90% percent of the impacted businesses are back open. As of July 2014, Joplin had been spent $1.036 billion on construction.

Among multiple private charities involved in recovery, Joplin's Habitat for Humanity played a significant role in home reconstruction and repairs. Since the 2011 disaster, Habitat for Humanity has partnered to build over 150 new homes to date, greatly assisting in the rebuilding of Joplin neighborhoods.

In addition, in 2014 after a second housing analysis, Joplin created the Joplin Housing Rehabilitation Program, which provides up to $25,000 toward home repairs. Three local nonprofits were contracted to assist in home repairs: Rebuild Joplin, Catholic Charities, and Economic Security Corporation.

Prior to the disaster, the city was organizing expanded neighborhood revitalization programs, primarily focused on LMI neighborhoods in the north Joplin area. That program is now being revamped and accelerated. This program will work with newly planned developments and will also include Joplin's older, historic residential areas. The broadened scope will ensure continued investments and improvements are made, while guaranteeing connectivity to new and modern amenities and recovering areas through improved infrastructure, trails, and sidewalk enhancement. Branding of neighborhoods and portions of the city is being considered to help build cohesion and develop as sense of identity.

Green Neighborhoods

Citizens have expressed support for Joplin's first sustainable and green neighborhood, involving construction of 4-10 modern innovative homes. Designated funding will be used for neighborhood infrastructure and site development, including enhanced storm water management and berms, a community garden, storm shelter, earth work and remediation, and landscaping.

Additionally, efficient "mini-homes" ranging from 500-1,500 square feet could be built and meet an expressed need voiced by community young professionals and seniors. Homeowners could also participate and be qualified through the J-HAP. The city is working with a national non-profit, while Green Town Joplin is also providing community education and support of green sustainable developments.

Possible housing funding sources include:

- Private debt
- HUD CDBG
- Joplin budgeted annual infrastructure funding

Senior Housing Needs

Wallace Bajjali, Inc., in partnership with O'Reilly Development Partners, is developing two premiere facilities: The Villas, an independent and assisted-living facility, and The McClelland, a memory care facility, for a combined total of 150 beds on a 40-acre brownfield within the recovery area. Working with the State of Missouri Department of Health, a Certificate of Need was issued in 2014 in support of the project.

Possible funding sources:

- Private debt
- HUD-CDBG

Culture, Parks, and Recreation Projects

Trees, Trails and Parks

As part of the re-establishment of the urban forest, the city is replacing 25,000 trees across the recovery area and nearly 18,000 have been replaced to date. These trees will be reintroduced according to a commissioned 2014 Tree Study. Trees and foliage will help advance the redevelopment of the affected area and greatly enhance tornado-affected neighborhoods to create a more attractive place for residential redevelopment and population growth objectives. Trees have been a significant and tangible visual prompt of the positive recovery progress underway and help with the beautification of the area while meeting city stormwater mitigation objectives.

Trees will also help mitigate the Heat Island Effect, a result of large undeveloped areas, as well as developed and paved urban areas that are not shaded from UV radiation. Replacing destroyed trees at this magnitude will also continue to secure Joplin's place as a Tree City USA member.

Schifferdecker, Cunningham, and Parr Hill Parks have been refreshed with new playground equipment, a swimming pool and waterpark, sports equipment, trails, as well as trees, ponds, parking, and other amenities. Working with Wildcat Glades Conservation and Audubon Center, Missouri Department of Conservation, Missouri Department of Natural Resources (MDNR), US Fish and Wildlife Service, and the Missouri Prairie Foundation, a new 8-acre park adjacent to Campbell Parkway is currently being restored as a native tall-grass prairie demonstration area complete with trails. An adjacent 9-acre regional storm water detention area is underway and will be planted with native trees, wildflowers, and grasses and includes a trail between 15th and 20th streets, ultimately connecting to 4th Street downtown. Nearly 1,500 caliper trees were planted along the parkway in 2013 through a MDNR stormwater grant.

An additional 20 miles of city-wide multi-use trails under construction will nearly double the trail network when completed; a two mile section of multi-use has just been added along Campbell Parkway connecting 20th Street to Landreth Park at 4th Street.

Near Cunningham Park, the site of the former St. John's RMC has been subdivided for the

newly reconstructed Irving Elementary School, the Mercy Memorial Garden, and a planned 18 acre city park was recently approved and work began in earnest in August 2014. This site is also being considered for a possible future cultural or recreational center effort.

Possible funding sources include:

- Private deb
- Parks and Storm Water Tax funding
- HUD-CDBG

Joplin Center for the Arts and Entertainment/Amphitheater

The Joplin Center for Arts and Entertainment/Amphitheater and Union Depot restoration projects incorporate spaces for entertainment productions, a visual and performing arts center, an outdoor amphitheater and Town Green, and related office spaces designed to encourage and stimulate the creative culture in Joplin. Discussions are underway on identifying a location for the performing and visual arts center as well as modernizing and identifying a location for the Joplin Mineral Museum. Interest in restoring the city's historic Union Depot continues as a broader revitalization effort of the downtown and Broadway Street area.

Possible funding source: Private debt

Parks and Recreation Facilities

The Joplin Parks and Recreation Department has been researching community sports and recreation needs since prior to the disaster. In 2010, a Parks Citizen Survey was completed, along with a 2014 survey. From these efforts, and additional staff discovery, the following information continues to be gathered and expanded upon.

It has been recognized that while significant progress has been made both prior to and post-disaster, the City of Joplin lags behind similarly sized communities with regard to adequate indoor recreation facilities or diverse programs for the residents of Joplin.

This same lack of facilities also impacts the Joplin Sports Authority's (JSA) ability to fulfill its mission to bring major sporting events to Joplin. A complex or multiple facilities would also allow a variety of spaces for seniors use, sporting activities, as well as provide large room rentals for community groups.

Major meeting and convention complex

A major meeting facility could be used to help the JSA in its mission to bring regional sporting events to Joplin, filling hotel rooms and increasing sales tax and revenues for local businesses.

For many years there has been a void in the area for facilities of this scale. Developing multipurpose venues allowing auditorium seating for up to 3,000 would fulfill long expressed needs of the citizenry for large meeting and event spaces. It would also serve as another major trail hub with connectivity into the network and also be designed and constructed to also provide

large emergency shelter spaces. Having facilities with such flexibility and opportunity for cross-programming would be a big step toward modernization of Joplin.

Senior Citizen's Center

The senior community has advocated for a new facility and has expressed support of the city's discovery of potential. A new recreation center with a senior center would allow for scheduled meetings, lunch and socialization while allowing new fitness opportunities. A portion of any facility could also include a senior therapeutic pool.

Athletics Programming

Currently Joplin does not have indoor space in a capacity sufficient enough for Parks and Recreation to build indoor recreation programs. Additional recreation centers will allow year-round sports to be offered with indoor amenities for soccer, basketball, and competition swimming is being considered. Additionally, Joplin Parks and Recreation will have the ability to host a multitude of skill development camps with new facilities.

Large Meeting Rooms and Space

Prior to the disaster it was acknowledged there was a need for large indoor spaces for activities. A large facility has been proposed to include six basketball courts and two indoor soccer fields, enough open space to accommodate up to 3,000 people for trade shows and special events as well. Additionally, in the event of another catastrophe this space could be used as an emergency shelter. Three meeting spaces with modern A/V and computer hook-ups and a catering kitchen would be available for use by public and private entities. The City's *Blueprint for the Future* as adopted in July of 2010, specifically addresses all of the needs for this type of facility. Finally, the CART Plan identifies a need to "enhance the quality of life", the desire to "increase community gathering spaces" and to "provide space for more special events and activities for all age groups".

Possible funding sources:

- Parks and Storm Water Tax funding
- Issuance of Public Bonds
- HUD-CDBG

Education Sector Projects

Joplin Schools

The Joplin Senior High School and Franklin Technology Center is a state-of-the art education and training facility that will provide high quality programming and hands-on learning experiences to students. Under construction, this school will open in September 2014. January 2014 marked the opening of three new schools as mentioned earlier. An early childhood education facility is currently being considered as many small home-based daycares were destroyed.

Possible funding sources include:

- School Bonds
- FEMA reimbursements
- HUD-CDBG

Public Library and 20th Street Commercial Development

Currently under development, this 50,000 square foot modern facility will be located at the corner of 20th and Connecticut Streets in the heart of the recovery area and complement a larger private 150,000 square foot mixed-use and loft-over-retail redevelopment effort advanced by the Master Developer. Funded by a $20 million EDA grant, library project design will began in late 2014. The adjacent development is funded in part by a mix of TIF funds and private investment.

Possible funding sources include:

- Private debt
- Tax Increment Financing
- EDA funds

Infrastructure Projects

Sidewalks and Americans with Disabilities Act (ADA) Ramps

Staff analyzed city aerials for sidewalks. Staff code enforcement officers surveyed the area and it was determined that there are 116,193 feet in the tornado area that were severely damaged and needed immediate replacement. Added to the 658,096 feet without sidewalks and the 38,178 feet to add a sidewalk on both sides in areas with only one sidewalk, we have a need of 812,467 feet of sidewalk to be installed or replaced in the tornado area to encourage a more walkable community.
In addition, almost every Americans with Disabilities Act (ADA) ramp surveyed is not in compliance and most intersections do not have ramps at all. There are 416 intersections in LMI areas, each with 4 corners providing 1,664 ADA ramps needed. This will maximize CDBG usage in the tornado area for ADA. The other ramps outside the LMI areas will be done with the curb and gutter money from a $14 million state infrastructure grant. A significant number of street curb and gutters were heavily damaged during debris removal process and will be replaced through this process as well.

Sanitary Sewer Relining and Manhole Repair

The tornado and ensuing heavy equipment caused significant damage to the manhole and sanitary sewers across the tornado recovery area.

The City's current capital improvement program repairs and replaces sanitary sewers with an annual budget of $1.5 million. It is currently being used primarily to clean and televideo the entire system per the *MDNR Bypass Elimination Plan* and for inflow and infiltration reduction

projects in portions of the Turkey Creek collection system including the Turkey Creek Waste Water Treatment Plant.

All Expedited Recovery Area sanitary sewers were videoed, measured, and rated from 1-5, 1 being best condition and 5 being the worst condition. City staff extrapolated those rankings and percentages across the entire tornado area and calculated costs for repairing the category 3 and above lines. Estimates and ranking scale are included as a part of this work. The work involves cleaning and TV inspection of the remaining lines in the tornado area to determine exact project scope, similarly to what was done for the expedited debris removal area portion of the project. The project also involves repairing all 1,700 manholes in the tornado area. The repair of the sewer lines is anticipated to be slip lining the pipe with occasional replacement in areas that cannot be navigated by the slip-lining process. The intention is to complete as many storm sanitary projects as possible prior to paving activity to minimize damage to new pavement.

Storm Sewer Replacement and Repair

Storm debris resulted in blocked drains and ensuing water damage caused significant erosion and collapsed storm sewers sections across large areas.

The city has an annual capital program that repairs and replaces system storm sewers annually. Post disaster, city staff surveyed the existing storm water system and estimated replacement costs on undersized, damaged, or otherwise inadequate lines and inlets.

Some 34 projects identified consist of existing priority drainage problems and are largely made up of needed residential neighborhood drainage improvements, some regional detention ponds, with a smaller number of improvements at street intersections and commercial areas. These improvements also allow comprehensive GIS mapping of existing projects and added improvements. Modernized GIS maps will reduce future planning and operational costs. Storm water projects will be completed prior to paving activity to minimize damage to new pavement.

Curb and Gutter

Staff code enforcement officers surveyed residential curbs and gutters across the recovery area to determine the extent of tornado damage and ensuing damage from of heavy equipment due to debris removal operations. Roughly 700,000 linear feet of curb and gutter is damaged. The least invasive approach is to partially remove the curb and replace with an S-Curb, or a stand-up curb in lieu of removing and replacing the entire curb and gutter. This will expedite the process and result in fewer disturbances on areas already paved.

Streets/Asphalt Overlay

Prior to the tornado on May 22, the city's asphalt program consisted of a two-pronged approach. The city was divided into seven zones which received a micro-surfacing treatment on a rotational basis. Distressed pavement received annual asphalt mill and overlay until the funds are expended for the year. Additional funds will help repair these roadways to previous- or better-than-previous condition. No paving was done in 2011 due to immediate recovery needs, so

allocations from two years of the asphalt paving program were coupled with recovery funds to continue paving in the tornado area, as well as other parts of the city. Staff has evaluated the entire tornado damaged area and determined the appropriate measures for repairing roadways. Many of these areas are in need of substantial infrastructure work and sustained greater damage during the cleanup due to catastrophic damage to area structures, resulting in intensive debris removal operations and damage from associated heavy equipment clean up.

In 2014-2015, the city is using CDBG funds to focus on improving the pavement condition in LMI areas, making the most efficient usage of these monies by allowing some other infrastructure work such as storm water to proceed in advance of paving the streets—this will eliminate having to excavate freshly paved areas. A coordinated approach is being taken with storm and sanitary sewers construction to minimize damage and ensure completion prior to paving activity.

With initial funding sources available starting in FY2013 through the reconstruction program, approximately 25% of city streets can be surface treated. Because the CDBG area is being removed from the program for 2013 and moved to FY2014, and combined with our annual maintenance money, this will add approximately an additional 10% of roadway to total 35% treated. These are all streets that will require more work than just an overlay.

Possible funding sources:

- Joplin Public Safety Tax
- HUD-CDBG

20th Street (Main Street to Range Line Road)–Streetscape

The streetscape project would provide pedestrian-friendly sidewalks on both sides of 20th Street from Main to Range Line, approximately 2 miles. This improvement will add momentum to additional nearby commercial and residential development, moving forward toward the goal of population and economic growth. This provides an important opportunity to stimulate and enhance redevelopment along this heavily-damaged main thoroughfare with modern updates

like street lights, benches, and public gathering places. Opportunities exist to integrate motifs and attractive design elements with the new Joplin High School and Library anchors, and the associated 150,000 sq. ft. of adjacent commercial mixed-use and loft-over-retail. Importantly, this would allow for review and implementation of portions of the EPA Green Streets 20th Street Corridor design completed. When complete, the 20th Street Corridor will be an attractive and powerful commercial sector with significant residential and recreational dimensions and is a core aspect of our population gain objectives.

A four-lane railroad overpass is currently under construction at 20th Street as well to alleviate traffic issues and emergency vehicle response times. The bridge includes pedestrian and bike lanes to tie into overall trails system and a multi-use trail is underway from Range Line west to Campbell Parkway.

Possible funding sources include:

- Joplin Public Safety Tax
- MoDOT
- TIGER Grant
- EDA
- EPA Green/Complete Streets
- HUD-CDBG

Industrial and Business Parks' Infrastructure Projects

Additional major growth opportunities lie in the investment in infrastructure at all three of Joplin's Crossroads, Southern, and Wildwood Ranch Business and Industrial Parks. All three parks are along the 20th Street thoroughfare through the Joplin and Duquesne and are in need of infrastructure updates and repairs as all three sustained some level of damage varying from light to catastrophic. Additional funding is being considered for the Joplin Regional Airport Business Park.

Joplin uses business tools such as an Enhanced Enterprise Zones, revenue bond capacity, local grants, and real and personal property tax abatements to incentivize business growth and investment in the expansion of the parks; utilities, sanitary sewer, and road infrastructure are of primary and continued focus. The limited availability of annual budgeted resources, coupled with the high costs associated with these types of infrastructure, are a major determining factor in a business or industry locating or expanding within the parks and community.

The city often cannot respond quickly enough with the level of support requested by a prospective developer in the time required primarily for program implementation or project construction. Investing in cost-control incentives will provide business opportunity and subsequent growth, which will afford more and better employment opportunities for the Joplin region. These opportunities, coupled with other successful programs underway in the residential housing sector, school district, and community amenities, will provide Joplin region citizens opportunities for jobs, homeownership, and a higher quality of living.

The CART's post-disaster planning, combined with the Chamber's Joplin Regional Prosperity Initiative, resulted in a regional collaborative partnership implementing a five-year strategic plan to expand jobs, increase economic opportunity and capital investment, and promote a superior quality of life for residents and visitors.

The Joplin Chamber of Commerce, Joplin Industrial Development Authority, and City Council have endorsed these efforts and continue investing significant resources to community industrial parks through the expansion and improvement of infrastructure for future growth and jobs creation. The opportunity to invest significant EDA and CDBG resources is unprecedented and would result in major improvements to cultivate businesses and incentivize expansion.

Crossroads Business and Industrial Park

As Joplin's largest industrial park, Crossroads currently encompasses nearly 800 acres and 16 businesses employing more than 900 people. This area received major damage as the tornado transitioned in intensity from EF-3 to an EF-2. While the park has existing natural gas and water service, an expressed need for overall infill and expansion of the park infrastructure is to facilitate business growth with the addition of streets and sewers.

In 2013, the MoDOT announced the construction of new interchange in 2015 to the north of the park which will provide direct access to Interstates 44/49. This was a much needed connection requested by Joplin and Duquesne in order to alleviate heavy truck and vehicle access to Crossroads Park through residential neighborhoods and retail areas.

Possible funding sources include:

- EDA funds
- State of Missouri CDBG
- HUD CDBG

Joplin Southern Park

Southern Park is a 330-acre development which sustained catastrophic damage in the 2011 disaster as the tornado was at EF-5 intensity as it moved through this area (Figure 3). Southern Park has truck-intensive firms and considerable traffic utilizes the intersection at 32nd and Davis Streets both in the jurisdictions of Duquesne and Joplin. This intersection needs signalization, which is complicated by the presence of the Kansas City Southern tracks, which angle across 32nd Street. Through-traffic on 32nd Street converges here with slower trucks merging from Davis Street resulting in a historically hazardous intersection. Duquesne Road would need to be strengthened, widened and shouldered to handle the increased truck traffic.

Possible funding sources include:

- EDA funds
- State of Missouri CDBG
- HUD CDBG

Wildwood Ranch Business and Industrial Park

Wildwood is part of a modern 2,100 acre mixed-use development that includes 440 acres of business and industrial development employing nearly 300 people. Extending a sewer line main from the southern 32nd Street area north to 20th Street and Malang Road and constructing a lift station will provide sewer service to over 350 acres of possible growth.

Possible funding sources include:

- EDA funds
- State of Missouri CDBG
- HUD CDBG

Joplin Chamber of Commerce Job Training and Education

The Chamber provides economic development services under an annual contract with the City of Joplin; efforts focus on developing incentives to entice more companies and business expansions in the Joplin area. The creation of a training fund would be very beneficial to create a pool of training opportunities for upgrading employees' existing skills for better employment opportunities and pay as well as new job training. This would allow companies to create more employment opportunities, while providing incentives for people to stay or relocate here, which is a high priority of the long term tornado recovery and enhances population growth objectives. Funding would provide training for approximately 1,000 people over two years, allowing the city to better serve existing companies, provide stronger incentives for new company attraction, and improve the skills of residents.

Possible funding sources:

- EDA funds
- State of Missouri CDBG
- HUD CDBG

Joplin Area Transportation Study Organization (JATSO) Infrastructure Projects

A series of regional infrastructure projects are outlined in the JATSO Project Report submitted to the MoDOT in April 2014. JATSO is comprised of elected officials, city planners, public works directors and city administrators who routinely review and recommend transportation projects for the Joplin area. Priority elements of the proposed projects advance regional interests, including important connectors in and out of the Joplin region, and also address important safety and economic development factors. The planning identified 15 road, highway and bridge projects from the following list (Table 3) to be recommended to MoDOT for planning.

Possible funding sources:

- Missouri Sales Tax
- MoDOT,
- City of Joplin and County Funds.

Table 3. JATSO Recommendations to MoDOT.

Potential transportation projects in JATSO area (**Final Prioritized List** - updated 4/9/2014):

Road/Highway/Bridge Prioritized Projects

Final Priority	Priority	Mode	Route	Description	Source	Jurisdictions
#1	High	Road/Highway/Bridge	Rte. 171/Rte. 249	Upgrade to Interstate	JATSO	Carterville, Duenweg, Joplin,
#2	High	Road/Highway/Bridge	West Corridor (TBD)	New limited access highway	2010 LRTP	Joplin, Jasper Co., Newton Co.
#3	High	Road/Highway/Bridge	West Corridor (TBD)	New limited access highway	2010 LRTP	Carl Junction, Joplin, Jasper Co
#4	High	Road/Highway/Bridge	I-44	Widen I-44 to 6 lanes / NEPA Study	JATSO	Joplin, Jasper Co., Newton Co.
#5	High	Road/Highway/Bridge	Rte. 171	Widen to 4 lane (or add turn lanes at all intersections)	2010 LRTP	Airport Drive, Carl Junction, Ja
#6	High	Road/Highway/Bridge	Madison Ave.	Intersection improvements	On The Move	Webb City
#7	High	Road/Highway/Bridge	Connecticut Ave.	Widen to 4 lane	2010 LRTP	Joplin, Leawood, Newton Co.
#8	High	Road/Highway/Bridge	Connecticut Ave.	Road widening	On The Move	Joplin, Leawood
#9	High	Road/Highway/Bridge	44th St.	Road widening	On The Move	Joplin, Leawood
#10	High	Road/Highway/Bridge	44th St.	Widen to 3 lane	Leawood citizens	Joplin, Leawood
#11	High	Road/Highway/Bridge	Zora	Widen to 5 lane	2010 LRTP	Joplin, Webb City, Jasper Co.
#12	High	Road/Highway/Bridge	32nd St.	Widen to 3 lane (plan for 5)	2010 LRTP	Joplin, Jasper Co., Newton Co.
#13	Medium	Road/Highway/Bridge	Rte. 249	New interchange	On The Move	Jasper Co.
#14	High	Road/Highway/Bridge	Rt. 66/7th Street	Widen to 5 lane + pavement rebuild	2010 LRTP	Joplin
#15	High	Road/Highway/Bridge	Rt. 66/7th Street	Access Management & Intersection Improvements (Complete Streets)	2010 LRTP	Joplin

Bike/Pedestrian Prioritized Projects

Final Priority	Priority	Mode	Route	Description	Source	Jurisdictions
#1	High	Bike/Pedestrian	Range Line Rd.	ADA upgrades at various intersections	On The Move	Joplin, Webb City
#2	High	Bike/Pedestrian	Frisco Greenway Trail	Trail crossing	On The Move	Webb City
#3	High	Bike/Pedestrian	Duquesne Rd.	Sidewalk improvements	On The Move	Duquesne, Joplin
#4	High	Bike/Pedestrian	Rte. 66/7th St.	Complete Streets - bike, pedestrian & transit accomodations	On The Move	Joplin
#5	High	Bike/Pedestrian	Webb City Habitat Trail	New trail system (approx. 7 miles - compacted aggregate)	On The Move	Webb City
#6	High	Bike/Pedestrian	Rte. Z/Pennell St.	Sidewalks and crosswalks at various intersections	On The Move	Carl Junction
#7	High	Bike/Pedestrian	Main St. (Webb City)	Sidewalk improvements	On The Move	Webb City
#8	High	Bike/Pedestrian	2nd St. (Joplin)	Bike and pedestrian accomodations, 2 schools along route	On The Move	Joplin
#9	High	Bike/Pedestrian	Range Line Rd.	Pedestrian bridge and sidewalk approaches along Range Line Rd.	On The Move	Joplin
#10	High	Bike/Pedestrian	4th St. (Joplin)	Sidewalk improvements, school along route	On The Move	Joplin
#11	High	Bike/Pedestrian	Newman Rd.	Bike lanes and sidewalks on both sides of street	On The Move	Joplin
#12	High	Bike/Pedestrian	Rte. 43/Main St. (Joplin)	Sidewalk improvements	On The Move	Joplin
#13	High	Bike/Pedestrian	Connecticut Ave.	Bike lanes	On The Move	Joplin
#14	High	Bike/Pedestrian	Range Line Rd.	Pedestrian accomodations	On The Move	Joplin
#15	High	Bike/Pedestrian	Bus. 49/Gateway Dr.	Add bike lanes (included on Saginaw's Comprehensive Plan)	On The Move	Newton Co.

Transit Prioritized Projects

Final Priority	Priority	Mode	Route	Description	Source	Jurisdictions
#1	High	Transit	Various	Add 3 trolley routes and 1 MAPS van to existing trolley system	MAPS	
#2	High	Transit		Transfer station	MAPS	
#3	High	Transit	Various	Increase weekday operating hours of MAPS & trolley system (3 trolleys and 3 vans)	MAPS	
#4	High	Transit	Various	Increase number of vehicles operated (and increased operating hours for each) - 6 trolleys and 7 vans	MAPS	
#5	High	Transit	Various	Downtown Circular trolley route (Downtown to Northpark Mall & MSSU)	MAPS	

Freight Prioritized Projects

Final Priority	Priority	Mode	Route	Description	Source	Jurisdictions
#1	High	Freight	I-44	Widen I-44 to 6 lanes	JATSO	Joplin, Jasper Co., Newton Co.
#2	High	Freight	Rte. 171/Rte. 249	Upgrade to Interstate	JATSO	Carterville, Duenweg, Joplin,
#3	High	Freight	West Corridor (TBD)	New limited access highway	2010 LRTP	Joplin, Jasper Co., Newton Co.
#4	High	Freight	West Corridor (TBD)	New limited access highway	2010 LRTP	Carl Junction, Joplin, Jasper Co
#5	High	Freight	Zora	Widen to 5 lane	2010 LRTP	Joplin, Webb City, Jasper Co.

Aviation Prioritized Projects

Final Priority	Priority	Mode	Route	Description	Source	Jurisdictions
#1		Air		10 T-Hangars	Joplin Regional Airport	Joplin
#2		Air		Spec Hangar/Maintenance Facility	Joplin Regional Airport	Joplin
#3		Air		GA Terminal Expansion	Joplin Regional Airport	Joplin
#4		Air		Flight Museum Facility	Joplin Regional Airport	Joplin

Additional Resilience and Preparedness Efforts

Post disaster, Joplin implemented a series of efforts and initiatives to be better prepared in the event of future disasters:

- The city sponsored insurance workshops and seminars post-disaster in response to the large number of residences and business that were uninsured or under-insured. A month-long campaign was launched to educate citizens about the opportunities and value of insurance.
- Joplin purchased 4,000 NOAA weather radios and distributed them to its citizens, free of charge.
- The city upgraded all sirens to two-radio communications, and installed solar panels to ensure a power supply to the batteries.
- Joplin is currently installing a NOAA Weather Radio Transmitter on top of City Hall to ensure good reception for all area weather radios.
- The city acquired a CivicPlus website to allow capability to post and send messages to its residents via SMS and email, as well as via social network sites such as Facebook and Twitter.
- Joplin changed siren test dates from every Monday to the first Monday of each month to reduce activations from 48 per year to 12. This adjustment will reduce siren desensitizing among the local population. The siren activation policy was changed to include multiple activations, as needed.
- In 2014, the city upgraded all police and fire computers providing better security and will assist in better coordination and accessing data during emergencies, as well as when on patrol and at crime scenes.
- The Joplin Police Department certified officers in Crime Prevention through Environmental Design (CPTED), a crime mitigation program that assists businesses in reviewing designs of current facilities and new construction projects recommending enhancements to security and safety.
- In 2013, City of Joplin Human Resources completed an emergency action plan for City Hall in the event of an emergency and is in the process of creating response plans for all other municipal facilities as well.

Joplin Public and Private Funding Sources Awarded or Received

At the time of publication, the resources available for recovery are as follows:

- HUD CDBG DR1 and DR 2—$160 million
- Disaster TIF District created—$47 million in municipal, commercial and medical redevelopment
- Hope Valley TIF District—$17 million in commercial development along Joplin's major Range Line commercial corridor
- EDA—$20.5 million for infrastructure and a new library; $3.5 million toward Franklin Technology Center workforce development training
- State of Missouri Infrastructure Repair Grant—$14 million
- Missouri Downtown Economic Stimulus Act tax credits—$3.7 million

- Missouri Distressed Area Land Assemblage tax credits—$3.5 million
- Community Foundation of the Ozarks Tornado Recovery Fund—$1 million
- MDNR—$500,000 for stormwater improvements and trees
- Chamber of Commerce SBA and Joplin Tomorrow Fund—$1.2 million
- U.S. Fish and Wildlife Service—$100,000
- EPA—$100,000 Complete-Green Streets planning grant
- US Forestry Service and MDC provide $100,000 for a 2 year arborist position
- EPA—$100,000 Complete-Green Streets planning grant
- Additional funding:
  - $10 million in construction financing assistance for developers, which would be available upon approval by the Missouri Housing Development Commission.
  - $7 million from the Neighborhood Preservation Program, through the Missouri Department of Economic Development.
  - $3.5 million in additional Federal CDBG funds for Economic Development.
  - $1 million in down-payment assistance through the Missouri Housing Development Commission.
  - $600,000 for home repairs through the Home Repair Opportunity Program.
  - Joplin Homeowners Rehabilitation Program initiated to provide $775,000 funding to support single-family housing recovery. The program assists eligible homeowners located in the recovery area in repairing damage not covered by FEMA or insurance and to correct any other deficiencies in the home.
  - The U.S. Small Business Association (SBA) is offering low interest loans to private and nonprofit organizations of any size. These businesses may take out up to $2 million in loans with repayment terms of up to 30 years. Up to $40,000 in funds are available to homeowners and renters for replacement disaster damaged personal property and up to $200,000 for rebuilding or repair of real estate. The loans are structured to be affordable for those affected by the tornado. SBA provided low-interest disaster loans to 417 homeowners for $26.8 million, 100 to businesses for $16.4 million and to not-for-profits for $256,400
  - Joplin Area Chamber of Commerce has set up the Joplin Recovery Fund, a long-term disaster recovery account set-aside for small businesses.

Recovery Milestones to Date

June 2011: Joplin City Council passes a reconstruction hiatus in the EDR area to allow for a safe operation of US Army Corp of Engineers debris removal operations that required oversized equipment.

July 2011: City announces Building Permits now available for entire recovery area.

August 2011: Major debris removal operations are completed; nearly 3 million cubic yards of residential debris removed.

September 2011: Tuscaloosa city officials visit Joplin and share insights and information own their own recovery.

November 2011: After six months of community engagement, CART presents the citizen recovery plan to the City Council and it's unanimously adopted.

May 2012: Seneca completes debris clearing and repairs to their playgrounds, roads, and emergency vehicles through a FEMA grant totaling more than $69,000.

June 2012: EDA awards the City of Joplin $250,000 toward the hiring of a disaster recovery coordinator to focus on Joplin and Duquesne recovery planning and implementation.

July 2012: City Council approves predevelopment agreement with Wallace Bajjali, Inc., a development firm from Sugarland, Texas, to serve as the Master Developer in recovery efforts. The City of Joplin and HSTCC hire two EDA funded disaster recovery coordinators to assist in project planning.

October 2012: HUD awards the City of Joplin $45 million in CDBG-DR funding. City's proposed budget for these funds includes more than $31 million for housing; and $6.5 million for infrastructure needs within the disaster area.

December 2012: Joplin City Council approves formation of a TIF district that includes 19 major projects over 3,000 acres within Joplin including the recovery area.

March 2013: HUD announces an additional $113 million has been awarded to the City of Joplin to help the community recover. This grant was part of $514 million allocated among nine states nationwide and provided through HUD CDBG Program to support long-term disaster recovery efforts in areas with the greatest extent of 'unmet needs.'

May 2013: TKF Foundation provides a portion of $585,000 grant to Joplin for creation of open space in recovery and healing, aka Butterfly Garden & Overlook Project, at Cunningham Park. EDA awards a $20 million grant to help revitalize the 20th Street commercial corridor, an area that was severely impacted by the tornado. This includes the relocation of the public library.

June 2013: MDNR awards $500,000 toward the planting of more than 1,500 trees across the recovery area and Joplin Creek Corridor, helping offset the nearly 25,000 estimated lost. Last of 586 FEMA sheltered families are placed in permanent housing and FEMA trailers are removed.

July 2013: City of Joplin retains Deloitte Consulting to assist in the expenditure and monitoring of $45 million in HUD CDBG DR I funding for recovery projects.

August 2013: City launches J-HAP to offer funding to individuals and families pursuing a home purchase in the recovery area. J-HAP assists eligible homebuyers with down-payment and/or closing costs while supporting single-family housing recovery.

September 2013: Parr Hill Park reopens after a major post tornado renovation an now includes additional trees, trails, pavilions, water features and a dog park.

October 2013: Joplin Area Habitat for Humanity completes 75 houses following the tornado, including 35 in the Governor's Challenge, which were completed in August. In addition, other affordable housing projects continue with new homes completed regularly. City of Joplin officials visit and participate in planning and information exchanges in tornado damaged Tuscaloosa, Alabama.

December 2013: EPA Region 7 notifies Joplin of $2 million in additional funds to ensure lead remediation is completed throughout the recovery area. Initiated in 2012, this funding has allowed the city of Joplin to offer the testing and remediation at no cost to property owners within the area affected by the May 2011 tornado. The city has received $5.5 million of the $8.5 million pledged to this effort.

December 2013: Joplin's Main Street Fire Station #4 opens at Hearnes Blvd. and 34th Street.

January 2014: Schifferdecker Fire Station #2 located at the intersection of Junge and Schifferdecker in Joplin opens. Three new schools open, Irving Elementary, Soaring Heights Elementary, and East Middle School.

March 2014: Joplin Tornado First Response Fund allocates nearly $1 million through 41 grants to 27 various agencies for diverse needs, including home construction and repairs, housing, furnishings and appliances, emergency weather radios, wheelchairs, storm shelters, playground equipment, and children's mental health services.

April 2014: J-HRP initiates $775,000 funding to support single-family housing recovery. The program assists eligible homeowners located in the recovery area in repairing damage not covered by FEMA or insurance and to correct any other deficiencies in the home.

August 2014: City of Joplin retains Deloitte Consulting to assist in the expenditure and monitoring of an additional $113 million in HUD CDBG DR2 funding for recovery projects. City of Joplin retains CBC Real Estate Group as the project manager for the development of the new EDA funded library at 20th and Connecticut Streets. The city accepts a donation of 18 acres located at the previous St. John's RMC site from Mercy Hospital for the development of a new public park in association with the adjacent Mercy memorial Gardens underway.

October 2014: The new Joplin Senior High and Franklin Technology Center open with Vice President Joe Biden providing remarks along with other officials.

October 2014: City of Joplin and HSTCC EDA funded Disaster Recovery Coordinator Grants end.

December 2014: J-HAP provides nearly $6 million of assistance for down-payment and/or closing costs to homebuyers, for a total of 216 homes sold to date. City of Joplin retains SAPP Design and TriState Engineering for the development of the new EDA funded library at 20th and Connecticut Streets.

Summary and Future Challenges

While clearly devastating, the 2011 disasters across the region have provided an unprecedented opportunity to explore the effectiveness of the region's immediate, short- and long-term responses to catastrophes in regards to planning and preparation, redevelopment and resiliency.

This report has primarily attempted to capture a body of knowledge on how area organizations and local, state, and federal agencies responded, and managed post-disaster. It also documents how lessons learned were utilized to improve post-disaster management and informed best practices and projects development moving forward. New policies, revised plans and redevelopments, amended budgets and the leveraging of existing and new resources, shared experiences and cooperative efforts in the recovery phase were recounted.

Cities of Joplin and Duquesne

In an unprecedented initiative, the Joplin and Duquesne leadership took an unparalleled approach to disaster recovery by letting citizens and community leaders share the responsibility and burden of planning for the future. The CART and ensuing subcommittees' planning process resulted in an engaged citizenry and formed consensus on the priorities and projects required to rebuild vibrant and growing communities. Citizens were offered multiple opportunities to participate in comprehensive recovery planning through public meetings, social media, web and print applications, surveys, charrettes, and formal City Council and other city meetings to weave together a vision for the future that addresses the needs of the city and its residents. Not without its challenges, the process has proven relatively successful on the whole and has been identified as a national model to be explored further.

Challenges and Lessons Learned

Through the development of this report, area organizations were contacted to share thoughts on the City's recovery. In a separate endeavor, Jane Cage and the Citizen Advisory Recovery Team published a booklet, *Pay It Forward*, which shares stories of select community leaders and citizens of challenges and lessons.

Below are individual thoughts gathered separately:

- Nearly $300 million in diverse and often times conflicting funding resources received to date has proven challenging in coordinating, sequencing and conjoining due to each source being unique in their own stipulations, guidelines and limitations on expenditures.
- Thoughtful decision making policies and procedures in place have proven invaluable to the many political and cultural challenges that exist to determine how to best allocate and expend such unprecedented resources efficiently and effectively in a long-term recovery atmosphere.

- Maintaining staff stamina and energy for a prolonged period of time under inordinate levels of stress has been challenging. Two years post disaster the city started to experience turnover of long term staff. Staffing capacities in dealing with disaster cleanup and ongoing recovery and implementation of revitalization projects, as well as the needs of the day-to-day city operations need to be carefully weighed and balanced.
- It is extremely difficult to engage in long-term economic planning functions while still absorbed in immediate disaster recovery efforts.
- Complex and outdated HUD-CDBG expenditure rules severely limits how funds can be used in disaster recovery and has been a significant impediment to recovery. Conflicting award guidelines from two separate awards of CDBG-DR1 and -DR 2 funding has been perplexing to coordinate. Lack of flexibility to utilize these funds to advance major redevelopment efforts has been disappointing.
- Encouraging FEMA to proactively articulate what resources the agency can provide for specific needs was initially problematic. Clear and direct communication through regular interfaces proved useful. Constantly-changing FEMA representatives throughout the recovery process interrupts planning continuity.
- Significant challenges emerged in meeting officials' and the public's recovery expectations while still in emergency mode six months after the event.
- Clear documentation and communication amongst community leaders and citizens proved vital in order to ensure the needs of the city, its people, and agreed upon priorities were kept in sequence during planning and implementation.
- There was initial recognition and understanding by citizens of the immediacy of recovery in weeks and months after the disaster, but public perceptions eventually shift as day-to-day needs and services are not met or provided; progress appears slow.

Business' Preparation

- Innovative staffing needs have to be addressed early on to identify short- and long-term strategies to meet existing and future operational needs. Bringing the right staff and expertise onboard early is critical to long term objectives.
- Think about your business' needs, from suppliers to production to delivery. What are some alternatives? Think about what your immediate needs are. Who can you count on in a disaster? Then draw up a plan. Many are available from trade groups and elsewhere online, but go beyond the template. You really have to walk through it. You have to make it your own and make sure your employees understand how it works.
- Think about your employees' needs. Does everyone have the basic stuff at home – a few days worth of food, water and medicines, blankets and flashlights just for starters – so they are comfortable leaving their families long enough to come to work?
- It's important to have everyone's mobile number. Even if cell phones are down, texts, which require little bandwidth, can still often get through. Immediate communications are critical.

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xv Missouri Department of Insurance, Financial Institutions, and Professional Registration. 2014

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Acronyms

ADA	Americans with Disabilities Act
ASPCA	American Society for the Prevention of Cruelty to Animals
CART	Citizen Advisory Recovery Team
CDBG	Community Development Block Grants
CDBG-DR	Community Development Block Grant – Disaster Recovery
CEDS	Comprehensive Economic Development Strategy
CPTED	Crime Prevention through Environmental Design
EDA	Economic Development Administration
EDR	Expedited Recovery Area
EMS	Emergency Medical Services
FEMA	Federal Emergency Management Agency
GIS	Geospatial information System
HMGP	Hazard Mitigation Grant Program
HSTCC	Harry S Truman Coordinating Council
HUD	U.S. Department of Housing and Urban Development
JATSO	Joplin Area Transportation Study Organization
JHAP	Joplin Housing Assistance Program
JHRP	Joplin Housing Rehabilitation Program
JSA	Joplin Sports Authority
LTRC	Long-Term Recovery Committee
MAPS	Metro Area Public Transit System
MDNR	Missouri Department of Natural Resources
MoDOT	Missouri Department of Transportation
MSA	Metropolitan Statistical Area
NFIP	National Flood Insurance Plan
NOAA	National Oceanic and Atmospheric Administration
RMC	Regional Medical Center
USDA	U.S. Department of Agriculture
USDOC	U.S. Department of Commerce

EMERGENCY ACTION PLAN

CITY
OF
JOPLIN

602 South Main Street
Joplin Missouri 64804

Designated Response Team

Updated August, 2014

City Hall	**Ext. #**	**Cell #**
Sam Anselm, City Manager	(x205)	417-691-0132
+ designates ERT Team Leaders		

Emergency Response Team Members **(By floor)**

Basement		
+ Jeff Tennis	(x299)	417-499-8181
Patrick Tuttle	(x271)	417-850-3526
1ST Floor		
Tamra Schaller	(x212)	417-825-2320
+Patrick Hurn	(x211)	417-529-7153
2nd Floor		
+ Dave Allgood	(x210)	918-533-8076
Lynn Onstot	(x204)	471-438-2287
3rd Floor		
AJ Whistler	(x246)	417-622-8563
Rachel Olsen	(x241)	417-499-2349
+ Mark Morris	(x247)	417-439-7877
4th & 5th Floors		
+ Lynden Lawson	(x560)	417-310-6971
Tim Johnson	(x592)	417-483-9652
Gina Simmons	(x528)	417-437-1445
Nate Turner	(x592)	417-499-0693
Dan Johnson	(x538)	417-291-2725
Jeff Oliver	(x573)	417-438-0850
Lindsey Dunn	(x542)	417-540-7021
Rick Boucher	(x526)	417-437-0920

City of Joplin
Emergency Action Program

In the event of an emergency the following action is required of all employees. The emergencies are outlined by type and action required. **It is your responsibility to be familiar with these procedures and location of the emergency exits.** Evacuation Maps are attached to this Emergency Action Program and also located in all departments be familiar with them.

FIRE

Alert:

If you discover a fire or have a fire reported to you, immediately call 911.
The building Fire Alarm will sound and should automatically notify the Fire Dept.
The Alarm will be a loud horn sound going on and off
DO NOT FIGHT THE FIRE unless required to get to the emergency exits, know where the fire extinguishers are located on each floor and be familiar with how to use properly

Employee Action:

1. Look for smoke or fire. **Call 911**
2. If no smoke or fire is seen secure your work area, if possible and safe to do so, and move to the main stairwell to evacuate. **Main stairwell is locate in the Southwest corner on each floor**
3. If smoke or fire is seen **IMMEDIATELY** move to the main stairwell. **DO NOT USE ELEVATORS**
4. While moving to the main stairwell gather all citizens, vendors, customers and ensure they are evacuated to the main stairwell
5. If you and/or any citizen, vendor or customer are unable to evacuate via the stairwell due to a medical condition, remain on the stairwell landing of the floor you are on and Fire Dept. personnel will assist them in evacuating
6. Walk quickly – do not run. Elderly, handicapped and small children should be assisted to the emergency exits
7. Primary Exit - Use the main stairwell on the Southwest corner of the building,
8. Secondary Exit – If the Primary Exit is blocked use the fire escape stairway in the Northwest corner. Use **EXTREME CAUTION** in the Northwest fire escape, the stairs are steep and narrow.
9. Upon exiting the building move to you designated area in the WEST PARKING LOT.
10. Move away from the building, move quickly.
11. Evacuation areas by floor are:
    a. *First Floor*: The far Northwest corner of parking lot behind City Hall
    b. *Second Floor*: The Northwest corner of parking lot behind City Hall (same as first floor)
    c. *Third Floor:* The North Central area of parking lot behind City Hall

d. *Fourth Floor:* The Southwest corner of parking lot behind City Hall (near 7th street)
e. *Fifth Floor*: The Southwest corner of parking lot behind City Hall (same as fourth floor)

12. Once outside the building and at designated evacuation area, a member of the Emergency Response Team or Department Head will conduct head count and advise scene commander
13. Under no circumstances will anyone, EXCEPT AUTHORIZED PERSONNEL, be allowed to return to the building until the Fire Department issues the all clear signal which will be communicated to each floor Emergency Response Team member and/or Department Head.

TORNADO/SEVERE WEATHER

Alert:

1. The sirens will be sounded if a tornado is sighted with a track that includes any portion of the City of Joplin.
2. The sirens will also be sounded if a thunderstorm produces winds in excess of 75MPH and has a track that includes any portion of the City of Joplin.
3. Emergency Response Personnel and/or Department Management team will alert employees of the potential severe weather and instruct employees to move to their designated **SAFE HAVEN**

Employee Action

1. **Evacuate to Safe Haven (Basement of City Hall Building near the vending machines)**
2. Immediately move to the main stairwell. **DO NOT USE ELEVATORS UNLESS INSTRUCTED BY EMERGENCY RESPONSE TEAM AND/OR DEPARTMENT HEAD**
3. While moving to the main stairwell gather all citizens, vendors, customers and ensure they are evacuated to the main stairwell
4. If you and /or any citizen, vendor or customer are unable to evacuate via the stairwell due to a medical condition, the elevator may be used or you will be assisted down the stairs by Emergency Response Team member and/or Fire or Police personnel.
5. Walk quickly – do not run. Elderly and handicapped and small children should be assisted to the emergency exits
6. Primary Exit – Use the main stairwell on the Southwest Corner of the building
7. Exit to the basement.
8. In the basement move to the North end, in the location of the vending machines.
9. Stay with the other employees within your department
    a. This will allow the Emergency Response Personnel and/or Department Head to conduct a head count and report to scene commander
10. DO NOT go outside – stay in the designated area until advised by Emergency Response Personnel and /or Department Head gives you the all clear to return to your work area.
11. In the event the building is damaged and too dangerous to return to your work area, follow the instructions of the Emergency Response Personnel and exit the building accordingly.

IF TIME DOES NOT PERMIT MOVEMENT TO THE DESIGNATED SAFE HAVEN:

1. Move to the center of the floor, away from exterior walls and windows.
2. Drop to the floor, take COVER by getting underneath a sturdy desk or table or other piece of furniture
3. Cover your face and head with your arms and crouch in fetal position, try and protect head and chest

All Clear

1. Sirens will not be sounded to indicate the all clear.
2. Emergency Response Personnel and/or Department Heads will advise you when and if it is safe to return to your work area.
3. In the event the building is damaged and too dangerous to return to your work area, follow the instructions of the Police/Fire or Emergency Response Personnel and exit the building accordingly.

EARTHQUAKE

Should an earthquake occur during the time an employee/citizens/vendor/customers are in the building the following procedures should be followed:

Alert: none (Earthquakes are unpredictable and give no warning)

Employee Action:

1. Gather any citizens, vendor or customers in your area and instruct them to take cover and not to exit the building.
2. Drop to the floor; take COVER by getting under a sturdy desk, table or other piece of furniture;
3. Hold ON until the shaking stops
4. If there is not a desk or table near you to take cover under, crouch in an inside corner of the building
5. Cover your face and head with your arms
6. Stay away from glass, windows, outside doors and walls and anything that could fall such as lighting fixtures
7. **DO NOT** use doorways unless you know it is a strongly supported and is a load bearing doorway and it is close to you. *(Many inside doors are lightly constructed and to do not offer protection)*
8. Stay inside until the shaking stops and it is safe to go outside. DO NOT exit the building during the shaking.
   (Research has shown that most injuries occur when people inside building attempt to move to a different location inside the building or try to leave the building)
9. Be aware that the electricity may go out or the sprinkler system or fire alarms may turn on or rupture, there also may be significant Natural gas leaks. If any of these occur notify other employee, evacuate the building immediately and **call 911.**

BOMB THREAT

Alert

1. If you receive a bomb threat use the **"Telephone Bomb Treat Checklist"** (attached); while on the phone with the person making the threat advise co-worker to contact 911 and the Emergency Response Team member for their floor immediately.
2. ERT member will upon notification that a bomb threat has been received, will make contact with Police personnel for instructions and advise City Manager

Employee Action

1. If Police or Fire Department instruct evacuation, as you are leaving your work area check for anything out of place or suspicious containers
2. If anything is seen **DO NOT TOUCH IT**.
3. Report it to the nearest Police/Fire or Emergency Response Personnel
4. **DO NOT USE CELL PHONES OR TWO WAY RADIOS** until clear of the building
5. While moving to the main stairwell gather all citizens, vendors, customers and ensure they are evacuated to the main stairwell
6. If you and/or any citizen, vendor or customer are unable to evacuate via the stairwell due to a medical condition, remain on the stairwell landing of the floor you are on and Fire Dept. personnel will assist them in evacuating
7. Walk quickly – do not run. Elderly, handicapped and small children should be assisted to the emergency.
8. Exit - Use the main stairwell on the Southwest corner of the building
9. Upon exiting the building move to you designated area in the WEST PARKING LOT.
10. Move away from the building, move quickly.
11. **Evacuation areas by floor are:**
    a. ***First Floor*: The far Northwest corner of parking lot behind City Hall**
    b. ***Second Floor*: The Northwest corner of parking lot behind City Hall (same as first floor)**
    c. ***Third Floor*: The North Central area of parking lot behind City Hall**
    d. ***Fourth Floor*: The Southwest corner of parking lot behind City Hall (near 7th street)**
    e. ***Fifth Floor*: The Southwest corner of parking lot behind City Hall (same as fourth floor)**
12. Once outside the building and at designated evacuation area, a member of the Emergency Response Team or Department Head will conduct head count and advise scene commander
13. Under no circumstances will anyone, **EXCEPT AUTHORIZED PERSONNEL**, be allowed to return to the building until the Fire Department issues the all clear signal which will be communicated to each floor Emergency Response Team member and/or Department Head.

WORKPLACE VIOLENCE

There are several types of workplace violence that could occur; employees need to be prepared with a predetermined plan of action. It is impossible to cover all the potential events that could occur, however the following is an outline of some of the types of events that could occur and suggested action to protect yourself.

ACTIVE SHOOTER IN THE BUILDING

ALERT

1. Use the panic button on your floor – **Call 911**

On another floor

1. If the shooter is on another floor evacuate the building immediately. Use the same evacuation procedure as outlined in the FIRE emergency action plan – **Call 911**
2. Alert anyone you see while exiting the building of the emergency

On your floor

1. **RUN** – evacuate if you can – **Call 911**
2. **HIDE** – find the most secure place you can – lock doors and move away from them **–**
    a. Turn off cell phone, lights and don't talk or make any noise
3. **FIGHT** – This is recommended as a last resort – Take action against the shooter if it is highly likely that the shooter is intent on harming you.
    a. Use whatever means possible to defend yourself – SUCH AS:
    b. Use any makeshift weapon – chair, lamp, trash receptacle, computer, keypad, pen, book, phone, etc.

DOMESTIC VIOLENCE

1. Usually known person – family, friend etc.
2. Note changes in behavior in co-workers, don't ignore it, report it to your supervisor
3. Be aware of person and if there is a threat with a weapon or a weapon is seen (gun, knife, bomb etc.)
    a. If so, use Panic Button and **Call 911**
4. If weapon is observed handle as an active shooter situation – evacuate – use Panic button – **Call 911**

ANGRY CUSTOMER/CITIZEN

1. LISTEN – Give your undivided focused attention
2. EMPATHIZE – Understand the speakers message
3. ALTERNATIVES – Help resolve the problem
4. PERSON TO PERSON – Work with the person one on one
5. PANIC BUTTON – If you are unable to diffuse the situation activate panic button – **Call 911**

SUSPICIOUS PEOPLE

1. Confront without being confrontational
2. Greet all customers entering the area and make eye contact
3. Avoid accusations
4. Avoid physical force – USE PANIC BUTTON if persons activity has changed to aggressiveness – **Call 911**

Emergency and Resource Contacts

CITY OF JOPLIN SERVICES

Police Department 911
417-623-3131 Office
417-625-4733 Fax
303 East Third Street
Joplin, MO 64801

Fire Department 911
417-623-0403 Office
417-625-4709 Fax
303 East Third Street
Joplin, MO 64801

Emergency Management
417-624-0820 Office
417-625-4735 Fax
303 East Third Street
Joplin, MO 64801

Health Department
417-623-6122 Office
417-624-6453
321 E. 4th
Joplin, MO 64801

City Manager's Office
417-624-0820 Office
417-625-4707 Fax
602 South Main Street
Joplin, MO 64801

Public Works Department
417-624-0820 Office
417-625-4738 Fax
602 South Main St
Joplin, MO 64801

Planning and Development
417-624-0820 Office
417-625-4738 Fax
602 South Main Street
Joplin, MO 64801

CITY OF DUQUESNE SERVICES

City Manager's Office
417-781-5085 Office
1501 S. Duquesne Rd.
Joplin, MO 64801

Police Department 911
417-781-9494 Office
417-781-4570 Fax
1501 S. Duquesne Rd.
Joplin, MO 64801

JOPLIN UTILITIES

Missouri American Water
866-430-0820 Office
417-623-0502 Fax
2650 E. 32nd Street, Ste 121
Joplin, MO 64804

Empire Electric
417-625-5100 Office
417-625-5153 Fax
602 South Joplin Avenue
P.O. Box 127
Joplin, MO 64802-0127

Missouri Gas Energy
800-582-1234 Office
800-582-0000 Emergency
PO Box 21955
Kansas City, MO 64141

JASPER COUNTY SERVICES

Emergency Management
417-358-7000 Office
13870 Dispatch Ln
Carthage, MO 64836

Health Department
417-358-3111 Office
417-358-0481 Office
417-358-0494 Fax

County Sheriff
417-358-8177 Phone
417-359-8620 Fax
231 S. Main Street

NEWTON COUNTY SERVICES

Emergency Management
417-451-4357 Office
417-451-8260 Fax
202 West Brook St.
Neosho, MO 64850

County Dispatch
Emergency - 911
417-451-8333 Office
417-451-8275 Fax
308 North Jefferson Street
Neosho, MO 64850

Health Department
417-451-3743 Phone
417-451-1852 Fax
812 West Harmony
Neosho, MO 64850

County Sheriff
417-451-8300 Office
417-451-8352 FAX
208 W. Coler
Neosho, MO 64850

HOUSING AND ECONOMIC ASSISTANCE

Economic Security Corp.
(417) 781-0352 Office
(417) 781-1234 Fax
302 South Joplin Avenue
P.O. Box 207
Joplin, MO 64802-0207

Harry S. Truman Coordinating Council
417-649-6400 Office
417-649-6409 Fax
800 East Pennell
Carl Junction, MO 64834

Emergency and Resource Contacts cont.

MENTAL HEALTH AND SOCIAL SERVICES

Lafayette House Women's Shelter
417-782-1782 Office
1802 S. Connor
Joplin, MO 64804

Souls Harbor Shelter
417-623-4358 Office
915 S Main St.
Joplin, MO 64802

Crosslines Churches of Joplin
417-782-8384 Office
320 S. School Avenue
Joplin, MO 64801

Ozark Center Mental Health Services
417-347-7600 Phone
1105 East 32nd Street
Joplin, Missouri 64804

Catholic Charities
417-624-3790 Office
403 E. 4th Street
Joplin, MO 64801

Habitat for Humanity
417-782-6533 Office
5201 North Main
Joplin, MO 64801

FEDERAL EMERGENCY SUPPORT CONTACTS

Federal Emergency Management Administration
800-745-0243 Disaster Assistance
800-827-8112 Fax
Federal Emergency Management Agency
P.O. Box 10055
Hyattsville, MD 20782-7055

US Army Corp of Engineers
Emergency Management
816-426-6320 Office
Corps of Engineers, Kansas City District
601 E. 12th Street
Kansas City, MO 64106

U.S. Dept. of Commerce
Economic Development Administration
303-844-4715 Office
303-844-3968 Fax
1244 Speer Boulevard, Suite 431
Denver, CO 80204

Environmental Protection Agency
913-551-7003 Office
800-223-0425 Toll Free
11201 Renner Blvd.
Lenexa, KS 66219

STATE OF MISSOURI EMERGENCY CONTACTS

MO Department of Economic Development
301 W. High Street
P.O. Box 1157
Jefferson City, Missouri 65102
573-751-4962 Office
573-526-7700 Fax
E-mail: ecodev@ded.mo.gov

Missouri Department of Natural Resources
800-361-4827 or 573-751-3443 Office
Email: contact@dnr.mo.gov
PO Box 176; 1101 Riverside Drive
Jefferson City, MO 65102

Missouri Office of Governor
573-751-3222
201 W. Capitol Ave Rm 216
Jefferson City, MO 65102

Missouri Department of Conservation
417-895-6880 Office
417-895-6910 Fax
Southwest Regional Office
2630 N. Mayfair
Springfield, MO 65803