

Kansas Homeland Security Region K Hazard Mitigation Plan

Prepared for, and developed with, the
jurisdictions within and including:

Atchison County, Brown County, Doniphan
County, Douglas County, Jackson County,
Jefferson County, Marshall County, Nemaha County,
Washington County, the Iowa Tribe of Kansas and
Nebraska and the Kickapoo Tribe

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List of Commonly Used Acronyms

Acronym	Meaning
CPRI	Calculated Priority Risk Index
CDC	Centers for Disease Control and Prevention
CWD	Chronic Wasting Disease
CFR	Code of Federal Regulations
CRS	Community Rating System
CWPP	Community Wildfire Protection Plans
EAB	Emerald Ash Borer
EAP	Emergency Action Plan
EMAP	Emergency Management Accreditation Program
EPZ	Emergency Planning Zone
EF	Enhanced Fujita
EPA	Environmental Protection Agency
°F	Fahrenheit
FEMA	Federal Emergency Management Agency
HAZUS	FEMA Loss Estimation Software
FIRM	Flood Insurance Rate Map
GIS	Geographic Information System
GDP	Gross Domestic Product
HMGP	Hazard Mitigation Grant Program
HMP	Hazard Mitigation Planning
HazMat	Hazardous Materials
ISO	Insurance Service Office
KDA	Kansas Department of Agriculture
KDHE	Kansas Department of Health and Environment
KDOT	Kansas Department of Transportation
KDEM	Kansas Division of Emergency Management
KFS	Kansas Fire Service
KGS	Kansas Geological Survey
KSFM	Kansas State Fire Marshall
K.S.A	Kansas Statutes Annotated
KWO	Kansas Water Office
LEPC	Local Emergency Planning Committee
MPC	Mitigation Planning Committee
NCEI	National Centers for Environmental Information



NFIP	National Flood Insurance Program
NLCD	National Land Cover Database
NLD	National Levee Database
NLIR	National Levee Inventory Report
NLSP	National Levee Safety Program
NOAA	National Oceanic and Atmospheric Administration
NRCS	National Resource Conservation Service
NWS	National Weather Service
NSFHA	No Special Flood Hazard Area





Acronym	Meaning
NGO	Non-Governmental Organization
NRC	Nuclear Regulatory Commission
OHMS	Office of Hazardous Materials Safety
PDSI	Palmer Drought Severity Index
PHMSA	Pipeline and Hazardous Materials Safety Administration
PDM	Pre-Disaster Mitigation
PAL	Provisionally Accredited Levee
RL	Repetitive Loss
Risk MAP	Risk Mapping, Assessment and Planning
REC	Rural Electric Cooperative
SRL	Severe Repetitive Loss
SFHA	Special Flood Hazard Area
USD	Unified School District
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WUI	Wildland Urban Interface

1.0 Introduction, Assurances and Adoption

1.1 – Introduction

Mitigation is commonly defined as sustained action taken to reduce or eliminate long-term risk to people and their property from hazards and their effects. Hazard mitigation planning provides communities with a roadmap to aid in the creation and revision of policies and procedures, and the use of available resources, to provide long-term, tangible benefits to the community. A well-designed hazard mitigation plan provides communities with realistic actions that can be taken to reduce potential vulnerability and exposure to identified hazards.

This Hazard Mitigation Plan (HMP) was prepared to provide sustained actions to eliminate or reduce risk to people and property from the effects of natural and man-made hazards. This plan documents the State of Kansas Homeland Security Region K (hereafter referred to as Kansas Region K) and its participating jurisdictions planning process and identifies applicable hazards, vulnerabilities, and hazard mitigation strategies. This plan will serve to direct available community and regional resources towards creating policies and actions that provide long-term benefits to the community. Local and regional officials can refer to the plan when making decisions regarding regulations and ordinances, granting permits, and in funding capital improvements and other community initiatives.

Specifically, this hazard mitigation plan was developed to:

- Update the Kansas Region K 2014 Hazard Mitigation Plan□



- Build for a safer future for all citizens□
- Foster cooperation for planning and resiliency□
- Identify, prioritize and mitigate against hazards□
- Assist with sensible and effective planning and budgeting□
- Educate citizens about hazards, mitigation and preparedness□
- Comply with federal regulations□

As stipulated in the Disaster Mitigation Act of 2000 (DMA 2000) Section 322, federally approved mitigation plans are a prerequisite for mitigation project grants. Development and Federal Emergency Management Agency (FEMA) approval this plan will ensure future eligibility for federal disaster mitigation funds through the Hazard Mitigation Grant Program (HMPG), Pre-Disaster Mitigation Grant Program (PDM), Repetitive Flood Claims, and a variety of other state and federal programs. This HMP was prepared to meet the requirements of the DMA 2000, as defined in regulations set forth by 44 CFR Part 201.6 and 44 CFR Part 201.7.

This plan has been designed to be a living document, a document that will evolve to reflect changes, correct any omissions, and constantly strive to ensure the safety of the citizens of Kansas Region K.

1.2 – Participating Jurisdictions

44 CFR 201.6(a)(4): Multi-jurisdictional plans (e.g. watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan. State-wide plans will not be accepted as multi-jurisdictional plans.

44 CFR 201.7(a)(4): Multi-jurisdictional plans (e.g. county-wide or watershed plans) may be accepted, as appropriate, as long as the Indian tribal government has participated in the process and has officially adopted the plan. Indian tribal governments must address all the elements identified in this section to ensure eligibility as a grantee or as a subgrantee.





All eligible jurisdictions were invited to participate in the organization, drafting, completion and adoption of this plan. Invited jurisdictions included, but were not limited to, elected officials, relevant State of Kansas agencies, counties, cities, school districts, non-profit agencies, and businesses.

In order to have an approved hazard mitigation plan, DMA 2000 requires that each jurisdiction participate in the planning process. Each jurisdiction choosing to participate in the development of the plan were required to meet detailed participation requirements, which included the following:

- When practical and affordable, participation in planning meetings
- Provision of information to support the plan development
- Identification of relevant mitigation actions
- Review and comment on plan drafts
- Formal adoption of the plan

Based on the above criteria, the following jurisdictions participated in the planning process, and will individually as a jurisdiction adopt the approved hazard mitigation plan:

Table 1.1: Atchison County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Atchison County	X	X
City of Atchison	X	X
City of Effingham	X	X
City of Huron	X	X
City of Lancaster	X	X
City of Muscotah	X	X
Highland Community College	X	X
USD #377 - Atchison County	X	X
USD #409 - Atchison	X	X





Table 1.2: Brown County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Brown County	X	X
City of Everest	X	X
City of Fairview	X	X
City of Hiawatha	X	X
City of Horton	X	X
City of Morrill	X	X
City of Reserve	X	X
City of Robinson	X	X
City of Willis	X	X
USD #415 - Hiawatha	X	X
USD #430 - Horton	X	X

Table 1.3: Doniphan County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Doniphan County	X	X
City of Denton	X	X
City of Elwood	X	X
City of Highland	X	X
City of Troy	X	X
City of Wathena	X	X
Highland Community College	X	X
USD #111 – Doniphan West		X
USD #429 - Troy	X	X

Table 1.4: Douglas County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Douglas County	X	X
City of Baldwin City	X	X
City of Eudora	X	X
City of Lawrence	X	X
City of Lecompton	X	X
Clinton Township	X	X
Eudora Township		X
Kanawaka Township	X	X
Lecompton Township	X	X
Marion Township	X	X
Palmyra Township	X	X
Wakarusa Township	X	X





Willow Springs Township	X	X
Baker University	X	X
University of Kansas	X	X
USD #343 - Perry / Lecompton	X	X
USD #348 - Baldwin City	X	X

Table 1.4: Douglas County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
USD #491 - Eudora	X	X
USD #497 - Lawrence	X	X
Rural Water District #2	X	X
Rural Water District #5	X	X
Rural Water District #6	X	X
Lawrence Memorial Hospital	X	X

Table 1.5: Iowa Tribe of Kansas and Nebraska

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Iowa Tribe		X

Table 1.6: Jackson County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Jackson County	X	X
City of Circleville	X	X
City of Delia	X	X
City of Denison	X	X
City of Holton	X	X
City of Hoyt	X	X
City of Mayetta	X	X
City of Netawaka	X	X
City of Soldier	X	X
City of Whiting		X
USD #335 - North Jackson	X	X
USD #336 - Holton	X	X
USD #337 - Royal Valley	X	X
Blue Stem Electric Coop	X	X
Nemaha Marshall Electric Coop	X	X

Table 1.7: Jefferson County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Jefferson County	X	X
City of McLouth	X	X
City of Meriden	X	X





City of Nortonville	x	x
City of Oskaloosa	x	x
City of Ozawkie		x
City of Perry	x	x
City of Valley Falls	x	x
City of Winchester	x	x
USD #338 - Valley Falls	x	x
USD #339 - Jefferson County North	x	x
USD #340 - Jefferson West	x	x
USD #341 - Okaloosa	x	x

Lakeside Village Improvement District		x
Lakeshore Estates Improvement District		x
Lakewood Hills Improvement District		x
USD #342 - McLouth	x	x





Table 1.7: Jefferson County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
USD #343 - Perry / Lecompton	x	x
Free State Electric Coop		x

Table 1.8: Kickapoo Tribe

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Kickapoo Tribe	x	x

Table 1.9: Marshall County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Marshall County	x	x
City of Axtell	x	x
City of Beattie	x	x
City of Blue Rapids	x	x
City of Frankfort	x	x
City of Marysville	x	x
City of Oketo	x	x
City of Summerfield	x	x
City of Vermillion	x	x
City of Waterville		x
Good Shepherd School	x	x
St. Gregory School	x	x
St Michael's School	x	x
USD #113 - Prairie Hills	x	x
USD #364 - Marysville	x	x
USD #380 - Vermillion	x	x
USD #498 - Valley Heights	x	x
Blue Stem Electric Coop	x	x
Free State Electric Coop		x
Nemaha Marshall Electric Coop	x	x

Table 1.10: Nemaha County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Nemaha County	x	x
City of Bern	x	x
City of Centralia	x	x
City of Corning	x	x
City of Goff	x	x
City of Oneida	x	x
City of Sabetha	x	x





City of Seneca	X	X
City of Wetmore	X	X
Saints Peter and Paul School		X
USD #113 - Prairie Hills	X	X
USD #115 - Nemaha Central	X	X

Table 1.10: Nemaha County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
USD #380 - Vermillion	X	X
Nemaha Marshall Electric Coop	X	X

Table 1.11: Washington County Participating Jurisdictions

Jurisdiction	2014 HMP Participant	2019 HMP Participant
Washington County	X	X
City of Barnes		
City of Clifton	X	X
City of Greenleaf	X	X
City of Haddam	X	X
City of Hanover	X	X
City of Hollenberg	X	X
City of Linn	X	X
City of Mahaska		
City of Morrowville	X	X
City of Palmer	X	X
City of Vining		X
City of Washington	X	X
USD #108 - Washington County	X	X
USD #223 - Barnes / Hanover / Linn		X
USD #224 – Clifton/Clyde		X
Blue Stem Electric Coop	X	X
Nemaha Marshall Electric Coop	X	X

Any Kansas Region K jurisdiction not covered in this HMP is either covered under another plan or declined to participate.

1.3 – Assurances

Kansas Region K and all participating jurisdictions certify that they will comply with all applicable Federal statutes and regulations during the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c), and will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d).





This hazard mitigation plan was prepared to comply with all relevant the requirements of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, as amended by the DMA 2000. This plan complies with all the relevant requirements of:

- Code of Federal Regulation (44 CFR) pertaining to hazard mitigation planning□
- FEMA planning directives and guidelines□
- Interim final, and final rules pertaining to hazard mitigation planning and grant funding□ □ Relevant presidential directives□
- Office of Management and Budget circulars□

- Any additional and relevant federal government documents, guidelines, and rules.□

1.4 – Tribal Assurances

44 CFR 201.7(c)(6): The plan must include assurances that the Indian Tribal government will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, including 2 CFR parts 200 and 3002.. The Indian Tribal government will amend its plan whenever necessary to reflect changes in Tribal or Federal laws and statutes.

As required by 44 CFR 201.7(c)(6), the Iowa and Kickapoo Tribes will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with 13.11(c). The Iowa and Kickapoo Tribal governments will amend its plan whenever necessary to reflect changes in tribal or Federal laws and statutes as required in 13.11(d).

This hazard mitigation plan was prepared to comply with all relevant the requirements of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, as amended by the DMA 2000. This plan complies with all the relevant requirements of:

- Code of Federal Regulation (44 CFR) pertaining to hazard mitigation planning□
- FEMA planning directives and guidelines□
- Interim final, and final rules pertaining to hazard mitigation planning and grant funding□ □ Relevant presidential directives□
- Office of Management and Budget circulars□
- Any additional and relevant federal government documents, guidelines, and rules.□

1.5 – Authorities

For all jurisdictions within Kansas Region K all authority is subject to prescribed constraints, as all of Kansas political subdivisions must not act without proper delegation from the State. However, cities and





counties in Kansas have broad home rule powers. Local governments in Kansas have a wide range of tools available to them for implementing mitigation programs, policies, and actions. A local jurisdiction may utilize any or all of the following broad authorities granted by the State of Kansas:

- Regulation□
- Acquisition□
- Taxation□
- Spending□

In addition, Kansas local governments have been granted broad regulatory authority in their jurisdictions. Kansas Administrative Regulations bestow the general police power on local governments, allowing them to enact and enforce ordinances which define, prohibit, regulate or abate acts, omissions, or conditions detrimental to the health, safety, and welfare of the people, and to define and abate nuisances. Since hazard mitigation can be included under the police power (as protection of public health, safety, and welfare), towns, cities, and counties may include requirements for hazard mitigation in local ordinances. Local governments may also use their ordinance-making power to abate “nuisances”, which could include, by local definition, any activity or condition making people or property more vulnerable to any hazard.

The Kansas Region K HMP relies on the authorities given to it by the State of Kansas and its citizens as encoded in state law. This plan is intended to be consistent with all policies and procedures that govern activities related to the mitigation programming and planning. In all cases of primacy, State of Kansas laws, statutes, and policies will supersede the provisions of the plan. This HMP attempts to be consistent following:

- Kansas Constitution, Article 12 Section 5: Home rule powers□
- Kansas Administrative Regulation 56-2: Standards for local disaster agencies□
- 2016 Kansas Statutes, Chapter 12, Article 7: Allows cities and municipalities to designate flood zones and restrict the use of land within these zones□
- 2016 Kansas Statutes Chapter 24, Article 12: Establishes watershed districts□
- 2016 Kansas Statutes, Chapter 48, Article 9: Promulgating the Kansas Emergency Management Act, requiring counties to establish and maintain a disaster agency responsible for emergency management and to prepare a county emergency response plan□
- 2016 Kansas Statutes, Chapter 65, Article 57: Promulgating the Kansas Emergency Planning and Community Right to-Know Act□
- The Robert T. Stafford Disaster Relief and Emergency Assistance Act as amended by the Disaster Mitigation Act of 2000 (Public Law 106-390 – October 30, 2000)□
- 44 CFR Part 201.6: Local mitigation plans□

In addition, this plan will be consistent with all relevant federal authorities as well as Emergency Management Accreditation Program (EMAP) mitigation standards.





1.6 – Tribal Authorities

The Iowa Tribe of Kansas and Nebraska (Iowa Tribe) is a federally recognized sovereign Indian Tribe and is organized in accordance with section 16 of the Indian Reorganization Act of 1934, as amended by the Act of June 15, 1935. Its first constitution and bylaws were adopted on November 6, 1978. The Executive Committee was established as the governing body of the tribe. It consists of a chairman, vice- chairman, secretary, treasurer and one member. They have enumerated powers as to negotiate with Federal, State, and local governments.

The Kickapoo Tribe in Kansas is a federally recognized sovereign Indian Tribe and is organized in accordance with section 16 of the Indian Reorganization Act of 1934, as amended by the Act of June 15, 1935. Kickapoo Constitution and By-Laws established the procedures to elect a governing body called the Kickapoo Tribal Council, a body of seven elected enrolled members of the Kickapoo Tribe to serve two-year terms. The Kickapoo Tribal Council is the official governing body for the Kickapoo Tribe and is so authorized in Section 1, in Article III of the Kickapoo Constitution and By-Laws. They have enumerated powers as to negotiate with Federal, State, and local governments.

As a Sovereign Indian Nations, the Iowa and Kickapoo Tribal Councils carries the same unique powers and duties as any city council officials across the United States. Regular meetings are held by Tribal Councils to discuss, and vote on tribal matters that affect the communities, enterprises, legal issues, and overall tribal government operations.

1.7 – Adoption Resolutions

44 CFR Requirement 201.6(c)(5): Documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council). For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

44 CFR Requirement 201.7(c)(5): The plan must be formally adopted by the governing body of the Indian tribal government prior to submittal to FEMA for final review and approval.

Upon review and approved pending adoption status by FEMA Region VII adoption resolutions will be signed by the participating jurisdictions and tracked by the Regional Mitigation Plan Project Manager with KDEM.

While not required, private, non-profit and charitable organizations that independently participated in this planning effort are encouraged to adopt the plan.

Adoption resolutions may be found in Appendix A.



2.0 Planning Process

2.1 – Documentation of the Planning Process

44 CFR 201.6(c)(1): Documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

44 CFR 201.7(c)(1): Documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

In September of 2018, Kansas Region K and its participating jurisdictions began the process to update the Kansas Region K 2014 HMP. It was determined that Jeanne Bunting, the State of Kansas Hazard Mitigation Planner would serve as the project manager, directing this plan update, and would act as the primary point-of-contact throughout the project.

The State of Kansas contracted with Blue Umbrella Solutions to assist in updating the 2014 Kansas Region K HMP. Blue Umbrella’s roles included:

- Ensure that the hazard mitigation plan meets all regulatory requirements□
- Assist with the determination and ranking of hazards□
- Assist with the assessment of vulnerabilities to identified hazards□
- Assist with capability assessments□
- Identify and determine all data needs and solicit the information from relevant sources□
- Assist with the revision and development of the mitigation actions□
- Development of draft and final planning documents□

Kansas Region K and its participating jurisdictions undertook the following steps to update and create a robust HMP:

- Review of the 2014 Kansas Region K HMP□
- Review of current related planning documents□
- Delivery of organizational and planning meetings□
- Solicitation of public input as to plan development□
- Assessment of potential risks□
- Assessment of vulnerabilities and assets□
- Development of the mitigation actions□
- Development of a draft multi-hazard mitigation plan□
- Implementation, adoption, and maintenance of the plan□



The process established for this planning effort is based on DMA 2000 planning and update requirements and the FEMA associated guidance for hazard mitigation plans. The FEMA four step recommended mitigation planning process, as detailed below, was followed:

1. Organize resources
2. Assess risks

-
3. Develop a mitigation plan
 4. Implement plan and monitor progress

To accomplish this, the following planning process methodology was followed:

- Inform, invite, and involve other mitigation plan stakeholders throughout the state, including federal agencies, state agencies, regional groups, businesses, non-profits, and local emergency management organizations.□
- Conduct a thorough review of all relevant current and historic planning efforts□
- Collect data on all related state and local plans and initiatives. Additionally, all related and relevant local plans were reviewed for integration and incorporation.□
- Develop the planning and project management process, including methodology, review procedures, details about plan development changes, interagency coordination, planning integration, and the organization and contribution of stakeholders.□
- Develop the profile of the county and participating jurisdictions.□
- Complete a risk and vulnerability assessment using a Geographic Information System (GIS) driven approach using data from various local, state and federal agency resources.□
- Develop a comprehensive mitigation strategy effectively addressing their hazards and mitigation program objectives. This included identifying capabilities, reviewing pre and post disaster policies and programs, identifying objectives and goals, identifying mitigation actions and projects, and assessing mitigation actions and projects.□
- Determination and implementation of a plan maintenance cycle, including a timeline for plan upgrades and improvements.□
- Submission of the plan to FEMA Region VII for review and approval and the petition all participating jurisdictional governments for a letter of formal plan adoption.□

2.2 – 2019 Plan Changes

44 CFR 201.6(d)(3): A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding





44 CFR 201.7(d)(3): Indian tribal governments must review and revise their plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for non-emergency Stafford Act assistance and FEMA mitigation grant funding, with the exception of the Repetitive Flood Claims program.

The Kansas Region K HMP has undergone significant revision and upgrading since its last edition. Not only has the region made significant efforts to improve the functionality and effectiveness of the plan itself but it has significantly improved its hazard mitigation program. This grants the region's improved and robust hazard mitigation program a better base to further mold and improve its mitigation strategy over the next five years.

As part of this planning effort, each section of the previous mitigation plan was reviewed and completely revised. The sections were reviewed and revised against the following elements:

- Compliance with the current regulatory environment
- Completeness of data
- Correctness of data
- Capability differentials
- Current state environment

In addition to data revisions, the format and sequencing of the previous plan was updated for ease of use and plan clarity.

During this process, and after a thorough review and discussion with all participating jurisdictions and stakeholders, it was determined that the priorities of the overall community in relation to hazard mitigation planning have not changed during the five years of the previous planning cycle.

2.3 – Mitigation Planning Committee

Upon project initiation a mitigation planning committee (MPC), generally consisting of participating county emergency managers, was formed. From project inception to completion, the MPC was involved in each major plan development milestone, and fully informed through on-site meetings and electronic communication. Prior to the plan's submission to FEMA, the MPC was invited to review the plan and provide input.

In general, all MPC members were asked to participate in the following ways:

- Provide local engagement with all participating jurisdictions
- Attend and participate in meetings





- Assist with the collection of data and information□
- Review planning elements and drafts□
- Integrate hazard mitigation planning elements with other planning mechanisms□
- Facilitate jurisdictional coordination and cooperation□
- Assist with the revision and development of mitigation actions□

MPC members who were unable to attend meetings due to budgetary or personnel constraints were contacted via email or phone to discuss hazard mitigation planning, including the process, goals, mitigation actions, local planning concerns and plan review.

Each MPC member was thoroughly interviewed regarding their jurisdiction’s and sub-jurisdiction’s mitigation related activities. These interviews were invaluable in fully integrating the resources necessary to produce this plan, document mitigation activities, and document the mitigation resources available to better increase resiliency.

Additionally, the MPC was used as a conduit to solicit input from all participating jurisdictions under the county. Where appropriate, the MPC solicited the assistance of technical experts from various agencies and groups. When the MPC updated and improved the plan’s mitigation strategy, personnel from strategically selected agencies were interviewed to provide input on their mitigation capabilities.

The following participants were selected for the MPC.

Table 2.1: Kansas Region K Mitigation Planning Committee

Participant	Title	Organization
Wes Lanter	Emergency Manager	Atchison County
Lydia Theurer	Assistant Emergency Manager	Atchison County
Randy Linck	Emergency Manager	Brown County
Rich Liehmkuhal	Assistant Director	Brown County
Julie Meng	Emergency Manager	Doniphan County
Joe Hoelscher	Emergency Manager	Douglas County
Kelli Cheek	Treasurer	Iowa Tribe
Pat Korte	Emergency Manager	Jackson County
Sherri Ladner	Assistant Director	Jackson County
Keith Jeffers	Emergency Manager	Jefferson County
Moud Safadi	Environmental Specialist	Kickapoo Tribe
William Schwindamann	Emergency Manager	Marshall County
Leslie Jeter	Assistant Director	Marshall County
Russel Lierz	Emergency Manager	Nemaha County
Steve Duryea	Assistant Director	Nemaha County
Randy Hubbard	Emergency Manager	Washington County
Tim Mueller	Assistant Director	Washington County





Jeanne Bunting	Mitigation Planner	Kansas Division of Emergency Management
Matt Eyer	Plan Author	Blue Umbrella Solutions

2.4 – Local and Regional Stakeholder Participation

44 CFR Requirement 201.6(b)(2): An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process

44 CFR Requirement 201.7(c)(1)(ii): As appropriate, an opportunity for neighboring communities, tribal and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and nonprofit interests to be involved in the planning process

Within Kansas Region K there are many jurisdictions and organizations who have a vested interest in participating in the creation and adoption of the hazard mitigation plan. An integral part of the planning process included the identification, development, and coordination of these entities. The Kansas Region K MPC provided the opportunity for neighboring communities, counties, and local and regional development agencies to be involved in the planning process. Where applicable, these entities were kept informed of the hazard mitigation process during state, regional and local emergency management meetings, gatherings and conferences, in person by MPC members, or were solicited for planning information.

It is worth noting that all neighboring Kansas counties are undergoing a similar mitigation planning effort, and as part of this statewide process all county and state planners are working together toward common mitigation goals. During the creation and adoption of this plan communication channels were opened to facilitate the cross pollination of ideas, to incorporate neighboring regions concerns, and to ensure the overall preparedness of the State of Kansas.

In addition, relevant federal, regional, state, local governmental, and private and non-profit entities were also invited to provide input and utilized for information and technical expertise, including, but not limited to:

- American Red Cross□
- Center for Disease Control□
- FEMA□
- Kansas Adjutant General’s Office□
- Kansas Department of Agriculture, the Kansas Department of Health and Environment□





- Kansas Department of Transportation□
- Kansas Fire Service, Kansas Water Office□
- Kansas Geological Survey□
- Kansas State Fire Marshall□
- Local and county planning and zoning offices (where available).□
- Local business and non-profit entities□
- National Oceanic and Atmospheric Administration□
- National Weather Service□
- Nuclear Regulatory Commission□
- Pipeline and Hazardous Materials Safety Administration□
- Salvation Army□
- United States Army Corp of Engineers, National Resource Conservation Service□ □ United States Department of Agriculture□
- United States Geological Survey□

2.5 – Public Participation

44 CFR Requirement 201.6(b): An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include: (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval

44 CFR Requirement 201.7(c)(1)(i): An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval, including a description of how the Indian tribal government defined “public”

For region K participating jurisdictions, the public is defined as any citizen living within or adjacent to Kansas Region K. The Kickapoo Tribe considers tribal members and non-natives living within the Kickapoo Reservation boundaries as the public. As part of the overall planning process, the public were provided with numerous opportunities to contribute and comment on the creation and adoption of the plan. These opportunities included:

- Advertised meeting invitations on participating jurisdictional websites□
- Open meeting opportunities with Kansas Region K MPC members□
- Access to an online survey document to provide feedback□
- Comment period upon completion of draft plan□





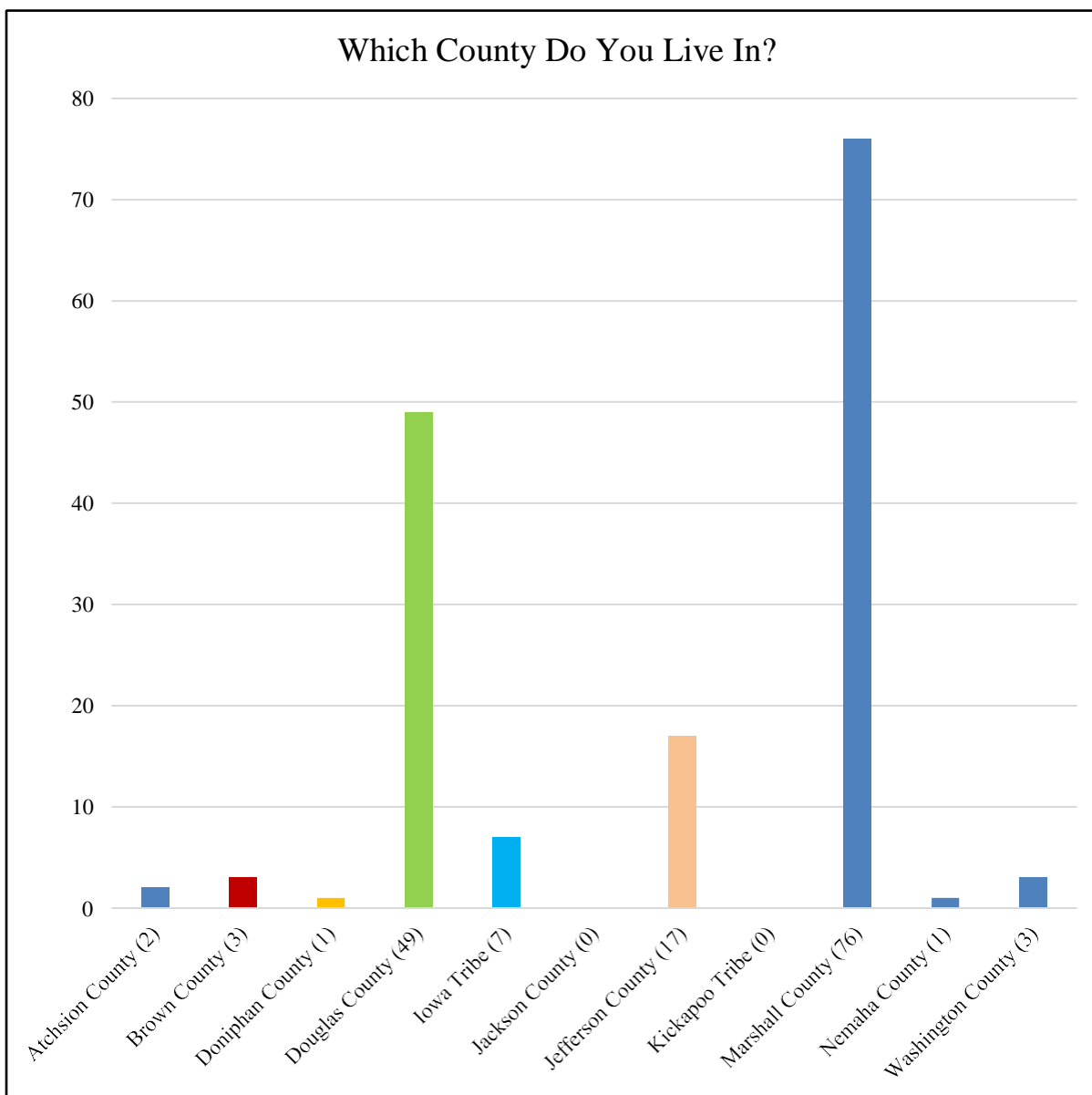
Input from the general public provided the MPC with a clearer understanding of local concerns, increased the likelihood of citizen buy-in concerning proposed mitigation actions, and provided elected officials with a guide and tool to set regional ordinances and regulations. This public outreach effort was also an opportunity for adjacent jurisdictions and entities to be involved in the planning process.

Additionally, as citizens were made more aware of potential hazards and the local process to mitigation against their impacts, it was believed that they would take a stronger role in making their homes, neighborhoods, schools, and businesses safer from the potential effects of natural hazards.

With 161 responses, the following graphics represents the feedback received from the public from the online survey document.

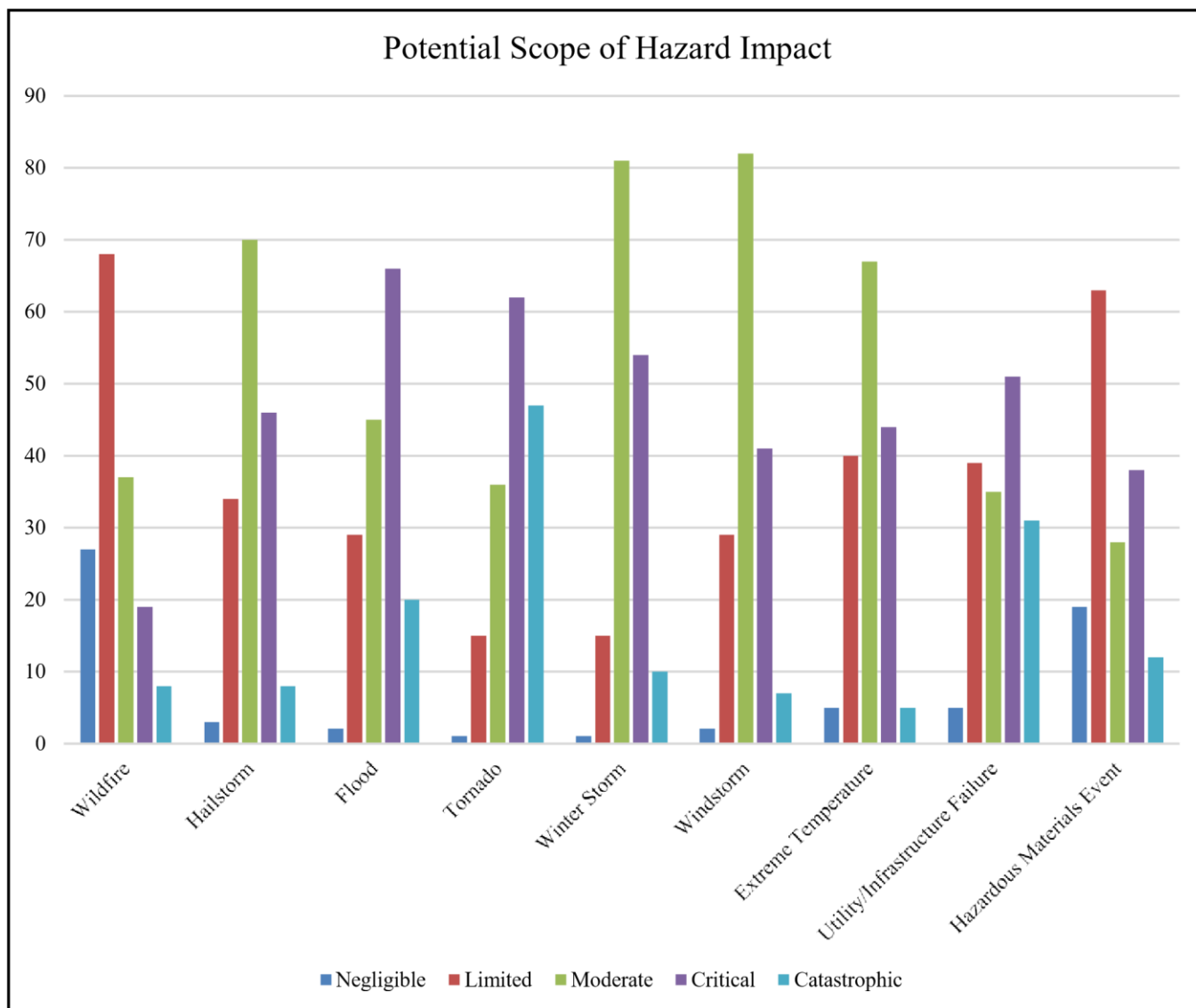
Question 1: In which county or jurisdiction do you live?





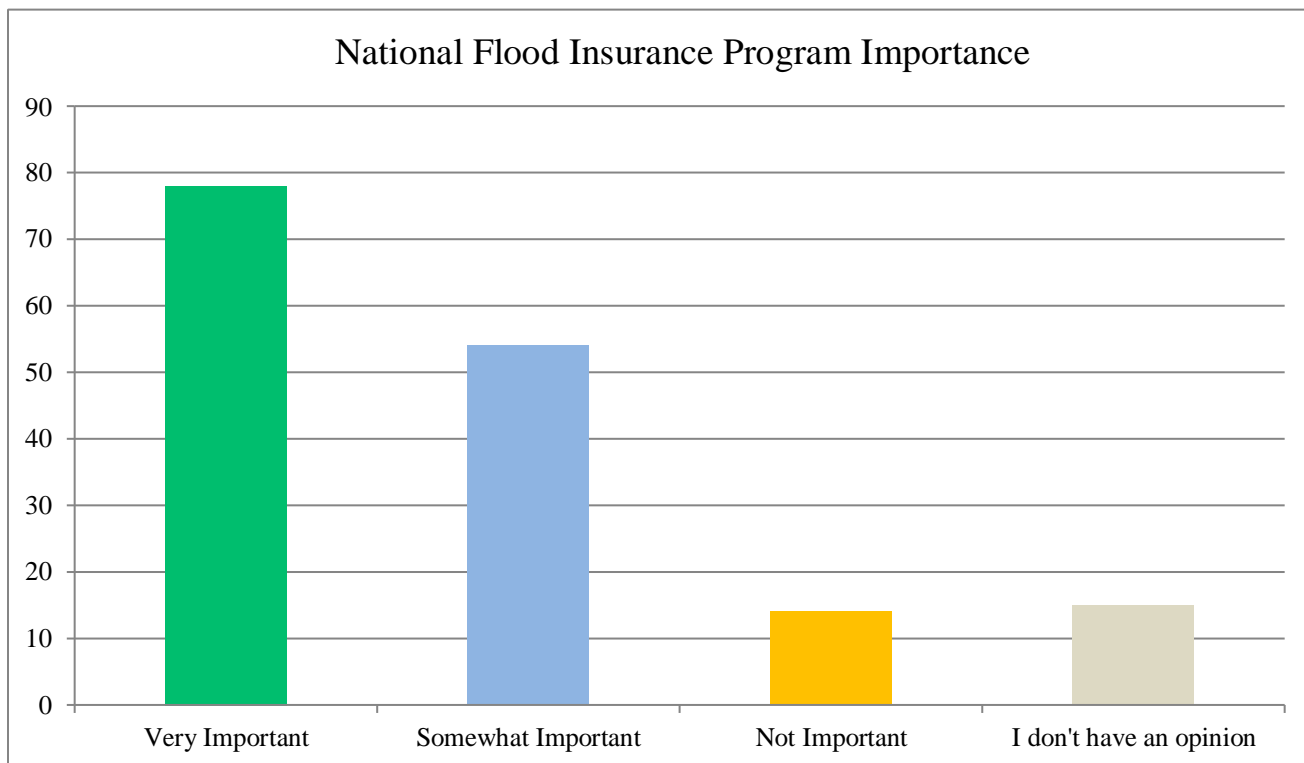
Question 2: In 2015, the Region consisting of Atchison, Brown, Doniphan, Douglas, Jackson, Jefferson, Kickapoo Tribe, Marshall, Nemaha, and Washington counties, the planning committee determined that the hazards listed below are important to the area. Indicate the level of risk, or the scope of potential impacts, in the Region, that you perceive for each hazard:



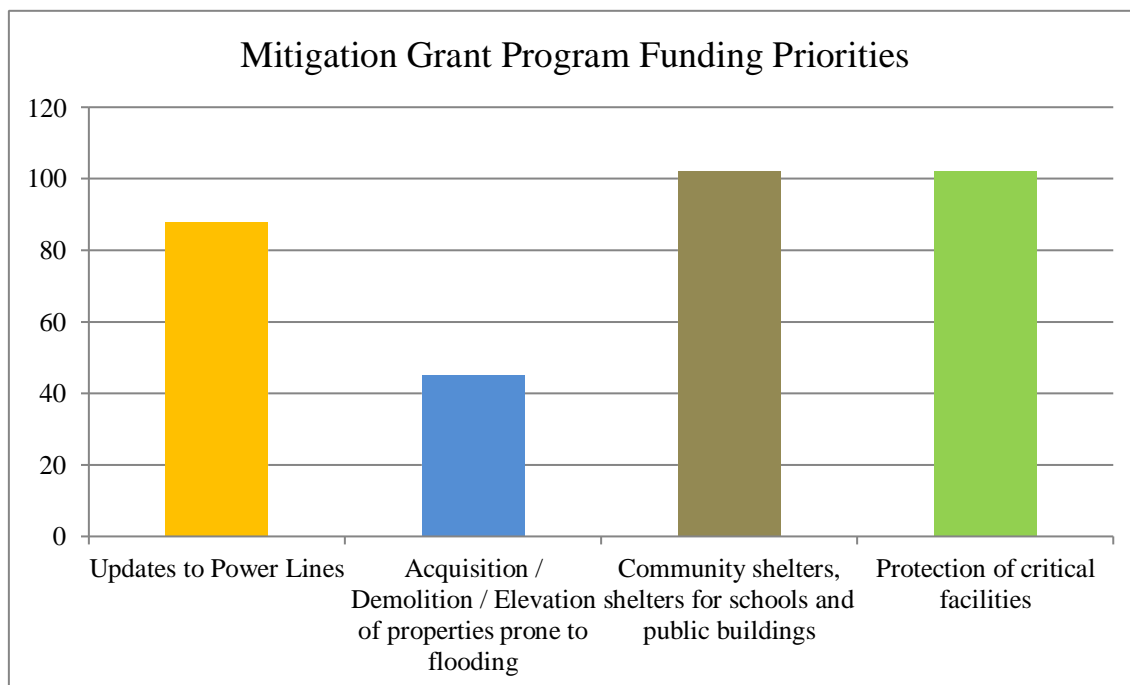


Question 3: In the Region, the planning committee has determined that a flood event is the third most critical hazard. How important is it for you to have your community participate in or continue to participate in the National Flood Insurance Program?



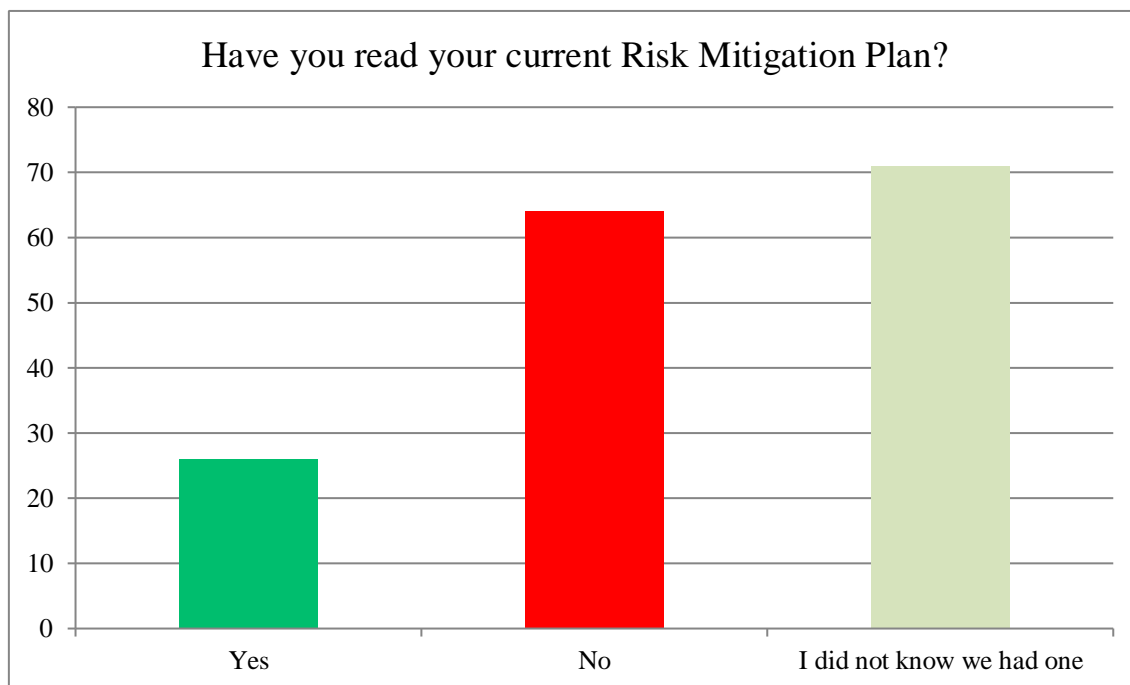


Question 4: The Kansas Division of Emergency Management currently reviews the application for funds for the FEMA Risk Mitigation Grant Program. Your current funding priorities are listed below. Please check those that could benefit your community.

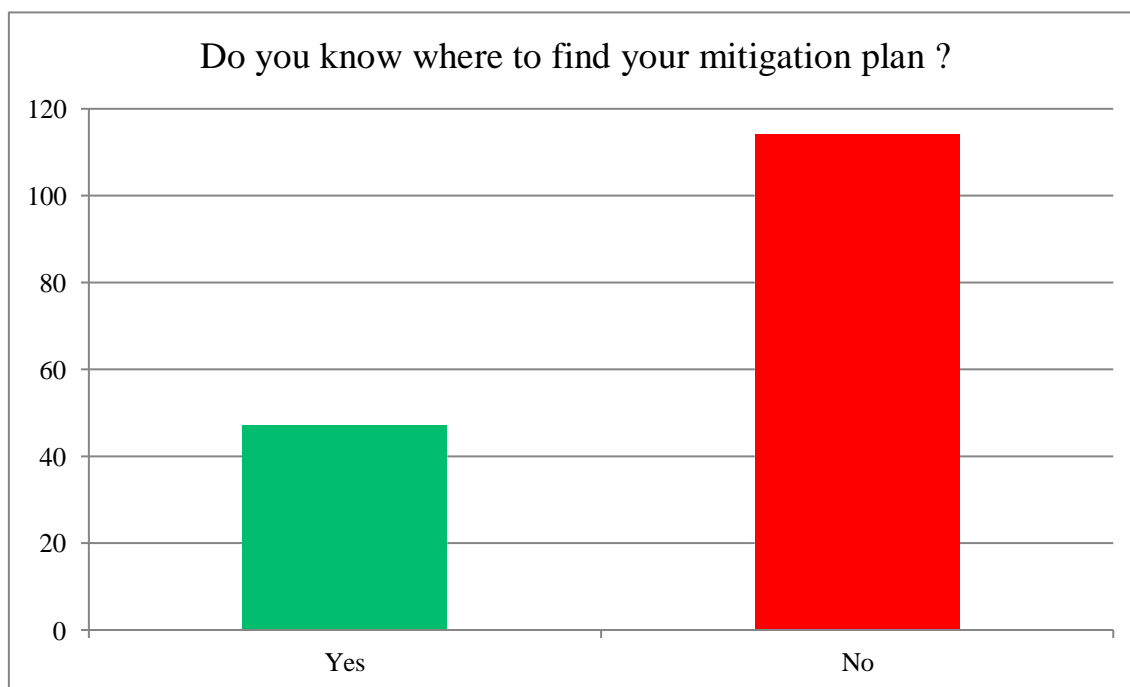




Question 5: Have you had the opportunity to read your current Risk Mitigation Plan?



Question 6: Do you know where you can find the mitigation plan for your county if you would like to see it?





In addition, respondents were given the opportunity to address any local concerns or issues of concern to them. These responses were provided to the relevant MPC member for review, and if necessary, action.

Question 7: Your opinion is valuable to this planning process. Discuss any other problems that the planning committee should consider when developing a strategy to reduce future losses caused by natural hazard events.

Table 2.2: Kansas Region K Survey Comments, Areas of Concern

Jurisdiction	Comments
Douglas County	Community involvement plan
Douglas County	Outreach to let communities know how the insurance process works and that the Federal dollars will not meet the gap.
Douglas County	PLEASE provide public service announcements about the dangers of flood waters with regard to not just to drowning, being swept away by receding waters, infection and disease, but the dangers resulting from flood waters that disrupt homeless and transient campsites such as those at Bircham Park in Lawrence. These parks also depositories for used drug paraphernalia such as hypodermic needles and razor blades which can be very harmful.
Douglas County	Please look at the predicted effects of climate change in this area when developing strategies. https://nca2014.globalchange.gov/report/regions/great-plains This is a fantastic resource. Keep in mind that storms, floods, droughts, and temperature extremes will continue to get more severe and frequent and plan accordingly.

Table 2.2: Kansas Region K Survey Comments, Areas of Concern

Jurisdiction	Comments
Douglas County	Advance warning of events is crucial to survival, as shown by the recent tornado. Maintaining and improving communication is essential, no matter the hazard.
Douglas County	It is really hard to say. Douglas County has a great response to all forms of hazards and the surrounding counties are there to help also.
Douglas County	I trust you will rely on previous and current science, research and experience of FEMA!
Douglas County	county-wide ditch maintenance and improvements (flood)
Douglas County	Consider infrastructure that isn't as immediately noticeable. When the power goes out, places like sewage treatment facilities need immediate attention to prevent sewage overflows. Updating these facilities would be helpful, especially when power outages are widespread and affect multiple stations.
Douglas County	+Lecompton FIRE/EMS Station #1 designated as a community shelter.
Douglas County	Allow space for the rivers to flood. Do not allow building in the flood plain.
Douglas County	Schools and other heavily populated buildings should all have tornado shelters. New construction should be required to incorporate a tornado shelter.
Douglas County, Lawrence	Tornado shelters





Jefferson County	Provide funding and grants to agencies that have little or no money to update their infrastructure.
Jefferson County	Making sure all communities have shelter available to the residents in the event of a tornado.
Jefferson County	Drinking water
Jefferson County	This is a start. Communication of the fact the plan exists and starting the conversation.
Jefferson County	Information needs to be conveyed to all residents in a timely manner and the information needs to be accurate. With social media, there will always be rumors. However, when you have emergency management and law enforcement relaying information to citizens that contradicts meteorologists and the national weather service, the community's faith in its leaders suffers dramatically.
Jefferson County	Better community communication I'm the mayor in the city of Oskaloosa Kansas and have not had the county emergency preparedness director ever contact the city.
Jefferson County	Community education of "safe locations" during times of emergency. To include winter storms and extended power outages.
Marshall County	Notify citizens of road closures
Marshall County	Power loss during bad weather
Marshall County	Roads and infrastructure are affected by all weather events. With the rains this year, it is extremely difficult for townships to maintain and keep roads open and drivable.
Marshall County	More information given by text message. Email does not alert residents.
Marshall County	Make sure the sirens actually work
Marshall County	Storm drainage. Specifically, in Frankfort
Marshall County	Bridges and communication networks are crucial in times of disaster. Internet and telephone must be available for emergency personnel. This should be every county's priority
Marshall County	I have no clue how to answer this question.

Table 2.2: Kansas Region K Survey Comments, Areas of Concern

Jurisdiction	Comments
Marshall County, City of Marysville	Basic services, Water, Sewer, Electric

Question 8: Do you have any mitigation project that you would like to see implemented and what are they?

Table 2.3: Kansas Region K Survey Comments, Requested Projects

Jurisdiction	Comments
Atchison County	FEMA Tornado shelters
Brown County	New Fire Station
Douglas County	Increase flood mitigation projects. Flooding is the single most common hazard.





Douglas County	Large event issues specifically KU.
Douglas County	Although Wolf Creek nuclear power plant is located in Coffey County, it may behoove officials in our area to have knowledge of how a worst-case scenario could impact this area.
Douglas County	We are currently affected by the high waters at Clinton Lake. It's for recreational purposes and this is a record setting year, but still impacts us. Improvements to help prevent major disruptions to the use of the lake and facilities would be helpful so we learn from this event and apply those lessons moving forward.
Douglas County	I have nothing in my area. I would like to see more power lines and utilities put underground instead of poles.
Douglas County	No suggestions, but I do want to say I am glad for the prominence of Douglas County Emergency Management in the last month. You've helped a whole lot of people connect for the good of all.
Douglas County	Not at this time
Douglas County	Not mitigation, but I'm alarmed that there do not appear to be any community shelters in our area. There are a lot of people here who live in trailers and other non-safe locations, when tornadoes are prevalent in our area.
Douglas County	Backup power supply for Lecompton FIRE/EMS Station #1 Natural gas generator as a backup power supply.
Douglas County	Restore vegetation along the rivers
Douglas County	Would love if a grant was available to give homeowners financial help in adding a tornado shelter or having one retrofitted.
Douglas County	Make sure you're working with critical businesses to make sure they get up and running as quickly as possible following a disaster. This would include grocery and hardware stores as well as gas stations.
Douglas County, Lawrence	The city, state and federal parks in the region need storm shelters. The F4 skirted Clinton State Park and if it had struck it many, many people would have been killed.
Jefferson County	A new well for water district 10 that is not in a flood zone.
Jefferson County	Would like to see a community shelter built or more than one built for people who live in areas such as Trailer Courts or areas where there is no shelter from Tornado's. Getting to a shelter in appropriate time or having access to one quickly is critical. Majority of shelters in the community are at least 2 to 5 minutes away give or take traffic or personnel available to unlock such shelters.

Table 2.3: Kansas Region K Survey Comments, Requested Projects

Jurisdiction	Comments
Jefferson County	Wells on higher ground
Jefferson County	Regarding question #4, I'm not sure on three of the four (in terms of our community) but I do not concern has been expressed for a community tornado shelter/safe space.





Jefferson County	There are numerous abandon homes that no one lives in, that need to be removed. It makes the towns look old and run down. They are also harboring numerous cats that apparently own the city streets.
Jefferson County	Community storm shelter for the city of Oskaloosa we have money but would like to know if there are grants or cost share programs.
Marshall County	Poor communication infrastructure means loss of means of communication during emergency.
Marshall County	Improve drainage at the Marshall county fairgrounds. This would help the flooding in the area and keep insect population down.
Marshall County	We would like to strengthen our building, specifically the windows and doors. Glass that is designed to stand up to high speed projectiles (such as those in a tornado) but still easily opened for evacuations would be ideal.
Marshall County	Hazmat release training die to train derailment or tanker overturn
Marshall County	Disaster protocol for ALL health care workers in the area! Not just those that are working in local entities like the health departments or hospital settings
Marshall County	Update sirens, generators at government, schools, major infrastructures, shelters
Marshall County, City of Marysville	Ensure all communities have standby power for water and sewer pumps and treatment.
Washington County	A tornado shelter on the south side of the highway in Washington

2.6 – Planning Meetings

Within Kansas Region K there are many jurisdictions and organizations who have a vested interest in participating in the creation and adoption of the hazard mitigation plan. An integral part of the planning process included the identification, development, and coordination of all of these entities. As such, a series of three organizational and planning meetings were scheduled and all past and potential future participants were notified by the State of Kansas as to the dates and locations of the meetings. In addition, communities neighboring the region were invited to participate in the planning process.

It is worth noting that all neighboring Kansas counties are undergoing a similar mitigation planning effort, and as part of this statewide process all county and state planners are working together toward common mitigation goals. During the creation and adoption of this plan communication channels were opened to facilitate the cross pollination of ideas, to incorporate neighboring regions concerns, and to ensure the overall preparedness of the State of Kansas.

A series of kick-off meetings were held with MPC members, available representatives from jurisdictions within the planning region, local and regional stakeholders, and the public invited. At the kickoff meeting, the planning process, project coordination, scope, participation requirements, strategies for public involvement, and schedule were discussed in detail. During the meeting, participants were led through a guided discussion concerning hazard data sourced from their previous hazard mitigation plans. Additionally, research was conducted prior to the meeting on recent regional hazard events to further inform the discussion. Participants were encouraged to discuss past hazard events, past impacts, and the future probability for all identified hazards. At the conclusion of the meeting, all participants were





provided with a data collection forms to solicit information needed to properly complete the HMP. The forms asked for information concerning data on historic hazard events, at risk populations and properties, and available capabilities. Additionally, participating jurisdictions were provided with their mitigation actions from the previous plans for review and comment and asked to identify any additional mitigation actions.

A mid-term planning meeting was held with MPC members. Based upon the initial research, discussions held during the kickoff meetings, information obtained from the data collection forms, additional research, and subsequent discussion with MPC members, the results of the hazard identification, classification, and delineation were discussed in detail. In addition, sections of the HMP were made available for review and comment. Based on the supplied hazard information, participants were asked to assist in the development and review of mitigation goals and actions.

A final planning meeting was held with MPC members, available representatives from jurisdictions within the planning region, local and regional stakeholders, and the public invited. The completed draft HMP was made available for review and comment.

The following table presents the date and location of each planning meeting.

Table 2.4: Kansas Region K Planning Meetings

Meeting Number	Date	Location
1 (Kickoff)	02/12/2019	Marshall County
	02/13/2019	Atchison County
	02/13/2019	Jefferson County
2 (Mid-Term)	05/21/2019	On-Line
3 (Final)	06/25/2019	Marshall County
	06/25/2019	Atchison County
	06/26/2019	Douglass County

Both the minutes and sign-in sheets from all meetings may be found in Appendix C.

2.7 – Existing Plan Incorporation

44 CFR 201.6(b)(3): Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

44 CFR 20176(c)(1)(iii): Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.





The hazard mitigation plan is an overarching document that is both comprised of, and contributes to, various other jurisdictional plans. In creating this plan, all the planning documents identified below were consulted and reviewed, often extensively. In turn, when each of these other plans is updated, they will be measured against the contents of the hazard mitigation plan.

Below is a list of the various planning efforts, sole or jointly administered programs, and documents reviewed and included in this hazard mitigation plan. While each plan can stand alone, their review and functional understanding was pivotal in the development of this plan and further strengthens and improves Kansas Region K's resilience to disasters.

- All participating jurisdictions Codes and Ordinances□
- All participating jurisdictions Comprehensive Plans□
- All participating jurisdictions Critical Facilities Plans□
- All participating jurisdictions Economic Development Strategic Plans□
- All participating jurisdictions Emergency Operations Plans□
- All participating jurisdictions Flood Mitigation Assistance Plan□
- All participating jurisdiction Land-Use Plans□
- Community Wildfire Protection Plans□
- Any other newly created or relevant jurisdictional plan□

Information from each of these plans and programs is utilized within the applicable hazard sections to provide data and fully inform decision making and prioritization.

State and Federal Level Plan Integration

The following list illustrates local, state and federal programs integrated, where applicable, and referenced in Kansas Region K's mitigation efforts.

- State of Kansas Hazard Mitigation Plan□
- Hazard Mitigation Grant Program□
- Flood Mitigation Assistance Program□
- National Flood Insurance Program□
- Pre-Disaster Mitigation Program□
- Repetitive Loss & Severe Repetitive Loss Program□
- FireWise Communities Program□
- Relevant Dam Emergency Action Plans (if document not secured)□
- Community Rating System□





Integration Challenges

The 2014 plan update successfully integrated approved Kansas Region K local hazard mitigation plans into one regional HMP. This represents a success of our streamlined program of allowing jurisdictions to participate in multi-jurisdictional regional-level plans. This program not only reduces the cost and the burden to local jurisdictions, it also allows for closer collaboration and integration of local communities in all areas of planning and response. However, and as always, challenges exist due to the day to day demands of the working environment, including scheduling conflicts, budget restrictions, and staffing changes and shortages related to both the utilization and incorporation of the HMP and completion of identified hazard mitigation projects.

