

Contents

I. Introduction	1
A. Plan Purpose.....	1
Background.....	1
Planning Area.....	1
B. Funding.....	4
C. Region Planning Team	5
D. Plan Development & Data Collection	5
E. Profile Organization.....	6
Jurisdiction Profile	8
Participation	9
Capabilities	9
F. RISK ASSESSMENT.....	9
Mitigation Goals, Actions, and Strategies.....	10
G. Public Input.....	10
H. Amendments and Plan Maintenance	11
I. Plan Adoption	12
II. Hazards	1
A. Identify	2
B. Definitions & Regional Impacts	3
Natural Disasters	3
1. Dam/Levee Failure	3
2. Drought	8
3. Earthquake	11
4. Expansive Soils	12
5. Extreme Heat	15
6. Flooding – Flash and Riverine.....	18
7. Grass or Wildland Fire	20
8. Landslide	22
9. Severe Winter Storm.....	24
10. Sinkholes	25
11. Thunderstorm – Hail/Lightning	27
12. Tornado Windstorm	29
Other Hazards.....	31
13. Animal/Plant/Crop Disease	31
14. Hazardous Materials Incident	35
15. Infrastructure Failure	36
16. Pandemic Human Disease	36

17. Radiological Incident	39
18. Terrorism	40
19. Transportation Incident	41
C. ~~Effects of Climate Cycles~~	43
Projected changes	43
III. Region	1
A. Profile	1
Landforms & Geology	1
Bodies of Water & Watersheds	2
Weather & Climate	3
B. Participation	5
C. Updates to 2020 Actions and Strategies	7
D. Risk Assessment	41
Summary of Disasters	42
Record of Recent Events	43
E. Mitigation Goals	48
F. Mitigation Actions, Strategies, & Projects	49
Guiding Principles for Determining Actions, Strategies, & Projects	50
Prioritizing Actions	51
Identified Actions, Strategies, & Projects	52
Region-Wide Recommendations	87
IV. Counties & Cities Participating as Jurisdictions	2
G. Cherokee County	2
Profile – Unincorporated Area & County	2
Participation	11
Capabilities	12
Mitigation Actions, Strategies, & Projects	22
Jurisdictions	24
1. Aurelia	24
2. Cherokee	33
3. Cleghorn	48
4. Larrabee	53
5. Marcus	60
6. Meriden	67
7. Quimby	72
8. Washta	79
B. Ida County	2
Profile – Unincorporated Area & County	2
Participation	10

Capabilities	10
Risk Assessment	14
Mitigation Actions, Strategies, & Projects	22
Jurisdictions	25
1. Arthur	25
2. Battle Creek	30
3. Galva.....	36
4. Holstein	41
5. Ida Grove.....	49
C. Monona County.....	2
Profile – Unincorporated Area & County	2
Participation	13
Capabilities	13
Risk Assessment	16
Mitigation Actions, Strategies, & Projects	20
Jurisdictions	22
1. Blencoe.....	22
2. Castana.....	30
3. Mapleton.....	36
4. Moorhead.....	43
5. Onawa	51
6. Rodney	61
7. Soldier	69
8. Turin	76
9. Ute.....	81
10. Whiting.....	90
D. Plymouth County	2
Profile – Unincorporated Area & County	2
Participation	11
Capabilities	12
Risk Assessment	15
Mitigation Actions, Strategies, & Projects	25
Jurisdictions	27
1. Akron	27
2. Brunsville.....	35
3. Craig	39
4. Hinton.....	43
5. Kingsley	52
6. Le Mars.....	59

7. Merrill.....	71
8. Oyens	78
9. Remsen.....	83
10. Struble.....	90
11. Westfield	95
E. Woodbury County	2
Profile – Unincorporated Area & County	2
Participation	10
Capabilities	11
Risk Assessment	14
Mitigation Actions, Strategies, & Projects	22
Jurisdictions	24
1. Anthon.....	24
2. Bronson	30
3. Correctionville	36
4. Cushing.....	45
5. Danbury.....	51
6. Hornick	57
7. Lawton.....	63
8. Merville.....	70
9. Oto	78
10. Pierson	83
11. Salix	90
12. Sergeant Bluff.....	97
13. Sioux City.....	108
14. Sloan.....	127
15. Smithland	134
V. School Districts Participating as Jurisdictions	1
A. Summary of Relevance to Plan	1
B. Jurisdictions	2
1. Akron-Westfield Community School District.....	2
2. Alta-Aurelia Community Schools.....	8
3. Cherokee Community Schools	9
4. Galva-Holstein (Ridge View School District).....	11
5. Hinton Community Schools.....	15
6. Kingsley-Pierson Community School District	20
7. Lawton-Bronson Community School District	23
8. Le Mars Community Schools	23
9. Maple Valley-Anthon-Oto Community Schools	27

10. Marcus-Meriden-Cleghorn and Remsen Union Districts 30

11. Odebolt Arthur Battle Creek Ida Grove (OABCIG) Community School District 33

12. River Valley 37

13. Sergeant Bluff-Luton 39

14. Sioux City Community School District 42

15. West Monona Community School District 46

16. Westwood Community School District 47

17. Whiting Community School District 50

18. Woodbury Central Community School District 52

I. INTRODUCTION

A. Plan Purpose

Cherokee, Ida, Monona, Plymouth, and Woodbury Counties in Iowa, along with their respective participating cities and school districts, have prepared this Regional Hazard Mitigation Plan to guide planning for increased resilience by way of sustained action to eliminate or reduce loss resulting from the occurrence of natural or other disasters. This Plan is intended for use in conjunction with all planning and guidance documents, procedures, and processes within a given jurisdiction (including but not limited to Comprehensive Plans, Economic Development Plans, Emergency Response Plans, and Capital Improvement Programs).

Background

In 2022, the Iowa Department of Homeland Security and Emergency Management (DHSEM) issued a Notice of Funding Available (NOFA) through the Building Resilient Infrastructure and Communities (BRIC) grant program specifically referencing Hazard Mitigation Plans set to expire in 2025. This notice was provided to County Emergency Management Agencies (EMA) in Iowa and communicated through the Iowa Association of Councils of Government (ICOG). Represented under a common Council of Governments (COG), Cherokee, Ida, Monona, Plymouth, and Woodbury County EMAs agreed to update their 2020 Regional plan and maintain five-county participation. Siouxland Interstate Metropolitan Planning Council (SIMPCO) facilitated the discussion and agreed to prepare the estimated budget, scope of work, and application. Plymouth County agreed to be the applicant of record and as such, contracted with SIMPCO to complete the Regional Hazard Mitigation Plan encompassing Cherokee, Ida, Monona, Plymouth, and Woodbury Counties in northwest Iowa. Each county, as duly agreed upon, is responsible for its respective share of the required twenty-five percent (25%) local cash match.

Planning Area

This Regional Hazard Mitigation Plan includes an overview of each jurisdiction within Cherokee, Ida, Monona, Plymouth, and Woodbury Counties in Iowa including:

- profile
- participation
- community capabilities
- hazard analysis and risk assessment, and
- identified mitigation actions and strategies

The term “jurisdiction” within the context of this Plan refers to an incorporated city, unincorporated area under its respective county authority, county entity, and/or school district serving a population within the region and having at least one facility hosted within the region. The same five counties share a boundary under the SIMPCO regional planning area and its Iowa metropolitan planning area, the Iowa Department of Transportation (IaDOT) – designated as Transit Region IV and Transportation Planning Region IV, and the Local Emergency Planning Committee (LEPC) also designated as Iowa Region IV.

While all cities, counties, and school districts with facilities in the Region are included for discussion, FEMA recognizes “Participating Jurisdictions” as those with specific actions, strategies, and/or projects included in the Region Listing of Projects located in Title III *Region, Section F Mitigation Actions, Strategies, & Projects, Article 3 Identified Actions, Strategies, & Projects*. For jurisdictions included in this plan that have not included planned actions in the development of this Plan, an amendment and subsequent adoption at the local level enables that jurisdiction’s eligibility and activates “Participant” status upon notification to the State and FEMA. Jurisdictions included but not meeting the FEMA expectation of including a specific action, strategy or project are denoted with an asterisk (*) on the complete listing of included jurisdictions beginning below.

To minimize redundancy, describing hazards and risks impacting the region are discussed in terms of the Region as a whole. Similarly, the geological makeup that is consistent across county borders is also characterized in regional terms. Therefore, identified mitigation actions and strategies in response to identified hazards are included in the Region summary, wherein some apply to the Region as a whole and are grouped together. Jurisdiction measures that respond to unique circumstances are also listed within jurisdiction profiles. To better reflect jurisdiction participation unique characteristics, public input, and planning procedures are independently addressed within the context of the given jurisdiction where applicable.

Following is a complete listing of jurisdictions included in this plan. Please note these indicators as applicable.

- * denotes plan development participation with **no FEMA-qualifying participatory projects** identified
- ** denotes participation in **other FEMA-Approved plan**. Included as reference point for county or host community-based projects as may be considered
- x denotes **non-participant status** due to no response provided from jurisdiction

Cherokee County, its unincorporated area and the cities of:

Aurelia	* Cleghorn	Marcus	* Quimby
Cherokee	* Larrabee	* Meriden	* Washta

Ida County, its unincorporated area and the cities of:

Arthur	Battle Creek	Galva	Holstein	Ida Grove

Monona County, its unincorporated area and the cities of:

Blencoe	Mapleton	Onawa	Soldier	Ute
Castana	Moorhead	Rodney	* Turin	Whiting

Plymouth County, its unincorporated area and the cities of:

Akron	Hinton	Merrill	Struble
x Brunsville	Kingsley	Oyens	Westfield
x Craig	Le Mars	Remsen	

Woodbury County, its unincorporated area and the cities of:

Anthon	Cushing	Lawton	Pierson	Sioux City
Bronson	Danbury	Moville	Salix	Sloan
Correctionville	Hornick	Oto	Sergeant Bluff	Smithland

Public School Districts serving the Region

Akron-Westfield CSD	Cherokee CSD
** Alta-Aurelia CSD	Galva-Holstein CSD

Hinton CSD	Remsen-Union CSD (RU)
Kingsley-Pierson School District	River Valley CSD
* Lawton-Bronson School District (LB)	Sergeant Bluff-Luton Community Schools (SBL)
Le Mars Community School District	Sioux City CSD (SCCSD)
* Maple Valley-Anthon-Oto CSD (MVAO)	* West Monona CSD
Marcus-Meriden-Cleghorn CSD	Westwood Schools
* Odebolt Arthur Battle Creek Ida Grove CSD	* Whiting CSD
(OABCIG)	* Woodbury Central CSD

Jurisdictions indicating a notation of * or * are included in the plan as they may be beneficiaries of county or nearby-jurisdiction planned/proposed action. These entities have not identified specific mitigative strategies, actions, or projects and therefore are NOT classified as “Participants” under FEMA guidelines requiring such. Jurisdictions as indicated are required to amend, and adopt by resolution, the Plan at the local level to be eligible to apply for PDM funds as may become available for mitigation projects.

It is important to note that the Alta-Aurelia School District is a participant in the Buena Vista County, Iowa Hazard Mitigation Plan. The district is included by reference here as it may be a collaborative partner in projects affecting its Aurelia student population and/or facilities.

B. Funding

As provided in the Background section, this plan is made possible through the Federal Emergency Management Agency (FEMA) BRIC program as allocated by the Iowa Department of Homeland Security and Emergency Management (DHSEM) accounting for seventy-five percent (75%) of development and production costs. The funding opportunity was announced August 15, 2022. Participating counties completed a sub-award agreement with Plymouth County formalizing commitment to participate and commit to covering equal share of the 25% match as required for funding eligibility. The application was submitted December 21, 2022. Plymouth County received a request for more information requiring ongoing communication between Plymouth County, Iowa Homeland Security Mitigation Bureau, and SIMPCO through November 2023. Notification to proceed was granted December 8, 2023.

Upon completing coordination with the state mitigation bureau, finalizing county commitments and approval of contracting with SIMPCO, work on this plan effectively began February, 2024. The Region Planning Committee included participating county EMAs and key partners in emergency response planning for each of those agencies.

C. Region Planning Team

Beginning with EMAs from each County, SIMPCO organized the lead Regional Planning Team to include Rebecca Socknat – Plymouth County EMA, Justin Pritts – Cherokee County EMA, Ed Sohm – Ida County EMA, Patrick Prorok – Monona County EMA, and Mike Montino – Woodbury County EMA. Additional counsel was provided through existing committees and respective members including Region IV LEPC, the SIMPCO Water Resource Committee, the SIMPCO MPO and SRTPA in addition to SIMPCO Staff – Michelle Bostinelos, Ryan Brauer, Nathan Kistner, Bess Seaman, Tonia Abell, and Dawn Kimmel.

D. Plan Development & Data Collection

The 2025 Regional Hazard Mitigation Plan for Cherokee, Ida, Monona, Plymouth and Woodbury Counties is presented in a format consistent with guidelines as provided through FEMA, IDHS and the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by the Disaster Mitigation Act of 2000 and Title 44 Code of Federal Regulations §201.6.

The Plan has been developed using a broad range of data resources, community interviews, and survey collection. The primary source for demographic data included the analysis of participant profiles on CensusReporter.org¹. Some information is also drawn from American Community Survey (ACS) estimates² and decennial census data³ through the Census Bureau. It is important to note that using a consistent base source for demographic data allows for consistent comparison and basic correlations between jurisdictions. Local accounts of events and other details are given full consideration in profile compilation.

¹ Source: <https://censusreporter.org/>

² Source: <https://www.census.gov/programs-surveys/acs.html>

³ Source: <https://data.census.gov/>

Records of weather events are sourced through NOAA Storm Event database⁴ as well as local, state, and federal records of disaster declarations and damages. Online and personal accounts were considered for discussion. NOAA is a reporting system that receives data from residents and jurisdiction officials. Many reports can be made for a single event. For the purpose of this plan, some general condition reports made on the same day are grouped together as appropriate, for example, four counties reported drought on August 1, 2020. This is recognized as a single event as it relays to general conditions without a unique impact on just one portion of the reporting area. The same consideration is given to general cold weather events and wind storm activity. Hail and Tornado reports, however, may be isolated in nature and are counted separately for each jurisdiction and each occurrence. Reports for the same community at varying times in a single day are also recognized as separate events.

GIS databases and locally collected and compiled data were used to create representational maps, including but not limited to land use and floodplains, to provide visual support of plan content. Additional maps have been included or referenced where applicable with source information duly noted.

SIMPCO facilitated meetings with all participating jurisdictions as noted in respective profiles. While CensusReporter.org provides a consistent baseline for comparisons, it is important to note that local accounting of populations, incomes trends, and housing details tend to better reflect circumstances not recognized in estimation-sourced data.

Plan outline is consistent with FEMA and state requirements to ensure participant eligibility to apply for pre-disaster program funds, flood mitigation assistance, and other capacity and capability-building program funding opportunities.

E. Profile Organization

A profile is included for each level of information — region, county, city, and school district, providing the detail at the broadest level as applicable. Characteristics regarding all aspects of mitigation and related projects that are common to all or most jurisdictions within a County

⁴ Source: <https://www.noaa.gov/>

are detailed in the County profile. The same applies to features consistent in all counties as included in the presentation of regional information throughout the Plan.

Jurisdiction profiles are consistent with state and FEMA guidelines providing a context for community mitigation capabilities and needs. These basic community characteristics help define population risk levels and city per capita capacities, housing sustainability, variables in temporary population increases and several other factors contributing to emergency preparedness. Each jurisdiction profile includes an overview of the following.

- City Governance & Community Supports
- Demographics, Housing, & Economics
- Leading Employers
- Critical Facilities
- Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest
- Valuation of City Assets
- Land use map with floodplain overlay (in Appendices)

In addition to the profile, the following are itemized for each jurisdiction, documenting input, supports in place, addressing changes/implementations since the 2020 Regional Hazard Mitigation Plan, and allowing notation of specific actions, strategies, and needs.

- Participation
- Community Capabilities
 - Review of Actions Taken (Since 2019)
- Risk Assessment
 - Contributing Factors
 - Priority Hazards
- Mitigation Needs, Actions, & Strategies

JURISDICTION PROFILE

For the purpose of this Plan, critical facilities are those as identified by the community as significant to the operation of the City such as:

- City facilities and infrastructure
- Facilities hosting or having the potential to host vulnerable populations – event and recreation facilities as well as nursing homes, childcare centers, and medical facilities where applicable,
- Businesses and organizations that are essential to the overall wellbeing of the community at large.

Aside from recreation venues, maintaining function of the critical facilities and infrastructure as presented in the event of a natural or other disaster is indicative of a given community's ability to recover. Unless specified as a refuge location, churches and private or in-home child/elder care providers are generally not included for discussion.

“Vulnerable populations” is a characterization of any given group that may have increased risk of threat in the event of a natural hazard occurrence due to exposure, age-based limitations, disability, or access to a designated safe zone. While nursing homes, hospitals, and schools are obvious locations that may have large groups of vulnerable persons, parks and local gathering places may also host an abnormally large representation of the population that is temporarily at an increased risk to hazards due to exposure. Several categories of critical facilities and locations should be considered when determining the need and/or impact of a given mitigation action. While some locations as listed for a given jurisdiction fall outside City limits, they are still relevant to emergency response and emergency action as may result from a natural, human-caused, or biological hazard. Community Support and/or Gathering Locations may occur anywhere within the City's borders. While the above provision may not be an exhaustive list, it is intended to reflect an expansive representation of where residents and visitors may congregate.

PARTICIPATION

Participation includes planned meetings, phone and email submissions of jurisdiction-specific information, collected informal public input, and formal public input as submitted by respondents through written comment cards, emailed responses to comment cards, or completion of an online survey. If a given jurisdiction is represented by a submitted response, that submission is included for discussion. Note of venues used for informal public input is included where applicable.

CAPABILITIES

Capabilities are disseminated in a manner similar to all jurisdictional resources. Supports available to the Region at large are provided in the summary of Regional Resources. Countywide supports are listed as available under the County summary provided. Jurisdiction capabilities are indicators and measures taken that enable a community to properly prepare for, endure, and recover from a natural disaster. Including but not limited to communications networks, equipment, designated refuge locations, guided planning documents, proactive ordinances, and a community network of public and private services and supports, each jurisdiction's capabilities are outlined within its profile. Implemented actions and strategies further contribute to a jurisdiction's capability to remain resilient during and after a disastrous event. As such, completed actions and strategies are included under Capabilities. Implemented projects, actions, and strategies enhance a community's capabilities. For each jurisdiction, comment is provided updating the status of the actions and strategies as assigned in the 2020 Plan.

F. RISK ASSESSMENT

An analysis of jurisdictional strengths, weaknesses, opportunities and threats comprises the risk assessment. In context of historical events within and around the region and due consideration of community capabilities, participants determine necessary strategies, feasible actions, and desired projects.

MITIGATION GOALS, ACTIONS, AND STRATEGIES

Specified projects based on Region Mitigation Goals in Title III, Section F as they correspond to Region Mitigation Action and Strategies, will be included in each jurisdiction profile. Local actions and strategies reflect that community's interest in regard to their own priority disaster concerns.

Some considerations are not economically feasible on their own, however, the City will include assessment of potential mitigation actions when preparing and developing new betterment projects. Additional projects, as decided by the Council and outside the description of projects and potential projects as outlined above, may be eligible for resiliency and/or pre-disaster mitigation funds through a formal process to amend this document at the jurisdiction level.

G. Public Input

Public input was collected through in-person conversation, scheduled planning meetings, and survey collection. In-person interactions took place at the following events and community meetings:

- Riverside Flood Resources Fair, Sioux City IA July 10 & 11, 2024
- Siouxland Coalition to End Homelessness meeting, Sioux City IA September 23, 2024
- Plymouth County Health Planning meeting, Le Mars IA December 13, 2024

Informal invitation to complete the online survey was extended at several community meetings not listed when attendees provided organizational updates as well. Additional input was collected through in-person discussion, paper survey distribution, and postings/flyers prompting participation via online survey at the following county fairs in the region.

- Cherokee County Fair, Cherokee, IA July 17-21 2024
- Plymouth County Fair, Le Mars, IA July 24-28 2024
- Woodbury County Fair, Merville, IA July 31-August 4 2024

A total of 251 primary surveys were collected – some were completed online, most completed on paper and data-entered into the survey collector to better tabulate findings. For each jurisdiction with survey responses, a summary of results is included for discussion under participation and results are referenced under the risk assessment and priority hazards sections within their prospective profile.

Meetings conducted with participating school districts included an invitation to share an adapted version of the survey with their junior and senior students allowing consideration of youth perspective. A total of 65 student surveys were collected from 4 schools. Findings from student surveys are added for discussion within profiles where applicable. These responses are separately noted than those of the primary survey.

H. Amendments and Plan Maintenance

For projects to be eligible for Pre-Disaster Mitigation or like-program funds, the project must be included in this plan's identified actions and strategies. To modify mitigation actions or strategies, an amendment may be passed at jurisdiction level with documentation of such amendment kept on record with the Plan. Each jurisdiction will have on file an electronic copy of the Plan and a progress report form. As a city implements mitigation strategies to improve its overall resilience, a progress report is to be completed and filed in the City's Record of Mitigation Plan Amendments and Implemented Mitigation Actions and reported to the County EMA at least annually. Record of amendments approved to the jurisdiction's needs assessment and/or planned projects will be maintained in the same manner. Such records will be made available for review upon request. An electronic file is recommended for ongoing plan maintenance.

This plan shall be renewed or updated every five (5) years). Each jurisdiction is responsible for maintaining record of mitigation actions/strategies/projects completed and/or needed, regardless of funding requests. All jurisdictions are expected to communicate with their respective Emergency Management Office and its Director/Coordinator when implementing mitigation projects. For cities, the City Clerk is expected to collaborate with the Council and City Staff to assign responsibility as appropriate for each project. For counties, the responsible department leading any action/strategy/project shall communicate intentions with the

Emergency Management Agency. Progress of mitigation projects shall be reported to the County EMA Coordinator on an annual basis at minimum. School districts are encouraged to maintain record of actions/strategies/projects for review by the Emergency Management Agency. If funding supports are sought, districts may work with the County EMA to amend the Plan and/or initiate a funding application, with the collaboration of the facility's host city/county as applicable.

I. Plan Adoption

All participating jurisdictions are required to adopt the plan at the jurisdiction level. A Resolution of Adoption template is provided in Appendix D, along with the Amendment template, and Progress Report form. Included jurisdictions that have not identified specific mitigation actions, strategies, or goals are required to submit an amendment to include an identified action, strategy, or project, and subsequently adopt the Plan by resolution to be recognized as a participant by FEMA. Non-participant jurisdictions are denoted with an asterisk (*) in the Planning Area Listing on page 3 of this Plan.

II. HAZARDS

One or more of these four qualifying considerations have determined the natural hazards, and those that are human-caused or biological, included in this plan:

1. Inclusion in the 2023 State of Iowa Hazard Mitigation Plan (IHMP)
2. Actual occurrence in recent history within the region and/or jurisdiction
3. Occurrence, presence, or increased frequency of event/condition in nearby and border communities/counties/states
4. Concern of increased impact due to continuous extreme weather conditions on aging or incident-compromised infrastructure.

Mitigation actions and strategies included in the 2020 Regional Hazard Mitigation Plan addressed hazards as identified in that plan as shown in the table below.

<i>Natural Disasters Identified 2020 Regional Hazard Mitigation Plan</i>	
1 Dam Failure/Levee Failure	8 Landslide
2 Drought	9 Severe Winter Storm
3 Earthquake	10 Sinkholes
4 Expansive Soils	11 Thunderstorms & Lightning /Hail
5 Extreme Heat	12 Tornado/Windstorm
6 Flood – Flash & Riverine	13 Other Hazards
7 Grass or Wildland Fire	

<i>Other Hazards</i>			
1	Animal/Plant/Crop Disease	5	Radiological Incident
2	Hazardous Materials Incident	6	Terrorism
3	Infrastructure Failure	7	Transportation Incident
4	Pandemic Human Disease		

A. Identify

Using the definition as provided in the State Plan according to the *U.S. Department of Homeland Security Risk Lexicon* (2010), natural hazards are hereby defined as "a source of harm or difficulty created by a meteorological, environmental, or geological phenomenon or combination of phenomena". As such, hazards originating biologically (i.e. disease) or through human-caused events, are not in this plan deemed "natural". To remain consistent in presentation of data in relation to the State Plan, this plan addresses hazards using the same categorization. While identified natural hazards have not changed, the order of priority has shifted. Hazards as included in the 2023 State of Iowa Hazard Mitigation Plan are as follows:

1. Drought	8. Dam and Levee failure (relates to natural hazard of flooding)
2. Tornadoes and other High Wind Events (including derechos)	9. Landslides
3. Flooding-River	10. Earthquake
4. Flooding-Flash	11. Wildfire, including Grass Fire
5. Severe Winter Storms	12. Sinkholes
6. Hail and Lightning storms	13. Expansive Soils
7. Excessive Heat	

For reference in regard to their potential or likelihood of occurrence within the state of Iowa, and to provide context for these concerns to be included in mitigation actions and strategies in this plan, the following biological and human-caused hazards are included for consideration as "Other Hazards". Other hazards, also unchanged except for priority ranking, as identified in the current state plan include:

1. Animal/Crop/Plant Disease	5. Radiological Incident
2. Pandemic Human Disease	6. Terrorism
3. Hazardous Materials	7. Transportation Incident
4. Infrastructure Failure	

B. Definitions & Regional Impacts

Following are the descriptions and/or definitions of State-Identified Natural and Other Hazards as included in the 2023 Iowa Hazard Mitigation Plan. Except in regard to local commentary or where noted, content below is taken directly from *Section 3 Hazard Analysis and Risk Assessment* in the state plan. Some content is shortened to reduce redundancy. More information about Iowa's hazard definitions can be found in the state plan and in references provided.

NATURAL DISASTERS

1. DAM/LEVEE FAILURE

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Dam Failure/Levee Failure	extensive	moderate	likely	high

At the time of this update, dam and levee failure, due to unprecedented water levels in the summer of 2024, has had a devastating effect for communities in western Iowa and in neighboring communities in southeastern South Dakota. However, communities impacted by such events have included discussion regarding needed actions/strategies within the context of respective community profiles. Mitigation planning in a tri-state region presents unique challenges involved in preparing for outcomes resulting from mitigation actions implemented in South Dakota and Nebraska.

With varying capacities and ratings, it is a fair assumption to consider dams and levees and their respective structural integrity to be significant consideration for mitigation planning.

More information about the region's dams and levees can be found online at <https://www.iowadnr.gov/Environmental-Protection/Land-Quality/Dam-Safety>.

The State Plan identifies Dam/Levee Failure using the following description.

Dam/levee failure is the uncontrolled release of water resulting from a structural failure in a dam, wall, dike, berm, or area of elevated soil that causes flooding. Possible causes of the breach could include flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, terrorism, erosion, piping, saturation, or under seepage.

Dams are constructed for a variety of purposes, including flood control, erosion control, water supply impoundment, hydroelectric power generation, and recreation. In Iowa, dams are classified according to the downstream damage that would occur if they were to fail. The more risk, the higher the standards that must be met when that dam is constructed or modified. There are three dam classifications: high hazard, moderate (aka “significant”) hazard and low hazard. These classifications do not describe the current condition of the dam. High hazard dams have to meet the State's highest level of criteria and are inspected on a two-year cycle. The classification may change over time because of development downstream from the dam since it was constructed. Older dams may not have been built to the standards of its new classification. Below are the hazard classifications as defined by the Iowa Department of Natural Resources (DNR):

- *High Hazard* – A dam is classified as high hazard when it is located in an area where dam failure may create a serious threat of loss of human life.
- *Moderate (Significant) Hazard* – A dam is classified as moderate hazard when failure may damage isolated homes or cabins, industrial or commercial buildings, moderately traveled roads, or interrupt major utility services. A moderate hazard dam does not present a substantial risk of loss of human life. A dam is also classified as moderate hazard when the dam and its impoundment are themselves of public importance, such as a dam that is associated with public water supply systems, industrial water supply, or public recreation, or is an integral feature of a private development complex.
- *Low Hazard* – A dam is classified as low hazard when damage from a failure would be limited to loss of the dam, livestock, farm outbuildings, agricultural lands and lesser-used roads, and where loss of human life is considered unlikely.

A complete list of statewide dams is available through the U.S. Army Corps of Engineers' National Inventory of Dams (NID). Dams of particular significance to a given community are noted within the discussion points of relevant jurisdictions. The NID includes 700 dams within the region. Of that total, 42 are noted as *Significant* or *High* potential for risk under Hazard Classification. Of the 42 dams with *Significant* or *High* hazard potential, 31 have been given a Condition Assessment rating. Two are rated as *Poor*, three are rated as *Fair*, and 26 are rated as *Satisfactory*. Eleven dams with *Significant* or *High* hazard potential are not rated. Below is a listing of dams rated with *High* or *Significant* Hazard Classification. Additional Dam Inventory data is incorporated into County sections as applicable.

C = CHEROKEE I = IDA M = MONONA P = PLYMOUTH W = WOODBURY

<i>Dam Name</i>	<i>NIDID</i>	<i>Hazard Classification</i>	<i>County</i>	<i>Last Inspection Date</i>	<i>Condition Assessment</i>	<i>EAP</i>
Held Watershed Site E-3	IA01857	High	P	8/3/2020	Fair	Y
Deer Creek Dam	IA02937	High	P	7/18/2019	Satisfactory	NR
Focht & Schindel Dam	IA00860	High	P	7/22/2019	Satisfactory	Y
Held Watershed Site E-4	IA01856	High	P	8/3/2020	Satisfactory	Y
Smokey Hollow Subwatershed Site 4	IA02310	High	W	6/24/2020	Fair	Y
Bacon Creek Watershed Site A-1-1	IA01796	High	W	8/3/2020	Satisfactory	Y
Bacon Creek Watershed Site A-2-4	IA01791	High	W	8/3/2020	Satisfactory	Y
Bacon Creek Watershed Site A-3	IA01797	High	W	8/3/2020	Satisfactory	Y
Bacon Creek Watershed Site A-3-1	IA01795	High	W	8/3/2020	Satisfactory	Y
Bacon Creek Watershed Site C-1	IA01685	High	W	8/3/2020	Satisfactory	Y
Glen Ellen Subwatershed Site 3-1	IA01254	High	W	8/4/2020	Satisfactory	NR
Glen Ellen Subwatershed Site 3-2	IA01253	High	W	8/4/2020	Satisfactory	NR
Smokey Hollow Subwatershed Site 1	IA02311	High	W	6/24/2020	Satisfactory	Y
Smokey Hollow Subwatershed Site 2	IA02312	High	W	6/24/2020	Satisfactory	Y
Smokey Hollow Subwatershed Site 3	IA02313	High	W	6/24/2020	Satisfactory	Y
Crawford Creek Subwatershed Site M-3	IA01851	Significant	I	7/12/2018	Satisfactory	NR
Grell Pond Dam	IA00514	Significant	I	11/3/2015	Poor	NR

Arnold-Armstrong Subwatershed Gully 23	IA00788	Significant	M	11/4/2015	Fair	NR
Horse Lake Dam	IA00893	Significant	P	6/1/2016	Satisfactory	NR
Iowa NoName35	IA00875	Significant	P		Not Rated	NR
Kennedy & Johns Dam	IA01676	Significant	P		Not Rated	NR
Anthon Subwatershed 1-2261	IA01921	Significant	W		Not Rated	NR
Bacon Creek Watershed Site A-2-1	IA01794	Significant	W		Not Rated	NR
Bacon Creek Watershed Site A-2-2	IA01793	Significant	W	6/2/2016	Satisfactory	NR
Bacon Creek Watershed Site A-2-3	IA01792	Significant	W		Not Rated	NR
Bacon Creek Watershed Site A-2-6	IA01790	Significant	W		Not Rated	NR
Bacon Creek Watershed Site H-1	IA02343	Significant	W	8/4/2020	Satisfactory	NR
Bacon Creek Watershed Site H-1-1	IA02139	Significant	W	10/19/2015	Satisfactory	NR
Bacon Creek Watershed Site H-1-2	IA02140	Significant	W		Not Rated	NR
Bacon Creek Watershed Site H-1-3	IA02141	Significant	W		Not Rated	NR
Bacon Creek Watershed Site H-2-1	IA02142	Significant	W	6/2/2016	Satisfactory	NR
Bacon Creek Watershed Site H-2-2	IA02143	Significant	W	8/4/2020	Satisfactory	NR
Bacon Creek Watershed Site H-3-1	IA02344	Significant	W	8/4/2020	Satisfactory	NR
Bacon Creek Watershed Site H-3-2	IA02345	Significant	W	8/4/2020	Satisfactory	NR
Bacon Creek Watershed Site J-1	IA02347	Significant	W	10/21/2015	Satisfactory	NR
Bacon Creek Watershed Site J-3	IA02671	Significant	W	8/4/2020	Satisfactory	NR
Bacon Creek Watershed Site J-5	IA02346	Significant	W	10/21/2015	Poor	NR
Big Whiskey 1 Subwatershed Site 3-1	IA01195	Significant	W		Not Rated	NR
Iowa NoName60	IA01250	Significant	W		Not Rated	NR
Little Whiskey Subwatershed Site M-2	IA02533	Significant	W	8/4/2020	Satisfactory	NR
Smith Dam	IA01232	Significant	W		Not Rated	NR
Woodbury Co Roadgrade Dam 36-86-42	IA02580	Significant	W	7/11/2017	Satisfactory	NR

Plymouth County and Cherokee County do not have any levees listed in the National Levee Database. Following is an overview of levees in, or likely to affect, the region.

	<i>Ida</i>	<i>Mon</i>	<i>Wdby</i>
Levee Systems	6	19	13
Miles of Levees	2	144	18

Levee Structures	6	57	46
Average Levee Age	55	56	53

C = CHEROKEE I = IDA M = MONONA P = PLYMOUTH W = WOODBURY + = OUTSIDE REGION

County	Levee Name	Location	Risk Characteristics			Assessment Date
			People	Structure	Property Value	
M,W	Little Sioux & Wolf Creek	Rodney	37	56	\$7M	2/19/2020
M	Little Sioux 2	Whiting	0	10	\$2M	-
M	Little Sioux 3	Whiting	9	6	\$1M	-
W	Little Sioux LB - Bennet-Smithland	Smithland	0	0	0	6/23/2017
M,W	Little Sioux LB - Nagel DD North	Rodney	5	4	\$410K	10/26/2016
M,W+	Little Sioux West Fork Ditch RB & Monona-Harrison Ditch RB - Intercounty	Whiting	351	423	\$63M	1/27/2021
M,W	Little Sioux West Fork Ditch RB - Intercounty	Hornick	350	205	\$39M	2/18/2020
M,W	Little Sioux Wolf Cr RB & W Fork LB - Intercounty	Hornick	22	25	\$3M	3/5/2020
W	Sioux City - Big Sioux River LB	Sioux City	2973	1214	\$290M	4/29/2021
W	Sioux City - Floyd River LB	Sioux City	2479	326	\$290M	10/27/2016
W	Sioux City - Floyd River RB	Sioux City	2383	817	\$470M	10/27/2016
W	Sioux City - Perry Creek Left Bank	Sioux City	72	34	\$14M	7/31/2018
W	Sioux City - Perry Creek Right Bank	Sioux City	1553	488	\$250M	7/31/2018
M	Little Sioux - Intercounty DD	Whiting	0	9	\$2M	-
M	Little Sioux LB & Beaver Creek LB - Intercounty	Turin	2	5	\$590K	10/26/2016
M	Little Sioux LB & Beaver Creek RB - Intercounty	Turin	7	15	\$2M	6/20/2017
M	Little Sioux LB & Cottonwood Cr LB - Intercounty	Blencoe	5	11	\$1M	6/20/2017
M+	Little Sioux LB & Hogue Ditch LB - Intercounty	Little Sioux, Harrison County	547	313	\$28M	6/23/2017
M	Little Sioux LB & Maple River RB - Intercounty	Turin	88	65	\$6M	10/26/2016
M	Little Sioux LB - Castana - Intercounty	Castana	0	3	\$970K	6/23/2017
M	Little Sioux LB - Nagel and Intercounty DD	Turin	5	8	\$990K	6/23/2017
M	Little Sioux LB – Nagel DD South	Castana	2	7	\$840K	10/26/2016

M	Little Sioux Maple River RB North - Intercounty	Castana	2	0	\$920K	6/23/2017
M	Little Sioux Maple River RB South - Intercounty	Castana	0	3	\$260K	10/26/2016
M+	Little Sioux RB & Monona-Harrison LB - Intercounty	Blencoe	175	186	\$17M	3/5/2020
I	Badger Creek Levee LB	Ida Grove	18	9	\$2M	-
I	Badger Creek Levee RB	Ida Grove	not screened	-	-	-
I	Ida Grove - Maple River LB	Ida Grove	9	6	\$1.51M	12/19/2016
I	Ida Grove - Maple River RB	Ida Grove	not screened	-	-	-
I	Ida Grove - Odebolt Creek LB	Ida Grove	75	2	\$3.05M	11/15/2017
I	Ida Grove - Odebolt Creek RB & Maple LB	Ida Grove	450	110	\$59.1M	12/19/2016

<https://levees.sec.usace.army.mil/#/>

Jurisdictions are generally aware of weak points along dams and levees affecting their expected performance during routine weather patterns. Escalating weather events attributed to Climate Change complicate predicted behaviors of established mitigation features. For example, extreme weather (unusually high precipitation) in the summer of 2024 in Northwest Iowa reduced effectiveness of water retention systems across the region. Furthermore, increased occurrences of extreme weather patterns prohibit effective repairs and stabilization even when funds are available for such projects.

2. DROUGHT

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Drought	extensive	moderate	highly likely	high

According to Merriam-Webster, drought, as it pertains to a natural disaster, is generally defined as a prolonged period of dryness with a specific and adverse impact on crops or water supply (www.merriam-webster.com/dictionary/drought). Reduced water levels can result from abnormally low precipitation as well as fluctuations in surface water or ground water, which may be either human-caused or naturally occurring.

In addition to the provided definition, climatologists further categorize drought by the following types, which describe the extent of the drought's impact. These four types of drought conditions are relevant to Iowa:

- Meteorological drought, which refers to precipitation deficiency
- Hydrological drought, which refers to declining surface and groundwater supplies
- Agricultural drought, which refers to soil moisture deficiencies
- Socioeconomic drought, which refers to when physical water shortages begin to affect people

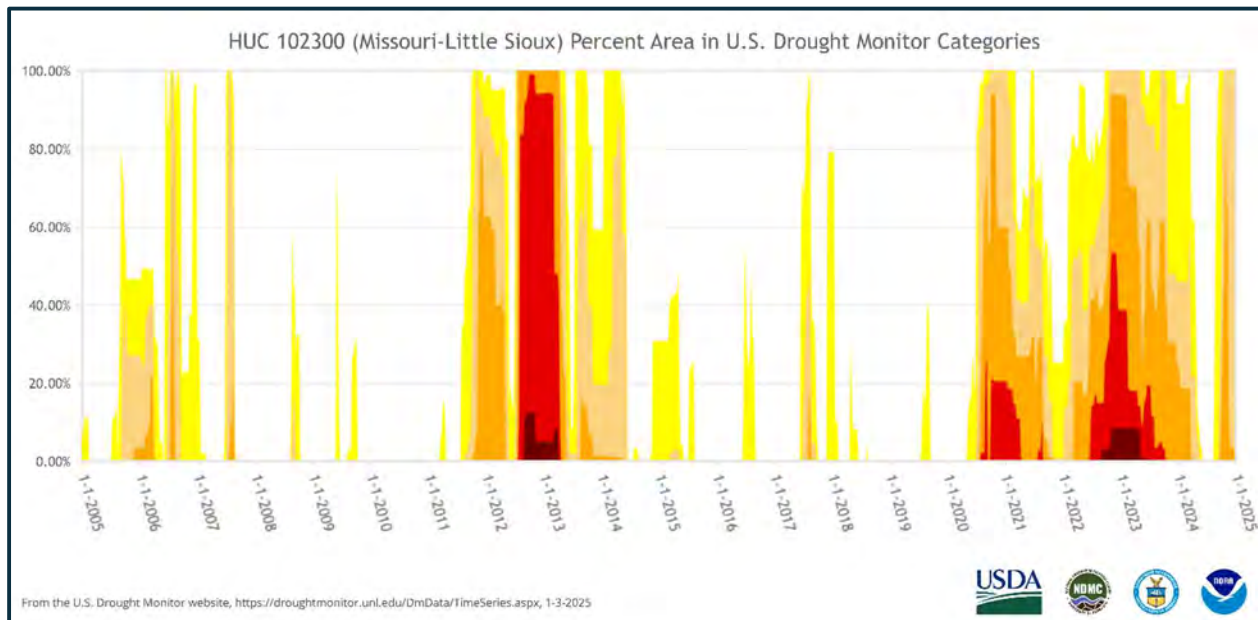
The six categories of drought defined in the U.S. Drought Monitor (USDM) are provided below. This tool for tracking drought is a product of the National Drought Mitigation Center.

Category	Description	Example Percentile Range for Most Indicators	Values for Standard Precipitation Index and Standardized Precipitation-Evapotranspiration Index
None	Normal or wet conditions	30.01 or Above	-0.49 or above
D0	Abnormally Dry	20.01 to 30.00	-0.5 to -0.79
D1	Moderate Drought	10.01 to 20.00	-0.8 to -1.29
D2	Severe Drought	5.01 to 10.00	-1.3 to -1.59
D3	Extreme Drought	2.01 to 5.00	-1.6 to -1.99
D4	Exceptional Drought	0.00 to 2.00	-2.0 or less

The highest occurrences of drought conditions with recorded events in Iowa are associated with agricultural and meteorological drought as a result of either low soil moisture or a decline in recorded precipitation.

Droughts can be spotty or widespread and last from a few weeks to a period of years. A prolonged drought can have a serious impact on a community's water supply and economy. Increased demand for water and electricity may result in shortages of resources. Moreover, food shortages may occur if agricultural production is damaged or destroyed by a loss of crops or livestock. While droughts are generally associated with extreme heat, they can and do occur during cooler months.

The USDM records show nearly continuous drought conditions in recent years in the Missouri-Little Sioux watershed between May 2020 and December 2024, with the most severe conditions (category D4) taking place between September 2022 and May 2023. Current conditions



according to data from USDA indicate moderate (D1 category) drought across most of the region, including the entirety of Cherokee, Ida, and Monona counties. A portion of northwest Woodbury County and the western half of Plymouth County are in a severe drought (D2 category). <https://www.drought.gov/drought/states/iowa>. Current streamflow conditions and 28-day streamflow at Missouri River stream gages near Sioux City and Decatur are Normal, compared to historical conditions for the same time period. The following graph shows drought intensities in the Missouri-Little Sioux watershed from 2005 through the end of 2024.

It is significant in planning to note that not all factors are mutually exclusive of others. Regional drought may not be of primary concern during the occurrence of river flooding as occurred along the Missouri River in 2024. Although flooding was caused by record rain events and an overall wetter season than average in the summer of 2024, the Region experienced drought conditions concurrently with these river flooding events. Above average precipitation events can overshadow the long-term precipitation trend leading to drought. Furthermore, extreme and prolonged drought in western portions of the United States also tend to overshadow the effects of a similar weather pattern locally.

3. EARTHQUAKE

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Earthquake	extensive	negligible	unlikely	low

Historically, earthquakes have not been a serious concern for the region. Most earthquakes occur along fault lines, the area where two tectonic plates meet. The state of Iowa does not contain any fault lines, resulting in very few earthquakes. However, while rare, these events can still happen. According to the Iowa Geological Survey, 13 earthquakes have occurred in in the State since European settlement. While few earthquakes originate in the State, residents do report feeling tremors that originate in other areas of the country. There have been no serious impacts due to earthquakes in the region.

Following is how the State Plan defines Earthquake.

An earthquake is any shaking or vibration of the earth caused by the sudden release of energy that may impose a direct threat on life and property. It is a sudden, rapid shaking of the earth caused by the breaking and shifting of rock beneath the earth's surface. This shaking can cause buildings and bridges to collapse; disrupt gas, electric, and phone service; and sometimes trigger landslides, flash floods, and fires.

More information regarding earthquakes in Iowa can be found on the [USGS website](#), including an interactive map of all recent earthquakes nationwide.

Earthquakes with Epicenters in Iowa

<i>Date</i>	<i>Nearest Town</i>	<i>Mercalli Intensity</i>
April 28, 1867	Sidney (IA / Nebraska City (NE)	IV
December 9, 1875	Sidney (IA / Nebraska City (NE)	III
April 13, 1905	Wayland (MO) / Keokuk (IA)	IV-V
January 26, 1925	Waterloo (IA)	II
November 12, 1934	Davenport (IA) / Rock Island (IL)	VI
January 5, 1935	Rock Island (IL) / Davenport (IA)	IV

January 5, 1935	Rock Island (IL) / Davenport (IA)	III
February 26, 1935	Burlington (IA)	III
October 11, 1938	Inwood (IA)	V
November 8, 1938	Dubuque (IA)	Approx. II
November 24, 1938	Davenport (IA) / Rock Island (IL)	II-III
April 20, 1948	Oxford (IA)	IV
July 16, 2004	Shenandoah (IA)	III
June, 30, 2021	Rembrandt (IA)	II-III

There are no recorded earthquakes centered within the five counties included in this plan. As a result, goals and action items related to earthquake mitigation are not a priority. An ongoing concern does exist based on the potential of energy production-related earthquakes and seismic activity. According to USGS at <https://www.usgs.gov/programs/earthquake-hazards/science/induced-earthquakes>, occurrences of energy production-related quakes are increasing in magnitude and frequency. While considering earthquake mitigation actions moving forward, additional emphasis should be placed on the potential for human-caused incidents.

4. EXPANSIVE SOILS

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Expansive Soils	extensive	negligible	occasional	low

Expansive soils are soils that expand and contract as a result of moisture content. This movement can damage residential and commercial structures, as well as components of infrastructure. While this hazard lacks the drama characteristic of others, such as floods or tornadoes, expansive soils account for approximately \$2.3 billion in damages annually in the United States.

There is not a comprehensive database documenting consequence of expansive soils in Iowa or the United States. Therefore, it is impossible to determine the amount of property damage that has occurred in the five counties within this plan. It is known that expansive soils are

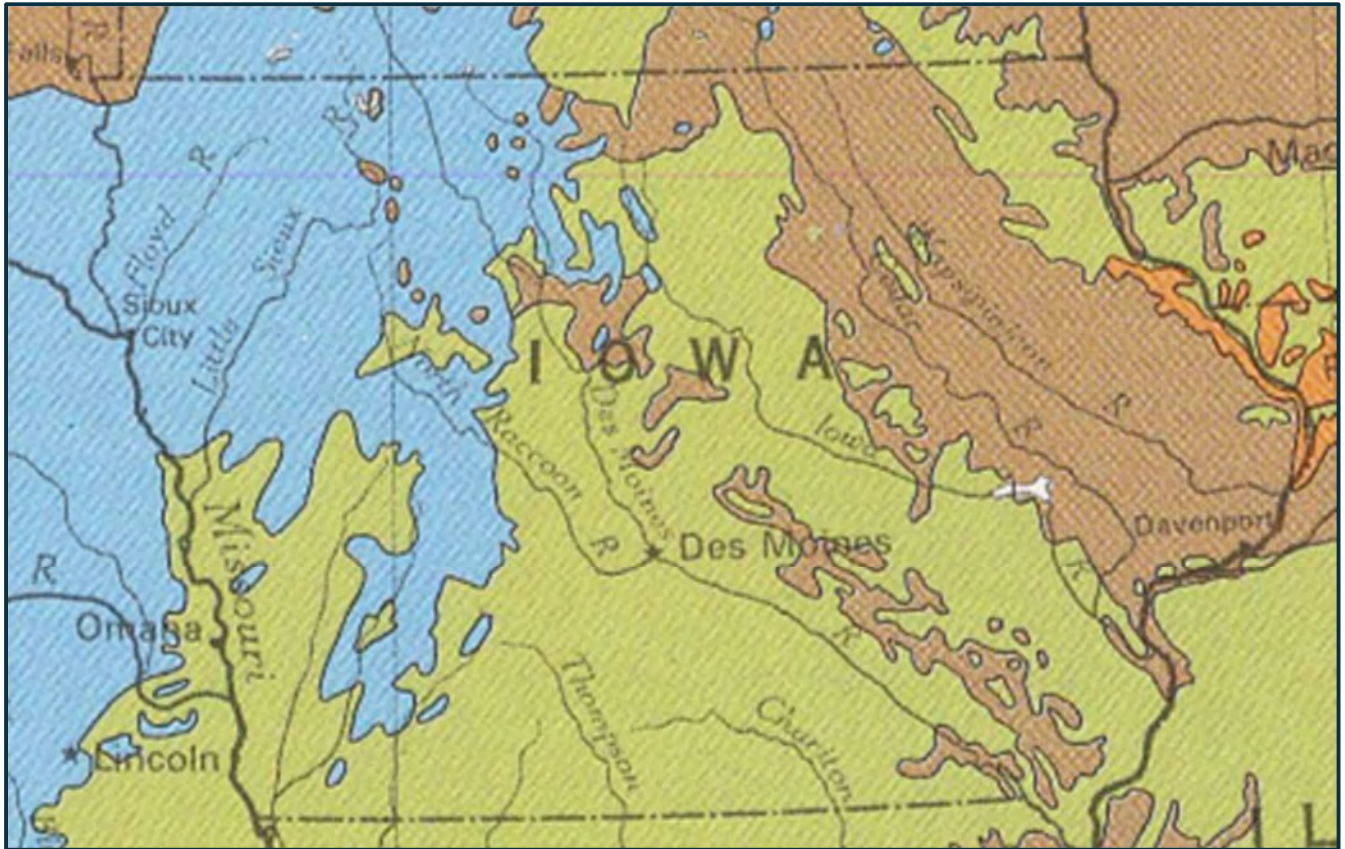
present in all participating jurisdictions and will continue to cause future property and infrastructure damage.

Following is the description of Expansive Soils as provided in the State Plan.

Soils and soft rock that tend to swell or shrink excessively due to changes in moisture content are commonly known as expansive soils, although they may also be referred to as “shrink-swell soils”, “swelling clay soils”, or similar names. The more water such soils absorb, the more their volume increases. Expansions of ten percent or more are not uncommon. This change in volume can exert enough force on a building or other structure to cause damage. Expansive soils will also shrink when they dry out. This shrinkage can remove support from buildings or other structures and result in damaging subsidence. Fissures in the soil can also develop. These fissures can facilitate the deep penetration of water when moist conditions or runoff occurs. This cycle of shrinkage and swelling places repetitive stress on structures, and damage worsens over time. The effects of expansive soils are most prevalent in regions that typically have moderate to high precipitation, with effects especially felt at times when prolonged periods of drought are followed by long periods of rainfall. The hazard occurs in many parts of the southern, central, and western United States. Estimates conducted in 1980 put the annual damage from expansive soils as high as \$7 billion, with single-family and commercial buildings accounting for nearly one-third of the total damage amount. (Krohn and Slosson, 1980). However, because the hazard develops gradually and seldom presents a threat to life, expansive soils have received limited attention, despite their costly effects. Expansive soils can also contribute to or cause damage to roadways, bridges, pipelines, and other infrastructure.

Probability and frequency analyses have not been prepared because of the nature of occurrence of this hazard. This is consistent with other geologic hazards that occur slowly over time. As such, the duration of response to expansive soils and their associated risk to public property and loss of life is unknown. According to the U.S. Geological Survey (USGS), the northwest section of the state has the highest probability of the incidence of expansive soils. That risk is rated as “less than 50 percent of the soil being of the expansive clay” variety.

The USGS Association of American State Geologist (AASG) provides information regarding the presence of expansive soils in the conterminous United States, as found on their website at



https://ngmdb.usgs.gov/Prodesc/proddesc_10014.htm. The preceding map provided by the USGS AASG zooms into the state of Iowa.

The entire region is colored blue indicating a high swelling potential. While there is no data pertaining to damage from expansive soils, the frequency of damage is associated with cycles of drought and heavy rainfall. This damage is visually apparent throughout every participating community. The consequences are seen in cracks in the roads, sidewalks, and parking lots throughout the regions. These cracks also exist in property owners' foundations and walls. Not

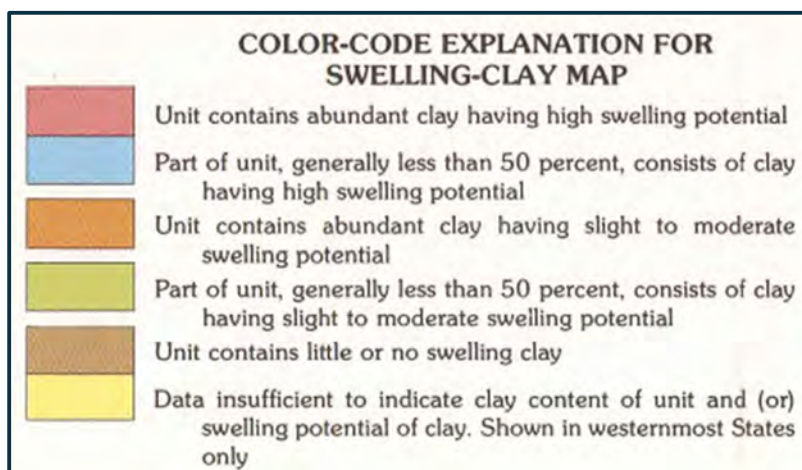
only is damage visible, but invisible damage to underground utilities negatively affect the region.

There are construction best practices that communities can require and monitor with building inspections to mitigate the effects of expansive soils. Mitigation efforts also fall to the property owners to prevent structural damage. General maintenance includes maintaining drainage patterns and consistent landscape watering practices to limit potential consequences.

5. EXTREME HEAT

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Extreme Heat	extensive	moderate	highly likely	medium

Extreme heat events endanger the health and lives of people, pets, and livestock. Deaths due to extreme heat are increasing at an alarming rate, not only in the United States, but globally. In an online article, the National Weather Service shared findings reported by Journal of the American Medical Association⁵ that states an accounting of more than 2,300 deaths connected to heat in 2023. Other reports from the National Weather Service⁶ provide the following totals, indicating a drastic increase in annual rates as noted in the 2020 plan estimated at an average of 182 such related deaths.



⁵⁵ Source: <https://weather.com/news/climate/news/2024-08-26-heat-deaths-by-year-in-us-hit-record>

⁶ www.weather.gov/media/hazstat/heat16.pdf, www.weather.gov/media/hazstat/heat18.pdf, www.weather.gov/media/hazstat/heat20.pdf, www.weather.gov/media/hazstat/heat22.pdf, www.weather.gov/media/hazstat/heat17.pdf, www.weather.gov/media/hazstat/heat19.pdf, www.weather.gov/media/hazstat/heat21.pdf, www.weather.gov/media/hazstat/heat23.pdf

<i>year</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>
<i>total US heat-related deaths reported</i>	94	107	108	187	350	375	383	555

The discrepancy in totals may be a result of system reporting through the weather service being more of a voluntary contribution format while medical journals are drawn from specific analyses of logged medical events. Regardless of the foundation of reports, it is clear that extreme heat incidents are having an alarming effect.

Extreme heat events are particularly harmful to already vulnerable populations. Children, elderly individuals, and those with certain disabilities are not able to withstand long periods of heat exposure without experiencing health consequences. Furthermore, individuals experiencing homelessness or those unable to afford adequate air conditioning are at greater risk of heat stroke or related illnesses and death during these events. Due to the region's relatively high rate of people living below the poverty level, this is a prevalent concern. Furthermore, the aging housing stock may indicate a larger proportion of residents without access to functioning air conditioning.

In addition to human health impacts, extreme heat can affect agriculture by decreasing crop yields and harming livestock. Potential for harm to the economy also exists during these events, as energy and water usage increase.

The following is the description of extreme heat as provided in the State Plan.

Conditions for extreme heat are defined by summertime weather that is substantially hotter and/or more humid than average for a location at that time of year. Definitions vary by Weather Forecast Office, but the NWS Weather Forecast Office in Des Moines defines excessive heat as heat index greater than 110 degrees Fahrenheit for two or more consecutive days. The heat index is a number in degrees Fahrenheit that tells how hot it really feels when relative humidity is factored into actual air temperature. Exposure to full sunshine can increase the heat index by at least 15 degrees.

Under extreme heat conditions, the National Weather Service can issue either a heat advisory or an excessive heat warning, as described below

1. Heat advisory - A heat advisory is issued when a heat index of 100 degrees Fahrenheit or higher is expected for a period of three hours or more. A heat advisory shall be continued through the overnight hours, following a day with excessive heat, if the heat index is not expected to fall below 75 degrees Fahrenheit. A heat advisory can be issued for a heat index less than 100 degrees Fahrenheit when the cumulative effect of successive days of near advisory-level heat leads to potentially life-threatening conditions.

2. Excessive Heat Warning – An excessive heat warning is used when a heat index of 105 degrees Fahrenheit or higher is expected for a period of three hours or more. An excessive heat warning shall be continued through the overnight hours, following a day with excessive heat, if the heat index is not expected to fall below 75 degrees Fahrenheit. An excessive heat warning can be issued for a heat index less than 105 degrees Fahrenheit when the cumulative effect of successive days of near warning-level heat leads to life threatening conditions.

More information regarding various storm events including extreme heat can be found on the National Centers for Environmental Information [website](#). For reference, the following table lists the dates for all excessive heat events in the region in the past 10 years.

Excessive Heat Events 2015 - 2024				
Cherokee	Ida	Monona	Plymouth	Woodbury
6/10/2016	6/10/2016		06/10/2016	06/10/2016
7/20/2016	7/20/2016		07/20/2016	07/20/2016
6/29/2019	6/29/2019		06/29/2019	06/29/2019
7/26/2023	7/26/2023		7/25/2023	7/25/2023
8/19/2023	8/19/2023		8/19/2023	8/19/2023
8/21/2023	8/21/2023	8/21/2023	8/21/2023	8/21/2023
7/13/2024	7/13/2024		7/13/2024	7/13/2024
			7/31/2024	7/31/2024
8/5/2024	8/5/2024		8/5/2024	8/5/2024
8/25/2024	8/25/2024		8/25/2024	8/25/2024
		8/26/2024		

Because extreme heat events are not uncommon, many jurisdictions have specific mitigation strategies. Furthermore, many communities use websites or social media to distribute information regarding personal safety tips to residents. To find specific action plan items, refer to the county profiles found later in this document.

Numerous reports predict more frequent and extreme heat events due to climate change. This is supported by the *Iowa Climate Statement 2019* citing that “Dangerous Heat Events will be More Frequent and Severe” and is signed by 211 scientists working in the state of Iowa.

6. FLOODING – FLASH AND RIVERINE

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Flooding - <i>Flash and Riverine</i>	significant	severe	highly likely	high

Communities that have neither recent nor significant historical flood activity prior to the 2014 Plan were literally under water in spring of 2019. For reference, the City of Hinton enacted an emergency road closure due to high water and it was a first-time experience for the Community’s current population as well as the Iowa DOT. The DOT designated the roadway in question as terminus of a detour route due to other closures, complicating and therefore delaying local closure declaration. As referenced throughout this Plan, unique combinations of weather-related phenomena cannot be prevented, neither have they been given serious consideration in planning response activity. However, the new normal is expecting the extreme.

The Region has had over a decade of varying flooding events. In 2011, the prolonged flooding of the Missouri River triggered flooding events on communities along not only the Missouri but also its tributaries. Natural absorption processes were ineffective, as ground water levels remained high despite “abnormally dry conditions” as described in the State Climate Summary for Iowa (<https://statesummaries.ncics.org/chapter/ia/>). Even with gradual and steady increase in average temperatures, NOAA National Centers for Environmental Information projections show an expected increase in winter and spring precipitation at a rate greater than

15% by mid-century. This complicated mix of extremes increases flash flooding potential in high precipitation in above freezing weather and river flooding events in warmer temperatures, even in dryer conditions, due to snow melt after high cold weather precipitation events. This is especially significant when temperature increases are sudden and ground is still frozen as demonstrated in the Region in March of 2019.

Furthermore, the NOAA NCICS Iowa State Climate Summary of 2022 indicates that “the frequency of 2-inch extreme precipitation events has increased” since 1900 with the most evident increases since 2005. Nearly 50% of annual precipitation occurs on the ten wettest days of the year in the western region of the state. These data illustrate the extreme precipitation patterns that have been and will likely continue to be more frequent over time. Between June 20th and 22nd of 2024, one such unprecedented rain event occurred in the tri-state region of Northwest Iowa, Southwest Minnesota, and Southeast South Dakota. Volumes reached in the range of 10-15 inches over this period near the communities of Rock Rapids and Rock Valley. Due to the extreme influx of water entering tributaries of the Little Sioux, Big Sioux, and Missouri Rivers, the communities of Akron, Hinton, Le Mars, Cherokee, Sioux City, Correctionville, Oto, Anthon, Rodney, and Smithland were flooded to varying degrees.

Insert graphic]

<https://www.fema.gov/disaster/4796/designated-areas>

FEMA data outlines the Presidential Disaster Declaration for Iowa from June 24, 2024 through August 28, 2024. Cherokee, Monona, Plymouth, and Woodbury Counties represented in this plan were included for Individual Assistance and Public Assistance Categories A through G. The following totals are applicable for all eligible counties in Iowa.

Individual Assistance Applications Approved:	6,053
Total Housing Assistance (HA) – Dollars Approved:	\$44,490,543.82
Total Other Needs Assistance (ONA) – Dollars Approved:	\$21,012,140.08
Total Individual & Households Program Dollars Approved:	\$65,502,683.90

Reference is made in the State Plan to the Flood Risk Maps on the Iowa DNR website. At this time, the maps of Cherokee, Ida, and Monona Counties have been finalized and are in effect, and the maps of Plymouth and Woodbury Counties are preliminary. Iowa Flood Hazard maps in varying stages of development can be found on the Iowa Flood Center’s Iowa Flood Information System site at <http://ifis.iowafloodcenter.org/ifis/newmaps/hazard/>. The NCEI Storm Events Database shows occurrence of 36 flood events in Cherokee, 8 in Ida, 9 in Monona, 76 in Plymouth, and 30 in Woodbury counties from 2000 to 2024. For a snapshot reference to significance of flooding in the region, a query of flood, flash flood, heavy rain, heavy snow events between November 1, 2023 and October 31, 2024, 27 events show as reported in the region with cumulative damages costing over \$8.2 million for only five impacted areas (Sloan, James, Washta, Albaton, and Rodney). Further details on flood and flash flood events can be found at <https://www.ncdc.noaa.gov/stormevents/>, on the NOAA website.

7. GRASS OR WILDLAND FIRE

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Grass or Wildland Fire	extensive	negligible	highly likely	medium

With more than 60 percent of Iowa’s population living in urban communities, many communities have expanded into traditionally natural areas. Each year Iowa’s beautiful landscapes entice more urban residents to push a little further into those natural, wildland areas. This trend has created an extremely complex landscape, known as wildland/urban interface, and a new set of conditions: houses and businesses constructed amid wooded or wildland areas. By populating natural areas, a wildland fire can now reach beyond its natural fuels like trees, brush, and grass to homes, businesses, and human endangerment.

The state has the largest number of Conservation Reserve Program (CRP) contracts in the nation, totaling over 1.5 million acres. Most of this land is planted in cool and warm season grass plantings, tree plantings and riparian buffer strips. An additional 230,000 acres are in federal ownership and conservation easements. Wildfires are frequently associated with

lightning and drought conditions, as dry conditions make vegetation more flammable. As new development encroaches into the wildland/urban interface, an ever-increasing amount of structures and people are at risk.

The following is the description of grass fire and wildfire as presented in the State Plan. A grass fire or wildland fire is an uncontrolled fire that threatens life and property in a rural or wooded area. A grass fire or wildland fire is not a cropland fire. Damage to crops from fire are often covered by insurance, and are on land that is not “wild.” Wildland or grass fires occur in natural, wild areas. Wildland fires are more likely to occur when conditions are favorable, such as during periods of drought when natural vegetation is drier and more combustible.

According to the National Interagency Fire Center, not counting prescribed fires, there were 859 wildfires spanning 20,440 acres from 2018 to 2022 in Iowa. The year 2018 accounted for nearly 45% of those fires (and 39% of the acres burned). The wildfires and resultant acres burned of the last five years is only about a third of that of the previous five year period (2013-2017, which 2438 fires and 69,583 acres burned). Going back further in history, between 2002 and 2012 (inclusive) Iowa experienced 1,817 wildfires spanning 33,122 acres and 1,884 prescribed fires spanning 14,079 acres. No event reported in the state has been a historically-significant wildfire, at least compared to the wildfires experienced in western states.

The USDA Forest Service (USDA) provides information regarding wildfire likelihood and associated risks through the project, Wildfire Risk to Communities, which can be found using the link below. According to this data, on average, Iowa has a greater wildfire likelihood than 30% of states in the U.S., categorized as “low risk” relative to the rest of the country. However, there are areas on the outskirts of urban areas and along river systems within the region that fall within the moderate or high-moderate categorization for wildfire likelihood. The northwest region of the state has the highest risk of any other region in Iowa. The map below is a screenshot from the USDA’s Wildfire Risk to Communities, Wildfire Likelihood Map

[insert graphic - USDA’s Wildfire Risk to Communities, Wildfire Likelihood Map]

Wildfire Likelihood Map, 2024; Source: USDA Forest Service, Wildfire Risk to Communities,
<https://wildfirerisk.org/explore/wildfire-likelihood/19/>

Additionally, the image below demonstrates Iowa's relative risk compared to the rest of the country. This data is provided on the Wildfire Risk to Communities site to contextualize the risk level as presented in the accompanying map.

More information regarding wildfires in Iowa can be found the NOAA website at <https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=19%2CIOWA> including individual county data.

There have been two recorded wildfires in the five counties included in this plan from January 2014 to December 2024. The table below provides details about these two incidents.

<i>Location</i>	<i>Date</i>	<i>Magnitude</i>	<i>Est Damage</i>	<i>Inj/Fatalities</i>
Woodbury County	10/11/2020	3,000 acres	\$320,000	0/0
Plymouth County	4/23/2022	1,000 acres	\$0	0/0

As a result, goals and action items specific to wildfire mitigation are not a priority. Individuals in rural areas often burn trash, leaves, and other vegetation debris. These fires have the potential to get out of control and turn into wildfires. Wildland/Grass fires can occur in city limits. However, the magnitude is generally lower due to proximity to firefighting services. There is less potential for wildland/grass fires affecting schools due to general locations away from Wildland Urban Interface Areas. If a wildland/grass fire were to occur near school buildings, the magnitude would likely be lower due to close proximity to firefighting services.

8. LANDSLIDE

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Landslide	limited	negligible	likely	low

Landslides are a type of "mass wasting," which denotes any down-slope movement of soil and rock under the direct influence of gravity. The term "landslide" encompasses five modes of slope movement: falls, topples, slides, spreads, and flows. The type of geologic material (bedrock, debris, or earth) further subdivides these. Debris flows (commonly referred to as mudflows or mudslides) and rock falls are examples of common landslide types.

Landslides result from several causes, or a combination thereof, including geological, morphological, physical, or human influence. However, for a landslide to occur, it must be triggered by an external event. An event such as intense rainfall, flooding, or stream erosion may result in a near immediate slope instability. On the other hand, an event such as weathering of material may gradually result in slope instability over a much longer period. Based on the historical Iowa data, the majority of slope failures are a result of change in groundwater levels, groundwater seepage, or other water sources.

The State Plan provides the following description for landslides.

Landslides occur when susceptible rock, earth, or debris moves down a slope under the force of gravity and water. Landslides may be very small or very large, and can move at slow to very high speeds. A natural phenomenon, landslides have been occurring in slide-prone areas of Iowa since long before the state was created. Landslides can occur due to rainstorms, fires, or human activities that modify slope and drainage.

A portion of the state is moderately susceptible to landslides. Susceptible areas are found along the adjacent steep terrain associated with the major river valleys such as the Mississippi, Missouri, Des Moines, and Iowa, and in the Loess Hills of western Iowa.

While maps show that there are areas of the state that may be somewhat susceptible to landslides, this is currently not a hazard that has had much impact. At least, jurisdictions have not reported any significant losses to landslides. In order to avoid increasing their susceptibility to damage from landslides, it would be wise for jurisdictions in the areas of moderate and higher landslide susceptibility to include in their land use codes a requirement that developers look carefully at the potential for landslides at specific sites, or a restriction on development in landslide-prone areas. This seems to be even more warranted because of evidence that extreme rain events, which could trigger landslides, appear to be occurring more frequently in Iowa. Another potential mitigation action is to ensure proper drainage above, around, and beneath roads where landslides are most likely (e.g., by having sufficiently sized culverts).

The USGS provides an interactive Landslide Susceptibility map that shows delineated areas in the conterminous U.S. where large numbers of landslides have occurred and areas that are susceptible to landslide. Iowa has low incidents overall but contains moderate susceptibility, and low incidence in all five counties discussed in this plan. Local record of a landslide in Sioux City can be found in records of the Sioux City Journal (July 29, 2014). A section of state highway 12 was closed for emergency repairs due to deterioration of the shoulder. Prior to this incident, the Burlington Northern Santa Fe Railroad line and I-29 closures resulted from a landslide in the Riverside area of the city on April 24, 2007. While lack of a categorized record of events may reduce substantiation of specific mitigation actions, contributing characteristics, especially in residentially developed areas, may provide viability for projects that protect from loss due to landslides.

9. SEVERE WINTER STORM

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Severe Winter Storm	extensive	moderate	highly likely	medium

Geographically, the region's position in northwest Iowa leads to the reasonable expectation of severe winter weather at any given time between October and April. According to the NOAA database of Storm Events (<https://www.ncdc.noaa.gov/stormevents/>), there were 34 events reported during 2024 including Winter Weather, Winter Storm, Cold/Wind Chill, Extreme Cold/Wind Chill, Heavy Snow, Ice Storm, and Blizzard in our region. For the period beginning January 1, 2020 through December 31, 2024, 117 winter weather-related events were reported. Remarkably, no deaths or severe injuries were included in reported events. It can be assumed that indirect injuries and/or deaths due to, at minimum, traffic accidents and falls resulting from complications of winter weather events, have occurred but are not included in the reporting of referenced incidents.

The following are descriptive terms based on information as provided in the State Plan and the National Weather Service.

- **Blizzard** — Winds of 35 mph or more with snow and blowing snow reducing visibility to less than ¼ mile for at least three hours.
- **Blowing Snow** — Wind-driven snow that reduces visibility. Blowing snow may be falling snow and/or snow on the ground picked up by the wind.
- **Snow Squalls** — Brief, intense snow showers accompanied by strong, gusty winds. Accumulation may be significant.
- **Snow Showers** — Snow falling at varying intensities for brief periods of time. Some accumulation is possible.
- **Freezing Rain** — Measurable rain that falls onto a surface with a temperature below freezing. This causes it to freeze to surfaces, such as trees, cars, and roads, forming a coating or glaze of ice.
- **Sleet** — Rain drops that freeze into ice pellets before reaching the ground. Sleet usually bounces when hitting a surface and does not stick to objects.
- **Wind Chill** – The apparent temperature the body feels when wind is factored into the equation. A wind chill warning is issued when wind chill temperatures are expected to be hazardous to life within several minutes of exposure.

Reacting to winter weather successfully depends on community resources. In this situation, equipment is a significant element in minimizing ill effects of extreme winter events. Rural jurisdictions and school districts are often dependent on County resources and contracted services, thereby elevating the need for appropriate equipment at the county and private industry levels. Because of the fluctuations in weather patterns, behaviors in response to winter weather are often inconsistent. In areas north of our region, weather patterns in winter are more regularly occurring resulting in a better mode of preparedness by residents in those areas. Specific actions related to refuge, power, and snow removal are components of several mitigation measures.

10. SINKHOLES

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Sinkholes	significant	negligible	unlikely	low

Historically, sinkholes have not been a serious concern for the region. Some sinkholes result from human activities such as underground mining of coal, groundwater or petroleum withdraw, and drainage of organic soils. Karst sinkholes result from soil composition containing soluble rocks, such as carbonates and evaporites. According to the Iowa Geological Survey, there are “three areas in Iowa where large numbers of sinkholes exist: (1) within the outcrop belt of the Ordovician Galena Group carbonates in Allamakee, Clayton, and Winneshiek counties; (2) in Devonian carbonates in Bremer, Butler, Chickasaw, and particularly Floyd and Mitchell counties; and (3) along the erosional edge of Silurian carbonates in Dubuque and Clayton counties.” Sinkholes have resulted in the failure of farm and other types of ponds, roads, and one sewage-treatment lagoon. As sinkholes sometimes allow surface runoff to directly enter bedrock aquifers, their presence has implications for groundwater quality. As stated above, karst sinkholes tend to occur in other areas of Iowa outside of the region and therefore, there have been no serious impacts due to sinkholes in the region.

The State Plan provides the following summation of sinkholes.

A sinkhole is the loss of surface elevation due to the removal of subsurface support. Sinkholes range from broad, regional lowering of the land surface to abrupt localized collapse. The primary causes of most subsidence are human activities such as underground mining of coal, groundwater/petroleum withdrawal, or drainage of organic soils. Sinkholes can aggravate flooding potential, and collapse of an abandoned mine may destroy buildings, roads, and utilities. Sinkholes often are found among karst landscapes.

Therefore, in regard to naturally occurring conditions contributing to sinkholes, the Region is at minimal risk. However, displacement of groundwater in addition to failing underground infrastructure, there is an ever-increasing likelihood of occurrence – especially when further compromised by heavy rain causing rapid washout conditions or multiple freeze/heave cycles that contribute to destabilization of soil. Documentation is not readily available for several sinkholes that have occurred in Woodbury County, mostly attributed to the washing out of underlay or foundation due to “failure of an underground storm sewer”, as recalled in the Sioux City Journal (April 2, 2017). Additional sinkholes have resulted after water main breaks. Circumstances substantiate need for mitigation within the region.

11. THUNDERSTORM – HAIL/LIGHTNING

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Thunderstorm - Hail & Lightning	extensive	severe	highly likely	high

Severe thunderstorms most often occur in Iowa in the spring and summer, though fall and winter thundershowers are not uncommon. The region, as with the Midwest in general, is susceptible to thunderstorms, severe in nature, including lightning and hail.

The NOAA Storm Events database (<https://www.ncdc.noaa.gov/stormevents/>) shows 115 hail, lightning, or thunderstorm wind events reported in the region between January 1, 2015 and December 31, 2024. Property damage costs associated with reported events totaled \$897,000 incurred during 42 of those reported events. Crop damage costs associated with these events totaled \$6.087 million incurred during 19 of those reported events. Lightning events in isolation, and those associated with thunderstorms have the potential to damage vulnerable assets in the region including crops, vehicles, and built structures. Most lightning damages occur to electronic equipment located inside buildings, but structural damage can also occur when a strike causes a building fire. Communications equipment and warning transmitters and receivers can also be knocked out by lightning strikes.

[insert graphic - Annual number of thunderstorm days in the U.S. From: Koehler, Thomas L., 2019: Cloud-to-Ground Lightning Flash Density and Thunderstorm Day Distributions over the Contiguous United States Derived from NLDN Measurements: 1993-2018.]

[Insert graphic – new hail]

Hailstorms in Iowa cause damage to property, crops, the environment in general, and may kill or injure livestock. In the United States, hail causes more than \$1 billion in damage to property and crops each year. Much of the damage inflicted by hail is to crops. Even relatively small hail can shred plants to ribbons in a matter of minutes. Vehicles, roofs of buildings and homes,

and landscaping are the other things most commonly damaged by hail. Hail has been known to cause injury to humans, occasionally fatal injury.

The State Plan provides the following description for thunderstorm with hail and/or lightning.

Thunderstorms are common in Iowa and can occur singly, in clusters, or in lines. Thunderstorms can result in heavy rains, high winds (reaching or exceeding 58 mph), tornadoes, or hail. For the purposes of this hazard analysis and risk assessment, the thunderstorm effect of flooding due to rain is primarily analyzed in the profile of flash flood and flood, and the effects of high wind are included in the profile of tornado/high wind. In this profile, the thunderstorms' effects and risks of lightning and hail are those primarily analyzed and assessed.

Lightning is an electrical discharge that results from the buildup of positive and negative charges within a thunderstorm. When the buildup becomes strong enough, lightning appears as a "bolt" or flash of light that occurs within the clouds or between the clouds and the ground. A bolt of lightning reaches temperatures approaching 50,000 degrees Fahrenheit in a split second. This rapid heating, expansion, and cooling of air near the lightning bolt creates thunder.

Hailstorms are a product of a severe thunderstorm in which pellets or lumps of ice (of most concern when greater than 1 inch in diameter) fall with rain. Hail is produced in many strong thunderstorms by strong rising currents of air carrying water droplets to a height where freezing occurs, the ice particles grow in size until they are too heavy to be supported by the updraft and fall back to earth. Hail can be smaller than a pea or as large as a softball and can be very destructive to plants and crops. Pets and livestock are particularly vulnerable to hail

The following image shows the distribution and frequency of thunderstorms in the US, and the mean number of hail incidents based on 1" diameter or larger. The majority of Iowa has an average of 40-50 days with thunderstorms per year, while the region experiences 3 to 4 inches of hail per year.

12. TORNADO WINDSTORM

Hazard	Geographic Extent	Severity	Future Probability	Regional Significance
Tornado/Windstorm	extensive	moderate	highly likely	high

Bordering, sometimes overlapping, the edge of the area commonly known as “Tornado Alley”, the region’s proximity indicates a very high susceptibility to tornados. While there is not a universal acceptance of Tornado Alley boundaries, the western boundary of the state is typically included in discussions regarding such. Weather.com provides the following maps to depict the areas that are most prone to tornadoes and how this geographical probability has shifted over time, according to a recent study by Coleman, Thompson and Forbes for the American Meteorological Society’s Journal of Applied Meteorology and Climatology.

[Insert tornadogenesis graphic 1951 through 1985]

[Insert tornadogenesis graphic through 2020]

The above map shows the number of F/EF1 or stronger tornadoes that formed in each 1-degree latitude by 1-degree longitude grid box each year from 1951 through 1985. Coleman, Thompson and Forbes, 2024, JAMC. © American Meteorological Society.)

Similarly, the following map shows the number of F/EF1 or stronger tornadoes that formed in each 1-degree latitude by 1-degree longitude grid box each year from 1986 through 2020. (Coleman, Thompson and Forbes, 2024, JAMC. © American Meteorological Society - <https://weather.com/storms/tornado/news/2024-06-04-tornado-alley-shifted-study-coleman-et-al-2024>).

[insert tornado environment trends graphic]

An older article which holds true more than seven years later, USA Today Online reported an average of \$5.4 billion in damages each year, with \$10b events “no longer uncommon” (<https://www.usatoday.com/story/weather/2018/10/17/tornado-alley-shifting-east/1660803002/>). This

article, as illustrated with the map provided above, reflects that tornado frequency is increasing in northwest Iowa.

NOAA Storm database shows 19 Tornado and 19 High Wind events reported in the region between January 1, 2019 and December 31, 2024, accounting for \$2,536,000 in damages. Of the 19 tornados, ten were produced from the same thunderstorm cell. Damage from high and/or straight-line winds can be mistaken for tornado damage due to intensity. The State Plan provides the following descriptions of tornado and windstorm activity.

A tornado is a violent whirling wind characteristically accompanied by a funnel-shaped cloud extending down from a cumulonimbus cloud. It progresses in a narrow, erratic path. Rotating wind speeds can exceed 300 mph and travel across the ground at average speeds of 25-30 mph. A tornado can be a few yards to approximately one mile wide where it touches the ground. An average tornado is a few hundred yards wide. A tornado can move over land for distances ranging from short hops to many miles, causing damage and destruction wherever it descends. The funnel is made visible by the dust that is sucked up and condensation of water droplets in the center of the funnel.

Windstorms are extreme winds associated with severe winter storms, severe thunderstorms, downbursts, derechos and very steep pressure gradients. Windstorms, other than tornadoes, are experienced in all regions of the United States. Unlike tornadoes, windstorms may have a destructive path that is miles wide and the duration of the event could range from hours to days. These events can produce straight-line winds in excess of 64 knots (73 mph) causing power outages, property damage, impaired visibility, and crop damage. It is often difficult to separate windstorms and tornado damage when winds get above 64 knots. For this reason, the SHMT chose in 2013 to combine the formerly separate hazards of tornado and windstorm.

While FEMA-regulated tornado shelters are often too cost prohibitive for communities to construct, presence and severity of high wind and tornado activity offers significant motivation to incorporate mitigation elements into remodel, renovation, and new construction projects. Maintenance of tornado/wind sirens is critical to ensure adequate warning ahead of these events for residents to seek shelter, while backup generators for essential operations are also critical for cities in case of power outages.

OTHER HAZARDS

In addition to naturally occurring hazards, there exist numerous human-caused and biological incidents that often seem to be beyond the scope of control of those impacted by such hazards. Included in this Plan are “other hazards” that may benefit, or further support implementation of, scheduled mitigation actions and strategies

13. ANIMAL/PLANT/CROP DISEASE

Human-caused or Biological Hazards	Geographic Extent	Severity	Future Probability	Regional Significance
Animal/Plant/Crop Disease	extensive	moderate	likely	medium

While some outbreaks are inevitable, the region does need to concern itself with the escalating outbreaks or new infestations and pathogens. Occasional cases of Bovine Tuberculosis are found in the state and surrounding region. These outbreaks have been small enough as to not affect Iowa’s Tuberculosis Free status, however, this serves as a reminder that previously eradicated diseases can return at any moment. One disease deemed likely to escalate is Johne’s Disease. This disease has a significant economic impact on calf-cow operations and a growing number of researchers have drawn an association between this bovine disease and human Crohn’s disease, according to an article from the Bovine Veterinarian publication. Of national concern at the moment is the HPAI H5N1 Avian Flu, which has spread to poultry farms and dairy herds, primarily on the west coast. Iowa has only one confirmed case documented by CDC, but this virus exposes the risks associated with such diseases and their potential for economic devastation.

The State Plan includes the following summation related to Animal/Plant/Crop Disease.

An outbreak of disease transmitted from animal to animal or plant to plant represents an animal/crop/plant disease. A disease outbreak will likely have a severe economic implication and/or public health impact well beyond the borders of Iowa. A crop/plant

pest infestation will likely have severe economic implications, cause significant production losses, or significant environmental damage.

The introduction of some high consequence diseases could significantly limit or eliminate our ability to move, slaughter, and export animals and animal products. An outbreak will have widespread economic and societal implications for our state, the nation, and potentially the world. Response to and recovery from infectious animal disease outbreaks will be lengthy, and many producers may never be able to return to business. There would also be many indirect effects on our economy.

Pest infestations can cause widespread crop/plant loss and resulting economic hardships on farmers, landowners, and related businesses. Once infestation occurs, the pest may become endemic, causing repeated losses in subsequent growing years. Loss of production could affect all related industries including fuel, food, synthetics, processors, etc.

Surface wind speeds (standard measurement height of 32 feet) over Iowa declined from the 1980s until about 2010, which provides less crop ventilation and more heat stress for plants and animals. However, this trend has since reversed and global surface wind speeds have instead increased in the past decade. The future of wind speed trends is uncertain. Reduced winds would create favorable conditions for survival and spread of unwanted weeds, fungi, pests, and pathogens. Waterlogged soil conditions during early plant growth often result in shallower root systems that are more prone to disease, nutrient deficiencies, and drought stress later in the season. In 2010 wet soil conditions are cited as cause for the epidemic of soybean sudden death syndrome that occurred that year. Other crop diseases and pests (such as Asian soybean rust) have not been observed in Iowa as of yet, but if warming winter trends persist they could expand their ranges to include Iowa.

The [Iowa Department of Agriculture & Land Stewardship](#) and the [USDA](#) websites provide information related to Animal Diseases.

This types of hazard occurs with infection of vegetation, including crops and other plant life, or animals, including livestock, pets and wild animals, with infestation of insects, vermin, or diseases. When affecting crops and livestock, this hazard can render these agricultural

products unfit for consumption. Agriculture is a significant component of the regional economy and plays an important role in the state and national economy as well. The state of Iowa produces more corn and eggs than any other state and one-third of the nation's hogs are raised in Iowa. As a result, any Animal, Crop, or Plant Disease that affects agriculture can have huge economic consequences in addition to posing human health risks. Below is a summary of the agriculture economy in each of the participating counties.

<i>County</i>	<i>Cherokee (Chke)</i>	<i>Ida</i>	<i>Monona (Mon)</i>	<i>Plymouth (Ply)</i>	<i>Woodbury (Wdby)</i>
Acres of farmland	327,342	210,663	406,263	544,068	468,824
Market value of products sold	\$551,667,000	\$327,840,000	\$324,954,000	\$1,116,816,000	\$576,980,000

<i>Top Livestock Inventory</i>	<i>Top Crops</i>
Region-wide	Region-wide
• Hogs & Pigs • Cattle & Calves • Sheep & Lambs	• Corn for grain • Soybeans for beans • Forage (hay/haylage) • Corn for silage or greenchop
Additional Per County	Additional Per County
Chke Add'l Top Livestock Inventory	Chke Add'l Top Crop
• Turkeys • Horses & Ponies	• Oats for grain
Ida Add'l Top Livestock Inventory	Ida Add'l Top Crop
• Horses & Ponies • Layers	• Oats for grain
Mon Add'l Top Livestock Inventory	Mon Add'l Top Crop
• Broilers & other meat-type chickens • Layers	• Rye for grain
Ply Add'l Top Livestock Inventory	Ply Add'l Top Crop
• Layers • Goats	• Oats for grain
Wdby Add'l Top Livestock Inventory	Wdby Add'l Top Crop
• Layers • Goats	• Popcorn

A regional outbreak of the avian flu was termed “a nightmare” by Senators Chuck Grassley and Joni Ernst in a July 8, 2015 article in the Omaha World-Herald, but failed to receive a Presidential disaster declaration. A report published through the University of Minnesota estimates a \$1.2b in damages resulting from the outbreak. Due to the episodes that defined the industry that year, producers in the region took independent mitigation measures to reduce replication and spread of the disease. Those measures were strengthened through state-mandated actions when entering/exiting production facilities. With the current outbreak of HPAI H5N1 avian flu that has been circulating around the world beginning in 2021, it is clear that continual monitoring and strengthening of mitigation measures will be necessary to prevent exposure in our region’s livestock.

The Iowa Department of Agriculture and Land Stewardship monitors and reports on many animal diseases in Iowa, including the following:

- Avian Influenza
- Bovine Spongiform Encephalopathy (BSE) Disease
- Chronic Wasting Disease
- Exotic Newcastle Disease
- Food and Mouth Disease
- Johnes Disease
- Pseudo Rabies
- Scrapie
- West Nile Virus

The complete list of what the United States Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service (APHIS) considers foreign to the U.S. can be found on the [APHIS Notifiable Diseases and Conditions webpage](#). The list of reportable animal diseases in Iowa is in [Chapter 64: Infectious and Contagious Diseases](#).

In addition to those listed above, the Emerald Ash Borer is also being monitored by the state of Iowa. Several communities with varying levels of commitment are addressing the infestation

of this pest. Specific measures are included for discussion within applicable jurisdiction profiles.

14. HAZARDOUS MATERIALS INCIDENT

Human-caused or Biological Hazards	Geographic Extent	Severity	Future Probability	Regional Significance
Hazardous Materials Incident	extensive	moderate	highly likely	medium

In terms of hazardous materials, the region has potential to be volatile. Using the Region IV LEPC HazMat Response Mapping Application as developed by SIMPCO, 2018 reporting shows 1,000 Tier II facilities in the Region. Though Ethanol production is worth noting, Subbituminous Coal, Granular Urea, Urea Ammonium Nitrate, and Anhydrous Ammonia are significant contributors to the region's economic picture with the largest average daily presence. Whether in production or for use in operations, these and more hazardous materials are abundant. In addition to truck and over the road transport of hazardous chemicals, there are three national railroads and nine companies operating pipeline infrastructure throughout the region. The 2018 Hazardous Materials Commodity Flow Study completed for the Region IV LEPC included an assessment of not only transportation of hazardous materials, but production, storage, and consumer sites reliant upon the industry. Data shows that in 975 traffic incidents, over 20% involved vehicles transporting hazardous materials. Data from the study also shows a volume of 25,634 tons of hazardous materials imported into the region in 2017 alone (this based on responses from only 52 participants of survey administered in the completion of the study).

The State plan includes the following descriptors.

... accidental release of flammable or combustible, explosive, toxic, noxious, corrosive, oxidizable, irritant, or radioactive substances or mixtures that can pose a risk to life, health, or property, possibly requiring evacuation. Chemicals are manufactured and used in ever-increasing types and quantities and as many as 500,000 products pose physical or health hazards and can be defined as hazardous chemicals.

Found at <https://programs.iowadnr.gov/focomp/Search/Spills>, the Iowa DNR Hazardous Material Release Database shows 48 spills in the region between January 1, 2019 and December 31, 2024. Local emergency response teams within the region do have at minimum, an annual opportunity to participate in full-scale hazardous materials incident exercises through the Region IV LEPC.

15. INFRASTRUCTURE FAILURE

Human-caused or Biological Hazards	Geographic Extent	Severity	Future Probability	Regional Significance
Infrastructure Failure	extensive	moderate	highly likely	medium

Based on its inclusion in the State Plan, Infrastructure Failure “encompasses a variety of occurrences, including communication failure, energy failure, structural failure, and structural fire. This includes an extended interruption, widespread breakdown, or collapse (part or all), of any public or private infrastructure, that threatens life and property. Potential causes of infrastructure failure include severe weather, space weather/solar flare, excessive use, poor maintenance, poor design or construction, or supply chain issues, among others.”

Regionally, jurisdictions expressed concern regarding transportation infrastructure failure such as bridge collapse, losses of power, and communications systems failure, especially in terms of cellular service or broadband coverage in rural areas. Probably more than other hazards, this category ties in as an outcome of many natural and human-caused hazard occurrences. Considering mitigation strategies within infrastructure implementation is primary in the development of this and other comprehensive community development plans. Interest in the promotion of standardized and specialized building codes is a common discussion regarding local mitigation efforts. A barrier to this sort of regulation is the lack of funding to enforce such measures.

16. PANDEMIC HUMAN DISEASE

Human-caused or Biological Hazards	Geographic Extent	Severity	Future Probability	Regional Significance
Pandemic Human Disease	extensive	moderate	likely	low

Several factors elicit concern regarding pandemic human disease. There is an increasing presence of previously (assumed) eradicated disease. Communicable diseases seem to be rampant, despite availability of vaccines and inoculations. Complicated by weather extremes resulting in high precipitation in winter and spring and steamy summer months, mosquito-borne illness is an increasing concern for the Region. In data presented by States at Risk (<https://statesatrisk.org/iowa/all>), Iowa is trending toward an increase in mosquitos season by as much as 25% from the averages recorded in the 1980s and '90s.

The state provides the following regarding pandemic disease.

A pandemic human disease is one that is prevalent over a whole country, region, continent, or world. Many diseases throughout the history of the world have been pandemic. The 1918 influenza pandemic killed an estimated 50 million people. More than 25 percent of United States population was afflicted and in one calendar year average life expectancy dropped by 12 years. Influenza pandemics in 1957 and 1968 killed 70,000 and 34,000 people respectively worldwide. The H1N1 pandemic flu may have killed as many as 18,000 people in 2009-2010. A pandemic will have widespread economic and societal implications for our state. Response to and recovery from a pandemic will likely be lengthy if Iowa is severely infected. The death rate of a pandemic depends on the number of people infected, the virulence of the virus, characteristics and vulnerability of the population, and availability and effectiveness of preventative measures. Response to future pandemics will depend on the severity of the pandemic.

The COVID-19 pandemic, which began in China in 2019 and was declared an emergency in the United States in early 2020, killed over 10,700 people in Iowa by March of 2023, according to the CDC. The pandemic led to unprecedented levels of quarantining and social distancing, causing massive disruptions to the U.S. economy and society. Response to the pandemic varied by state and local jurisdiction, with some issuing “stay at home” orders, limiting large gatherings; closing schools, daycares, bars, and restaurants; mandating mask usage (and eventually vaccines). Others went in the opposite direction, even going so far as to ban mask or vaccine mandates. The CDC reported an age-adjusted death rate in Iowa of 76 deaths per 100,000 people for the year

2021, which is relatively low on the national scale, but higher than all neighboring states except Missouri. With billions of dollars invested and with extraordinary international cooperation, vaccines against the novel virus were developed within a year of the pandemic's onset. One study estimates vaccines saved 14 to 20 million lives from COVID-19 worldwide, while another study estimated three million lives saved in the U.S. alone.

Records from Siouxland District Health in Woodbury County show the following statistics for reportable illnesses in Woodbury County in 2020 and 2024. Information shown as provided (<https://www.sioxlanddistricthealth.org/disease-prevention/disease-tracker>).

<i>Infection</i>	<i>2024</i>	<i>2023</i>	<i>2022</i>	<i>2021</i>	<i>2020</i>
Campylobacter	37	21	26	26	14
Chlamydia	662	674	806	822	838
Cryptosporidium*	12	6	14	8	15
Cyclospora	1	0	1	4	0
E. coli / Shiga toxin**	9	6	13	12	5
Giardia	12	7	6	4	4
Gonorrhea	261	178	321	426	424
Hepatitis A	0	1	0	0	0
Hepatitis B (acute)*	1	0	0	1	0
Hepatitis B (chronic)*	18	15	21	20	8
Legionella*	0	1	2	2	0
Lyme Disease	0	1	1		
Malaria	2	0	0	0	0
Monkeypox	0	0	3		
Mumps*	0	0	1	0	0
Pertussis*	7	0	0	1	0
Salmonella*	24	21	29	25	15
Shigella**	5	10	2	2	1
Syphilis (all stages)	57	107	98	25	1
West Nile Virus*	0	1	1	2	0

*Requires public health follow up investigations by local public health

**Requires the enforcement of exclusions if they are a food worker, daycare worker, child in daycare, or a healthcare worker who has direct patient care.

Other County data is not readily available but similar characteristics of occurrences is expected to be proportionate to the region. Assistance in monitoring, controlling, and/or preventing 120 diseases/ variations of diseases is provided through the National Notifiable Diseases Surveillance System (NNDSS) at <https://wonder.cdc.gov/nndss-annual-summary.html> as found on the CDC website. An infographic on the process of surveillance can be found at <https://www.cdc.gov/nndss/docs/nndss-infographic-508.pdf>. Aside from promotion of healthy and sanitary personal habits and immunization, awareness is key to reducing potential for pandemic episodes. While not ranking among top concerns for the region, participating jurisdictions expressed concerns regarding this hazard.

It should be noted that individual cases of common illnesses such as influenza and norovirus (also known as "stomach flu") are not reportable, so numbers of those cases are not shown. Those illnesses are only reportable during outbreaks and other special circumstances.

17. RADIOLOGICAL INCIDENT

Human-caused or Biological Hazards	Geographic Extent	Severity	Future Probability	Regional Significance
Radiological Incident	limited	negligible	unlikely	low

Radiological incidents are not a marked concern for the region based on public input and jurisdictional assessment. The State Plan includes the following description.

A radiological incident is an occurrence resulting in a release of radiological material at a fixed facility or in transit. An incident resulting in a release of radiological material at a fixed facility includes, but is not limited to, power plants, hospitals, and laboratories. Although the term "nuclear accident" has no strict technical definition, it generally refers to events involving the release of significant levels of radiation. Most commercial nuclear facilities in the United States were developed in the mid-1960s and are designed to withstand aircraft attack. With this level of design they should withstand most natural hazards, but events that occurred in 2011 at the Fukushima nuclear plant in Japan illustrate the possibilities of what can happen in a worst-case scenario. The Japanese

plant may have been able to withstand either the earthquake or the tsunami, but both hazards together caused release of radioactive materials.

Though local concern is minimal, it is imperative to consider occurrence of radiological incident based on proximity of the Ft Calhoun Nuclear Generating Station in Blair, NE. Ready Iowa (<https://ready.iowa.gov/disasters-emergencies/nuclear-power-plants>) provides the following Emergency Classification Levels.

Preparedness for commercial nuclear power plants includes a system for notifying the public if a problem occurs at a plant. The emergency classification level of the problem is defined by these four categories:

- **Notification of Unusual Event** is the lowest classification, and means that a minor plant event, either an operational event or security threat. Has occurred, but no radiation release is expected. No action by the public is necessary.
- **Alert** is declared when an actual or potential reduction in the plant's safety level or a security event that could threaten site personnel or damage plant equipment. No radiation release is expected.
- **Site Area Emergency** is declared when major safety equipment either has failed or is deemed likely to fail. There is the potential for a minor radiation release that would not exceed Environmental Protection Agency Protective Action Guidelines (PAGs) beyond the site boundary. No action by the public is necessary.
- **General Emergency** is the most serious of the four classifications. If such an event occurs, radiation could be released that would travel beyond the site boundary. State and local authorities will take action to protect the residents living near the plant.

Additional information including *Preparing for an Emergency, Radiation FAQs*, and *Iowa Homeland Security and Emergency Management's Radiological Emergency Preparedness (REP) Program* can be found at the above provided link.

18. TERRORISM

Human-caused or Biological Hazards	Geographic Extent	Severity	Future Probability	Regional Significance
Terrorism	limited	negligible	unlikely	low

The unpleasant truth of terrorism is perhaps even more apparent now than in the 1950's and into the 60's when schoolchildren were practicing for protection from air raids and before that with gas masks in the late 30's and early 40's. The State Plan includes the following description for Terrorism.

This hazard encompasses a wide variety of human-caused threats including enemy attack, biological terrorism, agroterrorism, chemical terrorism, conventional terrorism, cyber terrorism, radiological terrorism, and public disorder. This includes the use of multiple outlets to demonstrate unlawful force, violence, and/or threat against persons or property causing intentional harm for purposes of intimidation, coercion, or ransom in violation of the criminal laws of the United States. These actions may cause massive destruction and/or extensive casualties.

Several school districts and some communities continue to enhance security procedures including installation of warning and surveillance systems, controlled access to facilities, and unspecified measures for protection. Active Shooter Training has been offered throughout the region with high levels of participation from professionals and residents alike. While not a component for formal strategies, communities indicate an ongoing interest in awareness, communication, and active response in situations that may become volatile.

19. TRANSPORTATION INCIDENT

Human-caused or Biological Hazards	Geographic Extent	Severity	Future Probability	Regional Significance
Transportation Incident	significant	moderate	highly likely	medium

According to Iowa DOT statistics on vehicle registrations, a total of 4,662,571 vehicles were registered in Iowa in 2024, consistent with data from the previous four years: 4,612,891 in 2023,

4,596,501 in 2022, 4,590,386 in 2021, and 4,549,289 in 2020. Registration includes Autocycle, Automobile, Bus, Moped, Motor Home (Classes A, B, C), Motorcycle, Multipurpose, various Trailer types/classes, and various Truck types/classes. The total for vehicle registration in 2024 for the region is 238,128 with per county numbers as provided below.

Cherokee	22,458	Plymouth	47,731
Ida	13,869	Woodbury	136,833
Monona	17,237		

Referencing the 2018 Hazardous Materials Commodity Flow Study completed for the Region IV LEPC, 15,235 vehicle crashes occurred in the Region between 2013 and 2017. Based on the Iowa Crash Analysis Tool at <https://icat.iowadot.gov/>, crash statistics show 114 fatalities in the region and 19,183 total crashes from 2019 through 2024. A full scope of vehicle accidents and incidents on state roadways can be found on the Iowa DOT website. This is significant for several reasons. Not only is there notable presence of hazardous materials in our transportation network, but with major expansion projects nearing completion, flow of traffic is expected to increase pointedly. In addition to road traffic, there is an airport in each county in the region, one of which is for commercial use and is adjacent to Air National Guard operations. As included for discussion under hazardous materials, the region hosts three (3) major railroad lines – Canadian National, Burlington Northern Santa Fe, and Union Pacific.

Establishment of rules/guidelines is purely preventive when assessing transportation related hazards. Mitigation by way of awareness is in place with Airport Zoning (Overlay/Height) Ordinances where applicable, reducing negative impact of built and natural environments on the take-off and landing of planes. Heightened awareness of train/vehicle and pedestrian incidents are becoming more prevalent with social media presence. Additional mitigation by way of vehicle and driving safety is available through social media campaigns through the FTA, NHTSA, and state and local transportation authorities. The adoption of best practices of the Safe System Approach to roadway safety as promoted by FHWA and Iowa DOT by regional jurisdictions can also improve roadway design proactively. In addition, a case can be made for enforcement of blatant misconduct while driving – especially pertaining to texting while driving and distracted driving offenses.

C. Effects of Climate Cycles

Climate Change is a term used to categorize significant variations in expected weather events ranging from extreme temperatures, weather occurrences outside of average date ranges for that specific weather, and weather events not typical for a given geographic location. This summation is not exclusive; however, it includes the most observable characteristics of this controversial phenomenon. While acceptance of Climate Change as scientific fact as opposed to theory is far from universal, existing conditions—whether human-caused or cyclical—do remind planners that there is rarely a thing so unpredictable as weather. As outcomes of even routine weather events are compounded by human-imposed factors, it is imperative to assess not only new development but also existing conditions, which if re-worked, would improve resiliency to naturally occurring events.

When communities consider all contributing factors, they are better able to address mitigation actions. While full impact studies are not practical, especially in small and rural towns, research can still provide guidance in developing building standards that minimize the effects of reducing natural groundcover. For the sake of planning for what is largely an unknown, the Iowa DNR provides key impacts on the Midwest resulting from Climate Change. Key impacts and related characteristics as identified in the State of Iowa's Hazard Mitigation Plan are shown below.

PROJECTED CHANGES

In Iowa over the next 20-30 years

These projections come from the NCA4 (4th National Climate Assessment, U.S. Global Change Research Program), unless otherwise noted.

- More of the effects already seen, magnified as temperatures rise
- Annual average temperatures at least 2.4°F higher compared to the first half of the 20th century, according to NOAA27

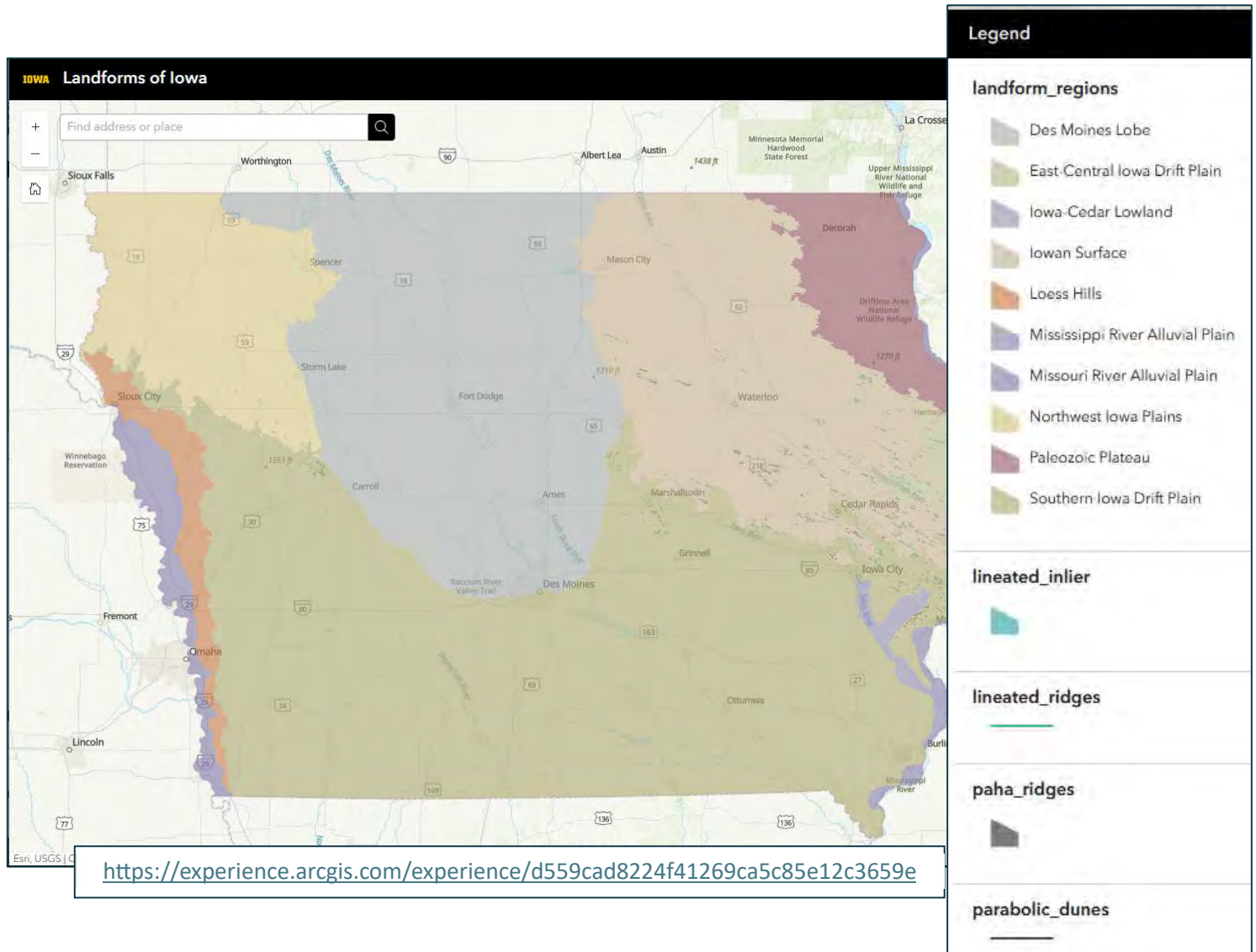
- Increased heat waves
- By 2050, most of Iowa is projected to see about one extra month per year of daily high temperatures above 90°F than was observed from 1961 to 1990, according to the U.S. Climate Resilience Toolkit. Lower numbers are under the RCP 4.5 scenario; higher numbers are under the RCP 8.5 scenario
 - Lyon (NW): 33 to 37 more days (49 to 53 days total)
- Heat stress affects both urban and rural populations, especially those without air conditioning. Livestock are also vulnerable to heat stress
- Increased humidity
 - Leads to increased spring rainfall, soil erosion, and fewer planting-season work days
- Lower air quality
 - Warmer temperatures lead to higher surface-level ozone. NCA4 notes that higher ozone levels could lead to 200 to 550 more premature deaths annually across the Midwest by 2050
 - Livestock are also vulnerable to higher ozone levels
- Frost-free seasons increasing by up to 10 days by 2045 and 20 days by 2065, compared to the period of 1976-2005, according to NCA4 (these numbers are projections under the RCP 8.5 scenario)
- Increased spread of some diseases
- Increased heavy precipitation and flooding events
- Increased drought
 - With warmer air, the atmosphere pulls more moisture from plants, leading to increased tree mortality and stressed crops.
- Loss of plant and animal habitat and ecosystems in flux
- Invasion by non-native species and tropical pests and diseases

III. REGION

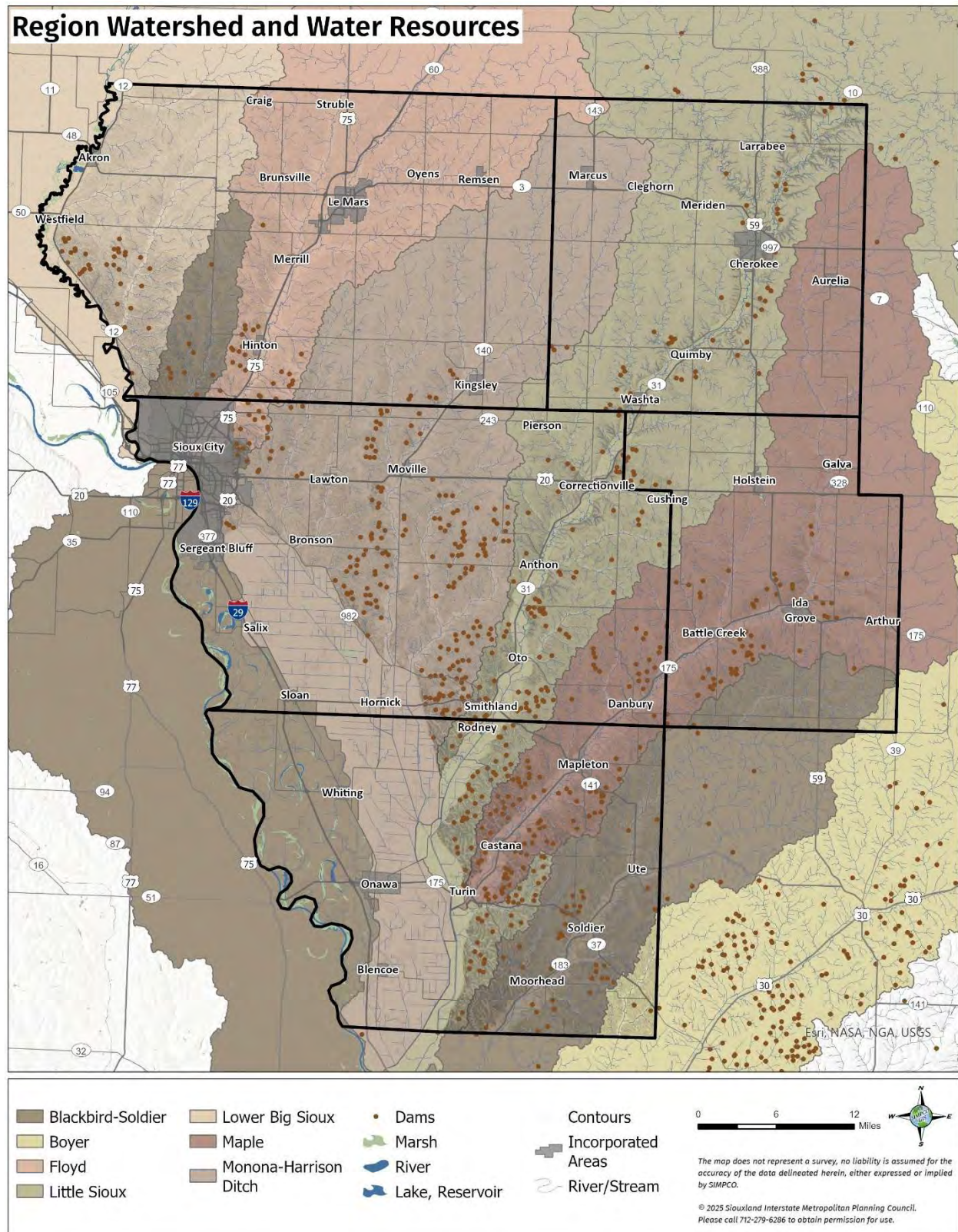
A. Profile

LANDFORMS & GEOLOGY

The Region is characterized by four (4) landforms. As provided by the Iowa Geological Survey, the following map shows how those designations lie within our county borders. Information specific to each County is included in respective profiles.



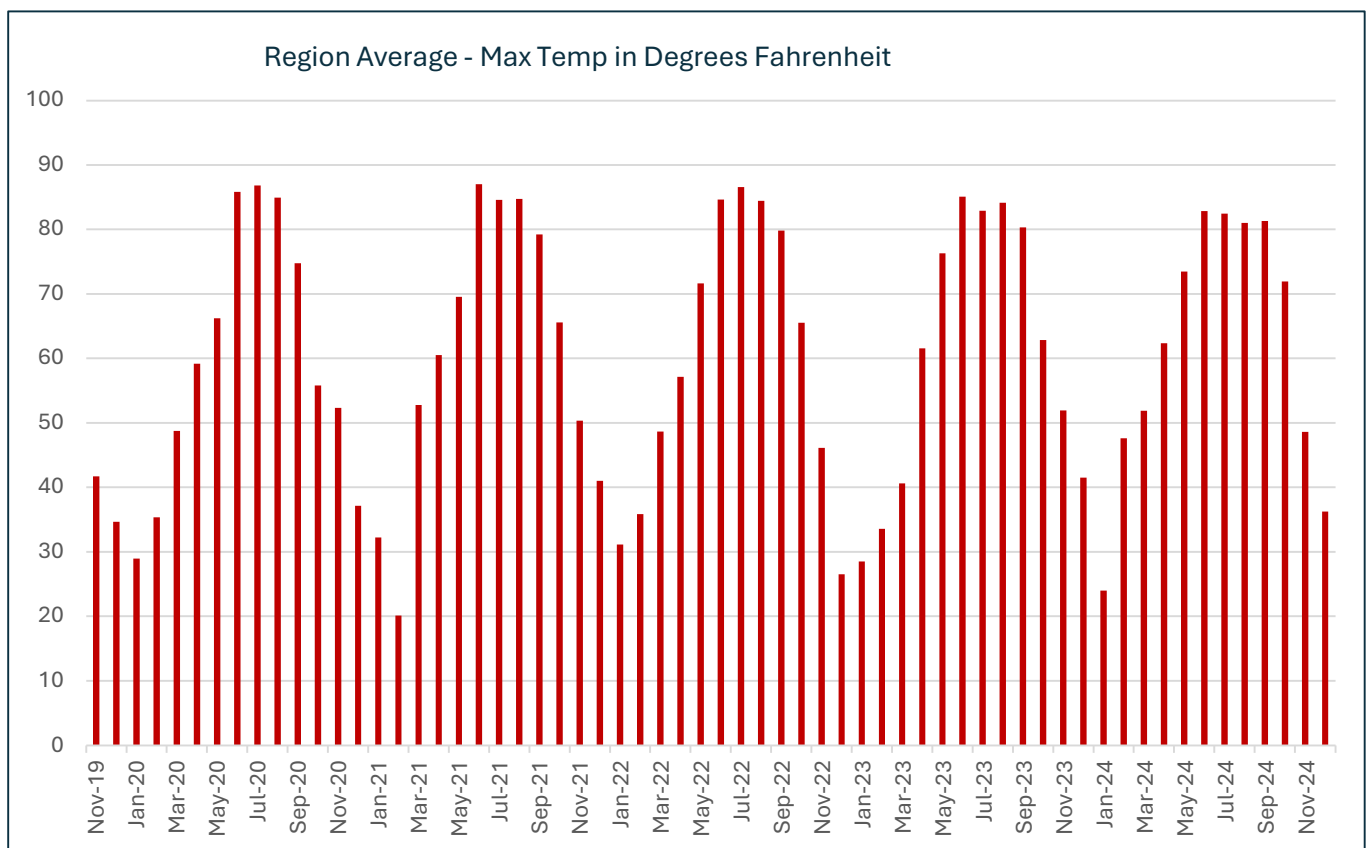
BODIES OF WATER & WATERSHEDS



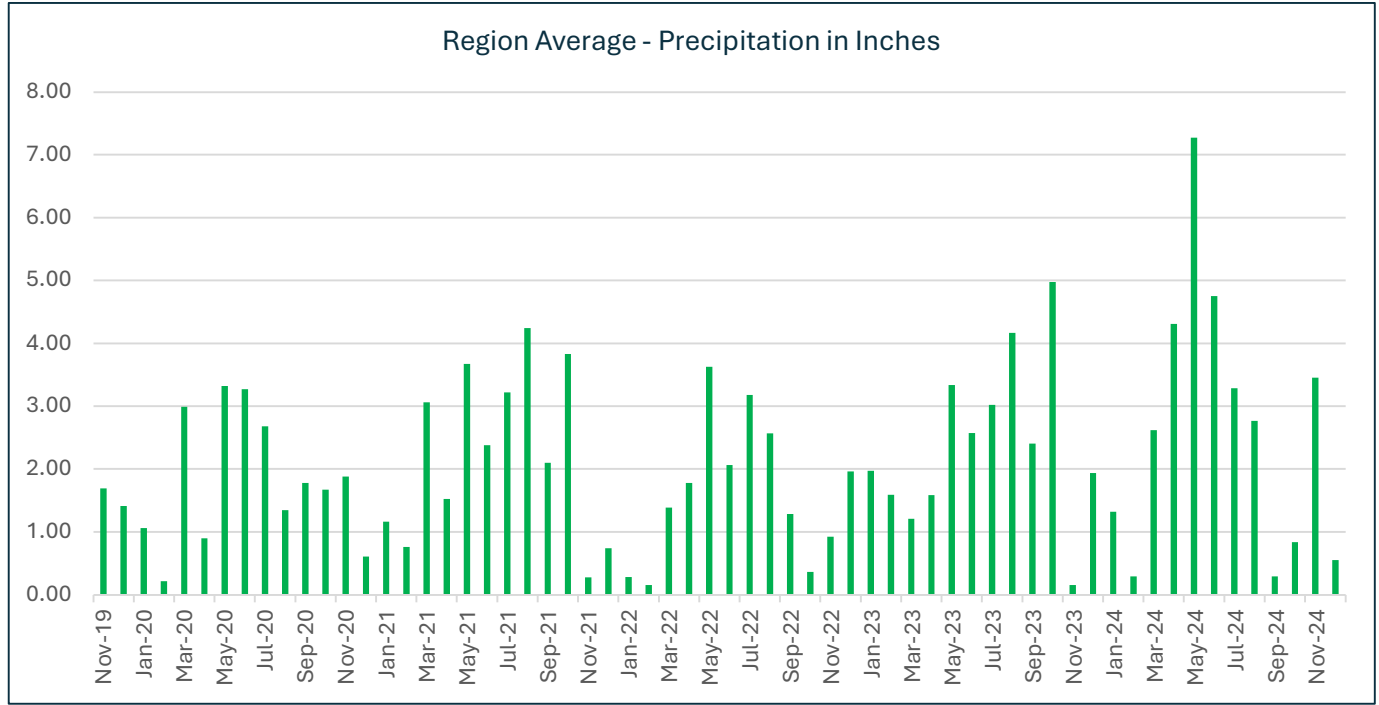
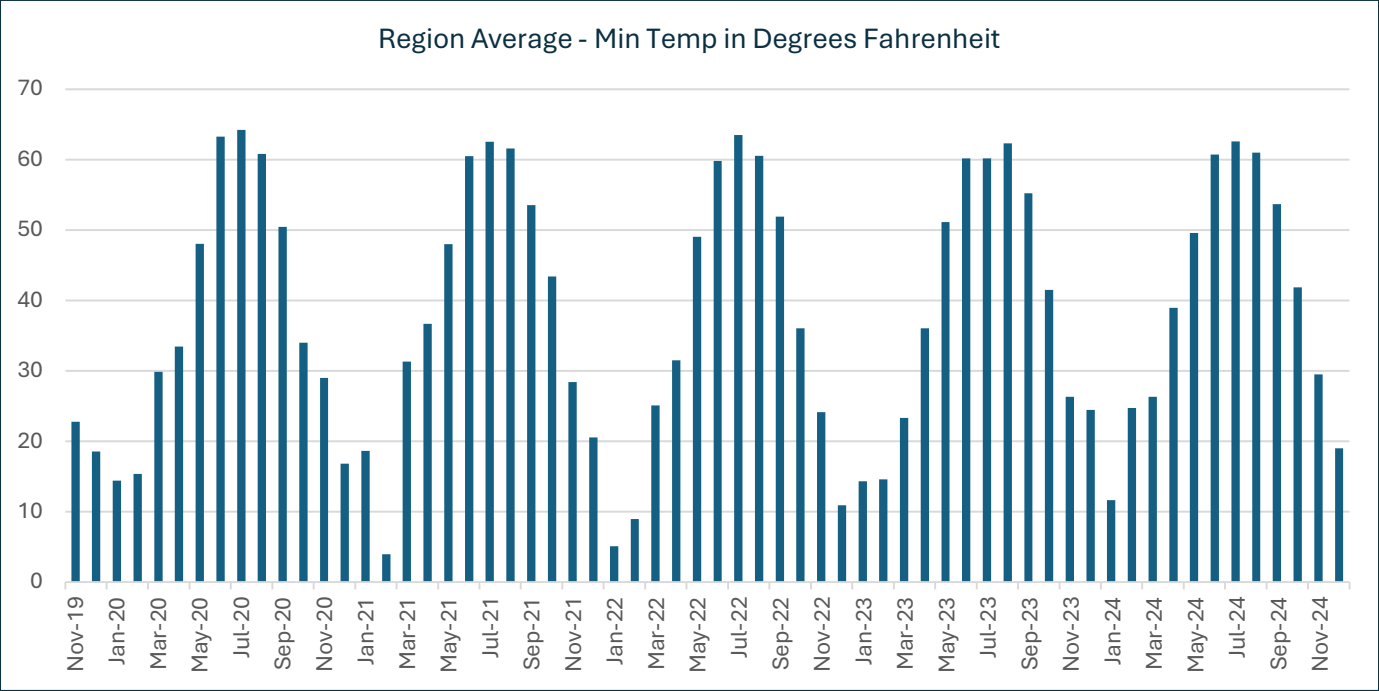
The planning area includes several bodies of water and watersheds that are significant to plan development. Watersheds are categorized on varying levels of detail. Previously shown is a map depicting general water resource and resource watershed detail. For each county, a mapping of sub-watershed boundaries is provided within respective profiles for reference. Ten (10) watershed boundaries shown include relational placement of bodies of water and dams.

WEATHER & CLIMATE

The climate for the Region is characterized by a variety of temperatures and weather patterns throughout the year but is fairly consistent between counties. Averages as provided are based on recorded averages per county. Using NOAA's *Climate at a Glance County Time Series*⁷ navigator, data was gathered for each county. The following charts depict region averages for minimum temperature, maximum temperature, and precipitation by month for November 2019 through December 2024.



⁷Source: www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/IA



As provided in Section II: *Hazards*, the region is prone to several extreme weather conditions including drought, extreme heat, flooding, grass and wildland fire, severe winter storm, thunderstorm (with lightning/hail), and tornado. Peak periods for these events or conditions fluctuates with annual weather patterns, and may intensify with cyclical trends.

B. Participation

Components of this Regional Plan were drawn from meetings and public input surveys. A long-form survey was available online and shortened paper surveys were distributed and collected at every meeting attended. The project coordination team sought public input at the Cherokee, Plymouth, and Woodbury County fairs. A display board with a QR coded link to the online survey and paper surveys were available at designated locations. To include perspective from region youth, the online survey was adapted for student input with a link provided to all school districts within the region. A total of 316 surveys were collected with 65 resulting from student input from 3 school districts.

Planning meetings with each jurisdiction and through discussion as held at several meetings involving hazard mitigation, related topics, projects, and potential outcomes. Meetings attended and purpose for each meeting is shown. Please note that meetings as scheduled and facilitated by the project coordinator do not include the coordinator in attendee counts.

<i>Date</i>	<i>Meeting purpose</i>	<i>Location</i>	<i># Attending</i>
11/01/23	Region Planning Team meeting	The Security Institute, Lower Level – WITCC	6
04/24/24	Region Planning Team meeting	The Security Institute, Lower Level – WITCC	6
7/10/24	Flood Resource Fair (Riverside)	Riverside Lutheran Church, 1817 Riverside Blvd	50+
7/11/24	Flood Resource Fair (Riverside)	Riverside Lutheran Church, 1817 Riverside Blvd	50+
09/23/24	Siouxland Coalition to End Homelessness	Sioux City Public Library, Gleason Room	20
10/16/24	Region Planning Team meeting	The Security Institute, Lower Level – WITCC	5
12/13/24	Plymouth County Health Planning Committee Mtg	Floyd Valley Healthcare	20
01/15/25	Region Planning Team meeting	SIMPCO, 6401 Gordon Dr, Sioux City	6
04/23/25	Region Planning Team meeting	SIMPCO, 6401 Gordon Dr, Sioux City	8

06/18/25	SIMPCO Water Resource Committee meeting	SIMPCO, 6401 Gordon Dr, Sioux City	9

<i>Date</i>	<i>Group/Audience</i>	<i>Information Shared</i>	<i># Contacts</i>
10/10/24	Ida County Community Alliance	Survey Distribution - Flyers, paper format pdf, social media template, Natural Disasters and Other Hazards posting	67

The Regional Planning team met in person as indicated and communicated information via email throughout the entire plan development process.

SIMPCO's Water Resource Committee meets periodically, as often as monthly when conditions are deemed necessary. Representatives from communities in Iowa, Nebraska, and South Dakota discuss current levels and dam release schedules to coordinate activity as needed along the Missouri River and its tributaries. Discussion from this group is communicated with the Missouri River Recovery Implementation Committee (MRRIC) and federal representatives for consideration when determining future dam releases especially as they pertain to heavy precipitation years.

SIMPCO staff attended several established community-based meetings and presented on mitigation planning and Regional Plan development. Surveys were distributed at meetings and attendees were invited to forward the survey links or paper surveys to their respective program participants. Community Health Planning Meetings are held throughout the region by County. Meeting attendees represent vulnerable populations and provide valuable feedback on resident needs, especially in crisis situations. Particularly relevant in light of the severe flooding in June 2024, the Siouxland Coalition to End Homelessness allowed SIMPCO to present on development of the regional hazard mitigation plan, and how it ties back to the work they are doing. SIMPCO Set up a table at the Riverside Flood Recovery Resources Fair, enabling conversation with those directly affected by unprecedented flooding in Sioux City's Riverside neighborhood.

C. Updates to 2020 Actions and Strategies

To best understand the table updating projects as included in the 2020 Regional Hazard Mitigation Plan, the following table provides a breakdown of:

1. project categories,
2. areas of impact,
3. application,
4. project type,
5. goals/objectives reached upon implementation (see Title III, Section E), and
6. hazard(s) mitigated upon implementation (see Title II, Section B)

Actions/Strategies for Region		
communication /education	Local county region	Increase interactive communication and education of natural hazard awareness, preparedness, and available resources to improve capacity for response and loss prevention.
Project type	Goals met by strategy/action/project	Hazard addressed
Promotional/informational (promoting use of and providing information on existing services and resources)	1: make use of existing communication channels/modes and available informative resources 2: expand reach through additional means of communication 4: expand access and therefore application of preparedness resources	- All Natural and Other Hazards
Warning sirens & other alert systems	2: communicates urgent disaster prep and awareness 3: communicates need to seek protection/shelter	- Dam Failure/Levee Failure - Tornado/Windstorm - Flooding - Flash and Riverine
Programs and educational opportunities, resources	1: Maximize use of programs as available or implemented in comparable jurisdictions or otherwise renowned as a best practice; Investigate available human and organizational resources through existing collaborations and civic supports such as County Emergency Management Agencies, regional training opportunities through emergency response associations, the LEPC, local businesses and health and human services agencies. 4: Continue function of operations in the event of a natural disaster through established chain of command and/or order of operations. 5: Implementation supports well-planned projects that address multiple issues or serve more than one purpose.	- All Natural and Other Hazards

Assessments, studies, project planning & engineering	1: assess issue in context of existing resources to determine best course of action including but not limited to natural, human, organizational, and technological resources -- internal and collaborative. 4: considers continuity of operations 5: consideration given to mitigative aspects in all new projects.	- All Natural and Other Hazards
tools/equipment	power supply safety/security access	Acquire equipment and tools that will facilitate access to and protection of residents and visitors, critical facilities, and utility infrastructure during extreme weather events including but not limited to generators, surveillance tools, all-weather ATV, or snow machine.
Project type	Goals met by strategy/action/project	Hazard addressed
Generator & related projects	1: Enables use of existing resources in the event of power outage. 2: Facilitates communication in the event of power outage. 3: facilitates protection of people and property enabling operations and equipment to function during power outage 4: allows functional operation in the event of power outage. 5: meets multiple goals in reducing vulnerability during power outages.	- Flooding - Flash and Riverine - Tornado/Windstorm - Grass or Wildland Fire - Hazardous Materials Incident - Severe Winter Storm - Terrorism - Thunderstorm - Hail & Lightning - Transportation Incident
Equipment (any equipment that improves ability to maintain functional operations during disaster or extreme event)	3: protect existing infrastructure allowing function during varying conditions resulting from a natural or other disaster 4: enables functionality of infrastructure by maintaining or improving access &/or operation	- Dam Failure/Levee Failure - Thunderstorm - Hail & Lightning - Earthquake - Tornado/Windstorm - Expansive Soils - Hazardous Materials Incident - Flooding - Flash and Riverine - Infrastructure Failure - Grass or Wildland Fire - Radiological Incident - Landslide - Terrorism - Severe Winter Storm - Transportation Incident - Sinkholes
Safety & security equipment	1: protect existing resources via new and/or enhancements to existing tools, tech, and equipment 3: protection of people, public and private environments, facilities, and assets 5: incorporate security and safety into other projects as applicable	- Hazardous Materials Incident - Terrorism - Radiological Incident - Transportation Incident

development	mutual benefit; integrated project design/planning acquisition – local local building standards/controls development guidance/regulations local relocation/fortification	• Correlate Capital Improvement Projects, Economic Development projects, scheduled maintenance and repairs to necessary mitigation actions. • Consider (additional) properties for acquisition in high flood risk areas. • Monitor effectiveness and applicability of adopted and/or referenced ordinances, policies, and programs guiding community growth such as development regulations and established building standards. • Evaluate locations of critical facilities and utility infrastructure. Identify relocation and/or improvement projects that will allow continued function during and after natural hazard events.
Project type	Goals met by strategy/action/project	Hazard addressed
Improve existing facilities & infrastructure	1: enhance, stabilize, or otherwise improve existing infrastructure/facilities	- Dam Failure/Levee Failure - Severe Winter Storm - Earthquake - Thunderstorm - Hail & Lightning - Expansive Soils - Tornado/Windstorm - Flooding - Flash and Riverine - Infrastructure Failure - Landslide - Transportation Incident
Policy Implementation/Updates	1: improve or expand upon existing policies, processes, and procedures to incorporate mitigative improvements including but not limited to adoption of standardized building codes.	- All Natural and Other Hazards
Relocate existing facilities	1: enhance, stabilize, or otherwise improve existing infrastructure/facilities; relocate existing when possible. Incorporate location changes in updating/improvement projects. 3: take advantage of protections in place or available at alternate site 4: address known/potential hazards to prevent disruption to continuity and full function of operations 5: serve multiple purposes within single project	- Flooding - Flash and Riverine

Bridges & roads	1: Maximizing use of existing resources and collaborations by way of ensuring access, especially in the event of a disaster. 3: Protection of our people, public and private environments, facilities, and assets. Implement actions and strategies that significantly decrease risk associated with the effects of natural and other hazards that may otherwise result in the loss of life or damage to or loss of property -- primarily by way of maintaining adequate access/egress allowing for response teams and end/or evacuation as dictated by situation. 4: enabling continued functionality within and between jurisdiction operations 5: addressing multiple issues within a single project (i.e. improved drainage controls &/or structural integrity under extreme conditions)	- Flooding - Flash and Riverine - Severe Winter Storm - Infrastructure Failure - Transportation Incident

flow control	Roadways drainage	• Assess repair/replace/redesign roadways to improve function during natural hazard events. Consideration to be given to elevation, implement/improve water flow controls such as culverts, ditches and gutter systems. • Improve drainage patterns in flood-prone areas by implementing features that improve flow and/or absorption and reduce runoff.

Project type	Goals met by strategy/action/project	Hazard addressed
Flood protection (runoff controls, levee/dike/dam)	1: Maximizing use of existing resources and collaborations. 3: Protection of our people, public and private environments, facilities, and assets; significantly decrease risk associated with the effects of natural and other hazards 4: enabling continued functionality within and between jurisdiction operations 5: address multiple issues while resolving primary concern	- Flooding - Flash and Riverine
Drainage projects (including road projects specific to drainage)	3: protects existing infrastructure by diverting water flow, alleviating erosion 4: enables function of roadways and other access points during and immediately following heavy rain/snow melt or other flood-inducing events.	- Flooding - Flash and Riverine

refuge	mutual benefit integrated project design/planning	• Identify, evaluate, and assess informal shelter locations.

Project type	Goals met by strategy/action/project	Hazard addressed

Shelter – structural additions or fortifications; designated locations at alternate sites	3: provide protection from extreme weather conditions 4: Continued functionality of operations in the event of a natural disaster; Establish means of maintaining function of city operations and response efforts regardless of circumstance, ensuring availability of appropriate equipment as needed. 5: Implement refuge for residents while planning alternate work sites for critical services during and after extreme weather events.	- Extreme Heat - Hazardous Materials Incident - Severe Winter Storm - Terrorism - Thunderstorm - Hail & Lightning - Transportation Incident - Tornado/Windstorm

technology	Improve access Increase use of existing	• Implement technology to more effectively assess, respond to, and recover from dangers associated with hazard events.

Project type	Goals met by strategy/action/project	Hazard addressed
Improve effectiveness of existing systems	1: Maximizing use of existing resources. 3: Protection of our people, public and private environments, facilities, and assets. Implement actions and strategies that significantly decrease risk associated with the effects of natural and other hazards that may otherwise result in the loss of life or damage to or loss of property. 4: Functional Continuity of operations in the event of a natural disaster. 5: project planning to address multiple issues or serve more than one purpose.	- Dam Failure/Levee Failure - Hazardous Materials Incident - Flooding - Flash and Riverine - Infrastructure Failure - Grass or Wildland Fire - Terrorism - Thunderstorm - Hail & Lightning - Transportation Incident - Tornado/Windstorm

natural barriers/supports	Develop plan Determine if plan is needed	• Stabilize or increase naturally occurring mitigation features such as tree cover, wetlands, and/or greenspace. • Improve effectiveness of existing natural systems for water management

Project type	Goals met by strategy/action/project	Hazard addressed
Retention Pond	1: enhance natural landscape to better accommodate excess water from rain or rapid snow melt.	- Flooding - Flash and Riverine - Severe Winter Storm
Dyke improvement, Levees/Berms	1: enhance or maximize benefits of naturally occurring barriers 3: protection from flood and wind to an extent	- Dam Failure/Levee Failure - Flooding - Flash and Riverine
Addition of natural/native vegetation to improve sustainability (i.e. Trees to stabilize soil, add wind barrier, respite from extreme heat/sun)	1: enhance or maximize benefits of naturally occurring barriers 3: protection from extreme heat, direct sun, erosion, and wind (when trees are healthy)	- Drought - Thunderstorm - Hail & Lightning - Extreme Heat - Tornado/Windstorm - Severe Winter Storm
Stabilization – substantiate existing water channels to reduce erosion	1: enhance natural structures to reduce erosion 4: improve sustainability of natural waterways, reducing erosion and meandering	- Flooding - Flash and Riverine - Infrastructure Failure

Updates to projects from the 2020 plan are as follows.

Completed
New project or carried over from previous (still needed)
Not implemented; no longer planned/needed; deemed not feasible in the near future

Communication /Education		
Promo/Info	Aurelia	2020: Interest in promoting Smoke Detector programs, and similar supports, when offered at County or Region levels. <i>City Clerk, Public Health, EMA</i> (for promo: No dedicated funding necessary. For detectors: Community grants, pre-disaster funds) HIGH PRIORITY
Promo/Info	Aurelia	Update. No action taken as program has not been made available through FD or Public Health. City wishes to carry this project over to 2025.
Promo/Info	Blencoe	Implemented: Blencoe. Implemented promotion of existing alerts system and continues to do so.
Promo/Info	Cleghorn	2020: Interest in promotion of established notification networks such as the Alert Iowa system; Promote programs as available through regional resources. <i>City Clerk, County EMA</i> (No dedicated funding necessary) HIGH PRIORITY
Promo/Info	Cleghorn	Closed. Update was not provided by community.
Promo/Info	Galva	2020: Need for secured gate and "Restricted" signage at the sewer plant; <i>City Maintenance/Public Works</i> (Local Funds, Community benefit grants) HIGH PRIORITY
Promo/Info	Galva	Update (In progress): Galva is in the process of implementing a Sewer systems project. Securing point of access is part of the project.
Promo/Info	Galva	2020: Interest in obtaining weather radio and additional communications equipment such as handheld radios for direct communication with responders; <i>City Council, County EMA to assist</i> (local funds, PDM funds, Community benefit grant funds) MEDIUM PRIORITY
Promo/Info	Galva	Update: Handheld radios are not in place. Carry over to 2025 HMP.
Promo/Info	Hinton	2020: City is interested in formalizing communications with DOT to address default road closures and local authority on road closures to avoid ineffective detours; <i>City Administration & Public Works, County Engineer, Iowa DOT</i> (necessity for dedicated funds not anticipated) HIGH PRIORITY

Promo/Info	Hinton	Update: Need for enhanced communications continues. Carry over. Some lines have improved but concern remains a factor in communicating course of action and conflicting chain of command.
Promo/Info	Ida Co	2020: Actively promote available trainings; <i>County EMA, County Admin Staff</i> (no funding need anticipated) HIGH PRIORITY
Promo/Info	Ida Co	Update: County intends to continue promoting state-funded training programs as available. Carry over. Improve awareness of program availability.
Promo/Info	Larrabee	2020: Interest in developing improved means of communicating urgent information through existing networks such as Alert Iowa. Also, further develop local intercommunications tools such as texting and internal posting options. <i>City Clerk, City Council</i> (No costs associated with this project)
Promo/Info	Larrabee	Implemented. Additional efforts ongoing. City installed new community message board to better relay information in real time and for scheduled messaging (about \$1,500). City makes use of existing informational formats such as the County website, Facebook postings, and physical postings at the post office.
Promo/Info	Plymouth Co	2020: Signage needed to better define restricted areas; <i>County Engineer, Sanitarian</i> (County funds) HIGH PRIORITY
Promo/Info	Plymouth Co	Implemented: Plymouth County continues to administer general alerts. Assessing feasibility of adding employees to enable uniform communications and enabling external use specific to departments. System is used by Communications Center, CERT Team including Floyd Valley Hospital.
Promo/Info	Remsen	2020: Interest in promotion of established warning systems such as Alert Iowa system; <i>City Clerk, County EMA</i> (No dedicated funding necessary) HIGH PRIORITY
Promo/Info	Remsen	Update. Remsen includes periodic postings recommending resident enrollment in Alert Iowa and similar online alert systems. Community will continue to do so but this will not be continued as an Ongoing mitigation-specific project into the 2025 plan.
Promo/Info	Struble	2020: Interest in promotion of established warning systems such as Alert Iowa system; Promote programs as available through regional resources. <i>City Clerk, County EMA</i> (No dedicated funding necessary) HIGH PRIORITY
Promo/Info	Struble	Update. informal promotion of available alert systems is provided through council discussion and interactions with residents. The city plans to continue promotional efforts to expand effectiveness of existing resources. Carry over to 2025 HMP as an ongoing project.
Promo/Info	Whiting	2020: PSA program to promote education about tree types and planting; <i>City Clerk</i> (no funding anticipated) LOW PRIORITY
Promo/Info	Whiting	Completed. PSA was communicated through schools at no cost.

Warning Sirens	Akron	2020: Assess need for additional warning siren near school; <i>School Board, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Akron	Resolved. City assessed function of existing equipment and determined additional siren is not necessary. School facilities are adequately served by existing warning siren.
Warning Sirens	Blencoe	2020: 2nd warning siren placement - northwest end of town; Location Simpson & Mack; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Blencoe	Update. Action not taken. Carry over. The City still needs a second warning siren to sufficiently serve its corporate boundaries and nearby rural residents.
Warning Sirens	Bronson	2020: Considering warning siren replacement; Recent repairs were necessary on current siren; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) LOW PRIORITY
Warning Sirens	Bronson	Implemented. The warning siren was replaced in June 2022, at the cost just over \$19,000.
Warning Sirens	Danbury	2020: Warning Siren needs replacing; <i>City Council, County EMA</i> (Local funds, County Funds, PDM, Community Benefit funds) HIGH PRIORITY
Warning Sirens	Danbury	Complete. Warning siren installed 2020+/- . Project was funded through various local grant programs.
Warning Sirens	Holstein	2020: Additional warning siren would benefit City - potential location near south end of town near CharMac, Ridgeview, Cobblestone Inn; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Holstein	Update. Project carried over to 2025
Warning Sirens	Ida Co	2020: An additional warning siren would benefit Crawford Creek; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Ida Co.	Objective Met. Review of available resources indicates siren is not needed. County will promote existing internet system with improved coverage capacity. The County plans to provide signage and other promotions on social media forums to promote subscriptions to alert services.
Warning Sirens	Monona Co / Rodney	2020: Additional sirens in rural recreation areas such as the Rodney Recreation Pits; <i>County EMA</i> collaboration w/Rodney <i>City Council</i> , (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Monona Co / Rodney	Update. Not completed, still needed. Project carries over to 2025 HMP. Carry over. Additional sirens in rural recreation areas such as the Rodney Recreation Pits.

Warning Sirens	Monona Co	2020: Warning Siren at Lewis & Clark Lake would be beneficial to improve warning efforts in the recreation area. <i>County Board of Supervisors, EMA, various departments.</i> (County funds, PDM, community benefit fund programs) MEDIUM PRIORITY
Warning Sirens	Monona Co	Update. Project not implemented but siren is still needed in rec area. Project will carry over to 2025 HMP. Carry over. Warning Siren at Lewis & Clark Lake needed to improve warning efforts in the recreation area.
Warning Sirens	Moorhead	2020: Warning siren needs replacing. Existing prone to malfunction, in need of constant repair. Necessary in maximizing efforts to reduce repercussion from severe weather conditions. <i>City Council, County EMA.</i> (Local funds, County support funds, PDM, community benefit programs) HIGH PRIORITY
Warning Sirens	Moorhead	Update. Project still under consideration, maintain in 2025 Plan. Carry over. City siren needs rewiring/electrical replacement.
Warning Sirens	Moville	2020: Add warning sirens to supplement existing. Assess need for additional at southeast edge of town and at Ridge Park; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Moville	Update. Maintain project for 2025 Plan. Carry over. City still interested in fully assessing need for additional siren(s).
Warning Sirens	Oto	2020: Warning siren needed immediately. Malfunction due to lightning strike. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Warning Sirens	Oto	Resolved. Oto's warning siren is now functioning.
Warning Sirens	Salix	2020: Warning sirens – Replace existing in town; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Warning Sirens	Salix	As amended 01/12/2022: Complete. A new weather siren was installed in December 2020. The weather siren is connected to the County Communications Center as a primary means of notifying residents and visitors to Salix of imminent danger due to extreme weather conditions such as tornado and/or windstorms. The siren is multi-tonal allowing variation in sounds to differentiate the causes for warning.
Warning Sirens	Sloan/ Westwood Schools	2020: Warning siren at south end of town, serving school & rec facilities; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Sloan	Complete. A siren was installed to better serve the areas of outdoor school facilities.
Warning Sirens	Smithland	2020: Warning siren improvement/replacement needed to better perform alerts for residents. Replacement or updating must include connection to County Communications Center. City

		Council. City staff, County EMA. (Local funds, county supports, community benefits programs, fundraising, PDM) HIGH PRIORITY
Warning Sirens	Smithland	Update. City has determined replacement of siren is necessary as parts are no longer available to maintain current siren. Carry over. Replace warning siren.
Warning Sirens	Turin	2020: City needs to install 2 nd warning siren to increase alert capacity during severe weather conditions. <i>City Council, County EMA.</i> (Local funds, County supports, PDM) HIGH PRIORITY
Warning Sirens	Turin	Completed. Second warning siren was added to increase awareness of pending severe weather. Hill served as barrier to single siren effectiveness for all residents.

Programs	Hornick	2020: Assess opportunities for homeowners with uninhabitable properties months after flood events of 2019; <i>City Council/Administration SIMPCO</i> (no cost allocated outside of staff hours for assessment) MEDIUM PRIORITY
Programs	Hornick	Closed. Based on city finances, skewed market value of homes/property, and ability to repurpose flood-prone areas, the city determined implementation of a home acquisition program is not feasible. City will continue to monitor potential of opportunities as they arise, however, the project is removed from the priority list.
Programs	River Valley CSD	2020: Interested in funded First Aid/CPR training for staff; <i>School Board, Collaborate with EMA to coordinate training</i> (District training funds, Community Benefit funds, fundraising, Response support funds) MEDIUM PRIORITY
Programs	River Valley CSD	Completed. District implements mandatory training on annual basis. Funds still needed to support training, with expense review and new programming pending review. Project will remain HIGH PRIORITY in updated plan as district continues to seek training and funding partners.

Assessment/Study	Le Mars	2020: Flood Risk Options Study. Improve elevation of roadway @ 4th Ave SE (Mahogany Ave). Primary access road to this portion of town, limiting access for response teams. A full study on options is needed in preparation of presenting issue of road closure to resident. <i>City Administrator, Engineer, County Roads communication, IDOT</i> (City funds, Planning funds, IDNR/IDOT programs, State/Federal programs, TIP, CIP) HIGH PRIORITY
Assessment/Study	Le Mars	Complete. Surveys were completed and discussion held with IDNR, Army Corps of Engineers to assess potential improvements. Determination that a bridge is the only solution is not a feasible project for the City to consider. No further action is planned regarding this issue.
Assessment/Study	Moorhead	Added by amendment 2021. Still needed – Study needed to determine source/cause of sinkholes believed to be a delayed effect of extensive area flooding in 2019. City's initial assessment revealed no visible effects of that year's flood. By 2021, sinkholes

		appeared throughout town affecting roadways and sidewalks. It is expected that underwashing caused by high velocity runoff is the primary cause of the sinkholes, however a study is needed to confirm that. Included in the study is an review of solutions for implementation that would eliminate the cause and prevent recurrence. City public works, State Homeland Security and Emergency Management, County EMA, USDA, potentially IDNR, other state departments as may be appropriate. (FEMA BRIC/FMA technical assistance, USDA programs, local funds) HIGH PRIORITY. Update. Initial application was not funded (2023). City is carrying project into 2025 plan with the intent of continuing to pursue funds to determine feasible solution(s) to the sinkhole issue. Carry over.
Assessment/Study	Woodbury Co	2020: Econ Dev - Work on measures necessary to reduce NFIP participant costs for communities. County Economic Dev, IDNR (County funds as needed) HIGH PRIORITY
Assessment/Study	Woodbury Co	Project closed. Economic Development department consolidated into Zoning. Project deemed not immediately feasible, though county will reassess situation given an opening to such opportunity.

Tools/Equipment		
Generator & Related Projects	All Counties	2020: Assess availability of generators for all critical facilities, portable or permanent. Prep all critical facilities for connection to generators as applicable; <i>County EMA</i> (Varying levels of funds needed. Support may come through County, State, and Federal grant and loan programs) HIGH PRIORITY
Generator & Related Projects	Ida County	Completed. Community assessments of critical facilities and generator compatibility have been completed. The Courthouse addition is ready. Transfer switches are in place where needed for City offices in Battle Creek and Holstein. Findings where more transfer switches are needed have been included as new projects as collaborative efforts between the County and applicable communities.
Generator & Related Projects	Plymouth County	Implemented. County Courthouse, Courthouse Annex, and Law Enforcement office have added a generator with a \$300,000 investment. Portable generators are available for communities; no additional need for transfer switches.
Generator & Related Projects	Akron	2020: Transformer needed at wells to make ready for generator connections; <i>City Public Works & Waterworks Depts</i> (Local funds, Community benefit fund grants) HIGH PRIORITY
Generator & Related Projects	Akron	Update. Well #4 has been updated with a transformer switch and is ready as needed. Second is still needed for the North Well and is carried over to the 2025 project list. Carry over. Transformer needed at wells to make ready for generator connections
Generator & Related Projects	Akron	Implemented. A generator is in place at the Fire Station and 2 generators are incorporated into the Water Treatment Plant U.V. project underway (03/2025).

Generator & Related Projects	Arthur	2020: Interest in a dedicated generator for the waterworks; <i>City Waterworks/Public Works Maintenance</i> (Local Funds, PDM, Community Benefits grants) HIGH PRIORITY
Generator & Related Projects	Arthur	Complete. A mobile generator was added in 2020 using safety funds through insurance provider. City accrued annual allocation to help meet expense.
Generator & Related Projects	Arthur	2020: Fire Dept - generator to maintain function of doors and building during a power outage; <i>Fire Chief, City Council</i> (Department funds, Community Benefit funds, Firefighter Association supports, PDM) HIGH PRIORITY
Generator & Related Projects	Arthur	Update. Project not completed due to lack of funds. Carry project into 2025 HMP. Department did attain mobile generator for use with the grass truck pump, but none are available for the facility. Priority based on likely funding opportunity, not need. Carry Over. Fire Dept - generator to maintain function of doors and building during a power outage; <i>Fire Chief, City Council</i> (Department funds, Community Benefit funds, Firefighter Association supports, PDM) LOW PRIORITY
Generator & Related Projects	Blencoe	2020: Generators; city hall/community ctr which operates as command center as needed; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Blencoe	Update. Generators were included for lift stations in two water works project – Sewer (2022) and Wastewater Treatment Plant (2019). Carry over. Generators as noted in 2020 are planned for implementation at the N Manley Lift Station.
Generator & Related Projects	Bronson	2020: Generator for Community Center/City Hall and critical facilities; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Bronson	Update. Due to lack of funding, the project was not implemented. Carry over. The City is still seeking funding supports and will carry project into 2025 Plan with modified priority level.
Generator & Related Projects	Cherokee (City of)	2020: Generators needed for Water Plant and Wastewater Plant; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee (City of)	Update. The Wastewater Treatment Plant is in the process of being relocated due to flooding. In progress. Generator for the Water Plant has been purchased, installation pending.
Generator & Related Projects	Cherokee County	2020: Two trailer-mounted generators to facilitate county response efforts <i>County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee County	Update. 1 in place 100kw unit owned by the state is housed at the EMA offices. 2 nd unit as well as other generator needs are carried into the 2025 HMP.

Generator & Related Projects	Cherokee County	(cont'd from phased project) Carry over. trailer-mounted generator needed to facilitate county response efforts
Generator & Related Projects	Cherokee County	2020: On-site permanent generator for Courthouse; <i>County EMA</i> (County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee County	Update. Not implemented as funding has not been dedicated to project. Still needed and carries over to 2025 HMP. Carry over. On-site permanent generator for Courthouse
Generator & Related Projects	Danbury	2020: Portable generator <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Danbury	Update. Project still needed. Lagoon project has taken precedence for current year. Project will carry to 2025 HMP. Expanded - carry over. Portable generator needed for water plant with potential to serve various facilities. Added: Transformer switches needed to enable connections.
Generator & Related Projects	Hinton	2020: Generators for Lagoon Lift Station & @ 1 well location; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Hinton	Complete. Part 1 of this project is complete with a generator added at the well location in 2022.
Generator & Related Projects	Holstein	2020: Permanent, dedicated generators @ lift stations & water plant; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Holstein	Update: The City has received quotes to initiate the project. Planned cost is \$197,000. Support funding has not been secured. This carries over into the project list for the 2025 Plan. Carry over. Permanent, dedicated generators @ lift stations & water plant
Generator & Related Projects	Ida Grove	2020: Transfer switches at all critical facilities to enable use of generators; Generators @ Critical Facilities including Waste Water Plant; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Ida Grove	Completed. Water Tower and Well Site improvements included necessary connections. Odebolt Creek Lift Station is ready for portable connection. Water Plant updates included a transfer switch and plumbing of gas lines (\$30,000) Additional connections and generators are still needed and project will carry into 2025 Plan.
Generator & Related Projects	Ida Grove	Carry over. Dedicated generators still needed at City Hall and Moorhead Avenue.
Generator & Related Projects	Kingsley	2020: Generators needed at lift station, water plant, and lagoon; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Kingsley	Partially completed. Generators are in place at the lift station and lagoon.

Generator & Related Projects	Kingsley	Carry over. The remaining scope of project will be carried into the 2025 project list.
Generator & Related Projects	Lawton	2020: Generator needed for Fire Department; <i>Fire Chief, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Lawton	Complete. Phase I is complete. A generator has been purchased for the Fire Department. A new project for 2025 HMP is for hook-up and installation.
Generator & Related Projects	Mapleton	Correction to the 2020 Plan stating generator was added. Additional generators are needed to maintain function of critical facilities during disastrous and other extreme events. <i>City Administrator, Waterworks, County EMA</i> (City funds, community benefit funds, IDOT program funds, PDM funds) HIGH PRIORITY Update. Project not completed due to lack of dedicated funding. Transfer switches were installed at light plant, equipped to handle in-the-moment outages, primarily intended for short-term.
Generator & Related Projects	Marcus	2020: Generator for Fire Department to enable use as emergency shelter. <i>Fire Chief, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Marcus	Update. Project is in progress as an included component of a Fire Station Expansion Project. As of late 2024, the pad has been laid, and a dedicated generator is planned. As of December 2024, local budget is the primary funding source with the city continuing to consider additional options. Carry over.
Generator & Related Projects	Marcus	2020: Generator Water Plant – maintain function during power outage; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Marcus	Closed. Community will coordinate with county for mobile generator use as needed.
Generator & Related Projects	Marcus	2020: Generator at Shelter house, also for use in the event of power outage during an emergency; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Marcus	Update. Action not taken due to lack of dedicated funding. Project is still needed and carries over to the 2025 project list.
Generator & Related Projects	Moorhead	2020: Generators - city hall/community ctr that operates as command center as needed; Potential partnering with County to establish Command Center capacity in the event of an emergency; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Moorhead	Update. No action has been taken on this project due to lack of funding availability. The project is still needed and therefore will be carried over to the 2025 project list.

Generator & Related Projects	Onawa	2020: Additional generators; <i>City Administrator, Waterworks, County EMA</i> (City funds, community benefit funds, IDOT program funds, PDM funds) HIGH PRIORITY
Generator & Related Projects	Onawa	Update: Some generator work has been completed, replacing generators at 3 sites (Fire Station, Electric Building, and Waterworks) and one new generator installed at Sewer Plant. A generator is also onsite at the hospital. The community center is still in need of a generator. This will be carried over to the 2025 HM project list.
Generator & Related Projects	Onawa	Carry over. Generators needed for Community Center and Nursing Home. <i>City Administrator, Waterworks, County EMA</i> (City funds, community benefit funds, IDOT program funds, PDM funds) HIGH PRIORITY
Generator & Related Projects	Pierson	2020: Generator for Community Building for continuation of use as refuge location in the event of power outage; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Pierson	Update. Action not taken as other projects took precedence. Carry over to 2025 HMP. Carry over. Dedicated generator for Community Building for continuation of use as refuge location in the event of power outage.
Generator & Related Projects	Sgt Bluff	2020: Generator for PD; <i>Police Chief, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Sgt Bluff	Project closed. One large portable generator is available as needed. Police Department is prepared for such connection if needed. Fire Station has been designated as command center in the event of an emergency and is equipped to serve that role.
Generator & Related Projects	Sioux City	2020: Generators for critical facilities where none are currently in place; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Sioux City	Update: Some generator acquisition/placement still needed. Carry over. Generators still needed at Police Department and other City Facilities. Project remains necessary and carries into 2025 plan.
Generator & Related Projects	Ute	2020: Generator for community building; City Hall; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Ute	Update. Ute implemented several projects in the past 5 years, resulting in this one being delayed. This project carries over into the 2025 HMP with continued high priority. Carry over. Generator for community building.
Generator & Related Projects	Westwood CSD	2020: Generator for backup during crisis events & to maintain use as refuge location in event of power outage; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY

Generator & Related Projects	Westwood CSD	Update. Project has not been completed with funding and other projects taking precedence. Still interested in dedicated generator and transfer switches at minimum. Carry over. Generator for backup during crisis events & to maintain use as refuge location in event of power outage or other emergency.
Generator & Related Projects	Woodbury Co	2020: All communities: Standby generator on site for each Community Center/City Hall as may be designated for command center during a disastrous event) LOW PRIORITY
Generator & Related Projects	Woodbury Co	Update. Some communities have added generators and/or transfer switches to accommodate mobile equipment. The county will continue to pursue opportunity to install dedicated generators where necessitated and transfer switches where still needed. Carry over. Standby generator still desired on site for each Community Center/City Hall
Generator & Related Projects	Woodbury Co	2020: A generator needed at Courthouse; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Woodbury Co	Update. Carry over to 2025 plan. Generator still needed.

Equipment	Aurelia	2020: Additional equipment for Emergency Response needed in lieu of resident-owned materials. Items considered include but are not limited to ATV and Rescue Boat. <i>City Council, Fire & Rescue Services, Police Department</i> (Local funds, fundraising, community betterment funds) MEDIUM PRIORITY
Equipment	Aurelia	Complete. City added ATV to city inventory. No further action anticipated for this project.
Equipment	Battle Creek	2020: Equipment updates and additions needed for Fire Department and Ambulance Services. <i>City Council, Fire Chief, Ambulance Director.</i> (Local funds, fundraisers, community benefit funds, firefighter association funding programs). HIGH PRIORITY
Equipment	Battle Creek	Complete. The FD and Ambulance service added several pieces of equipment in recent years including: • 2 grass rigs & tanker (\$275,000) – fundraisers, grants • Transfer switch for FD • Compressor to fill air cans • Power Cot (\$30,000) • New ambulance ordered – (\$287,000) fundraising, grants, service billings, donations
Equipment	Bronson	Implemented. City purchased Stair Chair (lift) for ambulance to facilitate building exit for persons otherwise requiring use of a mobility device (such as a wheelchair or walker) in the event of an emergency and/or evacuation when stairs are involved. Cost: \$990. Local funds.

Equipment	Correctionville	2020: ATV with water tank capacity - remote access for fire response and other uses as applicable; <i>City Council, Fire Chief</i> (City funds, Fire Department funds, Fire Association funds, fundraisers, Community Benefit funds, Federal funds for response programs) HIGH PRIORITY
Equipment	Correctionville	Complete. \$55,000 project complete 2022 – funded through grant (USDA).
Equipment	Danbury	2020: Pumps; <i>City Council, Public Works, collaboration with County EMA</i> (Local funds, County funds, Community Benefit funds, fundraising, Federal programs, PDM) HIGH PRIORITY
Equipment	Danbury	Resolved. City has worked out agreement with Fire Department. FD will provide equipment as needed.
Equipment	Danbury	2020: Utility ATV/snowmobile; <i>City Council, Fire Chief, Public Works, collaboration with County EMA</i> (Local funds, County funds, Community Benefit funds, fundraising, Federal programs, PDM) MEDIUM PRIORITY
Equipment	Danbury	Complete. City purchased a Gator in 2020 using local funds.
Equipment	Hinton	2020: Mobile pump; <i>City Maintenance/Public Works</i> (City funds) MEDIUM PRIORITY
Equipment	Hinton	Carry over. Project still needed and funds were not sourced.
Equipment	Hinton	2020: ATV for use during road blockage and flood staging; <i>City Council, Streets Dept</i> (City funds, Community Benefit funds, Response support funds) MEDIUM PRIORITY
Equipment	Hinton	Completed. City purchased ATV for use when roadways or points of entry are inaccessible (storm debris, etc.) in 2022.
Equipment	Holstein	2020: Additional snow removal equipment; <i>City Council, Public Works/Maintenance</i> (Local funds) LOW PRIORITY
Equipment	Holstein	Completed (pending delivery). Equipment has been purchased but item is on backorder. Expected availability May 2025.
Equipment	Holstein	Implemented (pending delivery). City has ordered an ambulance. Cost not provided. City council, Emergency Services. (Local funds, fundraising).
Equipment	Ida County	2020: Sandbag fillers. Only 2 are available in the region and flooding often impacts several counties concurrently. Interest in accumulating a stockpile to meet multiple community needs. <i>County Engineer, EMA, Regional collaboration</i> (Collective County funds , PDM) HIGH PRIORITY
Equipment	Region (Initiated by Ida County)	Update. No action taken. Still interested in have available for extreme events. Carry to 2025 HMP as a Region project.
Equipment	Ida County	2020: ATV for access to levees for inspection regardless of road conditions. <i>County EMA</i> (County funds) MEDIUM PRIORITY
Equipment	Ida County	Resolved. Roads Dept and Sheriff's department added side-by-sides to inventory. Anticipated availability if needed, especially for scheduled inspections.

Equipment	Ida County	2020: Additional road closure barricades are needed with consideration to be given to another trailer in order to haul to multiple locations. To accommodate approximately 80 roadways are subject to closure in the event of an emergency. <i>County Engineer, EMA (County Funds, PDM) HIGH PRIORITY</i>
Equipment	Ida County	Update: No action taken. Additional barricades still needed. Carry over. Additional road closure barricades are needed with consideration to be given to another trailer in order to haul to multiple locations.
Equipment	Ida Grove	2020: Snow removal equipment needs updating. <i>City Streets Department (City funds) LOW PRIORITY</i>
Equipment	Ida Grove	Update not provided.
Equipment	Ida Grove	2020: Motor in the grader needs updating. City Streets Dept (City funds) MEDIUM PRIORITY
Equipment	Ida Grove	Update not provided.
Equipment	Ida Grove	2020: Larger capacity pump; <i>Public Works, Streets Dept (City Funds, PDM, Community Benefit funds) HIGH PRIORITY</i>
Equipment	Ida Grove	Update not provided.
Equipment	Ida Grove	2020: New booster pump is needed to support fire hydrant performance. <i>Fire Chief, City Administrator (City funds, Fire Dept funds, Response support funds) MEDIUM PRIORITY</i>
Equipment	Ida Grove	Update not provided.
Equipment	Mapleton	2020: Lift station for water plant; <i>City Water Supt (City funds, PDM) HIGH PRIORITY</i>
Equipment	Mapleton	Update: Project has not been completed and carries over to the 2025 HMP. Carry over. Lift station for water plant.
Equipment	Monona Co	2020: Region-shared equipment such as high capacity snow blower. <i>County Roads, collaboration between County Roads departments (County funds—potentially multiple, IDOT funds) LOW PRIORITY</i>
Equipment	Monona Co	Update. No action has been coordinated between counties for shared use of high-performance equipment. This project will carry over to 2025 HMP. Carry over. Region-shared equipment such as high capacity snow blower. <i>County Roads, collaboration between County Roads</i>
Equipment	Monona Co	2020: Communications Trailer. <i>County Board, EMA (County funds, PDM) MEDIUM PRIORITY</i>
Equipment	Monona Co	Complete. The EMS department has a fully equipped trailer that serves as a mobile response unit, training, center, and refuge/shelter location as needed.
Equipment	Monona Co	2020: Trailer designated for road barricade set-up; <i>County Engineer (County funds, IDOT, PDM) HIGH PRIORITY</i>
Equipment	Monona Co	Update. No action taken on this item but project is still needed. Project carries over to 2025 HMP. Carry over. Trailer designated for road barricade set-up; <i>County Engineer (County funds, IDOT, PDM) HIGH PRIORITY</i>
Equipment	Moorhead	Implemented. Fire Department assed UTV to improve access to wild fires and other emergency needs not accessible by roadway. Project was funded through grants and local fundraising efforts.

Equipment	Moville	2020: Drone for Fire Department -- assess and prepare before entering situation; determine best approach for grass fires, etc.; Assess areas of concern. <i>Fire Chief, City Council</i> (Department funds, Response support funds, PDM) MEDIUM PRIORITY
Equipment	Moville	Update not provided.
Equipment	Onawa	2020: Snow removal equipment; <i>City Streets Dept</i> (City funds, transportation funds) LOW PRIORITY
Equipment	Onawa	In progress. A newer plow truck is added to the budget for 2026. Carry over. Additional equipment is still needed. Snow removal equipment.
Equipment	Onawa	2020: Pump with greater than 6" capacity – function @ 1,000 gallon per minute; <i>City Administrator</i> (City funds, PDM) HIGH PRIORITY
Equipment	Onawa	Update. Action not taken. Portable pump is still needed and carries over to the 2025 HMP with modified priority level.
Equipment	Onawa	2020: Boat; <i>City Administrator, Fire Chief collaboration</i> (City Funds, Response support funds, PDM) LOW PRIORITY
Equipment	Onawa	Project closed. Action not taken. FD has not indicated dire need for new rescue boat Project removed from priority list.
Equipment	Oto	2020: Fire Dept in need of equipment and new facility; <i>Fire Chief</i> (City support, Department funds, Fire Association funds, FEMA AFG, CDBG facilities funds, State Revolving Fund loan) LOW PRIORITY
Equipment	Oto	Update. Facility and equipment improvements are still needed for the Oto Volunteer Fire Department. No action has been taken due to lack of funds. This project will carry into the 2025 HMP. Priority reflects feasibility, not need. Carry over. Fire Dept in need of equipment and new facility.
Equipment	Pierson	2020: ATV for use during road blockages; <i>City Council</i> (City funds, PDM) LOW PRIORITY
Equipment	Pierson	Update. Action not taken. Carry into 2025 HMP with same priority level. Carry over. ATV for use during road blockages.
Equipment	Plymouth County	Implemented. Plymouth County Law Enforcement added equipment to increase efficiency of services, especially in emergency situations. Additions include Bearcat, Incident Command Trailer, and multi-use (80-person capacity) Shelter trailer. <i>County law Enforcement.</i> (ARPA funds).
Equipment	Sgt Bluff	2020: Pumps for clean water transfer; <i>City Administrator, Streets Department</i> (City funds, PDM) HIGH PRIORITY
Equipment	Sgt Bluff	Complete. Pumps for use in diverting accumulated water during flooding and heavy rain events have been added to city equipment inventory. Cost of project completion not provided.
Equipment	Sgt Bluff	2020: Replace rescue boat. <i>Fire Department/EMS</i> (Department funds, City supports, Response support funds, fundraisers, PDM) LOW PRIORITY
Equipment	Sgt Bluff	Update. Fire Department has replaced pump tanker. Some additional equipment on budgeted (see new projects). Rescue boat replacement removed from priority list.

Equipment	Sgt Bluff	In progress. Handheld radios are in process of being replaced. Spring 2025 10 replaced with 4 still pending. <i>City, Fire Department.</i> (Local funds for those already replaced, Local funds and response funds as available for remaining) HIGH PRIORITY
Equipment	Sgt Bluff	2020: ATV for police Department to minimize access issues. <i>Police Dept</i> (Department funds, City supports, fundraisers, PDM) LOW PRIORITY
Equipment	Sgt Bluff	Update: UTV replacement has been initiated in budget conversations with a plan to replace at least one UTV within the next five years. Carry over. Replace 1 of 2 UTVs within 5 years.
Equipment	Whiting	2020: Interest in additional/better performing snow removal equipment; <i>City Council</i> (City funds, IDOT program funds, PDM) LOW PRIORITY
Equipment	Whiting	Complete. The city has a box plow for tractor, new scraper, refurbished plow, and new (used) sander. Better removal plan is in place which included the addition of a part time position.
Equipment	Woodbury County	2020: Sandbagging equipment/HESCO bags; <i>County Engineer, potential collaboration with partner County</i> (County funds, IDOT program funds, PDM) HIGH PRIORITY
Equipment	Woodbury County	Complete (with ongoing inventory maintenance required). County acquired 10 pallets of HESCO bags in addition to two 2" pumps, a 6" pump. Bags and sandbagging equipment was issued to address current year flooding. Old stock was used first with remainder stored for future use. Bags hold an approximate 10-year useful life so no additional are needed at this time.
Equipment	Woodbury County	2020: Additional trailer w/ 5 sets of road barricades. 3 trailered and ready to roll. 5 sets per trailer; <i>County Engineer,</i> (County funds, IDOT program funds, PDM) LOW PRIORITY
Equipment	Woodbury County	Project Closed. County determined that while extra equipment would be beneficial, it is not a practical cost consideration in the near future with county funds, nor response funding as may become available.
Equipment	Woodbury County	2020: Additional pumps - 12" & 18" capacity; <i>County Engineer</i> (County funds, IDNR program funds, PDM) HIGH PRIORITY
Equipment	Woodbury County	Update: Current practice is to borrow from established resources as needed (local farmer). Carry over. Should funding be available, county will further consider addition of such pumps to their inventory.

Development		
Policy	Sioux City	Implemented. City implemented standards of practice during COVID that serve as basis for future events that may require such measures including but not limited to public health and safety protections.
Policy	Onawa	2020: Review/revision of subdivision regulations to address runoff concerns resulting from displacement; <i>City Council, Zoning Commission, City Attorney</i> (Local funds) MEDIUM PRIORITY

Policy	Onawa	Update. No action taken on this item. Needs have been clarified, necessitating the inclusion of water diversion in plans. Formalizing discussed recommendations to subdivision plans is carried over to the 2025 HMP, with elevated priority. Carry over. Review and formal revision of subdivision regulations to address runoff concerns resulting from displacement.
Policy	Whiting	2020: Consider formalizing reference to DNR for Floodplain Development; <i>City Council, Zoning Commission, City Attorney</i> (Local funds) LOW PRIORITY
Policy	Whiting	Complete. City completed floodplain update in coordination with IDNR. City is participating in county-wide efforts to counter flooding. No cost associated with project outside of staffing hours.

Improve existing facilities & infrastructure	Aurelia	2020: Improve capacity for Community Center to be designated as cooling shelter and/or refuge location for extreme weather conditions. <i>City Council, City Maintenance</i> (Local Funds, Community Betterment Funds, PDM)
Improve existing facilities & infrastructure	Aurelia	Update. City still interested in improving facility prep for use as shelter/refuge with specific project identified: add generator. Carry over. Project for generator added under appropriate category.
Improve existing facilities & infrastructure	Cherokee	2020: Improve capacity and function of sewer system; <i>City Waterworks</i> (City funds, USDA program funds, IDNR program funds) MEDIUM PRIORITY
Improve existing facilities & infrastructure	Cherokee	Update: The city has made some improvements, additional are still needed. Project priority remains the same. Carry over. Improve capacity and function of sewer system.
Improve existing facilities & infrastructure	Cleghorn	2020: Improve infrastructure to better accommodate weather extremes such as heavy rain, frost/heave conditions – especially water lines and related infrastructure. <i>City Council, City Staff</i> (Local funds, capital improvement funds, DNR program funds). HIGH PRIORITY
Improve existing facilities & infrastructure	Cleghorn	Update. No specific action was taken to permanently address this concern. City will continue to implement mitigative measures within funded projects but will not continue to carry this as a priority item in the 2025 HMP.
Improve existing facilities & infrastructure	Cushing	2020: Extensive repairs on City Hall/Community Building necessary due to cumulative damages from wind, heavy snow, heavy rain, and fluctuating weather conditions. <i>City Council, City Maintenance</i> (City funds, Community Catalyst Building Remediation funds, Facility Improvements funds, PDM) HIGH PRIORITY
Improve existing facilities & infrastructure	Cushing	Completed. \$20- to \$30,000 has been invested in City hall improvements. Over \$1M have been invested in water systems improvements including a lift station and water distribution system improvements. Funding included \$350,000+ DNR grant, IFA funds, \$890,00 loan, and \$150,000+ in imminent threat funds (water mains).
Improve existing facilities & infrastructure	Galva	2020: Wastewater Plant upgrades are pending response from Iowa DNR. <i>City Council, IDNR</i> (IDNR program funds, City funds, State/federal loan programs) HIGH PRIORITY
Improve existing facilities & infrastructure	Galva	Substantially Completed. Anticipated project closure Feb 2025. Project costs not provided.

Improve existing facilities & infrastructure	Hinton	2020: Water booster to improve capacity as accesses through fire hydrants. <i>City Waterworks, Fire Chief</i> (City funds, Fire Department funds, PDM) MEDIUM PRIORITY
Improve existing facilities & infrastructure	Hinton	Update: No specific actions were taken to address this strategy. Carry over. Capacity improvements are still desired through specific fire hydrants.
Improve existing facilities & infrastructure	Hinton	2020: Lining sewer and manholes in flood plane to eliminate infiltration from flooding and water table; <i>City Maintenance & Waterworks departments, IDNR</i> (IDNR program funds, City funds, PDM) HIGH PRIORITY
Improve existing facilities & infrastructure	Hinton	Partial Completed . Manholes were lined in 2021. Project cost not provided.
Improve existing facilities & infrastructure	Hinton	Carry over. Sewer linings in floodplain to eliminate infiltration from flooding and water table. Project priority remains. <i>City Maintenance & Waterworks departments, IDNR</i> (IDNR program funds, City funds, Disaster Mitigation or Response/FMA as applicable) HIGH PRIORITY
Improve existing facilities & infrastructure	Hinton	2020: Repair golf course crossings damaged and washed away during high flow events. <i>City Parks Dept, City Maintenance</i> (City funds, Active Transportation funds, Healthy Community/Recreation funds, PDM) LOW PRIORITY
Improve existing facilities & infrastructure	Hinton	Complete. Project was implemented in 2020. Project cost not provided.
Improve existing facilities & infrastructure	Ida County	2020: Waterlines are not looped at MidWest Industries, reducing the available water pressure at fire hydrants. <i>County engineer, Midwest Indus business manager, EMA</i> (County funds, private funds, Response support funds, PDM) MEDIUM PRIORITY
Improve existing facilities & infrastructure	Ida County	Update. Jurisdictional oversight of need has been relegated to the City of Ida Grove. Related work is included for consideration under their new projects. While improvements specific to this site are still necessary, Project is closed at County level.
Improve existing facilities & infrastructure	Ida County	2020: Not all outlying shops are insulated. New project needed to add heat and insulation. Access and issues accelerating due to ice accumulation. <i>County Department of Secondary Roads</i> (County funds, Transportation facilities program funds, Building remediation funds) LOW PRIORITY
Improve existing facilities & infrastructure	Ida County	Update. Insulation and heating improvements still needed at Battle Creek shop, affecting access hindered by ice accumulation. Should funding become available, facility replacement is needed in Holstein. Carry Over. Insulate outlying shops.
Improve existing facilities & infrastructure	Ida Grove	2020: Casements along 7th St (Badger Creek); <i>City Roads Dept, collaborate with County Engineer</i> (City funds, IDOT Program funds, PDM) HIGH PRIORITY
Improve existing facilities & infrastructure	Ida Grove	Update: Still needed. Action not taken due to lack of dedicated funding. Continues to be a very big issue. Cost estimates around \$200,000 for mitigation. Carry over. Casements along 7th St (Badger Creek)
Improve existing facilities & infrastructure	Ida Grove	NOTE: This project was miscategorized under “Bridges & Roads” in the 2020 Plan. It has been moved to “Improve existing facilities & infrastructure.”

		2020: Full renovation of City Hall & attached community center/senior center, starting with roof. City project Manager, Council (Community Catalyst Building Remediation funds, Private funds, City funds, Connections Area Agency on Aging, AARP Healthy Communities funds) MEDIUM PRIORITY
Improve existing facilities & infrastructure	Ida Grove	Complete. City Hall was completely reconstructed.
Improve existing facilities & infrastructure	Le Mars	2020: Pedestrian bridge connecting rec trail to golf course. In interest of maintaining natural open spaces, and recoup loss due to lack of development in those areas, the city has invested in a thriving outdoor recreation network. Intending to be interconnected, rec trails connect most facilities. At present, a pedestrian bridge that connects the rec trail to the golf course is in need of major renovation or replacement. A temporary bridge is in place but it is not a long-term solution. The city is determining the best solution for the trail bridge, therefore costs are not yet determined. <i>City Administrator, Streets, Parks Depts</i> (City funds, Active Transportation funds, Health & Wellness program funds, Transportation Alternatives Program funds, Community Benefit funds) HIGH PRIORITY
Improve existing facilities & infrastructure	Le Mars	Update: Active implementation. Funding for this project are in place with work planned for 2025/2026. City streets and parks departments are involved in oversight. TAP funds with local match from City budget will cover project.
Improve existing facilities & infrastructure	Mapleton	2020: New motor needed to maintain operation of one of the municipal wells (Willow Vale unit) <i>City Water Dept., IDNR</i> (City funds, IDNR Clean Water/Drinking Water program funds) HIGH PRIORITY
Improve existing facilities & infrastructure	Mapleton	Complete. \$30,000 project has been completed.
Improve existing facilities & infrastructure	Mapleton	2020: Rebuild needed for lift station @ 8th & Ring; <i>City Water & Public Works Depts</i> (City funds, IDNR, PDM) HIGH PRIORITY
Improve existing facilities & infrastructure	Mapleton	Complete. Estimated project cost of \$50,000 – project has been completed.
Improve existing facilities & infrastructure	Quimby	2020: Wastewater infrastructure improvements needed to address increased waterflow through and near river, which has accelerated deterioration of stabilization. Redirection of wastewater lines necessary. <i>City Council, DNR as applicable, County departments as applicable.</i> (Local funds, approved loan and bond programs, CDBG) HIGH PRIORITY
Improve existing facilities & infrastructure	Quimby	Complete. Pipeline crossing river was relocated and reconstructed to pass over an area that runs straighter, reducing wear, length of exposed lines, and risk of contamination. Project included relocation of lift station to the east. Project funded in part by CDBG (\$300K) and FEMA (\$350K).
Improve existing facilities & infrastructure	Sioux City (amended & adopted 01/13/25)	2025: Carry over to 2025 HMP. Bacon Creek Conduit. Estimated \$35M project - Reconstruction and relocation beginning at Rustin Street continuing to the outlet west of Lewis Boulevard. The project addresses the deteriorated condition of the existing conduit underneath Gordon Drive and the risk of structural failure, posing a risk to the traveling public on Gordon Drive. The conduit will be relocated from underneath Gordon Drive off-alignment and the capacity will be expanded to withstand a 100-year flooding event. The project improves resiliency of the utility, transportation infrastructure, and the region. <i>City of Sioux City, IA DOT.</i> (City of Sioux City Engineering Dept, CIP FY 2028) HIGH PRIORITY.

Improve existing facilities & infrastructure	Sioux City (amended & adopted 01/13/25)	2025: Carry over to 2025 HMP. Bacon Creek Channel Reconstruction. Estimated \$18M project is a collaborative effort to stabilize the channel built in 1930. Flooding events have resulted in Missouri River backing up channel, causing entry to the combined sanitary sewer system. Backwater infiltration has caused significant damage to Wastewater Treatment Plant. Project addresses the compromised combined sanitary system and includes repurposing the existing site to coordinate with economic development and urban use vision planning. <i>City of Sioux City, IA DOT.</i> (City of Sioux City Engineering Dept., CIP FY2028) HIGH PRIORITY.
Improve existing facilities & infrastructure	Soldier	2020: Improve waterworks-related infrastructure to better sustain extreme weather conditions and extremes in temperatures resulting in damages from frost and heave activity. Specific attention to water tower and waterlines throughout City. <i>City Council, City maintenance/waterworks.</i> (Local funds, CDBG funds, approved loan opportunities) HIGH PRIORITY
Improve existing facilities & infrastructure	Soldier	Carry over. In progress - The city has completed phase I of its \$3.2M water tower replacement project, with expectation of going live fall 2025.
Improve existing facilities & infrastructure	Ute	2020: Waterworks and water tower project including generator backup system. <i>City Clerk, Project administrator, Engineering consultant</i> (City funds, Loans, CDBG) HIGH PRIORITY
Improve existing facilities & infrastructure	Ute	Complete. Water tower replaced – higher capacity, updated system (December 2024). Project cost exceeded \$3M. Segment of water mains replaced, and generator added. Funded through USDA RD , CDBG, local funds, GO Bonds.

Relocate critical facilities	Battle Creek	2020: Complications from 2019 flooding resulted in need for elevation of the city's sewer lift station. <i>City Council, City maintenance/waterworks, collaboration with County EMA & Engineer as applicable.</i> (Local funds, PDM, Bonds/Loans through approved programs) HIGH PRIORITY
Relocate critical facilities	Battle Creek	Update. Project was not implemented but is still needed. No estimated timeline for completion as this is highly reliant on available funding sources. Project will carry into 2025 HMP. Carry over. Past flood issues resulted in need for elevation of the city's sewer lift station.
Relocate critical facilities	Cherokee	2020: Move/raise lift station at Beech St; <i>City Water & Public Works Depts</i> (City funds, IDNR, PDM) HIGH PRIORITY
Relocate critical facilities	Cherokee	Update: Carry Over. Cherokee is expanding project scope to include several infrastructure improvements. In addition to Beech Street, lift stations at E Sumner< Riverview, Emmet Dr (MHI), E Bluff, and Spruces need rising and/or repairs. Cost estimates not immediately available. <i>City Water & Public Works Depts</i> (City funds, IDNR, Disaster Response/Disaster Mitigation funds as may be available) HIGH PRIORITY
Relocate critical facilities	Ida Grove	2020: Lift station needs raising -- Hillcrest (Off 5th St); <i>City Water & Public Works Depts</i> (City funds, IDNR, PDM) HIGH PRIORITY

Relocate critical facilities	Ida Grove	Update. Carry Over. Lift replacement still needed at Hillcrest Lift Station. Cost estimate not immediately available
Relocate critical facilities	Quimby	2020: Relocation or elevation needed for Lift Station to address flooding impacts. <i>City Council, City maintenance/waterworks, Coordination with County EMA as applicable.</i> (Local funds, DNR program funds, PDM funds, approved bond and loan programs) HIGH PRIORITY
Relocate critical facilities	Quimby	Complete. Lift station moved east as part of line improvements as noted under <i>Improve existing facilities & infrastructure</i> category of projects.
Relocate critical facilities	Sgt Bluff	2020: Interest in relocating 2nd Fire Station for improved response to more areas; <i>City Admin, Fire Chief, Zone Administrator</i> (City Funds, Fire Dept Funds, Fire Assoc funds, fundraisers, Response Support funds) LOW PRIORITY
Relocate critical facilities	Sgt Bluff	Update. Project not completed. Carry over to 2025 HMP. Carry over. Interest in relocating 2nd Fire Station for improved response to more areas.

Bridges & Roads	Cherokee	2020: Collaborate w/County and State on review of and implementation of roadway elevation improvements along Hwy 3 and/or Hwy 59; <i>City Administrator & Streets Dept, County Roads Dept, IDOT</i> (Transportation funds, City/county funds) MEDIUM PRIORITY
Bridges & Roads	Cherokee	Update. Several road/bridge projects are planned with 3 in progress and others pending. Bridges pending work: Railroad Creek Bridge and E Cherry St Bridge. Needed but not yet planned: Maple Street Bridge Work on Bypass scheduled with preparation in progress. Projects as listed are carried over to 2025 HMP with HIGH PRIORITY. Carry Over. Collaborate w/County and State on review of and implementation of roadway elevation improvements along Hwy 3 and/or Hwy 59
Bridges & Roads	Danbury	2020: Road repairs from runoff damages. Interest in preventive measures by way of redirection and retention methods. <i>City Maintenance/Council, County Engineer collaboration</i> (City funds, Transportation funds) HIGH PRIORITY
Bridges & Roads	Danbury	Complete. Road repairs necessitated by runoff from flood events have been completed and were covered by FEMA funds.
Bridges & Roads	Hinton	2020: Resurface alleys due to washout during rain events. <i>City Streets Dept</i> (City funds, PDM) HIGH PRIORITY

Bridges & Roads	Hinton	Update: Some resurfacing has been completed with other still pending, and is carried over to the 2025 HMP, reduced to lesser priority. Carry over. Resurface alleys due to washout during rain events
Bridges & Roads	Ida County	2020: At Ida Grove: Potential for work to add shoulder along Old Hwy 59 and M15, also trap area attention. Work is needed along Jasper Ave; County Engineer, Collaborate w/City Admin (County funds, Transportation funds, PDM) LOW PRIORITY
Bridges & Roads	Ida County	Complete. Shoulders as provided have been rebuilt. Project cost ranged from \$8-9M.
Bridges & Roads	Ida County	2020: At Ida Grove: When flooded, no access to city wells along Keystone Ave. Mapping of well needed north of 387th St, off M15. County has access road to maintenance sheds. Improvements needed. <i>County Engineer, Collaboration with City Streets Dept.</i> (County funds, City support, transportation funds, PDM) MEDIUM PRIORITY
Bridges & Roads	Ida County	Update: Carry over. • Collaborative project needed to develop west access point to City of Ida Grove to improve access to Keystone Ave wells. • Necessity of mapping of 387th is under consideration but is carried over to 2025 plan. • County shop south of town is needing access improvements – surface repairs. Grading/straightening is planned along 235th Street.
Bridges & Roads	Ida Grove	2020: Potential paving project on 6th St to improve drainage; City Streets Dept (City funds, Transportation funds, PDM) LOW PRIORITY
Bridges & Roads	Ida Grove	Update: Carry over. Project still needed. Cost estimated at \$1.4M includes drainage along with noted street repair needs.
Bridges & Roads	Ida Grove	Completed. E. 2 nd St resurfacing. \$300K investment. <i>City Streets Dept.</i> (Local funds).
Bridges & Roads	Meriden	2020: Street repaving project to address washout and weather-related deterioration. <i>City maintenance, City Council.</i> (Local funds) MEDIUM PRIORITY
Bridges & Roads	Meriden	Closed. Project not completed. Some work completed to maintain function. Work will be implemented incrementally without anticipation of PDM funding supports.
Bridges & Roads	Monona County	2020: Bridge and tube projects needed throughout the county; improve drainage patterns, reduce rate of deterioration on bridge components/foundation; <i>County Roads Dept.</i> (County funds, Transportation funds, PDM) HIGH PRIORITY
Bridges & Roads	Monona County	Update not provided. Several road and bridge projects were implemented with several more pending. Unless a specific drainage or access barrier is specified, such projects are not included in the mitigation plan.
Bridges & Roads	Onawa	2020: Resurfacing projects that will address drainage issues and minimize the effects of inclement weather-caused deterioration. <i>City Streets Dept, collaborate with County Roads</i> (City funds, Community Benefit funds, Transportation funds) HIGH PRIORITY

Bridges & Roads	Onawa	Update. No resurfacing projects have been completed. Patchwork is implemented as needed. Current projects anticipated at \$50,000 are set to begin in 2025. Full resurfacing is still needed and carries into the 2025 HMP. Carry over. Resurfacing projects that will address drainage issues and minimize the effects of inclement weather-caused deterioration.
Bridges & Roads	Plymouth County	2020: Roadway access/elevation projects identified @ Floyd River Basin and Deep Creek Basin areas. While floodmap revisions continue, the County does not anticipate significant changes in unincorporated areas. <i>IDNR, County Conservation, County Engineer</i> (Clean Water Conservation program funds, County funds, IDNR funds, Transportation funds) LOW PRIORITY
Bridges & Roads	Plymouth County	Update was not provided. Project removed from Priority List.
Bridges & Roads	Remsen (as amended at local level 8/10/2020)	Amendment: Box culvert replacement in flood prone area (5 th St between Jackson and Marion Streets). <i>City of Remsen, Beck Engineering contracted services, City Clerk, Public Works.</i> (anticipated funding: FMA/BRIC, local match via Road Use funds, and local option funds) HIGH PRIORITY Complete. Flood mitigation project was completed with addition of box culvert and redirection of runoff. Project cost was \$475,000 - paid using entirely local funds.
Bridges & Roads	Rodney	Moved to Drainage Projects section under “Flow Control”. 2020: Interest in roadway drainage improvements; <i>City Council</i> (City funds, transportation funds, Community Benefit funds) LOW PRIORITY
Bridges & Roads	Soldier	2020: Road construction improvements needed to address buckling and weather-related deterioration. Specifically needed on road serving access to Ute. Additional throughout City. <i>City Council, Streets department, collaboration with County Roads dept & City of Ute as applicable.</i> (Local funds, transportation funds, approved bonding and local programs) HIGH PRIORITY
Bridges & Roads	Soldier	Update: In progress and ongoing. Phase I of the project has been completed. Scheduled improvements will continue through Spring and Fall on a rotating basis through 2030. Process will start over with overlay. At this time, this project will be removed from the priority list with mitigative actions met. The city may amend project back in if underwashing and runoff become prohibitive to routine maintenance, requiring more developed remediation.
Bridges & Roads	Whiting	2020: West St Bridge - pending evaluation and cost estimate; <i>City Council, Collaborate with County Engineer</i> (City funds, transportation funds, Community Benefit funds) HIGH PRIORITY
Bridges & Roads	Whiting	Complete. West St bridge and K45 bridge both redone in 2020. Project cost @ \$98,000. Loan balance remaining is \$45,000. K45 still needs new guard rails – pending (entered as new project).
Bridges & Roads	Whiting	2020: Elevate portion of roadway to correct dip in the road at Bertram intersection; <i>City Council</i> (City funds, transportation funds, Community Benefit funds) MEDIUM PRIORITY
Bridges & Roads	Whiting	Complete. Roadway elevation completed summer 2023.

Bridges & Roads	Woodbury Co	2020: Secondary Roads - about 30 bridge replacements necessary -- some immediate, <i>County Engineer, Contracted services</i> (County funds, IDOT Transportation funds) HIGH PRIORITY
Bridges & Roads	Woodbury Co	Specifics regarding completed and pending bridge projects were not provided, though the county continues to address its bridge repair backlog annually. Unless incorporated into a specific event-related recovery or prevention effort and amended, this item will not carry over to the 2025 HMP.
Bridges & Roads	Woodbury Co	2020: Secondary Roads - about 50 bridge needing rip rap, scour, overlay or other maintenance; <i>County Engineer, Contracted services</i> (County funds, IDOT Transportation funds) HIGH PRIORITY
Bridges & Roads	Woodbury Co	Specifics regarding completed and pending rip rap restoration/fortification projects were not provided. Replacement of rip rap is an annual maintenance item, with additional attention given post extreme weather event (flood, heavy rain, heavy snow, other incurred displacement). Unless incorporated into a specific event-related recovery or prevention effort and amended, this item will not carry over to the 2025 HMP.
Bridges & Roads	Woodbury Co	2020: Further incorporate mindful planning to accommodate overflow at some road points such as Old Hwy 141 and D38; <i>County Engineer, Contracted services</i> (County funds, IDOT Transportation funds) HIGH PRIORITY
Bridges & Roads	Woodbury Co	Update was not provided at the county's mitigation planning meeting.

flow control		
Flood protection	Cherokee	2020: Berm preventing runoff and Little Sioux Floodwaters from entering Spring Lake; <i>City Administrator, Parks Dept, IDNR</i> (City funds, IDNR Clean Water programs/Runoff control) HIGH PRIORITY
Flood protection	Cherokee	Completed. Project complete with construction of flood wall in 2021. Project cost & funding source not provided. However, 35' crest from 2024 flooding has presented additional concern for potential road washout. The city is interested in conducting a study to review options including but not limited to extending the wall. That is included as a new project in the 2025 HMP.
Flood protection	Hinton	2020: Floodgates @ dike; <i>City Council, IDNR</i> (City funds, PDM) HIGH PRIORITY
Flood protection	Hinton	Complete. Floodgate project completed 2021-2022. Cost & fund sources not provided.
Flood protection	Hornick	2020: Berm/raised rec trail to protect city from Ditch flooding; <i>City Council, County EMA, engineering consultant</i> (PDM and FEMA Disaster funds) HIGH PRIORITY
Flood protection	Hornick	Update – Phase 1, the mitigation portion of the project is complete . Berm has been substantially raised with primary phase of project completed 12/2024. Funded with IA Flood Mitigation dollars, the \$2.1M project included the development of a local Flood Mitigation Board. Phase 2 of the project, the trail, is not complete. The trail remains on the city's project list but will not be carried into the 2025 HMP as a mitigation action.

Flood protection	Le Mars	2020: Airport Flooding Protection - Implement protections to minimize erosion damage to runway & property overall. Floyd River w/in 50" of north end of runway. Measures to further improve previous bank stabilization efforts. Option: Reroute river; channelize. <i>City Administrator, Airport administration, IDNR</i> (Local funds, Economic Development funds, PDM) HIGH PRIORITY
Flood protection	Le Mars	Update: Project was not implemented and will be carried over to the 2025 HMP. Carry over. Further efforts are needed to stabilize riverbanks and creekbanks
Flood protection	Meriden	2020: Interest in flood control implementation to protect lagoon at north end of town. Flooding risk with heavy rain and/or rapid snowmelt. <i>City Council, city staff/maintenance</i> (Local funds, capital improvement funds, betterment funds, DNR program funding). HIGH PRIORITY
Flood protection	Meriden	Update. No action taken. City stated due to lack of funding, no major projects were completed. Project removed from priority listing.
Flood protection	Westfield	2020: City assessing options to reinforce lagoon to protect from flooding. <i>City Council, City maintenance/waterworks, County EMA and DNR as applicable.</i> (Local funds, PDM, approved bond/loan programs as applicable)
Flood protection	Westfield	Update. This project did not advance to a more permanent solution due to expenses attributed to 2019 flood recovery and again in 2024. Substantial berm repairs were completed. However, they proved insufficient for unprecedented flooding as occurred in 2024. Lack of funding and available resources contributed to delay in permanent solution. Project is still needed and will carry over to the 2025 HMP. Carry over. City seeking options to substantially reinforce berm and/or other flood protections around lagoon.

Drainage projects	Correctionville	2020: Implement drainage projects as identified; <i>City Administrator/Streets/Public Works</i> (Local funds, IDNR project funds, PDM) HIGH PRIORITY
Drainage projects	Correctionville	Update: Driftwood Street ditches completed. Carry over. Continue implementation of drainage projects. Additional areas need attention.
Drainage projects	Hinton	2020: Stormwater management projects - drainage improvements; <i>City Administration, Contracted services, IDNR</i> (Local funds, IDNR program funds, Disaster funds, PDM) HIGH PRIORITY
Drainage projects	Hinton	Update: Annual road maintenance projects have included some drainage improvements. Carry over. Starview is in need of stormwater management improvements.
Drainage projects	Holstein	2020: Sidewalk trail at ball field and rec center with drainage project incorporated; <i>City Administration, Contracted services, County collaboration for trail projects</i> (Health & Wellness funds, Transportation Alternatives funds, Local funds, fundraisers, Walk/Bike program funds) LOW PRIORITY

Drainage projects	Holstein	Update. No work has been done to date. Project is still needed, but remains low priority due to lack of readily available funding supports. Carry over. Sidewalk trail at ball field and rec center with drainage project incorporated.
Drainage projects	Ida Co	2020: At Quimby drainage ditch dredging from Quimby and establishing routine/scheduled maintenance; <i>County Engineer, Collaborate with City staff, IDNR</i> (County Roads funds, local funds) HIGH PRIORITY
Drainage projects	Ida Co	Update: Dredging has been completed for some areas, however major maintenance is still needed. Carry over. Areas of particular need of drainage ditch dredging include 7 th Street at Rowher, Jasper, and M15. Old Hwy 59 still needs attention. Project carries over to 2025 HMP
Drainage projects	Ida Grove, OABCIG	2020: Drainage improvements are needed between the high school and Badger Creek; <i>City Administrator, School Board or Plant Engineering, IDNR</i> (Local funds, School District funds, IDNR program funds) HIGH PRIORITY
Drainage projects	Ida Grove	2020: There is interest in improving drainage at Cobb Park - raise elevation, pump to drain; <i>City Administrator, IDNR</i> (Local funds, IDNR program funds, PDM) LOW PRIORITY
Drainage projects	Ida Grove	Complete. Addressing some of the needs expressed in the 2 projects indicated above, the City has implemented a \$200,000 drainage project, installing a 36" tube along 7 th Street.
Drainage projects	Kingsley	2020: Terracing needed to ease floodplain restrictions. <i>City Administration, County Engineer collaboration, IDNR, Contracted services</i> (Local funds, County funds, IDNR Program funds, USDA program funds/loan program, Disaster funds, PDM) LOW PRIORITY
Drainage projects	Kingsley	Project closed. Updated floodplain resources decreased significance of potential impacts to indicated areas, thereby removing restrictions. City will continue to consider opportunities for terracing when implementing projects, however, this item has been removed from the priority list.
Drainage projects	Mapleton	2020: Wetlands designation within city limit; <i>project led by Mapleton Community Development Corps in collaboration with the Department of Agriculture and the DNR</i> (Limited expense anticipated) HIGH PRIORITY
Drainage projects	Mapleton	Project Closed. Project will not be implemented as cost of maintenance if enacted is not feasible.
Drainage projects	Merrill	2020: Improve ditch and drainway management. Conduct through clearing and implement maintenance plan. <i>City Council, City staff</i> (Local funds) HIGH PRIORITY
Drainage projects	Merrill	Update. Issues addressed at north end of town including routine maintenance. Problems still present with particular concern over riverine flooding. Additional attention is needed to determine prevention options. Ditch maintenance is ongoing and will continue. New project added for 2025 for other options to be determined.
Drainage Projects	Moorhead	AMENDMENT. 8/2023 – City is seeking to better address stormwater runoff. Sinkholes have been appearing throughout town. A study is

		needed to confirm cause and viable options for correction and mitigation. Council approved the amendment to include a scoping project and implementation plan, and re-adopted the Regional Hazard Mitigation Plan as amended.
Drainage Projects	Moorhead	Update: Action not implemented but still needed. Carry over. City is seeking options to improve stormwater drainage.
Drainage Projects	Rodney	Pulled from “Bridges & Roads” category. 2020: Interest in roadway drainage improvements
Drainage Projects	Rodney	Update: Some work has been done on 1st, 2nd, 3rd, and Main Streets. Carry over. Remaining streets throughout town still need work to improve drainage and drainage paths. Project is carried to 2025 HMP.
Drainage Projects	Salix (As amended 01/12/2022)	2022. Recent changes in permissible stormwater drainage methods have increased flood risk in Salix during periods of heavy rainfall and/or rapid snow/ice melt. Phase I: The City plans to pursue technical assistance including but not limited to a study or preliminary engineering to assess probable solutions. Phase II: Implement stormwater drainage system to resolve issues created by cancellation of agreement to direct stormwater into nearby Drainage District. Public Works, County Board of Supervisors, IDNR, USDA, other regulatory bodies as applicable (FEMA BRIC/FMA, local funds) HIGH PRIORITY
Drainage Projects	Salix	Update – Phase I: Complete. City worked with Farmer’s Drainage District and Woodbury County, assisted with contracted engineering firm, to conduct study and form a new drainage district – Approved 12/10/2024. Phase II will now be implemented under status as a drainage district, enabling a more expeditious and streamlined process.
Drainage Projects	Salix	Carry over. Phase II - The project identified through the study included the construction of a flow channel connecting the Salix Drainage District to the Farmers Drainage District, including a retention pond and other flow diversions.

Shelter	Correctionville	2020: Considering means of enabling refuge when community center and city hall are not open. Assess feasible options in accessing when otherwise closed, or alternate location available 24 hrs. <i>City administration, Local services, agencies, businesses</i> (Local funds – additional supports unknown until solution has been identified) MEDIUM PRIORITY
Shelter	Correctionville	Implemented. Community Center remains unlocked during anticipated extreme weather events, particularly in winter. The school was designated as command center, recovery center, and temporary residence for displaced families during the 2024 flood events.

Shelter	Hinton	2020: Storm Shelters @ City Parks; <i>City Administration, County EMA collaboration</i> (Local funds, Improving public spaces funds, PDM) LOW PRIORITY
Shelter	Hinton	Update: The Elementary School is designated as a refuge site for large scale disaster vents. Carry over. Additional shelter options needed.
Shelter	Ida Grove	2020: Issue formal recommendation for owners to add cement refuge shelter to trailer park to accommodate its four (4) residents; <i>City Administrator, Property Owner(s), Residents</i> (Local funds, private funds, Response support funds, PDM pending classification of facility) MEDIUM PRIORITY
Shelter	Ida Grove	Update - Resolved. The City has opted to designate the Rec Center as refuge/shelter location in the event of disasters. As such, a new project is added under “Generators” to substantiate use during extreme events that may include power outages.
Shelter	Lawton	2020: Include tornado-rated safety features in plans for new community center; <i>City administration, Project coordinator, EMA collaboration</i> (Local funds, private funds, fundraisers, PDM) MEDIUM PRIORITY
Shelter	Lawton	Implemented. City constructed a new city hall/community center/maintenance facility that enables reasonable shelter from extreme weather. While not FEMA-level designated, the center has interior space designated as a safe area. The county has designated the new facility has been designated by the county as a recovery center as needed. Project overall cost is about \$1.3M. In addition to city staff, the fire department has access to the building in the event of an emergency or extreme weather conditions.
Shelter	Marcus	2020: Interest in improvements of Fire Department to enable Safe Room designation. City Council, Fire Chief, County EMA as applicable. (Local funds, community benefit fund programs, PDM) HIGH PRIORITY
Shelter	Marcus	Implemented. An addition to the Fire Station has been completed allowing adequate space to serve as shelter site in the event of mass displacement. An ongoing concern is coordination of supplies in the event of such disaster. City will work with county and federal/state/local response teams as appropriate to attain and allocate supplies (such as cots) as needed.
Shelter	Merrill	2020: Interest in designating refuge locations at City Park and Campgrounds. Structural enhancements to be considered for formal designation. <i>City Council, City staff County EMA as applicable.</i> (local funds, community benefit programs, local groups, fundraising)
Shelter	Merrill	Update. No action taken due to lack of dedicated funding options. Project is still needed and carries into the 2025 HMP project list. Priority is due to funding constraints, not level of need. Carry over. Interest in designating refuge locations at City Park and Campgrounds.
Shelter	Monona County	2020: At Onawa: Interest in adding formal storm shelter with tornado designation at the Fairgrounds and at the Christian Camp within the State Park. <i>County Conservation/Parks Dept, EMA, IDNR/State Parks Dept, City administration</i> (County funds, IDNR Program funding, PDM, Community Benefit funds) LOW PRIORITY
Shelter	Monona County	Update. Project not completed as funding source has not made project feasible. Project will carry over to 2025 HMP.

		Carry over. At Onawa: Interest in adding formal storm shelter with tornado designation at the Fairgrounds &/or at the Christian Camp within the State Park
Shelter	Monona County	2020: Shelter at Peters Park; <i>County Conservation/Parks Dept, EMA, IDNR/State Parks Dept</i> , (County funds, IDNR Program funding, PDM, Community Benefit funds, fundraisers, PDM) LOW PRIORITY
Shelter	Monona County	Update. Not implemented. County still interested in pursuing project at low priority due to lack of funding. Project will carry into 2025 HMP. Carry over. Shelter at Peters Park.

technology		
Improve effectiveness	Akron-Westfield CSD	2020: Fire Alert System is under review to determine options for audio alerts and direction cues for visually impaired students/staff – Flashing beacon in place for hearing impaired persons; <i>School Board, Plant Engineering/Maintenance</i> (District funds, ADA supports, local funds, fundraisers, PDM) HIGH PRIORITY
Improve effectiveness	Akron-Westfield CSD	Complete. District invested \$150,000 on updates to its emergency alert system (2023). Already suited with flashing lights for deaf/hard of hearing students/staff/visitors, audio commands are now incorporated into the system to better serve visually impaired individuals.
Improve effectiveness	MMC-RU CSD	2020: District would like to place weather radios in each building; <i>School Board, Collaboration with EMA</i> (District funds, potential PDM funds) MEDIUM PRIORITY
Improve effectiveness	Marcus-Meriden-Cleghorn (MMC) CSD	Implemented. Both Systems within the MMC-RU School District are fully equipped with weather radios.
Improve effectiveness	Remsen Union (RU)	Implemented. Remsen Union system within the MMC-RU School District is equipped with handheld radios to better accommodate interdepartmental communications all at once.
Improve effectiveness	Moville	2020: Increase supply of handheld radios to improve inner and inter-department communications; <i>City Council, Collaboration with EMA</i> (City funds, potential PDM funds) LOW PRIORITY
Improve effectiveness	Moville	Implemented. The city police and fire departments are inter-connected allowing for immediate, in-time communications as needed. The city offices use All Contact enabling constant communication through departments.
Improve effectiveness	Rodney	2020: Promote available weather alert subscription services such as Alert Iowa and storm-spotter training as available. <i>City Clerk</i> (no cost anticipated) HIGH PRIORITY
Improve effectiveness	Rodney	Update: No action specific was taken to on this project, however staff would like to revisit available opportunities and share with residents. Carry over. Promote available weather alert subscription services such as Alert Iowa and storm-spotter training as available
Improve effectiveness	Rodney	2020: Improved communication w/County re: warning siren test schedule; <i>City administration, County EMA</i> (no cost anticipated) HIGH PRIORITY
Improve effectiveness	Rodney	Implemented. Siren was fixed in 2021 and testing is uniformly conducted on a routine schedule.

Improve effectiveness	Woodbury Co	2020: EMA - Improve weather radio/communication receptors in southeast area of county; County EMA, County Board, State Communications (County funds, state program funds, PDM) MEDIUM PRIORITY
Improve effectiveness	Woodbury Co	Implemented. The county completed an upgrade of their communications systems, improving reception in problem areas. Funding source and cost were not provided.

natural barriers/ supports		
Retention Pond	Bronson	2020: Consideration to addition of Retention Pond to mitigate flooding; improve effectiveness of natural space in mitigation; <i>City administration, IDNR, Collaboration with County EMA, Contracted engineer services</i> (Local funds, Community Benefit funds, IDNR Program funds, PDM) LOW PRIORITY
Retention Pond	Bronson	Update: Action has not been taken due to other priorities, however project remains a concern for the city and will continue through the 2025 HMP planning period. Carry over. Assess opportunity to implement retention pond to mitigate flooding through natural methods.
Dyke improvement	Merrill	2020: Implementation of improvements to substantiate dyke as barrier to flooding. <i>City Council, County, and DNR collaboration as applicable.</i> (Local funds)
Dyke improvement	Merrill	Update. Cells were raised in lagoon project completed in 2019. Area was still severely impacted by floods in 2024 necessitating further consideration and expanded options.
Trees	Rodney	2020: Funding support to sustain/improve tree population; <i>City administration</i> (City funds, IDNR programs, UPS Tree Grants and similar community reforestation funds, private funds) LOW PRIORITY
Trees	Rodney	Update: No action has been taken due to lack of available funds (including local match). Community will continue to seek funding opportunities to re-substantiate its tree population. Carry over. Funding support to sustain/improve tree population.
Stabilization	All Counties	2020: Assess and test drainage controls on routine schedule. Additional assessment during heavy periods of rain/snow melt. Include efforts to stabilize guideways. Respective departments under Secondary Roads, contracted professionals as needed (annual budget funding for maintenance once established, Additional funds to develop program may require additional budget requests, grant funds through State and Federal programming) HIGH PRIORITY
Stabilization	All Cities	2020: Assess and test drainage controls on routine schedule. Additional assessment during heavy periods of rain/snow melt. Include efforts to stabilize guideways. Respective departments under Public Works, Streets, City Council, contracted professionals as needed (annual budget funding for maintenance once established, Additional funds to develop program may require additional budget requests, grant funds through State and Federal programming) HIGH PRIORITY
Stabilization	All School Districts	2020: Assess and test drainage controls on routine schedule. Additional assessment during heavy periods of rain/snow melt. Include efforts to stabilize guideways. Respective departments under Plant Engineering, Maintenance, School Board, contracted

		professionals as needed (annual budget funding for maintenance once established, Additional funds to develop program may require additional budget requests, grant funds through State and Federal programming) HIGH PRIORITY
Stabilization	Anthon	2020: Riverbank stabilization @ access point; City administration (City funds, Disaster funds, PDM) HIGH PRIORITY
Stabilization	Anthon	Update. Stabilization was implemented, however, the city would like a more permanent solution to reduce continuous rip rap replacement. Project will carry into 2025 HMP. Carry over. Riverbank stabilization @ access point; City administration (City funds, Disaster funds, PDM) HIGH PRIORITY
Stabilization	Castana	2020: Modify road overlay with "packable rock" or more stable substance to minimize washout episodes; City Maintenance (City funds, PDM) MEDIUM PRIORITY
Stabilization	Castana	Update. Carry over. Due to multi-faceted and severe funding constraints, action was not taken on this project. The city is interested in stabilizing the gravel roads throughout its hilly terrain to address proneness to wash out. Carry over. Modify road overlay with "packable rock" or more stable substance to minimize washout episodes
Stabilization	Holstein	2020: Drainage projects to stabilize dirt in areas prone to washout; City Maintenance/Streets (Local funds, PDM) HIGH PRIORITY
Stabilization	Holstein	Update: Carry over. Efforts are ongoing with consideration being given to more long-term solutions. Determination of such action has not been made. Project will carry to 2025 Plan, retaining HIGH PRIORITY.
Stabilization	Holstein	2020: Substantiate barriers @ gateway to community; City administration, County Engineer, EMA (Local funds, County funds, PDM, Community benefit grant funds) HIGH PRIORITY
Stabilization	Holstein	Project closed. No update on this activity is available. Community is not intending further action on this project at this time.
Stabilization	Ida Grove	2020: Rip rap needed @ Moorhead Ave Bridge; City administration & Streets Dept, County Engineer (Local funds, if scheduled accordingly State/Federal Transpo funds PDM) HIGH PRIORITY
Stabilization	Ida Grove	Update. Bridges are inspected every 2 years. 6 bridges are receiving ongoing erosion control (rip rap). Two bridges are scheduled for major repairs within the next 5 years as noted under New Projects: Bridges & Roads.
Stabilization	Ida Grove	Complete. Moorhead Ave reconstruction completed in 2022 with nearly \$2.24M invested. Funding sources include \$1M in SWAP funding was designated for this project.

D. Risk Assessment

Regionally, there are a few notable centers of population with Sioux City hosting the most residents and Monona County having the highest proportion of aging residents 65 years and older. Public input identifies Severe Winter Storm, Tornado/Windstorm, and Flash Flooding as causing the most concern. Thunderstorm with Lightning/Hail and Extreme Heat were

frequently rated with a high level of concern and consistently in the respondents' top three concerns.

Published: Jul, 9, 2024 at 4:57 PM CDT



SIOUX CITY (KTIV) - Iowa Gov. Kim Reynolds announced Tuesday that Woodbury County has been added to the Presidential Major Disaster Declaration for the flooding seen in June.

According to the governor's office, Woodbury County residents are now eligible for Individual Assistance under the previously approved Major Disaster Declaration for Iowa counties hit by June's severe weather. Those eligible for the assistance are people who received significant damage from severe storms, flooding, straight-line winds and tornadoes that occurred from June 16, 2024, and onward.

The Federal Emergency Management Agency's (FEMA) Individual Assistance Program is already activated for eight other Northwest Iowa counties. Those included are Buena Vista, Cherokee, Clay, Emmet, Lyon, O'Brien, Plymouth, and Sioux Counties.

www.ktiv.com/2024/07/09/woodbury-county-is-now-part-presidential-disaster-declaration/?utm June 9, 2025

SUMMARY OF DISASTERS

Floods of 2024: Between June 20 and June 22, 2024, Iowa's Regional Planning Area 4 (RPA 4), including Sioux City and surrounding communities, experienced unprecedented rainfall. In some areas, rainfall totals reached up to 15 inches over this period, with localized amounts exceeding 20 inches in parts of southeastern South Dakota and northwestern Iowa.

This extreme precipitation led to widespread flash flooding, overwhelming rivers such as the Big Sioux, Little Sioux, and Rock Rivers, and causing levee breaches in towns like Rock Valley. The flooding resulted in extensive property damage, infrastructure destruction, and necessitated numerous evacuations and rescues.

Derecho: The 2020 Midwest derecho significantly impacted Iowa's Rural Planning Agency (RPA4) region, which includes counties such as Woodbury, Plymouth, Cherokee, Ida and Monona. On August 10, 2020, a powerful windstorm known as a Derecho swept across the Midwest, causing widespread damage. In Iowa, the storm destroyed over 10 million acres of corn and soybean crops, affecting approximately 43% of the state's cropland. This powerful windstorm not only devastated crops but also caused widespread property damage, power outages, and

infrastructure disruptions, leading to significant recovery efforts throughout the region and across the state.

Rail: While train-related incidents in the region are not constant, they have been a recurring issue over the years, particularly at railroad crossings. Many communities have taken steps to address these concerns through enforcement and awareness efforts. However, the recurrence of such incidents underscores the need for continued vigilance and improvement in railroad crossing safety measures.

RECORD OF RECENT EVENTS

There are several resources for weather event records of occurrence within the region. Some examples are provided within the *Description* section of Identified Hazards portion of this plan and reference sites such as NOAA, local newspapers, and the National Weather Service. To highlight the risk some hazards pose, State and Presidential Disaster declarations are provided for reference. FEMA includes information specific to the Disaster Declaration Process on its website stating:

... All emergency and major disaster declarations are made solely at the discretion of the President of the United States.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207 (the Stafford Act) §401 states in part that: "All requests for a declaration by the President that a major disaster exists shall be made by the Governor of the affected State." <https://www.fema.gov/disaster-declaration-process>

Presidential Declarations from 11/01/2019 through 12/31/2024 that include all or some of the Region follow.

<i>ID</i>	<i>Type</i>	<i>Date</i>	<i>Incident Type</i>	<i>Declaration Title</i>	<i>Designated Area</i>
DR-4483-IA	DR	3/23/2020	Biological	COVID-19 PANDEMIC	C
EM-3480-IA	EM	3/13/2020	Biological	COVID-19	C

DR-4642-IA	DR	2/23/2022	Severe Storm	SEVERE STORMS, STRAIGHT-LINE WINDS, AND TORNADOES	C
DR-4784-IA	DR	5/24/2024	Severe Storm	SEVERE STORMS, TORNADOES, AND FLOODING	C
DR-4796-IA	DR	6/24/2024	Severe Storm	SEVERE STORMS, FLOODING, STRAIGHT-LINE WINDS, AND TORNADOES	C
DR-4483-IA	DR	3/23/2020	Biological	COVID-19 PANDEMIC	I
EM-3480-IA	EM	3/13/2020	Biological	COVID-19	I
DR-4483-IA	DR	3/23/2020	Biological	COVID-19 PANDEMIC	M
EM-3480-IA	EM	3/13/2020	Biological	COVID-19	M
DR-4796-IA	DR	6/24/2024	Severe Storm	SEVERE STORMS, FLOODING, STRAIGHT-LINE WINDS, AND TORNADOES	M
DR-4483-IA	DR	3/23/2020	Biological	COVID-19 PANDEMIC	P
EM-3480-IA	EM	3/13/2020	Biological	COVID-19	P
DR-4796-IA	DR	6/24/2024	Severe Storm	SEVERE STORMS, FLOODING, STRAIGHT-LINE WINDS, AND TORNADOES	P
DR-4483-IA	DR	3/23/2020	Biological	COVID-19 PANDEMIC	W
EM-3480-IA	EM	3/13/2020	Biological	COVID-19	W
DR-4796-IA	DR	6/24/2024	Severe Storm	SEVERE STORMS, FLOODING, STRAIGHT-LINE WINDS, AND TORNADOES	W

According to the Iowa HSEM site, a Governor's Disaster Proclamation begins the process where

–

State resources may be activated and deployed to assist with the ongoing disaster at no cost to local jurisdictions. State resources include equipment, personnel, technical assistance/guidance, supplies, and essential services to provide assistance in the form of debris removal, traffic control, levee patrol, security, vaccines, transportation, and other emergency response and recovery capabilities. A governor's proclamation may also make assistance available to low income residents in the proclaimed counties.

https://www.homelandsecurity.iowa.gov/disasters/disaster_proclamations.html

Iowa Governor’s Disaster Declarations involving one or more counties in the Region follow showing date of declaration, declaration number, incident, and county/counties from November 2019 through December 2024.

<i>Date</i>	<i>Proc #</i>	<i>Incident</i>	<i>Area</i>
8/19	2024-42	Severe Storms and Flooding June 21 and continuing	(Monona)
8/1	2024-39	Severe Storms July 29 and continuing	(Cass, Mills, Plymouth, Pottawattamie, Wapello, Webster, and Woodbury)
7/22	2024-37	Extension for June Severe Storms	(Buena Vista, Cherokee, Clay, Dickinson, Emmet, Fremont, Harrison, Kossuth, Lyon, Mills, Monona, O’Brien, Osceola, Plymouth, Pottawattamie, Sioux, Cerro Gordo, Floyd, Hancock, Humboldt, Palo Alto, Pocahontas, Webster, Winnebago, Woodbury, Worth, and Wright)
7/15	2024-34	Disaster Recovery Housing Assistance Program Activation	(Adair, Adams, Buena Vista, Cedar, Cherokee, Clarke, Clay, Emmet, Harrison, Jasper, Lyon, Mills, Montgomery, O’Brien, Plymouth, Polk, Pottawattamie, Ringgold, Shelby, Sioux, Story, Union and Woodbury)
7/3	2024-32	Severe Storms and Flooding June 21 and continuing	(Buena Vista, Cerro Gordo, Cherokee, Clay, Dickinson, Emmet, Floyd, Fremont, Harrison, Hancock, Humboldt, Kossuth, Lyon, Mills, Monona, O’Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Pottawattamie, Sioux, Webster, Winnebago, Woodbury, Worth and Wright)
6/28	2024-31	Severe Storms and Flooding June 21 and continuing	(Buena Vista, Cerro Gordo, Cherokee, Clay, Dickinson, Emmet, Floyd, Fremont, Harrison, Hancock, Humboldt, Kossuth, Lyon, Mills, Monona, O’Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Pottawattamie, Sioux, Webster, Winnebago, Woodbury, Worth and Wright)
6/26	2024-30	Severe Storms and Flooding June 21 and continuing	(Buena Vista, Cerro Gordo, Cherokee, Clay, Dickinson, Emmet, Floyd, Fremont, Harrison, Hancock, Humboldt, Kossuth, Lyon, Mills, Monona, O’Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Pottawattamie, Sioux, Webster, Winnebago, Woodbury, Worth and Wright)
6/26	2024-29	Highly Pathogenic Avian Influenza (HPAI) Extension	(Sioux, Cherokee, and Sac)
6/24	2024-26	Severe Storms and Flooding June 21 and continuing	(Fremont, Harrison, Mills, Monona, and Pottawattamie)
6/22	2024-24	Severe Storms and Flooding June 21 and continuing	(Buena Vista, Cerro Gordo, Cherokee, Clay, Dickinson, Emmet, Floyd, Hancock, Humboldt, Kossuth, Lyon, O’Brien, Osceola, Plymouth, Pocahontas, Sioux, Webster, Winnebago, Woodbury, Worth, and Wright)
6/14	2024-20	Severe weather beginning June 12 and continuing	(Monona and Woodbury Counties)
6/2	2024-17	Highly Pathogenic Avian Influenza (HPAI)	(Cherokee County)
2/23	2023-05	Avian Influenza – Extension for Buena Vista, Cherokee, Ida, and Sac Counties	(allows state resources from Iowa Homeland Security, the Iowa Department of Agriculture and Land Stewardship, and other agencies to assist with tracking and monitoring, rapid detection, containment, disposal, and disinfection, waives regulatory provisions related to commercial vehicles responding to affected sites)

1/27	2023-04	Avian Influenza – Extension for Buena Vista, Cherokee, Ida, Sac, and Wright Counties	(allows state resources from Iowa Homeland Security, the Iowa Department of Agriculture and Land Stewardship, and other agencies to assist with tracking and monitoring, rapid detection, containment, disposal, and disinfection, waives regulatory provisions related to commercial vehicles responding to affected sites)
1/3	2023-01	Avian Influenza – Extension for Buena Vista, Cherokee, Ida, Sac, and Wright Counties	(allows state resources from Iowa Homeland Security, the Iowa Department of Agriculture and Land Stewardship, and other agencies to assist with tracking and monitoring, rapid detection, containment, disposal, and disinfection, waives regulatory provisions related to commercial vehicles responding to affected sites)
12/13	2022-33	Avian Influenza – Ida County	(allows state resources from Iowa Homeland Security, the Iowa Department of Agriculture and Land Stewardship, and other agencies to assist with tracking and monitoring, rapid detection, containment, disposal, and disinfection, waives regulatory provisions related to commercial vehicles responding to affected sites)
12/6	2022-32	Avian Influenza – Cherokee and Sac County	(allows state resources from Iowa Homeland Security, the Iowa Department of Agriculture and Land Stewardship, and other agencies to assist with tracking and monitoring, rapid detection, containment, disposal, and disinfection, waives regulatory provisions related to commercial vehicles responding to affected sites)
5/31	2022-20	Severe weather beginning May 26 and continuing	(allows state resources to be utilized to respond to, and recover from, the effects of severe weather in Boone, Des Moines, Hamilton, Ida, Lyon and Webster counties)
5/20	2022-19	Avian Influenza – Extension for Bremer, Buena Vista, Cherokee, Guthrie, Hamilton, Hardin, Osceola, Sac, and Taylor Counties	(allows state resources from Iowa Homeland Security, the Iowa Department of Agriculture and Land Stewardship, and other agencies to assist with tracking and monitoring, rapid detection, containment, disposal, and disinfection, waives regulatory provisions related to commercial vehicles responding to affected sites)
4/22	2022-17	Avian Influenza – Extension for Bremer, Buena Vista, Cherokee, Franklin, Guthrie, Hamilton, Hardin, Humboldt, Osceola, Sac, and Taylor Counties	(allows state resources from Iowa Homeland Security, the Iowa Department of Agriculture and Land Stewardship, and other agencies to assist with tracking and monitoring, rapid detection, containment, disposal, and disinfection, waives regulatory provisions related to commercial vehicles responding to affected sites)
3/31	2022-10	Avian Influenza – Cherokee and Osceola Counties	(allows state resources from Iowa Homeland Security, the Iowa Department of Agriculture and Land Stewardship, and other agencies to assist with tracking and monitoring, rapid detection, containment, disposal, and disinfection, waives regulatory provisions related to commercial vehicles responding to affected sites)
12/16	2021-29	Severe weather beginning December 15 and continuing	(allows state resources to be utilized to respond to and recover from the effects of this severe weather in Emmet, Franklin, Humboldt, Palo Alto, Pocahontas, and Woodbury counties)
12/16	2021-28	Severe weather beginning December 15 and continuing	(allows state resources to be utilized to respond to and recover from the effects of this severe weather and activates the Iowa Individual Assistance Grant Program for qualifying residents, along with the Disaster Case Management Program, for the following counties: Allamakee, Appanoose, Audubon, Bremer, Buena Vista, Butler, Calhoun, Cass, Cerro Gordo, Cherokee, Chickasaw, Davis, Fayette, Floyd, Greene, Guthrie, Hamilton, Hancock, Hardin, Harrison, Howard, Ida, Kossuth, Lucas, Madison, Marshall, Mills, Mitchell, Monroe, Montgomery, O’Brien, Page, Pottawattamie, Ringgold, Sac,

			Shelby, Union, Washington, Webster, Winnebago, Winneshiek, Wright, and Worth)

While natural disaster-related proclamations are self-explanatory, harvest and fuel shortage proclamation can increase risk in unexpected ways. Both proclamations result in ease of transport restrictions related to hours worked, and some time load capacity, to meet increased demands – for fuel or for expediency in transporting ag products. Conditions, while apparently deemed necessary, compound potential effects of all hazards. Drivers are likely to be more tired and therefore more at risk for a mistake. Fuels loads are already volatile. Increased capacity on grain loads further stresses roadways, accelerating deterioration and ultimately intensifying the impact of weather disasters such as flooding. Therefore, inclusion of these conditions is consistent with the intent of this plan to guide mitigation efforts.

Historic December Severe Weather Outbreak Brings Damaging Winds and Tornadoes to Northwest Iowa

Sioux Falls, SD
Weather Forecast Office

[Weather.gov](#) > [Sioux Falls, SD](#) > Historic December Severe Weather Outbreak Brings Damaging Winds and Tornadoes to Northwest Iowa

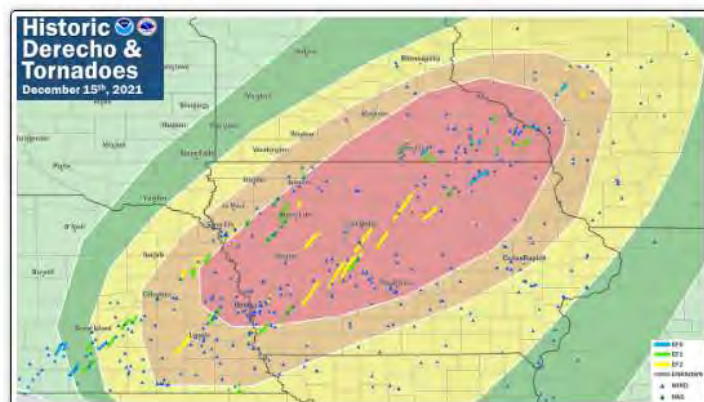
[Current Hazards](#) [Current Conditions](#) [Radar](#) [Forecasts](#) [Rivers and Lakes](#) [Climate and Past Weather](#) [Local Programs](#)

Overview

An unseasonably strong and dynamic winter system brought severe thunderstorms and tornadoes to portions of Nebraska, Iowa, Minnesota and Wisconsin on Wednesday, December 15. In addition to this, the region experienced widespread strong winds, which resulted in numerous trees, structures, and powerlines being damaged.

To put things into perspective on how rare this event was, it was the first time since record keeping began in 1986 that our office had to issue both a severe thunderstorm and tornado warning during the month of December, with 6 and 8 issued respectively.

In total, this event led to 189 warnings being issued across the central U.S., with 118 of those being for severe thunderstorms and the remaining 71 being for tornadoes.



SPC Day 1 Outlook and Reports - December 15, 2021

<https://www.weather.gov/fsd/20211215-Tornado-nwia?utm>

June 9, 2025

Additional risk can be assessed due to landforms and geologic characteristics of a given area. Presence of loess hill landforms within the region contribute to mitigation planning at onset of development. Author Jean C. Prior includes the following in her book, *Landforms of Iowa* (University of Iowa Press, 1991) as drawn from Iowa Geological Survey. Please note: quoted text includes edits by Drew Hutchinson as provided.

The erodibility of loess and its instability when wet pose other serious problems and land-use hazards in this region. Soil erosion rates are very high, and the amount of eroded sediment carried in streams draining the region is among the highest recorded in the United States. Gully erosion is especially pronounced, and these deep, narrow, steep-sided features are characteristic of the region's smaller drainages (photo, left). Gullies lengthen headward, deepen, and widen quickly after rainstorms, cutting into cropland, clogging stream channels and drainage ditches, and forcing costly relocations of bridges and pipelines.

County and Jurisdiction Profiles include records of events more specific to respective communities.

E. Mitigation Goals

This Regional Hazard Mitigation Plan serves to outline a singular objective: Improve the Region's resilience to natural disasters through effective and efficient investment of public funds and private investment collaborations. This can be achieved by:

1. Maximizing use of existing **resources** and collaborations.
 - a. Take advantage of *natural resources* as mitigation components
 - b. Investigate available *human* and *organizational resources* through existing collaborations and civic supports such as County Emergency Management Agencies, regional training opportunities through emergency response associations, the LEPC, local businesses and health and human services agencies.

- c. Implement *technology-based resources* that are low cost, free, or already funded.
2. Improve **communication** of information and provide education. Use established means of communication to educate on preparedness and raise awareness about hazard mitigation. For example – city website, utility billings, community bulletin board or message board, newsletter, and school district communications.
3. **Protection** of our people, public and private environments, facilities, and assets. Implement actions and strategies that significantly decrease risk associated with the effects of natural and other hazards that may otherwise result in the loss of life or damage to or loss of property.
4. Continued **functionality of operations** in the event of a natural disaster. Establish means of maintaining function of city operations and response efforts regardless of circumstance, ensuring availability of appropriate equipment as needed.
5. Implement well-planned projects that address **multiple issues** or serve more than one purpose. Reduce vulnerability to hazardous events by incorporating mitigation actions/strategies into all capital improvement and community betterment projects. Promotion of personal well-being and healthy living improves individual resilience and contributes to added strength of the whole.

F. Mitigation Actions, Strategies, & Projects

The intent of this Plan is to guide planning in a manner that offers resilience as opposed to reaction. It serves as a reminder to assess the cause of what is costing the community the most money on a recurring basis, and to determine ways to mitigate or eliminate those recurring expenses. Ideally, all jurisdictions would be able to implement all of the best practices discussed through the course of developing this Plan. Realistically, some communities are in a position to consider presented actions and strategies as part of a new project only, recognizing current losses as just that – losses. As a Regional Plan, general actions and

strategies are provided as uniform considerations for all communities. Projects that are actually planned or are in development are included in the respective community profiles.

There are no across-the-board solutions to every problem resulting from natural and other hazards. Geography and topography varies by community while weather patterns are fairly consistent. Some weather events (such as tornado or hail) are equally likely to occur in the region, however impact may be isolated to a single, small area. Technology is the same everywhere, though access varies by location. Some municipalities have the means to guide growth in a methodical, strategic manner and others operate in a more responsive mode, making adjustments as needed. Available non-financial resources are similar for all jurisdictions. However, population, a specific event, or per capita income often drive monetary awards and allocations. Understanding the elements that remove uniformity of implementation of desired strategies and actions is a significant consideration in assessing risks and identifying projects for each jurisdiction. With such factors included for consideration, it may be assumed that the minimum benefit of proposed actions is protection of a jurisdiction's given valuation. As a base point, the valuation as provided in County, City, and School District profiles indicates the least of which may be protected and/or improved by mitigation actions as provided. Interdependency of public facilities, buildings, and infrastructure justifies use of an overall valuation as opposed to that of a singular space. Benefits to private properties and individuals are assessed during project planning and funding procurements but are not part of the consideration for prioritizations in this Plan. Using this foundation, a listing of actions and strategies that are of interest to all or most of the communities and districts included in this Plan follows.

GUIDING PRINCIPLES FOR DETERMINING ACTIONS, STRATEGIES, & PROJECTS

As mentioned in the Region Capabilities discussion, a thriving transportation network is critical in defining access and evacuation in the event of some hazardous incidents, an in response to most of them. Regional transportation projects that are eligible for state allocations of federal funds are processed through the MPO and SRTPA under specific programs that include the Transportation Improvement Program (TIP). Involving a 5-year planning period, projects are determined well in advance of implementation and often have the overall effect of improving

resilience during and after hazardous events. More information about TIP and other transportation projects can be found on SIMPCOs website at www.simpco.org under Divisions, Transportation Planning.

Additional detail by project is provided in Title III, Section E for projects included in the 2020 HMP and in Section F for projects identified for implementation in the next five years.

PRIORITIZING ACTIONS

High Priority Projects include one or more of the following considerations.

- Action reduces risk to persons and properties in the event of natural or other disaster
- Action is imminently necessary and unavoidable (especially in situations as they arise that create necessity of immediate response). Action may be temporary or permanent
- Reduction/Elimination of recurring damages
- Collaborative projects that serve multiple purposes or may be combined with other funded projects
- Improves use of existing facilities, structures, infrastructure, programs, and/or tools
- Lack of response results in noncompliance
- Attainability of funding
- Addresses accessibility thereby reducing the risk to persons with limited mobility, hearing, and/or vision

Moderate or Medium Priority projects have some of the same characteristics as high priority projects. However, when conditions are stable, conditions are such that action may be delayed until additional funding is secured or work aligns with other planned projects. If conditions experience rapid deterioration, such projects would move to High Priority.

Low Priority projects are those that are best implemented as elements within new or potential projects or projects that may only be possible in the aftereffects of a hazardous event.

Projects as deemed necessary or desired based on current conditions may vary greatly in a very short time period. Expected issues, such as flooding along the Big Sioux and Little Sioux Rivers, have mitigation in place such as floodplain designations. Unforeseen events, such as pandemic

human disease decreasing functioning capacity of emergency response teams, have unknown impacts and are key reminders to consider a wide range of obstacles and how they may be countered. A formal Disaster Declaration from City to State to Presidential initiates emergency funding supports and are therefore not the primary focus of projects outlined in this plan. However, with each extreme weather or hazardous event, communities learn more about their own resilience and are then able to further develop mitigation projects. To accommodate newly identified projects, a jurisdiction may at any time amend its identified actions, strategies, and projects by adopting the necessitated amendment at the jurisdiction level and communicating that update with the County, County Emergency Management, the State Department of Emergency Management, and FEMA.

The primary benefit in planning mitigation measures as a region is the ability to identify actions that are applicable to all or most participating jurisdictions. Not all participants may be able to initiate immediate implementation on any given action, in some cases they may not be able to proceed without a disaster declaration and receipt of related allocated funds at all. However, incorporating knowledge of ideal measures into this and other jurisdictional planning documents enables consistent goal setting and project development.

In the interest of maintaining a region-level accounting of mitigation actions, strategies and projects, all identified projects as determined necessary through the development of this Hazard Mitigation Plan are listed below as well as in the corresponding jurisdiction profile. Projects are grouped under common Goals, Hazards Addressed, and type of project. Beside the city name is the project description, listing of responsible parties (*italicized*), and potential funding sources (in parentheses). Indications do not imply formal assignation of project lead, nor does it imply guaranteed funding. Information is provided based on likely process of implementation. Jurisdictions are responsible for maintaining adequate Progress Reports to ensure accurate and complete follow-up on future updates to this Plan. This record outlines those actions as required for update in successive plan development.

IDENTIFIED ACTIONS, STRATEGIES, & PROJECTS

Communication /Education		
Promo/Info	Akron-Westfield CSD	New. School is interested in sharing information with students & their families. District plans to coordinate with Plymouth Co EMA for PSA formatted messages to include in communications and on website. District admin team, Principal, County EMA (no funding needs anticipated) HIGH PRIORITY
Promo/Info	Aurelia	Carry over. Seek Smoke Detector program opportunities and similar supports, when offered at County or Region levels and promote accordingly, <i>City Clerk, Public Health, EMA</i> (for promo: No dedicated funding necessary. For detectors: Community grants, pre-disaster funds) HIGH PRIORITY
Promo/Info	Aurelia	New. City intends to increase awareness of Alert Iowa program through promotion and registration provision on city communications. City Clerk, County EMA (no expense aside from staffing hours is anticipated) HIGH PRIORITY
Promo/Info	Cherokee	New. The city is committed to promoting alert systems as already available through the county and state. City Clerk, City Administrator, County EMA (No funds expected to be needed) HIGH PRIORITY.
Promo/Info	Cushing	New. City is committing to incorporating public awareness for disaster preparedness through promotion of Alert Iowa system. <i>City Clerk, Council, County EMA</i> (no funding needs anticipated. HIGH PRIORITY
Promo/Info	Galva	Carry over. City intends to continue seeking funds to implement project. Obtain weather radio and additional communications equipment such as handheld radios for direct communication with responders; <i>City Council, County EMA to assist</i> (local funds, PDM funds, Community benefit grant funds) MEDIUM PRIORITY
Promo/Info	Hinton	Carry over. Some lines have improved but concern remains a factor in communicating course of action and conflicting chain of command (for example, C60 affecting County, DOT, City) as may result in road closures from varying directions and inadvertent closure of backup or designated alternate routes. <i>Public Works, County EMA, County Secondary Roads, IADOT.</i> (Intent is to use existing resources in improved format to ensure communications of intent. No additional funding needs anticipated) HIGH PRIORITY

Promo/Info	Ida Co	Carry over. County intends to continue promoting state-funded training programs as available. Improve awareness of program availability. <i>County EMA, emergency response teams throughout county, State program officer(s).</i> (State program funds where applicable; in-kind volunteer time) HIGH PRIORITY.
Promo/Info	Ida Grove	New. City promotes county-based alerts. Interested in increasing scope of advisory notifications to expand from just weather to other issues such as boil advisories. <i>City Clerk, Public Works, County EMA, other Department heads as applicable.</i> (Local funds, safety grants, weather preparedness program funds if available) HIGH PRIORITY.
Promo/Info	Marcus	New. City is interested in expanding opportunity for preparedness workshops and readiness campaigns to better inform residents of potential disasters. Workshop/information would include before/after preparation including “ready bags” with medications and other necessary items, especially if urgent evacuation is issued. Additional preparedness resources would include facilitating a safe check process for aging and specialized needs neighbors (i.e. oxygen tank dependency or mobility limitations) and the implementation of a buddy system to ensure communications are thorough and complete for those not routinely using social media or cell phones. <i>City, local response teams, County EMA, Red Cross/United Way affiliates as applicable</i> (Need for dedicated funding not anticipated, use of local communications formats expected) MEDIUM PRIORITY
Promo/Info	Plymouth Co	New. Plymouth County. Continuity of Operations plan development is in the works, assigning use of facilities when relocation is necessary. Plan includes consideration of displacement potential for all county services. Involved parties: all department heads, Clerk of Court, State Officers, DOT, DNR, VA.
Promo/Info	Sgt Bluff	New. Interest in developing public awareness campaign for emergency preparedness. Specific topic of interest: lightning awareness and safety. Others as deemed appropriate for season. <i>Public Works, Parks & Rec, City Council, County EMA</i> (Local funds, no additional dedicated funding expected to be necessary) HIGH PRIORITY
Promo/Info	Sioux City	New. Efforts in progress to update Red Alert geo mapping capacity to specific areas and to address more than just snow city-wide. <i>Public Works, Communications Department.</i> (Local funds/annual budget) MEDIUM PRIORITY

Promo/Info	SCCSD	New. Interest in promotion of established practice of Alert Iowa system in conjunction with school's internal alert system; School communications teams, County EMA (No dedicated funding necessary) HIGH PRIORITY
Promo/Info	Struble	Ongoing. Promote established warning systems such as Alert Iowa system; Promote programs as available through regional resources. <i>City Clerk, County EMA</i> (No dedicated funding necessary) HIGH PRIORITY

Warning Sirens	Blencoe	Carry over. The City still needs a second warning siren to sufficiently serve its corporate boundaries and nearby rural residents. Cost is approximately \$15,000. Funds have not been designated. City will pursue grant opportunities and continually review opportunities to include project in the annual budget. This project will carry as an ongoing effort with MEDIUM PRIORITY.
Warning Sirens/Alerts	Cherokee	New. The city is interested in implementing a flood warning system that can be used for in-time communication of known, pending, likely, or immediate flood conditions when urgent action is necessary. Preliminary discussion leads to use of cell alerts, but alternatives effective for those not using cell phones or in the event of service disruptions are still needed. Study or system development may be necessary as a solution is not immediately known. <i>City, Public Works, County EMA, IDNR, US ACE (FMA/PDM, local funds, community foundation grants, public safety funds, others TBD)</i> HIGH PRIORITY
Warning Sirens	Holstein	Carry over.. Project carried over to 2025 Plan as siren is still needed. Community will continue to review grant and funding support opportunities as well as assess feasibility of fundraising to boost local fund options. Expected cost is in excess of \$15,000. Additional warning siren would benefit City - potential location near south end of town near CharMac, Ridgeview, Cobblestone Inn; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Ida Grove	New. The city is planning to replace or upgrade the sirens located at 4 th & Moorhead Streets and on the 600 block of N Main and N 2 nd Streets. <i>Public Works, County EMA</i> (PDM, local general funds) HIGH PRIORITY
Warning Sirens	Le Mars	New. New warning siren at 34 th & Lake is planned for 2025. <i>Public Works, County EMA</i> (PDM, public safety funds as may be available, community grants, local general funds) HIGH PRIORITY

Warning Sirens	Mapleton	New. City is seeking to replace the motor on their aging warning siren located at the park. Maintenance on existing is increasingly cumbersome with lack of replacement parts and continuous repairs needed. <i>Public Works, County EMA</i> (PDM, public safety funds as may be available, community grants, local funds) HIGH PRIORITY
Warning Sirens	Monona Co / Rodney	Carry over. Additional sirens in rural recreation areas such as the Rodney Recreation Pits; <i>County EMA</i> collaboration w/Rodney <i>City Council</i> , (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Monona Co	Carry over. Warning Siren at Lewis & Clark Lake needed to improve warning efforts in the recreation area. <i>County Board of Supervisors, EMA, various departments.</i> (County general fund/EM line item, PDM, community benefit fund programs) MEDIUM PRIORITY
Warning Sirens	Monona Co / Blencoe	New. City is interested in partnering with the county to install a warning siren for the NEW Cooperative Port pf Blencoe to serve the port and nearby park. <i>County, County EMA, City of Blencoe, Industry partners</i> (Private funds, Pre-disaster funds as available, local and county funds, transportation funds as may be applicable) HIGH PRIORITY
Warning Sirens	Moorhead	Carry over. City siren needs rewiring/electrical replacement. Fire Department interested in upgrade pending fundability. <i>City Council, Fire Department, County EMA.</i> (Local funds, BRIC as available if coordinated with additional projects) MEDIUM PRIORITY.
Warning Sirens	Moville	Carry over. Add warning sirens to supplement existing. City still interested in fully assessing need for additional siren(s). Cell phone-based alerts may meet needs of most, but not all. MEDIUM PRIORITY
Warning Sirens/Alerts	Plymouth Co	New. The county is interested in enhancing capacity for alerts at the fairgrounds. As large gatherings tend to slow cell networks, a booster is needed to ensure timely notifications, especially for larger scale outdoor events. <i>County EMA, Fair board</i> (Pre-disaster mitigation funds, Community Safety program funds, county funds, allocated fairground facility funds) HIGH PRIORITY
Warning Sirens/Alerts	Plymouth Co w/ City of Le Mars	New. Further consideration is needed for improved localized warnings in Le Mars, narrowing scope of generalized county-wide warnings for events that may have significant in-town effects. Such specification are expected to improve school district and shift adaptations for major employers as may be necessary. <i>County EMA, City of Le Mars, Emergency Response teams</i> (Pre-disaster mitigation funds, Community Safety program funds, county funds, allocated fairground facility funds) HIGH PRIORITY

Warning Siren	Sgt Bluff	New. City is considering need for additional warning siren due to development of East Campus which includes outdoor school sports facilities in addition to expansion of homes and trail connections. Implementation is dependent on school district development planning as well as population changes. <i>City, Public Works, Utilities, County EMA.</i> (Local funds, BRIC funds, local community and foundation grants, School District funds) Currently HIGH PRIORITY but may downgrade pending school bond measure (2025)
Warning Sirens	Smithland	Carry over. City has determined replacement of siren is necessary as parts are no longer available to maintain current siren. Replace warning siren. <i>Public Works, City Clerk, County EMA</i> (local funds, community foundation grants) HIGH PRIORITY
Warning Siren	Struble	New. City is interested in replacing warning siren. Current siren had aged out with replacement parts hard to find and very expensive. <i>City council, County EMA.</i> Local funds, pre-disaster/mitigation funds as may be available, community foundation grants, community betterment grants) HIGH PRIORITY

Programs	Correctionville	New. (Property Acquisition) City is in progress of developing a housing program involving acquisition of flood prone properties. Project includes potential park expansion to include wetlands conservation / preservation area for prone property adjacent to Copeland Park. City Council, Residents, FEMA, IDNR, others to be determined (Disaster Recovery funds, PDM as available/applicable, other source to be determined) MEDIUM PRIORITY
Programs	Hornick	New. Interest in implementing Smoke Detector check/install program in collaboration with Fire Department and County departments as applicable (Health, EMA). City is aware that county has units available. Distribution & Install process not established. <i>City, County EMA, FD</i> (no funding needs anticipated) MEDIUM PRIORITY

Assessment/Study / planning	Blencoe	New. Emergency Response Plan – city is interested in updating and formalizing its emergency response plan. City staff, County EMA (local funds) HIGH PRIORITY
Assessment/Study	Cherokee Co	New. A study of several tributaries is need to assess options for collection, redirection, diversion. Waterways include Mill Creek, Little Sioux River, Railroad Creek. County will support study of others as collaborative project. <i>EMA, County Board, affected cities, Conservation Board, DNR, ACE, Secondary Roads.</i> (Scoping project-PDM funds as may be available, local funds from participating entities)

Assessment/Study	Ida County	New. Due to excessive washout during flash flood events, enhanced by extremely dry/drought conditions, the county is interested in assessing alternative practices to stabilize gravel roads. Key concern is maintaining access/exit in the event of severe weather. This may include a demonstration project to test varying applications. <i>County Engineer/ Secondary Roads, IA DOT, County EMA</i> (Road use funds, local funds, USDA or DNR programs as may be available, Proj scoping funds). MEDIUM PRIORITY
Assessment/Study	Ida Grove	New: Interested in pursuing a study re: long term street repairs. Issues include drainage and flow control in addition to surface maintenance. Project in review stage and cost not readily determined. City Clerk, Streets Superintendent, Public Works, contracted engineering firm, regulatory bodies as may be applicable – County Roads, IA DOT. (Local funds, STBG/Road use funds as may be approved, local foundation grants). MEDIUM PRIORITY
Assessment/Study	Le Mars	New. Floyd River Redirection Study to address ongoing flood concerns as each recurring heavy flow and river flooding events decrease unaffected area surrounding the airport. Flow currently hooks around north end of runway, looping around again eastward at the south end. South end is progressively shifting east creating an unplanned contact point. The City would like to review options to redirect flow to protect its airport. <i>City Administrator, County departments as applicable, IDNR, State and Federal programs as may be applicable, contracted engineer.</i> (Local funds, BRIC/FMA technical support, other grants) HIGH PRIORITY
Assessment/Study	Moorhead	Added by amendment 2021. Still needed – Study needed to determine source/cause of sinkholes believed to be a delayed effect of extensive area flooding in 2019. City’s initial assessment revealed no visible effects of that year’s flood. By 2021, sinkholes appeared throughout town affecting roadways and sidewalks. It is expected that underwashing caused by high velocity runoff is the primary cause of the sinkholes, however a study is needed to confirm that. Included in the study is an review of solutions for implementation that would eliminate the cause and prevent recurrence. City public works, State Homeland Security and Emergency Management, County EMA, USDA, potentially IDNR, other state departments as may be appropriate. (FEMA BRIC/FMA technical assistance, USDA programs, local funds) HIGH PRIORITY. Update. Initial application was not funded (2023). City is carrying project into 2025 plan with the intent of continuing to pursue funds to determine feasible solution(s) to the sinkhole issue.

		Carry over. – Study needed to determine source/cause of sinkholes. Included in the study is an review of solutions for implementation that would eliminate the cause and prevent recurrence. City public works, State Homeland Security and Emergency Management, County EMA, USDA, potentially IDNR, other state departments as may be appropriate. (FEMA BRIC/FMA technical assistance, USDA programs, local funds) HIGH PRIORITY.
Assessment/Study	Region (Specified interest from Region Planning Team, Cherokee County, Smithland)	New. City is interested in a collaborative approach to a regional tributary study to improve monitoring capacity of tributary waterways to improve proactive flood preparations, including but not limited to monitored gauges. <i>Plan-participating counties and communities, IDNR, U SACE, others as applicable.</i> (funding sources TBD based on participation and lead entity) HIGH PRIORITY

Tools/Equipment		
Generator & Related Projects	Plymouth County	New. The County will continue this project, coordinating with communities to ensure their panels are prepped for connection. Cost will vary by facility. <i>County EMA, City public works departments.</i> (Emergency preparedness programs, BRIC, local funds, county funds) HIGH PRIORITY
Generator & Related Projects	Akron	Carry over. Transformer needed at wells to make ready for generator connections; <i>City Public Works & Waterworks Depts</i> (Local funds, Community benefit fund grants) HIGH PRIORITY
Generator & Related Projects	Akron-Westfield CSD	New. Generator on facilities list but purchase and implementation not scheduled. Cost estimated at \$350,000. <i>School Board, Collaboration with city hosting facility, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Aurelia	Carry over (moved from Improve Existing Facilities). Community ctr updates to improve capacity to serve as refuge location in the event of an emergency. Transfer switch added to community center after 2021 tornado, funded privately. Dedicated generator still needed. Cost estimate provided in 2023 is \$55,000. Portion of funds have been set aside. Project pending availability to cover balance. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Battle Creek	New. Transfer switches are need for critical facilities including: Community Center, City Shed/Ambulance Shed, Lift Station, wells. This meets minimum needs in power outages enabling use of mobile generators available through county or private entities. <i>City Council, County EMA</i> (Local funds, PDM, public

		safety funds as may be available, community benefit funds) HIGH PRIORITY
Generator & Related Projects	Battle Creek	New. Dedicated generator for lift station &/or wells. One mobile available but insufficient if several systems are cut from power. Primary use is for wells. Estimated cost \$50,000. <i>City Council, County EMA</i> (Local funds, PDM, public safety funds as may be available, community benefit funds) HIGH PRIORITY
Generator & Related Projects	Blencoe	Carry over. Generators as noted in 2020 are planned for city hall/community ctr which operates as command center as needed; implementation at the N Manley Lift Station, estimated cost: \$35,000. <i>Public Works.</i> (Local funds, pre-disaster funds) HIGH PRIORITY
Generator & Related Projects	Blencoe	New. In addition to the lift station project, generators are planned for the Community Center (to be established as Command Center) and the Fire Station (to maintain operations in the event of a disaster) at the estimated cost of \$35,000 each. <i>Public Works.</i> (Local funds, pre-disaster funds) HIGH PRIORITY
Generator & Related Projects	Bronson	Carry over. The City is still seeking funding supports and will carry project into 2025 Plan with modified priority level. City has designated Community Center as refuge site/command center in the event of an emergency. A dedicated generator would facilitate that use. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Generator & Related Projects	Cherokee (City of)	New. A generator is needed for the community center which serves as a refuge/shelter center during extended power outages and as needed for extreme weather or crisis events. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee (City of)	New. A generator is needed for the community center which serves as a refuge/shelter center during extended power outages and as needed for extreme weather or crisis events. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee (City of)	New. Generators are needed for Radio Repeaters that are essential for communications between the Police Department and Public Works, especially during power outages. Current backup is supplied via battery which is intended to bridge connections until a dedicated power source is (re)connected, lasting no longer than 30 minutes. Repeaters are located on - Hill Street Water tower - Main water tower at the intersection of Hwy 59 and Hwy 3

		The generators would serve dual purpose, also powering the pumps and equipment at respective towers to maintain functionality of the water system. <i>Public Works, County EMA</i> (PDM funds as available, CDBG DR as applicable, Response/Communications funds as available) HIGH PRIORITY
Generator & Related Projects	Cherokee County	Carry over. trailer-mounted generator needed to facilitate county response efforts <i>County EMA</i> (Local funds – not yet allocated, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee County	New. On-site generator needed for EOC/EMA for continuity of operations extreme weather events and other disasters. Estimated cost @ \$350,000. <i>County EMA</i> (Local funds – not yet allocated, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee County, Cherokee CSD	New. generator to facilitate use of High School as refuge / shelter location <i>County EMA, School Superintendent / Board, City of Cherokee</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee County	Carry over. On-site permanent generator for Courthouse; <i>County EMA</i> (County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Danbury	Carry over. Portable generator needed for water plant with potential to serve various facilities. Added: Transformer switches needed to enable connections. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds, local funds) HIGH PRIORITY
Generator & Related Projects	Hinton	New. This project will carry over into the 2025 plan maintaining the planned Lagoon Lift Station generator (scheduled for 2026) and the addition of need for a generator at the Public Safety Building. The project at the lagoon includes a loop connection with the Electric Company. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, BRIC, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Holstein	2020: Permanent, dedicated generators @ lift stations & water plant; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Holstein	Carry over. Permanent, dedicated generators @ lift stations & water plant. The City has received quotes to initiate the project. Planned cost is \$197,000. Support funding has not been secured. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, pre-

		disaster/mitigation funds as available, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Ida County	New. County is considering funding opportunities to ensure all communities are equipped with generators and/or transfer switches at City Halls/Community Centers and Fire Departments. <i>County EMA, City Emergency Response Department(s)</i> , (Varying levels of funds needed. Support may come through County, State, and Federal grant and loan programs) HIGH PRIORITY
Generator & Related Projects	Ida County	New. Add generator or transfer switch capacity to each County Department to ensure continuity of operations in the event of a disaster. Consider relocation opportunities in the event of displacement during and after absence of dedicated power source. County EMA
Generator & Related Projects	Ida Grove	Carry over. Dedicated generators needed at City Hall and Moorhead Avenue. An additional portable generator is needed to serve all lift stations with that one generator dedicated to moving between stations as appropriate. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Ida Grove	New. Generator needed at Rec Center to facilitate function as refuge/shelter designation during disasters and other extreme hazard events. <i>City Council, Public Works, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Kingsley	Carry over. Generators needed at water plant. A portion of the backup power needs are included in the Water Plant. Replacement project slated for FY2026. Estimated project budget is \$5.5M. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, BRIC, Community Benefits funds, USDA) HIGH PRIORITY
Generator & Related Projects	Kingsley	New. The city has purchased a generator (\$50,000) for the community center. Funds have not yet been fully designated for installation. Cost to be determined pending correlation to other like projects. <i>City Council, Public Works, County EMA</i> as may be needed. (Local funds, safety/emergency response funds as may be available, pre-disaster/mitigation funds as may be available. HIGH PRIORITY
Generator & Related Projects	Kingsley-Pierson CSD	New. Highschool currently has a generator as installed in 1979. A new generator is need to meet capacity of updated facility and to ensure viability for use as a refuge location in the event of a disaster or other extreme event. Interest in transfer switches at all facilities. <i>Superintendent, District Maintenance/Crew, Plymouth and Woodbury County EMAs</i> as

		<i>applicable</i> (district and local funds, county supports, PDM as may be applicable) HIGH PRIORITY
Generator & Related Projects	Lawton	New. Prepare generator connection and install at Fire Station. <i>Fire Chief, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Mapleton	Correction to the 2020 Plan stating generator was added. Carry over. Additional generators are needed to maintain function of critical facilities during disastrous and other extreme events. <i>City Administrator, Waterworks, County EMA</i> (City funds, community benefit funds, IDOT program funds, PDM funds) HIGH PRIORITY
Generator & Related Projects	Marcus	Carry over. Generator for Fire Department to enable use as emergency shelter. Project is in progress as an included component of a Fire Station Expansion Project. As of late 2024, the pad has been laid, and a dedicated generator is planned. As of December 2024, local budget is the primary funding source with the city continuing to consider additional options. <i>Fire Chief, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, BRIC, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Marcus	New. Install transfer switch at Community Center, a critical facility as it serves a command center, refuge/shelter as needed in the event of a disaster or extreme event. Facility available for residents, students, and nearby communities as may be necessary.
Generator & Related Projects	Marcus	Carry over. Generator at Shelter house, also for use in the event of power outage during an emergency; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Marcus-Meriden-Cleghorn and Remsen Union CSDs	New. Both districts comprising MMC and RU are interested in outfitting their facilities with generators and related connection/transfer switches. This is especially relevant as facilities are likely to be designated as refuge/shelter locations in the event of a disaster. Priority level reflects lack of funding not level of need. <i>Superintendent, Maintenance depts of each district, Host County EMAs</i> (district funds, host community and county supports, PDM funds as may be available) LOW PRIORITY
Generator & Related Projects	Monona Co	New. County is seeking opportunity to purchase mobile generator allowing flexibility to meet needs at varying locations as needed. <i>County EMA, County Board</i> (annual budget, public safety/response funds, PDM as available) HIGH PRIORITY.

Generator & Related Projects	Moorhead	2020: Generators - city hall/community ctr that operates as command center as needed; Potential partnering with County to establish Command Center capacity in the event of an emergency; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Moorhead	Carry over. The project is still needed. Generator for fire station/Community Center as this facility is designated for refuge/shelter and command center in the event of an emergency. <i>Public Works, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, BRIC, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Moorhead	New. A DNR notification was received during routine inspection of the lagoon that the generator in place is antiquated and presumed unreliable necessitating urgent priority for replacement. Community goal is to move to attain necessary funding and implement project as soon as possible. <i>Public Works, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, BRIC, IDNR, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Moville	New. City is looking at generator purchases for Fairgrounds (County collaboration), Community Center and Fire Hall. Community Center serves as shelter when open. <i>City, Public Works, County EMA</i> (local funds, pre-disaster/mitigation funds as available) HIGH PRIORITY
Generator & Related Projects	Onawa	Carry over. Generators needed for Community Center and Nursing Home. <i>City Administrator, County EMA</i> (Local – general funds, community benefit funds, IDOT program funds, PDM funds) HIGH PRIORITY
Generator & Related Projects	Oyens	New. As part of an infrastructure improvement project for the city's water systems, the city is looking at opportunities to include a dedicated generator at its wastewater treatment plant. Cost is to be determined and will dictate whether a dedicated generator is added or if a transfer switch alone is incorporated into the project. If a transfer switch is the implemented solution, the city will pursue funds for a mobile generator for use between its facilities. <i>City Council, contracted engineering firm, DNR.</i> (USDA, DNR, CDBG, Local funds, PDM) HIGH PRIORITY
Generator & Related Projects	Oto	New. Oto is seeking the opportunity to purchase a generator to facilitate operation of critical functions during power outages. <i>Public Works, County EMA</i> (local funds, community foundation grants, pre-disaster/mitigation funds as available. MEDIUM PRIORITY
Generator & Related Projects	Pierson	Carry over. Dedicated generator for Community Building for continuation of use as refuge location in the event of power outage; <i>City Council, County EMA</i> (Local funds, County

		supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Quimby	New. Interested in generators for Fire Station and warning siren as means of maintaining operations & communication during power outages and as need in response efforts. <i>Fire Dept, City Council, Public Works, County EMA</i> (Local supports, fundraising, response funds as may be available, PDM funds, community benefit funds) HIGH PRIORITY
Generator & Related Projects	Ridge View SD (Galva-Holstein)	New. Generators and transfer switch installment need for facilities throughout the district. Galva-Holstein Elementary is all electric, allowing for no recourse should there be a power failure (heat in winter, hot water, lights, etc.). District is seeking opportunity to provide backup power to sustain operation during school year and to enable use a community refuge location in a major disaster/evacuation situation. <i>School Superintendent, City Council, City Public Works, School Facilities team, County EMA.</i> (School funds, city support funds and/or partner for grant opportunity through PDM.) HGIH PRIORITY
Generator & Related Projects	River Valley CSD	New. Generator(s) needed to maintain operation/function in greater capacity in the event of loss of power. School facilities serve as refuge /shelter location for Correctionville and neighboring communities. District interested in partnering with city, county, in coordinating generator, or at minimum generator connection. Cost with full facility function up to \$300, 000. <i>School Superintendent, City Council, City Public Works, School Facilities team, County EMA.</i> (School funds, city support funds and/or partner for grant opportunity through PDM.) HIGH PRIORITY
Generator & Related Projects	Sgt Bluff	New: Dedicated generator still desired at Fire Department should funding become available. Fire Station serves as designated command center as needed.
Generator & Related Projects	Sgt Bluff-Luton (SB-L) CSD	New. Generator connections at all facilities. <i>Maintenance, County/City collaboration as applicable for refuge location designation</i> (district, city, county funds, PDM as available) LOW PRIORITY
Generator & Related Projects	Sioux City	Carry over. Generators still needed at Police Department and other City Facilities. Project remains necessary and carries into 2025 plan. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Smithland	New. Generators are needed at the Wastewater Plant and Fire Hall as means of maintaining operations during power outages. <i>City Maintenance, County EMA</i> (local funds, community benefit funds, fundraisers, pre-disaster / mitigation funds as available)

Generator & Related Projects	Soldier	New. City is interested in having dedicated generator for critical facilities. City Council, Public Works (Local funds, PDM as available, community benefit grants, public safety funds as may be available) HIGH PRIORITY.
Generator & Related Projects	Ute	Carry over. Generator for community building; City Hall; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, pre-disaster/mitigation funds as available, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Whiting	New. There are no generators and no transformer switches in place for critical facilities. City is developing 2 new projects with generators needs identified. Generator also needed at sewer plant lift station. 1. water plant project in a phased overhaul, including consideration of another well (local, state, federal supports including loan ops) 2. New building for Fire Department (city funded at present, likely to include fundraising and community benefit funds) 3. Sewer plant lift station (not associated with other active or planned project) Addition of generators will enable continuity of operations in the event of a power outage. Public Works, County EMA (local funds, project funds as applicable, PDM funds as available) HIGH PRIORITY
Generator & Related Projects	Westwood CSD	Carry over. Generator for backup during crisis events & to maintain use as refuge location in event of power outage or other emergency. <i>Superintendent, School Board, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Woodbury Co	Carry over. Standby generator on site for each Community Center/City Hall as may be designated for command center. Some communities have added generators and/or transfer switches to accommodate mobile equipment. The county will continue to pursue opportunity to install dedicated generators where necessitated and transfer switches where still needed. during a disastrous event. <i>County EMA</i> (PDM and county emergency response funds) LOW PRIORITY
Generator & Related Projects	Woodbury Co	Carry over. Generator still needed. Plans in place to apply for generator through HMGP funding source. There are 2 small mobile generators available however, capacity is insufficient for extended period of need. A generator needed at Courthouse; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY

Generator & Related Projects	Woodbury Co	New. 1 dedicated/fixed and 1 mobile generator needed for secondary roads to <i>County Board of Supervisors County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY

Equipment	Battle Creek	New: New radios and operating system is needed. City needs communications improvements to better accommodate mutual aid calls. Current system does not connect with Woodbury County (on a state system) which is problematic for regional and mutual aid needs. Cost estimate not readily available. County EMS/EMA, FD, City Council (Local funds, PDM, public safety systems, county funds as may be applicable) HIGH PRIORITY
Equipment	Blencoe	New. Interest in coordinating resource attainment (such as cots) in the event of an emergency where refuge/shelter designation is necessary. No cost expected to be associated with process aside from staff time. <i>City, local partnering response agencies, state and federal programs such as Red Cross.</i> (local and response funds as available/necessary) HIGH PRIORITY
Equipment	Blencoe	New. Mobile pumps needed for stormwater transfer. Estimated project cost is \$50,000. <i>Public Works.</i> (City funds, FMA, Disaster Mitigation/Disaster Response funds as available) HIGH PRIORITY
Equipment	Cherokee	New. Equipment needed for various city departments includes: brush truck (FD), side-by-side to improve access during extreme weather events, and pumps for stormwater transfer. Public Works, Fire Department, Streets Dept. (Local funds, emergency response funds, disaster mitigation & disaster response funds as may be available) HIGH PRIORITY
Equipment	Hinton	Carry over. Project still needed and funds were not sourced. City expects to implement project using local general funds. Mobile pump; <i>Public Works</i> (City funds, local community benefit funds) elevate to MEDIUM PRIORITY.
Equipment	Hinton	New. City is interested in acquiring road barriers/blockade equipment for use during emergency road closure situations. <i>City Council, Public Works, Streets Dept</i> (City funds, Community Benefit funds, Response support funds) MEDIUM PRIORITY
Equipment	Hinton	New. City is interested in additional ATV for general use city-wide to ensure access as needed when multiple departments are active. <i>City Council, Public Works, Streets Dept</i> (City funds, Community Benefit funds, Response support funds) LOW PRIORITY
Equipment	Hornick	New. Interested in new communications radios. Potentially available through County supports. <i>City staff, County EMA</i>

		(Local funds, Response/Community Safety programming) MEDIUM PRIORITY
Equipment	Region (Initiated by Ida County)	Carry Over Sandbag fillers. Only 2 are available in the region and flooding often impacts several counties concurrently. Interest in accumulating a stockpile to meet multiple community needs. Increase availability for the region as flooding often impacts several counties concurrently. Interest in accumulating a stockpile to meet multiple community needs. <i>County Engineer, EMA, Regional collaboration</i> (Collective County funds , PDM) HIGH PRIORITY
Equipment	Ida County	Carry over. Additional road closure barricades are needed with consideration to be given to another trailer in order to haul to multiple locations. To accommodate approximately 80 roadways are subject to closure in the event of an emergency. <i>County Engineer, EMA</i> (County Funds, PDM) HIGH PRIORITY
Equipment	Le Mars Community Schools	New. District is interested in acquiring weather radios for each facility. <i>Superintendent, School Board, County EMA</i> (County EMA and related supports) HIGH PRIORITY
Equipment	Mapleton	Carry over. Lift station for water plant; <i>City Water Supt</i> (City funds, PDM) HIGH PRIORITY
Equipment	Monona Co	Carry over. Region-shared equipment such as high capacity snow blower. <i>County Roads, collaboration between County Roads departments</i> (County funds—potentially multiple, IDOT funds) LOW PRIORITY
Equipment	Monona Co	No action taken on this item but project is still needed. Carry over. Trailer designated for road barricade set-up; <i>County Engineer</i> (County funds, IDOT, PDM) HIGH PRIORITY
Equipment	Moorhead	New. City interested in acquiring UTV for general multi-departmental city use to improve access and maneuverability ranging from clean-up to pest prevention, etc. <i>Multi-departmental involvement.</i> (City funds, Emergency Response funds as available, local foundation grants, fundraising) HIGH PRIORITY
Equipment	Onawa	Carry over. A newer plow truck is added to the budget for 2026. Additional equipment is still needed. Snow removal equipment; <i>City Streets Dept</i> (City funds, transportation funds) LOW PRIORITY
Equipment	Onawa	Carry over. Portable pump with greater than 6" capacity – function @ 1,000 gallon per minute; City Administrator, Public Works, potential for county collaboration (City funds, PDM) LOW PRIORITY
Equipment	Oto	Carry over. Fire Dept in need of equipment and new facility; <i>Fire Chief</i> (City support, Department funds, Fire Association funds, FEMA AFG, CDBG facilities funds, State Revolving Fund loan) LOW PRIORITY

Equipment	Pierson	Carry over. ATV for use during road blockages; <i>City Council</i> (City funds, PDM) LOW PRIORITY
Equipment	Remsen	New. Fire Department is in need of equipment replacements including 12 SCBA units with harness/backpack, face piece, and 2 cylinders each and 24 spare cylinders. Cost at last estimate is about \$122K. <i>City Council, Fire Chief & Department reps</i> (local funds, AFG grant if awarded, community benefits funds). HIGH PRIORITY
Equipment	River Valley CSD	New. District interested in acquiring additional response equipment including but not limited to De-Choker devices to be made available in several key locations throughout district facilities. These devices offer low-cost lifesaving solutions. <i>School board, Superintendent, internal emergency response team.</i> (District funds, grants) HIGH PRIORITY
Equipment	Sgt Bluff	New. Fire department replacing Ambulance at \$305,000. <i>City, Fire Department.</i> (Local funds, Response funds as available) HIGH PRIORITY
Equipment	Sgt Bluff	New. Replace AED units. 2 existing units aging out of effective life. Seeking funding supports. <i>City, Fire Department.</i> (Local funds, Response funds as available) HIGH PRIORITY
Equipment	Sgt Bluff	New. Replace Life Packs. 35 are aging out of useful life. Expected cost is \$60,000. <i>City, Fire Department.</i> (Local funds, Response funds as available) HIGH PRIORITY
Equipment	Sgt Bluff	New. Fire Dept planning replacement of Brush Truck pending funding availability. Replacement is approximately a year-long process with an estimated cost of \$100- to \$120,000. <i>City, Fire Department</i> (local funds, fundraisers, local community benefit funds, BRIC) HIGH PRIORITY
Equipment	Sgt Bluff	Carry over. Replace 1 of 2 UTVs within 5 years. This remains a low priority activity. <i>City, Police Dept</i> (Department funds, City supports, fundraisers, pre-disaster/mitigation funds as applicable, emergency response equipment grants as available) LOW PRIORITY
Equipment	Sioux City (interest in same expressed by Ida Co.)	New. Sandbagging machine needed for local inventory. City would maintain as property with access through mutual aid for adjacent/nearby communities. Machine enables responders to produce the same amount of bags in 5 hours with 4-5 people as you can with 12-15 people loading manually in 30 hours. Investment estimated under \$50K. Regional impact. Parks Department. (Local - general fund, PDM/FMA) HIGH PRIORITY
Equipment	Sioux City	New. Add large capacity pump to city inventory. Estimated at \$210,000. Sioux City Utilities. (CIP FY 2026) HIGH PRIORITY

Equipment	Sioux City	New. Department needs an updated tool to open and close flood gates that is not electric. <i>Parks Department</i> (Local - general fund, PDM/FMA)) HIGH PRIORITY
Equipment	Struble	New. City identified need to obtain tanker to keep in town to support local response efforts. Without a local fire department, Struble's risk is significantly high. Priority level reflects likelihood of extended time frame for completion due to limited funding availability. City Council, County and State EMA and other response network supports as available (Local funds, fundraising, response equipment grants, community foundation/betterment funds) MEDIUM PRIORITY
Equipment	Whiting	New. Whiting Fire Department in need of a new rig-grass fire truck. Estimated cost is \$300,000. Fundraising efforts focused on new building therefore local funds are constrained. Priority reflects fund availability, not level need. <i>Fire Dept, City Council</i> (Response support funds as applicable, PDM if available) LOW PRIORITY
Equipment	Woodbury County	Carry over. Additional pumps - 12" & 18" capacity; Should funding be available, county will further consider addition of such pumps to their inventory. Priority level is decreased. <i>County Engineer</i> (County funds, IDNR program funds, BRIC/FMA) LOW PRIORITY
Safety/Security Equipment	Hinton CSD	New. District is considering opportunity to improve security systems for facilities including but not limited to locking systems with remote control capacity. <i>Superintendent, District Maintenance</i> (District funds, School safety program, fundraisers, local grant funds) HIGH PRIORITY
Safety/Security Equipment	Onawa	New. City is considering installing cameras in city buildings and parks. Recent bids estimate project cost at \$20,000+. Cameras would contribute to monitoring conditions in and potentially contributing to emergency situations. <i>City administrator, Parks Dept., Response teams</i> (City funds, community benefits, public safety grants as may be available) HIGH PRIORITY
Safety/Security Equipment	Sgt Bluff	New. Interested in acquiring and installing Flock Camera as means of community protection. This would be a collaborative effort with the City of Sioux City as a bordering community – due to planned placement, it may also be affected. <i>City of Sgt Bluff, City of Sioux City, SB PD, Public Works.</i> (City funds, Safety grants as available) HIGH PRIORITY
Safety/Security Equipment	Sgt Bluff	New. Collaborative effort to enable communication connections via software in Law Enforcement between City, County, and Sioux City. Cost estimates not currently available. <i>City of Sgt Bluff, City of Sioux City, Woodbury County Communications Center/EMA.</i> (Respective local funds, Response funds as available, public safety funds as available) HIGH PRIORITY

Development		
Policy	Onawa	Carry over. No action taken on this item. Needs have been clarified, necessitating the inclusion of water diversion in plans. Formalizing discussed recommendations to subdivision plans. Review and formal revision of subdivision regulations to address runoff concerns resulting from displacement. <i>City Council, Zoning Commission, City Attorney</i> (Local funds) HIGH PRIORITY
Policy	Rodney	New. Interest in update Municipal Code of Ordinances, pending funding opportunities. <i>City, Contracted services</i> (local funds, community betterment grants, public safety/wellness grants) LOW PRIORITY
Policy	Sioux City	New. Policy/regulation needed to ensure all future wells and well projects must include means for permanent protections upon implementation. City Council, City Planning & Zoning. (No funds anticipated aside from staff hours to compile ordinance &/or modification of existing) HIGH PRIORITY

Improve existing facilities & infrastructure	Castana	New. Castana is actively pursuing funding to reconstruct its water systems as the water is currently unusable. Mineral content in water is so significant that it cannot be used even for laundry.
Improve existing facilities & infrastructure	Cherokee	Carry over. Improve capacity and function of sewer system; <i>City Waterworks</i> (City funds, USDA program funds, IDNR program funds) MEDIUM PRIORITY
Improve existing facilities & infrastructure	Cherokee	New. City is planning ADA improvements to the Community Center to enable use as refuge/shelter in the event of a disaster resulting in residential displacement. Project includes addition of dedicated generator. <i>Public Works/Utilities, local responses teams.</i> (Local budget, CDBG, disaster response/disaster mitigation as may be available) HIGH PRIORITY
Improve existing facilities & infrastructure	Cherokee	New. Saratoga Lift station needs improvements. Public Works (local budget)
Improve existing facilities & infrastructure	Cherokee	New. Increase well availability and function during flood events. One control panel raising project is in progress with at least one planned. Up to 3 are being considered. City is also adding one well outside flood zone. Costs were not immediately available. <i>Public Works/Utilities, local responses teams.</i> (Local budget, CDBG, disaster response/disaster mitigation as may be available) HIGH PRIORITY
Improve existing facilities & infrastructure	Cherokee, Cherokee CSD	New. Collaborative effort to implement ADA improvements on school campus and at access routes as applicable throughout the City. Some projects have been implemented (no detail provided). Costs will be determined by project as implemented. <i>Cherokee Community Schools, City of Cherokee.</i> (accessibility grants, local

		funds, trail funds where applicable, wellness grants, Safe Routes to School funds as applicable, CDBG) HIGH PRIORITY.
Improve existing facilities & infrastructure	Correctionville	New. City is in the planning stages of replacing its critical water systems infrastructure. The well, water tower, and water mains are all in need of replacing. Generators/transfer switches anticipated as part of planned projects where applicable. Public works, contracted services, IDNR, USDA (Disaster Recovery funds, CDBG, USDA, local funds, SRF for design) HIGH PRIORITY
Improve existing facilities & infrastructure	Galva	New. City Hall façade improvements are in the planning stages. Estimated cost is \$15,000 - \$20,000, which will in part substantiate building integrity. <i>City staff, contracted services as applicable.</i> (Local funds) HIGH PRIORITY
Improve existing facilities & infrastructure	Galva	New. Shelter House and other City Park improvements. <i>City staff, contracted services as applicable.</i> (Local funds, community betterment funds, fundraisers, Galva Economic Development Corporation) HIGH PRIORITY
Improve existing facilities & infrastructure	Hinton	Carry over. Water booster to improve capacity as accesses through fire hydrants. improvements are still desired through specific fire hydrants. Not a current over-riding concern. City will continue to seek funding opportunities to implement project. <i>City Waterworks, Fire Chief</i> (City funds, Fire Department funds, BRIC as applicable) MEDIUM PRIORITY
Improve existing facilities & infrastructure	Hinton	Carry over. Sewer linings in floodplain to eliminate infiltration from flooding and water table. Project priority remains. <i>City Maintenance & Waterworks departments, IDNR</i> (IDNR program funds, City funds, Disaster Mitigation or Response/FMA as applicable) HIGH PRIORITY
Improve existing facilities & infrastructure	Ida County	Carry Over. Insulate outlying shops. Access and issues accelerating due to ice accumulation. <i>County Department of Secondary Roads</i> (County general fund, Transportation facilities program funds, Building remediation funds) LOW PRIORITY
Improve existing facilities & infrastructure	Ida Grove	Carry over. Casements along 7th St (Badger Creek); <i>City Roads Dept, collaborate with County Engineer</i> (City funds, IDOT Program funds, PDM) HIGH PRIORITY
Improve existing facilities & infrastructure	Ida Grove	New. Water/Sewer Treatment Facility upgrades are in progress. System is undergoing modification from mechanical treatment to an anaerobic process. Early estimate is \$11M; set for bid early 2-25. <i>City utilities. Public Works.</i> (Local budget, Water utility fees, USDA/IDNR as may be applicable) HIGH PRIORITY
Improve existing facilities & infrastructure	Ida Grove	New. Hydrant replacements are planned citywide addressing approximately 25% of the city's hydrants, primarily located on the central and north sides of town.
	Le Mars	New: Install new water main valves to improve flow control and access for maintenance. <i>Public Works.</i> (Local funds) HIGH PRIORITY.

Improve existing facilities & infrastructure	Le Mars	New. Several waterworks projects are planned including a new reverse osmosis system, well, waterlines between wells. <i>City utilities.</i> (Local funds, utility rates) HIGH PRIORITY
Improve existing facilities & infrastructure	Le Mars	New. City is planning new waste water treatment facility. <i>City utilities, public works.</i> (Local funds, state/federal program supports as may be available) HIGH PRIORITY
Improve existing facilities & infrastructure	Le Mars	New. New Fire Station facility slated for 2026, with a ballot measure to be brought in 2025. Project includes new buildings and storage shed. <i>Fire Department.</i> (Local funds, EOC funds). HIGH PRIORITY
Improve existing facilities & infrastructure	Mapleton	New. City is planning installation of Well House with motor at Golf Course. Budgeted for fall 2025 at an estimated cost of \$51,000. Public Works (Local funds, community benefits grants, other as may become available)
Improve existing facilities & infrastructure	Onawa	New. Water Treatment Plant is planned. Estimated at \$17M, the new plant. Public Works, USDA, IDNR (Local funds, Bonds, Grants TBD) HIGH PRIORITY
Improve existing facilities & infrastructure	Onawa	New. Updates to the Electrical Substation are in discussion Repair costs are currently at \$100,000 mark. Project would include assessment of options including but not limited to replacement and/or repair of various components. City council, Public Works (local funds, others to be determined pending project scope) HIGH PRIORITY
Improve existing facilities & infrastructure	Pierson	New. Sewer lining project. City is lining sewers to improve existing infrastructure, and extend useful life. Approx cost is \$200,000 – planned for 2026. Public Works, DNR. (Local funds) HIGH PRIORITY
Improve existing facilities & infrastructure	Quimby	New. Address abandoned, vacant, and dilapidated buildings through: incentivized development, rehabilitation, and acquisition programs. Dilapidated structures are themselves at risk in extreme weather conditions, pose threat of fire, and are a general risk to public health. City is looking for programs to implement as well as funds to implement some measures as applicable (including but not limited to acquisition). City Council. (various funding sources depending on programs – IEDA, PDM as applicable, local funds, private partnerships, IDNR Dilapidated Buildings prog) HIGH PRIORITY.
Improve existing facilities & infrastructure	Quimby	New. City is in the process of determining options to improve function of, expand, and update lagoon, sewer/wastewater system, lines and related to meet IDNR compliance standards. Needs include but are not limited to 1. expanded capacity with potential of adding a cell pending feasibility.

		2. Berm construction or raising of lift station to protect from flood infiltration, and 3. Pre-engineering to fully assess options are part of project. <i>City, Public Works, IDNR (CDBG, USDA as applicable, local funds, PDM as available, other sources TBD) HIGH PRIORITY</i>
Improve existing facilities & infrastructure	Sgt Bluff-Luton (SB-L) CSD	New. Improvements to roof and HVAC. Roof repairs need more permanent fix. HVAC work necessary to maintain function of facility during extreme temperatures – both hot and cold. Project is tiered. Maintenance work will be funded by district. Priority is determined due to cost, not level of need. Replacement for long-term resiliency as preferred would require collaborative efforts. District Maintenance, City/County officials, County EMA (district funds, PDM funds as applicable) LOW PRIORITY
Improve existing facilities & infrastructure	Sioux City (amended & adopted 01/13/25)	2025: Carry over to 2025 HMP. Bacon Creek Conduit. Estimated \$35M project - Reconstruction and relocation beginning at Rustin Street continuing to the outlet west of Lewis Boulevard. The project addresses the deteriorated condition of the existing conduit underneath Gordon Drive and the risk of structural failure, posing a risk to the traveling public on Gordon Drive. The conduit will be relocated from underneath Gordon Drive off-alignment and the capacity will be expanded to withstand a 100-year flooding event. The project improves resiliency of the utility, transportation infrastructure, and the region. <i>City of Sioux City, IA DOT.</i> (City of Sioux City Engineering Dept, CIP FY 2028) HIGH PRIORITY.
Improve existing facilities & infrastructure	Sioux City (amended & adopted 01/13/25)	2025: Carry over. Bacon Creek Channel Reconstruction. Estimated \$18M project is a collaborative effort to stabilize the channel built in 1930. Flooding events have resulted in Missouri River backing up channel, causing entry to the combined sanitary sewer system. Backwater infiltration has caused significant damage to Wastewater Treatment Plant. Project addresses the compromised combined sanitary system and includes repurposing the existing site to coordinate with economic development and urban use vision planning. <i>City of Sioux City, IA DOT.</i> (City of Sioux City Engineering Dept., CIP FY2028) HIGH PRIORITY.
Improve existing facilities & infrastructure	Sioux City	New: Wastewater Plant Improvement Project. In conjunction with other flood-affected area projects, the City is planning significant improvements to its wastewater treatment plant. Estimated at \$300M, the project will address system capacity updates, flood infiltration protections, and improved function overall. <i>City Utilities Department.</i> (BRIC, Local matching funds) HIGH PRIORITY

Improve existing facilities & infrastructure	Sioux City	New. Improve outflow systems at Wastewater Plant. Estimated at \$1.5M. Protects river, local bodies of water. <i>Sioux City Utilities Dept. and related regulatory bodies – IDNR, etc.</i> (Local funds, BRIC) HIGH PRIORITY
Improve existing facilities & infrastructure	Sioux City	New. Reconstruction of well planned, including addition of flood barrier. Project cost not provided. <i>Public Works, Water Dept.</i> (Local funds, Federal/state funds as may be applicable) HIGH PRIORITY.
Improve existing facilities & infrastructure	Sioux City	New. City is seeking to construct a designated storage shed or container for flood response equipment. <i>Parks department.</i> (Local - general fund, PDM/FMA)) HIGH PRIORITY
Improve existing facilities & infrastructure	Sloan	New. Sloan is preparing for a water infrastructure improvement project including wastewater treatment and a new water tower. The project will include generators and/or generator transfer switches where applicable and practical. Project is expected to exceed \$3M. <i>Public Works, contracted engineer.</i> (Local funds, loans, others as may become available.) HIGH PRIORITY
Improve existing facilities & infrastructure	Sloan	New. Sloan is seeking funding to support add lighting to parks and enhance trail network to improve access as well as general public safety and wellbeing. City Council, Parks committee. (Local funds, others to be determined.) HIGH PRIORITY
Improve existing facilities & infrastructure	Soldier	New. The city is seeking upgrade opportunities for its lagoon system and related lines. Established in the 1970s, it has been 32 years since the last discharge. They've undergone a preliminary engineering report and televised lines. 3-cell lagoon but only one has been used. Looking at using all 3 for treatment / discharge. <i>Public works, DNR (CDBG, USDA RD, local funds)</i> HIGH PRIORITY
Improve existing facilities & infrastructure	Soldier	New. Updated meters for the city's waterworks are warranted as means of improving monitoring and determining leakage or other flow problems, maintenance needs. Cost estimated at \$1.5M. <i>Public works, IDNR as may be applicable</i> (local funds, go bonds, CDBG, USDA as available) HIGH PRIORITY
Improve existing facilities & infrastructure	Soldier	New. City is planning to put in a new pump house. <i>Public works</i> (USDA, IDNR as applicable, local funds) HIGH PRIORITY
Improve existing facilities & infrastructure	Ute	New. City is planning new well. <i>Public works, USDA, contracted services</i> (local funds, USDA RD) HIGH PRIORITY
Improve existing facilities & infrastructure	Westfield	New. City is in process of completing a new water treatment facility. Project is incorporating flood protections and continuity of operations features (generator/generator hook up). <i>Maintenance and Water/Sewer Supervisor, contracted project manager/administrator</i> (WTSAP, IFA Loan, General Budget) HIGH PRIORITY

Relocate critical facilities	Battle Creek	Carry over. Project was not implemented but is still needed. No estimated timeline for completion as this is highly reliant on available funding sources. Past flood issues resulted in need for elevation of the city's sewer lift station. As flooding events become more frequent and more extreme, project becomes more dire. <i>City Council, City maintenance/waterworks, collaboration with County EMA & Engineer as applicable.</i> (Local funds, PDM, Bonds/Loans through approved programs) HIGH PRIORITY
Relocate critical facilities	Cherokee Co	New. Relocation of Conservation Department necessitated by floodplain expansion. Current office now in compromised area. Facility needs office space as well as storage. There is potential to collaborate with Secondary Roads to share storage space. Estimates range from \$.5M - \$.75M. Ideally, new location will be in one of the parks, River Oaks Conservation Area is being considered. County Board, Conservation Dept, Secondary Roads, IDNR, State Conservation (County and state funds as available, PDM/FMA as appropriate, other TBD) HIGH PRIORITY
Relocate critical facilities	Cherokee	Update: Carry Over. Cherokee is expanding project scope to include several infrastructure improvements. In addition to Beech Street, lift stations at E Sumner< Riverview, Emmet Dr (MHI), E Bluff, and Spruces need rising and/or repairs. Cost estimates not immediately available. <i>City Water & Public Works Depts</i> (City funds, IDNR, Disaster Response/Disaster Mitigation funds as may be available) HIGH PRIORITY
Relocate critical facilities	Ida Grove	Carry Over. Lift replacement still needed at Hillcrest Lift Station. Cost estimate not immediately available. <i>Public Works.</i> (Local budget, Water utility fees, USDA/IDNR as may be applicable) HIGH PRIORITY
Relocate critical facilities	Sgt Bluff	Carry over. Interest in relocating 2nd Fire Station for improved response to more areas; <i>City Admin, Fire Chief, Zone Administrator</i> (City Funds, Fire Dept Funds, Fire Assoc funds, fundraisers, Response Support funds) LOW PRIORITY
Relocate critical facilities	Sioux City	New. Sioux City is looking at relocation of Riverside lift station outside of potential flood area. Due to existing structure's age, replacement may be warranted. Still in preliminary planning stages with expected cost not immediately available. <i>Public Works, Waterworks.</i> (local funds, may be eligible for disaster/disaster mitigation funds, TBD) HIGH PRIORITY
Bridges & Roads	Cherokee	Carry Over. Collaborate w/County and State on review of and implementation of roadway elevation improvements along Hwy 3 and/or Hwy 59; Several road/bridge projects are planned with 3 in progress and others pending. Bridges pending work: Railroad Creek Bridge and E Cherry St Bridge.

		Work on Bypass scheduled with preparation in progress. Needed but not yet planned: Maple Street Bridge <i>City Administrator & Streets Dept, County Roads Dept, IDOT</i> (Transportation funds, City/county funds) MEDIUM PRIORITY
Bridges & Roads	Hinton	Carry over. Resurface alleys due to washout during rain events Oversight is the responsibility of the <i>Streets Department</i>. (local budget) LOW PRIORITY.
Bridges & Roads	Ida County	Carry over. Grove: When flooded, no access to city wells along Keystone Ave. Mapping of well needed north of 387th St, off M15. County has access road to maintenance sheds. Improvements needed. • Collaborative project needed to develop west access point to City of Ida Grove to improve access to Keystone Ave wells. • Necessity of mapping of 387th is under consideration but is carried over to 2025 plan. • County shop south of town is needing access improvements – surface repairs. Grading/straightening is planned along 235th Street. Funding sources and responsibility remain as provided - <i>County Engineer, Collaboration with City Streets Dept.</i> (County funds, City support, transportation funds, FMA/Mitigation funds where applicable) MEDIUM PRIORITY
Bridges & Roads	Ida County	New. The County is looking to improve access to schools, particularly for young drivers. The following corridors are highly traveled gravel roads being programmed for paving. German Rd (one mile section to Hwy 20) and westward access roads including Lamp, Kastner, and Meuller. (County funds, City collaboration where applicable, road use funds)
Bridges & Roads	Ida Grove	Update: Carry over. 2020: Potential paving project on 6th St to improve drainage; Project still needed. Cost estimated at \$1.4M includes drainage along with noted street repair needs. <i>City Streets Dept</i> (City funds, Transportation funds, FMA/Disaster mitigation Disaster response funding as available) LOW PRIORITY
Bridges & Roads	Ida Grove	New: Funding has been awarded to fix Main Street bridge at \$1.5M, including major repairs. <i>Streets Dept.</i> (City budget, Transportation funds) HIGH PRIORITY
Bridges & Roads	Ida Grove	New: Funding for Washington Street bridge is pending and anticipated within the next few years. <i>Streets Department, IA DOT</i> (City budget, Transportation funds, IA DOT) HIGH PRIORITY
Bridges & Roads	Ida Grove	New. City has 6 bridges requiring significant maintenance² are shown as New Projects in the 2025 HMP. Four bridges remain as needed projects, with lower priority due to lack of known funding opportunities. <i>City Streets Dept.</i> (City funds,

		Transportation funds, Disaster Response/Disaster Mitigation funds as available) LOW PRIORITY
Bridges & Roads	Ida Grove	New. Resurfacing needed on 2 nd St & 6 th St. Estimated cost based on recently completed similar project is \$300K each. <i>City Streets Dept.</i> (Local road use funds, local funds) HIGH PRIORITY
Bridges & Roads	Ida Grove	New. Many road repair projects throughout town are needed due to deterioration/crumbling. Damage is significant, however lack of funding may delay implementation. <i>City Streets Dept.</i> (Local funds, Disaster mitigation as may be applicable, others TBD) MEDIUM PRIORITY
Bridges & Roads	Le Mars	New. Action needed to improve conditions where Willow Creek meets the Floyd River. Increase in occurrence of flood events has highlighted lack of capacity of small railroad bridge crossing that area to handle such a large volume of water. If bridge is washed out, a significant impact would be felt regionally and potentially at the national level pending severity of damage. <i>City administrator, County departments as applicable, railroad, DOT, contracted consultant as applicable.</i> (local funds, BRIC/FMA, railroad programming, IDOT) HIGH PRIORITY
Bridges & Roads	Onawa	Carry over. Resurfacing projects that will address drainage issues and minimize the effects of inclement weather-caused deterioration. <i>City Streets Dept, collaborate with County Roads</i> (City funds, Community Benefit funds, Transportation funds, Disaster funds as may apply, PDM as applicable) HIGH PRIORITY
Bridges & Roads	Whiting	New. K45 bridge needs new guardrails following improvements completed in 2020. Streets dept, County roads. (local road use funds, other road funding as may be available) HIGH PRIORITY

flow control		
Flood protection	Cherokee	New. Study to determine flood protection options including but not limited to extending existing flood barrier wall. <i>City Administrator, Parks Dept, IDNR</i> (City funds, IDNR Clean Water programs/Runoff control, Disaster mitigation funds as may be available) HIGH PRIORITY
Flood protection	Ida Grove	New. The Army Corps of Engineers is completing a Slip Lining Levee project in Ida Grove on the Moorhead Park side of the levee. Implementation date, cost, and funding sources not provided. <i>US ACE (ARPA)</i> HIGH PRIORITY
Flood protection	Le Mars	Carry over. Further efforts are needed to stabilize riverbanks and creekbanks to control or direct flow from Floyd River and Willow Creek, especially when in high water stages, from both riverine and flash flood events. North and South ends of airport are increasingly at risk as high flow rate of water continues to reform the Floyd River. Bridges at 24 th Street and the RR bridge at 4 th Ave NE and the walking bridge at Hwy 3 are faced with

		structure failure risk increasing with each high water event, as placement in proximity to river is changing. Issue is becoming increasingly urgent. Cost estimate not readily available. <i>City Administrator, Airport administration, IDNR</i> (Local funds, Economic Development funds, PDM) HIGH PRIORITY
Flood Protection	Moville	New. Improvements to the existing berm at the North Lift Staton are needed as it has been compromised three times. <i>Public Works, Engineering supports as available</i> (local funds, Flood/Disaster mitigation funds as available, community foundation grants) HIGH PRIORITY
Flood protection	Sioux City	New. Flood Mitigation Ponding project for FY27 in Leeds area. Full scope to be determined – intent is to mitigate frequent occurrence of flash flood points by creating intentional water retention areas. Cost is estimated at \$4M. Public Works, contracted services/labor. Local funds, state mitigation funds as available. HIGH PRIORITY
Flood protection	Sioux City:	New. Levee Extension along Big Sioux River affecting Riverside neighborhood. The project estimated at \$2.5M is under review for implementation. Extreme historical flooding in 2024 resulted in flood protection actions as dictated in neighboring state jurisdiction. Outcome of that last-resort implementation exposed an otherwise protected area, with significant damage to or loss of approximately 70 homes. <i>Sioux City Public Works, related regulatory systems including but not limited to the Army Corp of Engineers.</i> (CIP requested, Local Funds, BRIC) HIGH PRIORITY
Flood protection	Sioux City:	New. Infrastructure protection. Riverside Collector well-permanent flood barrier and elevated access to the well. <i>Parks Department.</i> (Local - general fund, PDM/FMA) HIGH PRIORITY
Flood protection	Sioux City:	New. Infrastructure protection. Well and switchgear in Chris Larsen boat ramp- needs a deployable closure structure instead of sand bags. Needs to have plan to increase wall height if necessary as it was under built. <i>Parks Department.</i> (Local - general fund, PDM/FMA) HIGH PRIORITY
Flood Protection	Sioux City	New. Hesco sandbags needed to improve flood prevention. This \$40, 000 project may also be categorized as Equipment. <i>Public Works.</i> (Local funds, FMA funds, other response/emergency management funds as may be available) HIGH PRIORITY
Flood Protection	Sioux City	New. City is looking to replace wire weight gauge on Floyd River with USGS Auto-Read gauge, allowing remote alerts. <i>Parks Department.</i> (Local - general fund, PDM/FMA) HIGH PRIORITY
Drainage projects	Sioux City	New. Southbridge development will affect function of existing drainage ditch, which protects water treatment plant. A 46M project is planned and funded to ensure sufficient function FY26-28. <i>City Utilities</i> (CIP) HIGH PRIORITY

Drainage projects	Sioux City	New. City is planning stormwater drainage improvements at Pulaski Park area in Morningside. A collaborative effort with Morningside university resulted in \$1.5M investment, in the planning stage in 2025 with implementation set for 2026. <i>Environmental Services Dept. coordinated with Morningside University (CIP)</i> HIGH PRIORITY
Flood protection	Westfield	Carry over. City seeking options to substantially reinforce berm and/or other flood protections around lagoon. <i>City Council, City maintenance/waterworks, County EMA, FEMA, and DNR as applicable.</i> (Local – General electric fund, Disaster Recovery funds as applicable) HIGH PRIORITY

Drainage projects	Correctionville	Carry over. Continue implementation of drainage projects. Additional areas need attention. Project will be recurring with opportunity to instill better long term controls should such process be made known.. Implement drainage projects as identified. Citywide culvert and ditch maintenance improvements including but not limited to bigger culverts, dredging ditches, add drainways where appropriate. <i>City Administrator/Streets/Public Works</i> (Local general funds, IDNR project funds, PDM) HIGH PRIORITY
Drainage projects	Akron	New. City is assessing check valve on storm sewer pipe seeking a viable solution to reduce flooding incidents. Other considerations include diverting water and/or adding a pump station. Likely to include study and implementation. <i>Public Works, DNR, County Engineer, Contracted services.</i> (local funds, disaster/flood mitigation program funds as may be available) HIGH PRIORITY
Drainage projects	Akron-Westfield CSD	New. Culvert under highway directs water to school facilities in high water events, leaving district with excess water accumulation and no means of draining. District is interested in partnering with city and IA DOT as applicable to determine drainage and/or flow control solutions. Project may include study and/or implementation of solution as identified. Potential solution is plug for culvert that will sustain flow unless highway is overtaken by water. <i>District facilities staff, City of Akron, Plymouth Co Roads, and Plymouth Co EMA</i> (fund sources to be determined upon identifying feasible solution) HIGH PRIORITY
Drainage projects	Akron-Westfield CSD	New. Address bus barn flooding by waterproofing and implementing a process allowing the structure to serve as a “passthrough” to minimize effects of flooding. <i>District maintenance staff</i> (district funds, PDM as may be available) HIGH PRIORITY
Drainage projects	Hinton	Carry over. Starview is in need of stormwater management improvements. With modified priority level, this project continues to the 2025 HMP. <i>City Administration, Contracted</i>

		<i>services, IDNR (Local funds, IDNR program funds, Disaster Response/Mitigation funds) MEDIUM PRIORITY</i>
Drainage projects	Holstein	Carry over. Sidewalk trail at ball field and rec center with drainage project incorporated; <i>City Administration, Contracted services, County collaboration for trail projects</i> (Health & Wellness funds, Transportation Alternatives funds, Local funds, fundraisers, Walk/Bike program funds) LOW PRIORITY
Drainage projects	Ida Co	Carry over. Areas of particular need of drainage ditch dredging include 7 th Street at Rowher, Jasper, and M15. Old Hwy 59 still needs attention. Project carries over to 2025 HMP with same priority. <i>County Engineer, Collaborate with City staff, IDNR</i> (County Roads funds, local funds) HIGH PRIORITY
Drainage projects	Ida Grove	New. Storm sewers and culverts citywide need of dredging with Moorhead Ave and US 175 being highest priority. Cost estimate not immediately available. City Streets Dept (Local funds, disaster mitigation funds as available, other funds TBD) HIGH PRIORITY
Drainage projects/ Study-Assessment	Merrill	New. River flooding hits north side of town and around highway. Additional attention is needed to determine prevention options. Interested in feasibility study and implementation of related solutions. Funding is a barrier. <i>City Council, City staff</i> (Local funds, PDM, FMA) HIGH PRIORITY
Drainage Projects	Moorhead	Carry over. City is seeking options to improve stormwater drainage. Latent effects of 2019 floods resulted in underwashing of the city's sidewalks and streets, the presumed cause of sinkholes throughout town. The city did pursue a scoping grant through FEMA BRIC but was not awarded. A study to confirm/determine cause and development of an implementation plan is still needed. <i>Public Works</i> (Disaster Mitigation Funds as available Local Funds) HIGH PRIORITY
Drainage Projects	Pierson	New. The city has made some drainage improvements in recent years (4 th St), but more work is needed along Front Street. <i>Public Works</i> (local funds, other infrastructure funds as may be available) HIGH PRIORITY
Drainage Projects	Plymouth Co	New & Ongoing. Drainage ditch improvements are needed throughout the county. Maintenance is performed as needed with monitoring in effect for Akron, Westfield, and Hinton as areas frequently affected by flash flooding. Monitoring includes assessing opportunities for long term improvements that may supplement drainage ditch network. Secondary Roads (County budget, IDNR as may be applicable, Disaster response as may be needed) HIGH PRIORITY

Drainage Projects	Remsen	New. Storm drains are needed at each end of Beck Park. <i>City Council, public Works, Parks & Rec, DNR as applicable</i> (local funds, DNR as available, PDM/Flood prevention as available) HIGH PRIORITY
Drainage Projects	Rodney	Carry over. Remaining streets throughout town still need work to improve drainage and drainage paths. Project is carried to 2025 HMP. <i>City Council</i> (City – general fund, transportation funds, Community Benefit funds) LOW PRIORITY
Drainage Projects	Salix	Carry over. Phase II - Implement stormwater drainage system to resolve issues created by cancelation of agreement to direct stormwater into nearby Drainage District. The project identified through the study included the construction of a flow channel connecting the Salix Drainage District to the Farmers Drainage District, including a retention pond and other flow diversions. Project is awaiting finalization of cost-benefit analysis as interim conditions put Salix at heightened risk for street flood potential, storm drain backup, and home infiltration. <i>Salix Drainage District</i> (Drainage district funds, others to be determined pending necessitated corrections) HIGH PRIORITY
Drainage projects	Sioux City	New. Southbridge development will affect function of existing drainage ditch, which protects water treatment plant. A 46M project is planned and funded to ensure sufficient function FY26-28. <i>City Utilities</i> (CIP) HIGH PRIORITY
Drainage projects	Sioux City	New.. City is planning stormwater drainage improvements at Pulaski Park area in Morningside. A collaborative effort with Morningside university resulted in \$1.5M investment, in the planning stage in 2025 with implementation set for 2026. Public Works, Parks & Rec, Morningside University (funding sources not identified beyond local budget) HIGH PRIORITY
Drainage	Struble	New. City is in need of improved stormwater drainage and runoff controls for downtown. <i>City Council</i> (City funds, transportation funds, Community Benefit funds) LOW PRIORITY
Shelter	Cherokee	New. City of Cherokee is aware of need for shelter location south of the river, serving the ball fields and surrounding parks and considering funding opportunities to support the project. A cost estimate is not immediately available as funding source may dictate size and other components affecting the cost. Priority level reflects lack of feasible funding in the near future, not the importance of the project. City parks dept., City Council, County EMA. (Local funds, fundraisers, community benefit grants, public safety initiatives) LOW PRIORITY

Shelter	Cherokee	New. City is assessing options for refuge locations for extreme heat/ extreme cold weather events, especially for individuals whose homes may not have air conditioning or sufficient heat systems. This would also serve to benefit those using rec areas where a brief respite may be necessary. City departments, clerk & administrator, County EMA as consult (local funds as needed) HIGH PRIORITY
Shelter	Correctionville / River Valley School District	New. Formalize shelter/refuge/command center designation(s) and declaration process specific to hazard type and need. City, River Valley School District, County EMA. (No funding needs anticipated) HIGH PRIORITY
Shelter	Hinton	Carry over. Additional shelter options needed. The City would still like to incorporate a shelter at City parks to serve as refuge site during ball games and other events. This project will carry over to the 2025 HMP, maintaining assigned priority. <i>City Administration, County EMA collaboration</i> (Local funds, Improving public spaces funds, PDM) LOW PRIORITY
Shelter	Ida Co	New. Interested in adding storm shelter at Fairgrounds. Project is primarily limited by funding but will remain on priority list for consideration when updates and other investments are planned. <i>County Board, County EMA, Fair Board</i> (Mitigation program funds, local/county funds, community safety programs, local foundation and betterment grants) MEDIUM PRIORITY
Shelter	Ida Co (w/Ida Grove)	New. Schmidt's Addition on 6 th in Ida Grove is a residential development without basements. Interest in establishing storm shelter in area. Location and scale of facility to be determined. May require preliminary study or project scoping to determine most effective option. County EMA, County Board, Ida Grove City administration/Council, residents as applicable (Community Safety funding opportunities, community foundation and/or betterment grants, local funds) MEDIUM PRIORITY
Shelter	Merrill	Carry over. Interest in designating refuge locations at City Park and Campgrounds. Structural enhancements to be considered for formal designation. <i>City Council, City staff County EMA as applicable.</i> (local funds, community benefit programs, local groups, fundraising). LOW PRIORITY
Shelter	Monona County	Carry over. At Onawa: Interest in adding formal storm shelter with tornado designation at the Fairgrounds &/or at the Christian Camp within the State Park. Priority level reflects lack of funding opportunity, not level of need. <i>County Conservation/Parks Dept, EMA, IDNR/State Parks Dept, City administration</i> (County funds, IDNR Program funding, PDM, Community Benefit funds, private funds as applicable) LOW PRIORITY

Shelter	Monona County	Carry over. Shelter at Peters Park. <i>County Conservation/Parks Dept, EMA, IDNR/State Parks Dept, (County funds, IDNR Program funding, PDM, Community Benefit funds, fundraisers, PDM)</i> LOW PRIORITY
Shelter	Oyens	New. The city is in the process of establishing a city park. Plans include a shelter to offer moderate protection from thunderstorms, hail & lightning as well as shade in extreme heat conditions. <i>City Park Planning Committee, City Council (Local funds, community betterment, PDM as applicable.</i> HIGH PRIORITY

technology		
Improve effectiveness	Hinton	New. City has incorporated a plan to review their local Emergency Response and Emergency Operations Plans to assess and improve emergency response actions through: 1. Establishing a chain of command process specific to emergency type and area of effect 2. Designate command center, including alternate location if center is impacted by event 3. Identify refuge/shelter locations that may serve in a general capacity
Improve effectiveness	Hinton	New. City is working to better inform residents of pending and potential extreme weather and other hazardous events through the promotion of existing services including but not limited to Alert Iowa. City Clerk (no funding outside of staffing hours necessary) HIGH PRIORITY
Improve effectiveness	Hinton	New. Implementation of improved ADA access is needed for restrooms at community center and city parks. Parks & Rec, Public Works (local funds, accessibility or multi-generational living program grants, fundraisers) HIGH PRIORITY
Improve effectiveness	Ida Co	New. Efforts will continue as opportunities become available. <i>County Board (State/Federal connectivity programs as may be available, private-public partnerships)</i> MEDIUM PRIORITY
Improve effectiveness	Moorhead	New. City is planning to increase awareness of Monona County's Alert Iowa system as effective means of communicating in-time weather events, as well as connected preparedness tools, as may be needed for residents. City Clerk, County EMA (No funds expected to be necessary beyond staff time) MEDIUM PRIORITY
Improve effectiveness	Rodney	Carry over. Promote available weather alert subscription services such as Alert Iowa and storm-spotter training as available. <i>City Clerk, Council, County EMA (no cost anticipated)</i> HIGH PRIORITY

Improve effectiveness	Woodbury Co	New. County is in the process of developing a Continuity of Operations Plan including alternate worksite locations for county offices in the event of displacement due to disaster, including reprioritization process for alternate work sites.

natural barriers/ supports		
Retention Pond	Bronson	Carry over. Assess opportunity to implement retention pond to mitigate flooding through natural methods. <i>County EMA, Contracted engineer services</i> (Local funds, Community Benefit funds, IDNR Program funds, pre-disaster funds as may be available) LOW PRIORITY
Dyke improvement	Merrill	New. Dike enhancement and/or replacement with more effective protections against flood, especially for lagoon. Project may require a study to determine feasible options. <i>City Council, County, and DNR collaboration as applicable.</i> (Local funds)
Levees/Berms	Akron	New. Berms/Levees to reduce flood risk; rip rap for bank stabilization. <i>City, FEMA coordination</i> (Local funds, disaster/flood mitigation funds as may be available) HIGH PRIORITY
Trees	Marcus	New. Recognizing the benefits of a healthy tree population, the city is seeking funding opportunities to fortify its tree density, especially in recreation and public greenspace areas, filling gaps left by removal of dead/diseased trees. <i>Public Works, City Council, County Conservation as applicable</i> (local funds, Trees Please and similar re-trees programs, Arbor Day Foundation) MEDIUM PRIORITY
Trees	Moorhead	New. City has removed dying/diseased trees from public rights of way as needed, but no schedule of removal or replacement is currently in place. City is interested in seeking funds to add trees back into parks, pending availability of funds, to serve as protection from extreme heat, soil stabilization/erosion control, and to serve as a wind barrier. <i>City administration</i> (City funds, IDNR programs, UPS Tree Grants and similar community reforestation funds, private funds) LOW PRIORITY
Trees	Rodney	Carry over. Community will continue to seek funding opportunities to re-substantiate its tree population. Funding support to sustain/improve tree population. <i>City administration</i> (City funds, IDNR programs, UPS Tree Grants and similar community reforestation funds, private funds) LOW PRIORITY
Trees	Ute	New. Re-tree plan to be implemented. City reduced loss with treatment of ash trees in parks, however additional trees are needed to provide soil stabilization, respite from extreme heat/sun, and to serve as natural windbreak. <i>City administration</i>

		(City funds, IDNR programs, UPS Tree Grants and similar community reforestation funds, private funds) HIGH PRIORITY
Trees	Westwood CSD	New. District is seeking viable mode of tree replacement including an implementation plan and funding sources. Superintendent, District Maintenance, Re-Tree programs as applicable (district funds, community grants, IDNR, others as may be applicable) LOW PRIORITY
Stabilization	Anthon	Carry over. Riverbank stabilization @ access point; City administration (City funds, Disaster funds, PDM) HIGH PRIORITY
Stabilization	Castana	Carry over. Carry over. Due to multi-faceted and severe funding constraints, action was not taken on this project. The city is interested in stabilizing the gravel roads throughout its hilly terrain to address proneness to wash out. Modify road overlay with "packable rock" or more stable substance to minimize washout episodes; City Maintenance (City general funds, PDM) MEDIUM PRIORITY
Stabilization	Cherokee	New. Lake bank stabilization. Repetitive flooding is having an impact on the lake in addition to riverbanks. The city is implementing a stabilization project intended for long term sustainability. City, IDNR as applicable (local funds, DNR grants as may be available, other TBD) HIGH PRIORITY
Stabilization	Cherokee	New. City, in collaboration with the County, is considering options in controlling flow of river to reduce meandering. Increase of intensity and frequency of high water events has resulted in accelerated meandering of the river, threatening to overtake River Road. City, County, IDNR, USACE as applicable. (local funds, county funds, waterway program funds as may be available, pre-disaster funds) HIGH PRIORITY
Stabilization	Holstein	Carry over. Efforts are ongoing with consideration being given to more long-term solutions. Determination of such action has not been made. Drainage projects to stabilize dirt in areas prone to washout; <i>City Maintenance/Streets</i> (Local – general fund, PDM) HIGH PRIORITY
Stabilization	Ida County	New. Spillway maintenance is ongoing and cumulatively expensive. County is interested in addressing channel stability with a long-term approach, reducing recurring expenses and substantiating infrastructure. Operations Supervisor, County Conservation. (Funding to be determined but will include county funds and pursuit of applicable grant programs) HIGH PRIORITY
Stabilization	Ida Grove	New. Stabilization as a project carries over to the 2025 Plan. Particular needs at Railroad St at Badger Creek. Significant erosion. Steep pitch of bank complicates stabilization. City administration & Streets Dept, County Engineer (Local funds, if

		scheduled accordingly State/Federal Transpo funds PDM) HIGH PRIORITY
Stabilization	Merrill	New. City is using rip rap for stabilization and reduction of wash out potential. Interested in more permanent means of stabilizing river bank and protective berms. Public Works, City Maintenance, DNR as may be applicable. (Local funds, PDM, Flood Disaster funds, community benefits program) HIGH PRIORITY
Stabilization	Plymouth County	New. Rip rap repair and assessment for permanent stabilization is in progress for a man-made berm surrounding a 20-acre lake south of Akron. Flooding in 2024 exceeding historic high flood marks by 5', resulting in significant deterioration of berm. County departments, IDNR as applicable (County budget item, disaster response funds as may be applicable, mitigation funds as may be available) HIGH PRIORITY
Stabilization	Sioux City	New: Tree replacement plan included in CIP. Replace trees that have been removed due to dead/diseased as means of soil stabilization, wind break, and relief from extreme heat/sun events. Parks & Recreation Department. Local funds via CIP, grants as available - DNR, tree foundations, MidAmerican, etc.) HIGH PRIORITY.

REGION-WIDE RECOMMENDATIONS

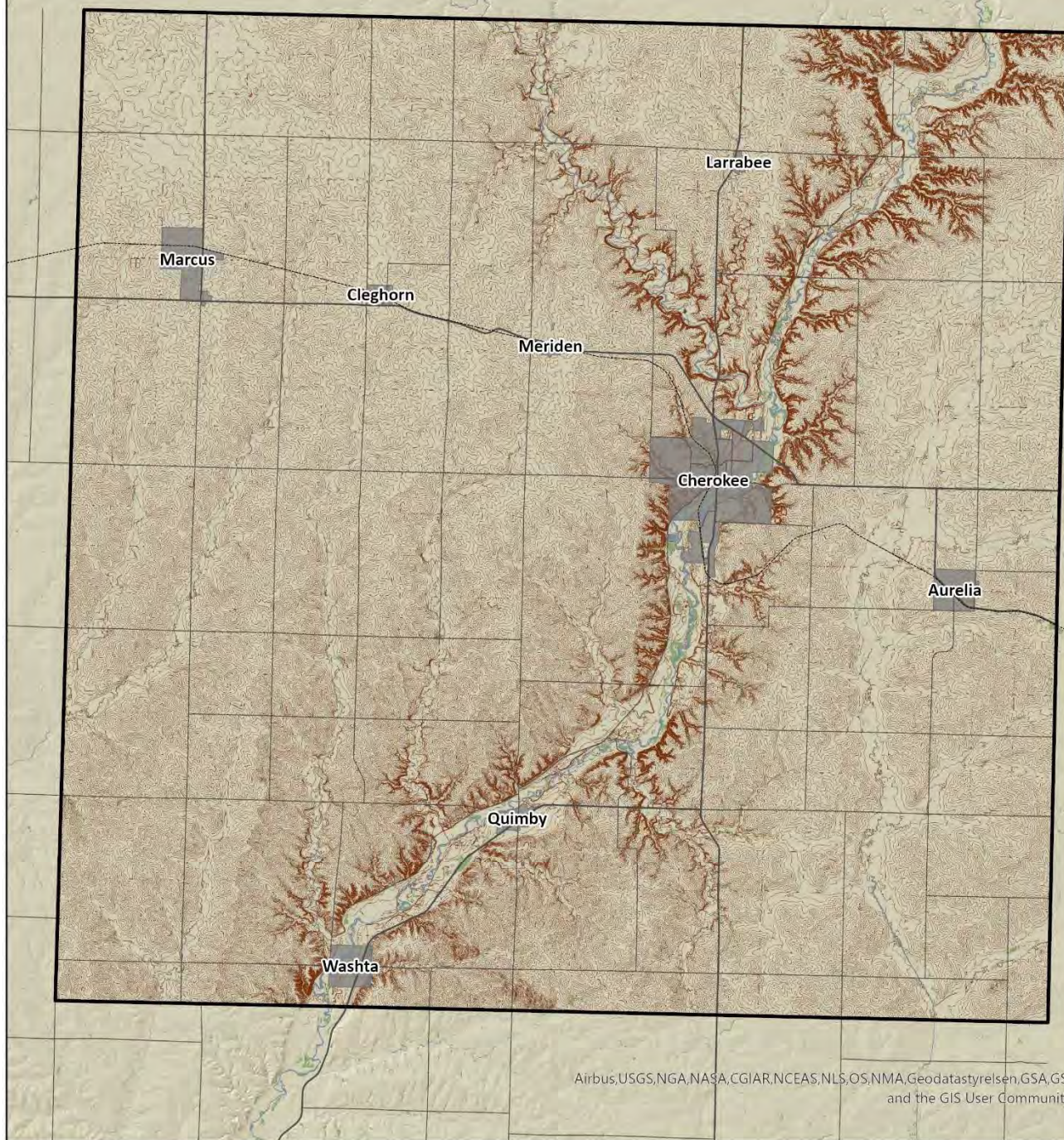
In addition to planned projects, some general strategies have been identified that are expected to contribute to community resiliency. The following provides some specific actions and strategies that may be incorporated into future projects as well as existing practices with little or no cost to communities.

Awareness	Increased use of technology to provide relevant information -- event or season specific.
	Promote Alert Iowa notification services through City, School District, and County websites.
Coordinated Projects	Modify action to carry into new plan strategy: Identify need for shelter from tornado and windstorm. Then, design and develop storm shelters. Strategy should be routine assessment based on current and expected conditions and consideration how those conditions may be evolving, causing a change in need.
Equipment	Adjust flood level assessment practices to include tributary flooding and relative impacts for all waterways within the region that have incurred damage.
	Equip High capacity snow thrower(s) (truck mounted) for use between counties within the region -- shared equipment. Monona & Woodbury specified potential for shared equipment if possible. Better capacity accelerates removal process; increases efficiency.

	Each county made some moderate improvements in fleet capacity, however coordination is still desired to reduce redundancy and improve efficiency of mutually needed equipment.
	Provide generators or alternate energy reserves for facilities identified as critical in times of crisis -- backup power supply
	Equip City as necessary to implement emergency protocol (materials to restrict access and/or infiltration such Road barricades; flood barriers, etc.)
Human Resources	Address decline in volunteer response departments necessitates need for action. Paid staff or at minimum paid time for training to meet certification requirements.
	Assess how other smaller communities are addressing volunteer shortages. Standardize "junior" responders -- high school students 17 and older, having been certified. Connect with school credits/internships.
	To account for time constraints on volunteers, region should assess ability for remote training opportunity through web meetings or archived video training that may be interactive. Petition State to enable allowable flex-training options.
Policy	Formal ordinance directing routine/scheduled ditch maintenance to manage debris accumulation/blockages. Silt management needed for retention ponds as part of new developments.
	Ensure development guidelines include language addressing water retention &/or flow controls.
Promotion of existing resources	Promotion of subscription to Alert Iowa or other location-specific alert systems
	Promote availability of awareness materials and alert systems as available through respective EMA offices
	Make use of existing means of local communications to improve disaster awareness and preparedness -- postings, bulletin board, newsletter, email, text
Security	Consider security-oriented cameras and remote/keyless entry to enable access for refuge
Technology	Improved cell and internet services to maximize use of technological advancements is needed throughout the region.
	Equip tributaries with remotely monitored flood gauges (current gauges are manually assessed and monitored)
	tri-band radio communications capacity

For jurisdictions that have participated in the development of this Plan but have not identified a specific action, strategy, or project, an amendment must be filed for FEMA and the Iowa Department of Homeland Security to formally recognize this jurisdiction as an eligible applicant for Pre-Disaster Mitigation Funds. Such condition is noted in the profile of respective jurisdictions. Since most School Districts did not outline specific actions, strategies, or projects, a statement indicating terms of eligibility is included in the district introduction under Title V. *School Districts Participating as Jurisdictions, Section A. Summary of Relevance to Plan.*

Topography Map, Cherokee County



Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI
and the GIS User Community

Marsh, Swamp, Bog,
Prairie
River

Lake, Reservoir
Incorporated Areas
County Boundary

Contours
Railroad

0 2 4 Miles



The map does not represent a survey, no liability is assumed for the accuracy of the data delineated herein, either expressed or implied by SIMPCO.

© 2025 Siouxland Interstate Metropolitan Planning Council.
Please call 712-279-6286 to obtain permission for use.

IV. COUNTIES & CITIES PARTICIPATING AS JURISDICTIONS

G. Cherokee County

PROFILE – UNINCORPORATED AREA & COUNTY

Cherokee County is centrally located in the northwest quarter of Iowa. The County is bordered by O'Brien County to the north, Buena Vista County to the east, Ida County to the south, and Plymouth County to the west. Cherokee County is approximately 577 square miles.

Cities within Cherokee County include Aurelia, Cherokee, Cleghorn, Larrabee, Marcus, Meriden, Quimby, and Washta.

a. Rivers & Watersheds

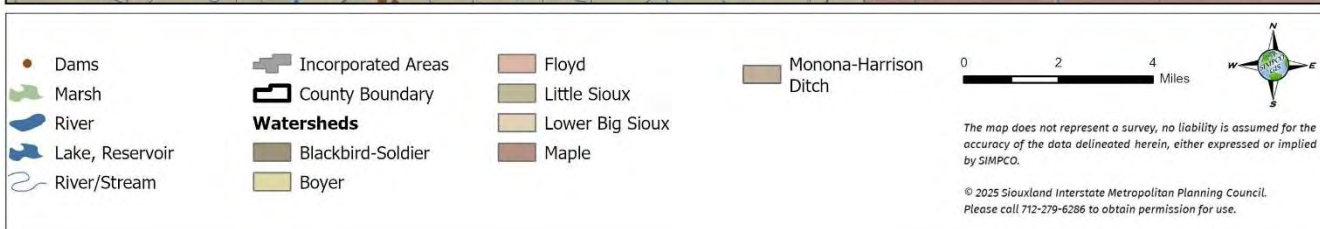
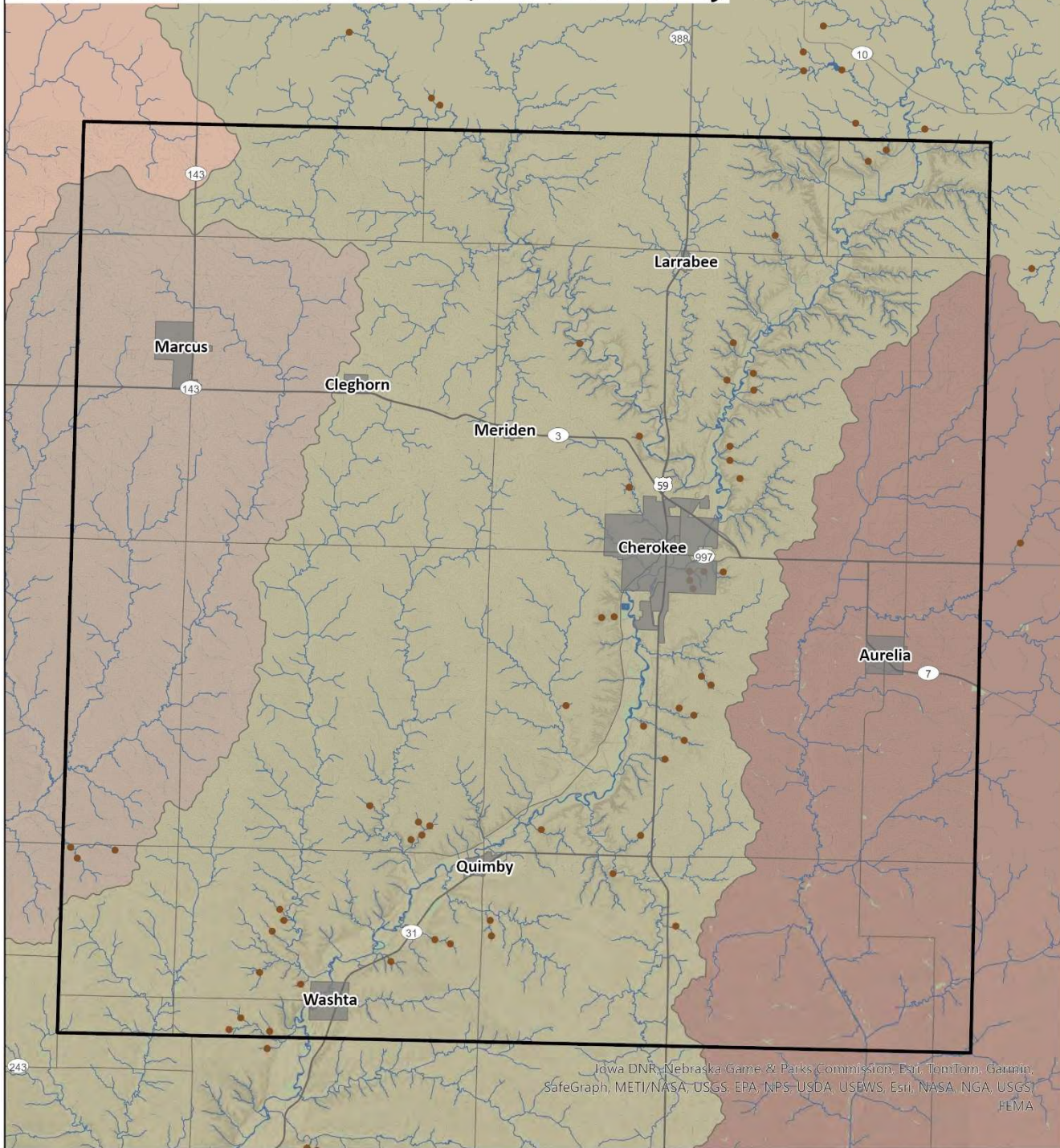
The Little Sioux River runs diagonally from northeast to southwest through the County. While this is the only significant river, there are a number of smaller creeks including Perry Creek, Stratton Creek, and Pierson Creek.

There are three (3) primary watersheds within the County that drain storm water and snow melt into streams and lakes, wetland areas, or into groundwater reserves. These watersheds are Little Sioux Watershed, Monona-Harrison Ditch Watershed, and Maple Watershed. The following map shows sub-watersheds for Cherokee County. Regional breakdown for watersheds is provided in *Planning Area* information. The following map depicts the sub-watersheds within those as listed above. Subwatersheds are determined based on hydrologic unit code (HUC) level 12, which includes more detail including tributary data.

b. Landform Regions & Geology

Some resources (such as Iowa Landscapes in Google Maps) indicate that Cherokee County is composed entirely of a single geological landform region, the Northwest Iowa Plains. The Northwest Iowa Plains are marked by rolling hills, which are the result of the manipulation of glacial sediment deposits, by glacial melt and streams. Other resources reference presence of Southern Iowa Drift Plain as well (<https://www.iihr.uiowa.edu/igs/southern-iowa-drift-plain/>).

Watershed and Water Resources, Cherokee County



c. Transportation Network

U.S. Highway 59 and State Highways 3, 7, 31, and 143 are all included in the County's transportation network.

The County's secondary road system is composed of 1,004.35 miles. Within this category, Farm-to-Market roads make up 311.07 miles, while Area Service roads account for 693.28 miles. Gravel or earth surface types account for 780.10 miles of the secondary road system. The remaining 217.02 miles are composed of bituminous, asphalt, or PCC surface types.

d. County Governance & Supports

The county seat is located in the city of Cherokee, which is just northeast of the center of the County. Its jurisdiction covers all unincorporated portions within county boundaries. A five (5)-person Board of Supervisors governs Cherokee County. The Board acts as the legislative body for the County. Additional offices include the following departments:

• Assessor	• Engineer	• Sheriff
• Attorney	• Environmental Health	• Technology/Website
• Auditor	• General Relief	Admin
• Community Services	• GIS – Mapping	• Treasurer
• Conservation	• Recorder	• Veterans Affairs
• Emergency Management	• Secondary Roads	• Zoning

The Cherokee County's Emergency Management Agency is responsible for the development and maintenance of relevant planning documents, coordinates plans and facilities, and sponsors training opportunities for emergency responders, partner agencies, and the public. The Cherokee County Sheriff's Office provides law enforcement to all rural portion of the County including towns of Larrabee, Meriden, Cleghorn, Quimby, and Washta. The office is staffed by a sheriff and seven (7) additional employees.

County Facilities

Storage	405 1/2 Coombs Dr	Aurelia

Storage	118 N Main	Larrabee
Radio Equipment	118 N Main	Larrabee
Law Enforcement Center	111 N 5th	Cherokee
Courthouse	520 W Main	Cherokee
War Memorial Bldg	520 W Main	Cherokee
Conservation Office; Storage	629 River Road	Cherokee
Martin Access, County Park	SE 1/4 NW 1/2 Sec 32-91-40	Cherokee
Work Activity Center	322 Lake St	Cherokee
Garage	322 Lake St	Cherokee
Offices; Shop; Bldgs	5074 Hwy 3 W	Cherokee
LEC Radio Equip	5074 Hwy 3 W	Cherokee
Storage	406 E 4th St	Quimby
Storage	408 W Sanford	Washta
Storage	601 W Cedar	Marcus
Radio Equipment	601 W Cedar	Marcus
Storage	409 W 1st	Meriden
E911 Radio Equip	113 S Lewis St	Cleghorn
E911 Radio Equip	1880 570th St	Cherokee
Cabins	5494 Martin Access Rd	Cherokee
Park Equip	5494 Martin Access Rd	Cherokee
Siren	5494 Martin Access Rd	Cherokee

Education

Educational attainment in Cherokee County differs in several ways from the state of Iowa as a whole. More residents in Cherokee have completed high school or earned an associate's degree compared to the state average, indicating a strong foundation in basic and technical education. However, the county sees fewer individuals pursuing or completing bachelor's and graduate degrees, highlighting a gap in higher education. The level of residents without a high school diploma is roughly in line with the state, suggesting comparable access to early education. Overall, while Cherokee County maintains solid rates of high school and associate-level education, it falls behind in advanced educational attainment.

<i>Level of Education</i>	<i>Cherokee</i>	<i>Iowa</i>

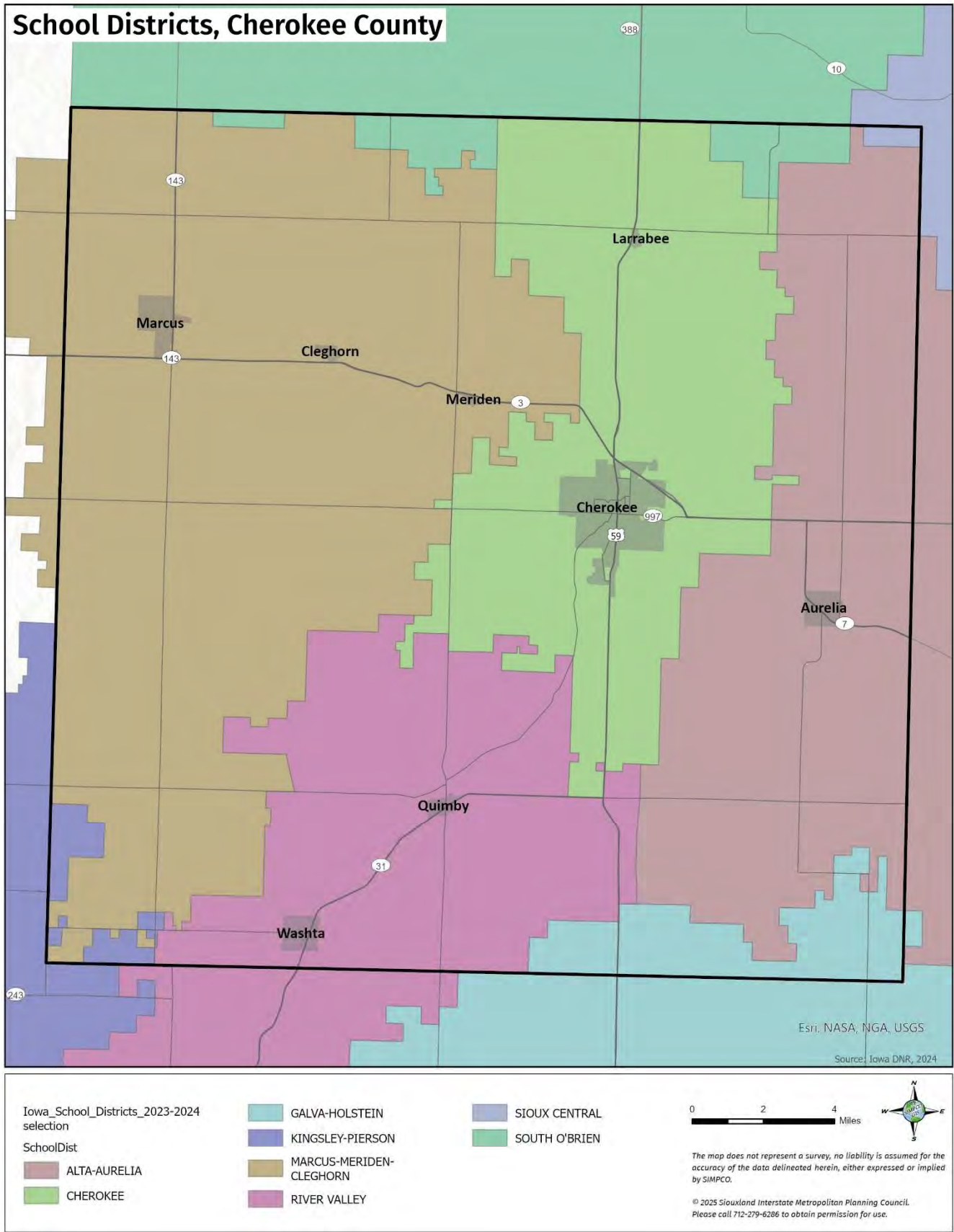
No high school diploma	6.9%	6.7%
High school degree (includes equivalency)	38.4%	29.9%
Some college, no degree	18.8%	19.6%
Associate's degree	13.1%	12.2%
Bachelor's degree	14.3%	20.9%
Graduate or professional degree	7.3%	10.7%

Local enrollment numbers for public schools are included within the statistics and data presentation for each district. In Cherokee County, there are 10 public schools serving four (4) school districts. District listing and facilities table follow.

- Alta-Aurelia Community Schools
- Cherokee Community School District
- Marcus-Meriden-Cleghorn-Remsen Community School District
- River Valley Community School District

<i>Educational Facilities</i>	
Alta-Aurelia Elementary/Middle School	300 Ash Street, Aurelia
Cherokee Community Schools	600 W Bluff, Cherokee
Cherokee Middle School	200 E Indian Street, Cherokee
Early Childhood Learning Center	929 N Roosevelt, Cherokee
Marcus Meriden Cleghorn Jr. Sr. School	400 E Fenton St, Marcus
Marcus Meriden Cleghorn Primary	500 E Fenton St, Marcus
Marcus-Meriden-Cleghorn East Elementary School	200 Campbell St, Cleghorn
River Valley Community School	100 S 5 th St, Washta
Roosevelt Elementary School	929 N Roosevelt, Cherokee
Washington High School	600 W Bluff St, Cherokee
Western Iowa Tech Community College (Chke Co Campus)	200 Victory Dr, Cherokee

There are three (3) private schools located within the County. While there are not public or private standalone universities located within Cherokee County, Western Iowa Tech Community College (WITCC) does have a small campus in the city of Cherokee. WITCC is a public two-year college.



Population

CensusReporter.gov 2023 estimates show Cherokee County⁸ has a population of 11,605, showing a slight decline from 11,658 in 2020. The county contains 5,082 households, with a median household income of \$64,478—falling below the statewide median of \$73,147. Population projections indicate a continued decline over the coming decades, with estimates for 2040 ranging from just under 8,000 to nearly 11,700 residents, depending on future growth rates. The county also includes a significant portion of vulnerable populations: nearly 25% of residents are aged 65 and older, while 15.2% live below the poverty level. Additionally, 7.2% of the population lives with a disability, and 4.9% are children under the age of five. These demographic trends highlight the need for thoughtful planning around economic development, aging services, and support for low-income and at-risk residents.

<i>Community Characteristics</i>	
Population (2023)	11,605
Population (2020)	11,658
Total Households	5,082
Median Household Income	\$ 64,478
Median Household Income – Iowa	\$ 73,147

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>
5 years and younger	568	4.9%
65 years and older	2,845	24.6%
Below the poverty level	1,717	15.2%
Living with a disability	1,335	7.2%

Healthcare Facilities

<i>Name</i>	<i>Address</i>	<i>City</i>	<i>Assisted Living</i>	<i>Skilled Nursing</i>
Careage Hills	725 N. 2nd St.	Cherokee, IA 51012	No	Yes
Accura Healthcare	921 Riverview Dr	Cherokee, IA 51012	Yes	Yes
Heartland Care Center	604 E. Fenton	Marcus, IA 51035	Yes	Yes
Accura Healthcare	401 W 5th St	Aurelia, IA 51005	No	Yes

⁸ Source: <https://censusreporter.org/profiles/05000US19035-cherokee-county-ia/>

Cherokee Specialty Care	1011 N. Roosevelt Ave	Cherokee, IA 51012	No	Yes
The Beck Senior Living Apartments	333 Sioux Valley Dr	Cherokee, IA 51012	Yes	No
The Gardens	1610 Hwy 3	Cherokee	No	No

Housing

Cherokee County offers relatively affordable housing, with a median home value slightly higher than the state average and median rent slightly below. The county has a total of 5,551 housing units, the majority of which are occupied. Most occupied homes are owner-occupied, while a smaller portion are rented. A modest number of housing units remain vacant, indicating a reasonably stable housing market. These figures suggest that homeownership is the dominant form of housing in Cherokee County, and rental options are available but limited.

<i>Housing Characteristics</i>		
Value	Cherokee	Iowa
Median Home Value	\$145,100	\$137,200
Median Rent	\$711	\$740
Availability	Count	Percent
Total Housing Units	5,551	-
Occupied	5,373	90.5%
Owner-occupied	4,064	71.5%
Renter-occupied	1,309	28.5%
Vacant	549	9.5%

Income & Economics

Cherokee County's civilian workforce, made up of individuals aged 16 and older, totals around 4,049 people. The largest number of residents are employed in education, health care, and social assistance, followed by manufacturing and retail trade. Agriculture, including forestry, fishing, and mining, also represents a key part of the local economy. Other notable sectors include construction, wholesale trade, public administration, and professional services. Smaller portions of the workforce are employed in areas such as finance, information,

transportation, and the arts and hospitality industries. Overall, the employment landscape reflects a strong presence of both traditional industries and essential community services.

<i>Industry for the Civilian Employed Population 16 and over</i>		
Civilian employed population (16 and older)	4,049	-
Agriculture, forestry, fishing and hunting, and mining	400	9.9%
Construction	346	8.5%
Manufacturing	645	15.9%
Wholesale trade	189	4.6%
Retail trade	619	15.3%
Transportation and warehousing, and utilities	115	2.8%
Information	44	1.1%
Finance and insurance, and real estate and rental and leasing	51	1.3%
Professional, scientific, and management, and administrative and waste management services	165	4.1%
Education services and health care and social assistance	842	20.1%
Arts, entertainment, and recreation, and accommodation and food services	130	3.2%
Other services except public administration	187	4.6%
Public administration	182	4.5%

Cherokee County identifies the following as leading employers:

- Hy-Vee Distribution
- Cherokee Regional Medical Center
- Cherokee Mental Health Institute
- Cherokee Community School District
- Civil Commitment Union for Sexual Offenders
- Cherokee County
- RJ Thomas Manufacturing
- Christensen Brothers, Inc.
- City of Cherokee
- American Natural Processors
- Schoon Construction/Warehouse

- First Coop Association (Cherokee)
- Mongan Painting
- Foundation Analytical Labs
- Screenbuilders
- Grundman Hicks Construction
- Cloverleaf Cold Storage
- Haselhoff Construction

Additional notable employers in the county include:

- AgReliant
- Corteva
- Fareway
- Hy-Vee Grocery
- Little Sioux Corn
- Lopez Foods, Inc.
- Marcus Lumber
- Simonsen Industries
- Staples Promotional Product

Valuation of County Assets

Total Blanket TIV	\$	23,108,274
Building	\$	19,442,963
Personal Property	\$	3,692,503
Miscellaneous Property Scheduled	\$	8,692,349
Miscellaneous Property Unscheduled	\$	<u>664,929</u>
Total TIV	\$	32,492,744
APD TIV	\$	4,692,268
Grand Total TIV	\$	<u>37, 185,012</u>

PARTICIPATION

Facilitated by SIMPCO, a planning meeting was held at the County EMA office on January 17, 2025 with the following in attendance.

- Justin Pritts, EMA Coordinator

- Bill Anderson, Economic Development (CAEDC)
- Joel Ehrig, Assessor
- Laura Jones, Conservation Board Director
- Tom Ryherd, Superintendent – Cherokee Community Schools
- Derek Scott, Sheriff

Public input was collected through the primary survey with 61 of 251 respondents indicating Cherokee as county of residence. Comments and concerns are included for discussion under Capabilities and Risk Assessment sections as applicable.

CAPABILITIES

Factors improving community capabilities include warning sirens at county parks – Silver Sioux and Martin Access. The sheriff’s office has a generator.

<i>Cherokee County Resources</i>	
Emergency Management Agency & Programming	Emergency Management Coordinator County Recovery Plan Local/County Emergency Plan
Law Enforcement	Cherokee County Sheriff’s Office
Regional Hazard Mitigation Plan	
Economic Development Plan	Cherokee Area Economic Development Corporation
Iowa Wetlands and Riparian Areas Conservation Plan	Cherokee County Conservation Board

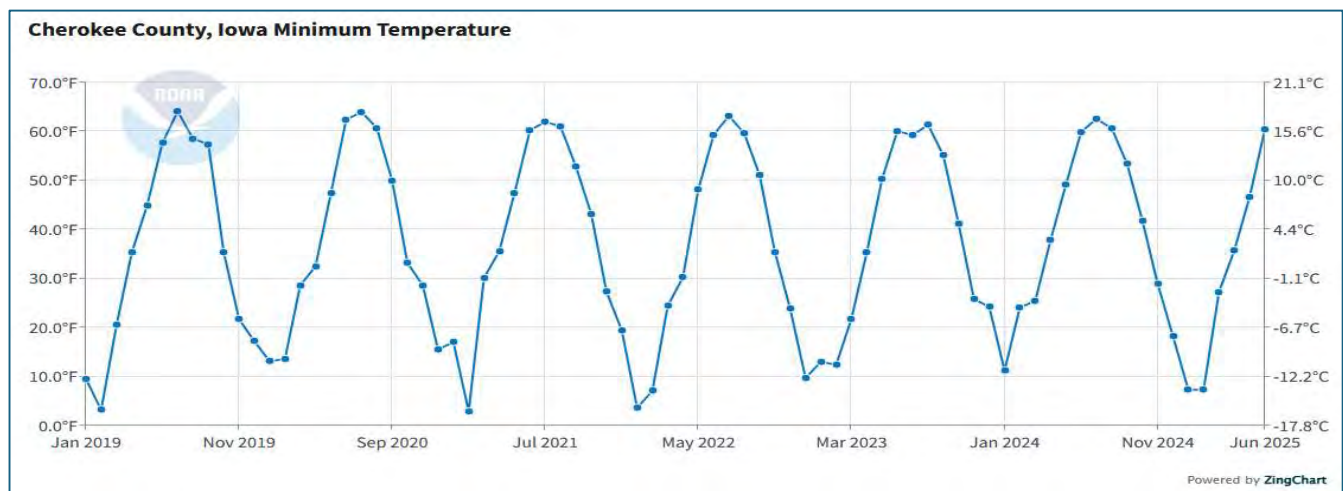
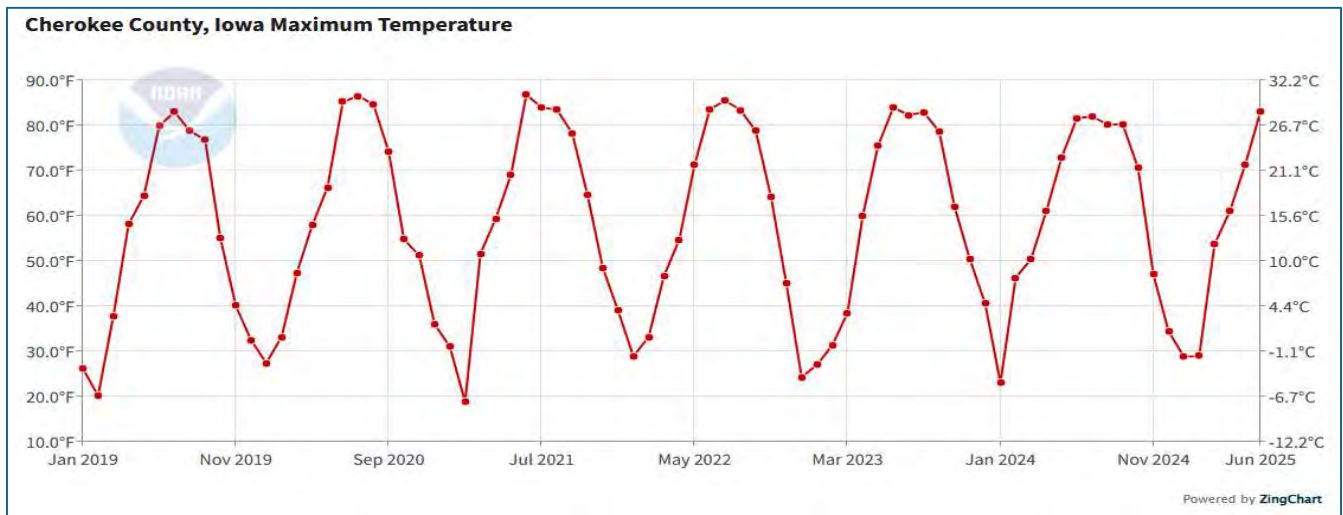
e. Review of Actions Taken

communication /education		
tools/equipment		
Generator & Related Projects	Cherokee County	2020: Two trailer-mounted generators to facilitate county response efforts <i>County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee County	Update. 1 in place 100kw unit owned by the state is housed at the EMA offices. 2 nd unit as well as other generator needs are carried into the 2025 HMP.
Generator & Related Projects	Cherokee County	2020: On-site permanent generator for Courthouse; <i>County EMA</i> (County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY

Generator & Related Projects	Cherokee County	Update. Not implemented as funding has not been dedicated to project. Still needed and carries over to 2025 HMP.
flow control		
refuge		
technology		
natural barriers/ supports		
development		

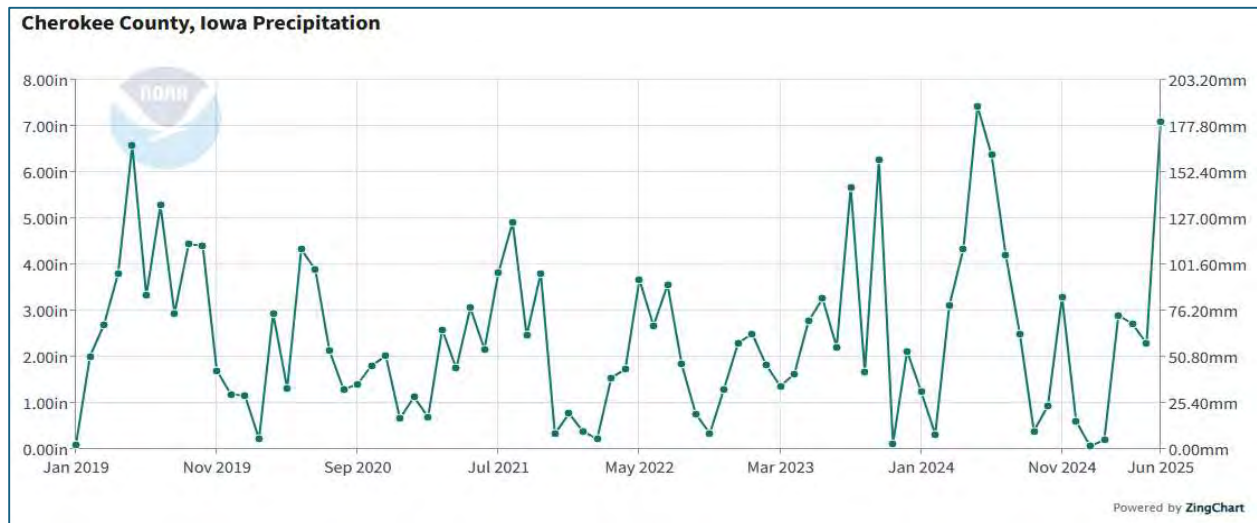
Risk Assessment

Cherokee County Flood Hazard maps⁹ as produced through the Iowa DNR are now categorized as *Effective*. The Land Use and Floodplain map as provided is based on current available information from the DNR and the County, with more detail visible when zooming in on a specific area rather than the full county. Regardless of mapped depiction of floodways,



⁹ Source: <https://ifs.iowafloodcenter.org/ifs/maps/hazard/>

Cherokee County is intersected diagonally by the Little Sioux River and again to the center of its northern border by its Mill Creek tributary. Development particularly for the cities of Cherokee, Quimby, and Washta is therefore highly subject to flood patterns. Other geographical and weather-based vulnerabilities are consistent with those of the region as a whole. The following charts provide a look at county averages¹⁰ for maximum temperature, minimum temperature, and precipitation for November 2019 through December 2024.



Ethanol production and transport is a key consideration in determining risk, as are the presence of bulk ammonia tanks outside the cities of Marcus and Aurelia.

The Trivium Life Services work activity facility in the city of Cherokee is noted to have shelter specifications, though details are not immediately available. School facilities in Cherokee County have designated tornado protocol and refuge areas, though none are certified. In recent years, state programming has enabled the addition of some generators for use by County departments and facilities.

Frequency of extreme weather, especially flooding and heavy storms, has resulted in an increase of power outages due to downed powerlines. As contributing factors are widespread affecting many communities at the same time, county and locally supplied portable generators are insufficient to maintain operations simultaneously.

¹⁰ www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/IA

Gov. Kim Reynolds issued a disaster declaration that weekend for 21 Iowa counties affected by the nearly unimaginable amount of flood water inundating those areas.



-Photo by Karen Schwaller

Much of northwest Iowa received nearly a year's worth of rainfall before 2024 was even half over, with approximately 11 inches falling in a short period of time in the month of June. That resulted in historic flooding, which devastated hard-hit Iowa communities like Rock Valley, Spencer, Sioux Rapids, Cherokee, Correctionville, Hawarden, and points further south. Here the water flows from the field and over the roadway.

www.messengernews.net/progress-2025/progress-2025-agriculture/2025/02/2024-floods-northwest-iowa-recovers 2024 Floods: Northwest Iowa recovers. Feb 22, 2025 Karen Schwaller
editor@messengernews.net (June 9, 2025)

A review of reports in the NOAA Storm Event database provides 134 records within Cherokee County between 11/01/2019 and 12/31/2024.

Summary

Number of County/Zone areas affected:	2
Number of Days with Event:	113
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	2
Number of Days with Event and Crop Damage:	20
Number of Event Types reported:	15

Property damage estimates as reported: \$ 2,445,000
Crop damage estimates as reported: \$ 12,734,000

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
CHEROKEE (ZONE)	11/26/2019	15:00	Winter Storm		0	0	0.00K	0.00K
CHEROKEE (ZONE)	11/28/2019	22:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/17/2020	7:00	Blizzard		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/18/2020	15:00	Cold/wind Chill		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/22/2020	0:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/12/2020	22:30	Cold/wind Chill		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/19/2020	3:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	3/19/2020	18:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	4/12/2020	8:00	Winter Storm		0	0	0.00K	0.00K
CLEGHORN	6/4/2020	22:43	Hail	1.00 in.	0	0	0.00K	0.00K
CHEROKEE MUNI ARPT	6/4/2020	23:09	Hail	1.25 in.	0	0	0.00K	0.00K
CHEROKEE (ZONE)	7/28/2020	0:00	Drought		0	0	0.00K	1.100M
CHEROKEE (ZONE)	8/1/2020	0:00	Drought		0	0	0.00K	1.100M
CHEROKEE (ZONE)	9/1/2020	0:00	Drought		0	0	0.00K	50.00K
CHEROKEE (ZONE)	10/1/2020	0:00	Drought		0	0	0.00K	55.00K
CHEROKEE (ZONE)	10/25/2020	5:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	11/1/2020	0:00	Drought		0	0	0.00K	37.00K
CHEROKEE (ZONE)	11/9/2020	22:00	Ice Storm		0	0	0.00K	0.00K
CHEROKEE (ZONE)	12/1/2020	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	12/23/2020	11:00	Blizzard		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/1/2021	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/14/2021	23:00	Blizzard		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/23/2021	8:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/25/2021	18:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/1/2021	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/4/2021	3:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/14/2021	2:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/21/2021	6:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	3/1/2021	0:00	Drought		0	0	0.00K	0.00K

CHEROKEE (ZONE)	3/15/2021	0:00	Winter Storm		0	0	0.00K	0.00K
CHEROKEE (ZONE)	4/1/2021	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	5/1/2021	0:00	Drought		0	0	0.00K	20.00K
CHEROKEE (ZONE)	6/1/2021	0:00	Drought		0	0	0.00K	270.00K
WASHTA	6/22/2021	17:42	Hail	1.25 in.	0	0	0.00K	191.00K
CHEROKEE (ZONE)	7/1/2021	0:00	Drought		0	0	0.00K	214.00K
CHEROKEE (ZONE)	8/1/2021	0:00	Drought		0	0	0.00K	250.00K
WASHTA	8/20/2021	17:22	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
MARCUS	8/27/2021	0:46	Thunderstorm Wind	52 kts. EG	0	0	0.00K	50.00K
CHEROKEE	8/27/2021	1:05	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
CHEROKEE (ZONE)	9/1/2021	0:00	Drought		0	0	0.00K	10.00K
CHEROKEE (ZONE)	10/1/2021	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	11/1/2021	0:00	Drought		0	0	0.00K	5.00K
CHEROKEE (ZONE)	12/10/2021	13:00	Winter Weather		0	0	0.00K	0.00K
FIELDING	12/15/2021	16:46	Thunderstorm Wind	74 kts. EG	0	0	0.00K	0.00K
MARY HILL	12/15/2021	16:53	Thunderstorm Wind	83 kts. EG	0	0	15.00K	0.00K
MERIDEN	12/15/2021	16:56	Thunderstorm Wind	83 kts. EG	0	0	30.00K	0.00K
MARCUS	12/15/2021	16:56	Thunderstorm Wind	70 kts. EG	0	0	50.00K	0.00K
AURELIA	12/15/2021	16:59	Tornado	EF1	0	0	1.000M	0.00K
AURELIA	12/15/2021	17:00	Tornado	EFU	0	0	0.00K	0.00K
AURELIA	12/15/2021	17:02	Thunderstorm Wind	87 kts. EG	0	0	0.00K	0.00K
AURELIA	12/15/2021	17:02	Thunderstorm Wind	87 kts. EG	0	0	20.00K	0.00K
AURELIA	12/15/2021	17:02	Thunderstorm Wind	78 kts. EG	0	0	30.00K	0.00K
AURELIA	12/15/2021	17:03	Thunderstorm Wind	78 kts. EG	0	0	30.00K	0.00K
LARRABEE	12/15/2021	17:05	Tornado	EF1	0	0	250.00K	0.00K
CHEROKEE (ZONE)	12/15/2021	20:40	High Wind	39 kts. MS	0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/1/2022	1:30	Cold/wind Chill		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/6/2022	4:00	Cold/wind Chill		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/14/2022	3:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/21/2022	16:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/22/2022	19:30	Cold/wind Chill		0	0	0.00K	0.00K
CHEROKEE (ZONE)	3/5/2022	13:30	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	3/25/2022	10:00	Strong Wind	31 kts. MS	0	0	0.00K	0.00K

CHEROKEE (ZONE)	4/14/2022	7:20	High Wind	35 kts. MS	0	0	0.00K	0.00K
CHEROKEE (ZONE)	4/23/2022	10:45	High Wind	38 kts. MS	0	0	0.00K	0.00K
MARCUS	5/30/2022	14:55	Hail	0.88 in.	0	0	0.00K	0.00K
CHEROKEE (ZONE)	6/14/2022	0:00	Drought		0	0	0.00K	1.130M
CHEROKEE (ZONE)	7/1/2022	0:00	Drought		0	0	0.00K	1.800M
CHEROKEE (ZONE)	8/1/2022	0:00	Drought		0	0	0.00K	1.750M
FIELDING	8/18/2022	18:35	Thunderstorm Wind	53 kts. MG	0	0	0.00K	0.00K
CLEGHORN	8/27/2022	16:18	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
CHEROKEE (ZONE)	9/1/2022	0:00	Drought		0	0	0.00K	1.120M
CHEROKEE (ZONE)	10/1/2022	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	11/1/2022	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	11/29/2022	6:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	12/1/2022	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	12/8/2022	17:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	12/12/2022	17:00	Ice Storm		0	0	0.00K	0.00K
CHEROKEE (ZONE)	12/22/2022	3:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
CHEROKEE (ZONE)	12/22/2022	10:30	Blizzard		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/1/2023	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/2/2023	20:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/18/2023	17:00	Winter Storm		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/28/2023	1:00	Winter Storm		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/1/2023	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/15/2023	1:30	Strong Wind	29 kts. MS	0	0	0.00K	0.00K
CHEROKEE (ZONE)	3/1/2023	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	3/8/2023	13:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	3/22/2023	22:30	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	4/1/2023	0:00	Drought		0	0	0.00K	0.00K
CLEGHORN	4/19/2023	18:43	Hail	1.50 in.	0	0	0.00K	0.00K
CHEROKEE (ZONE)	4/30/2023	8:00	Strong Wind	39 kts. MG	0	0	0.00K	0.00K
CHEROKEE (ZONE)	5/1/2023	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	6/20/2023	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	7/1/2023	0:00	Drought		0	0	0.00K	0.00K
AURELIA	7/3/2023	16:53	Hail	1.00 in.	0	0	0.00K	110.00K

CHEROKEE (ZONE)	7/26/2023	10:00	Excessive Heat		0	0	0.00K	0.00K
CHEROKEE (ZONE)	8/1/2023	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	8/19/2023	13:30	Excessive Heat		0	0	0.00K	0.00K
CHEROKEE (ZONE)	8/21/2023	11:00	Excessive Heat		0	0	0.00K	0.00K
CHEROKEE (ZONE)	9/1/2023	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	10/1/2023	0:00	Drought		0	0	0.00K	3.470M
CHEROKEE (ZONE)	10/28/2023	12:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	12/25/2023	2:00	Ice Storm		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/8/2024	15:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/11/2024	18:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/12/2024	15:00	Blizzard		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/12/2024	18:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/18/2024	9:00	Winter Weather		0	0	0.00K	0.00K
CHEROKEE (ZONE)	1/19/2024	22:00	Cold/wind Chill		0	0	0.00K	0.00K
CHEROKEE (ZONE)	2/27/2024	16:00	Winter Weather		0	0	0.00K	0.00K
FIELDING	4/26/2024	11:30	Hail	1.25 in.	0	0	0.00K	0.00K
CLEGHORN	4/26/2024	11:47	Hail	1.00 in.	0	0	0.00K	0.00K
LARRABEE	5/2/2024	18:00	Flood		0	0	0.00K	0.00K
MARCUS	5/8/2024	15:31	Hail	1.00 in.	0	0	0.00K	0.00K
LARRABEE	5/20/2024	19:50	Hail	1.25 in.	0	0	0.00K	0.00K
AURELIA	5/20/2024	20:30	Hail	1.50 in.	0	0	0.00K	2.00K
LARRABEE	5/22/2024	2:00	Flood		0	0	0.00K	0.00K
WASHTA	6/21/2024	1:00	Flood		0	0	1.020M	0.00K
LARRABEE	6/21/2024	1:00	Flood		0	0	0.00K	0.00K
CLEGHORN	6/22/2024	6:00	Flood		0	0	0.00K	0.00K
LARRABEE	7/1/2024	0:00	Flood		0	0	0.00K	0.00K
CHEROKEE (ZONE)	7/13/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
QUIMBY	7/29/2024	23:21	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
MARCUS	7/29/2024	23:22	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
CHEROKEE	7/29/2024	23:37	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
AURELIA	7/29/2024	23:45	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
CHEROKEE (ZONE)	7/31/2024	11:00	Excessive Heat		0	0	0.00K	0.00K
CHEROKEE (ZONE)	8/2/2024	12:00	Heat		0	0	0.00K	0.00K

CHEROKEE (ZONE)	8/5/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
CHEROKEE (ZONE)	8/25/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
CHEROKEE (ZONE)	10/29/2024	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	11/1/2024	0:00	Drought		0	0	0.00K	0.00K
CHEROKEE (ZONE)	12/4/2024	11:00	Strong Wind	36 kts. MG	0	0	0.00K	0.00K
CHEROKEE (ZONE)	12/19/2024	12:00	Strong Wind	26 kts. MS	0	0	0.00K	0.00K

Estimates as provided are intended to imply a base valuation only. It is important to note that estimates are from on reported amounts. As NOAA is a public-sourced database, events are recorded in real time but follow up of adding costs associated with events is often incomplete. Local EMA offices are better equipped to provide such details. Even then, final numbers may not be totaled for several years after recovery efforts have been completed.

A compilation of State disaster declarations and presidential disaster declarations are included in the Region Risk Assessment section of this plan.

f. Priority Hazards

The county identifies the following as primary hazard concerns.

- Flood
- Tornado / Windstorm
- Drought

Also noted as concerns are

- Animal / Plant / Crop disease and
- Terrorism (Active Shooter)

Among Cherokee County respondents to the survey, Tornado/Windstorm (33/61), Severe Winter Storm (27/61) and Flood – Flash and Riverine (24/61) have the highest frequency of Very Concerned indicated. When asked what they consider the top three hazards, respondents provided: Tornado/Windstorm (37/61), Severe Winter Storm (23/61) and Thunderstorm with Hail & Lightning (20/61).

Most surveys completed were on paper which allowed for level of concern for each hazard and space for general comments. The online survey was longer with more prompts for open-ended responses. Below are some notable concerns/mentions regarding overall community awareness of hazards and preparedness.

What personal impacts have you experienced due to any of the hazards identified above?

- [Sure!] Good! Need info on what's available during/after disaster - to know what to do
- To be informed of dam and levy failure
- (1) Ongoing community only about risks and risk migration measures (2) Department meetings in the subject yearly reviewing plans
- Dust and noise from elevator
- flood
- Have had to miss work because couldn't travel because of floods and snow.

What have you done to reduce the impacts of likely occurring hazards (i.e. installed sump pump to keep basement from flooding)

- All that I can do
- nothing
- Built on a hill

Are there any mitigation projects you would like to see implemented to reduce the impact of hazard/disastrous events in the Jurisdiction you are representing?

- Dam release from Lakes are[a] can affect our County.
- More security in schools-SRO's-Metal detectors etc.
- Flood mitigation- expanding watershed project

MITIGATION ACTIONS, STRATEGIES, & PROJECTS

The full list of planned mitigation actions, strategies, and projects follows.

communication/education		
Assessment/Study	Cherokee Co	New. A study of several tributaries is need to assess options for collection, redirection, diversion. Waterways include Mill Creek, Little Sioux River, Railroad Creek. County will support study of others as collaborative project. <i>EMA, County Board, affected cities, Conservation Board, DNR, ACE, Secondary Roads.</i> (Scoping project-PDM funds as may be available, local funds from participating entities)
tools/equipment		
Generator & Related Projects	Cherokee County	Carry over. trailer-mounted generator needed to facilitate county response efforts <i>County EMA</i> (Local funds – not yet allocated, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee County	New. On-site generator needed for EOC/EMA for continuity of operations extreme weather events and other disasters. Estimated cost @ \$350,000. <i>County EMA</i> (Local funds – not yet allocated, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee County, Cherokee CSD	New. generator to facilitate use of High School as refuge / shelter location <i>County EMA, School Superintendent / Board, City of Cherokee</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee County	Carry over. On-site permanent generator for Courthouse; <i>County EMA</i> (County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Relocate critical facilities	Cherokee Co	New. Relocation of Conservation Department necessitated by floodplain expansion. Current office now in compromised area. Facility needs office space as well as storage. There is potential to collaborate with Secondary Roads to share storage space. Estimates range from \$.5M - \$.75M. Ideally, new location will be in one of the parks, River Oaks Conservation Area is being considered. County Board, Conservation Dept, Secondary Roads, IDNR, State Conservation (County and state funds as available, PDM/FMA as appropriate, other TBD) HIGH PRIORITY
flow control		
refuge		
technology		
natural barriers/supports		
development		

Other projects with potential mitigative impact include but are not limited to the following.

- Cherokee County has several road projects listed for consideration in the near future, many of which are increasing in implementation priority due to the accelerated deterioration effects of frequent weather extremes. Among these are collaborative projects with cities, state funded roadways, and watershed improvements.
- The ability to maintain function of County operations during and after a hazardous event or disaster is essential to appropriating response.
- The county is looking at expanding the assessor's office space, addressing in part vehicle storage.
- Several road repair projects to perform routine maintenance, some with extensive repairs

JURISDICTIONS

1. AURELIA

a. Profile

The city of Aurelia is located close to the eastern border of Cherokee County, just 8 miles southeast of the City of Cherokee. The IA-7 Highway is the main road that goes through the city and connects Aurelia to surrounding communities, running northwest/southeast through the city.

City Governance & Community Supports

Aurelia is governed by a 5-person elected council and the Mayor. Offices in addition to Mayor and Council include City Clerk, Deputy City Clerk, Public Works, Streets, Waterworks, Electric, Fire Chief and Police Chief. City Hall houses the Council chambers, police department, and city staff offices. Aurelia City has a volunteer Fire Department in place. The Department staffs 22 volunteer firefighters with 7 having Emergency Medical Service certifications. The Aurelia Fire Department serves the city and rural surrounding community, approximately 105 sq. miles. The department operates as at EMT level service for medical emergencies.

The city pursues economic development with several community partners. After a lapse in activity, the Aurelia Economic Development Corporation's (AEDC) has resumed. Its mission is to economically promote and sustain the quality of life in Aurelia by assisting local businesses, residents, and actively promoting new opportunities to grow the City of Aurelia. Eight Board members lead the AEDC.

The Aurelia Commercial Club (ACC) is much like a traditional chamber of commerce with the exception that anyone may be a member. Aurelia Commercial Club's mission is to promote Aurelia's local business, ag industry and the economic and social health of the community. The Friends of Aurelia group is a community organization that contributes to economic development issues in Aurelia.

Tornado - AURELIA

Cherokee/Buena Vista County

Date	Dec 15, 2021
Time (Local)	4:59 PM - 5:12 PM CST
EF Rating	EF-1
Est. Peak Winds	110 mph
Path Length	18.1 miles
Max Width	250 yards
Injuries/Deaths	0/0

Summary:

The tornado touched down near the intersection of T Avenue and 610th Street and collapsed a hog barn. It tracked northeast toward Aurelia and intermittently damaged roofs and siding of nearby houses and farm outbuildings.

The tornado entered the south side of Aurelia near Main Street and 560th Street. It damaged the grain elevator and snapped numerous tree limbs and trunks throughout the city, including at the golf course. Other non-tornadic wind damage included three tipped over empty rail cars, leaning power poles, and a storage garage near the elementary school.

The tornado continued to the northeast, destroying a barn and three outbuildings along 535th Street. Additional damage occurred to a machine shed and trees along the Cherokee and Buena Vista County line. Damage continued to the northeast, and trees before south of the Buena Vista County line.

Track Map



Downloadable KMZ File

Source: Historic December Severe Weather Outbreak Brings Damaging Winds and Tornadoes to Northwest Iowa, www.weather.gov/fsd/20211215-Tornado-nwia (June 9, 2025)



(Courtesy: NWS Survey)



(Courtesy: NWS Survey)



(Courtesy: NWS Survey)



(Courtesy: NWS Survey)

Demographics, Housing, & Economics

It is important to note that a local survey indicates a higher population than indicated by census estimates of 968 (2020 decennial census). The local survey was distributed to less than the full population and results still exceed value assigned by the Census Bureau. For consistency in review of data, the census total is used herein.

This small community is composed of approximately 430 households. It boasts a median household income that slightly surpasses the Cherokee County average, indicating a relatively

stable economic foundation. Despite its modest size, the community has notable demographic trends. Nearly 30% of residents are aged 65 or older, significantly higher than both the county and state averages, highlighting a strong presence of older adults. In contrast, the percentage of young children is lower than regional and state figures. The community also reports a lower poverty rate and a comparable proportion of residents living with disabilities, suggesting a need for services that cater specifically to aging residents and those with accessibility needs.

<i>Community Characteristics</i>	
Population (2020)	968
Total Households	430
Median household income	\$68,605
Median household income – Cherokee County	\$64,478

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Cherokee</i>	<i>Iowa</i>
5 years and younger	44	4.5%	4.9%	6.3%
65 years and older	283	29.3%	24.6%	16.0%
Below poverty level	44	4.5%	7.2%	11.3%
Living with a disability	136	14%	15.2%	13%

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total housing units	441	
Occupied units	402	91.2%
Vacant units	39	8.8%
Mobile Homes	12	2.3%
<i>Age of residential structure</i>		
Built 2000 or later	10	1.9%
Built 1970 – 1999	151	28.7%
Build 1969 or earlier	366	69.4%

The local housing landscape reflects the community’s deep-rooted character. Of the 441 housing units, more than 90% are occupied, showing consistent demand and a relatively low vacancy rate. Most homes were built prior to 1970, with fewer than 2% constructed since 2000. This aging housing stock suggests potential needs for renovations or infrastructure

improvements. Mobile homes make up a small portion of available housing, indicating a predominance of traditional single-family residences.

Together, these characteristics paint a picture of a well-established and stable community with a strong economic base, an aging population, and housing infrastructure that may benefit from strategic investment and long-term planning.

Leading Employers

While not hosting a large number of employees, the following businesses operate and have established a necessary presence in Aurelia.

- Alta-Aurelia Community Schools
- Accura Care and Rehab Center

Critical Facilities

City Hall	236 Main St
Water Tower	236 Main St
Community Center	235 Main St
Library	232 Main St
Municipal Electric Bldg	126 S Main St
Town Shop	126½ S Main St
Town Building	115 Myrtle St
Garbage Shop	114 Myrtle St
Fire Dept Storage	112 Myrtle
Fire Station	110 Myrtle St
City Park (Shelter House, Gazebo)	216 W 4 th St
Boy Scout House	216 W 4 th St (West side)
Pool Bldg & Equipment Bldg	304 W 4 th St (bldgs 1 & 2)
Sewer Plant	SW ¼ of Section 10 – Pitcher Twp (bldgs 1 – 5)
Town Storage	Hwy 7
Aurelia Golf Course	601 Valor Rd

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Accura Care and Rehab Center,	410 W 5th St
Aurelia Elementary School	300 Ash St
Alta-Aurelia Middle School	300 Ash St
Heritage Center	228 Main St
Martin Area Park	4579 Martin Access Rd (outside City Limits)
Aurelia Day Care (on-site at school, operated independently)	216 Ash St

Valuation of City Assets

Total Buildings	\$	6,185,768
Total Personal Property	\$	1,030,463
Total Property in the Open	\$	<u>2,378,323</u>
Combined Total	\$	<u>9,594,554</u>

b. Participation

Facilitated by SIMPCO, a mitigation planning meeting was held December 18, 2024 at Aurelia City Hall with the following in attendance.

- Stephanie McSparran, City Clerk
- Dustin Wieland, Maintenance
- Mark Sangwin, Public Works Director

Public input was provided by way of survey responses. Of the 61 surveys collected for Cherokee County, 2 respondents indicated Aurelia as jurisdiction of residence.

c. Community Capabilities

<i>Planning Documents and Organization Supports</i>	
Comprehensive Plan	Adopted 2018
Builder's Plan	2015IPMC and IBC)
Economic Development Plan	Cherokee Area Economic Development Corporation
<i>Policies/Ordinance – adopted 12/26/2018</i>	
Municipal Code of Ordinances – annual updates	

- Floodplain Ordinance (2021 via IDNR) - Subdivision Ordinance - Tree Trimming Ordinance - Nuisance Ordinance - Debris Management Plan	- Storm Water Ordinance - Drainage Ordinance - Historic Preservation Ordinance - Zoning Ordinance
Iowa Wetlands and Riparian Areas Conservation Plan	<i>Cherokee County Conservation Board</i> <i>Iowa DNR</i>
<i>Infrastructure and Technology</i>	
- Warning Siren - Generator at Fire Station and 1 mobile	- Alert Iowa access - Community Bulletin Board/Public Posts
<i>Programs</i>	
Zoning/Land Use Restrictions	<i>Zoning Ordinance</i>
Codes Building Site/Design	<i>Building Permits issued by clerk w/Council-approved application</i>
National Flood Insurance Program (NFIP) Participant	<i>CID #190549</i>
Hazard Awareness Program	Cherokee County Hazardous Waste Pick-up
ISO Fire Rating	Aurelia Class 7 and Aurelia FD Class 7/9
Property Acquisition	Considered for dilapidated residences on a case-by-case basis
Planning/Zoning Boards	Planning and Zoning Commission
Mutual Aid Agreements	Cities of Alta, Peterson, and Galva
	Service provided to: Cherokee Regional Medical Ctr; Sioux Valley Hospital.
<i>Staff/Department</i>	
- Public Works Official - Emergency Response Team - Historic Preservation	- Public Works Director - City Fire and EMS Department - Aurelia Heritage Society
<i>Non-Governmental Organizations</i>	
Veterans Groups	American Legion Auxiliary Grashoff McManus American Legion Post 390
Community Organizations	- Aurelia Commercial Club - Aurelia Economic Development - Aurelia Women’s Club - Friends of Aurelia Public Library - Kiwanis Club of Aurelia
<i>Local Funding Availability/Eligibility</i>	
Community Development Block Grants	
Capital Improvements funding	

Authority to levy taxes for a specified purpose	
Fees for water, sewer, gas, or electric services	
Incur debt through	• general obligation bonds • private activities • special tax bonds
Withhold spending in hazard prone areas	

The city is working on funding a new Fire Station with a generator included in the plans. Estimated at \$1.5M, the site has been determined and the project is set to go to bid in 2025. Fundraising figures prominently in planned funding sources.

Review of Actions Taken (Since 2019)

communication/education		
Promo/Info	Aurelia	2020: Interest in promoting Smoke Detector programs, and similar supports, when offered at County or Region levels. <i>City Clerk, Public Health, EMA</i> (for promo: No dedicated funding necessary. For detectors: Community grants, pre-disaster funds) HIGH PRIORITY
Promo/Info	Aurelia	Update. No action taken as program has not been made available through FD or Public Health. City wishes to carry this project over to 2025.
tools/equipment		
Equipment	Aurelia	2020: Additional equipment for Emergency Response needed in lieu of resident-owned materials. Items considered include but are not limited to ATV and Rescue Boat. <i>City Council, Fire & Rescue Services, Police Department</i> (Local funds, fundraising, community betterment funds) MEDIUM PRIORITY
Equipment	Aurelia	Complete. City added ATV to city inventory. No further action anticipated for this project.
development		
Improve existing facilities & infrastructure	Aurelia	2020: Improve capacity for Community Center to be designated as cooling shelter and/or refuge location for extreme weather conditions. <i>City Council, City Maintenance</i> (Local Funds, Community Betterment Funds, PDM)
		Update. City still interested in improving facility prep for use as shelter/refuge with specific project identified: add generator.
		Carry over. Project for generator added under appropriate category.
flow control		
refuge		
technology		
natural barriers/supports		

Addressing failing infrastructure, the city completed a water and sewer mains replacement project in November 2023. The work included 7 fire hydrants, covered 5 blocks, and cost approximately \$900,000. Cherokee County reported that a transfer switch project was implemented at the community center following 2021 tornado. The \$20,000 project was privately funded. The city would still like to have a dedicated generator for city use.

Other efforts include the removal of ash trees completed per the city's tree removal plan. Re-treeing efforts are intermittent, although Kiwanis put in a trail lined with several trees.

d. Risk Assessment

Contributing Factors

The NOAA Storm Event database provides record of 8 events specific to Aurelia, and 97 events attributed to Cherokee (Zone) affecting the whole county from 11/01/2019 through 12/31/2024.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
AURELIA	12/15/2021	16:59	Tornado	EF1	0	0	1.000M	0.00K
AURELIA	12/15/2021	17:00	Tornado	EFU	0	0	0.00K	0.00K
AURELIA	12/15/2021	17:02	Thunderstorm Wind	87 kts. EG	0	0	0.00K	0.00K
AURELIA	12/15/2021	17:02	Thunderstorm Wind	87 kts. EG	0	0	20.00K	0.00K
AURELIA	12/15/2021	17:02	Thunderstorm Wind	78 kts. EG	0	0	30.00K	0.00K
AURELIA	12/15/2021	17:03	Thunderstorm Wind	78 kts. EG	0	0	30.00K	0.00K
AURELIA	7/3/2023	16:53	Hail	1.00 in.	0	0	0.00K	110.00K
AURELIA	5/20/2024	20:30	Hail	1.50 in.	0	0	0.00K	2.00K

In addition to adverse effects of extreme weather, aging infrastructure is placing a high demand on local resources. A water systems improvement project including a new water tower and well is in progress with engineering complete. Site testing for the well and site selection for the tower are underway. Construction is expected to begin within a year.

Naturally occurring flooding is not a primary issue, however, flash flooding can be problematic. Sewer system overload and resulting back flow is a prominent concern and is directly related

to aging infrastructure that is overcapacity. It is expected that recent improvements will reduce these occurrences.

Priority Hazards

- Tornado/Windstorm
- Severe Winter Storms (*including Ice and Extreme Cold*)
- Extreme Heat

Survey respondents indicate similar priorities with Thunderstorms with Hail and Lightning ranking slightly higher than Extreme Heat. Drought and Grass and Wildland Fire are also noted concerns.

e. Mitigation Needs, Actions, & Strategies

communication/education		
Promo/Info	Aurelia	Carry over. Seek Smoke Detector program opportunities and similar supports, when offered at County or Region levels and promote accordingly, <i>City Clerk, Public Health, EMA</i> (for promo: No dedicated funding necessary. For detectors: Community grants, pre-disaster funds) HIGH PRIORITY
Promo/Info	Aurelia	New. City intends to increase awareness of Alert Iowa program through promotion and registration provision on city communications. City Clerk, County EMA (no expense aside from staffing hours is anticipated) HIGH PRIORITY
tools/equipment		
Generator & Related Projects	Aurelia	Carry over (moved from Improve Existing Facilities). Community ctr updates to improve capacity to serve as refuge location in the event of an emergency. Transfer switch added to community center after 2021 tornado, funded privately. Dedicated generator still needed. Cost estimate provided in 2023 is \$55,000. Portion of funds have been set aside. Project pending availability to cover balance. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/supports		

2. CHEROKEE

a. Profile

The City of Cherokee is situated just north and east of center in Cherokee County. It is the County's largest city and serves as the county seat. Two main highways connect the city to neighboring cities in Cherokee and neighboring Counties – US Highway 59 passes through the middle, running north/south bound, and Highway 3 passes along its northern-most border. The Little Sioux River is situated near the city's southern-most border, extending north and south of Cherokee County.

City Governance & Community Supports

The City of Cherokee is governed by a five-person elected council and Mayor. Offices in addition to Mayor and Council include City Clerk, Deputy City Clerk, Administrator, Wastewater Department, Parks and Recreation, Street Department, and Public Works. The City's Fire Department consists of 25 volunteer firefighters, two paid driver/dispatchers and a chief. The department provides fire, rescue, and hazardous material services for the City and surrounding rural areas. The Department also maintains several agreements with surrounding communities to assist each other with major incidents or as needed.

Some additional detail on supports available for the City of Cherokee can be found in *Section c. Community Capabilities* later in this Chapter.

Demographics, Housing, & Economics

As of 2024, the city of Cherokee has experienced modest population growth, increasing to 5,157 residents from 5,018 in 2020. There are approximately 2,290 households and 2,330 total housing units, with a high occupancy rate, indicating steady housing demand. The median household income stands at \$64,478, reflecting economic conditions consistent with the broader county average. The housing stock is predominantly older, with most residential structures built before 1970. More recent development has been limited, with a small portion of homes constructed since 2000. Mobile homes account for a minor part of the housing inventory. These

characteristics point to a stable and established community, though the aging housing infrastructure may present opportunities for revitalization and investment.

<i>Community Characteristics</i>	
Population (2024)	5,157
Population (2020)	5,018
Total Households	2,290
Median household income	\$64,478

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total housing units	2,330	-
Occupied units	2,172	93.2%
Vacant units	158	6.8%
Mobile Homes	59	2.5%
<i>Age of residential structure</i>		
Built 2000 or later	180	7.7%
Built 1970 – 1999	430	18.4%
Build 1969 or earlier	1,720	73.9%

Leading Employers

Economic development in Cherokee is ever-evolving with some rotation of newer businesses and/or ownership of older entities. At the writing of this Plan, the following are recognized as major or otherwise notable employers in the City of Cherokee.

- American Natural Soy 1510 S 2nd St
- Cherokee Mental Health Institute 1251 W Cedar Loop
- Cherokee Regional Medical Center 300 Sioux Valley Dr
- Cherokee Community School District 600 W Bluff St
- NorAm Cold Storage 1530 S 2nd St
- Fareway Food Store 205 W Bluff St
- Hy-Vee Distribution Center 1010 Riverview Dr
- Hy-Vee Food Store 1300 N 2nd St
- Lopez Foods 1300 Lake St

Critical Facilities

City Hall	416 W Main St
Fire Station	300 W Elm
Law Enforcement Center	239 W. Maple St
Streets Shop (multiple bldgs/equip)	1811 Industrial Rd
Community Center	530 W Bluff St
Library	215 S 2nd St
Cemetery (multiple bldgs/equip)	1601 W Main
Cherokee Regional Airport (multiple bldgs/equip)	1201 S 2nd
Aquatic Center (multiple bldgs./equip)	614 W Bluff
North Water Tower (#1)	Intersection of Hwy 59 & Hwy 3
Hill Street Water Tower (#2)	N 11th & Hill St
MHI Water Tower (#3)	1200 W Cedar Loop
Industrial Water Tower (#4)	1300 S Lake Rd
Industrial Wastewater Plant (multiple bldgs/equip)	1322 S Lake St
Industrial Water Plant (multiple bldgs/equip)	1201 S Lake St
Wastewater Plant (multiple bldgs/equip)	5745 River Rd
Water Plant	746 E Spruce
Siren	1400 N 2nd
Siren	936 Hill St
Central Park Walking Bridge	Central Park
RR Bridge	
Well Sites	8 Well & Well House locations
Lift Station - South	136 S 2nd St
Lift Stations - Saratoga	76 Saratoga Ave & E Main St
Sumner Street Lift Station	731 Sumner St
Valley View Lift Station	318 W View
MHI Lift Station	701 River Dr
Lift Station	1540 S 2nd St
Spruce Street Lift Station	996 East Spruce St
Beech Street Lift Station	300 E Beech Street
Lift Station	920 Riverview Dr
Storage (multiple bldgs)	339 W Beech

Community Supports, Vulnerable Populations, &/or Gathering Locations

<i>City Supports & Communications Centers</i>	
Chamber of Commerce	201 W Main
Cherokee Area Economic Development	201 W Main
Chronicle Times	111 S 2nd St
KCHE Radio	201 S 5th St
<i>County Facilities in City Limits</i>	
County Offices	520 W Main
Conservation Office	629 River Rd
Engineer's Office	Hwy 3 West
Cherokee County Landfill	1805 Linden St
Sheriff's Office	111 N 5th St
VA Office	228 1/2 W Main St
<i>Education Facilities</i>	
Cherokee Community Schools	600 W Bluff
Cherokee Middle School	200 E Indian St
Roosevelt Elementary School	929 N Roosevelt
Washington High School	600 West Bluff St
ISU Cherokee Co Extension Office	209 Centennial Dr, Suite A
Crossroads of Western Iowa	322 S Lake
Western Iowa Tech Community College	200 Victory Dr
<i>Medical Facilities</i>	
Cherokee Mental Health Institute/CCUSO	1251 W Cedar Loop
Cherokee Regional Medical Center	300 Sioux Valley Dr
<i>Senior and Disabled Housing/Care/Support Facilities</i>	
Countryside Estates	921 Riverview Drive
Cherokee Villa Nursing and Rehab	1011 N Roosevelt
Careage Hills Nursing Home	725 N 2nd St
The Gardens	1610 Hwy 3
The Beck (Senior Housing)	333 Sioux Valley Dr
<i>Recreation/Cultural Facilities</i>	
Cherokee County Fairgrounds	200 Linden
American Theaters	108 E Main St

Cherokee Community Theater	530 W Bluff St
Cherokee Symphony	530 W Bluff St
Sanford Museum and Planetarium	117 E Willow St
Cherokee Depot	119 S 4th St, Ste. 6
Westcott Ball Park	Highway 59 South
Spring Lake Yacht Club	606 Spring Lake Dr
Koser Spring Lake Park and Campground	808 Spring Lake Dr
Cherokee Country Club	800 N 11th
<i>Nearby Parks</i>	
Inkpaduta Canoe Trail	Little Sioux River
Pilot Rock (Glacial Rock)	South of Cherokee on Highway 59
Poulson Park	Euclid Ave
Treptow Mini-Park	E Main St

Valuation of City Assets

For the purpose of cost-benefit considerations, a valuation of the City's assets was compiled based on its insured properties, personal property, and facilities. The value as provided does not include private properties, equipment, or non-city funded investments that may contribute to project determinations. Separately catalogued assets and equipment may not be represented in this value.

Total Blanket TIV	\$	76,009,255
Building	\$	72,588,025
Personal Property	\$	3,461,406
Miscellaneous Property Scheduled	\$	1,265,830
Miscellaneous Property Unscheduled	\$	<u>1,178,910</u>
Total	\$	62,535,835
APD TIV	\$	<u>4,443,336</u>
Grand Total TIV	\$	<u>82,937,507</u>

b. Participation

A planning meeting to update the City of Cherokee's profile and projects for the 2025 HMP update was held at Cherokee City Hall on October 7, 2024. The meeting was facilitated by SIMPCO with the following in attendance.

- Sara Lucas – City Clerk
- Craig Schmidt – Mayor
- Tyler Hahn – Library
- Chris Horton – Parks & Rec
- Nate James – Police Dept
- Todd Larsen – Street Dept Supt
- Todd Miller – Water Supt
- Jeremiah Mullins – Parks & Rec

In addition to the planning meeting, survey responses were considered in determination of primary hazards. Of all survey responses, 17 had Cherokee indicated as residence. Considerations provided in survey responses are included throughout this community profile as applicable.

A signed 2025 Regional Hazard Mitigation Plan Voluntary Participation Agreement has not been received from the City of Cherokee.

c. Community Capabilities

The City of Cherokee has a self-assessment process to monitor infrastructure and residential needs. Investments have been made to improve connectivity for residents through library and internet improvements. Among them, broadband expansions are providing more reliable access to resources for residents and local business. A municipal code update is in progress as of 2025. The city is looking at updating its local emergency response plan and its comprehensive plan in light of known and potential growth and development opportunities for Cherokee.

Training opportunities, specifically for hazardous materials response are conducted routinely, improving local response practices. Tornado siren warning procedures are well understood within the community. However, there is a need to better prepare for and issue warnings for pending or likely flood events that communicates that same “urgent action needed” effect as the tornado siren.

In-time extreme weather events resulting in power outages prompted City staff to further consider communications systems and the need for extended connections during power outages. Events occurring during the development of this plan highlighted such needs that when implemented with the full scope of need in context, enables a multi-faceted solution. In this case, a generator project has been added to resolve a breakdown in communications between emergency response and public works during power outages, while also serving to retain function operation of the city's water systems. As infrastructure becomes more automated, sustained backup power is increasingly urgent.

<i>Documents/Plans</i>	
Comprehensive Plan	Updated in 2011
Economic Development Plan	Cherokee Area Economic Development Corporation
Land Use Plan	Included in the Comprehensive Plan; Land use addressed in zoning
Flood Mitigation Assistance (FMA) Plan & updated floodplain map	
<i>Policies/Ordinances - last updated August 2019</i>	
The following are included in the City of Cherokee Municipal Code of Ordinances	
• Zoning Ordinance • Building Code • Floodplain Ordinance • Subdivision Ordinance • Tree Trimming Ordinance • Nuisance Ordinance • Storm Water Ordinance • Drainage Ordinance • Historic Preservation Ordinance • Landscape Ordinance	
Zoning/Land Use Restrictions	Addressed in Comprehensive Plan and in Zoning Regulations in Code of Ordinances
National Flood Insurance Program (NFIP) Participant	CID #190063
ISO Fire Rating	Class 4
Property Acquisition	Acquisition in flood areas & abandoned property
Planning/Zoning Boards	Planning and Zoning Commission
Tree Trimming Program	City managed in right-of-way and in parks
Mutual Aid Agreements	County-wide 28E Agreement
<i>Staff/Department</i>	
Building Code Official	City Administrator serves in this capacity; Inspections/reviews typically performed by one of two full time firemen

Development Planner	City Administrator serves in this capacity
Emergency Response Team	Cherokee Fire Department
Engineer	Project-based consultation; Primary is Beck Engineering, Cherokee office
Fire Department	Chief: Casey Carpenter; 25 Volunteers; dispatch and drivers
Historic Preservation	Historic Preservation Commission
Library	7 Staff members including Director Zach Freking
NFIP Floodplain Administrator	City Administrator serves in this capacity
Parks & Rec	Dept includes director & coordinator
Police Department	Chief: Nate James; 2 Sergeants, 6 officers; 1 admin
Public Works Director (<i>includes oversight of: Water, Sewer, Storm Sewer, Utility</i>)	
• Streets Dept	• Wastewater Dept • Water Dept
<i>Non-Governmental Organizations</i>	
Chamber of Commerce	Executive Director: Cory Ege
Neighborhood Associations	Varied
Veterans Groups	Veterans Affairs
	L.A. Wescott, Post 2253
Community Organizations	Cherokee Rotary Club
	Cherokee Lions Club
	Friends of the Library
<i>Local Funding Availability/Eligibility</i>	
Community Development Block Grants	
Capital Improvements funding	
Authority to levy taxes for a specified purpose	
Fees for water, sewer, gas, or electric services	
Ability to incur debt through	• general obligation bonds
	• private activities
	• special tax bonds
Ability to withhold spending in hazard prone areas as development restricted and guided through Floodplain Ordinance and compliance may affect spending allowance	

In addition to the charted capabilities and efforts as provided, physical implementations also contribute to mitigating loss of life and/or damage to property. The City of Cherokee has effectively addressed recurring flooding issues through completed strategies and projects as outlined in the following Review of Actions taken section. The City has established guidance

procedures for new developments and has therefore managed reduction in new, preventable risks and losses.

Review of Actions Taken (Since 2019)

Cherokee has continually worked toward resiliency with implementation of community projects specific to mitigation as well as other projects where resistance to natural disasters and other hazards is an additional consideration. Below is a summary of actions taken on projects identified in the 2020 Regional Plan.

communication /education		
tools/equipment		
Generator & Related Projects	Cherokee (City of)	2020: Generators needed for Water Plant and Wastewater Plant; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee (City of)	Update. The Wastewater Treatment Plant is in the process of being relocated due to flooding. In progress. Generator for the Water Plant has been purchased, installation pending. Project was funded via bond and FEMA grant (disaster declaration funds)
development		
Improve existing facilities & infrastructure	Cherokee	2020: Improve capacity and function of sewer system; <i>City Waterworks</i> (City funds, USDA program funds, IDNR program funds) MEDIUM PRIORITY
Improve existing facilities & infrastructure	Cherokee	Update: The city has made some improvements, additional are still needed. Project priority remains the same.
Relocate critical facilities	Cherokee	2020: Move/raise lift station at Beech St; <i>City Water & Public Works Depts</i> (City funds, IDNR, PDM) HIGH PRIORITY
Relocate critical facilities	Cherokee	Update: Carry Over. Cherokee is expanding project scope to include several infrastructure improvements. Project is carried into 2025 HMP.
Bridges & Roads	Cherokee	2020: Collaborate w/County and State on review of and implementation of roadway elevation improvements along Hwy 3 and/or Hwy 59; <i>City Administrator & Streets Dept, County Roads Dept, IDOT</i> (Transportation funds, City/county funds) MEDIUM PRIORITY
Bridges & Roads	Cherokee	Update. Several road/bridge projects are planned with 3 in progress and others pending. Bridges pending work: Railroad Creek Bridge and E Cherry St Bridge.

		• Needed but not yet planned: Maple Street Bridge • Work on Bypass scheduled with preparation in progress. Projects as listed are carried over to 2025 HMP with HIGH PRIORITY.
flow control		
Flood protection	Cherokee	2020: Berm preventing runoff and Little Sioux Floodwaters from entering Spring Lake; <i>City Administrator, Parks Dept, IDNR</i> (City funds, IDNR Clean Water programs/Runoff control) HIGH PRIORITY
Flood protection	Cherokee	Completed. Project complete with construction of flood wall in 2021. Project cost & funding source not provided. However, 35' crest from 2024 flooding has presented additional concern for potential road washout. The city is interested in conducting a study to review options including but not limited to extending the wall. That is included as a new project in the 2025 HMP.
refuge		
technology		
natural barriers/ supports		

d. Risk Assessment

Contributing Factors

In flooding events since 2019, most damages incurred have been at a higher cost and more significant than usual. Through 2023, about 70 homes/properties were acquired through a buyout process, with some buildings relocated. There is potential for an additional 120 homes and properties to be considered for the property acquisition program. It seems flood response is often still in progress when the next flood event occurs, making it extremely difficult to enact more impactful mitigative measures. Discussions leading to the development of this plan included the need for monitoring and controls for tributaries as well as major rivers. Flooding stemming from the Little Sioux River can be multifaceted with each cause having a varying effect, with some reducing capacity for timely response. Local precipitation, precipitation and snow melt at source and feeder waterways, backflow from larger and other connecting tributaries and rivers are all conditions contributing to difficulties in pre-disaster planning. Each cause resulting is a different flood impact. Velocity of river flow due to flooding is also expediting erosion and meandering, changing the course of the river at an increasingly high rate. The river is encroaching on River Rd along with annual recurrence of washing out trees.

The city is looking at long term solutions while continually maintaining rip rap for erosion prevention.

State officials estimate 2000 homes were damaged or destroyed during recent flooding in northwest Iowa.

After previous flooding in Cherokee, FEMA bought out 40 properties. Another 70 homes in Cherokee were destroyed in this year's flooding and Cherokee Mayor Craig Schmidt said he doesn't know where people will go.

"They're not staying if they can't find another place to live if their home is devastated," he said. "The reality of it is, and it's not comforting, but all the other towns around us are saying the same thing: 'No workers and no housing.' So, what do you do?"

Governor Kim Reynolds and FEMA Administrator Deanne Criswell surveyed flood damage in Cherokee, Spencer and Rock Valley last week. Reynolds said the state needs to figure out how to combine state and local resources and get new homes built as quickly as possible. The governor told reporters she and her staff are trying to come up with some type of transitional housing plan as well as incentives for developers that build homes and apartments.

(By Sheila Brummer, Iowa Public Radio)

www.radioiowa.com/2024/07/03/70-homes-in-cherokee-destroyed-by-flooding/ 70 Homes in Cherokee Destroyed by Flooding Radio Iowa Contributor (July 3, 2024). Resource drawn June 9, 2025

by Radio Iowa Contributor | Jul 3, 2024



Governor Kim Reynolds and FEMA Administrator Deanne Criswell toured flood damage in Cherokee, Spencer and Rock Valley last week. (Photo from Iowa Governor's Office)

During the planning meeting, the community provided that there have been changes to the city's floodplain. Iowa DNR worked with several communities in the region, including Cherokee,

over the past 5 years to update floodplain ordinances and flood maps. The technologies and assessment tools will ultimately replace the FEMA FIRM maps, better representing land-form improvements that reduce flood risk as well as flow changes that result in altered areas of effect.

In addition to the facilities as provided, Critical Infrastructure to be considered in the event of a natural disaster includes at least one nursing home, a Middle and Elementary School located in one facility, public water intake, water treatment plant, and a pipeline and railroad line known to transport hazardous material(s).

An historical record of events for Cherokee is detailed in the NOAA Storm Event Database and other event-based information centers. Notable occurrences specifically recorded the City of Cherokee between 11/01/2019 and 12/31/2024 are as provided. Events categorized as Cherokee “Zone” can reasonably be expected to have affected the whole county and are included under the Cherokee County profile.

NOAA Record of Storm Events 12/01/2019 – 12/31/2024

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
<u>CHEROKEE MUNI ARPT</u>	6/4/2020	23:09	Hail	1.25 in.	0	0	0.00K	0.00K
<u>CHEROKEE</u>	8/27/2021	1:05	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
<u>CHEROKEE</u>	7/29/2024	23:37	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K

Source: <https://www.ncdc.noaa.gov/stormevents>

Priority Hazards

Determination of priority hazards is consistent between city staff perspective and resident survey respondents. There were 17 respondents via paper survey for the Cherokee. Of those responses, 16 indicated “very concerned” for **flooding**, both under “**riverine**” and “**flash**” as indicated separately. **Tornado/Windstorm** rated next highest with 11 indicating “very concerned” and 3 at “somewhat concerned”. Other notably concerning hazards based on survey responses include infrastructure failure and drought. The city recognizes most natural hazards as listed by the State are of a significant level of concern with the following being primary in regard to risk to residents and potential impact on City operations:

- Flooding
- Tornado/Windstorms
- Infrastructure failure
- Drought

Thunderstorms - Hail/Lightning was moved lower on the list of prominent concerns faced by the city. Though still an issue, potential for catastrophic damage to the city's wells and water treatment facilities takes priority. For infrastructure failure, age is likely the greatest contributing factor, however several disaster types may contribute to such occurrence – especially flooding. An investment of at least \$2M, in addition to the many projects listed would significantly improve sustainability of the above-mentioned infrastructure.

e. Mitigation Needs, Actions, & Strategies

Mitigation actions and strategies identified by Cherokee are consistent with the goals as established for the Region. Projects included in this Plan address maintaining function of operations, communication of existing procedures and new mitigation activity, and encouraging individual accountability for personal safety and protection. Actions are reliant upon collaboration and optimizing potential of existing programs and resources.

communication /education		
Promo/Info	Cherokee	New. The city is committed to promoting alert systems as already available through the county and state. City Clerk, City Administrator, County EMA (No funds expected to be needed) HIGH PRIORITY.
tools/equipment		
Generator & Related Projects	Cherokee (City of)	New. A generator is needed for the community center which serves as a refuge/shelter center during extended power outages and as needed for extreme weather or crisis events. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Cherokee (City of)	New. A generator is needed for the community center which serves as a refuge/shelter center during extended power outages and as needed for extreme weather or crisis events. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY

Generator & Related Projects	Cherokee (City of)	New. Generators are needed for Radio Repeaters that are essential for communications between the Police Department and Public Works, especially during power outages. Current backup is supplied via battery which is intended to bridge connections until a dedicated power source is (re)connected, lasting no longer than 30 minutes. Repeaters are located on - Hill Street Water tower - Main water tower at the intersection of Hwy 59 and Hwy 3 The generators would serve dual purpose, also powering the pumps and equipment at respective towers to maintain functionality of the water system. <i>Public Works, County EMA</i> (PDM funds as available, CDBG DR as applicable, Response/Communications funds as available) HIGH PRIORITY
Equipment	Cherokee	New. Equipment needed for various city departments includes: brush truck (FD), side-by-side to improve access during extreme weather events, and pumps for stormwater transfer. Public Works, Fire Department, Streets Dept. (Local funds, emergency response funds, disaster mitigation & disaster response funds as may be available) HIGH PRIORITY
development		
Improve existing facilities & infrastructure	Cherokee	Carry over. Improve capacity and function of sewer system; <i>City Waterworks</i> (City funds, USDA program funds, IDNR program funds) MEDIUM PRIORITY
Improve existing facilities & infrastructure	Cherokee	New. City is planning ADA improvements to the Community Center to enable use as refuge/shelter in the event of a disaster resulting in residential displacement. Project includes addition of dedicated generator. <i>Public Works/Utilities, local responses teams.</i> (Local budget, CDBG, disaster response/disaster mitigation as may be available) HIGH PRIORITY
Improve existing facilities & infrastructure	Cherokee	New. Saratoga Lift station needs improvements. Public Works (local budget)
Improve existing facilities & infrastructure	Cherokee	New. Increase well availability and function during flood events. One control panel raising project is in progress with at least one planned. Up to 3 are being considered. City is also adding one well outside flood zone. Costs were not immediately available. <i>Public Works/Utilities, local responses teams.</i> (Local budget, CDBG, disaster response/disaster mitigation as may be available) HIGH PRIORITY
Improve existing facilities & infrastructure	Cherokee, Cherokee CSD	New. Collaborative effort to implement ADA improvements on school campus and at access routes as applicable throughout the City. Some projects have been implemented (no detail provided). Costs will be determined by project as implemented. <i>Cherokee</i>

		<i>Community Schools, City of Cherokee.</i> (accessibility grants, local funds, trail funds where applicable, wellness grants, Safe Routes to School funds as applicable, CDBG) HIGH PRIORITY.
Relocate critical facilities	Cherokee	Carry Over. Cherokee is expanding project scope of facility/building relocation program to include several infrastructure improvements. In addition to Beech Street, lift stations at E Sumner< Riverview, Emmet Dr (MHI), E Bluff, and Spruces need rising and/or repairs. Cost estimates not immediately available. <i>City Water & Public Works Depts</i> (City general fund, IDNR, Disaster Response/Disaster Mitigation funds as may be available) HIGH PRIORITY
Bridges & Roads	Cherokee	2020: Collaborate w/County and State on review of and implementation of roadway elevation improvements along Hwy 3 and/or Hwy 59; <i>City Administrator & Streets Dept, County Roads Dept, IDOT</i> (Transportation funds, City/county funds) MEDIUM PRIORITY
Bridges & Roads	Cherokee	Carry Over. Collaborate w/County and State on review of and implementation of roadway elevation improvements along Hwy 3 and/or Hwy 59; <i>City Administrator & Streets Dept, County Roads Dept, IDOT</i> (Transportation funds, City/county funds) MEDIUM PRIORITY
flow control		
Flood protection	Cherokee	New. Study to determine flood protection options including but not limited to extending existing flood barrier wall. <i>City Administrator, Parks Dept, IDNR</i> (City funds, IDNR Clean Water programs/Runoff control, Disaster mitigation funds as may be available) HIGH PRIORITY
refuge		
Shelter	Cherokee	New. City of Cherokee is aware of need for shelter location south of the river, serving the ball fields and surrounding parks and considering funding opportunities to support the project. A cost estimate is not immediately available as funding source may dictate size and other components affecting the cost. Priority level reflects lack of feasible funding in the near future, not the importance of the project. City parks dept., City Council, County EMA. (Local funds, fundraisers, community benefit grants, public safety initiatives) LOW PRIORITY
Shelter	Cherokee	New. City is assessing options for refuge locations for extreme heat/ extreme cold weather events, especially for individuals whose homes may not have air conditioning or sufficient heat systems. This would also serve to benefit those using rec areas where a brief respite may be necessary. City departments, clerk & administrator, County EMA as consult (local funds as needed) HIGH PRIORITY
technology		

natural barriers/ supports		
Stabilization	Cherokee	New. Lake bank stabilization. Repetitive flooding is having an impact on the lake in addition to riverbanks. The city is implementing a stabilization project intended for long term sustainability. <i>City, IDNR as applicable</i> (local funds, DNR grants as may be available, other TBD) HIGH PRIORITY
Stabilization	Cherokee	New. City, in collaboration with the County, is considering options in controlling flow of river to reduce meandering. Increase of intensity and frequency of high water events has resulted in accelerated meandering of the river, threatening to overtake River Road. <i>City, County, IDNR, USACE as applicable.</i> (local funds, county funds, waterway program funds as may be available, pre-disaster funds) HIGH PRIORITY

3. CLEGHORN

Note: The city participated in the development of the Regional Hazard Mitigation Plan, however, they have not included any specified mitigation actions, strategies, or projects. Therefore, the City of Cleghorn is not recognized as an active “Participant” in the Plan. To activate participant status, the city must process an amendment at the local level and file said amendment with Cherokee County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

The city of Cleghorn lies in the northwest quadrant of Cherokee County. Built on a sloping hill and without active waterways, the City does not have a floodplain within its limits. Edging the south of town is state Highway 3 serving as the main road running east/west and connecting Cleghorn to surrounding cities. Canadian National rail line as operated by Illinois Central Railroad intersects the City diagonally from the west to the southeast. Historically, the railroad brought a great deal of industrial business and growth to the city.

City Governance & Community Supports

Cleghorn is governed by a five-person elected council and Mayor. Staffed positions include City Clerk and Public Works official. Fire Rescue and emergency response is coordinated through the Liberty-Sheridan-Rock Fire Association, which is independent of the City but does receive financial support. The city also contracts with the county for law enforcement and with regional medical and hazardous materials emergency response providers.

Demographics, Housing, & Economics

Cleghorn, a small community with an estimated population of 274 in 2023¹¹, has a presumed increase from 240 residents in 2020. The town consists of 134 households and a total of 135 housing units, with a very high occupancy rate, indicating strong housing demand and stability. The median household income is \$48,750, and a portion of the population lives below the poverty line, reflecting modest economic conditions. The housing stock is relatively modern, with most residents having moved into their homes in recent years. Mobile homes make up a small portion of the housing inventory, while a limited number of homes date back to before 1990. These characteristics suggest a tight-knit community with newer housing and potential opportunities for economic growth and development.

Leading Employers

The following businesses operate and have established a necessary presence in Cleghorn.

- AgState
- Wetherell Manufacturing

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

City Hall	102 N. Lewis Ave
Cleghorn Community Center	102 W Grace

¹¹ Source: <https://censusreporter.org/profiles/16000US1914115-cleghorn-ia/>

Meriden-Cleghorn Public Library	200 E Grace St
Post office	110 N Lewis Ave
Liberty-Sheridan-Rock Fire Department	109 N Lewis Ave
Cleghorn Central Park	Adaline St & Dixon Ct
City Pump Station	W Grace St

Valuation of City Assets

Total Blanket TIV	\$	3,379,858
Building	\$	3,116,300
Personal Property	\$	263,558
Misc Property Scheduled	\$	30,470
Misc Property Unscheduled	\$	<u>13,750</u>
APD TIV	\$	35,200
Total TIV	\$	<u>3,424,078</u>

b. Participation

Updates to the Cleghorn profile and related projects were communicated through email and phone conversations January 2025 and March 2025. The primary contact is City Clerk, Audra Crocker. Additional information was provided by Mayor Tim Petersen, Fire Chief Dillon Mugge, and Waterworks Director Caleb Ney.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	2005 Community Builder
<i>Policies/Ordinances</i>	
Municipal Code of Ordinances	
• Zoning Ordinance • Floodplain Ordinance • Subdivision Ordinance	• Tree Trimming Ordinance • Nuisance Ordinance • Drainage Ordinance
Iowa Wetlands and Riparian Areas Conservation Plan	Cherokee County Conservation Board
<i>Programs</i>	

Zoning/Land Use Restrictions	Including in City Code under Zoning Ordinance
Codes Building Site/Design	Building Permits only
ISO Fire Rating	Class 8/9
Property Acquisition	Case-by-case determination
Planning/Zoning Boards	Planning and Zoning Commission
Mutual Aid Agreements	Liberty-Sheridan-Rock Fire Association Fire Department
	County-Wide 28E
<i>Staff/Department</i>	
Public Works Official	Public Works Official for Water/Sewer
Emergency Management Coordinator	Cherokee County EMA
Emergency Response Team	Liberty-Sheridan-Rock Fire Association Fire Department
	County-Wide 28E
<i>Local Funding Availability/Eligibility through following Programs/Activities</i>	
Community Development Block Grants	
Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, gas, or electric services	
Ability to incur debt through	• general obligation bonds • private activities • special tax bonds
Withhold spending in hazard prone areas as development restricted/guided through Floodplain Ordinance; compliance may affect spending allowance	

Review of Actions Taken (Since 2019)

The city indicated that no action was taken on the projects included in the 2020 plan.

communication/education		
Promo/Info	Cleghorn	2020: Interest in promotion of established notification networks such as the Alert Iowa system; Promote programs as available through regional resources. <i>City Clerk, County EMA</i> (No dedicated funding necessary) HIGH PRIORITY
Promo/Info	Cleghorn	Closed. Update was not provided by community.
tools/equipment		
development		
Improve existing facilities & infrastructure	Cleghorn	2020: Improve infrastructure to better accommodate weather extremes such as heavy rain, frost/heave

		conditions – especially water lines and related infrastructure. <i>City Council, City Staff</i> (Local funds, capital improvement funds, DNR program funds). HIGH PRIORITY
Improve existing facilities & infrastructure	Cleghorn	Update. No specific action was taken to permanently address this concern. City will continue to implement mitigative measures within funded projects but will not continue to carry this as a priority item in the 2025 HMP.
flow control		
refuge		
technology		
natural barriers/supports		

Cleghorn completed a water tower project in 2020 that can generally be classified as a public health measure. Project cost was \$959,840 and funded through Community Development Block Grant (CDBG) program, State Revolving Loan Funds, (SRF), and local funds. The city stated no other significant projects were implemented within the last five years.

d. Risk Assessment

Contributing Factors

A review of records as reported in the NOAA Storm Event database from 11/01/2019 through 12/31/2024 included five events specific to Cleghorn.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
CLEGHORN	6/4/2020	22:43	Hail	1.00 in.	0	0	0.00K	0.00K
CLEGHORN	8/27/2022	16:18	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
CLEGHORN	4/19/2023	18:43	Hail	1.50 in.	0	0	0.00K	0.00K
CLEGHORN	4/26/2024	11:47	Hail	1.00 in.	0	0	0.00K	0.00K
CLEGHORN	6/22/2024	6:00	Flood		0	0	0.00K	0.00K

Priority Hazards

- Tornado/Windstorm
- Severe Winter Storms
- Drought

e. Mitigation Needs, Actions, & Strategies

The city has not identified a specific action, strategy, or project. Therefore, an amendment must be filed for FEMA and the Iowa Department of Homeland Security and Emergency Management to formally recognize this jurisdiction as an eligible applicant for pre-disaster and/or mitigation funds as may be available.

4. LARRABEE

Note: The city participated in the development of the Regional Hazard Mitigation Plan, however, they have not included any specified mitigation actions, strategies, or projects. Therefore, the City of Larrabee is not recognized by FEMA as an active “Participant” in the Plan. To activate participant status, the city must process an amendment at the local level and file said amendment with Cherokee County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

The city of Larrabee is situated near the northern border of Cherokee County. The city lies south of C-16 and US Hwy 59 runs north/south through the city. One of the County’s smaller cities, it occupies 0.12 square miles. Larrabee is served by the Cherokee Community School district and is within the Western Iowa Tech Community College (WITCC) region.

City Governance & Community Supports

Larrabee is governed by a five-person elected council and Mayor. Offices in addition to Mayor and Council includes Public Works, a department comprised of part time water/sewer meter reading and maintenance and a mower/snow removal team. Larrabee is on the Cherokee County Rural Water System and local services include C-M-L Telephone, cable television,

garbage pick-up, and sewer. Larrabee has a Volunteer Fire Department with 11 firefighters and one (1) administrative volunteer.

American Legion Post 0670 is a significant community support, with a notable presence in the community. Larrabee growth and development is supported with local, County, and Region guidance in several plans and documents including County Recovery Plan, SIMPCO Economic Development Plan, and 2050 Long Range Transportation Plan currently in development. Some additional detail on supports available for the City of Larrabee can be found in *Section c. Community Capabilities* later in this Chapter.

Demographics, Housing, & Economics

In 2023, the city of Larrabee had an estimated population of 116¹², showing a decrease from 142 residents reported in the 2020 decennial census. The community is made up of 54 households, with a median household income of \$47,143, and some residents living below the poverty line. There are 63 total housing units in the city, with most of them occupied, indicating stable demand for housing. Mobile homes make up a small portion of the housing stock. Half of the homes in Larrabee were built after 2000, while others were constructed in the 1990s or earlier. These characteristics suggest that Larrabee is a small, yet stable community, with a relatively newer housing market and potential for future growth.

Leading Employers

The First Cooperative Association Feed Mill first opened in March of 1999 and established a now historical presence. Now operating independently, the Feed Mill and Cooperative remain as key businesses in Larrabee. As a small community in a rural area, the United States Postal Service presence in Larrabee is significant. At the time of the planning meeting, the former Juke Box restaurant was undergoing an extensive remodel. Under new ownership, this local establishment is expected to become an integral element of the community, serving as a gathering place for residents.

¹² Source: <https://censusreporter.org/profiles/16000US1943500-larrabee-ia/>

Critical Facilities

Larrabee Community Center; Clerk's Office	101 N Main St
Water Tower	106 N Jordan St
Pump House/Valve Bldg	Cedar & Jordan Streets
Flow Meter	S Main St
Warning Siren	106 N Main St
City Park	adjacent to Community Center
City Shed	118 N Main

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

US Post Office	116 N Main
Larrabee United Methodist Church	106 S Church St
Calvary Chapel	213 S Jordan
The Alamo (pending re-opening)	117 N Main

Valuation of City Assets

The City's Valuation of Assets through 12/2024 including buildings, personal property (as owned by the City) is provided below based on their 2024 insurance statement of values. This is provided as means of determining cost-benefit analyses for projects affecting or that may affect city property/holdings. Housing value summaries as noted in the demographics portion of this profile provide a basis for residential benefits of mitigative action.

Total Blanket TIV	\$	837,962
Building	\$	826,138
Personal Property	\$	11,824
Miscellaneous Property Scheduled	\$	11,882
Miscellaneous Property Unscheduled	\$	<u>38,324</u>
Total TIV	\$	<u>888,168</u>

b. Participation

A planning meeting for the 2025 regional Hazard Mitigation Plan was held at the Larrabee City Hall on September 3, 2024 at 6PM and facilitated by SIMPCO with the following in attendance.

- Tammy Roethler, City Clerk
- Dan James, Mayor
- Chuck Waggoner, Utility Supt
- Jamie Fossler, Council
- Dustin Richardson, City Council
- Jan Robinson, City Council
- Missy Thompson, Council

In addition to the in-person meeting, surveys were made available to residents as an opportunity to provide input.

A signed *2025 Regional Hazard Mitigation Plan Voluntary Participation Agreement*, dated 09/03/2024 is on file for the city.

c. Community Capabilities

<i>Policies/Ordinance</i>	
Code of Ordinances	
• Tree Trimming Ordinance	• Storm Water Ordinance
• Nuisance Ordinance	• Debris Management Plan
<i>Programs</i>	
ISO Fire Rating	Larrabee Class 9 and Larrabee FD Class 9/10
Property Acquisition	Case-by-case
Mutual Aid Agreements	28E Agreement with all cities in Cherokee County.
<i>Staff/Department</i>	
Building inspector	Dave Christiansen
Mapping Specialist (GIS)	Cherokee County
Engineer	Consultant used as needed.
Public Works Official	Water Supt and Wastewater/Sewer Supt
Emergency Management Coordinator	Cherokee County EMA
Emergency Response Team	Larrabee Fire Department
Law Enforcement	Contracted through County
Regional Planning Agencies	Iowa League of Cities
	SIMPCO
<i>Local Funding Availability/Eligibility</i>	
Community Development Block Grants	

Capital Improvements funding
Authority to levy taxes for specified purpose
Fees for water, sewer, gas, or electric services
Incur debt through • general obligation bonds • special tax bonds • private activities
Withhold spending in hazard prone areas by way of building permit

Review of Actions Taken (Since 2019)

The city has made investments improving the city park and equipment. Larrabee has added a new message board allowing in-time mass communication to residents and is planning a major water and sewer systems improvement project.

communication /education		
Promo/Info	Larrabee	2020: Interest in developing improved means of communicating urgent information through existing networks such as Alert Iowa. Also, further develop local intercommunications tools such as texting and internal posting options. <i>City Clerk, City Council</i> (No costs associated with this project)
Promo/Info	Larrabee	Implemented. Additional efforts ongoing. City installed new community message board to better relay information in real time and for scheduled messaging (about \$1,500). City makes use of existing informational formats such as the County website, Facebook postings, and physical postings at the post office.
tools/equipment		
development		
flow control		
refuge		
technology		
natural barriers/ supports		

d. Risk Assessment

Contributing Factors

Recent occurrences of natural disasters with local impact were researched through the NOAA Storm Event database. City representatives stated meticulous maintenance of area ag land as a significant mitigation practice of wildfire prevention.

NOAA Record of Storm Events 12/01/2019 – 12/31/2024

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
LARRABEE	12/15/2021	17:05	Tornado	EF1	0	0	250.00K	0.00K
LARRABEE	5/2/2024	18:00	Flood		0	0	0.00K	0.00K
LARRABEE	5/20/2024	19:50	Hail	1.25 in.	0	0	0.00K	0.00K
LARRABEE	5/22/2024	2:00	Flood		0	0	0.00K	0.00K
LARRABEE	6/21/2024	1:00	Flood		0	0	0.00K	0.00K
LARRABEE	7/1/2024	0:00	Flood		0	0	0.00K	0.00K

Source: <https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=19%2CIOWA>

Please note that the above listed events are as recorded in the NOAA database. Locations as indicated may be at point of occurrence or point of data collection. Therefore, related information may include statistics from extended areas while effects directly on the City of Larrabee may be negligible. Incident details can be found using their Climate Data Online tool at <https://www.ncdc.noaa.gov/stormevents/> and via the hyperlink embedded in the community name for each event as provided.

Priority Hazards

Larrabee's physical location and topography have served favorably in reducing impacts of flooding in recent years. Though an issue in the past, other natural disasters and extreme weather have taken precedence in planning. The city recognizes the following as priority concerns.

- Tornado/Windstorm
- Thunderstorms with lightning &/or hail
- Severe Winter Storms

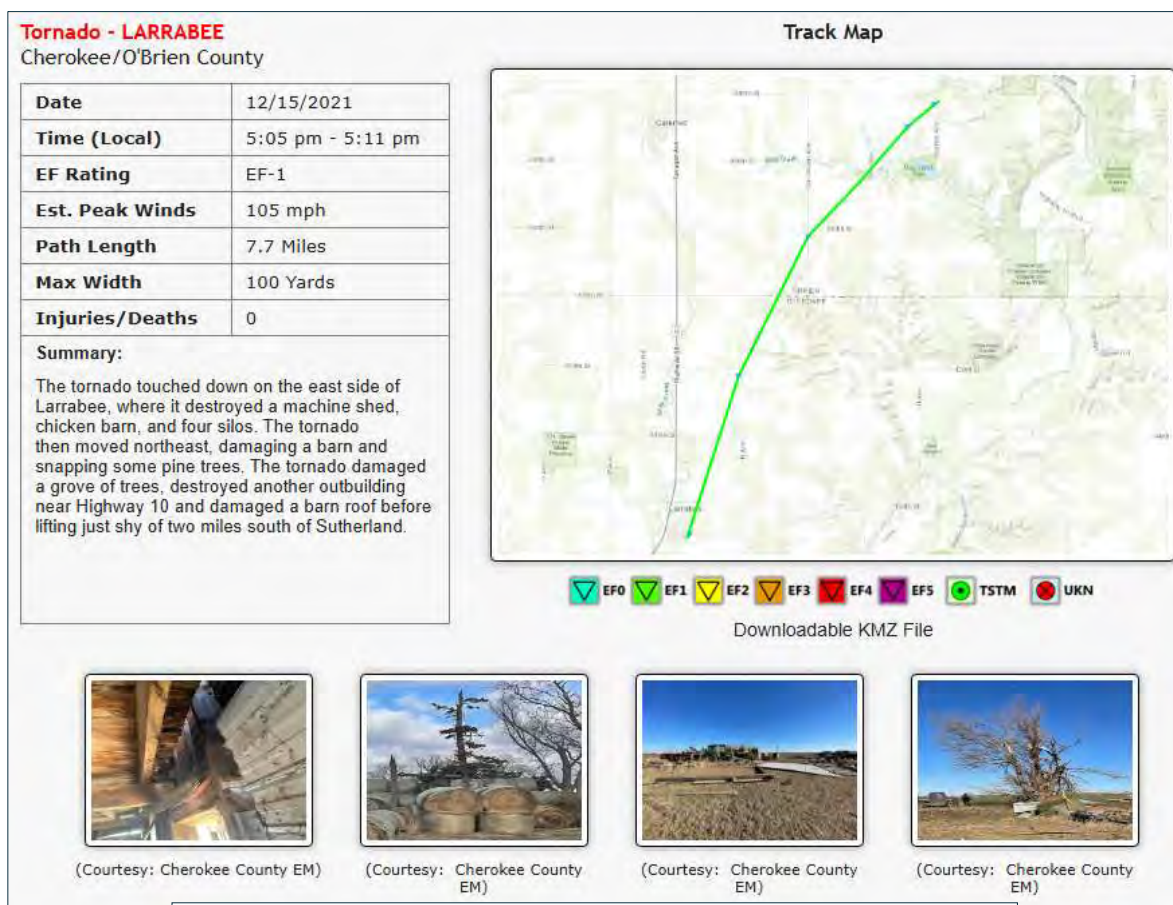
Thirteen survey responses with Larabee indicated as place of residence were collected. Of the 13, 100% were in agreement that the city-identified hazards are indeed of greatest concern. Despite note of ag land maintenance as fire prevention, there is lingering concern of Drought, Extreme Heat, and Grass or Wildland Fires by residents with 8 of 13 indicated being very concerned or somewhat concerned. As drought conditions persist in the region, due caution is

advised with a recommendation that the community include fire prevention awareness into their public communications and social media venues.

Also notable in survey response (each with 7 of 13) is some level of concern for Drought, Flooding (flash and riverine), and Transportation Incidents.

e. Mitigation Needs, Actions, & Strategies

Larrabee has not identified any mitigation-specific strategies for inclusion in this Plan. However, the city is pursuing a number of projects that will improve city functions overall that directly and indirectly improve resilience. City asset valuations and census-based housing values as previously provided in this profile set a foundation for cost-benefit analyses of projects prior to implementation. A more thorough analysis will be conducted during the early engineering stage(s) of each planned or recommended project.



Source: www.weather.gov/fsd/20211215-Tornado-nwia (June 9th)

5. MARCUS

a. Profile

The City of Marcus resides in the northwest region of Iowa, located in the heart of a vast fertile agricultural market in Cherokee County. Marcus is the second largest city in the county after the City of Cherokee. The intersection of State Highways 3 and 143 is located in the southeast corner of Marcus' municipal boundary. Long-standing train service runs across the northern part of Marcus originating October 1870 carrying passengers and freight from Sioux City to Chicago. The main line of the Canadian National Railroad skirts the north edge of town, now moving goods and commodities instead of passengers.

City Governance & Community Supports

Marcus is governed by a five-person elected council and Mayor. Additional offices include City Clerk, Police Department, Water/Wastewater Superintendent, Street Superintendent, Economic Development, Public Works, and Chamber of Commerce. The Marcus Fire and Ambulance Rescue Department has an average of 27 volunteer staff. Staff training levels vary and include the following: Emergency Medical Technician, Fire Fighter 1, Fire Fighter 2, fire instructors, and Emergency Medical Services evaluators.

Significant support entities for the community include, Marcus Action Club, MEDCO (Marcus Economic Development Corporation), and Marcus Lions. The last Comprehensive Plan was adopted in 2019. American Legion Post 0517 facility is still in place, however the local legion is not currently active.

Demographics, Housing, & Economics

With an estimated population of 1,236 in 2023¹³, the city of Marcus, has seen a rise from the 1,079 estimated residents in the 2020 decennial census. The community consists of 555 households, with a median household income of \$75,288, reflecting relatively strong economic conditions. Approximately 5.3% of the population lives below the poverty line. Marcus boasts a total of 626 housing units, with 89% of them occupied, indicating a healthy demand for housing. The housing stock in Marcus is relatively modern, with a significant portion of homes

¹³ Source: <https://censusreporter.org/profiles/16000US1949350-marcus-ia/>

built after 2000. Older homes, built prior to 1990, make up a smaller share of the housing market. Notably, Marcus has no mobile homes in its housing inventory, further reflecting the area's focus on traditional single-family homes. These factors point to a community that enjoys stable housing, strong economic health, and a relatively new housing market, with potential for continued growth and development.

Leading Employers

The City of Marcus and the MMC and RU Community School Districts are notable employers for the community. The following businesses also have established a significant and necessary presence in Marcus:

- AgReliant Genetics, LLC 4765 IA-143.
- Little Sioux Corn Processors 4808 F Ave
- Marcus Lumber 409 N Locust St
- Schmillen Construction 4772 C Ave
- Staples Promotional Products 710 IA-143

Critical Facilities

<i>City Facilities</i>	
City Hall	222 N Main St
Marcus Community Center	319 N Main St
Marcus Public Library	108-110 N Locust St
City Park – Equipment, Structures, & Bldgs	City Park
Swimming Pool (& related bldgs.)	110 S Locust St
City Storage/Garage	611 Railroad
City Storage	501 W Cedar
Pump House/Water Treatment Plant (& related)	409 Hwy 143
Water Tower	Hwy 143
Wastewater Treatment Plant (& related equipment)	Sec 32 Marcus Twp
Senior Center	405 N Main
Lift stations	Golf Course, 490 th St;
	Shamrock Rd & Pine St

Golf Course & Club House	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

In addition to critical city facilities, Marcus has several churches and two daycare providers, one in-home and one school facility, noted as likely hosting a concentration of vulnerable persons during hours of operation as well as scheduled and special events. The following services or venues may at any given time host a disproportionate amount of population.

- Marcus Fairgrounds, W Fenton St (near Maple St)
- Heartland Care Center
- Marcus-Meriden-Cleghorn Community School District, 400 E. Fenton St
 - MMC & RU High School (& adjacent baseball fields)
 - MMC Marcus Elementary School

Valuation of City Assets

For the purpose of cost-benefit considerations, a valuation of the City’s assets was compiled based on its insured properties, personal property, and facilities. The value as provided does not include private properties, equipment, or non-city funded investments that may contribute to project protection determinations. Separately catalogued assets and equipment may not be represented in this value. Housing values as provided in the Demographic section serve as a basis of residential values which may also be considered in determining cost-benefit analyses of mitigation projects and relative impact. The city purchased the local golf course which is now included in city property valuations.

Total Blanket TIV	\$	12,499,839
Building	\$	11,328,036
Personal Property	\$	1,171,803
Fine Arts	\$	4,873
Miscellaneous Property Scheduled	\$	272,796
Miscellaneous Property Unscheduled	\$	<u>43,375</u>
Total TIV	\$	12,820,883
APD TIV	\$	217,830

Total \$ 13,038,713

b. Participation

A Hazard Mitigation Planning Meeting was held at Marcus City Hall on December 11, 2024 at 09:30. The meeting was facilitated by SIMPCO with the following in attendance.

- Robin Harvey, City Clerk,
- Doug Dreckman, Water Supt
- Tanner Cronin, Public Works

Four survey respondents indicated Marcus as place of residence. In addition to discussion held with city staff, consideration of comments as provided in the survey is given in this profile.

A signed 2025 Regional Hazard Mitigation Plan Voluntary Participation Agreement has not been received from the City of Marcus.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
Urban Revitalization Plan	
<i>Policies/Ordinance</i>	
Code of Ordinances	
• Subdivision Ordinance • Nuisance Ordinance • Tree Ordinance • Hazardous Material Accountability	
Zoning Ordinances	<i>Zoning/Land Use Restrictions</i>
Historic Preservation	<i>Historical Preservation Commission</i>
Iowa Wetlands and Riparian Areas Conservation Plan	<i>Cherokee County Conservation Board</i>
<i>Programs</i>	
Codes Building Site/Design	<i>Building Permits; 2018 Adoption by Reference of Int'l Building Code Standards</i>
ISO Fire Rating	<i>Marcus Class 7 and Marcus FD Class 7/9</i>
Property Acquisition	<i>Case-by-Case</i>
Planning/Zoning Boards	<i>Planning and Zoning Commission</i>

<i>Staff/Department</i>	
Building Code Official	<i>Zoning Administrator serves in this capacity</i>
Mapping Specialist (GIS)	<i>Cherokee County; SIMPCO</i>
Public Works Official	<i>Water/Waste Superintendent</i>
Emergency Management Coordinator	<i>Cherokee County EMA</i>
Emergency Response Team	<i>Marcus Fire Department</i>
Law Enforcement	<i>Marcus Police Department</i>
Historic Preservation	<i>Marcus Historical Society</i>
<i>Non-Governmental Organizations</i>	
Veterans Groups	<i>American Legion Post 0517</i>
Economic Development/Growth	<i>Marcus Chamber of Commerce</i>
	<i>MEDCO (Marcus Economic Development Corporation)</i>
Community Organizations	<i>Marcus Action Club</i>
	<i>Marcus Lions</i>
<i>Local Funding Availability/Eligibility</i>	
Fees for water, sewer, gas, or electric services	
Community Development Block Grants (HUD and Iowa EDA)	
Incur debt through	• general obligation bonds • private activities • special tax bonds
Withhold spending in hazard prone areas	

Changes of note since 2019 include completion of an income survey determining CDBG eligibility under the national objective of percentage of residents meeting Low-to-Moderate Income guidelines. A Municipal Code update was completed in 2023 with annual reviews scheduled to maintain compliance with state standards.

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
Generator & Related Projects	Marcus	2020: Generator for Fire Department to enable use as emergency shelter. <i>Fire Chief, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Marcus	Update, in progress. Project is in progress as an included component of a Fire Station Expansion Project. As of late 2024, the pad has been laid and a

		dedicated generator is planned. As of December 2024, local budget is the primary funding source with the city continuing to consider additional options. <i>Fire Chief, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, BRIC, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Marcus	2020: Generator Water Plant – maintain function during power outage; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Marcus	Closed. Community will coordinate with county for mobile generator use as needed.
Generator & Related Projects	Marcus	2020: Generator at Shelter house, also for use in the event of power outage during an emergency; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Marcus	Update. Action not taken due to lack of dedicated funding. Project is still needed and carries over to the 2025 HMP.
development		
flow control		
refuge		
Shelter	Marcus	2020: Interest in improvements of Fire Department to enable Safe Room designation. <i>City Council, Fire Chief, County EMA</i> as applicable. (Local funds, community benefit fund programs, PDM) HIGH PRIORITY
Shelter	Marcus	Implemented. An addition to the Fire Station has been completed allowing adequate space to serve as shelter site in the event of mass displacement. An ongoing concern is coordination of supplies in the event of such disaster. City will work with county and federal/state/local response teams as appropriate to attain and allocate supplies (such as cots) as needed.
technology		
natural barriers/supports		

d. Risk Assessment

Contributing Factors

Marcus has the benefit of having no designated floodplain within and immediately surrounding their corporate boundaries. The city does experience the rare occasion of pooling during extremely heavy rain events, however such events in recent years have not incurred notable damages. Land use maps with floodplain overlay are included in the Appendix for all participating cities for reference.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
MARCUS	8/27/2021	0:46	Thunderstorm Wind	52 kts. EG	0	0	0.00K	50.00K
MARCUS	12/15/2021	16:56	Thunderstorm Wind	70 kts. EG	0	0	50.00K	0.00K

MARCUS	5/30/2022	14:55	Hail	0.88 in.	0	0	0.00K	0.00K
MARCUS	5/8/2024	15:31	Hail	1.00 in.	0	0	0.00K	0.00K
MARCUS	7/29/2024	23:22	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K

NOAA storm event database shows the above occurrences for Marcus between December 1, 2019 and December 31, 2024. Recorded wind and hail-induced events in part, figured into the city's decision schedule removal of dead and diseased trees from public rights of way. Marcus is in the process of planning tree replacement to substantiate natural barriers to extreme heat (via shade canopy), soil erosion, and wind as present with healthy tree population.

Additional weather impacts as experienced county-wide such as Drought, general winter weather, and extreme heat and cold are noted under the Cherokee County profile.

Priority Hazards

The City recognizes most natural hazards as listed by the State are of at least some concern. Despite reduction of even isolated flood incidents in recent years, city staff maintains the following as priority hazards in regard to risk to residents and potential impact on City operations.

- Tornado/Windstorms
- Severe Winter Weather
- Flash Flooding

Survey responses reflected highest level of concern for Severe Winter Weather, followed by Thunderstorms with Hail/Lightning, Tornado/Windstorms, and Transportation Incidents with each respondent indicating very- or somewhat concerned. Grass and Wildland Fires was also prioritized in the "top 3" section of the survey.

e. Mitigation Needs, Actions, & Strategies

Following is the list of identified strategies expected to be addressed by Marcus within the next five years.

communication/education		
Promo/Info	Marcus	New. City is interested in expanding opportunity for preparedness workshops and readiness campaigns to better inform residents of potential disasters. Workshop/information would include before/after preparation including “ready bags” with medications and other necessary items, especially if urgent evacuation is issued. Additional preparedness resources would include facilitating a safe check process for aging and specialized needs neighbors (i.e. oxygen tank dependency or mobility limitations) and the implementation of a buddy system to ensure communications are thorough and complete for those not routinely using social media or cell phones. <i>City, local response teams, County EMA, Red Cross/United Way affiliates as applicable</i> (Need for dedicated funding not anticipated, use of local communications formats expected) MEDIUM PRIORITY
Warning Sirens	Marcus	New. Existing warning siren has aged out of serviceability and is in need of replacement. Public works. (Private funds, Pre-disaster funds as available, local and county emergency response funds, transportation funds as may be applicable) HIGH PRIORITY
tools/equipment		
Generator & Related Projects	Marcus	New. Install transfer switch at Community Center, a critical facility as it serves a command center, refuge/shelter as needed in the event of a disaster or extreme event. Facility available for residents, students, and nearby communities as may be necessary.
		Carry over. Generator at Shelter house, also for use in the event of power outage during an emergency; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/supports		
Trees	Marcus	New. Recognizing the benefits of a healthy tree population, the city is seeking funding opportunities to fortify its tree density, especially in recreation and public greenspace areas, filling gaps left by removal of dead/diseased trees. <i>Public Works, City Council, County Conservation as applicable</i> (local funds, Trees Please and similar re-treeing programs, Arbor Day Foundation) MEDIUM PRIORITY

6. MERIDEN

Note: The city participated in the development of the Regional Hazard Mitigation Plan, however, they have not included any specified mitigation actions, strategies, or projects.

Therefore, the City of Meriden is not recognized as an active “Participant” in the Plan. To activate participant status, the city must process an amendment at the local level and file said amendment with Cherokee County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

Meriden is located just north of center in Cherokee County. One of the county’s smallest cities, Meriden occupies 0.11 square miles. Situated south of state Highway 3, Canadian National Railroad passes about parallel to the city’s northern boundaries. According to Cherokee County’s city webpage for Meriden, the city was originally named Hazard after a railroad family. The name was changed to Meriden after the locals put in a request to the U.S. Postal Service in 1874 (<https://www.cherokeecountyiowa.com/Towns/Meriden.htm>).

City Governance & Community Supports

Meriden is governed by the Mayor and City Council. Offices in addition include City Clerk, Public Works, and Parks and Recreation. The Meriden Fire Department is independent of the city with an average of 17 volunteer firefighters. The community is very self-sufficient with residents funding public infrastructure through fundraising efforts including fire station/city hall and a multi-purpose community center. The city contracts with the county for law enforcement and has an emergency response team under Meriden Fire and Rescue.

Demographics, Housing, & Economics

In 2023, the city of Meriden had an estimated population of 130¹⁴, reflecting a decrease from 161 residents in the 2020 decennial census. The community is home to 67 households, with a median household income of \$53,661, reflecting a moderate economic standing. A small portion of the population lives below the poverty line, indicating relatively stable financial conditions for most residents. Meriden has a total of 81 housing units, with most of these units occupied, suggesting a steady demand for housing. While there are a few vacant units, mobile homes make up a small portion of the housing stock. Many of the homes were built after 2000, while

¹⁴ Source: <https://censusreporter.org/profiles/16000US1951150-meriden-ia/>

older homes, built before 1990, make up a smaller share of the housing inventory. These characteristics suggest that Meriden is a small, stable community with newer housing and a need for continued attention to housing growth and revitalization.

Leading Employers

Meriden's leading employers are key to the function and sustenance of the community's wellbeing.

- Cleghorn-Meriden-Larrabee Telephone
- First Farmers Coop (seasonal)
- Millwright Maintenance
- Whistle Stop Restaurant

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

City Hall, Fire Department, City Storage Garage	105 Eagle St
Community Center, Playground	204 Eagle St

Valuation of City Assets

Building	\$	1,144,929
Miscellaneous Property Scheduled	\$	77,550
Miscellaneous Property Unscheduled	\$	286,000
Total	\$	<u>1,508,479</u>

b. Participation

To complete Meriden's update, mail communications were conducted between SIMPCO and Mike Loetz, City Clerk. Additional information was provided from Mayor Beau Menke.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	<i>2005 Community Builder</i>
<i>Policies/Ordinance</i>	
Municipal Code of Ordinances	
• Subdivision Ordinance • Tree Trimming Ordinance • Nuisance Ordinance	• Storm Water Ordinance • Drainage Ordinance • Debris Management Plan
Zoning Ordinance	Zoning/Land Use Restrictions
Building Code	Building plans are brought to Council for approval.
<i>Programs & Commissions</i>	
ISO Fire Rating	Meriden Class 9 and Meriden FD Class 9/10
Property Acquisition	Case-by-case
Planning/Zoning Boards	Zoning brought to County P&Z for review in lieu of local Board
<i>Staff/Department</i>	
Public Works Official	<i>Water/Sewer Superintendent (PT)</i>
Emergency Response Team	<i>Meriden Fire and Rescue</i>
<i>Local Funding Availability /Eligibility</i>	
Community Development Block Grants	
Capital Improvements funding	
Authority to levy taxes for specified purpose	
Fees for water, sewer, gas, or electric services	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities
Withhold spending in hazard prone areas	

Review of Actions Taken (Since 2019)

Meriden has not implemented any mitigation-related projects since 2019.

communication /education

tools/equipment

development

Bridges & Roads	Meriden	2020: Street repaving project to address washout and weather-related deterioration. <i>City maintenance, City Council.</i> (Local funds) MEDIUM PRIORITY
Bridges & Roads	Meriden	Closed. Project not completed. Some work completed to maintain function. Work will be implemented incrementally without anticipation of PDM funding supports.
flow control		
Flood protection	Meriden	2020: Interest in flood control implementation to protect lagoon at north end of town. Flooding risk with heavy rain and/or rapid snowmelt. <i>City Council, city staff/maintenance</i> (Local funds, capital improvement funds, betterment funds, DNR program funding). HIGH PRIORITY
Flood protection	Meriden	Update. No action taken. City stated due to lack of funding, no major projects were completed. Project removed from priority listing.
refuge		
technology		
natural barriers/ supports		

d. Risk Assessment

Contributing Factors

An assessment of NOAA Storm Event database included only one report specific to Meriden between 11/01/2019 and 12/31/2024¹⁵. An additional 97 events are recorded for the Cherokee (Zone) with impact to the whole county.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
<u>MERIDEN</u>	12/15/2021	16:56	Thunderstorm Wind	83 kts. EG	0	0	30.00K	0.00K

Priority Hazards

- Flash Flooding
- Severe Winter Weather
- Tornado/Windstorms

¹⁵ Source: <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1000253>

e. Mitigation Needs, Actions, & Strategies

The city has not identified a specific action, strategy, or project. Therefore, an amendment must be filed for FEMA and the Iowa Department of Homeland Security to formally recognize this jurisdiction as an eligible applicant for pre-disaster and/or mitigation funds as may be available.

7. QUIMBY

a. Profile

The City of Quimby lies close to the southern border of Cherokee County and occupies about 0.41 square miles. Highway 31 is the main road that connects Quimby to surrounding communities and runs diagonally from the southwest to northeast corners of the city. The Little Sioux River runs along the city's north boundary. A number of Iowa Century Farms exist in the rural areas around Quimby honoring farmers and their families that have been in the area for 100 years or more.

City Governance & Community Supports

Quimby is governed by a five-person elected council and Mayor. Offices in addition to Mayor and Council include City Clerk and Maintenance Director. Quimby City has a volunteer Fire Department in place. The Department staffs 23 members, headed by the Fire Chief. Quimby's Fire and EMS-Ambulance rescue squads are trained and certified in Sioux City and Quimby. The force is made up of five certified Emergency Medical Technicians, two are pending EMT training, and all are certified fire fighter I.

Demographics, Housing, & Economics

As of 2023, Quimby had an estimated population of 246¹⁶, reflecting a slight decrease from 249 residents in 2020 decennial census estimates. The town recognizes a higher population than reflected in database estimates. The town includes 160 households and has a median household income of \$52,083, which falls below the county median of \$64,478. A significant share of residents live below the poverty line, and the community has a higher percentage of

¹⁶ Source: <https://censusreporter.org/profiles/16000US1965280-quimby-ia/>.

individuals aged 65 and over compared to the county average. Additionally, many residents are living with a disability. These factors suggest that Quimby faces some economic and demographic challenges, but the town remains a small, close-knit community with potential opportunities for support and growth.

<i>Community Characteristics</i>	
Population (2023)	246
Population (2020)	249
Total Households	160
Median household income	\$52,083
Median household income – Cherokee County	\$64,478

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Cherokee</i>	<i>Iowa</i>
5 years and younger	14	4.7%	10%	6.3%
65 years and older	62	33%	25%	18%
Below poverty level	62	12.5%	15.2%	11%
Living with a disability	56	18.4%	11.8%	13.2%

Quimby has a total of 180 housing units, with 160 of them occupied, indicating a stable demand for housing in the area. There are 20 vacant units, which make up a small portion of the housing stock. Mobile homes account for a small part of the housing inventory. The housing market in Quimby is relatively modern, with a significant portion of homes built after 2000. A smaller number of homes were constructed between 1990 and 1999, while older homes, built before 1990, make up a portion of the town's housing stock. These characteristics suggest a relatively new housing market, with opportunities for continued development and maintenance of the existing housing infrastructure.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	180	-
Occupied units	160	89.0%
Vacant units	20	11%
Mobile Homes (portion of total)	5	3%

<i>Age of residential structure</i>		
Built 2000 or later	115	64%
Built 1990-1999	49	11%
Build 1990 or earlier	43	24%

Leading Employers

The following businesses operate and have established a necessary presence in Quimby.

- Simonson's Corporate Industries
- Quimby Ag Supply
- City of Quimby
- Deer Valley Mechanical
- Rendering Plant
- C+C Pesticide

Additional businesses contributing to the overall wellbeing of the City include several single-employee businesses including Joe's Food Mart, Quimby Golf Club (volunteer), Stevenson Family Tree Service, and Green Pasture Boutique. At the time of the planning meeting, a new restaurant was in the works.

Critical Facilities

City Hall	101 E 2 nd Ave
Quimby Community Center	9 Main St
Library	120 N Main St
City Park	Seller St
City Maintenance Shop	11 Main St
Lift Station	N Clark St
Water Treatment System/Lagoon	C60
Pump House/Filtration Bldg, etc.	Railway Ave
Warning Siren & Tower	Railway Ave

Water tower
Quimby Golf Course

Off E 3rd
1151 Clark

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

In addition to the area's leading employers, community supports in Quimby are the Community Center Board, American Legion, Auxiliary, and Town & County.

Valuation of City Assets

Misc Property Sched	\$	3,247,354
Misc Property Unsched	\$	<u>103,980</u>
Total	\$	<u>3,351,334</u>

b. Participation

SIMPCO facilitated a mitigation planning December 23, 2024 at Quimby City Hall with the following in attendance.

- Jeanette Beekman, City Clerk
- Donald Fiser, Councilmember, Fire Dept rep
- Willis Allbaugh, Councilmember

Additional participation by way of public input was collected through survey distribution – both paper and online. Of the total 251 responses for the primary survey, 20 respondents indicated Quimby as jurisdiction of residence.

c. Community Capabilities

<i>Policies/Ordinances</i>	
• Building Code • Debris Management Plan • Floodplain Ordinance	• Nuisance Ordinance • Tree Trimming Ordinance • Zoning Ordinance
<i>Programs</i>	
Zoning/Land Use Restrictions	Zoning Ordinance

National Flood Insurance Program (NFIP) Participant		190354 @ E status
ISO Fire Rating (not updated)		Class 7
Planning/Zoning Boards		
Tree Trimming Program	Mid-American Energy trims trees that are near power lines.	
<i>Staff/Department</i>		
Public Works Official		Water Superintendent
Emergency Response Team		Quimby Fire and Rescue
<i>Non-Governmental Organizations</i>		
• Veterans Groups • American Legion and American Legion Auxiliary • Community Organizations • Town and Country		
<i>Local Funding Availabilities & Authorities</i>		
Apply for Community Development Block Grants		
Fund projects through Capital Improvements funding		
Levy taxes for a specific purpose		
Collect fees for water services		
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities	

The fire department added a new fire truck at the cost of \$480,000. Project was financed through fundraising efforts (Fire Board and firefighters), local funds, and a MRHD grant.

Review of Actions Taken (Since 2019)

Projects as included in the 2019 are updated as shown.

communication /education		
tools/equipment		
development		
Improve existing facilities & infrastructure	Quimby	2020: Wastewater infrastructure improvements needed to address increased waterflow through and near river, which has accelerated deterioration of stabilization. Redirection of wastewater lines necessary. <i>City Council, DNR as applicable, County departments as applicable.</i> (Local funds, approved loan and bond programs, CDBG) HIGH PRIORITY

Improve existing facilities & infrastructure	Quimby	Complete. Pipeline crossing river was relocated and reconstructed to pass over an area that runs straighter, reducing wear, length of exposed lines, and risk of contamination. Project included relocation of lift station to the east. Project funded in part by CDBG (\$300K) and FEMA (\$350K).
Relocate critical facilities	Quimby	2020: Relocation or elevation needed for Lift Station to address flooding impacts. <i>City Council, City maintenance/waterworks, Coordination with County EMA as applicable.</i> (Local funds, DNR program funds, PDM funds, approved bond and loan programs) HIGH PRIORITY
Relocate critical facilities	Quimby	Complete. Lift station moved east as part of line improvements as noted under <i>Improve existing facilities & infrastructure</i> category of projects.
flow control		
refuge		
technology		
natural barriers/ supports		

Other projects improving the city's sustainability as recently completed include the following.

- Cracked sewers lined
- Lift station added at 3rd Street
- A generator has been purchased for the lagoons, though there is need for generators at additional facilities

d. Risk Assessment

Contributing Factors

Infrastructure concerns are significant for Quimby with needs far exceeding available funds. Ongoing maintenance and improvements are always in progress. Sewer lines (approximated at \$59/ft) and street resurfacing are needed on a large scale to catch up to "routine" status instead of reactive to extreme wear. Drainage ditch maintenance is burdensome especially in heavier periods of rain which increases frequency of work. Lead/galvanized pipes through most of town are an urgent priority for replacement. Funding opportunities are extremely limited, slowing implementation.

A DNR Tree Survey has been completed resulting in a prioritized removal list. Trees within parks will be replaced incrementally.

A review of the NOAA Storm Event database provided one event specific to Quimby as reported. It is expected that all events noted as Cherokee (Zone) under the county profile risk assessment were experienced in town as well.

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
<u>QUIMBY</u>	7/29/2024	23:21	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K

Priority Hazards

Priority hazards as determined by the city are unchanged from the 2020 HMP.

- Flooding – Riverine and Flash
- Tornado / Windstorm
- Severe Winter Weather

Discussion was held regarding long term power outage that resulted in melded lines. This is in acknowledgement of the significant impact of varying types of extreme weather events and transportation incidents and potential for loss of/damage to power sources (lines, transformers).

The survey responses submitted by 20 Quimby residents provides additional context to community hazard priorities. Respondents indicated Tornado/Windstorm with the highest frequency at “Very Concerned”, followed by Severe Winter Storm. Notable for a high rate of at least “Somewhat Concerned” is Thunderstorm with Hail and Lightning. When asked to choose their top three hazards, respondents indicated Tornado/Windstorm (10/20), Severe Winter Storm (6/20), and Infrastructure Failure (5/20).

e. Mitigation Needs, Actions, & Strategies

communication /education		
tools/equipment		
Generator & Related Projects	Quimby	New. Interested in generators for Fire Station and warning siren as means of maintaining operations & communication during power outages and as need in response efforts. <i>Fire Dept, City Council, Public</i>

		<i>Works, County EMA</i> (Local supports, fundraising, response funds as may be available, PDM funds, community benefit funds) HIGH PRIORITY
development		
Improve existing facilities & infrastructure	Quimby	New. Address abandoned, vacant, and dilapidated buildings through: incentivized development, rehabilitation, and acquisition programs. Dilapidated structures are themselves at risk in extreme weather conditions, pose threat of fire, and are a general risk to public health. City is looking for programs to implement as well as funds to implement some measures as applicable (including but not limited to acquisition). City Council. (various funding sources depending on programs – IEDA, PDM as applicable, local funds, private partnerships, IDNR Dilapidated Buildings prog) HIGH PRIORITY.
Improve existing facilities & infrastructure	Quimby	New. City is in the process of determining options to improve function of, expand, and update lagoon, sewer/wastewater system, lines and related to meet IDNR compliance standards. Needs include but are not limited to: 1. expanded capacity with potential of adding a cell pending feasibility. 2. Berm construction or raising of lift station to protect from flood infiltration, and 3. Pre-engineering to fully assess options are part of project. <i>City, Public Works, IDNR</i> (CDBG, USDA as applicable, local funds, PDM as available, other sources TBD) HIGH PRIORITY
flow control		
refuge		
technology		
natural barriers/ supports		

8. WASHTA

Note: The city participated in the development of the Regional Hazard Mitigation Plan, however, they have not included any specified mitigation actions, strategies, or projects. Therefore, the City of Washta is not recognized as an active “Participant” in the Plan. To activate participant status, the city must process an amendment at the local level and file said amendment with Cherokee County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

The City of Washta is situated near the southern-most border of Cherokee County, and occupies about 1.01 square miles. IA-31 is the main highway connecting Washta to surrounding communities, running north/south through the eastern half of its corporate boundaries. The Little Sioux River travels diagonally through its northwest quadrant with the Stratton Creek tributary branching eastward and south. Washta is known as the coldest spot in Iowa when on January 12, 1912, an official temperature of -47° F was recorded.

City Governance & Community Supports

An elected council and the Mayor govern Washta. Offices in addition to Mayor and Council include City Clerk and Public Works. Washta benefits from the services of a 19-member, independently operated volunteer fire department – Washta Fire and Rescue. The city contracts with the county for law enforcement and emergency management coordination. The City is served by the River Valley Community School District and hosts an elementary school facility. Information regarding mitigation actions and strategies for this and all regional public school districts can be found under Title VI: School Districts.

Demographics, Housing, & Economics

CensusReporter.gov estimates the 2023 population of Washta at 171¹⁷, down from 209 residents in 2020. The town is comprised of 89 households, with a median household income of \$50,313—lower than the regional average. Around 6.4% of residents live below the poverty line, indicating some economic difficulties within the community. Despite these factors, Washta remains a small and stable town, with potential for growth and development as it continues to adapt to the needs of its residents.

Washta has a total of 128 housing units, with 90 of them occupied, reflecting a moderate demand for housing. There are 38 vacant units, making up a portion of the housing stock, and mobile homes account for a small share of the inventory. The majority of homes in Washta were built after 2000, with a smaller number constructed between 1990 and 1999. A smaller portion

¹⁷ Source: <https://censusreporter.org/profiles/16000US1982380-washta-ia/>

of homes were built before 1990, indicating that the housing market in Washta is relatively modern, with opportunities for further development and improvement in the coming years.

Leading Employers

- Lange's Restaurant & Convenience Store
- River View Elementary School
- New Coop (formerly Western Iowa Coop)

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

City Hall	206 Main St
Community Building	305 Main St
Water Treatment (& related Bldgs)	101 Sanford St
City Maintenance	103 S 3 rd Ave
Water Tower	1 st Ave & Sanford St

Those entities identified as leading employers are also community staples, serving as gathering locations and providing essential services.

Valuation of City Assets

Property	\$	1,065,166
Misc Property - Sched & Unsched	\$	<u>84,154</u>
Total	\$	<u>1,149,320</u>

b. Participation

Contribution to the Regional Hazard Mitigation Plan were conducted via email between SIMPCO and City Clerk, Karen Clark. Of the 61 Cherokee County surveys submitted, 5 were from Washta residents.

c. Community Capabilities

<i>Plans/Guidance Documents, Policies</i>	
Comprehensive Plan	
Municipal Code of Ordinances	
• Floodplain Ordinance • Tree Trimming Ordinance	• Nuisance Ordinance • Storm Water Ordinance
Building Permit process w/out adopted building code standards	
<i>Programs</i>	
ISO Fire Rating	<i>Class 7/9</i>
National Flood Insurance Program (NFIP) Participant - <i>CID #190064</i>	
Property Acquisition	<i>Case-by-case</i>
<i>City Staff/Departments</i>	
Public Works Official/Water Superintendent	
Emergency Response Team	<i>Washta Fire and Rescue</i>
Engineer	<i>Consultant on an as needed basis</i>
<i>Local Funding Abilities</i>	
Apply for Community Development Block Grants	
Fund projects through CIP	
Levy taxes for a specific purpose	
Fees for water, sewer, gas, or electric services	
Incur debt through	• general obligation bonds • special tax bonds • private activities
Withhold spending in hazard prone areas on a case-by-case basis	

Review of Actions Taken (Since 2019)

Washta did not include any projects in the 2020 HMP. No major community projects aside from maintenance have been implemented.

d. Risk Assessment

Contributing Factors

An assessment of the NOAA Storm Event database from 11/01/2019 through 12/31/2024 shows three reported incidents specific to Washta. The city likely experienced the effects of the 97

weather incidents as recorded for Cherokee (Zone) as generalized for the area as a whole. As a border community, Ida (Zone) and Woodbury (Zone) reports may also apply.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
WASHTA	6/22/2021	17:42	Hail	1.25 in.	0	0	0.00K	191.00K
WASHTA	8/20/2021	17:22	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
WASHTA	6/21/2024	1:00	Flood		0	0	1.020M	0.00K

Priority Hazards

City staff indicated the following as priority hazards.

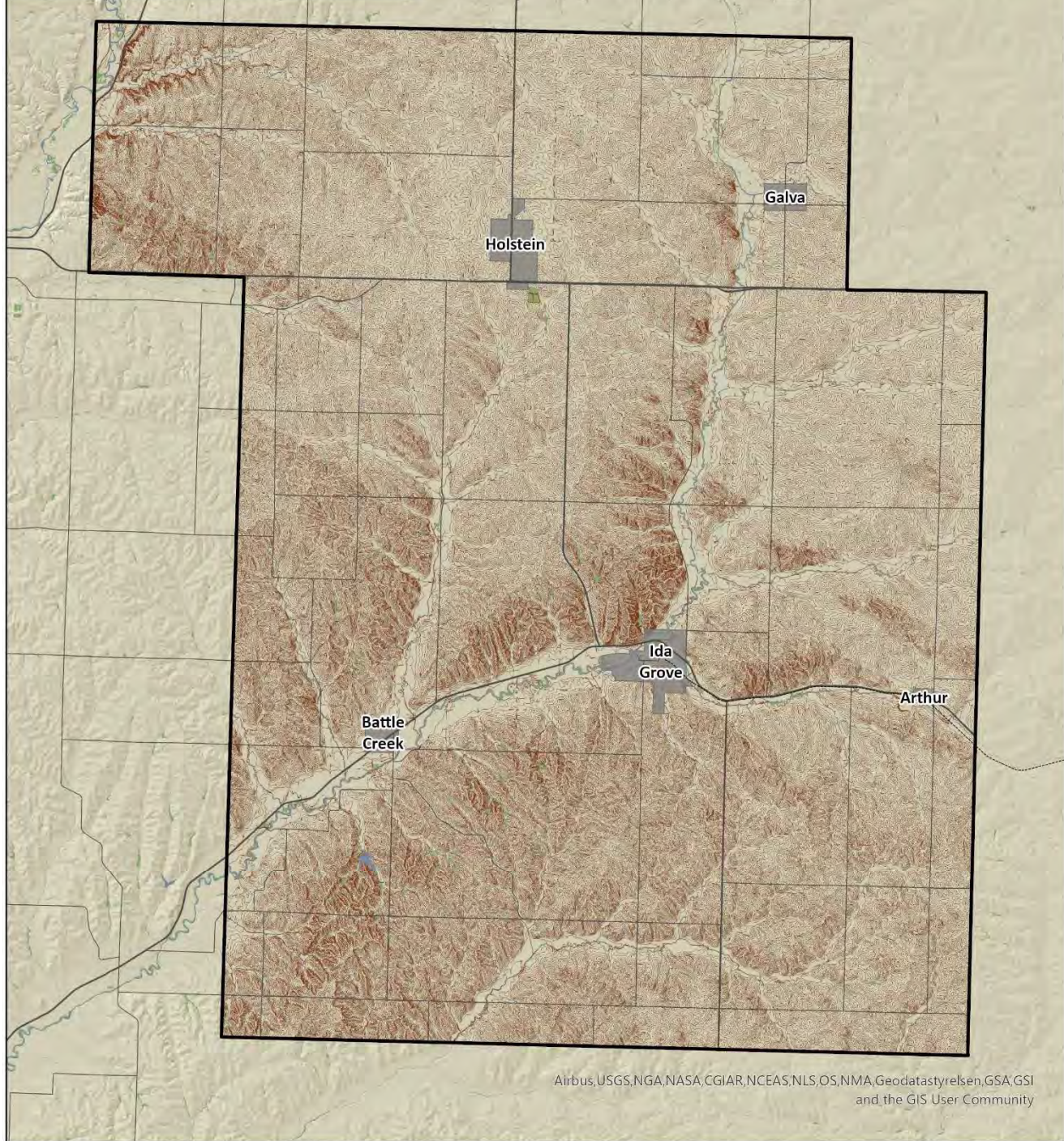
- Flooding
- Severe Winter Storm
- Tornado/Windstorm

Resident input is consistent with city assessment with one exception. Of the 5 Washta respondents, survey responses indicated the highest frequency of Very Concerned under Drought. Other notable indications of at least Somewhat Concerned include Flooding, Severe Winter Storm, and Tornado/Windstorm. When asked to choose the top three hazards, Tornado/Windstorm (4/5) had the highest frequency.

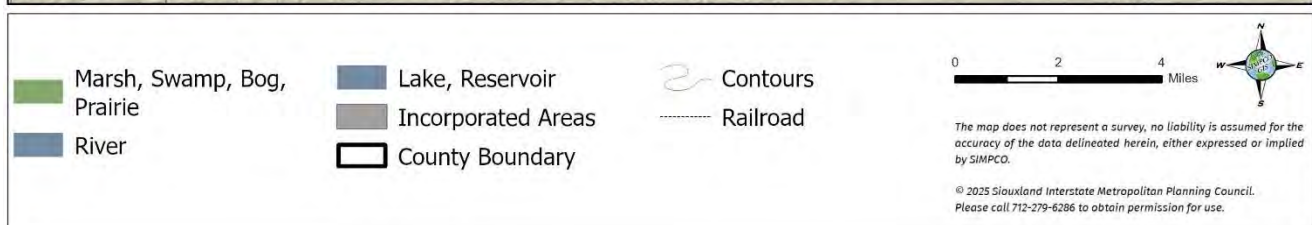
e. Mitigation Needs, Actions, & Strategies

The city has not identified a specific action, strategy, or project. Therefore, an amendment must be filed for FEMA and the Iowa Department of Homeland Security to formally recognize this jurisdiction as an eligible applicant for pre-disaster and/or mitigation funds as may be available.

Topography Map, Ida County



Airbus, USGS, NGA, NASA, CGIAR, NCEAS, NLS, OS, NMA, Geodatastyrelsen, GSA, GSI and the GIS User Community



IV. COUNTIES & CITIES PARTICIPATING AS JURISDICTIONS

B. Ida County

Ida County is located in the south half of the northwest quarter of Iowa. The County is bordered by Cherokee County to the north, Sac County to the east, Crawford County to the south, and Woodbury County to the west. Ida County is approximately 432 square miles.

Cities within Ida County include Arthur, Battle Creek, Galva, Holstein, and Ida Grove.

PROFILE – UNINCORPORATED AREA & COUNTY

a. Rivers & Watersheds

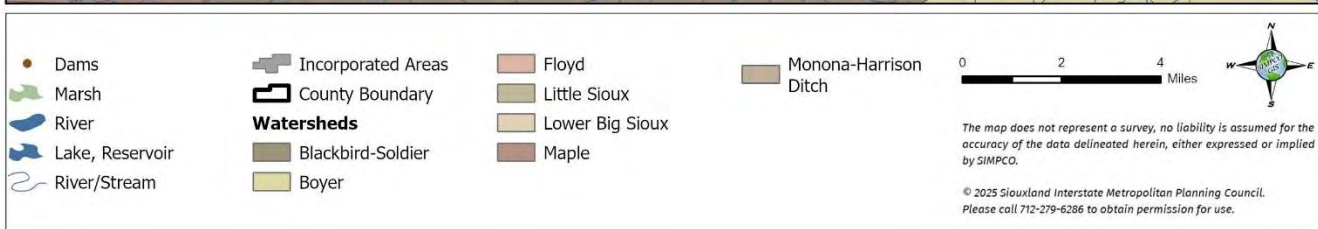
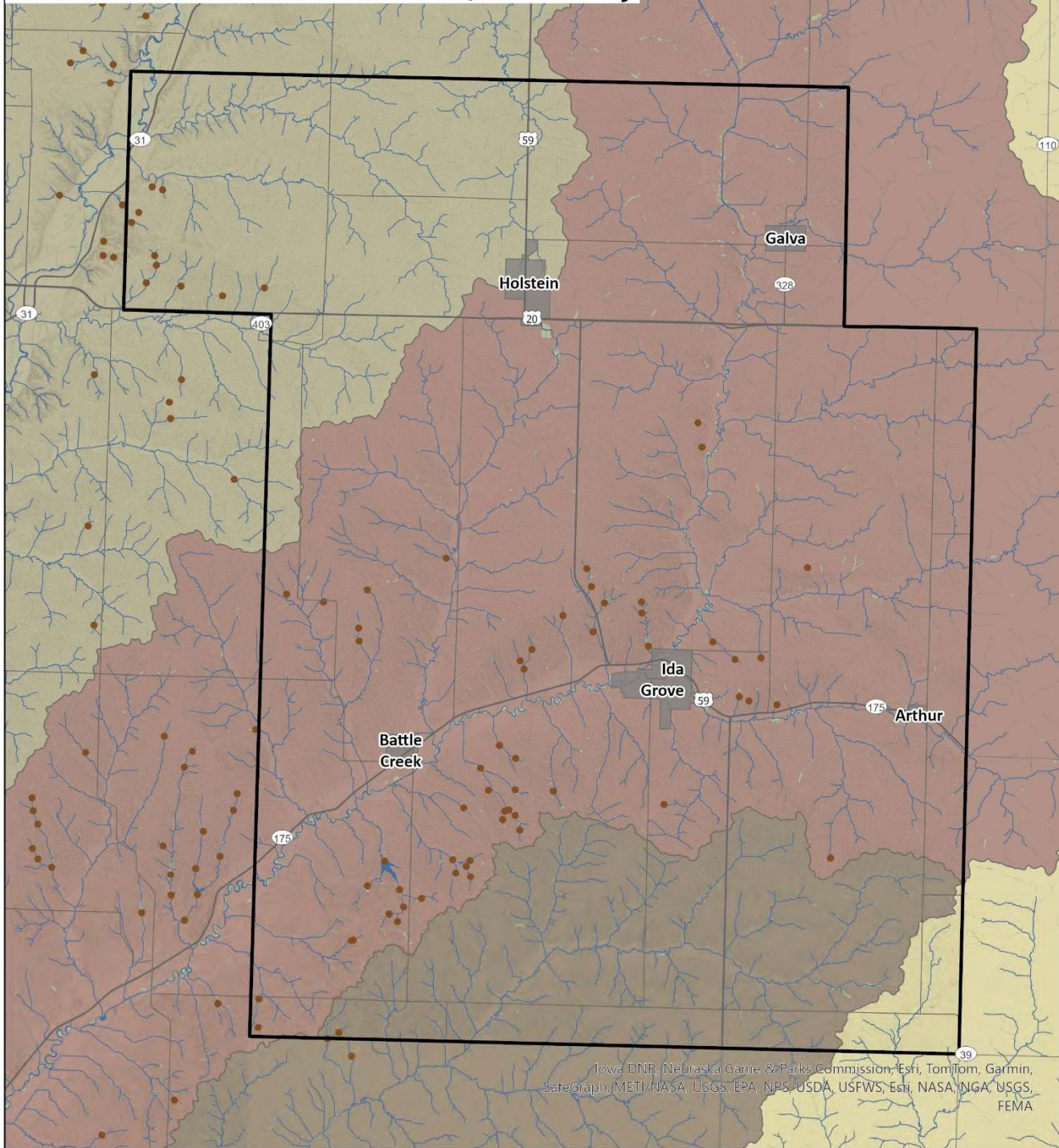
The Maple River crosses through the center of the County, while the Little Sioux River crosses briefly into Ida County at the northwest corner. Other rivers include Battle Creek and Soldier River, as well as many smaller creeks and streams.

There are four (4) watersheds within the County that drain storm water and snow melt into streams and lakes, wetland areas, or into groundwater reserves. These watersheds are Blackbird-Soldier Watershed, Little Sioux Watershed, Maple Watershed, and Boyer Watershed. Regional breakdown for watersheds is provided in the *Planning Area* information section in I. Introduction, subsection B. The following map depicts the sub-watersheds within those as listed above. Subwatersheds are determined based on a hydrologic unit code (HUC) level 12, which includes more detail such as tributary data.

b. Landform Regions & Geology

Ida County is composed of two (2) distinct landform regions that include Northwest Iowa Plains and Southern Iowa Drift Plain. Both are marked by rolling hills – the result of the manipulation of glacial sediment deposits by glacial melt and streams.

Watershed and Water Resources, Ida County



c. Transportation Network

U.S. Highway 20 runs east to west through the northern portion of the County. This highway is intersected by U.S. Highway 59, which runs north/south through the center of the state. The transportation network also includes State Highways 31 and 175.

The County's secondary road system is composed of 731.47 miles. Within this category, Farm-to-Market roads make up 225.58 miles, while Area Service roads account for 505.89 miles. Gravel or earth surface types account for 597.96 miles of the secondary road system. The remaining 124.68 miles are composed of asphalt or PCC surface types. Planned and illustrative transportation projects under Federal jurisdiction are included in the SIMPCO SRTPA 2050 Long Range Transportation Plan (LRTP) – a document on a five-year update schedule coinciding with the region's hazard mitigation planning process. Funded projects are included in the annually updated SIMPCO SRTPA Transportation Improvement Plan (TIP).

d. County Governance & Supports

The county seat is located in Ida Grove, near the center of the County. Its jurisdictions covers all unincorporated portions within county boundaries. Ida County is governed by a three (3)-person Board of Supervisors. The Board serves as the executive and administrative branches of Ida County. Additional Offices include the following departments:

• Assessor	• Emergency	• Recorder
• Auditor	Management	• Sheriff
• Clerk of Court	• Emergency Services	• Treasurer
• Conservation	• Engineer	• Veteran Affairs
	• Public Health	

The Ida County Emergency Management Agency provides coordination and works in partnerships with local communities, state, and federal agencies. Emergency Services Department has been added since the last HMP. The Ida County Sheriff's Office is the primary law enforcement agency for all of Ida County and has added the position of School Resources Officer as a full-time position during the school year.

County Facilities

<i>Critical Facilities</i>	
Courthouse; Misc Equip	401 Moorehead, Ida Grove
Courthouse Annex; Misc Equip	401 Moorehead, Ida Grove
Garage/Shop & Related	1705 W 6th, Ida Grove
Road Mntc/Storage	377 1 st , Battle Creek
Roads Storage	323 W Railroad, Holstein
	Hwy M31, Arthur
Engineer's Office/Roads Dept	1705 W 6 th , Ida Grove
Landfill Dept Storage	2202 Indian Ave, Ida Grove
Landfill Dept Recycling Bldg & Related	2202 Indian Ave, Ida Grove
Park - Consvr Dept & Related	Sec 10 & 15, Corwin Twp
	Sec 9 & 10, Garfield Twp
Emergency Mgmt Communications Tower	Moorhead Ave

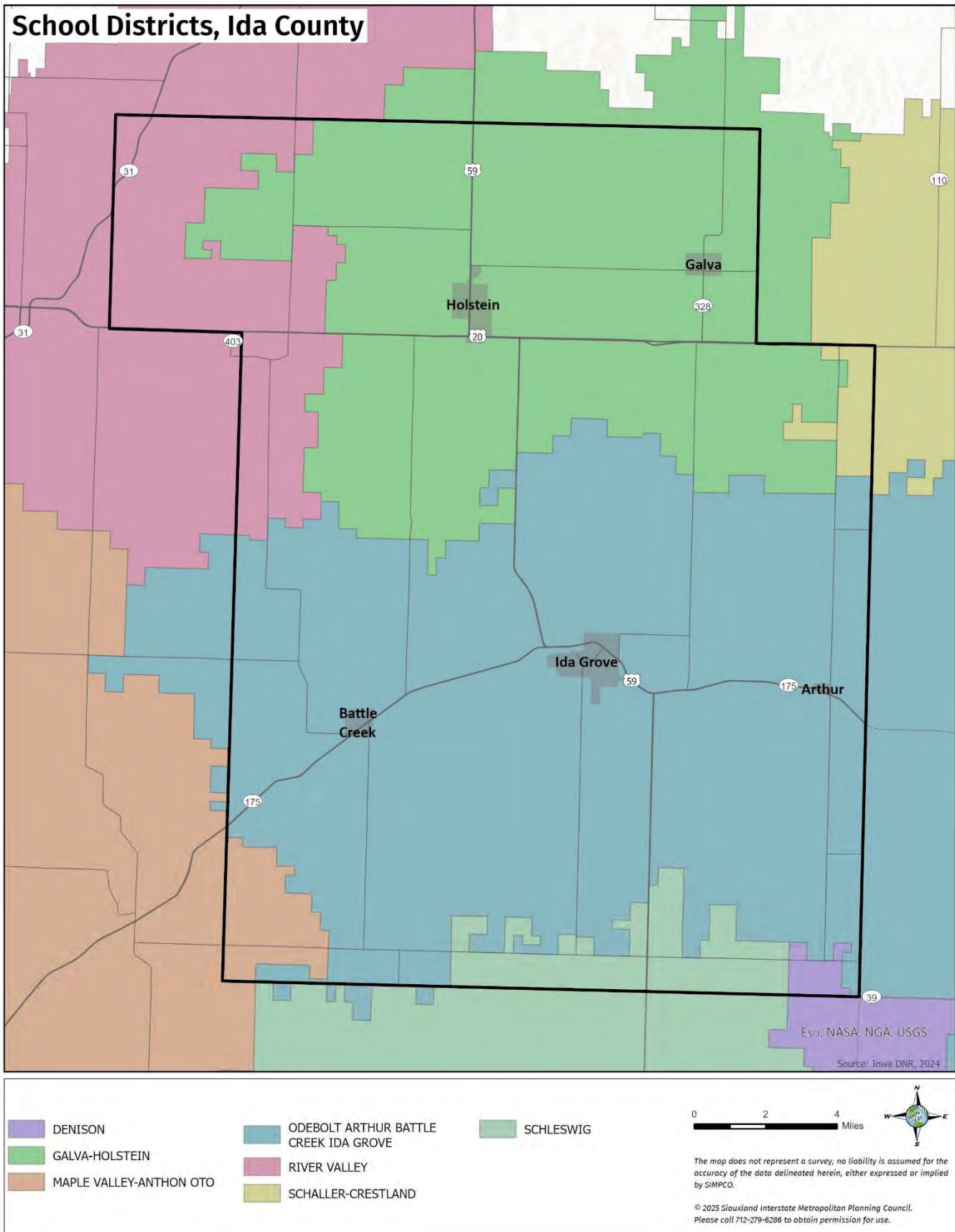
Education

Within Ida County there are eight (8) public schools divided into two (2) school districts. These districts include:

- Galva-Holstein Community School District
- Odebolt-Arthur & Battle Creek-Ida Grove Community School District

There are no colleges or universities based in Ida County, however there is an ISU Extension Office in Ida Grove.

Educational attainment in Ida Grove shows a strong emphasis on high school and associate-level education, with a higher share of residents completing these levels compared to the state average. A notable portion of the population has attended some college without earning a degree, indicating engagement with postsecondary education. However, Ida Grove trails behind the state in the number of residents holding bachelor's and graduate degrees, suggesting a gap in higher-level academic achievement. The percentage of individuals without a high school diploma is also slightly above the state average, pointing to an area for potential improvement



in early educational attainment. Overall, the data reflect a community with a solid foundation in basic and technical education but opportunities for growth in advanced degree completion.

<i>Level of Education</i>	<i>Ida</i>	<i>Iowa</i>
No high school diploma	11.5%	10.6%
High school degree (includes equivalency)	41.9%	30%
Some college, no degree	20.5%	19.6%
Associate's degree	16%	21%
Bachelor's degree	16.2%	20.9%
Graduate or professional degree	4.5%	10.7%

Population

Estimates through CensusReporter.org provides Ida County's 2023¹⁸ population of 6,944, showing a consistent decline since the decennial census reported 7,089 in 2010 and 7,005 in 2020.

The County's proportion of residents aged 65 years and older is high compared to Iowa. The proportion of the population living with a disability is comparable to state levels. FEMA identifies both of these categories as vulnerable populations.

<i>Community Characteristics</i>	
Population (2023)	6,944
Population (2017)	6,965
Total Households	2,944
Median Household Income	\$62,841
Median Household Income – Iowa	\$73,147

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Iowa</i>
5 years and younger	381	5.5%	5.7%
65 years and older	1,536	22.1%	18.5%

¹⁸ Source: <https://censusreporter.org/profiles/05000US19093-ida-county-ia/>

Below the poverty level	701	10.4%	11.3%
Living with a disability	885	13%	13.2%

Housing

Ida Grove offers more affordable housing compared to the state of Iowa, with a significantly lower median home value. The median rent is also slightly below the state average. The city has a total of 3,365 housing units, with an 89% occupancy rate. Of occupied units, 78% are owner-occupied. A modest number of homes remain vacant, suggesting a stable housing market. These figures highlight a community where homeownership is prevalent, and rental options are available, but limited.

<i>Housing Characteristics</i>		
	<i>Ida</i>	<i>Iowa</i>
Median Home Value	\$108,800	\$195,900
	<i>Count</i>	<i>Percent</i>
Total Housing Units	3,365	-
Occupied	2,961	88.8%
Owner-occupied	2,624	78%
Renter-occupied	740	22%
Vacant	370	11%

Income & Economics

Data from CensusReporter.org indicates a median household income of \$62,841 which is lower than both the Iowa and national estimates. County poverty estimates reflect about 10.4% of the population falls below the poverty line.

In Ida Grove, the civilian employed population aged 16 and older totals 3,533 individuals. The largest employment sectors in the city are education, health care, and social assistance, followed by manufacturing, which together employ a significant portion of the workforce. Agriculture, including forestry, fishing, and mining, also plays a key role in the local economy. Retail trade and construction are other notable sectors, while smaller portions of the population work in areas such as transportation, finance, and information services. Public

administration, arts, entertainment, and professional services account for smaller segments of the workforce. This diverse employment base reflects a community with strong ties to both traditional industries and service-oriented sectors.

Ida County identifies the following businesses and organizations as leading employers for the county.

- Cylinder Express
- Flint Hills Resources
- Galva-Holstein Community School District
- GOMACO
- GOMACO Trolley Company
- Hi-Way Products
- Holstein Manufacturing, Inc.
- Horn Memorial Hospital
- Invenergy/MidAmerican Wind Farms
- Johnson Propane, Heating, and Cooling
- Midwest Industries
- OABCIG Community School District
- Poet Bioprocessing
- Quad County Corn Processors
- Reliant Processing
- Ridge View School District
- Tiefenthaler Quality Meats
- United Bank of Iowa
- VT Industries

<i>Industry for the Civilian Employed Population 16 & over</i>		
Civilian employed population (16 and older)	3,533	-
Agriculture, forestry, fishing and hunting, and mining	385	10.9%
Construction	291	8.2%
Manufacturing	766	21.7%
Wholesale trade	58	1.6%
Retail trade	368	10.4%
Transportation and warehousing, and utilities	181	5.1%
Information	68	1.9%
Finance and insurance, and real estate and rental and leasing	131	3.7%
Professional, scientific, and management, and administrative and waste management services	73	2.1%
Education services and health care and social assistance	836	23.7%
Arts, entertainment, and recreation, and accommodation and food services	182	5.2%
Other services except public administration	129	3.7%

Public administration	62	1.8%

Valuation of County Assets

A current statement of values has not been provided. Based on the total building and personal property assessment valuation of \$13,547, 928 as received from 2019 and a minimum 40% increase for other counties in the region, this plan assumes an approximate valuation of \$18,967,100. This dollar amount serves as a foundation for minimum protected assets for mitigation projects affecting the county and its unincorporated areas as may be applicable in a cost-benefit analysis. A detailed valuation shall be fully considered within project parameters during project planning. Values inconsistent with this estimate may require an amendment at the county level prior to pursuit of mitigation funds as may be available.

PARTICIPATION

A planning meeting was conducted at the Ida County Courthouse on December 4, 2024 with the following county representatives in attendance.

- Ed Sohm, EMA
- Wyatt Reitmeier, Conservation Board
- Traci Riessen, Treasurer
- Corey Trucke, EMS Dept.
- Julie Phillips, Recorder
- Jeff Williams, Engineer

In addition to the in-person meeting, 28 survey responses were collected from Ida County residents. Their collective responses have been considered in discussion of county response efforts, concerns, needs, and recommendations.

CAPABILITIES

County capabilities are determined not only by physical infrastructure and equipment, but also by human resources, policy, and standards of practice. The following table itemizes supports including procedural sources, departmental roles, formal and informal community supports, and funding sources.

<i>Plans/Guidance</i>	
Capital Improvement Plan <i>via annual budget process</i>	
Comprehensive Land Use Plan	
Comprehensive Plan	
Flood Mitigation Assistance (FMA) Plan	
Local/County Emergency Plan	
<i>Policies/Ordinance</i>	
Zoning Ordinance	Subdivision Ordinance
Floodplain Ordinance	Tree Trimming Ordinance
Nuisance Ordinance (including <i>Debris Mgmt Plan</i>)	Floodplain Management Ordinance
<i>Programs/Commissions</i>	
National Flood Insurance Program (NFIP) Participant	CID #190893
Planning/Zoning Boards	Economic Development Planner
	Includes oversight of Builder's Plan (Zoning Officer)
	NFIP Floodplain Administrator (Zoning Officer)
	Zoning/Land Use Restrictions
<i>Staff/Department</i>	<i>Included responsibility</i>
Emergency Management Coordinator	Hazard Awareness Program
Emergency Response Team	Includes oversight of Emergency Operations Center
Engineer	
Mapping Specialist (GIS)	
Secondary Road Dept	Tree Trimming Program & Compliance
<i>Non-Governmental Organizations</i>	
Ida Grove Ambulance (independent of city/county operations, non-profit)	
American Red Cross	
Community Organizations (Lions, Kiwanis, etc.)	
Veterans Groups	
<i>Local Funding Availability/Eligibility</i>	
Community Development Block Grants	
Capital Improvements funding	
Levy taxes for specified purpose	
Fees for water, sewer, gas, or electric services	
Impact fees for new development under the Economic Development Commission	
TIF	
Potential funding through Utility earnings	

Ability to incur debt through	general obligation bonds
	special tax bonds
	private activities

It is important to note that standards of practice, whether written or implied, are based on State Code, with the most stringent taking precedence. Ida County has adapted its departmental structure and representation to best serve residents efficiently and effectively.

Review of Actions Taken

communication/education		
Promo/Info	Ida Co	2020: Actively promote available trainings; <i>County EMA, County Admin Staff</i> (no funding need anticipated) HIGH PRIORITY Update: County intends to continue promoting state-funded training programs as available.
Warning Sirens	Ida Co	2020: An additional warning siren would benefit Crawford Creek; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Ida Co.	Objective Met. Review of available resources indicates siren is not needed. County will promote existing internet system with improved coverage capacity. The County plans to provide signage and other promotions on social media forums to promote subscriptions to alert services.
tools/equipment		
Generator & Related Projects	All Counties	2020: Assess availability of generators for all critical facilities, portable or permanent. Prep all critical facilities for connection to generators as applicable; <i>County EMA</i> (Varying levels of funds needed. Support may come through County, State, and Federal grant and loan programs) HIGH PRIORITY
Generator & Related Projects	Ida County	Completed. Community assessments of critical facilities and generator compatibility have been completed. The Courthouse addition is ready. Transfer switches are in place where needed for City offices in Battle Creek and Holstein. Findings where more transfer switches are needed have been included as new projects as collaborative efforts between the County and applicable communities.
Equipment	Region (Initiated by Ida County)	2020: Sandbag fillers. Only 2 are available in the region and flooding often impacts several counties concurrently. Interest in accumulating a stockpile to meet multiple community needs. <i>County Engineer, EMA, Regional collaboration</i> (Collective County funds , PDM) HIGH PRIORITY Update. No action taken. Still interested in have available for extreme events. Carry to 2025 HMP as a Region project.
Equipment	Ida County	2020: ATV for access to levees for inspection regardless of road conditions. <i>County EMA</i> (County funds) MEDIUM PRIORITY Resolved. Roads Dept and Sheriff's department added side-by-sides to inventory. Anticipated availability if needed, especially for scheduled inspections.

Equipment	Ida County	2020: Additional road closure barricades are needed with consideration to be given to another trailer in order to haul to multiple locations. To accommodate approximately 80 roadways are subject to closure in the event of an emergency. <i>County Engineer, EMA</i> (County Funds, PDM) HIGH PRIORITY
		Update: No action taken. Additional barricades still needed.
development		
Improve existing facilities & infrastructure	Ida County	2020: Waterlines are not looped at MidWest Industries, reducing the available water pressure at fire hydrants. <i>County engineer, Midwest Indus business manager, EMA</i> (County funds, private funds, Response support funds, PDM) MEDIUM PRIORITY
Improve existing facilities & infrastructure	Ida County	Update. Jurisdictional oversight of need has been relegated to the City of Ida Grove. Related work is included for consideration under their new projects. While improvements specific to this site are still necessary, Project is closed at County level.
Improve existing facilities & infrastructure	Ida County	2020: Not all outlying shops are insulated. New project needed to add heat and insulation. Access and issues accelerating due to ice accumulation. <i>County Department of Secondary Roads</i> (County funds, Transportation facilities program funds, Building remediation funds) LOW PRIORITY
Improve existing facilities & infrastructure	Ida County	Update. Insulation and heating improvements still needed at Battle Creek shop, affecting access hindered by ice accumulation. Should funding become available, facility replacement is needed in Holstein.
Bridges & Roads	Ida County	2020: At Ida Grove: Potential for work to add shoulder along Old Hwy 59 and M15, also trap area attention. Work is needed along Jasper Ave; <i>County Engineer, Collaborate w/City Admin</i> (County funds, Transportation funds, PDM) LOW PRIORITY
Bridges & Roads	Ida County	Complete. Shoulders as provided have been rebuilt. Project cost ranged from \$8-9M.
Bridges & Roads	Ida County	2020: At Ida Grove: When flooded, no access to city wells along Keystone Ave. Mapping of well needed north of 387th St, off M15. County has access road to maintenance sheds. Improvements needed. <i>County Engineer, Collaboration with City Streets Dept.</i> (County funds, City support, transportation funds, PDM) MEDIUM PRIORITY
		Update. Little progress has been made on this objective due to higher priority strategies taking precedence. Project carries into the 2025 HMP.
flow control		
Drainage projects	Ida Co	2020: At Quimby drainage ditch dredging from Quimby and establishing routine/scheduled maintenance; <i>County Engineer, Collaborate with City staff, IDNR</i> (County Roads funds, local funds) HIGH PRIORITY
		Update: Dredging has been completed for some areas, however major maintenance is still needed.
refuge		
technology		
natural barriers/supports		

RISK ASSESSMENT

As with most participating jurisdictions, Ida County has implemented infrastructure investments geared toward enhancing resiliency including communications improvements and the addition of its Emergency Services Department. Other projects affecting the county, but not necessarily fully within their control includes the pending CO₂ pipeline. The County is actively considering the potential addition of the pipeline within its emergency response planning process. As potential effects related to a spill or line breakage remain relatively unclear, the County will continue to assess related training opportunities as means of maximizing preparedness should pipeline construction take place.

The County intends to adopt building code standards following state practices by reference. In doing so, the county is increasing awareness of impacts of disaster, guiding residents to make informed decisions when adding or improving structures on County and unincorporated properties.

Ida County's Flood Mitigation Assistance Plan is in need of an update. As of December 2024, the county board is working with Iowa DNR to update floodplain maps and related ordinances. The county is also considering the development of a debris management plan allowing for coordinated cleanup efforts in the event of a major disaster. The county does not currently have a written Critical Facilities Plan (Mitigation/Response/Recovery). Practices are in place,

Driver leaves scene after railroad crash

Published by admin on Mon, 06/06/2022 - 4:53pm



An unidentified driver caused \$25,000 in damage at Market Avenue and Highway 175 Saturday after running a stop sign and damaging railroad track and the driver's own vehicle.

The crash took place 2:41 a.m. when the driver was southbound on Market Avenue and did not stop at the railroad intersection for Market Avenue and Highway 175.

Running through the intersection, the driver struck the track for the railroad.

www.idacountycourier.com/content/driver-leaves-scene-after-railroad-crash Driver leaves scene after railroad crash. Published by [Ida County Courier](#) admin on Mon, 06/06/2022 - 4:53pm (June 10, 2025)

and there is an anticipated course of action. A formal plan with scheduled review is recommended.

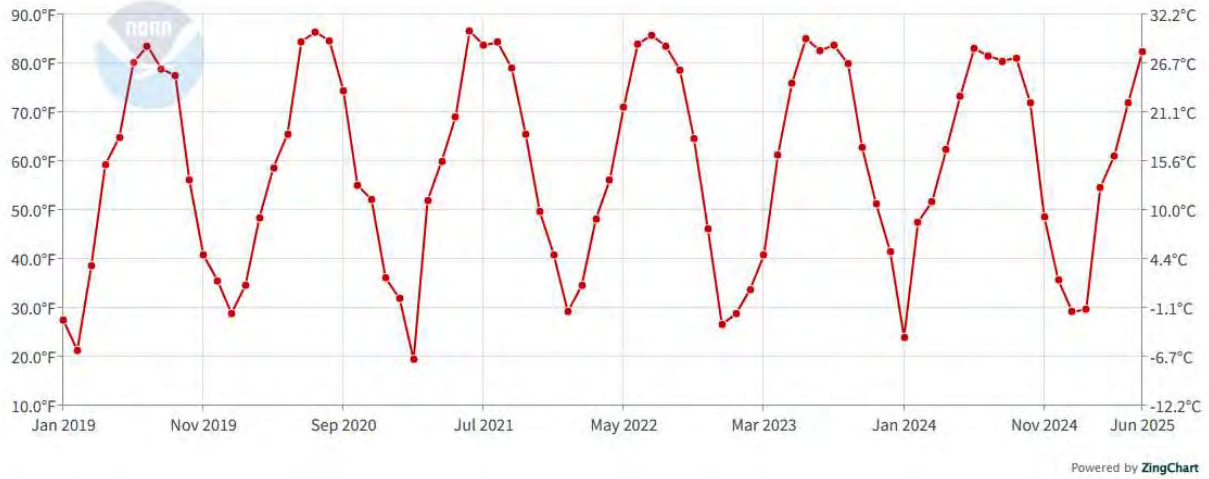
Roadways are a significant consideration in mitigation planning for Ida County. A high percentage of gravel roads alone incurs increased expense depending on weather events. Over-the-road freight is another significant detriment to all roadways as the state issues recurring exemptions for weight limits to accommodate ag and energy businesses. Road installations are engineered based on use and mandatory weight limits. When those are disregarded, even for a good cause, wear and deterioration is accelerated. Future reconstruction projects may consider accommodation for maximum potential load weights as opposed to maximum permitted.

Ida County has made significant gains in connectivity throughout its communities and unincorporated areas. Efforts will continue as opportunities become available. As such, this is included as a new project for the county for the 2025 HMP.

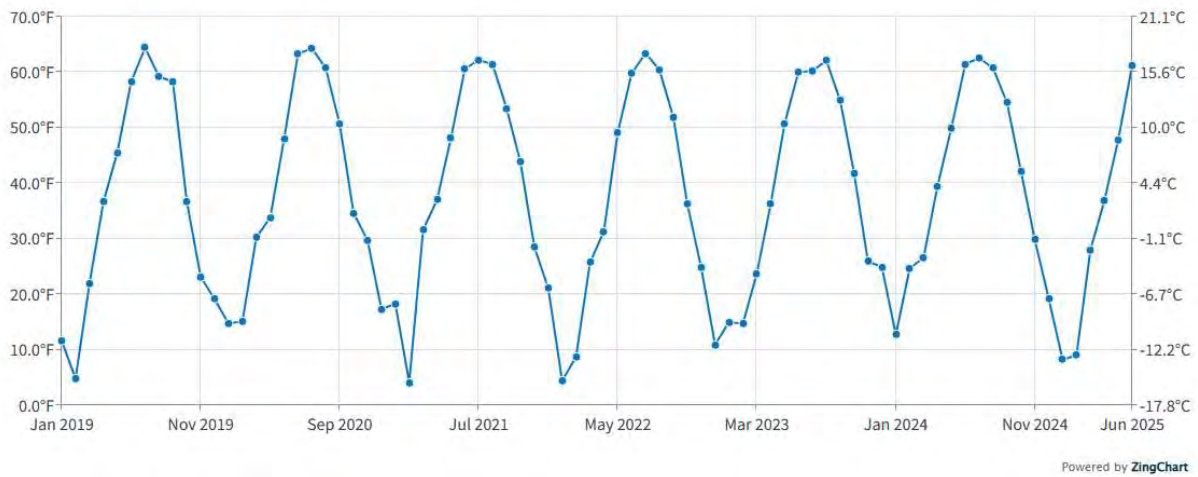
Weather patterns contribute to Ida County's considerations in mitigation planning. For reference, the following charts depict maximum temperature, minimum temperature, and precipitation by month for the county¹⁹ between November 2019 and December 2024.

¹⁹ Source: www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/IA

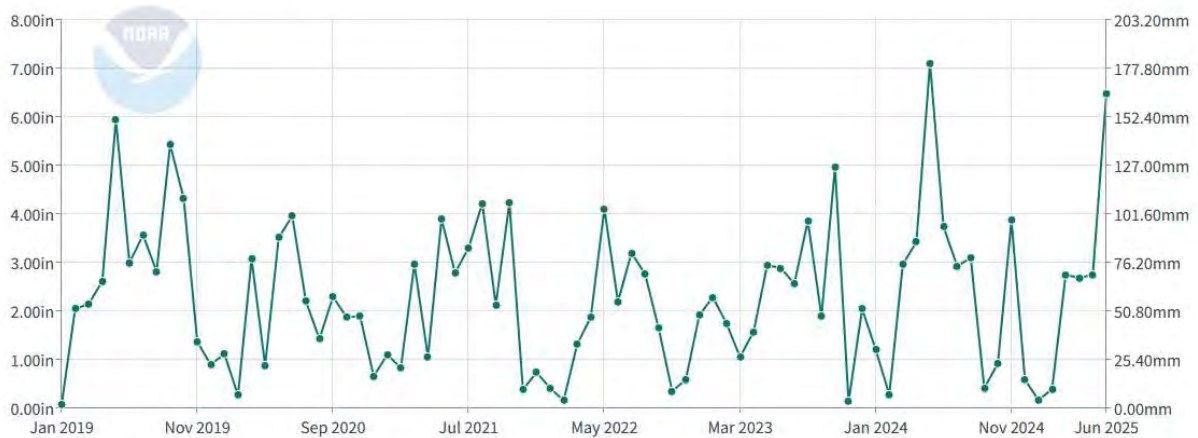
Ida County, Iowa Maximum Temperature



Ida County, Iowa Minimum Temperature



Ida County, Iowa Precipitation



Also sourced from NOAA, the Storm Event database²⁰ provides the following record of events for Ida County.

Summary of Storm Events

Number of County/Zone areas affected:	2
Number of Days with Event:	96
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	3
Number of Days with Event and Crop Damage:	18
Number of Event Types reported:	16

Storm Events as Recorded

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
IDA (ZONE)	11/26/2019	14:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	11/28/2019	22:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	1/17/2020	5:30	Blizzard		0	0	0.00K	0.00K
IDA (ZONE)	1/18/2020	15:00	Cold/wind Chill		0	0	0.00K	0.00K
IDA (ZONE)	1/21/2020	23:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	2/12/2020	23:00	Cold/wind Chill		0	0	0.00K	0.00K
IDA (ZONE)	2/19/2020	2:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	3/19/2020	19:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	4/12/2020	9:00	Winter Weather		0	0	0.00K	0.00K
ARTHUR	6/5/2020	1:02	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE	6/5/2020	0:53	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE	6/5/2020	0:57	Hail	1.75 in.	0	0	0.00K	0.00K
IDA GROVE	6/5/2020	0:59	Hail	2.50 in.	0	0	0.00K	0.00K
IDA GROVE	6/5/2020	0:59	Hail	1.50 in.	0	0	0.00K	0.00K
IDA GROVE	6/5/2020	1:06	Hail	1.00 in.	0	0	0.00K	0.00K
IDA (ZONE)	6/9/2020	23:15	High Wind	56 kts. EG	0	0	6.00K	0.00K
IDA (ZONE)	6/9/2020	23:30	High Wind	52 kts. EG	0	0	5.00K	0.00K
IDA (ZONE)	7/28/2020	0:00	Drought		0	0	0.00K	2.350M

²⁰ Source: <https://www.ncdc.noaa.gov/stormevents/>

IDA (ZONE)	8/1/2020	0:00	Drought		0	0	0.00K	1.900M
ARTHUR	8/10/2020	8:29	Thunderstorm Wind	56 kts. EG	0	0	1.00K	50.00K
IDA GROVE	8/10/2020	8:20	Thunderstorm Wind	61 kts. EG	0	0	1.00K	0.00K
IDA (ZONE)	9/1/2020	0:00	Drought		0	0	0.00K	125.00K
IDA (ZONE)	10/1/2020	0:00	Drought		0	0	0.00K	75.00K
IDA (ZONE)	10/25/2020	3:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	11/1/2020	0:00	Drought		0	0	0.00K	240.00K
IDA (ZONE)	11/9/2020	22:00	Ice Storm		0	0	0.00K	0.00K
IDA (ZONE)	12/1/2020	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	12/23/2020	10:00	Blizzard		0	0	0.00K	0.00K
IDA (ZONE)	12/29/2020	8:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	1/1/2021	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	1/15/2021	0:00	Blizzard		0	0	0.00K	0.00K
IDA (ZONE)	1/23/2021	18:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	1/25/2021	12:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	2/1/2021	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	2/4/2021	3:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	2/14/2021	6:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
IDA (ZONE)	2/21/2021	5:00	Winter Storm		0	0	0.00K	0.00K
GALVA	5/2/2021	19:37	Hail	0.88 in.	0	0	0.00K	2.00K
IDA GROVE	6/16/2021	20:52	Hail	0.75 in.	0	0	0.00K	233.00K
IDA GROVE	6/16/2021	21:00	Hail	1.25 in.	0	0	0.00K	0.00K
IDA GROVE	6/16/2021	21:02	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE	6/16/2021	20:34	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
IDA (ZONE)	7/27/2021	0:00	Drought		0	0	0.00K	61.00K
IDA (ZONE)	8/1/2021	0:00	Drought		0	0	0.00K	2.00K
ARTHUR	8/30/2021	21:02	Hail	1.75 in.	0	0	0.00K	0.00K
ARTHUR	8/30/2021	21:06	Hail	1.75 in.	0	0	0.00K	33.00K
IDA GROVE MUNI ARPT	8/30/2021	20:54	Hail	0.75 in.	0	0	0.00K	0.00K
IDA (ZONE)	12/10/2021	13:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	12/15/2021	20:30	High Wind	59 kts. MG	0	0	0.00K	0.00K

BATTLE CREEK	12/15/2021	16:42	Tornado	EF1	0	0	200.00K	0.00K
GALVA	12/15/2021	16:58	Tornado	EF0	0	0	75.00K	0.00K
IDA (ZONE)	1/6/2022	5:00	Cold/wind Chill		0	0	0.00K	0.00K
IDA (ZONE)	1/14/2022	5:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	2/21/2022	17:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	2/22/2022	19:30	Cold/wind Chill		0	0	0.00K	0.00K
IDA GROVE	4/12/2022	16:57	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE	4/12/2022	16:57	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE MUNI ARPT	4/12/2022	19:02	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
IDA (ZONE)	4/19/2022	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	4/23/2022	10:45	High Wind	38 kts. MS	0	0	0.00K	0.00K
GALVA	4/23/2022	5:10	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
IDA (ZONE)	5/1/2022	0:00	Drought		0	0	0.00K	36.00K
HOLSTEIN	5/12/2022	18:40	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
IDA GROVE MUNI ARPT	5/19/2022	22:49	Hail	1.00 in.	0	0	0.00K	0.00K
GALVA	5/30/2022	5:40	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
GALVA	5/30/2022	5:40	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
GALVA	5/30/2022	5:42	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
IDA GROVE	5/30/2022	5:33	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
IDA (ZONE)	6/14/2022	0:00	Drought		0	0	0.00K	185.00K
IDA (ZONE)	7/1/2022	0:00	Drought		0	0	0.00K	704.00K
IDA (ZONE)	8/1/2022	0:00	Drought		0	0	0.00K	110.00K
IDA (ZONE)	9/1/2022	0:00	Drought		0	0	0.00K	281.00K
IDA (ZONE)	10/1/2022	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	11/1/2022	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	11/29/2022	6:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	12/1/2022	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	12/8/2022	16:30	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	12/22/2022	10:30	Blizzard		0	0	0.00K	0.00K

IDA (ZONE)	12/22/2022	2:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
IDA (ZONE)	1/1/2023	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	1/2/2023	18:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	1/11/2023	5:00	Dense Fog		0	0	0.00K	0.00K
IDA (ZONE)	1/18/2023	17:00	Winter Storm		0	0	0.00K	0.00K
IDA (ZONE)	1/28/2023	0:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	2/1/2023	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	3/1/2023	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	3/8/2023	16:30	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	3/22/2023	21:30	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	4/1/2023	0:00	Drought		0	0	0.00K	0.00K
ARTHUR	4/19/2023	18:52	Hail	1.00 in.	0	0	0.00K	0.00K
IDA (ZONE)	4/30/2023	8:00	Strong Wind	43 kts. MG	0	0	0.00K	0.00K
IDA (ZONE)	5/1/2023	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	6/13/2023	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	7/1/2023	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	7/26/2023	10:00	Excessive Heat		0	0	0.00K	0.00K
IDA (ZONE)	8/1/2023	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	8/19/2023	13:00	Excessive Heat		0	0	0.00K	0.00K
IDA (ZONE)	8/21/2023	11:00	Excessive Heat		0	0	0.00K	0.00K
IDA (ZONE)	9/1/2023	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	10/1/2023	0:00	Drought		0	0	0.00K	10.150M
IDA (ZONE)	1/8/2024	15:00	Winter Storm		0	0	0.00K	0.00K
IDA (ZONE)	1/11/2024	18:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	1/12/2024	15:00	Blizzard		0	0	0.00K	0.00K
IDA (ZONE)	1/12/2024	18:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
IDA (ZONE)	1/18/2024	10:00	Winter Weather		0	0	0.00K	0.00K
IDA (ZONE)	1/19/2024	22:00	Cold/wind Chill		0	0	0.00K	0.00K
IDA (ZONE)	2/27/2024	17:00	Winter Weather		0	0	0.00K	0.00K
ARTHUR	6/16/2024	0:10	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
ARTHUR	6/16/2024	0:10	Thunderstorm Wind	61 kts. EG	0	0	0.00K	9.00K
HOLSTEIN	6/23/2024	4:00	Flood		0	0	0.00K	0.00K

IDA (ZONE)	7/13/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
IDA (ZONE)	7/31/2024	11:00	Heat		0	0	0.00K	0.00K
IDA (ZONE)	8/2/2024	12:00	Heat		0	0	0.00K	0.00K
IDA (ZONE)	8/5/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
IDA (ZONE)	8/25/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
IDA (ZONE)	10/29/2024	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	11/1/2024	0:00	Drought		0	0	0.00K	0.00K
IDA (ZONE)	12/4/2024	12:00	Strong Wind	40 kts. MG	0	0	0.00K	0.00K
IDA (ZONE)	12/19/2024	12:00	Strong Wind	41 kts. MG	0	0	0.00K	0.00K

Priority Hazards

Ida County recognizes the following as priority hazards.

- Drought
- Tornado Windstorm
- Severe Winter Weather
- Flood – Riverine and Flash

Using the NOAA Storm Event database, 119 events were reported between 11/01/2019 and 12/31/2024 (1888 days) in the Ida County zone with an estimated total of \$288,000 in property damages and more than \$16.5M in crop damages. Additional details are provided in directly affected communities where applicable. The following table is a summary of effects of those events.

<i>Summary of Outcomes</i>	
Number of County/Zone areas affected:	2
Number of Days with Event:	96
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	3
Number of Days with Event and Crop Damage:	18
Number of Event Types reported:	16

<i>Occurrences per storm type</i>			
Drought	31	Extreme Cold/wind Chill	3
Winter Weather	23	Strong Wind	3
Hail	18	Winter Storm	3
Thunderstorm Wind	12	Heat	2
Excessive Heat	6	Tornado	2
Blizzard	5	Dense Fog	1
Cold/wind Chill	5	Flood	1
High Wind	4	Ice Storm	1

Using NOAA data alone, it is no surprise that Ida County added Drought as one of its priority hazards, a change to its 2019 assessment. Other identified priority hazards are consistent with the previous Plan. Drought conditions to date have been more impactful on county properties with cities not yet experiencing extreme effects. Flooding concerns are focused on flash flood events causing washout on gravel roads and concern for lack of or ineffective runoff controls. Stabilization is included with routine maintenance, however, the county is in need of alternatives that reduce frequency of maintenance investments.

Additional projects identified by the county to improve its sustainability through severe weather disasters and occurrence of other disasters are included in the following table.

MITIGATION ACTIONS, STRATEGIES, & PROJECTS

communication/education		
Promo/Info	Ida Co	Carry over. Improve awareness of program availability. <i>County EMA, emergency response teams throughout county, State program officer(s).</i> (State program funds where applicable; in-kind volunteer time) HIGH PRIORITY.
Assessment/Study	Ida County	New. Due to excessive washout during flash flood events, enhanced by extremely dry/drought conditions, the county is interested in assessing alternative practices to stabilize gravel roads. Key concern is maintaining access/exit in the event of severe weather. This may include a demonstration project to test varying applications. <i>County Engineer/ Secondary Roads, IA DOT, County EMA</i> (Road use funds, local funds, USDA or DNR programs as may be available, Proj scoping funds). MEDIUM PRIORITY
tools/equipment		
Generator & Related Projects	Ida County	New. County is considering funding opportunities to ensure all communities are equipped with generators

		and/or transfer switches at City Halls/Community Centers and Fire Departments. <i>County EMA, City Emergency Response Department(s)</i> , (Varying levels of funds needed. Support may come through County, State, and Federal grant and loan programs) HIGH PRIORITY
Generator & Related Projects	Ida County	New. Add generator or transfer switch capacity to each County Department to ensure continuity of operations in the event of a disaster. Consider relocation opportunities in the event of displacement during and after absence of dedicated power source. <i>County EMA, respective County Department Head</i> (PDM, Community Benefits Grants, County General Fund) HIGH PRIORITY
Equipment	Region (Initiated by Ida County)	Carry Over. Sandbag fillers. Increase availability for the region as flooding often impacts several counties concurrently. Interest in accumulating a stockpile to meet multiple community needs. <i>County Engineer, EMA, Regional collaboration</i> (Collective County funds , PDM) HIGH PRIORITY
Equipment	Ida County	Carry over. Additional road closure barricades are needed with consideration to be given to another trailer in order to haul to multiple locations. To accommodate approximately 80 roadways are subject to closure in the event of an emergency. <i>County Engineer, EMA</i> (County Funds, PDM) HIGH PRIORITY
development		
Improve existing facilities & infrastructure	Ida County	Carry Over. Insulate outlying shops. <i>County Department of Secondary Roads</i> (County funds, Transportation facilities program funds, Building remediation funds) LOW PRIORITY
Bridges & Roads	Ida County	Carry over. · Collaborative project needed to develop west access point to City of Ida Grove to improve access to Keystone Ave wells. · Necessity of mapping of 387th is under consideration but is carried over to 2025 plan. · County shop south of town is needing access improvements – surface repairs. Grading/straightening is planned along 235th Street. Funding sources and responsibility remain as provided - <i>County Engineer, Collaboration with City Streets Dept.</i> (County funds, City support, transportation funds, FMA/Mitigation funds where applicable) MEDIUM PRIORITY
Bridges & Roads	Ida County	New. The County is looking to improve access to schools, particularly for young drivers. The following corridors are highly traveled gravel roads being programmed for paving. German Rd (one mile section to Hwy 20) and westward access roads including Lamp, Kastner, and Meuller. (County funds, City collaboration where applicable, road use funds)
flow control		

Drainage projects	Ida Co	Carry over. Areas of particular need of drainage ditch dredging include 7 th Street at Rowher, Jasper, and M15. Old Hwy 59 still needs attention. Project carries over to 2025 HMP with same priority. <i>County Engineer, Collaborate with City staff, IDNR</i> (County Roads funds, local funds) HIGH PRIORITY
refuge		
Shelter	Ida Co	New. Interested in adding storm shelter at Fairgrounds. Project is primarily limited by funding but will remain on priority list for consideration when updates and other investments are planned. <i>County Board, County EMA, Fair Board</i> (Mitigation program funds, local/county funds, community safety programs, local foundation and betterment grants) MEDIUM PRIORITY
Shelter	Ida Co (w/Ida Grove)	New. Schmidt's Addition on 6 th in Ida Grove is a residential development without basements. Interest in establishing storm shelter in area. Location and scale of facility to be determined. May require preliminary study or project scoping to determine most effective option. County EMA, County Board, Ida Grove City administration/Council, residents as applicable (Community Safety funding opportunities, community foundation and/or betterment grants, local funds) MEDIUM PRIORITY
technology		
Improve effectiveness	Ida Co	New. Efforts will continue as opportunities become available. <i>County Board</i> (State/Federal connectivity programs as may be available, private-public partnerships) MEDIUM PRIORITY
natural barriers/supports		
Stabilization	Ida County	New. Spillway maintenance is ongoing and cumulatively expensive. County is interested in addressing channel stability with a long-term approach, reducing recurring expenses and substantiating infrastructure. Operations Supervisor, County Conservation. (Funding to be determined but will include county funds and pursuit of applicable grant programs) HIGH PRIORITY

JURISDICTIONS

1. ARTHUR

a. Profile

The City of Arthur lies on the eastern-most border of Ida County, and occupies 0.15 square miles. Highway 175 is the main road that connects Arthur to surrounding communities and runs east and west through the city. The city was named after the 21st president of the United States of America, Chester A. Arthur.

City Governance & Community Supports

Arthur is governed by a five-person elected city Council and the Mayor. Offices in addition to Mayor and Council include City Clerk and Superintendent. Arthur City has a volunteer Fire Department in place. The Department staff averages at about 13 members and is independent of the City. The city contracts with the county for law enforcement and emergency management coordination.

Demographics, Housing, & Economics

The town of Arthur has experienced significant growth, with its population rising to 295 in 2023²¹ as estimated by CensusReporter.org – up from 222 residents in 2020’s decennial census reports. The community is home to 140 households, and the median household income stands at \$53,750. However, approximately 17.5% of the population lives below the poverty line, highlighting some economic challenges within the town. Despite this, Arthur is a growing community with potential for further development and improvement as it continues to adapt to the needs of its residents.

Arthur has a total of 147 housing units, with 139 of them occupied, reflecting a strong demand for housing in the area. There are only 7 vacant units, indicating a low vacancy rate. The town has no mobile homes, and the majority of its homes were built after 2000, with a smaller portion constructed in the 1990s. Very few homes were built before 1990, indicating a relatively

²¹ Source: <https://censusreporter.org/profiles/16000US1903115-arthur-ia/>

new housing market in the town. These characteristics suggest that Arthur's housing infrastructure is modern, with a high occupancy rate and limited room for new development.

Leading Employers

Following employers include those in Arthur as well as regional employers that have a significant impact on community well-being.

- Flint Hills Resources (Ethanol Plant)
- Gomaco
- Midwest Industries
- Horn Memorial Hospital

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Town Hall; Fire Dept; Garage/Supplies	217 Main St
Library	224 S Main
Lift Station	Hwy 175 West
Well House	West End 2nd St
Water Tower	
City Park/Playground/Shelter House	
Recreation area & Related	

Valuation of City Assets

Building	\$	2,518,371
Personal Property	\$	199,788
Fine Arts	\$	4,120
Misc Property Unsched	\$	<u>200,452</u>
Total TIV	\$	2,922,731
APD TIV	\$	607,500
Grand Total TIV	\$	<u>3,530,231</u>

b. Participation

SIMPCO facilitated a mitigation planning meeting via phone conference with City Clerk Paul Arbergast on February 17, 2025. A signed Voluntary Participation Agreement is on file, dated 02/14/2025. Additional input was collected via survey with two respondents indicating Arthur as jurisdiction of residence.

c. Community Capabilities

<i>Policies/Ordinance - updated 2017</i>		
• Building Code • Floodplain Ordinance • Nuisance Ordinance • Subdivision Ordinance • Tree Ordinance		
<i>Programs</i>		
National Flood Insurance Program (NFIP) Participant		Yes, CID #190696
ISO Fire Rating		Arthur - Class 8
Tree Trimming Program		Trim as needed
Mutual Aid Agreements	IMAC (in addition to county & planning region agreements)	
<i>Staff/Department</i>		
NFIP Floodplain Administrator		City Mayor
<i>Local Funding Availability</i>		
Apply for Community Development Block Grants		
Authority to levy taxes for a specific purpose		
Fees for water, sewer, gas, or electric services		
Ability to incur debt through		• general obligation bonds • special tax bonds

Review of Actions Taken (Since 2019)

In addition to projects as updated below, Arthur added a mobile generator to enable continuation of operations of waterworks during power outages. The city added a warning siren in 2022 at the cost of approximately \$3,000.

tools/equipment		
Generator & Related Projects	Arthur	2020: Interest in a dedicated generator for the waterworks; <i>City Waterworks/Public Works Maintenance</i> (Local Funds, PDM, Community Benefits grants) HIGH PRIORITY
Generator & Related Projects	Arthur	Complete. A mobile generator was added in 2020 using safety funds through insurance provider. City accrued annual allocation to help meet expense.
Generator & Related Projects	Arthur	2020: Fire Dept - generator to maintain function of doors and building during a power outage; <i>Fire Chief, City Council</i> (Department funds, Community Benefit funds, Firefighter Association supports, PDM) HIGH PRIORITY Update. Project not completed due to lack of funds. Carry project into 2025 HMP. Department did attain mobile generator for use with the grass truck pump, but none are available for the facility. Priority based on likely funding opportunity, not need.
development		
flow control		
refuge		
technology		
natural barriers/ supports		

d. Risk Assessment

Contributing Factors

A review of the NOAA Storm Event database provides seven records specific to Arthur between 11/01/2019 and 12/31/2024.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
ARTHUR	6/5/2020	1:02	Hail	1.00 in.	0	0	0.00K	0.00K
ARTHUR	8/10/2020	8:29	Thunderstorm Wind	56 kts. EG	0	0	1.00K	50.00K
ARTHUR	8/30/2021	21:02	Hail	1.75 in.	0	0	0.00K	0.00K
ARTHUR	8/30/2021	21:06	Hail	1.75 in.	0	0	0.00K	33.00K
ARTHUR	4/19/2023	18:52	Hail	1.00 in.	0	0	0.00K	0.00K
ARTHUR	6/16/2024	0:10	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
ARTHUR	6/16/2024	0:10	Thunderstorm Wind	61 kts. EG	0	0	0.00K	9.00K

Arthur is met on its west and south boundaries with floodplain, including its lagoon location. Arthur Bioprocessing is located on the other side of the flood plain, though within the town's planning area. Production and storage of ethanol and anhydrous ammonia present valid concerns of potential for hazardous materials incident.

Priority Hazards

- Tornado / Windstorm
- Flood – primarily flash flooding
- Thunderstorms with Hail & Lightning

Survey respondents also indicate Severe Winter Storm and Extreme heat as priorities.

e. Mitigation Needs, Actions, & Strategies

Snow removal is a challenge for this small community, with minimal equipment and limited funds to contract out the work.

communication /education		
tools/equipment		
Generator & Related Projects	Arthur	Carry Over. Fire Dept - generator to maintain function of doors and building during a power outage; <i>Fire Chief, City Council</i> (Department funds, Community Benefit funds, Firefighter Association supports, PDM) LOW PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/ supports		

2. BATTLE CREEK

a. Profile

The City of Battle Creek is located on the west border, in Ida County's southwest quadrant. It occupies about 0.50 square miles. Highway 175 is the main road that connects Battle Creek to surrounding communities and runs northeast and southwest through the city. Maple River Flows south and east of city limits meeting Battle Creek northeast of the city. More information about Battle Creek on the city's website at <https://battlecreekia.org/>.

City Governance & Community Supports

Battle Creek is governed by a five-person elected council and Mayor. Offices in addition to Mayor and council include City Clerk and Street Superintendent. The Battle Creek Volunteer Fire Department is independent from the city and staffs about 20 volunteers. There is a Battle Creek Fire Department Jr Firefighters program for teens 15 years of age and older. The city contracts with the county for law enforcement and emergency management coordination.

Demographics, Housing, & Economics

Estimates as compiled by CensusReporter.org indicate significant growth for Battle Creek with its population increasing to 882 in 2023²², from 700 residents in 2020. The community consists of 359 households, with a median household income of \$59,519, reflecting a moderate economic standing. Approximately 8.3% of the population lives below the poverty line, indicating some economic challenges within the community. Despite this, Battle Creek is a growing town with strong housing demand and opportunities for continued development and prosperity.

The town has a total of 418 housing units, with 334 currently occupied, reflecting steady residential use. A portion of the housing stock remains vacant, and mobile homes represent only a small share of the overall inventory. The majority of residents live in homes built since 2000, while a smaller number of homes were constructed in the 1990s or earlier. This suggests that the town's housing market is relatively modern, with most structures being newer and offering potential for continued residential growth and stability.

²² Source: <https://censusreporter.org/profiles/16000US1904870-battle-creek-ia/>

Leading Employers

- Willow Dale Wellness Village
- Johnson Propane
- AgState
- Galva-Holstein School District (Holstein)
- VT Industries (Holstein)
- Gomeco (Ida Grove)
- Midwest Industries (Ida Grove)

Critical Facilities

Community Center/Library/City Hall	115 Main St
Maintenance/Ambulance Bldg; Storage Shed	408 1st St
Fire Station	Hwy 175 & Ida St
Police Station/Storage	504 1st St
Water Tower	605 7th St
Water Treatment Plant (North Wells)	502 Chestnut
Salt Shed	506 1st St
Storage Shed	403 Clara St
Treatment Plant/East Wells	100 1st St
Lift Station/Lagoon	
Warning Siren	405 1st St
Shelter	3rd & Center
Baseball Field	Hwy 175
Alumni Park	5th & Maple
Shelter House	603 5th St
Pool & Related Equip/Bldgs	Sec 26
East Park	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

First State Bank	502 2nd St
Christensen-Huffman Funeral Home	608 4th St
Presbyterian Church	600 3rd Street
St. John's Lutheran Church	608 5th Avenue

Fred's Place	106 Main St
Bread Box	104 Main St
BC Bakery	119 Main St
The Inn at Battle Creek (B&B)	201 Maple St
Crawford Creek Recreation Area	Co Rd L51 (Outside city limits)
Sparky's Convenience Store	660 1st St
Nutrien Ag Solutions	701 1st St

Valuation of City Assets

Total Blanket TIV	\$ 4,555,919
Building	\$ 4,078,639
Personal Property	\$ 502,775
Misc Property Sched	\$ 302,994
Misc Property Unsched	\$ <u>232,593</u>
Total TIV	\$ <u>5,117,001</u>

b. Participation

A mitigation planning meeting, facilitated by SIMPCO and Ida County EMA Ed Sohm, was held at Battle Creek City Hall on February 5, 2025 with the following in attendance.

- Charles Pierce, Mayor
- Brian Scott, Public Works
- Jeanette Holmes, City Council
- Diane Lansink, City Clerk

In addition to the planning meeting, public input was collected by way of survey. Battle Creek was noted as jurisdiction of residence for 11 respondents.

c. Community Capabilities

<i>Policies/Ordinance</i>	
• Floodplain Ordinance	• Tree Trimming Ordinance

• Nuisance Ordinance		• Zoning Ordinance	
<i>Programs</i>			
National Flood Insurance Program (NFIP) Participant		CID #190432	
ISO Fire Rating		Class 6/6X	
Planning/Zoning Board			
<i>Staff/Department</i>			
NFIP Floodplain Administrator		City Mayor	
<i>Non-Governmental Organizations</i>			
Veterans Groups		Legion Post 364	
Community Organizations		Lions Club Women's Club Medical Auxiliary	
<i>Local Funding Availability</i>			
Authority to levy taxes for a specific purpose			
Fees for water & sewer			
Ability to incur debt through general obligation bonds			
Ability to incur debt through special tax bonds			

The City of Battle Creek is a member of the NFIP program, though residents are known to be inactive under flood insurance. The city shares a few plans with the county such as Local/County Emergency Plan and County Recovery Plan.

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
Equipment	Battle Creek	2020: Equipment updates and additions needed for Fire Department and Ambulance Services. <i>City Council, Fire Chief, Ambulance Director.</i> (Local funds, fundraisers, community benefit funds, firefighter association funding programs). HIGH PRIORITY
Equipment	Battle Creek	Complete. The FD and Ambulance service added several pieces of equipment in recent years including: • 2 grass rigs & tanker (\$275,000) – fundraisers, grants • Transfer switch for FD • Compressor to fill air cans • Power Cot (\$30,000) • New ambulance ordered – (\$287,000) fundraising, grants, service billings, donations

development		
Relocate critical facilities	Battle Creek	2020: Complications from 2019 flooding resulted in need for elevation of the city's sewer lift station. <i>City Council, City maintenance/waterworks, collaboration with County EMA & Engineer as applicable.</i> (Local funds, PDM, Bonds/Loans through approved programs) HIGH PRIORITY
Relocate critical facilities	Battle Creek	Update. Project was not implemented but is still needed. No estimated timeline for completion as this is highly reliant on available funding sources. Project will carry into 2025 HMP.
flow control		
refuge		
technology		
natural barriers/supports		

The city completed a tree inventory in 2024 with removal of dead/diseased trees from rights of way in progress.

d. Risk Assessment

Contributing Factors

A review of the NOAA Storm Event database revealed one report specific to Battle Creek between 11/01/2019 and 12/31/2024. It can be expected that Battle Creek suffered the effects of Zone categorized events for both Ida and Woodbury Counties as well.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
BATTLE CREEK	12/15/2021	16:42	Tornado	EF1	0	0	200.00K	0.00K

Priority Hazards

Planning committee discussion and survey response were aligned in determining the following as priority hazards.

- Tornado/Windstorm
- Severe Winter Storm
- Thunderstorm with Hail & Lightning

The committee further discussed severe implications locally from infrastructure failure including roadways, public works/waterworks, and railroad tunnels (coal concerns).

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Battle Creek	New. Transfer switches are need for critical facilities including: Community Center, City Shed/Ambulance Shed, Lift Station, wells. This meets minimum needs in power outages enabling use of mobile generators available through county or private entities. <i>City Council, County EMA</i> (Local general fund, PDM, public safety funds as may be available, community benefit funds) HIGH PRIORITY
Generator & Related Projects	Battle Creek	New. Dedicated generator for lift station &/or wells. One mobile available but insufficient if several systems are cut from power. Primary use is for wells. Estimated cost \$50,000. <i>City Council, County EMA</i> (Local general fund, PDM, public safety funds as may be available, community benefit funds) HIGH PRIORITY
Equipment	Battle Creek	New: New radios and operating system is needed. City needs communications improvements to better accommodate mutual aid calls. Current system does not connect with Woodbury County (on a state system) which is problematic for regional and mutual aid needs. Cost estimate not readily available. County EMS/EMA, FD, City Council (Local - operations fund, PDM, public safety systems, county funds as may be applicable) HIGH PRIORITY
development		
Relocate critical facilities	Battle Creek	Carry over. Past flood issues resulted in need for elevation of the city's sewer lift station. As flooding events become more frequent and more extreme, project becomes more dire. <i>City Council, City maintenance/waterworks, collaboration with County EMA & Engineer as applicable.</i> (Local – general fund, PDM, Bonds/Loans through approved programs) HIGH PRIORITY
flow control		
refuge		
technology		
natural barriers/supports		

3. GALVA

a. Profile

The City of Galva is situated on the northeastern-most border of Ida County and occupies 0.71 square miles. The City lies about two miles north of highway 20, which is the main road that connects to neighboring communities and runs east/west.

City Governance & Community Supports

Galva is governed by a five-person elected Council and the Mayor. Offices in addition to Mayor and Council include City Clerk/Treasurer, Fire Chief, Maintenance Supervisor, and City Attorney. The Galva Volunteer Fire Department is independent from the City and staffs about more than 20 volunteers. The city contracts with the county for law enforcement and emergency management coordination.

The City of Galva is a member of the NFIP program, though residents are known to be inactive under flood insurance. The city is covered by plans from the county such as Local/County Emergency Plan and County Recovery Plan. Local and area plans as applicable to Galva are itemized under Community Capabilities.

Demographics, Housing, & Economics

In 2023, the town of Galva had an estimated population²³ of 432, showing a slight decline from 435 residents in 2020. The community includes 142 households and reports a median household income of \$70,714, which is relatively strong. However, despite the higher income level, about 20.6% of residents live below the poverty line, indicating a significant level of economic disparity.

Galva has a total of 168 housing units, with 143 currently occupied and 25 vacant. The town includes a small number of mobile homes, totaling five units. Most residents have moved into their homes since the year 2000, while a smaller number settled in during the 1990s or earlier, showing a blend of newer and more established households in the community.

²³ Source: <https://censusreporter.org/profiles/16000US1929595-galva-ia/>

Leading Employers

While not hosting a large number of employees, the following businesses, and those as listed under Community Supports, operate and have established a necessary presence in Galva.

Quad County Corn Processors	300 E Third St
Rod's Fertilizer	117 Main St
Galva-Holstein School District	519 E Maple St, Holstein

Critical Facilities

City Hall	116 S Main
City Park/Shelter & Equipment	300 Crawford St
Water Pump House #1	107 N Main
Wastewater Plant	
Lift Station	120 N Main
Water Tower	Noll St
Library	203 S Main

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

US Post Office	2nd and Main
Galva-Holstein 3rd-5th Grade School	207 Noll St.
Galva Economic Development Corporation	1681 Market Ave
United Bank of Iowa	102 Main St
St. John's Lutheran Church	406 Monona St
Legion Hall	

Valuation of City Assets

A current valuation of assets has not been made available. The city will include a valuation as part of cost—benefit analysis should they pursue funding through a mitigation program. It is understood that such assessment will be specific to a given project and may not represent protections or sustainability improvements to the community as a whole.

b. Participation

Facilitated by SIMPCO, a virtual meeting via Teams was conducted on December 12, 2024 at 11AM with Vanessa Harder, City Clerk in attendance. While 28 respondents of the survey were from Ida County, none indicated Galva as residence. Concerns noted as contributing factors

c. Community Capabilities

<i>Policies/Ordinance</i>	
• Building Code	• Subdivision Ordinance
• Floodplain Ordinance	• Tree Trimming Ordinance
• Nuisance Ordinance	• Zoning Ordinance
<i>Programs</i>	
Planning/Zoning Boards	
Zoning/Land Use Restrictions	
National Flood Insurance Program (NFIP) Participant	CID #190424
ISO Fire Rating (served by independent fire dept)	Galva - Class 6; Galva TS FPSA 1 & 2 Class 9/10
Mutual Aid Agreements	IMAC (in addition to County-wide & Regional agreements)
<i>Staff/Department</i>	
NFIP Floodplain Administrator	role assumed by the City Mayor
<i>Non-Government Organizations</i>	
Galva Economic Development Corp	
Galva City Committee	
<i>Local Funding Availability</i>	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, gas, or electric services	
Ability to incur debt through general obligation bonds	
Ability to incur debt through special tax bonds	
Ability to withhold spending in hazard prone areas	

Review of Actions Taken (Since 2019)

Galva had several projects identified in the 2020 Regional Plan. Following is an update to each project as included.

communication/education		
Promo/Info	Galva	2020: Need for secured gate and "Restricted" signage at the sewer plant; <i>City Maintenance/Public Works</i> (Local Funds, Community benefit grants) HIGH PRIORITY
Promo/Info	Galva	Update (In progress): Galva is in the process of implementing a Sewer systems project. Securing point of access is part of the project.
Promo/Info	Galva	2020: Interest in obtaining weather radio and additional communications equipment such as handheld radios for direct communication with responders; <i>City Council, County EMA to assist</i> (local funds, PDM funds, Community benefit grant funds) MEDIUM PRIORITY
		Update: Handheld radios are not in place.
tools/equipment		
development		
Improve existing facilities & infrastructure	Galva	2020: Wastewater Plant upgrades are pending response from Iowa DNR. <i>City Council, IDNR</i> (IDNR program funds, City funds, State/federal loan programs) HIGH PRIORITY
		Substantially Completed . Anticipated project closure Feb 2025. Project costs not provided.
flow control		
refuge		
technology		
natural barriers/supports		

In addition to planned and anticipated projects, the city initiated some actions to address tree population changes as affected by the Ash Borer Beetle. The city implemented an urban tree maintenance plan for city properties in 2024 that includes a fee collection beginning 1/1/2025. This program enables monitoring and removal of dead/diseased trees and replacement of trees in parks and other public greenspaces. As a nuisance prevention measure, trees will not be replaced in parking.

d. Risk Assessment

Contributing Factors

Record of storm events as tracked in the NOAA database (11/01/2019 – 12/31/2024) include the following incidents directly affecting Galva. In addition to these occurrences, those indicated in the county profile under Ida (Zone) generally affect all communities within the county. Such events include but are not limited to various winter weather conditions, drought, and high

winds. Details on these and other storm events as recorded can be accessed online at <https://www.ncdc.noaa.gov/stormevents/>.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
GALVA	5/2/2021	19:37	Hail	0.88 in.	0	0	0.00K	2.00K
GALVA	12/15/2021	16:58	Tornado	EFO	0	0	75.00K	0.00K
GALVA	4/23/2022	5:10	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
GALVA	5/30/2022	5:40	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
GALVA	5/30/2022	5:40	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
GALVA	5/30/2022	5:42	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K

Community condition and features affect Galva's resiliency during natural disasters and other events. While not necessarily a mitigation project, roadway maintenance does directly affect function of and access to/from city operations. As indicated under the County profile, road maintenance is a considerable ongoing expense exacerbated by extreme weather events. Within and extending from Galva city limits, the county completed a seal coating project on M25/Main Street, completing scheduled segments on an annual basis. Galva's 6th Street is undergoing stage 3 of a curb gutter improvements project.

Other local improvements since 2019 include a new wastewater plant that better serves the needs of the community. These investments contribute to operational function as a city. Mitigation projects are intended to protect these and future investments.

Priority Hazards

Galva's priority natural disaster concerns are consistent with those identified in the 2020 HMP as well as the record of recent events.

- Thunderstorms w/Hail & Lightning
- Tornado/Windstorm
- Severe Winter Storm

e. Mitigation Needs, Actions, & Strategies

communication/education		
Promo/Info	Galva	Carry over. City intends to continue seeking funds to implement project. Obtain weather radio and additional communications equipment such as handheld radios for direct communication with responders; <i>City Council, County EMA to assist</i> (local funds, PDM funds, Community benefit grant funds) MEDIUM PRIORITY
tools/equipment		
development		
Improve existing facilities & infrastructure	Galva	New. City Hall façade improvements are in the planning stages. Estimated cost is \$15,000 - \$20,000, which will in part substantiate building integrity. <i>City staff, contracted services as applicable.</i> (Local funds) HIGH PRIORITY
Improve existing facilities & infrastructure	Galva	New. Shelter House and other City Park improvements. <i>City staff, contracted services as applicable.</i> (Local funds, community betterment funds, fundraisers, Galva Economic Development Corporation) HIGH PRIORITY
flow control		
refuge		
technology		
natural barriers/supports		

4. HOLSTEIN

a. Profile

The city of Holstein lies north of center in Ida County, and occupies 1.58 square miles. The City of Holstein remains the second most largest city in Ida County regarding population size and spatial area. US Highways 20 and 59 intersect at the southern portion of the city with US-59 traversing north/south through the center of town.

City Governance & Community Supports

Holstein is governed by a five-person elected council and the Mayor. Offices in addition to Mayor and Council include Deputy Clerk, City Administrator, Public Works, water superintendent, and Chamber of Commerce. The Holstein Fire and Ambulance departments are combined. Two positions lead the Ambulance and Fire Department including the Fire Chief and Ambulance Coordinator. The Department averages about 27 volunteer firefighters. In

collaboration with school district trades and career readiness programs, the department may at any time include juniors and/or cadets. Volunteer positions in general include Emergency Medical Technicians (EMT), Emergency Medical Technicians Advanced (EMTA), and Paramedics.

Governing ordinances, documents, policies, and programs are included in the Community Capabilities portion of this profile.

Demographics, Housing, & Economics

In 2023, the city of Holstein had an estimated population²⁴ of 1,552, reflecting modest growth from 1,501 residents in 2020. The community is made up of 646 households and has a median household income of \$61,625. Despite a relatively stable economic profile, about 14.7% of residents live below the poverty line, indicating that some households still face financial challenges.

Holstein has a total of 686 housing units, with 644 currently occupied and 41 vacant. The housing stock includes a small number of mobile homes, with seven in total. Most residents have moved into their homes since 2000, while others have been in their homes since the 1990s or earlier. This mix of newer and longer-term residents reflects a stable and evolving community.

Leading Employers

The following businesses, in addition to those as included in Community Supports listing, operate and/or have established a necessary presence in Holstein.

- V.T. Industries
- Galva Holstein Community School
- First Cooperative
- Good Samaritan Center

Critical Facilities

City Hall; Warning Siren	119 S Main St
Lohff-Schumann Memorial Community Center	301 Lohff-Schumann Dr

²⁴ Source: <https://censusreporter.org/profiles/16000US1936840-holstein-ia/>

Maintenance Office	420 N Main St
Stubbs Memorial Library	207 E 2nd St,
Sports Complex & Related	
City Park	
Park/Bathhouse & Related	621 S Kiel St
Water Treatment	109 S Kiel St
Wells and Related	
Sand & Equip Storage	
Wells; Control Bldgs	Hwy 20
Water Tower	E Railroad St
Lift Station	302 N Main St
Sewage Lift Station	E 2nd St
Lagoon Lift & Related monitoring equip	German Ave
East Lift Station	11 N Lubeck

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

US Post Office	121 E 2nd St
Ida County Economic Development	101 N Main St
Ridge View High School	519 East Maple St
Galva – Holstein Elementary School	
Little Raptors Daycare and School	
Good Samaritan Society	505 W. 2nd St
Holstein Senior Living (Assisted & Independent)	1500 S Kiel St
AmVets Legion Hall	
Masonic Hall	118 N Main St
Veterans Memorial Hall	121 N Main St
Douglas School (@ Douglas County School Grounds)	135 Union Ave (north & west outside city limits)
Holstein Golf Course	400 Kofmehl Dr
Holstein Country Club	
Holstein Supermarket	109 E 1st St
United Bank of Iowa	116 N Kiel St
St. Paul Lutheran Church	310 E Second St
CrossRidge Evangelical Free Church	Lohff-Schumann Dr

United Methodist Church	208 S Kiel St

Valuation of City Assets

In addition to project updates, the city has invested in several downtown renovations, supporting local property owners through Iowa EDA's Community Catalyst program. Providing in-kind waivers for permits and technical support through architectural plans, Holstein is providing a pathway to improvements, investing not only in public infrastructure but also facilitating private investment.

Based on the city's property schedule statement of value, the city's valuation of assets is **\$9,283,300**. This total includes but is not limited to property, facilities, building contents, vehicles, and machinery. This calculation provides a base value for cost-benefit analysis for mitigation projects likely to impact the whole city. This does not represent private properties/assets. A more in-depth review of affected properties will be conducted specific to projects that may qualify for pre-disaster or mitigation funding.

b. Participation

In an-person planning meeting was conducted at Holstein City Hall on August 6, 2024. The meeting was facilitated by SIMPCO with Tammy Nuckolls, City Administrator in attendance. Of the 28 Ida County responses to the survey, none indicated Holstein as residence.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
- Comprehensive Plan - Capital Improvement Plan	Land Use Plan
<i>Policies/Ordinance - recodification in progress (@ time of planning meeting)</i>	
- Nuisance Ordinance - Subdivision Ordinance	- Tree Trimming Ordinance - Zoning Ordinance
<i>Programs</i>	
Zoning/Land Use Restrictions	
ISO Fire Rating	Class 6
Planning/Zoning Boards	

Tree Trimming Program	
Mutual Aid Agreements	IMAC (in addition to County-wide & Regional agreements)
<i>Staff/Department</i>	
Engineer – contracted (ISG)	
Public Works Official	
Emergency Response Team	Fire and Ambulance Department
<i>Non-Governmental Organizations</i>	
American Legion/AmVets	
Community Organizations	• Holstein Betterment Alliance • Holstein Chamber of Commerce • Holstein Development Authority
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, gas, or electric services	
Ability to incur debt through	• general obligation bonds
	• special tax bonds
	• private activities

Review of Actions Taken (Since 2019)

communication/education		
Warning Sirens	Holstein	2020: Additional warning siren would benefit City - potential location near south end of town near CharMac, Ridgeview, Cobblestone Inn; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Holstein	Update. Project carried over to 2025 Plan as siren is still needed. Community will continue to review grant and funding support opportunities as well as assess feasibility of fundraising to boost local fund options. Expected cost is in excess of \$15,000. Project will maintain MEDIUM PRIORITY.
tools/equipment		
Generator & Related Projects	Holstein	2020: Permanent, dedicated generators @ lift stations & water plant; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Holstein	Update: The City has received quotes to initiate the project. Planned cost is \$197,000. Support funding has not

		been secured. This carries over into the project list for the 2025 Plan.
Equipment	Holstein	2020: Additional snow removal equipment; <i>City Council, Public Works/Maintenance</i> (Local funds) LOW PRIORITY
Equipment	Holstein	Completed (pending delivery). Equipment has been purchased but item is on backorder. Expected availability May 2025.
Equipment	Holstein	Implemented (pending delivery). City has ordered an ambulance. Cost not provided. City council, Emergency Services. (Local funds, fundraising).
development		
flow control		
Drainage projects	Holstein	2020: Sidewalk trail at ball field and rec center with drainage project incorporated; <i>City Administration, Contracted services, County collaboration for trail projects</i> (Health & Wellness funds, Transportation Alternatives funds, Local funds, fundraisers, Walk/Bike program funds) LOW PRIORITY
Drainage projects	Holstein	Update. No work has been done to date. Project is still needed, but remains low priority due to lack of readily available funding supports.
refuge		
technology		
natural barriers/supports		
Stabilization	Holstein	2020: Drainage projects to stabilize dirt in areas prone to washout; <i>City Maintenance/Streets</i> (Local funds, PDM) HIGH PRIORITY
Stabilization	Holstein	Update: Carry over. Efforts are ongoing with consideration being given to more long-term solutions. Determination of such action has not been made. Project will carry to 2025 Plan, retaining HIGH PRIORITY.
Stabilization	Holstein	2020: Substantiate barriers @ gateway to community; <i>City administration, County Engineer, EMA</i> (Local funds, County funds, PDM, Community benefit grant funds) HIGH PRIORITY
Stabilization	Holstein	Project closed. No update on this activity is available. Community is not intending further action on this project at this time.

d. Risk Assessment

Contributing Factors

Holstein is working on updating its Local Emergency Operations Plan and establishing a chain of command to be implemented in the event of a disaster. Also under consideration is the designation of a warming/storm shelter to reduce risk of exposure to residents during extreme weather events, especially during power outages. Another factor in assessing the community's

capacity to prepare for and withstand disaster is the inclusion of monitoring cameras at the city pool, providing an extra level of security should an incident take place. The city has a local newsletter accessible by all residents which is often used to communicate public service information including but not limited to disaster preparedness and promotion of subscribing to emergency notification services (such as Alert Iowa).

A review of the NOAA Storm Event database provided two incident reports specific to Holstein between 11/01/2019 and 12/31/2024 as shown in the following table. Additional detail can be found at the online NOAA website at <https://www.ncdc.noaa.gov/stormevents/> or by clicking the embedded link in the table.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
HOLSTEIN	5/12/2022	18:40	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
HOLSTEIN	6/23/2024	4:00	Flood		0	0	0.00K	0.00K

Notably, 85 Ida County *Zone* events as recorded are also considered for reference (see Ida County profile for details).

Priority Hazards

Consistent with recorded storm events, Holstein has identified the following as priority hazards.

- Tornado/Windstorm
- Severe Winter Storm
- Thunderstorm w/Hail & Lightning

Flash flooding as prevalent during heavy rain events is a matter of some concern. However, such events have not resulted in disruption of services within the community nor have they incurred notable damages. It is important to note that Holstein's proximity to the US 20 corridor brings additional consideration of transportation and hazardous materials incidents. Local amenities are impacted during extreme weather events with potential influx of visitors who may otherwise just be passing through.

e. Mitigation Needs, Actions, & Strategies

Following are Holstein's strategies to reduce the impacts of natural disasters and other hazards.

communication/education		
Warning Sirens	Holstein	Carry over. Siren is still needed. Community will continue to review grant and funding support opportunities as well as assess feasibility of fundraising to boost local fund options. Expected cost is in excess of \$15,000. Additional warning siren would benefit City - potential location near south end of town near CharMac, Ridgeview, Cobblestone Inn; <i>City Council, County EMA</i> (Local general fund, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
tools/equipment		
Generator & Related Projects	Hinton	New. This project will carry over into the 2025 plan maintaining the planned Lagoon Lift Station generator (scheduled for 2026) and the addition of need for a generator at the Public Safety Building. The project at the lagoon includes a loop connection with the Electric Company. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, BRIC, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Holstein	Carry over. Permanent, dedicated generators @ lift stations & water plant. The City has received quotes to initiate the project. Planned cost is \$197,000. Support funding has not been secured. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, pre-disaster/mitigation funds as available, Community Benefits funds) HIGH PRIORITY
development		
flow control		
Drainage projects	Holstein	Carry over. Sidewalk trail at ball field and rec center with drainage project incorporated; <i>City Administration, Contracted services, County collaboration for trail projects</i> (Health & Wellness funds, Transportation Alternatives funds, Local funds, fundraisers, Walk/Bike program funds) LOW PRIORITY
refuge		
technology		
natural barriers/supports		
Stabilization	Holstein	Carry over. Drainage projects to stabilize dirt in areas prone to washout; Efforts are ongoing with consideration being given to more long-term solutions. Determination of such action has not been made. <i>City Maintenance/Streets</i> (Local general fund, PDM) HIGH PRIORITY

5. IDA GROVE

a. Profile

The City of Ida Grove is situated slightly south and center of Ida County, and occupies 2.2 square miles. Highway 175 and Highway 59 travel east and west through the northern part of Ida Grove. Maple River runs through the east and north borders of the Ida Grove. Currently the Chicago and Northwestern Railroad travels through the center of the city, carrying product for commerce.

City Governance & Community Supports

Ida Grove is governed by a six-person elected council including the Mayor. City staff and supports include:

- City Clerk
- Deputy Clerk
- Administrative Assistant
- Library Director
- Librarian & Library Assistant
- Parks Superintendent
- Recreation Center Director
- Wastewater Superintendent
- City Crew & Foreman
- City Attorney

Ida Grove also has a Planning and Zoning Commission, Board of Adjustment, Tree Board, and several standing committees. The Ida Grove Volunteer Fire Department consists of about 25 firefighters. Ida Grove Fire Department is funded by a combination of township fire fees, city funding, and donations. The city takes part in the enhanced 911 system through the Ida County Communications Center.

The Ida Grove Ambulance service is voluntary averaging 19 crewmembers. The facility is staffed 24 hours a day, seven days a week. Ida Grove Ambulance Service response to emergencies in Ida Grove and surrounding areas. The department also provides emergent transfers from the local hospital to higher levels of care. The City of Ida Grove is a member of the NFIP program, though residents are known to be inactive under flood insurance. A Comprehensive Plan and CIP were reviewed in 2019 (estimated).

Demographics, Housing, & Economics

In 2023, Ida Grove's estimated population²⁵ decreased from 2,051 residents in 2020 to 1,904. The city is home to 901 households and has a median household income of \$63,194. With a poverty rate of 8.4%, a relatively small portion of the population lives below the poverty line, suggesting a generally stable economic environment for most residents.

Ida Grove has 1,094 housing units in total, with 897 of them occupied and 197 vacant. The town has a small portion of mobile homes within its housing stock. A large majority of residents have moved into their homes since 2000, while a smaller number have settled in during the 1990s or before, reflecting a blend of newer and older residences across the community.

Leading Employers

The following businesses operate and have established a necessary presence in Ida Grove.

- Gomaco
- Midwest Industries
- Horn Memorial Hospital
- Odebolt Arthur-Battle Creek Ida Grove Community School District
- UBI

Critical Facilities

City Hall	403 Third St
Fire Station	409 1 st St
Library & Related, etc.	103 E 2 nd St
Water Tower; Water Dept Related	100½ 7th St
Lift Station	88½ E Hwy 175
Lift Station	E Hwy 175
Lift Station	800 Walnut St
Maintenance Bldg (Streets)	1200 1 st St
Wastewater Treatment Plant & Related Sewer Works	

²⁵ Source: <https://censusreporter.org/profiles/16000US1938010-ida-grove-ia/>

Treatment Plant & Related; Wells	2375 Keystone Ave
Badger Creek Lift Station	206 Rohwer St
Zobels Lift Station	811 S Main
Moorehead Lift Station	100 Moorehead Ave
Hilcrest Lift Station	465½ Pin Oak
Oak Grove Lift Station	200½ Susan Lawrence
Pump House	403 Iowa St
Various Parks, Walking Trail & Related	
Baseball Facility & Related	901 John Montgomery Drive
City Park & Related	207 Washington St
Parks Dept, Misc	10 Washington St
Swimming Pool & Related Bldgs/Equip	101 E 2 nd St
Pool & Related Bldgs, Equip	101 Barnes St
Municipal Airport	Office & related Bldgs
Rec Center/Indoor Pool	311 Barnes St
Castle Battlement	US 59 & Harold Godberson Dr
Zobels Park	Main St & Badger Creek Dr

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

OABCIG Elementary School	Ida Bowl
OABCIG High School	Ida Grove Golf and Country Club
Cobb Memorial Park	Ida Grove Skate Palace
Dewey's Bar & Grill	King Theatre
The Farmacy	Moorehead House Museum
Food Pride	Moorehead Park
Gathering Place (Event Venue)	Taco Island
Golden Horizons	Zimmy's Bar & Grill
Horn Memorial Hospital	

Valuation of City Assets

Using Ida grove's ICAP policy effective through 2025, the city's base property valuation is **\$26,187,926**. This dollar amount sets estimated foundation for cost-benefit analysis for projects that mitigate a given disaster or other hazard that may affect the community as a whole.

Complete reconstruction of City Hall was completed within the last few years removing accessibility barriers and addressing structural concerns. The new structure increases the city's base valuation and provides an additional safe space in the event of disasters or other emergency conditions.

Road infrastructure including but not limited to overlay and bridges, is not included in the valuation, nor is any private property or county facilities. A specified valuation of properties, facilities, and infrastructure within an given area of potential effect will be included in cost-benefit analysis for all projects submitted for funding requests.

b. Participation

An in-person planning meeting was held in Ida Grove on October 7, 2024. SIMPCO facilitated the meeting with the following city staff in attendance.

- Heather Sweeden, City Clerk
- Kelly Young, Deputy City Clerk
- Gerrod Sholty, Crew Foreman

Of 28 surveys collected for Ida County, 15 indicated Ida Grove as respondent's residence. Compiled results regarding concerns related to natural disasters and other hazards are included for discussion under the community Risk Assessment section of this profile.

c. Community Capabilities

In addition to County, Region, and State supports, the city has the following resources in place.

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
Capital Improvement Plan	
<i>Policies/Ordinance</i>	
• Building Code	• Subdivision Ordinance
• Ditch Maintenance (including restrictions)	• Tree Trimming Ordinance
• Floodplain Ordinance	• Zoning Ordinance

Nuisance Ordinance	
<i>Programs</i>	
Zoning/Land Use Restrictions	
National Flood Insurance Program (NFIP) Participant	CID #190156
ISO Fire Rating	Ida Grove FD – Class 4/4Y
Planning/Zoning Boards	
Tree Trimming Program	
Mutual Aid Agreements	Fire; IMAC (in addition to County and Region agreements)
<i>Staff/Department</i>	
Emergency Response Team	Fire and Ambulance Department
<i>Non-Governmental Organizations</i>	
Veterans Groups	
Chamber of Commerce	
Ida Grove Economic Development	
Ida County Economic Development	
Community Organizations	- Kiwanis - Ida Grove Community Foundation - Ida Grove Community Partners
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water & sewer services	
Ability to incur debt through general obligation bonds	

Several actions are discussed by heading throughout this profile. Ida Grove is implementing several other strategies that reduce the risk to property and lives of its residents and visitors in the event of natural disasters. Among existing and planned actions are:

- continued use of AlertIA for boil advisories and other emergency information; program registration is promoted routinely through city website and Facebook.
- tightening of enforcement on abandoned and dilapidated buildings, including adoption of building code and property maintenance standards (SUDAS, IBC, IPMC) by reference,
- maintaining city code updates annually to address changes at the state level

- continue efforts to maintain dead and diseased trees with 300 trees scheduled for removal in city right-of-way (funding needed)
- replacement of trees in parks and public greenspace at the rate of about 20 per year over 5 years (grant received)

Review of Actions Taken (Since 2019)

The following table provides updates to projects as identified in 2020. Other efforts to improve disaster preparedness includes some work toward hydrant assessments and replacement to optimize functionality and capacity.

communication/education		
tools/equipment		
Generator & Related Projects	Ida Grove	2020: Transfer switches at all critical facilities to enable use of generators; Generators @ Critical Facilities including Waste Water Plant; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Ida Grove	Completed. Water Tower and Well Site improvements included necessary connections. Odebolt Creek Lift Station is ready for portable connection. Water Plant updates included a transfer switch and plumbing of gas lines (\$30,000) Additional connections and generators are still needed and project will carry into 2025 Plan.
Equipment	Ida Grove	2020: Snow removal equipment needs updating. <i>City Streets Department</i> (City funds) LOW PRIORITY
Equipment	Ida Grove	
Equipment	Ida Grove	2020: Motor in the grader needs updating. <i>City Streets Dept</i> (City funds) MEDIUM PRIORITY
Equipment	Ida Grove	
Equipment	Ida Grove	2020: Larger capacity pump; <i>Public Works, Streets Dept</i> (City Funds, PDM, Community Benefit funds) HIGH PRIORITY
Equipment	Ida Grove	
Equipment	Ida Grove	2020: New booster pump is needed to support fire hydrant performance. <i>Fire Chief, City Administrator</i> (City funds, Fire Dept funds, Response support funds) MEDIUM PRIORITY
Equipment	Ida Grove	
development		
Improve existing facilities & infrastructure	Ida Grove	2020: Casements along 7th St (Badger Creek); <i>City Roads Dept, collaborate with County Engineer</i> (City funds, IDOT Program funds, PDM) HIGH PRIORITY

		Update: Still needed. Action not taken due to lack of dedicated funding. Continues to be a very big issue. Cost estimates around \$200,000 for mitigation.
Improve existing facilities & infrastructure	Ida Grove	2020: Full renovation of City Hall & attached community center/senior center, starting with roof. City project Manager, Council (Community Catalyst Building Remediation funds, Private funds, City funds, Connections Area Agency on Aging, AARP Healthy Communities funds) MEDIUM PRIORITY
Improve existing facilities & infrastructure	Ida Grove	Complete. City Hall was completely reconstructed.
Relocate critical facilities	Ida Grove	2020: Lift station needs raising -- Hillcrest (Off 5th St); <i>City Water & Public Works Depts</i> (City funds, IDNR, PDM) HIGH PRIORITY
Relocate critical facilities	Ida Grove	Update. Lift replacement still needed at Hillcrest Lift Station. Carry over project to 2025 HMP.
Bridges & Roads	Ida Grove	2020: Potential paving project on 6th St to improve drainage; City Streets Dept (City funds, Transportation funds, PDM) LOW PRIORITY
Bridges & Roads	Ida Grove	Update. Project still needed and includes drainage along with noted street repair needs
flow control		
Drainage projects	Ida Grove, OABCIG	2020: Drainage improvements are needed between the high school and Badger Creek; <i>City Administrator, School Board or Plant Engineering, IDNR</i> (Local funds, School District funds, IDNR program funds) HIGH PRIORITY
Drainage projects	Ida Grove	2020: There is interest in improving drainage at Cobb Park - raise elevation, pump to drain; <i>City Administrator, IDNR</i> (Local funds, IDNR program funds, PDM) LOW PRIORITY
Drainage projects	Ida Grove	Complete. Addressing some of the needs expressed in the 2 projects indicated above, the City has implemented a \$200,000 drainage project, installing a 36" tube along 7 th Street.
refuge		
Shelter	Ida Grove	2020: Issue formal recommendation for owners to add cement refuge shelter to trailer park to accommodate its four (4) residents; <i>City Administrator, Property Owner(s), Residents</i> (Local funds, private funds, Response support funds, PDM pending classification of facility) MEDIUM PRIORITY
Shelter	Ida Grove	Update - Resolved. The City has opted to designate the Rec Center as refuge/shelter location in the event of disasters. As such, a new project is added under "Generators" to substantiate use during extreme events that may include power outages.
technology		
natural barriers/supports		
Stabilization	Ida Grove	2020: Rip rap needed @ Moorhead Ave Bridge; <i>City administration & Streets Dept, County Engineer</i> (Local funds, if scheduled accordingly State/Federal Transpo funds PDM) HIGH PRIORITY
Stabilization	Ida Grove	Update. Bridges are inspected every 2 years. 6 bridges are receiving ongoing erosion control (rip rap). Two bridges are

		scheduled for major repairs within the next 5 years as noted under New Projects: Bridges & Roads.
Stabilization	Ida Grove	Complete. Moorhead Ave reconstruction completed in 2022 with nearly \$2.24M invested. Funding sources include \$1M in SWAP funding was designated for this project.

Several other projects are in the works for the Ida Grove community, including but not limited to the following.

- Water Improvement Project. Started in 2021, 3 phases as follows:
 1. Meter replacement (whole town) and AMI reader on the water tower
 2. Water tower sandblast and paint – interior and exterior; Added mixer
 3. Drilled a new well (#9), added generator at well site north of town, updated chlorination system.

Project total about \$2.4 million (SRF loan)

- Sewer Improvement Project. Final plans approved by council but bids far exceeded estimated costs. Need is urgent. However, local funds cannot cover balance of project. USDA forgivable loan availability has been capped at \$1M. Project was bid at \$20M, with expectation that other loans and residents would cover expense. Currently not feasible. City will continue seeking viable options to improve plant. Replacement would still assume use of existing facility/building.
 - Currently an RBC plant and going to aero mod plant
 - Currently haul sludge, will be going to a press dry system (cakes)
 - Current layout will all be moved/repurposed, updated lighting, electrical, enclosure of portion of building, etc.
 - Estimated cost is about \$11 million (USDA loan)
 - Iowa/Washington Street: I attached some documentation of that. Stormwater runoff issue for years. Floods basement of a couple homeowners. (LOST funding)

d. Risk Assessment

Contributing Factors

Among its efforts to reduce risk and effects of natural disasters and other hazards, Ida Grove is taking steps to address abandoned and dilapidated buildings. The city also worked with Iowa DNR to complete a tree assessment.

Survey respondents indicate mixed messages on mitigation efforts and impacts of hazardous weather and other events. Several comments relate to drainage issues/concerns which reflect a noted priority for Flash Flooding. Several responses indicate an understanding of the high

Ida Grove woman hit by train

Published by admin on Mon, 10/03/2022 - 10:50pm



A frightening accident occurred in Ida Grove last Monday evening when a train collided with a pedestrian at the railway crossing of Washington Street.

A railway worker reported that a woman was walking across the tracks while the train was coming. The conductor pulled the emergency brake, but the train was going too fast to stop in

time.

The woman was hit and dragged several feet. The railway worker relayed that while she was injured, the woman was still conscious after the crash. Emergency crews transported her to the hospital.

<https://www.idacountycourier.com/content/ida-grove-woman-hit-train> Ida Grove woman hit by train.

Published by admin on Mon, 10/03/2022 - 10:50pm (June 10, 2025)

expense of infrastructure maintenance while still noting insufficient functionality of same. Ability to operate small business during extreme incidents and assuring access to medical services are clear priorities. There is an assumption that certain areas are better maintained

than others. For this reason, a transparent schedule of maintenance is recommended within city planning efforts.

Storm events as recorded through the NOAA database include 17 measured incidents specific to Ida Grove and the Ida Grove Airport. Those occurrences are in addition to the 85 recorded events for the Ida “Zone” impacting the county as a whole.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
IDA GROVE	6/5/2020	0:53	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE	6/5/2020	0:57	Hail	1.75 in.	0	0	0.00K	0.00K
IDA GROVE	6/5/2020	0:59	Hail	2.50 in.	0	0	0.00K	0.00K
IDA GROVE	6/5/2020	0:59	Hail	1.50 in.	0	0	0.00K	0.00K
IDA GROVE	6/5/2020	1:06	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE	8/10/2020	8:20	Thunderstorm Wind	61 kts. EG	0	0	1.00K	0.00K
IDA GROVE	6/16/2021	20:34	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
IDA GROVE	6/16/2021	20:52	Hail	0.75 in.	0	0	0.00K	233.00K
IDA GROVE	6/16/2021	21:00	Hail	1.25 in.	0	0	0.00K	0.00K
IDA GROVE	6/16/2021	21:02	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE MUNI ARPT	8/30/2021	20:54	Hail	0.75 in.	0	0	0.00K	0.00K
IDA GROVE	4/12/2022	16:57	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE	4/12/2022	16:57	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE MUNI ARPT	4/12/2022	19:02	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
IDA GROVE MUNI ARPT	5/19/2022	22:49	Hail	1.00 in.	0	0	0.00K	0.00K
IDA GROVE	5/30/2022	5:33	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K

Priority Hazards

Maintained from the 2020 HMP, the city finds the following to be priority hazards.

- Tornado/Windstorm
- Severe Winter Storm
- Thunderstorm w/Hail & Lightning

Survey respondents noted “very concerned” at the highest rate consistent with the city’s identified priority hazards. In the section requiring selection of top three concerns, Flash Flooding exceeded Thunderstorms w/ Hail & Lightning. Of the 19 categorized natural disasters and other hazards, 10 or more resident respondents indicated at least some level of concern for all but six, with the highest frequency noted for Infrastructure Failure (14 of 15). Top three as determined by survey respondents is consistent in Ida Grove and the county overall showing #1 – Tornado/Windstorm, #2 – Severe Winter Weather, and #3 – Flash Flooding.

e. Mitigation Needs, Actions, & Strategies

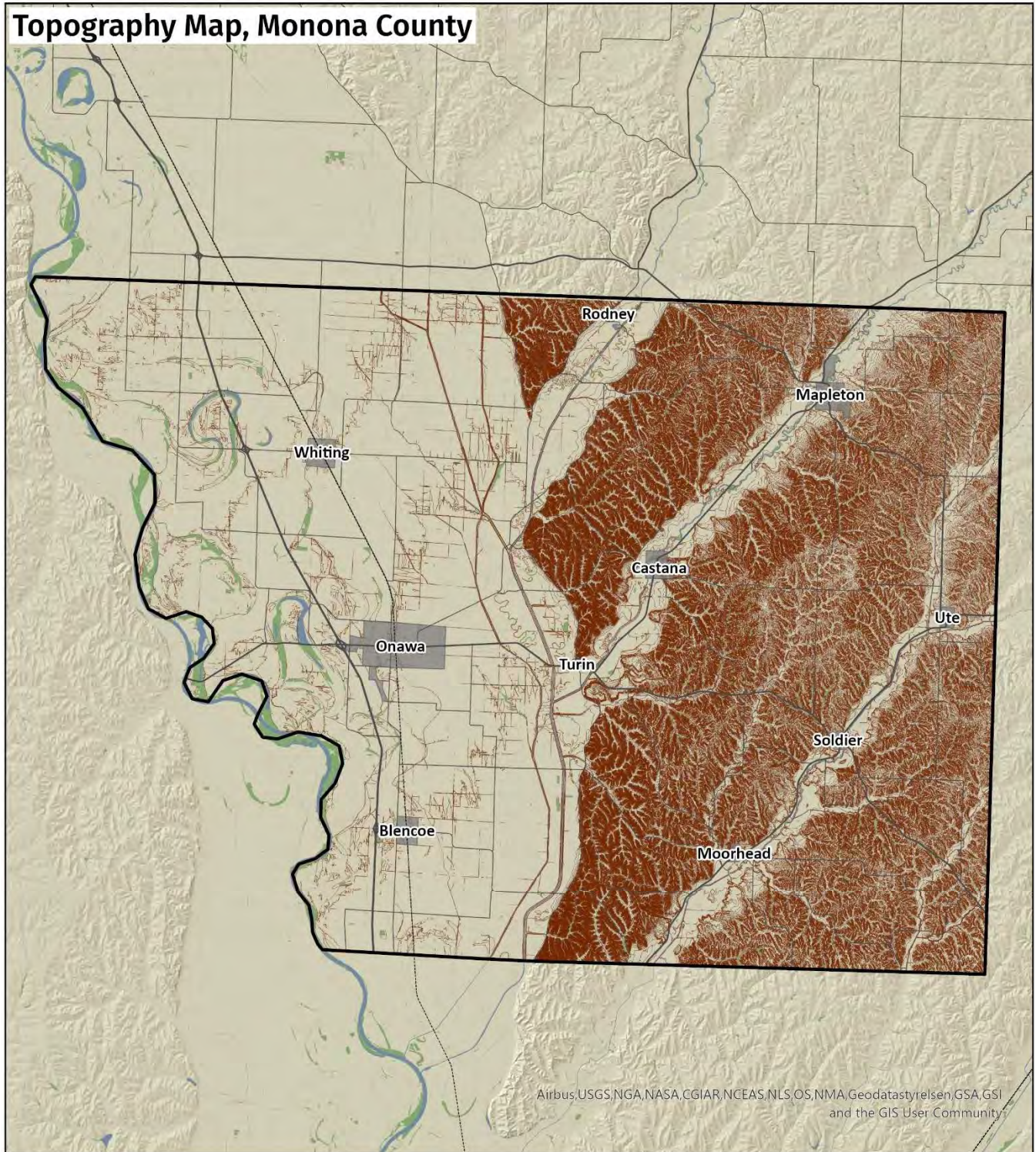
Projects developed or needed to address Ida Grove’s mitigation needs are provided in the following table.

communication/education		
Promo/Info	Ida Grove	New. City promotes county-based alerts. Interested in increasing scope of advisory notifications to expand from emergency notifications to other issues such as community events and non-emergency information items. <i>City Clerk, Public Works, County EMA, other Department heads as applicable.</i> (Local general fund, community benefits grants as applicable) HIGH PRIORITY.
Warning Sirens	Ida Grove	New. The city is planning to replace or upgrade the sirens located at 4 th & Moorhead Streets, 7 th & Rowher Streets, and on the 600 block of N Main and N 2 nd Streets. <i>City Maintenance Crew, County EMA.</i> (Local – community benefits grants as may be available, PDM, Emergency Response/Public Safety program funds as may be available) HIGH PRIORITY
Warning Sirens	Ida Grove	New. City is in urgent need of adding a 4th warning siren to serve the south side of town. Local fund availability is extremely limited. <i>City Maintenance Crew, County EMA.</i> (Local – community benefits grants as may be available, PDM, Emergency Response/Public Safety program funds as may be available) HIGH PRIORITY
Assessment/Study	Ida Grove	New: Interested in pursuing a study re: long term street repairs. Issues include drainage and flow control in addition to surface maintenance. Project in review stage and cost not readily determined. City Clerk, Streets Superintendent, Public Works, contracted engineering firm, regulatory bodies as may be applicable – County Roads, IA DOT. (Local funds, STBG/Road use funds as may be approved, local foundation grants). MEDIUM PRIORITY
tools/equipment		
Generator & Related Projects	Ida Grove	Carry over. Dedicated generators needed at City Hall and Moorhead Avenue. An additional portable generator is needed

		to serve all lift stations with that one generator dedicated to moving between stations as appropriate. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Ida Grove	New. Generator needed at Rec Center to facilitate function as refuge/shelter designation during disasters and other extreme hazard events. <i>City Council, Public Works, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Ida Grove	New. Generator needed (urgent) at Maintenance Shop to ensure access to, and function of critical equipment during disasters and other extreme hazard events. Current estimated cost is quoted at \$16,500 (not including gas piping). <i>City Council, Public Works, County EMA</i> (Local contribution reliant on general fund and grant opportunities, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Equipment	Ida Grove	2020: Snow removal equipment needs updating. <i>City Streets Department</i> (City funds) LOW PRIORITY
Equipment	Ida Grove	
Equipment	Ida Grove	2020: Motor in the grader needs updating. <i>City Streets Dept</i> (City funds) MEDIUM PRIORITY
Equipment	Ida Grove	
Equipment	Ida Grove	2020: Larger capacity pump; <i>Public Works, Streets Dept</i> (City Funds, PDM, Community Benefit funds) HIGH PRIORITY
Equipment	Ida Grove	
Equipment	Ida Grove	2020: New booster pump is needed to support fire hydrant performance. <i>Fire Chief, City Administrator</i> (City funds, Fire Dept funds, Response support funds) MEDIUM PRIORITY
Equipment	Ida Grove	
development		
Improve existing facilities & infrastructure	Ida Grove	Carry over. Casements along 7th St (Badger Creek); <i>City Roads Dept, collaborate with County Engineer</i> (City funds, IDOT Program funds, PDM) HIGH PRIORITY
Improve existing facilities & infrastructure	Ida Grove	New. Hydrant replacements are planned citywide addressing approximately 25% of the city's hydrants, primarily located on the central and north sides of town. Priority reflects limited viability for funds for full implementation as urgently as needed. <i>City Maintenance, Fire Department.</i> (Grant options needed, Department allocations as match; Public Safety funds as may be applicable, PDM) MEDIUM PRIORITY
Relocate critical facilities	Ida Grove	Carry over. Lift replacement still needed at Hillcrest Lift Station. Cost estimate not immediately available. <i>Public Works.</i> (Local budget, Water utility fees, USDA/IDNR as may be applicable) HIGH PRIORITY
Bridges & Roads	Ida Grove	Carry over. paving project on 6th St to improve drainage still needed. and includes drainage along with noted street repair needs. Expense estimated to have doubled. <i>City Streets Dept</i> (City funds, Transportation funds, FMA/Disaster mitigation Disaster response funding as available) LOW PRIORITY

Bridges & Roads	Ida Grove	New: Funding has been awarded to fix Main Street bridge at \$1.5M, including major repairs. <i>Streets Dept.</i> (City budget, Transportation funds) HIGH PRIORITY
Bridges & Roads	Ida Grove	New: Funding for Washington Street bridge is pending and anticipated within the next few years. <i>Streets Department, IA DOT</i> (City budget, Transportation funds, IA DOT) HIGH PRIORITY
Bridges & Roads	Ida Grove	New. City has 6 bridges requiring significant maintenance ² are shown as New Projects in the 2025 HMP. Four bridges remain as needed projects, with lower priority due to lack of known funding opportunities. <i>City Streets Dept.</i> (City funds, Transportation funds, Disaster Response/Disaster Mitigation funds as available) LOW PRIORITY
Bridges & Roads	Ida Grove	New. Resurfacing needed on 2 nd St & 6 th St. Estimated cost 2022 is \$1.4M. <i>City Streets Dept.</i> (Local road use funds, local – general fund) HIGH PRIORITY
Bridges & Roads	Ida Grove	New. Many road repair projects throughout town are needed due to deterioration/crumbling. Damage is significant, however lack of funding may delay implementation. <i>City Streets Dept.</i> (Local funds, Disaster mitigation as may be applicable, others TBD) MEDIUM PRIORITY
Bridges & Roads	Ida Grove	New. E. 2 nd St resurfacing (including drainage improvements). Approximately ¼ of project has been completed with an estimated cost of \$1M to fully implement. Project is significant in maintaining access during evacuation events, for routine transportation pathways, and for emergency services. <i>Streets/Roads Department.</i> (Local operations fund, Road use funds, additional to be determined. \$300K investment. <i>City Streets Dept.</i> (Local funds).
flow control		
Flood protection	Ida Grove	New. The Army Corps of Engineers is completing a Slip Lining Levee project in Ida Grove on the Moorhead Park side of the levee. Implementation date, cost, and funding sources not provided. <i>US ACE</i> (ARPA) HIGH PRIORITY
Drainage projects	Ida Grove	New. Storm sewers and culverts citywide need of dredging with Moorhead Ave and US 175 being highest priority. Cost estimate not immediately available. <i>City Streets Dept</i> (Local funds, disaster mitigation funds as available, other funds TBD) HIGH PRIORITY
refuge		
technology		
natural barriers/supports		
Stabilization	Ida Grove	New. Stabilization as a project carries over to the 2025 Plan. Particular needs at Rohwer St at Badger Creek. Significant erosion. Steep pitch of bank complicates stabilization. <i>City administration & Streets Dept, County Engineer</i> (Local funds, if scheduled accordingly State/Federal Transpo funds PDM) HIGH PRIORITY

Topography Map, Monona County



Marsh, Swamp, Bog,
Prairie
River

Lake, Reservoir
Incorporated Areas
County Boundary

Railroad
Contours

0 3 6 Miles



The map does not represent a survey, no liability is assumed for the accuracy of the data delineated herein, either expressed or implied by SIMPCO.

© 2025 Siouxland Interstate Metropolitan Planning Council.
Please call 712-279-6286 to obtain permission for use.

IV. COUNTIES & CITIES PARTICIPATING AS JURISDICTIONS

C. Monona County

PROFILE – UNINCORPORATED AREA & COUNTY

Monona County is located near the center of Iowa's western boundary. The County is bordered by Woodbury County to the north, Crawford County to the east, Harrison County to the south, and the state of Nebraska across the Missouri River, to the west. Monona is approximately 699 square miles in size.

Rivers & Watersheds

The western border of Monona County is the Missouri River. Other significant rivers in the County include the Maple River, Soldier River, and the West Fork of the Little Sioux River.

There are five (5) watersheds within the County that drain storm water and snow melt into streams and lakes, wetland areas, or into groundwater reserves. These watersheds are Blackbird-Soldier Watershed, Little Sioux Watershed, Monona-Harrison Ditch Watershed, Maple Watershed, and Boyer Watershed. Regional breakdown for watersheds is provided within *Region Planning Area* information. The following map depicts the sub-watersheds within those as listed above. Subwatersheds are determined based on hydrologic unit code (HUC) level 12, which includes more detail including tributary data.

In addition to the dams as provided in Title II *Hazards*, part B. *Definitions* listing, the following table shows all low hazard classification dams as on record for Monona County. All have a condition assessment of "Not Rated" and an EAP of "NR".

<i>Dam Name</i>	<i>NIDID</i>	<i>Dam Name</i>	<i>NIDID</i>
ANDRESEN/COBERLY DAM	IA01885	MC CALL SUBWATERSHED 1-2182	IA02763
ARCOLA SUBWATERSHED SITE 1-5084	IA02725	MC CALL SUBWATERSHED M-17070	IA02764
ARCOLA SUBWATERSHED SITE 2-3090	IA02724	MC CALL SUBWATERSHED SITE 10-2	IA00765
ARCOLA SUBWATERSHED SITE B-3000	IA02726	MC CALL SUBWATERSHED SITE 10-3	IA00764
ARCOLA SUBWATERSHED SITE B-5350	IA02727	MC CALL SUBWATERSHED SITE 30-1	IA00773
ARCOLA SUBWATERSHED STA 44+80	IA00755	MC CALL SUBWATERSHED SITE 32-1	IA00774
ARNOLD-ARMSTRONG SUBWTRSHD 64+00 #25	IA00789	MC CALL SUBWATERSHED SITE 8-1	IA00762

ARNOLD-ARMSTRONG SUBWTRSHD SITE 3A-3050	IA02728	MC CALL SUBWATERSHED SITE M-1	IA00768
ARNOLD-ARMSTRONG SUBWTRSHD SITE M-14195	IA02729	MC CALL SUBWATERSHED SITE M-2	IA00767
ARNOLD-ARMSTRONG SUBWTRSHD STA 127+05	IA00785	MC CALL SUBWATERSHED SITE M-3	IA00766
ARNOLD-ARMSTRONG SUBWTRSHD STA 171+55	IA00784	MC CALL SUBWATERSHED SITE M-5	IA00761
ARNOLD-ARMSTRONG SUBWTRSHD STA 190+78	IA00783	MC MASTERS SUBWATERSHED 2703	IA02765
ARNOLD-ARMSTRONG SUBWTRSHD STA 2+05 #3	IA00779	MC MASTERS SUBWATERSHED 3075	IA02768
ARNOLD-ARMSTRONG SUBWTRSHD STA 23+00	IA00781	MC MASTERS SUBWATERSHED 3907	IA02766
ARNOLD-ARMSTRONG SUBWTRSHD STA 243+48	IA00782	MC MASTERS SUBWATERSHED 4592	IA02767
ARNOLD-ARMSTRONG SUBWTRSHD STA 62+89 #1	IA00780	McHugh Dam	IA04180
ARNOLD-ARMSTRONG SUBWTRSHD STA 69+48	IA00787	MIKE MIKKELSON SUBWATERSHED 11-3227	IA02776
ARNOLD-ARMSTRONG SUBWTRSHD STA 76+60 #3	IA00778	MIKE MIKKELSON SUBWATERSHED 3-1630	IA02769
ARNOLD-ARMSTRONG SUBWTRSHD STA 99+95	IA00786	MIKE MIKKELSON SUBWATERSHED 5-10316	IA02770
ARNOLD-ARMSTRONG SUBWTRSHD STA27+80 #26	IA00790	MIKE MIKKELSON SUBWATERSHED 5-13484	IA02771
BAKER SUBWATERSHED SITE 1-3	IA00801	MIKE MIKKELSON SUBWATERSHED 5-18280	IA02772
BAKER SUBWATERSHED SITE 2-4	IA00799	MIKE MIKKELSON SUBWATERSHED 5-5020	IA00700
BAKER SUBWATERSHED SITE 5-3	IA00800	MIKE MIKKELSON SUBWATERSHED 9-2555	IA02773
BARBER HOLLOW SUBWATERSHED SITE 5-1	IA00727	MIKE MIKKELSON SUBWATERSHED M-10210	IA02774
BARBER HOLLOW SUBWTRSHED SITE 5-H-3865	IA02730	MIKE MIKKELSON SUBWATERSHED M-2395	IA02775
Behrendt Dam	IA04210	MIKE MIKKELSON SUBWATERSHED M-5905	IA02777
CARLSON DAM	IA00698	MONONA COUNTY ROADGRADE DAM 13-83-43	IA00763
CHARLES WOODS LAKE DAM	IA01656	MONONA COUNTY ROADGRADE DAM 23-82-43	IA02444
CLOUD DAM	IA02934	MONONA COUNTY ROADGRADE DAM 5-82-42	IA00712
CLUBINE DAM	IA03737	MOORE SUBWATERSHED SITE M-10130	IA02788
COBERLY DAM	IA00699	MOORE SUBWATERSHED SITE M-10180	IA02787
COBERLY/BUTLER DAM	IA00705	MOORHEAD DAM	IA00742
COBERLY/SWENSON DAM	IA00754	MUCKY CREEK SUBWATERSHED SITE 5-4185	IA02789
COTTONWOOD-GREEN VALLEY SUBWS 50+40 #2	IA00745	MUCKY CREEK SUBWATERSHED SITE 6-1	IA00726
COTTONWOOD-GREEN VALLEY SUBWS 75+70 #2	IA00744	MUCKY CREEK SUBWATERSHED STA 19+20	IA00753
COTTONWOOD-GREEN VALLEY SUBWS 99+50 #2	IA00743	MUCKY CREEK SUBWATERSHED STA 26+20 #3	IA00749
COTTONWOOD-GREEN VALLEY SUBWS STA 14+10	IA00746	MUCKY CREEK SUBWATERSHED STA 28+50 #2	IA00748
CROY SUBWATERSHED SITE 1-1292	IA02731	MUCKY CREEK SUBWATERSHED STA 37+80 #8	IA00750
CROY SUBWATERSHED SITE 2200	IA02732	MUCKY CREEK SUBWATERSHED STA 41+70	IA00752
CROY SUBWATERSHED SITE 22200	IA02733	MUCKY CREEK SUBWATERSHED STA 57+00	IA00751
CROY SUBWATERSHED SITE 23700	IA02734	NASS DAM	IA03222
CROY SUBWATERSHED SITE 2530	IA02735	NAURUDE DAM	IA00713

CROY SUBWATERSHED SITE A3-1050	IA02736	NEPPER SUBWATERSHED SITE 3348	IA02791
CROY SUBWATERSHED SITE A3-4908	IA02737	NEPPER SUBWATERSHED SITE M-5700	IA02790
CROY SUBWATERSHED SITE A4-2458	IA02738	NUTT HOLLOW SUBWATERSHED SITE 2-3176	IA02868
CROY SUBWATERSHED SITE A4-4572	IA02739	NUTT HOLLOW SUBWATERSHED SITE 2-6161	IA02792
CROY SUBWATERSHED SITE G3-2730	IA02740	NUTT HOLLOW SUBWATERSHED SITE 3-3075	IA01414
CROY SUBWATERSHED SITE G3-4083	IA02741	NUTT HOLLOW SUBWATERSHED SITE M-12855	IA02793
CROY SUBWATERSHED SITE G5-1890	IA02742	NUTT HOLLOW SUBWATERSHED SITE M-3650	IA01415
CROY SUBWATERSHED SITE M-10500	IA02743	NUTT HOLLOW SUBWATERSHED SITE M-6842	IA01413
CROY SUBWATERSHED SITE M-6159	IA02744	OLSON/MANN DAM	IA00798
CROY SUBWATERSHED SITE M-7500	IA02745	PHILLIPS SUBWATERSHED SITE 131	IA02799
DALY DAM	IA02321	PHILLIPS SUBWATERSHED SITE 3250	IA02803
DAVIS-BATTLE CR. WATERSHED SITE C-12-1	IA00760	PHILLIPS SUBWATERSHED SITE 5740	IA02804
DAVIS-BATTLE CR. WATERSHED SITE C-12-2	IA00759	PHILLIPS SUBWATERSHED SITE M-11985	IA02801
DAVIS-BATTLE CR. WATERSHED SITE D-1	IA00770	PHILLIPS SUBWATERSHED SITE M-17312	IA02802
DAVIS-BATTLE CR. WATERSHED SITE D-3	IA00771	PHILLIPS SUBWATERSHED SITE M-6600	IA02800
DAVIS-BATTLE CR. WATERSHED SITE D-7	IA00769	PLAGGE DAM	IA03733
DAVIS-BATTLE CR. WATERSHED SITE E-1	IA00710	REED SUBWATERSHED SITE 1-1	IA02657
DAVIS-BATTLE CR. WATERSHED SITE F-1	IA00711	REED SUBWATERSHED SITE 13C-2232	IA02808
DAVIS-BATTLE CR. WATERSHED SITE G-1	IA00729	REED SUBWATERSHED STA 37+70 #2	IA00735
DAVIS-BATTLE CR. WATERSHED SITE G-2	IA00728	REED SUBWATERSHED STA 41+45 #8	IA00736
DAVIS-BATTLE CR. WATERSHED SITE H-1	IA00731	REED SUBWATERSHED STA 45+25 #4	IA00738
DAVIS-BATTLE CR. WATERSHED SITE H-3	IA00730	REED SUBWATERSHED STA 46+55 #11	IA00737
DAVIS-BATTLE CR. WATERSHED SITE H-4-1	IA00772	REED SUBWATERSHED STA 46+80 #3	IA00740
DAVIS-BATTLE CR. WATERSHED SITE H-4-2	IA00732	REED SUBWATERSHED STA 71+10	IA00741
DAVIS-BATTLE CR. WATERSHED SITE H-4-4	IA00733	REED SUBWATERSHED STA 88+35 #2	IA00734
GALLUP SUBWATERSHED 1-1200	IA02760	REED SUBWATERSHED STA 97+82	IA00739
GALLUP SUBWATERSHED 4-3538	IA02761	REINIG DAM	IA00797
Gochenour Dam	IA04178	RODNEY SUBWATERSHED SITE 12-2	IA00701
GOSCH DAM	IA00758	RODNEY SUBWATERSHED SITE 2-1	IA02811
HABINCK SUBWATERSHED STA 93+30	IA03087	RODNEY SUBWATERSHED SITE 5-1	IA00704
HANIGAN DAM	IA03734	RODNEY SUBWATERSHED SITE 8-1	IA00703
HIEBER DAM	IA03735	RODNEY SUBWATERSHED SITE 8-2	IA00702
HUFF SUBWATERSHED 3-6069	IA02762	SAVERY/WELLIVER DAM	IA00724
HUFF SUBWATERSHED STA 122+69 #1	IA00804	SCHLIES DAM	IA03267
HUFF SUBWATERSHED STA 42+70 #1	IA00802	SCNOENJAHN DAM	IA00775

HUFF SUBWATERSHED STA 77+72 #1	IA00803	SIEVERS DAM	IA00747
HUFF SUBWATERSHED STA 94+07 #3	IA00805	SPRING VALLEY PROJECT NO. 2	IA01648
HULL/COBERLY DAM	IA00715	TOM KING SUBWATERSHED SITE 6290	IA02813
HUNDAHL DAM	IA01883	U-B SUBWATERSHED SITE 2-2	IA00777
IOWA NONAME32	IA00714	U-B SUBWATERSHED SITE 2C-1	IA00776
IOWA NONAME33	IA00723	UPPER BEAVER SUBWATERSHED SITE 15-1	IA00718
IOWA NONAME76	IA01636	UPPER BEAVER SUBWATERSHED SITE 20-1	IA00716
JOHNSON DAM	IA03736	UPPER BEAVER SUBWATERSHED SITE 4-1	IA00722
KINDER/PATTERSON DAM	IA00725	UPPER BEAVER SUBWATERSHED SITE 50-1	IA00721
LAWSON SUBWATERSHED SITE 1-1	IA00706	UPPER BEAVER SUBWATERSHED SITE 51-1	IA02814
LAWSON SUBWATERSHED SITE 2-1	IA00707	UPPER BEAVER SUBWATERSHED SITE 6-1	IA00720
LAWSON SUBWATERSHED SITE 2-2	IA00708	UPPER BEAVER SUBWATERSHED SITE M-1	IA00717
LAWSON SUBWATERSHED SITE 3-1	IA00709	UPPER BEAVER SUBWATERSHED SITE M-2	IA00719
LEECH HOLLOW SUBWATERSHED SITE C-11	IA01888	WEST BEAVER SUBWATERSHED STA 23+45 #A	IA00792
LEECH HOLLOW SUBWATERSHED SITE C-12	IA01891	WEST BEAVER SUBWATERSHED STA 33+30	IA00795
LEECH HOLLOW SUBWATERSHED SITE C-14	IA03908	WEST BEAVER SUBWATERSHED STA 40+06 #A	IA00791
LEECH HOLLOW SUBWATERSHED SITE C-2	IA01890	WEST BEAVER SUBWATERSHED STA 51+80	IA00794
LEECH HOLLOW SUBWATERSHED SITE C-5	IA01889	WEST BEAVER SUBWATERSHED STA 97+07	IA00793
LEECH HOLLOW SUBWATERSHED SITE C-6	IA01887	WOODS HOLLOW SUBWATERSHED SITE 1-2875	IA02820
LEECH HOLLOW SUBWATERSHED SITE C-8	IA03002	WOODS HOLLOW SUBWATERSHED SITE M-10450	IA02819
LITTLE SIOUX SCOUT RANCH DAM	IA02723	WOODS HOLLOW SUBWATERSHED STA 40+42	IA00796
LOWER BEAVER SUBWTRSHD STA 21+00 #2	IA00757	WOODWARD GLEN SUBWATERSHED SITE 5800	IA02821
LOWER BEAVER SUBWTRSHD STA 80+04 #7A	IA00756		

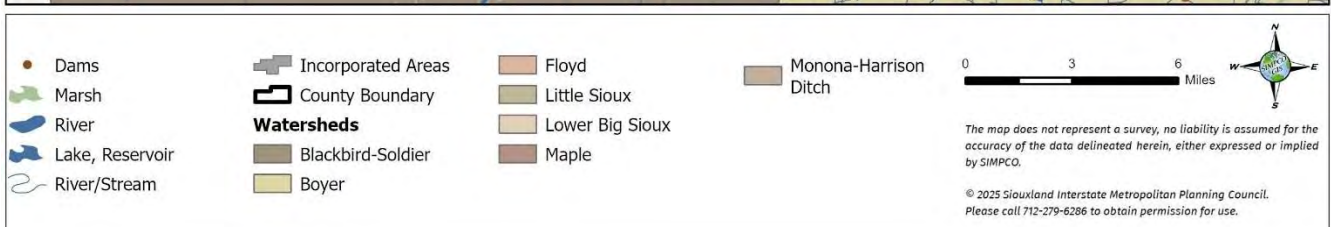
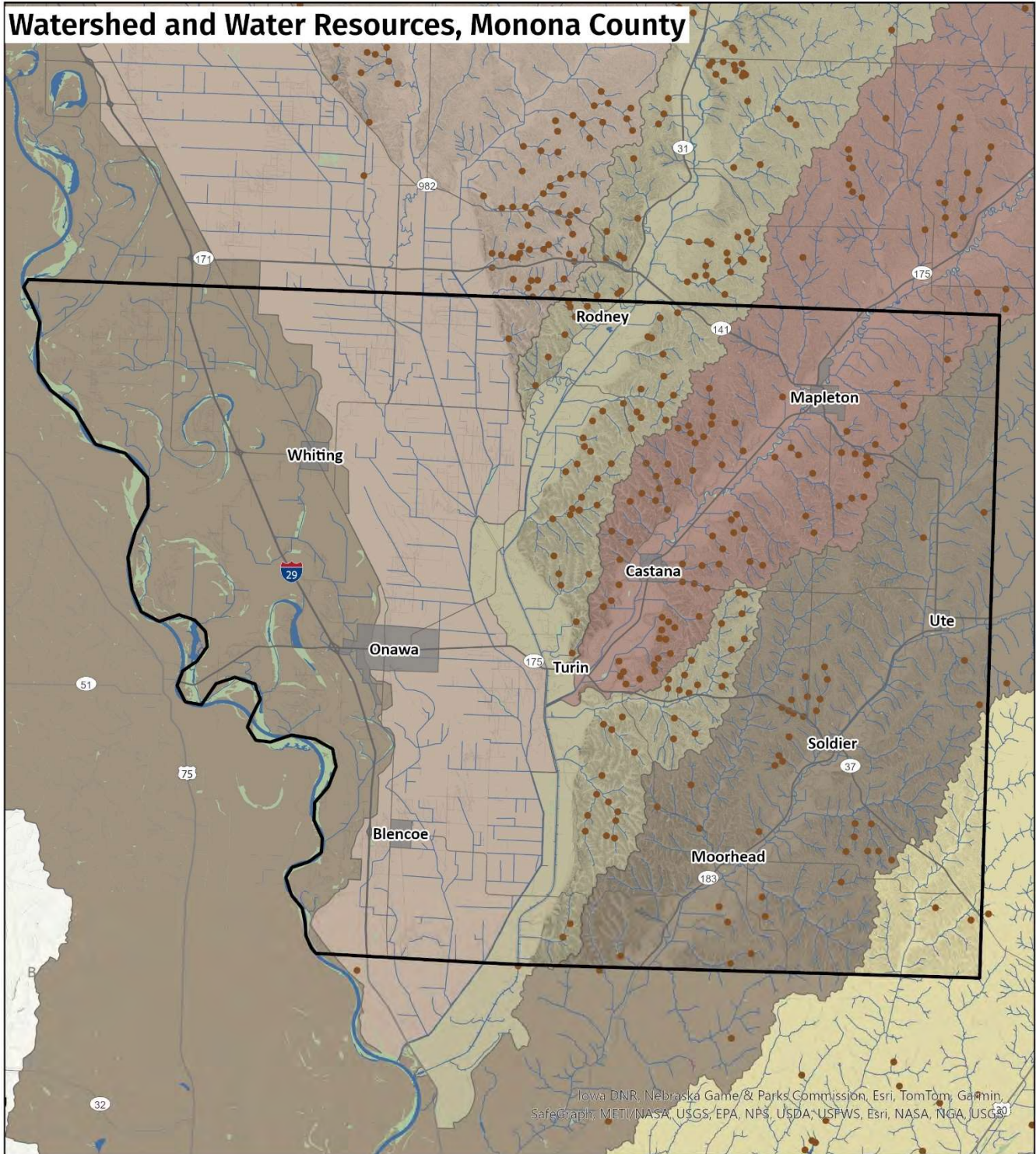
Landform Regions & Geology

Monona County is composed of three (3) distinct landform regions that include Missouri Alluvial Plain, Loess Hills, and Southern Iowa Drift Plain.

The Missouri Alluvial Plain was formed by erosion and sediment deposits resulting from the Missouri River. This landform region is characterized by backwater sloughs and oxbow lakes. There is also greater potential for flooding within this region.

The Loess Hills and Southern Iowa Drift Plain both resulted from geological processes related to ancient glaciers. The Loess Hills are unique to the region. This landform was created from

Watershed and Water Resources, Monona County



the accumulation of wind-blown silt. Today these steep hills rise up from the surrounding landscape. The Southern Iowa Drift Plains are marked by rolling hills which are the result of the manipulation of glacial sediment deposits by glacial melt and streams.

Transportation Network

On the western side of the County is Interstate 29, which generally runs north to south. State Highways 37, 141, 175, and 183 are included in the County's road network.

The County's secondary road system is composed of 1,063.89 miles. Within this category, Farm-to-Market roads make up 353.94 miles, while Area Service roads account for 709.95 miles. Gravel or earth surface types account for 860.65 miles of the secondary road system. The remaining 195.54 miles are composed of bituminous, asphalt, or PCC surface types.

Through an extremely competitive application process, Monona County was awarded \$10.26M for its Port of Blencoe. Funded through the Department of Transportation's Port Infrastructure Development Program (PIDP), *Progressive Farmer* (via DTN online) reports that the \$12.8M project will enable barge transport of ag products, saving thousands of over the road miles and staffing hours²⁶. Concept for the project goes back to the 1930's but was not realized until NEW Cooperative invested in a facility to load barges and a fertilizer storage shed. The ribbon cutting was held November 3, 2023. In terms of mitigation planning, this option reduces potential Transportation Incident opportunities through implementation of a relatively low risk transport method.

County Governance & Supports

The county seat is located in Onawa, in the center of the western half of the County. Its jurisdiction covers all unincorporated portions within county boundaries. Monona County is governed by a three (3)-person Board of Supervisors. The Board has both legislative and administrative powers and is the policy-making body of Monona County government. Additional offices include the following departments:

²⁶ Source: <https://www.dtnpf.com/agriculture/web/ag/news/business-inputs/article/2023/11/03/inland-waterway-grain-fertilizer>

- Auditor / Elections
- Assessor
- Attorney
- Engineer / Roads
- Emergency Management
- Recorder
- Sheriff
- Clerk of Court
- Community Services
- Early Childhood Iowa
- Treasurer / Auto / Driver's License
- Veterans Affairs
- Zoning & Environmental Health
- 911 Services

The Monona County's Emergency Management Agency is responsible for the coordination of the emergency response activities of various law enforcement and fire departments, the Hazardous Materials Response Team, local hospitals, medical and ambulance services, as well as Red Cross, Salvation Army, and Health & Human Services agencies. The Monona County Sheriff's Office provides law enforcement to the County, which includes jail, communications, patrol, and protection services. A sheriff and seven (7) deputies staff this office.

County Facilities

Equipment Garages	12008 Aspen Ave, Albaton
	400 Oak, Blencoe
Park Restroom Bldg	29998 Filbert Ave, Blencoe
Shelter House & Related	Sec 7 Twp 82 Rge 45, Blencoe
Equipment Garage	318 Pine, Castana
Shelter/Restrooms & Related	Sec 5 Twp 84 Rge 43, Castana
Shelter/Restrooms & Related; Antenna Tower	Sec 23 Twp 84 Rge 44, Castana
Maintenance/Equip Storage & Related	140 Maple, Mapleton
Shelter/Restrooms & Related; Office & Mechanic Bldg; Storage Sheds	201 S Maple, Mapleton
Equipment Garage	40 S Muckey, Mapleton
Shelter House & Related	Sec 30 Twp 85 Rge 43, Mapleton
Equipment Garage	102 Railroad, Moorhead
Museum	29508 Oak Ave, Moorhead
Law Enforcement Ctr	909 7th St, Onawa
Multiple Storage, County Shop Sheds; Related Mntc	708 20th St, Onawa
Court House; Court House Annex; Garage	610 Iowa Ave, Onawa
Conservation Office/Shop Bldg; Storage Bldgs; Shelter	318 E Iowa Ave, Onawa

Pump Houses; Restroom	Sec 3 Twp 83 Rge 45, Onawa
Shelter/Restrooms & Related	Sec 3 Twp 83 Rge 44, Rodney
Shelter/Restrooms & Related; Antenna Tower	41425 280th St, Soldier
Equip Garage; Supply Storage & Maintenance-related Bldgs	110 IA-37, Soldier
Equipment Garage	115 Wolfe, Turin
Historic Dwellings; Barn & Related	22133 Larpenteur Memorial Rd, Turin
Equipment Garage	118 W Main, Ute
Equipment Garage	103 Wells, Whiting
R.T. Reese Cabin	22171 Larpenteur Memorial Rd

Non-Government Facilities

Burgess Health Center	1600 Diamond St, Onawa

Education

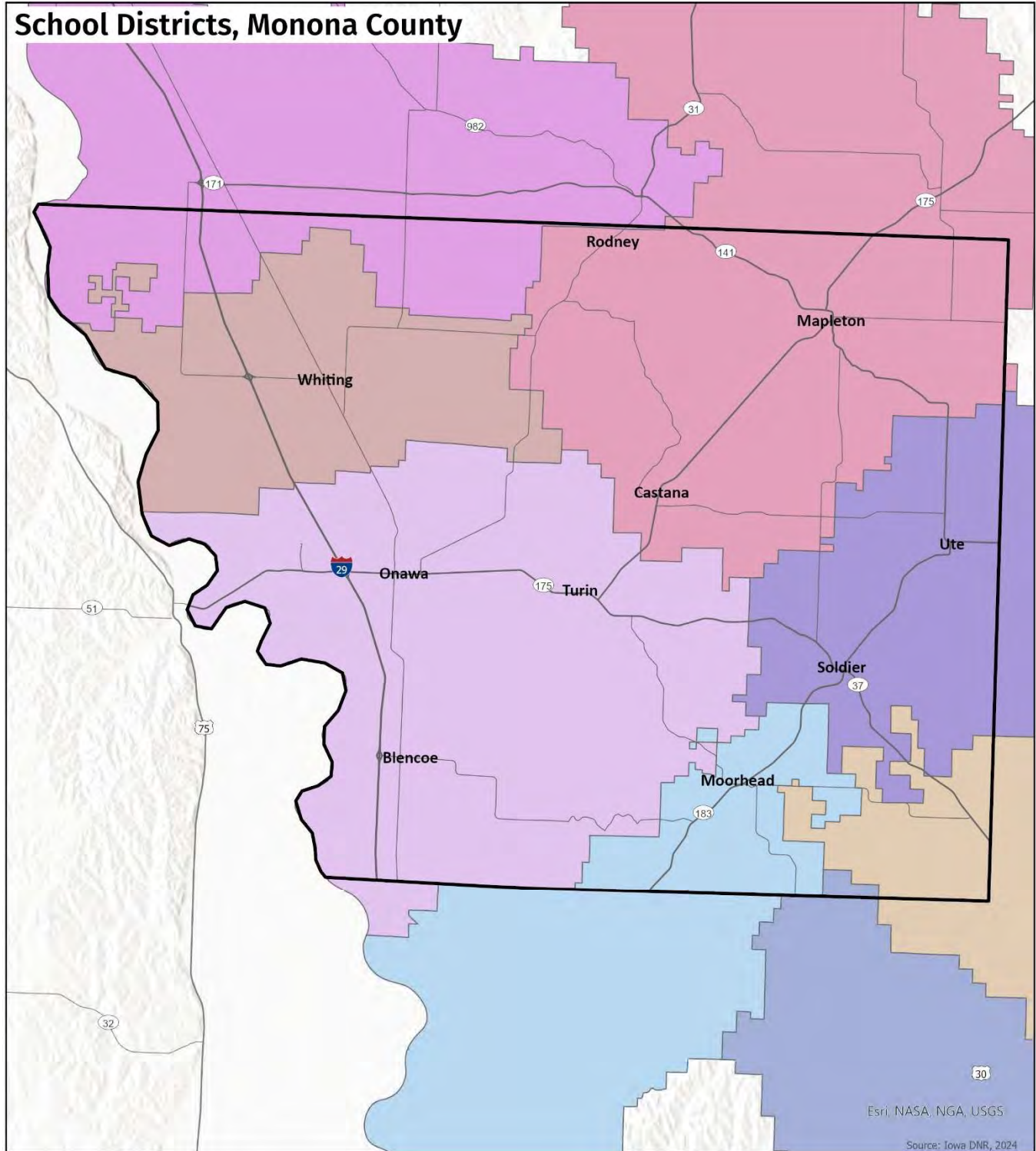
Monona County is served by several school districts, with only three (3) housing facilities within county borders. A total of four (4) elementary schools and three (3) middle school/high schools represent the following districts:

- Whiting Community Schools
- West Monona Community Schools
- Maple Valley-Anthon Oto Community Schools

Though there are no colleges or universities within Monona County, however there is an ISU Extension office in Onawa.

Educational attainment in Monona County shows that a higher percentage of residents have completed high school or earned an associate's degree compared to the state average. The county also has a relatively large proportion of individuals who have attended some college without obtaining a degree. However, Monona County has fewer residents with bachelor's and graduate degrees compared to the state, indicating a gap in higher education. The percentage of individuals without a high school diploma is slightly below the state average, suggesting comparable access to basic education.

School Districts, Monona County



 BOYER VALLEY	 WEST HARRISON	 WHITING
 CHARTER OAK-UTE	 WEST MONONA	 WOODBINE
 MAPLE VALLEY-ANTHON OTO	 WESTWOOD	

0 3 6 Miles



The map does not represent a survey, no liability is assumed for the accuracy of the data delineated herein, either expressed or implied by SIMPCO.

© 2025 Siouxland Interstate Metropolitan Planning Council.
Please call 712-279-6286 to obtain permission for use.

<i>Level of Education</i>	<i>Monona</i>	<i>Iowa</i>
No high school diploma	6.4%	6.7%
High school degree (includes equivalency)	39.4%	29.9%
Some college, no degree	23.8%	19.6%
Associate's degree	11.7%	12.2%
Bachelor's degree	12.7%	20.9%
Graduate or professional degree	6%	10.7%

Population

<i>Community Characteristics</i>	
Population (2023)	8,619
Population (2017)	8,865
Total Households	4,047
Median Household Income	\$62,944
Median Household Income – Iowa	\$73,147

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Region</i>
5 years and younger	430	5.6%	6.78%
65 years and older	2,143	23.8%	16.01%
Below the poverty level	1,321	11.2%	12.88%
Living with a disability	1,197	13.8%	12.41%

Housing

Monona County offers more affordable housing compared to the state of Iowa, with a significantly lower median home value, though the median rent is slightly higher than the state average. The county has a total of 4,390 housing units, with the majority of them occupied. Most of the occupied units are owner-occupied, while a smaller portion are renter-occupied. A modest number of homes remain vacant, suggesting a relatively stable housing market. These figures highlight a community with a strong focus on homeownership, though rental options are also available.

<i>Values</i>	<i>Monona</i>	<i>Iowa</i>
Median Home Value	\$122,600	\$213,300

Median Rent per Zillow	\$919	\$740
<i>Units</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	4,390	-
Occupied	3,907	88.8%
Owner-occupied	3,364	78%
Renter-occupied	1,054	22%
Vacant	483	11%

Income & Economics

The table below communicates the quantity and proportion of employed individuals within each industry. The total employed population of Monona County is 4,307. The three leading industries are:

1. Education services and health care and social assistance
2. Retail trade
3. Arts, entertainment, and recreation, and accommodation and food services.

In Monona County, the civilian employed population aged 16 and older totals 4,175 individuals. The largest employment sectors are education, health care, and social assistance, which account for a significant portion of the workforce. Retail trade and transportation, warehousing, and utilities also employ a large number of residents. Other notable sectors include manufacturing, construction, and professional services. Agriculture, including forestry, fishing, and mining, remains an important part of the local economy. Smaller shares of the workforce are involved in fields such as finance, arts, and public administration. This diverse employment base reflects a community with a mix of traditional industries, service-oriented sectors, and public services.

<i>Industry for the Civilian Employed Population 16 and over</i>		
Civilian employed population (16 and older)	4,175	-
Agriculture, forestry, fishing and hunting, and mining	424	10.1%
Construction	310	7.4%
Manufacturing	379	9%
Wholesale trade	69	4.6%
Retail trade	498	33.8%

Transportation and warehousing, and utilities	264	17.9%
Information	22	1.5%
Finance and insurance, and real estate and rental and leasing	202	13.7%
Professional, scientific, and management, and administrative and waste management services	283	19.2%
Education services and health care and social assistance	1,077	73%
Arts, entertainment, and recreation, and accommodation and food services	316	21.4%
Other services except public administration	189	12.8%
Public administration	142	9.6%

Valuation of County Assets

In addition to valuation of County assets as impacted by a given project, that of privately owned properties, facilities, and personal property will be considered as they may contribute to overall protected benefit when mitigation projects are planned. Each mitigation action, strategy, and/or project pursued for implementation in the next five (5) years will fully consider protections to those assets and to the residents therein. Furthermore, privately owned facilities that offer services and support during times of crisis may be specifically included in mitigation actions and/or strategies receiving municipal-funded support to maintain function and operation those structures.

PARTICIPATION

SIMPCO facilitated an in-person meeting at the County EMA office December 18, 2024 with Peggy Rolph, Auditor, and Patrick Prorok, EMA in attendance. Additional input was collected via survey. Of the 251 responses to the primary survey, 19 were submitted by Monona County residents.

CAPABILITIES

<i>Plans/Guidance</i>
Capital Improvement Plan <i>via annual budget process</i>
Comprehensive Land Use Plan
Comprehensive Plan
County Recovery Plan
Critical Facilities Plan (Mitigation/Response/Recovery)

Flood Mitigation Assistance (FMA) Plan	
Economic Development Plan	(County) Economic Development Partnership for Growth
County Emergency Plan	
<i>Policies/Ordinance</i>	
• Zoning Ordinance • Floodplain Ordinance • Nuisance Ordinance (including <i>Debris Mgmt Plan</i>) • Subdivision Ordinance • Tree Trimming Ordinance • Floodplain Management Ordinance Note: complete list available @ www.mononacounty.org/Ordinances	
<i>Programs/Commissions</i>	
Historic Preservation Commission	
Mutual Aid Agreements	County-wide; SCFR HazMat Response
National Flood Insurance Program (NFIP) Participant	CID #190893
Planning/Zoning Boards	Enterprise Zoning Commission (oversight of Property Acquisition Prog) Development Planner Includes oversight of Builder's Plan NFIP Floodplain Administrator Zoning/Land Use Restrictions
<i>Staff/Department</i>	
Emergency Management Coordinator	Hazard Awareness Program
Emergency Response Team	Includes oversight of Emergency Operations Center
Engineer	
Mapping Specialist (GIS)	Monona Co; SIMPCO
Secondary Roads Dept	Includes oversight of Tree Trimming Program & Compliance
<i>Non-Governmental Organizations</i>	
American Red Cross	
Veterans Groups	
<i>Local Funding Availability/Eligibility</i>	
Apply for Community Development Block Grants	
Capital Improvements funding	
Levy taxes for specified purpose	
Fees for water, sewer, gas, or electric services	
Impact fees for new development under the Economic Development Commission	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken

communication/education		
Warning Sirens	Monona Co / Rodney	2020: Additional sirens in rural recreation areas such as the Rodney Recreation Pits; <i>County EMA</i> collaboration w/Rodney <i>City Council</i> , (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Monona Co / Rodney	Update. Not completed, still needed. Project carries over to 2025 HMP.
Warning Sirens	Monona Co	2020: Warning Siren at Lewis & Clark Lake would be beneficial to improve warning efforts in the recreation area. <i>County Board of Supervisors, EMA, various departments.</i> (County funds, PDM, community benefit fund programs) MEDIUM PRIORITY
Warning Sirens	Monona Co	Update. Project not implemented but siren is still needed in rec area. Project will carry over to 2025 HMP.
tools/equipment		
Equipment	Monona Co	2020: Region-shared equipment such as high capacity snow blower. <i>County Roads, collaboration between County Roads departments</i> (County funds—potentially multiple, IDOT funds) LOW PRIORITY
Equipment	Monona Co	Update. No action has been coordinated between counties for shared use of high-performance equipment. This project will carry over to 2025 HMP.
Equipment	Monona Co	2020: Communications Trailer. <i>County Board, EMA</i> (County funds, PDM) MEDIUM PRIORITY
Equipment	Monona Co	Complete. The EMS department has a fully equipped trailer that serves as a mobile response unit, training, center, and refuge/shelter location as needed.
Equipment	Monona Co	2020: Trailer designated for road barricade set-up; <i>County Engineer</i> (County funds, IDOT, PDM) HIGH PRIORITY
Equipment	Monona Co	Update. No action taken on this item but project is still needed. Project carries over to 2025 HMP.
development		
Bridges & Roads	Monona County	2020: Bridge and tube projects needed throughout the county; improve drainage patterns, reduce rate of deterioration on bridge components/foundation; <i>County Roads Dept.</i> (County funds, Transportation funds, PDM) HIGH PRIORITY
Bridges & Roads	Monona County	Update not provided. Several road and bridge projects were implemented with several more pending. Unless a specific drainage or access barrier is specified, such projects are not included in the mitigation plan.
flow control		
refuge		
Shelter	Monona County	2020: At Onawa: Interest in adding formal storm shelter with tornado designation at the Fairgrounds and at the Christian Camp within the State Park. <i>County Conservation/Parks Dept,</i>

		EMA, IDNR/State Parks Dept, City administration (County funds, IDNR Program funding, PDM, Community Benefit funds) LOW PRIORITY
Shelter	Monona County	Update. Project not completed as funding source has not made project feasible. Project will carry over to 2025 HMP.
Shelter	Monona County	2020: Shelter at Peters Park; <i>County Conservation/Parks Dept, EMA, IDNR/State Parks Dept</i> , (County funds, IDNR Program funding, PDM, Community Benefit funds, fundraisers, PDM) LOW PRIORITY
Shelter	Monona County	Update. Not implemented. County still interested in pursuing project at low priority due to lack of funding. Project will carry into 2025 HMP.
technology		
natural barriers/ supports		

Several projects were implemented in addition to those included in the 2020 Plan including but not limited to the following.

- Emergency Response has been equipped with tools for CPR – AED for deputies. There is a fully equipped trailer that can serve as a shelter.
- The EMS group meets annually to coordinate planning and assess program needs.
- Roadway elevation project was completed on K45 between Whiting and Sloan.
- A new access road was added (E60) connecting the south end of Blencoe to the Port.
- A land use change was implemented to appropriate operation of Port Blencoe.

RISK ASSESSMENT

The NOAA Storm Event database includes record of 41 reported events within Monona County between 11/01/2019 and 12/31/2024.

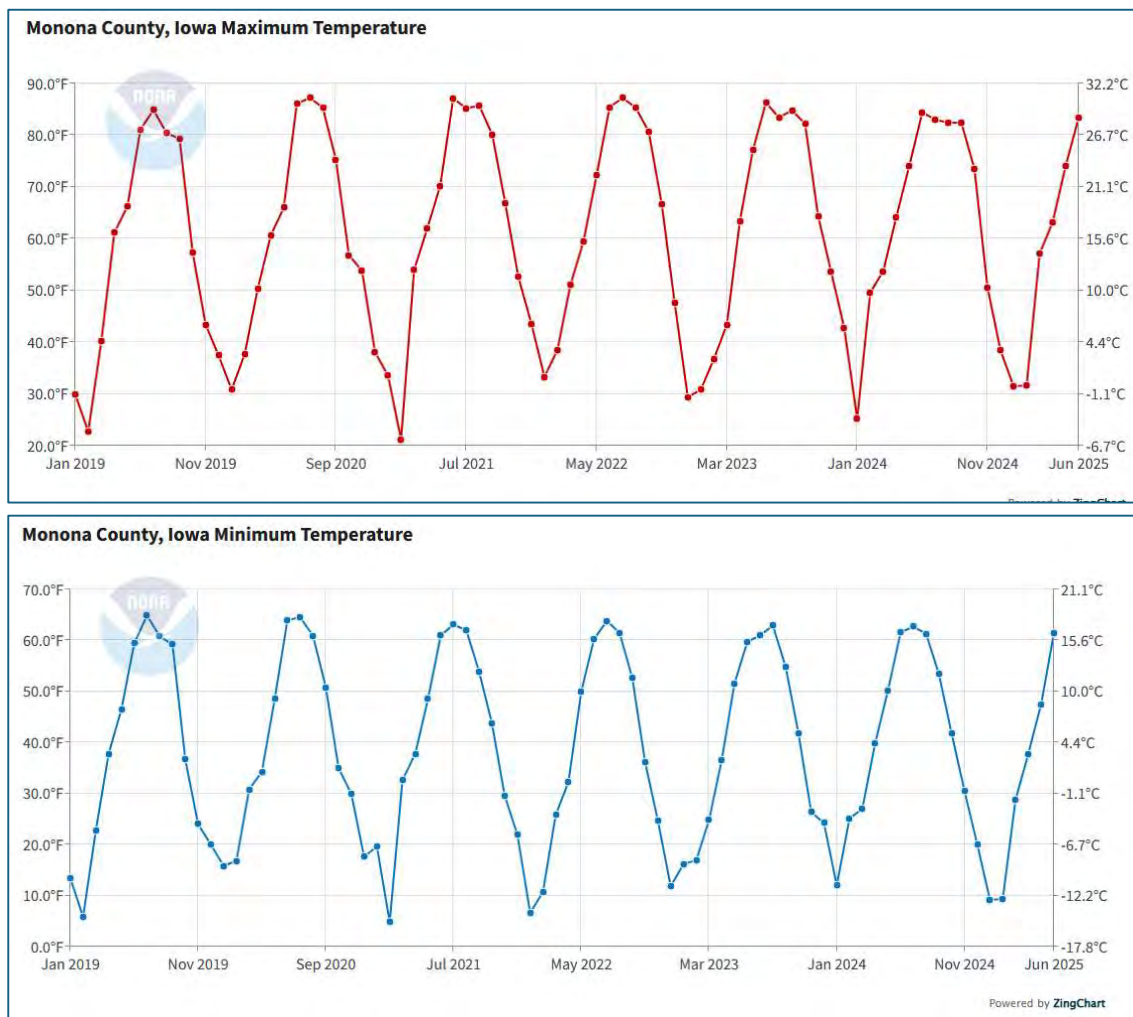
<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
MONONA (ZONE)	11/26/2019	14:00	Winter Weather		0	0	0.00K	0.00K
MAPLETON MUNI ARPT	6/2/2020	20:45	Hail	1.00 in.	0	0	0.00K	0.00K
BLENCOE	7/11/2020	0:30	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MONONA (ZONE)	11/10/2020	1:00	Ice Storm		0	0	0.00K	0.00K
MONONA (ZONE)	12/24/2020	3:00	Blizzard		0	0	0.00K	0.00K
MONONA (ZONE)	1/14/2021	21:00	Blizzard		0	0	0.00K	0.00K
MONONA (ZONE)	2/14/2021	5:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K

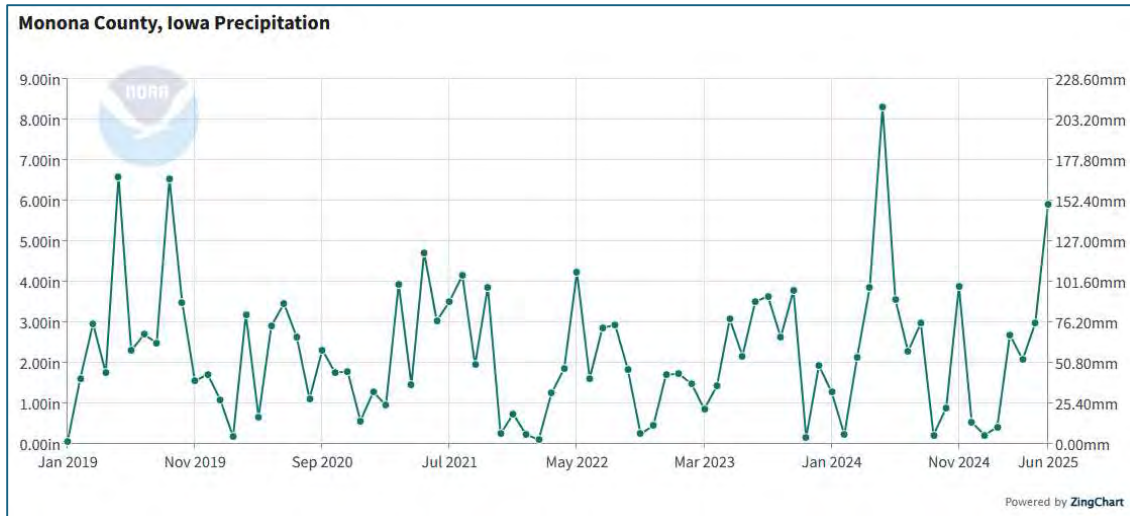
MONONA (ZONE)	2/21/2021	4:30	Winter Storm		0	0	0.00K	0.00K
ONAWA	7/9/2021	0:09	Hail	1.50 in.	0	0	0.00K	0.00K
WHITING	5/12/2022	18:51	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
MAPLETON MUNI ARPT	5/19/2022	22:28	Hail	1.00 in.	0	0	0.00K	0.00K
SOLDIER	7/11/2022	2:15	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
MOORHEAD	7/23/2022	19:33	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
MONONA (ZONE)	12/22/2022	3:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
MONONA (ZONE)	1/18/2023	13:00	Winter Storm		0	0	0.00K	0.00K
MONONA (ZONE)	3/26/2023	1:00	Winter Weather		0	0	0.00K	0.00K
BLENCOE	4/19/2023	17:28	Hail	1.50 in.	0	0	0.00K	0.00K
TURIN	4/19/2023	17:10	Hail	1.00 in.	0	0	0.00K	0.00K
UTE	4/19/2023	18:00	Hail	1.00 in.	0	0	0.00K	0.00K
MAPLETON	5/8/2023	18:29	Hail	1.00 in.	0	0	0.00K	0.00K
BLENCOE	7/12/2023	5:00	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
MONONA (ZONE)	8/21/2023	12:00	Excessive Heat		0	0	0.00K	0.00K
MONONA (ZONE)	1/8/2024	1:00	Winter Storm		0	0	0.00K	0.00K
MONONA (ZONE)	1/11/2024	18:00	Winter Storm		0	0	0.00K	0.00K
MONONA (ZONE)	1/12/2024	21:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
MONONA (ZONE)	1/18/2024	11:45	Winter Storm		0	0	0.00K	0.00K
MOORHEAD	4/26/2024	16:17	Tornado	EF0	0	0	0.00K	0.00K
PREPARATION	4/26/2024	16:05	Tornado	EF0	0	0	0.00K	0.00K
SOLDIER	4/26/2024	16:23	Tornado	EF1	0	0	0.00K	0.00K
BLENCOE	5/21/2024	12:25	Hail	1.00 in.	0	0	0.00K	0.00K
CASTANA	5/24/2024	1:46	Thunderstorm Wind	72 kts. MG	0	0	0.00K	0.00K
ONAWA	6/12/2024	18:31	Hail	3.50 in.	0	0	0.00K	0.00K
WHITING	6/12/2024	17:51	Hail	1.75 in.	0	0	0.00K	0.00K
WHITING	6/12/2024	18:14	Hail	2.75 in.	0	0	0.00K	0.00K
ALBATON	6/24/2024	4:35	Flood		0	0	1.000M	298.60K
RODNEY	6/25/2024	3:56	Flash Flood		0	0	100.00K	100.00K
BLENCOE	7/21/2024	17:35	Funnel Cloud		0	0	0.00K	0.00K
WHITING	7/21/2024	17:02	Funnel Cloud		0	0	0.00K	0.00K
WHITING	7/29/2024	23:05	Thunderstorm Wind	53 kts. MG	0	0	0.00K	0.00K
MONONA (ZONE)	8/26/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
MONONA (ZONE)	12/19/2024	12:00	High Wind	50 kts. EG	0	0	0.00K	0.00K

Summary of Events

Number of County/Zone areas affected:	2
Number of Days with Event:	34
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	2
Number of Days with Event and Crop Damage:	2
Number of Event Types reported:	13

Following are charts depicting Monona County's maximum temperature, minimum temperature, and precipitation by month from November 2019 through June 2025.





Other Hazard Risks

By [Dean Welte](#)

Published: Jun. 24, 2024 at 11:08 AM CDT



ONAWA, Iowa (KTIV) - Rising river levels are still being seen on the Missouri and Little Sioux Rivers in Monona County, Iowa.

According to Monona County Emergency Management, they expect the water levels will be similar to what was seen in 2019 when the area had major flooding. The Missouri River may be slightly higher at 37.3 feet compared to the 36.51 feet seen in March 2019.

Emergency management says people along the Little Sioux and Missouri should form a self-evacuation plan immediately. Water levels can change quickly, but the current predictions show the rivers should crest between June 25 and June 26. People who live along the Missouri River could lose power due to rising water.

At this time, Monona County officials say they don't expect any levee failures, but if they happen evacuations will be issued on short notice. There are currently no emergency shelters set up.

Road closures may happen in the county. For the safety of residents, several rescues have occurred in Woodbury County due to flooding.

Copyright 2024 KTIV. All rights reserved.

Monona County remains in a flood warning, residents should have a self-evacuation plan



www.ktiv.com/2024/06/24/monona-county-remains-flood-warning-residents-should-have-self-evacuation-plan By [Dean Welte](#) Published: Jun. 24, 2024 at 11:08 AM CDT. (June 9, 2025)

The nuclear plant in Fort Calhoun as noted in the 2020 HMP has been deactivated. No new activity taking place. Residual matter may still have impact if catastrophic incident occurs. However, there is a greatly reduced risk from when plant was active.

Priority Hazards

The County has designated the following as priority hazard concerns.

- Tornado/Windstorm
- Flooding
- Severe Winter Storm
- Thunderstorm w/ Hail & Lightning

Survey respondents indicated Very Concerned for Drought (11/19), Infrastructure Failure (8/19) and Tornado / Windstorm (7/19) at the highest frequency. The same ranked highest when asked to indicate Top Three Hazards, with Thunderstorm with Hail and Lightning tying at #3 with Infrastructure Failure. Drought prevails as overlying concern for residents, though Moona County event reports do not include recorded events.

MITIGATION ACTIONS, STRATEGIES, & PROJECTS

communication/education		
Warning Sirens	Monona Co / Rodney	Carry over. Additional sirens in rural recreation areas such as the Rodney Recreation Pits; <i>County EMA</i> collaboration w/Rodney <i>City Council</i> , (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Monona Co	Carry over. Warning Siren at Lewis & Clark Lake needed to improve warning efforts in the recreation area. <i>County Board of Supervisors, EMA, various departments.</i> (County funds, PDM, community benefit fund programs) MEDIUM PRIORITY
Warning Sirens	Monona Co / Blencoe	New. City is interested in partnering with the county to install a warning siren for the NEW Cooperative Port pf Blencoe to serve the port and nearby park. <i>County, County EMA, City of Blencoe, Industry partners</i> (Private funds, Pre-disaster funds as available, local and county funds, transportation funds as may be applicable) HIGH PRIORITY
tools/equipment		
Generator & Related Projects	Monona Co	New. County is seeking opportunity to purchase mobile generator allowing flexibility to meet needs at varying

		locations as needed. <i>County EMA, County Board</i> (annual budget, public safety/response funds, PDM as available) HIGH PRIORITY.
Equipment	Monona Co	Carry over. Region-shared equipment such as high capacity snow blower. <i>County Roads, collaboration between County Roads departments</i> (County funds—potentially multiple, IDOT funds) LOW PRIORITY
Equipment	Monona Co	Carry over. Trailer designated for road barricade set-up; <i>County Engineer</i> (County funds, IDOT, PDM) HIGH PRIORITY
development		
flow control		
refuge		
Shelter	Monona County	Carry over. At Onawa: Interest in adding formal storm shelter with tornado designation at the Fairgrounds &/or at the Christian Camp within the State Park. Priority level reflects lack of funding opportunity, not level of need. <i>County Conservation/Parks Dept, EMA, IDNR/State Parks Dept, City administration</i> (County funds, IDNR Program funding, PDM, Community Benefit funds, private funds as applicable) LOW PRIORITY
Shelter	Monona County	Carry over. Shelter at Peters Park. <i>County Conservation/Parks Dept, EMA, IDNR/State Parks Dept,</i> (County funds, IDNR Program funding, PDM, Community Benefit funds, fundraisers, PDM) LOW PRIORITY
technology		
natural barriers/ supports		

JURISDICTIONS

1. BLENCOE

a. Profile

The city of Blencoe is located near the southwest corner of Monona County, just east of Interstate 29. County Highways E60 and K45 intersect near the center of the western boundary. Fletcher ditch runs southwest away from the city. A few miles west of Blencoe is the Missouri River, a key factor in hosting the NEW Cooperative Port of Blencoe and Huff-Warner Access Area and campground. In operation as of spring 2021, the port serves as a world market gateway for grain and fertilizer.

City Governance & Community Supports

Blencoe is governed by an elected five (5) person City Council and Mayor. City offices include City Clerk and Maintenance. Fire and rescue services for the City and surrounding area are provided by the Blencoe Volunteer Fire Department, which is partially funded by the City. Law enforcement services are contracted by the City.

The City of Blencoe is not a member of the NFIP program. The Municipal Code of Ordinances was last updated in 2024. A Comprehensive Plan was adopted in 2014.

Demographics, Housing, & Economics

In 2023, Blencoe's population²⁷ grew to 264, up from 233 residents in 2020. The town has 107 households and a median household income of \$81,705, which is higher than the median for Monona County, which stands at \$62,944. Blencoe has a notably higher proportion of residents aged 65 and older compared to both the county and state averages. The town also has a smaller proportion of young children, with fewer living in the community. While the poverty rate is relatively low, there is a higher incidence of residents living with disabilities compared to the county and state averages.

<i>Community Characteristics</i>	
Population (2023)	264
Population (2020)	233

²⁷ Source: <https://censusreporter.org/profiles/16000US1906940-blencoe-ia/>

Total Households	107
Median Household Income	\$81,705
Median Household Income – Monona County	\$62,944

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Monona</i>	<i>Iowa</i>
5 years and younger	22	8.3%	5.6%	5.7%
65 years and older	90	34.1%	23.8%	16%
Below the poverty level	8	3%	11.2%	11.3%
Living with a disability	55	20.8%	13.8%	18.5%

Blencoe has a total of 114 housing units, with 107 currently occupied and 7 vacant. The community includes a small number of mobile homes, totaling three units. The housing stock is primarily older, with the majority of homes built before 1970. A smaller portion of the housing was constructed between 1970 and 1999, while only a few homes were built after the year 2000, reflecting a largely established housing market.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	114	-
Occupied	107	94%
Vacant	7	6%
Mobile Homes	3	3%
<i>Age of Residential Structure</i>		
Built 2000 or later	3	2.8%
Built 1970 – 1999	32	29.4%
Build 1969 or earlier	74	67.9%

Leading Employers

Most residents work outside of Blencoe. Its proximity about midway between Sioux City and Omaha/Council Bluffs allows residents the convenience of access to several regional job centers. NEW Cooperative has a notable presence with development of its Port of Blencoe. The nature of its business results in high-capacity storage and transfer of volatile materials including but not limited to propane, grain, and fertilizer storage.

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

In addition to valuation of privately owned properties, facilities, and personal property, each of Blencoe's proposed Mitigation Actions and Strategies pursued for implementation in the next five (5) years will fully consider protections to those assets and to the residents therein. Furthermore, privately owned facilities that offer services and support during times of crisis may be specifically included in mitigation actions and/or strategies receiving municipal-funded support to maintain function and operation of those structures. Those entities include the following Community Support office(s) and/or Gathering Location(s).

<i>Critical/City Facilities</i>	
Community Bldg & Related	413 Main St
Fire Station; Warning System, & Related	510 Main St
City Park	515 Linn St
Richardson Park	502 N Manley St
Lift Stations & Sewer Lift Stations	197 Main St
	635 Main St (@ Monona)
	502 N Manley St
2-Cell Lagoon	(East on) County Hwy 60
Shelter House; Water Tower & Related	Linn St & Main St
Water Treatment & Related	515 Linn St
Shop/Storage & Related	201 Front St
Campground	
City Maintenance Shed	201 Oak St
<i>Community Support Facilities</i>	
St Bernard Catholic Church	201 Main St

Private businesses and organizations play an essential role in the City's recovery efforts and communication networks and may be categorized as essential or critical facilities. The list is not exhaustive. Additional community churches, organizations, and individuals, as well as those in nearby communities, work together to ensure communication and support in times of crisis.

Valuation of City Assets

The taxable valuation of city property is \$2,976,629 based on current insurance documentation. This serves as a base for cost-benefit analysis to determine project feasibility. An in-depth cost-benefit analysis will be conducted as part of a project's scope and is subject to a given project and project area.

Though not a city property, it is important to note the valuation of the investments in the NEW Coop Port of Blencoe at \$10,192,535 and its parcel to the north valued at \$342,110. Mitigation implementations will consider impact on the port, in addition to private, residential, and city properties/holdings. Benefits as well as potential for adverse effect will be among considerations

b. Participation

An in-person mitigation planning meeting was held at City Hall, Blencoe on October 31, 2024. Facilitated by SIMPCO, the following were in attendance.

- Janet Ryan, Mayor
- Erica Stanislav, City Clerk
- Chip Collison, Maintenance

Monona County accounted for 18 survey responses with 4 indicating residence in Blencoe.

c. Community Capabilities

The City of Blencoe has one (1) warning siren with horns facing three (3) directions. Signals can be heard from most points out of doors within city limits and beyond. Signals are sounded through the County Communications Center and can be initiated by the city through protocol in place. With the development of the Port of Blencoe and the nearby Huff-Warner Access and camping area, the city and Monona County are considering need for an additional siren in that area.

Blencoe is equipped with a water pump that enables clean water transfer from overflowing drainage ditches to areas less prone to flash flooding. The following table identifies key elements supporting community actions in the event of a disaster. Blencoe's ISO fire rating has improved since last update, likely due to improved water pressure resulting from their water systems improvements project. While the city has not adopted a standard building code, it does follow form of state code.

<i>Plans/Guidance</i>	
Comprehensive Plan	
<i>Policies/Ordinance</i>	
• Zoning Ordinance • Nuisance Ordinance • Subdivision Ordinance	• Drainage Ordinance • Storm Water Ordinance
<i>Programs</i>	
Zoning/Land Use Restrictions	
Codes Building Site/Design	
ISO Fire Rating	6-5x
<i>Staff/Department</i>	
Public Works Official	
Planning/Zoning Boards	
Emergency Response Team	Fire Department & Contracted Services
<i>Non-Governmental Organizations</i>	
Veterans Groups	American Legion Post #665 (Stevens-Kelly; limited local activity)
<i>Local Funding Availability/Eligibility</i>	
Apply for Community Development Block Grants	
Capital Improvements funding via annual budget process	
Levy taxes for a specific purpose	
Fees for water, sewer, gas, or electric services	
Designation of funds through TIF	
Ability to incur debt through:	• general obligation bonds
	• special tax bonds
	• private activities

Review of Actions Taken (Since 2019)

communication /education		
Promo/Info	Blencoe	Implemented: Blencoe. Implemented promotion of existing alerts system and continues to do so.
Warning Sirens	Blencoe	2020: 2nd warning siren placement - northwest end of town; Location Simpson & Mack; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
		Update. Action not taken.
tools/equipment		
Generator & Related Projects	Blencoe	2020: Generators; city hall/community ctr which operates as command center as needed; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
		Update. Generators were included for lift stations in two water works project – Sewer (2022) and Wastewater Treatment Plant (2019).
development		
flow control		
refuge		
technology		
natural barriers/ supports		

d. Risk Assessment

Contributing Factors

Geographic location supports priority of Blencoe's concerns regarding tornado and severe winter storm. The same geography serves to benefit Blencoe as it lies entirely outside of the floodplain, significantly reducing concerns related to riverine flooding. However, flash flooding incidents continue to rise. Drought conditions with intermittent heavy periods of rain increase effects of such flash flood events.

Prospect of train derailment, especially as tracks are impacted by recurring inclement weather conditions, remains a concern, as does the volume of potentially hazardous materials transported on via rail through town. Hazardous materials-related incidents cannot be overlooked for another reason – proximity of grain elevator and propane tanks to anhydrous ammonia storage area, which poses further complications from an incident that may occur while volatile materials are in transport over the road, by rail, and barge.

An analysis of NOAA Storm Event Records indicated 5 recorded incidents specific to Blencoe and 16 in the Monona “Zone” affecting the county as a whole. Below are Blencoe’s events as recorded between 11/01/2019 and 12/31/2024. This does not include substantial impacts as may have been reported from winter weather in February and March 2025.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
BLENCOE	7/11/2020	0:30	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BLENCOE	4/19/2023	17:28	Hail	1.50 in.	0	0	0.00K	0.00K
BLENCOE	7/12/2023	5:00	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
BLENCOE	5/21/2024	12:25	Hail	1.00 in.	0	0	0.00K	0.00K
BLENCOE	7/21/2024	17:35	Funnel Cloud		0	0	0.00K	0.00K

Of 18 Monona County survey responses, 4 indicated Blencoe as place of residence. Survey responses specific to Blencoe indicate a high-level concern of drought, followed by at least some concern for several additional natural disasters and other hazards. Earthquake and Landslide are the only hazards with no concern indicated.

Priority Hazards

Respondents indicated Flash Flooding and Tornado/Windstorm with the highest frequency under the question asking top 3 concerns. Drought, Severe Winter Storm, Thunderstorm – Hail/Lightning, Hazardous Materials Incidents, Infrastructure Failure, and Transportation Incident also noted.

Tornado, Severe Winter Storm, and Flash Flood remain primary natural disaster concerns for the city. Extremes in both winter and summer months continue to trend, though more costly events have been in the winter. As discussed, there is considerable concern for hazardous materials incidents as well.

e. Mitigation Needs, Actions, & Strategies

Planned strategies include the following table of projects.

communication /education		
Warning Sirens	Blencoe	Carry over. The City still needs a second warning siren to sufficiently serve its corporate boundaries and nearby rural residents. Cost is approximately \$15,000. Funds have not been designated. City will pursue grant opportunities and continually review opportunities to include project in the annual budget. This project will carry as an ongoing effort with MEDIUM PRIORITY.
Assessment/Study / planning	Blencoe	New. Emergency Response Plan – city is interested in updating and formalizing its emergency response plan. City staff, County EMA (local funds) HIGH PRIORITY
tools/equipment		
Generator & Related Projects	Blencoe	Carry over. Generators as noted in 2020 are planned for implementation at the N Manley Lift Station, estimated cost: \$35,000. Public Works. (Local funds, pre-disaster funds) HIGH PRIORITY
Generator & Related Projects	Blencoe	New. In addition to the lift station project, generators are planned for the Community Center (to be established as Command Center) and the Fire Station (to maintain operations in the event of a disaster) at the estimated cost of \$35,000 each. Public Works. (Local funds, pre-disaster funds) HIGH PRIORITY
Equipment	Blencoe	New. Interest in coordinating resource attainment (such as cots) in the event of an emergency where refuge/shelter designation is necessary. No cost expected to be associated with process aside from staff time. <i>City, local partnering response agencies, state and federal programs such as Red Cross.</i> (local and response funds as available/necessary) HIGH PRIORITY
Equipment	Blencoe	New. Mobile pumps needed for stormwater transfer. Estimated project cost is \$50,000. <i>Public Works.</i> (City funds, FMA, Disaster Mitigation/Disaster Response funds as available) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/ supports		

In addition to mitigation-specific actions, the following are planned for completion by the city of Blencoe and are funded in part through TIF.

- Sewer Main lining/replacement
- Asphalt roads
- Force main to lagoon

- Storm drain intakes and force main
- Parks and playground equipment
- Housing and infrastructure
- Waterline west of K45
- Building improvements to current fire station (concrete replacement and safety bar per insurance).

Any projects as may be added to the schedule through 2025 may require an amendment to be considered for eligibility for mitigation funds through FEMA and/or Iowa Homeland Security and Emergency Management.

2. CASTANA

a. Profile

The city of Castana is situated near the center of Monona County. State Highway 175 runs north-south through the center of city limits. Most commercial and residential structures are located east of the highway. Maple River runs north-south along the western edge of the city and Cottonwood Creek meanders along the eastern boundary. The two bodies of water converge near the center of the northern boundary.

City Governance & Community Supports

The City of Castana is governed by a five-person elected City Council and the Mayor. The only office in addition to the Mayor and Council is that of City Clerk. At the time of preparing this profile, Castana anticipated the mayor seat to be vacated, moving the Mayor Pro Tem into the seat to serve in the interim.

Emergency services are provided by Castana Fire and Rescue, operated independent of the City, and staffed by volunteers. Ambulance service is provided through Mapleton Ambulance. Monona County provides law enforcement.

Demographics, Housing, & Economics

CensusReporter.org shows an estimate of Castana's population at 157 in 2023²⁸, up from 107 residents in 2020. Local records indicate a significantly lower number, closer to that reported in the census estimates. As noted throughout this plan, data provides a snapshot in time estimate of populations, including anticipated projections. Serving a basis for relative comparison, the population as noted in 2023 is included for reference and context within other communities throughout the region.

The same source as noted provides that the town is home to 80 households, with a median household income of \$55,833, which is lower than the Monona County median of \$62,944. A notable portion of Castana's population is aged 65 or older, making up nearly a quarter of the community. The town has no residents aged 5 or younger, which is significantly lower than both the county and state averages. While the poverty rate is lower than the county and state averages, around 7.6% of residents live below the poverty line. Additionally, 17.2% of residents live with a disability, a figure slightly above the county average.

<i>Community Characteristics</i>	
Population (2023)	157
Population (2020)	107
Total Households	80
Median Household Income	\$55,833
Median Household Income – Monona County	\$62,944

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Monona</i>	<i>Iowa</i>
5 years and younger	0	0.0%	5.6%	5.7%
65 years and older	38	24.2%	23.8%	16.0%
Below the poverty level	18	7.6%	11.2%	11.3%
Living with a disability	27	17.2%	13.8%	18.5%

Castana has a total of 105 housing units, with 63 currently occupied and 25 vacant. The town has 13 mobile homes, making up a relatively high proportion of the housing stock. The majority

²⁸ Source: <https://censusreporter.org/profiles/16000US1911530-castana-ia/>

of the homes in Castana were built before 1970, while a smaller number were constructed between 1970 and 1999. Notably, no residential structures were built after 2000, indicating a housing market largely consisting of older homes. Vacancy rate may be significantly higher than indicated based on local information. At the time of writing this plan, the city is initiating a complete water systems improvement, which when implemented will hopefully restore resident and home occupancy rates as projected in various estimates.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	105	
Occupied	63	76%
Vacant	25	24%
Mobile Homes	13	12%
<i>Age of Residential Structure</i>		
Built 2000 or later	0	0.0%
Built 1970 – 1999	11	15.3%
Build 1969 or earlier	61	84.7%

Critical Facilities

City Hall/Chestnut Hall	103 Pine St
Community Building	113 3rd St
City Park & related	Willow & 4 th Sts
Pump Houses	by Maple River
	by Elevator
Water Tower	South end of 2nd St
New Fire Station	321 Pine St
Old Fire Station	3rd & Pine Sts
Storage Bldgs	320 Pine St
	114 N 3rd St
Garage/Storage	202 3rd St

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Castana Community Church	101 4th Street
Lilly Jack Saloon	301 Ash Street
Timber Ridge Ranch and Winery & Vineyard	33453 153rd St (outside city limits)

Valuation of City Assets

A valuation of city assets was not provided. However, the city will conduct a thorough cost-benefit analysis including public and private facilities and properties as may be affected by the implementation of a given project.

b. Participation

A virtual mitigation planning meeting was facilitated by SIMPCO via Teams was held on February 25, 2025 with Castana City Clerk Cristy Nelson in attendance.

c. Community Capabilities

<i>Policies/Ordinance</i>	
• Drainage Ordinance • Nuisance Ordinance • Storm Water Ordinance	• Subdivision Ordinance • Tree Trimming Ordinance
<i>Programs</i>	
Codes Building Site/Design	
NFIP non-participant	CID #190462
ISO Fire Rating	Class 7
Planning/Zoning Boards	
Tree Trimming Program	Included in tree trimming ordinance
<i>Staff/Department</i>	
Emergency Response Team	Yes, Fire Department
<i>Non-Governmental Organizations</i>	
• American Legion Auxiliary • American Legion Post #507 (Grimsley-Thayer) • GFWC Iowa	• 76ers • Neighborly Pals • Thursday Club
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	

Capital Improvements funding via annual budget process	
Authority to levy taxes for a specific purpose	
Fees for water services	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

As corrective measures are pursued for the water systems, the city is mindful of other mitigative needs that may be included with this project and separately. Potential projects include but are not limited to the following.

- Generator/generator connections to maintain function of systems as well as communications through system technologies during power outages
- Wash out controls to stabilize gravel roadways
- Runoff controls and drainage
- Flash flood protections for new infrastructure as completed

A significant strength for the community is provision of bottled water through donations from area businesses of all sizes, showing immense local support.

Review of Actions Taken (Since 2019)

communication/education
tools/equipment
development
flow control
refuge
technology
natural barriers/supports

Stabilization	Castana	2020: Modify road overlay with "packable rock" or more stable substance to minimize washout episodes; City Maintenance (City funds, PDM) MEDIUM PRIORITY
Stabilization	Castana	Update. Carry over. Due to multi-faceted and severe funding constraints, action was not taken on this project. The city is interested in stabilizing the gravel roads throughout its hilly terrain to address proneness to wash out.

Castana completed an addition to the Fire Station at the cost of about \$25,000. Costs were covered by local fundraising efforts.

d. Risk Assessment

Contributing Factors

A review of the NOAA Storm Event database includes one reported incident specific to Castana. As it is centrally located, it can be expected that the city experienced the effects of all 16 Monona (Zone) events affecting the whole county.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
<u>CASTANA</u>	5/24/2024	1:46	Thunderstorm Wind	72 kts. MG	0	0	0.00K	0.00K

In addition to weather events, infrastructure failure is of significant concern. At the writing of this plan, Castana cannot be discussed without acknowledging the city's dire water situation. In addition to other contaminant concerns, extremely high presence of manganese is visible in collected tap water samples. The mineral concentration is high enough to prevent effective use through washing machines and other appliances, rendering the water not only unsafe to drink, but relatively useless. No Improvement to water quality occur through boiling. The city is tirelessly seeking funding for an overhaul of their water and water treatment systems. With bottled water necessary for all residents, many have likely sought alternate living arrangements, at least temporarily. The resulting vacancies and lack of response to the census and American Community Survey requests is likely the cause for disparate population and income estimates as provided earlier for discussion.

Priority Hazards

The City recognizes the following as priority hazard concerns for Castana.

- Infrastructure Failure
- Drought
- Thunderstorm w/Hail & Lightning

With persistent drought and water availability in Castana, Grass and Wildland Fires should be given due consideration as an overriding concern. Geographical location alone requires the consideration of Tornado/Windstorm as another significant concern.

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
development		
Improve existing facilities & infrastructure	Castana	New. Castana is actively pursuing funding to reconstruct its water systems as the water is currently unusable. Mineral content in water is so significant that it cannot be used even for laundry.
flow control		
refuge		
technology		
natural barriers/supports		
Stabilization	Castana	Carry over. Modify road overlay with "packable rock" or more stable substance to minimize washout episodes; <i>City Maintenance</i> (City funds, PDM) MEDIUM PRIORITY

Tree removal is not a prominent concern, however, activity will be addressed as needed for dead/diseased trees in the public right of way or parking.

3. MAPLETON

a. Profile

The city of Mapleton is located in the northeast corner of Monona County. State Highway 175 runs through the west / northwest portion of city limits, and acts as a part of the western boundary for the section town containing the airport. This section is bound by the Maple River to the east. This river then continues west of Mapleton. Schoenjahn Wildlife Preserve is located

along Maple River to the west. Heisler Creek is located north and west of Mapleton. More information can be found at the City of Mapleton's website at www.mapleton.com.

City Governance & Community Supports

Mapleton is governed by a five-person elected council and the mayor. Offices in addition to Mayor and Council include City Clerk, Public Works, Police, and Fire & Rescue. A Planning and Zoning Board also serves the City. Fire/rescue is provided by the Mapleton Fire Department, which is staffed by volunteers, and serves the surrounding area. The city hosts an ambulance service managed through Burgess. The city does have its own police department. Law enforcement services are supplemented by the Monona County Sheriff's Department.

Demographics, Housing, & Economics

CensusReporter.org provides a 2023 population estimate²⁹ of 997 for Mapleton, reflecting a decline from 1,161 residents in 2020. Local determination of population based on utility billing and known dynamics is closer to the 2020 census at 1185. The community includes 518 households, with a median household income of \$52,955, considerably low in comparison to the county and state averages. About 10.4% of the population lives below the poverty line, a clear indication of likely financial challenges.

Mapleton has an estimated total of 630 housing units, with 517 currently occupied and 113 vacant. Real estate marketplaces such as Zillow and Realtor.com indicate a15-16 homes for sale and www.apartmenthomeliving.com/mapleton-ia estimates 35 rentals available indicating a variation in actual vacancy as opposed to estimated. The housing stock includes a small number of mobile homes, with six units in total. Most residents have moved into their homes since 2000, while a smaller portion settled in during the 1990s or earlier. This suggests a relatively modern housing base, with a mix of newer and more established residences throughout the community.

²⁹ Source: <https://censusreporter.org/profiles/16000US1949170-mapleton-ia/>

Leading Employers

Mapleton has dozens of businesses, each employing a small staff. Leading employers in the city of Mapleton include:

- Maple Valley – Anthon Oto Community School District
- Maple Heights Nursing Home
- Monona County Iron
- NEW Coop
- The City of Mapleton

Critical Facilities

Town Hall, Police Dept, & Communications Bldg	513 Main St
Community Center	511 Main St
Fire Station	106 S 2nd St
Fire Bldg #2	48 Courtright
Ambulance, & Mntc Bldg	49 Maple St
Mapleton Public Library	609 Courtright St
City Garage	102 S 2nd St
Maintenance Bldg	109 Front St
City Shop	405 Heisler St.
City Garage/Storage	Maple St
Storage	39 Maple St
	321 Main St
	600 W Ring
Mapleton Pool & Related	551-599 Sioux St
Mapleton Park & Shelter House	Ring St & S. 7th St
Ball Field & Related	
Pocket Park	
Roadside Park	
Light Plant & Substation	103 S Front St
Sewer Plant & Related	IA-175 & W Ring St
Well Houses	Old Airport
	Willow Vale Golf Club

Water Tower	
Substation	8th & Ring Sts
Pump Station	
Water Treatment Plant	303 IA-175
Sirens	104 Maple
	Chamberlain St
Mapleton Muni Airport & Related	
Willow Vale Golf Club; Club House, & Related	300 Sioux St
Walking Trail	
Mapleton Cemetery	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Mapleton Elementary School	501 S 7th St
Maple Valley – Anthon Oto High School	
Burgess Family Clinic	513 S Muckey St
Medical Clinic	520 Main St
Maple Heights Nursing Home	2 Sunrise Ave
Post Office	106 S 5 th St
Whiting Woods (County Park)	14858 Peach Avenue (outside City Limits)
Heights Home Health Inc.	114 North 4th St, Ste C
Museum of American History	302 S 7th St
Numerous Churches	

Private businesses and organizations play an essential role in the City’s recovery efforts and communication network, and are therefore included in this itemizing of essential or critical facilities. The list is not exhaustive. Additional community churches and individuals, as well as those in nearby communities, work together to ensure communication and support in times of crisis.

Valuation of City Assets

An approximate overall valuation of city properties, facilities, and other holdings is \$20,261,840. This may not include all equipment and city vehicles. A precise accounting of value will be conducted for use in cost-benefit analysis as specific to a given project.

b. Participation

SIMPCO facilitated a mitigation planning meeting at Mapleton City Hall on February 5, 2025 with City Clerk Karla Uhl in attendance.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
2017 Mapleton Comprehensive Plan	
<i>Policies/Ordinance</i>	
• Building Code • Drainage Ordinance • Nuisance Ordinance • Storm Water Ordinance • Subdivision Ordinance • Tree Trimming Ordinance • Zoning Ordinance	
<i>Programs</i>	
Zoning/Land Use Restrictions	
Codes Building Site/Design	
National Flood Insurance Program (NFIP) Participant	CID #190208
ISO Fire Rating	Class 7/7X
Planning/Zoning Boards	
Tree Trimming Program	
<i>Staff/Department</i>	
• Building Code Official • Building Inspector • Public Works Official • Ambulance & EMS • Fire Department • Police Department	
<i>Non-Governmental Organizations</i>	
American Legion Post #496 (Loren Hollister)	
Mapleton Community Development Corps	
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, gas, and electric services	
Ability to incur debt through:	• general obligation bonds

- special tax bonds
- private activities

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
Generator & Related Projects	Mapleton	Correction to the 2020 Plan stating generator was added. Additional generators are needed to maintain function of critical facilities during disastrous and other extreme events. <i>City Administrator, Waterworks, County EMA</i> (City funds, community benefit funds, IDOT program funds, PDM funds) HIGH PRIORITY
		Update. Project not completed due to lack of dedicated funding. Transfer switches were installed at light plant, equipped to handle in-the-moment outages, primarily intended for short-term.
Equipment	Mapleton	2020: Lift station for water plant; <i>City Water Supt</i> (City funds, PDM) HIGH PRIORITY
		Update: Project has not been completed and carries over to the 2025 HMP.
development		
Improve existing facilities & infrastructure	Mapleton	2020: New motor needed to maintain operation of one of the municipal wells (Willow Vale unit) <i>City Water Dept., IDNR</i> (City funds, IDNR Clean Water/Drinking Water program funds) HIGH PRIORITY
		Complete. \$30,000 project has been completed.
Improve existing facilities & infrastructure	Mapleton	2020: Rebuild needed for lift station @ 8th & Ring; <i>City Water & Public Works Depts</i> (City funds, IDNR, PDM) HIGH PRIORITY
		Complete. Estimated project cost of \$50,000 – project has been completed.
flow control		
Drainage projects	Mapleton	2020: Wetlands designation within city limit; <i>project led by Mapleton Community Development Corps in collaboration with the Department of Agriculture and the DNR</i> (Limited expense anticipated) HIGH PRIORITY
		Project Closed. Project will not be implemented as cost of maintenance if enacted is not feasible.
refuge		
technology		
natural barriers/supports		

Other mitigation-focused projects not specified in the 2020 HMP as completed include the following.

- Dike improvements near the airport were implemented, replacing one section of the dike. The \$400,000 project was funded using the city's reserve of annual FAA (airport) funds. Hangars were added, as was a turnaround.
- The city has adopted IBC by reference with exceptions, consistent with state code practices.
- Drainage improvements were implemented as tied to storm water runoff damages incurred in 2024. The \$110,000 project was funded with Road Use tax dollars. In lieu of pavement repairs, the city added drain connections and new rocks.

d. Risk Assessment

Contributing Factors

General weather events are significantly impactful for Mapleton, especially rain and snow melt related accumulations that contribute to riverine flooding. Approximately one-third of the city is comprised of floodplain, covering its northwest cross-section. An assessment of the NOAA Storm Event database includes 3 reports specific to Mapleton and the Mapleton Municipal Airport.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
MAPLETON	5/8/2023	18:29	Hail	1.00 in.	0	0	0.00K	0.00K
MAPLETON MUNI ARPT	6/2/2020	20:45	Hail	1.00 in.	0	0	0.00K	0.00K
MAPLETON MUNI ARPT	5/19/2022	22:28	Hail	1.00 in.	0	0	0.00K	0.00K

Priority Hazards

The following have been identified as the hazards of priority concern for the City.

- Tornado / Windstorm

- Thunderstorm with Hail and Lightning
- Severe Winter Storm

Lingering effects of the 2011 EF-3 tornado and a lesser tornado in 2008 cause particular wariness for Mapleton’s residents.

e. Mitigation Needs, Actions, & Strategies

communication/education		
Warning Sirens	Mapleton	New. City is seeking to replace the motor on their aging warning siren located at the park. Maintenance on existing is increasingly cumbersome with lack of replacement parts and continuous repairs needed. Public Works, County EMA (PDM, public safety funds as may be available, community grants, local funds) HIGH PRIORITY
tools/equipment		
Generator & Related Projects	Mapleton	Carry over. Additional generators are needed to maintain function of critical facilities during disastrous and other extreme events. <i>City Administrator, Waterworks, County EMA</i> (City funds, community benefit funds, IDOT program funds, PDM funds) HIGH PRIORITY
Equipment	Mapleton	Carry over. Lift station for water plant; <i>City Water Supt</i> (City funds, PDM) HIGH PRIORITY
development		
Improve existing facilities & infrastructure	Mapleton	New. City is planning installation of Well House with motor at Golf Course. Budgeted for fall 2025 at an estimated cost of \$51,000. Public Works (Local funds, community benefits grants, other as may become available)
flow control		
refuge		
technology		
natural barriers/supports		

4. MOORHEAD

a. Profile

The city of Moorhead is located in south Woodbury County, just east of center. County Highway E54 and State Highway 183 intersect in the southern portion of Moorhead. Soldier River Cutoff

runs along the southeastern city boundary. Jordan Creek is located west of the City. Several miles to the southwest is Preparation Canyon State Park.

City Governance & Community Supports

Moorhead is governed by a five (5)-person elected City Council and a Mayor. Offices in addition to the Mayor and Council include City Clerk and Fire & Rescue. Fire & Rescue services are provided to the City and surrounding area by the Moorhead Volunteer Fire Department. Monona County provides law enforcement services, and a state patrol officer is located in Moorhead.

The City of Moorhead is a member of the NFIP Program. The Municipal Code of Ordinances was last updated in 2023.

Demographics, Housing, & Economics

In 2023, Moorhead’s population grew to 263, up from 199 in 2020, and the community includes 123 households. The median household income in Moorhead is \$35,935, significantly lower than the Monona County median of \$62,944, pointing to economic challenges for many residents. Vulnerable populations make up a notable portion of the community—children under the age of five account for a small segment, while a significant number of residents are 65 or older. About 16% of the population lives below the poverty line, and over one-fifth of residents live with a disability, both figures exceeding the county and state averages. These characteristics highlight the need for supportive services and resources tailored to the town’s diverse and aging population.

<i>Community Characteristics</i>	
Population (2023)	263
Population (2020)	199
Total Households	123
Median Household Income	\$35,935
Median Household Income – Monona County	\$62,944

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Monona</i>	<i>Iowa</i>

5 years and younger	5	7.6%	5.6%	5.7%
65 years and older	60	22.8%	23.8%	16.0%
Below the poverty level	159	16%	11.2%	11.3%
Living with a disability	45	21.3%	13.8%	18.5%

Moorhead has a total of 123 housing units, with 116 currently occupied and just 7 vacant, reflecting a high occupancy rate. The housing stock includes three mobile homes. The vast majority of homes in the community were built before 1970, with only a small number constructed between 1970 and 1999 or after 2000. This indicates that most of Moorhead's residential structures are older, suggesting a well-established housing base with limited recent development.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	123	-
Occupied	116	94%
Vacant	7	6%
Mobile Homes	3	3%
<i>Age of Residential Structure</i>		
Built 2000 or later	2	1.6%
Built 1970 – 1999	1	0.8%
Build 1969 or earlier	125	97.7%

Leading Employers

Hosting a handful of small businesses, Moorhead does not have any large-scale employers in town. However, some businesses are integral to community function and overall wellbeing. Some key businesses are provided for reference.

United Bank of Iowa	124 Oak St
Hauganseven	
Bud's Bar & Grill	114 Oak St

Critical Facilities

City Hall/Community Center/Library	100-102 Oak St.
Moorhead Fire & Rescue	110 Oak St.

Post Office	116 Oak St.
Office/Gift Shop	119 Oak St
Exhibition Hall	120 Oak St
Sewage Lift Station	1st St
Garage/Storage	212 1st St
Pump House	(Block 9)
Shelter House/Band Shell	(Block 21)
Ball Field & Related	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Consistent with previous planning practices, each of Moorhead's proposed Mitigation Actions and Strategies pursued for implementation in the next five (5) years will fully consider protections to privately held assets (facilities, personal property, property in the open) and to the residents therein. Furthermore, privately owned facilities that offer services and support during times of crisis may be specifically included in mitigation actions and/or strategies receiving municipal-funded support to maintain function and operation of those structures. Some facilities may host vulnerable populations (children, seniors, disable persons) and are therefore significant in mitigation planning. Recreation areas outside the City's jurisdiction and/or privately owned are included among hosts of vulnerable populations. Such entities as described may include the following.

Bethesda Lutheran Church	703 Pine St
Moorhead Christian Church	
<i>Outside City Limits</i>	
Savery Pond	33787 Plum Ave
Loess Hills Hideaway Cabins and Campground	33774 Plum Ave
Preparation Canyon State Park	340th St
State Patrol	31880 Prepreation

Private businesses and organizations, even when not leading employers, play an essential role in the City's recovery efforts and communication network, and may therefore be included in this itemizing of essential or critical facilities. The list is not exhaustive. Additional community

churches and individuals, as well as those in nearby communities, work together to ensure communication and support in times of crisis.

Valuation of City Assets

A current statement of valuation of city properties, assets, holdings has not been provided for this plan. The city will include valuations as appropriate per project should they pursue pre-disaster mitigation funds as means of defining base dollar amounts for cost-benefit analysis. Valuation for private commercial and residential properties will be included as appropriate for a given project.

b. Participation

A virtual planning meeting, facilitated by SIMPCO was held via MS Teams on November 4, 2024 with Barb Jensen, City Clerk in attendance.

c. Community Capabilities

<i>Policies/Ordinance</i>	
• Building Code and Unsafe Buildings Ordinance • Building Permit Ordinance • Nuisance Ordinance	• Residential Zoning Ordinance • Subdivision Ordinance • Trees Ordinance
<i>Programs</i>	
National Flood Insurance Program (NFIP) Participant	CID #190783
ISO Fire Rating	Class 7/7X
<i>Staff/Department</i>	
Fire Department	
<i>Non-Governmental Organizations</i>	
American Legion Post #365 (Peter A. Hansen)	
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, and electric services	
Ability to incur debt through:	• general obligation bonds

	• special tax bonds
	• private activities

Review of Actions Taken (Since 2019)

communication /education		
Warning Sirens	Moorhead	2020: Warning siren needs replacing. Existing prone to malfunction, in need of constant repair. Necessary in maximizing efforts to reduce repercussion from severe weather conditions. <i>City Council, County EMA</i>. (Local funds, County support funds, PDM, community benefit programs) HIGH PRIORITY Update. Project still under consideration, maintain in 2025 Plan.
Assessment/Study	Moorhead	Added by amendment. Still needed – Study needed to determine source/cause of sinkholes believed to be a delayed effect of extensive area flooding in 2019. City’s initial assessment revealed no visible effects of that year’s flood. By 2021, sinkholes appeared throughout town affecting roadways and sidewalks. It is expected that underwashing caused by high velocity runoff is the primary cause of the sinkholes, however a study is needed to confirm that. Included in the study is an review of solutions for implementation that would eliminate the cause and prevent recurrence. City public works, State Homeland Security and Emergency Management, County EMA, USDA, potentially IDNR, other state departments as may be appropriate. (FEMA BRIC/FMA technical assistance, USDA programs, local funds) HIGH PRIORITY. Update. Initial application was not funded (2023). City is carrying project into 2025 plan with the intent of continuing to pursue funds to determine feasible solution(s) to the sinkhole issue.
tools/equipment		
Generator & Related Projects	Moorhead	2020: Generators - city hall/community ctr that operates as command center as needed; Potential partnering with County to establish Command Center capacity in the event of an emergency; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY Update. No action has been taken on this project due to lack of funding availability. The project is still needed and therefore will be carried over to the 2025 HMP.
Equipment	Moorhead	Implemented. Fire Department assed UTV to improve access to wild fires and other emergency needs not accessible by roadway. Project was funded through grants and local fundraising efforts.
development		
flow control		
Drainage Projects	Moorhead	AMENDMENT. 8/2023 – City is seeking to better address stormwater runoff. Sinkholes have been appearing throughout town. A study is needed to confirm cause and viable options for correction and mitigation. Council approved the amendment to include a scoping

		project and implementation plan, and re-adopted the Regional Hazard Mitigation Plan as amended.
Drainage Projects	Moorhead	Update: Action not implemented but still needed.
refuge		
technology		
natural barriers/supports		

d. Risk Assessment

Included for consideration in the community risk assessment is local perception of available resources and infrastructure. For the most part, perceived issues have been legitimized through Council calls for action and regulatory notifications. Community response in the survey accounted for 3 as included in the 248 compiled results and an additional 3 full paper surveys turned in after the summary concluded. Respondents and the city council have expressed concern over capacity of fire/rescue services, increasing concern over sinkhole situation on streets and sidewalks, stormwater drainage (again along streets and sidewalks), and water systems repairs.

The city is assessing implementation of a DNR-EPA necessitated project to replace galvanized pipes (containing lead) throughout its water systems network. This project is anticipated to effectively incorporate other improvements such as road surface repairs, sidewalk repairs, and stormwater drainage as a byproduct of underground pipeline replacements. For areas not undergoing construction, like surface/drainage improvements will still be needed.

Contributing Factors

An assessment of NOAA records of Storm Events between 11/01/2019 and 12/31/2024 shows 3 events specific to Moorhead and its extended planning area, with an implied effect of 16 additional events recorded for the Monona (Zone) impacting the county as a whole. Localized occurrences are provided in the following table for reference. Additional detail can be found at <https://www.ncdc.noaa.gov/stormevents/>.

.	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
MOORHEAD	7/23/2022	19:33	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
PREPARATION	4/26/2024	16:05	Tornado	EFO	0	0	0.00K	0.00K

MOORHEAD	4/26/2024	16:17	Tornado	EFO	0	0	0.00K	0.00K

Priority Hazards

Identified local priority hazards are prioritized as follows, maintaining concerns from the 2020 plan and adding Sinkholes as current highest priority. Tornado and windstorm concerns are validated by the record of recent events in and around Moorhead and Monona County.

- Sinkholes
- Tornado/Windstorm
- Severe Winter Storm
- Thunderstorm w/Hail & Lightning

Extreme fluctuations between weather conditions from extreme cold to warm are continuing to perpetuate flash flooding issues and prolonged instances of standing water where none historically occurred. Heavy flooding in 2019 seems to have caused severe underwashing of the foundations beneath street and sidewalk infrastructure. This was unnoticed until sinkholes appeared throughout town at an alarming frequency beginning in 2020-2021. The city applied for a FEMA Project Scoping grant to confirm cause and develop a course of corrective and mitigative action. The project was not funded and remains an activity in the current project list.

e. Mitigation Needs, Actions, & Strategies

communication /education		
Warning Sirens	Moorhead	Carry over. City siren needs rewiring/electrical replacement. Fire Department interested in upgrade pending fundability. <i>City Council, Fire Department, County EMA.</i> (Local funds, BRIC as available if coordinated with additional projects) MEDIUM PRIORITY.
Assessment/Study	Moorhead	Carry over. – Study needed to determine source/cause of sinkholes. Included in the study is an review of solutions for implementation that would eliminate the cause and prevent recurrence. City public works, State Homeland Security and Emergency Management, County EMA, USDA, potentially IDNR, other state departments as may be appropriate. (FEMA BRIC/FMA technical assistance, USDA programs, local funds) HIGH PRIORITY.
tools/equipment		
Generator & Related Projects	Moorhead	Carry over. Generator for fire station/Community Center as this facility is designated for refuge/shelter and command center in the event of an emergency. <i>Public Works, City Council, County EMA (Local funds,</i>

		<i>County supports, State/Federal response funds, BRIC, Community Benefits funds</i>) HIGH PRIORITY
Generator & Related Projects	Moorhead	New. A DNR notification was received during routine inspection of the lagoon that the generator in place is antiquated and presumed unreliable necessitating urgent priority for replacement. Community goal is to move to attain necessary funding and implement project as soon as possible. <i>Public Works, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, BRIC, IDNR, Community Benefits funds) HIGH PRIORITY
Equipment	Moorhead	New. City interested in acquiring UTV for general multi-departmental city use to improve access and maneuverability ranging from clean-up to pest prevention, etc. <i>Multi-departmental involvement.</i> (City funds, Emergency Response funds as available, local foundation grants, fundraising) HIGH PRIORITY
development		
flow control		
Drainage Projects	Moorhead	Carry over. City is seeking options to improve stormwater drainage. Latent effects of 2019 floods resulted in underwashing of the city's sidewalks and streets, the presumed cause of sinkholes throughout town. The city did pursue a scoping grant through FEMA BRIC but was not awarded. A study to confirm/determine cause and development of an implementation plan is still needed. <i>Public Works</i> (Disaster Mitigation Funds as available Local Funds) HIGH PRIORITY
refuge		
technology		
Improve effectiveness	Moorhead	New. City is planning to increase awareness of Monona County's Alert Iowa system as effective means of communicating in-time weather events, as well as connected preparedness tools, as may be needed for residents. City Clerk, County EMA (No funds expected to be necessary beyond staff time) MEDIUM PRIORITY
natural barriers/supports		
Trees	Moorhead	New. City has removed dying/diseased trees from public rights of way as needed, but no schedule of removal or replacement is currently in place. City is interested in seeking funds to add trees back into parks, pending availability of funds, to serve as protection from extreme heat, soil stabilization/erosion control, and to serve as a wind barrier. <i>City administration</i> (City funds, IDNR programs, UPS Tree Grants and similar community reforestation funds, private funds) LOW PRIORITY

5. ONAWA

a. Profile

The city of Onawa is located in the center of the west half of Monona County. State Highway 175 runs east to west, bisecting the City and intersects with Interstate 29 just west of city limits. A few miles outside of town and west of the interstate is Lewis and Clark State Park, Middle

Decatur Bend State Wildlife Management Area, Blue Lake, and the Missouri River. East of the City is the Little Sioux River. More information about Onawa can be found on the city's website at www.onawa.com.

City Governance & Community Supports

The city of Onawa is governed by a six-person elected City Council and a Mayor. Offices in addition to Mayor and Council are include the following.

- City Clerk
- Economic Development
- Onawa Fire Department
- Onawa Police Department
- Onawa Public Library
- Parks & Recreation
- Public Works
- Utilities

Fire and rescue services are provided to the City and surrounding communities by the Onawa Fire Department, which is staffed by volunteers. The City is able to provide its own law enforcement. Ambulance service is a full-time, paid service that is provided by Burgess Health Center.

Demographics, Housing, & Economics

CensusReporter.org shows Onawa's population as estimated for 2023 at 2,862 – a slight decrease from the decennial census estimates in 2020. The city includes 1,267 households and has a median household income of \$54,659, which is below the Monona County median of \$62,944. Onawa has a relatively young population, with a higher share of children under five compared to both county and state averages. Nearly one in five residents is 65 or older, and a significant portion of the population—458 people—live below the poverty line, indicating ongoing economic challenges. Additionally, the same number of residents live with a disability, pointing to a need for accessible services and support within the community.

<i>Community Characteristics</i>	
Population (2023)	2,862
Population (2020)	2,906

Total Households	1,267
Median Household Income	\$54,659
Median Household Income – Monona County	\$62,944

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Monona</i>	<i>Iowa</i>
5 years and younger	224	7.8%	5.6%	5.7%
65 years and older	565	19.7%	23.8%	16.0%
Below the poverty level	458	16.1%	11.2%	11.3%
Living with a disability	458	16.4%	13.8%	18.5%

Onawa has a total of 1,369 housing units, with 1,273 currently occupied and 96 vacant. The community includes 14 mobile homes, making up a small portion of the housing stock. Most of the residential structures were built before 1970, reflecting an older housing base. A quarter of the homes were built between 1970 and 1999, while only a small number have been constructed since 2000. This mix indicates a predominantly established housing market with limited recent development.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	1,369	-
Occupied	1,273	93%
Vacant	96	7%
Mobile Homes	14	1%
<i>Age of Residential Structure</i>		
Built 2000 or later	83	5.6%
Built 1970 – 1999	374	25.4%
Build 1969 or earlier	1,018	69.0%

Leading Employers

There are dozens of businesses within Onawa that each employ small staff. Leading employers for the City include:

- AgriVision
- Bomgaars

- Burgess Health Center
- City of Onawa
- Crossroads of Western Iowa
- Elmwood Care Center
- Fiesta Brava
- Lewis Pharmacy
- McDonalds
- Monona County
- Subway
- Sunshine Foods
- T&R Truck Stop
- Taylor's Oil Company
- West Monona Community School District
- Westendorf Manufacturing Co.
- WIPCO Energy (& off-site Solar Field)

Critical Facilities

City Facilities

City Hall/Clerk's Office		914 Diamond St.
Streets/Cemetery Dept & Related		1519 6th St
Fire Station/City Sup't/Maintenance Bldg/Multi-use		1514 6th St
Onawa Fire Department		1025 9th St
Onawa Public Library		709 Iowa Ave
Water Treatment, Generator, Wells,& Related		900-904 8th St
Wastewater Treatment Plant, Main Lift Station & Related		1716 6th St
Sewer Lift Station		1229 8th St
Lift Stations	1200 1st St	142 Maple
	47 12th St	2300 S Blue Lake
22286 248th St	1111 28th St	2220 Iowa Ave
Sirens		20th & Pearl
		Iowa Ave & Diamond
Pump Houses & Equipment		8th & Jasper
		910 8th St
		916 8th St
Main Substation & Related		8th & Diamond
Electric Substation		12th & Emerald
		13th & Granite
		Between 3rd & 4th on Diamond
Water Tower		1720 Granite Pl (Hospital Grounds)
Electric Generation Station/Light Plant		1035 8th St

Storage Bldg	1503 10th St
Onawa Swimming Pools & related	200-227 12th St
Gaukel Park, Related Bldgs & Equip	14th & Gaukel Dr
• Blacksmith Museum • Church Museum • Depot Museum	• Firehouse Museum • Log Cabin • School House Museum
Monona County Veterans Memorial Museum	203 N 12th St
Onawa Community Center	320 10th St
Onawa Senior Citizen Center	1017 8th St
Ropes Park & Related Equip/Shelter	1400 2nd St & Maple
Liberty Park & Related Equip/Shelter	13th & Cameo
Generator Bldg	South end of 6th St
Community Theater	910 9th St
Dog Pound & Related	1700 6th St
Skate Park & Related Equip	12th St

County Facilities (housed in Onawa)

Courthouse	610 Iowa Ave
Law Enforcement Center	909 7th St
Monona County Arboretum & Conservation Center	318 E Iowa Ave
Monona County Fairgrounds & Campgrounds	1201-1323 Gaukel Dr
Monona County Historical Museum	47 12th St

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

West Monona Middle School	1314 15th St
West Monona High School	
Lark Elementary School	611 4th
Onawa Headstart Center	307 Jasper St
Burgess Memorial Hospital & Related Facilities/Services	1600 Diamond St
Crossroads of Western Iowa	301 10th St
Dialysis Clinic Inc.	1620 Diamond St Pl
Elmwood Care Center	190 North 15th Street
Elmwood PE, LLC	190 North 15th St
Family Medicine Clinic	1614 Diamond St

Frannie's Café	Main St
Decatur Bend (SW of Onawa)	Cherry Ave & 243rd St.
Kiwanis Museum Complex	203 N 12th St
On Ur Wa RV Campgrounds	22865 Filbert Ave
Onawa Country Club	1825 235th St
Churches:	
Faith Lutheran Church	316 15th St
First Christian Church	722 15th St
St John's Catholic Church	1009 13th St
Seventh Day Adventist Church	14th Street
Evangelical Free Church	12th street
Community Christ Church	11th Street
Onawa United Methodist Church	1103 13th Street
Kingdom Hall of Jehovah's Witnesses	1006 Lucas Street
United Pentecostal Church	406 Iowa Avenue

The city is mindful of its senior housing and low-income apartment complexes whose residents

Valuation of City Assets

A current valuation of assets has not been provided for this plan. For the purpose of cost-benefit considerations, a valuation of the City's assets will be compiled based on its insured properties, personal property, and facilities, as applicable to a given project. At such time, values will also include private properties, equipment, or non-city funded investments that may contribute to project determinations or as may be affected by the project.

b. Participation

An on-site mitigation planning meeting was facilitated by SIMPCO at the Onawa Council Chambers on February 14, 2025. The following were in attendance.

- Lonnie Campbell, Mayor
- Bryan Savery, Director – Public Works
- Melissa Beerman, Director – Economic Development/Parks & Rec
- Ashley Hausman, Administrative Assistant

Additional input was collected via survey and is included for discussion. Of the 18 surveys submitted for Monona County, 10 indicated jurisdiction of residence as Onawa.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	Capital Improvement Plan
<i>Policies/Ordinances</i>	
City Code of Ordinances including: • Drainage Ordinance • Floodplain Ordinance • Historic Preservation Ordinance • Nuisance Ordinance • Storm Water Ordinance • Subdivision Ordinance • Tree Trimming Ordinance	
Zoning Ordinance	Building Code
<i>Programs</i>	
Codes Building Site/Design	NFIP Participant: CID #190463
ISO Fire Rating: Class 4/4Y, eff. 9/1/2014	Tree Trimming Program
Planning/Zoning Board	Zoning/Land Use Restrictions
<i>Staff/Department</i>	
Building Code Official (Permit review)	Public Works Official
Building Inspector (State officer)	
Emergency Response	Onawa FD
	EMS
	Burgess Ambulance
	County Sheriff's Dept (contracted)
<i>Non-Governmental Organizations</i>	
American Legion Post #129 (David McNeill)	
Chamber of Commerce	
Kiwanis	
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
TIF funding allocations as appropriated	
Authority to levy taxes for a specific purpose	

Fees for water, sewer, & electric services		
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities	

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
Generator & Related Projects	Onawa	2020: Additional generators; <i>City Administrator, Waterworks, County EMA</i> (City funds, community benefit funds, IDOT program funds, PDM funds) HIGH PRIORITY Update: Some generator work has been completed, replacing generators at 3 sites (Fire Station, Electric Building, and Waterworks) and one new generator installed at Sewer Plant. A generator is also onsite at the hospital. The community center is still in need of a generator. This will be carried over to the 2025 HM project list.
Equipment	Onawa	2020: Snow removal equipment; <i>City Streets Dept</i> (City funds, transportation funds) LOW PRIORITY In progress. A newer plow truck is added to the budget for 2026.
Equipment	Onawa	2020: Pump with greater than 6" capacity – function @ 1,000 gallon per minute; <i>City Administrator</i> (City funds, PDM) HIGH PRIORITY
		Update. Action not taken. Portable pump is still needed and carries over to the 2025 HMP with modified priority level.
Equipment	Onawa	2020: Boat; <i>City Administrator, Fire Chief collaboration</i> (City Funds, Response support funds, PDM) LOW PRIORITY
Equipment	Onawa	Project closed. Action not taken. FD has not indicated dire need for new rescue boat Project removed from priority list.
development		
Bridges & Roads	Onawa	2020: Resurfacing projects that will address drainage issues and minimize the effects of inclement weather-caused deterioration. <i>City Streets Dept, collaborate with County Roads</i> (City funds, Community Benefit funds, Transportation funds) HIGH PRIORITY
		Update. No resurfacing projects have been completed. Patchwork is implemented as needed. Current projects anticipated at \$50,000 are set to begin in 2025. Full resurfacing is still needed and carries into the 2025 HMP.
Policy	Onawa	2020: Review/revision of subdivision regulations to address runoff concerns resulting from displacement; <i>City Council, Zoning Commission, City Attorney</i> (Local funds) MEDIUM PRIORITY

		Update. No action taken on this item. Needs have been clarified, necessitating the inclusion of water diversion in plans. Formalizing discussed recommendations to subdivision plans is carried over to the 2025 HMP, with elevated priority.
flow control		
refuge		
technology		
natural barriers/ supports		

Onawa added a generator to the Electric Shop, a \$17,000 project financed through local funds. A comprehensive Plan is in progress, with adoption anticipated prior to Fall 2025. Onawa has spent about \$10,000 per year mitigating dead/diseased trees. It is not at present a pressing issue.

By [Kathryn Vlaanderen](#)
Published: Mar. 1, 2024 at 2:38 PM CST







UPDATE:

ONAWA, IA (KTIV) - According to the Iowa State Patrol, James M. Ball was heading east on Emerald Avenue in an SUV when he stopped and failed to yield the right of way for an inbound train. The train then struck the passenger side of the vehicle where it then ended up in a ditch.

Ball was taken to MercyOne Medical Center in Sioux City for treatment.

<https://www.ktiv.com/2024/03/01/car-vs-train-collision-onawa-iowa/>
June 10, 2025

d. Risk Assessment

Contributing Factors

An assessment of the NOAA Storm Event database provided two reports specific to Onawa and 41 attributed to the county overall.

Location	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
ONAWA	7/9/2021	0:09	Hail	1.50 in.	0	0	0.00K	0.00K
ONAWA	6/12/2024	18:31	Hail	3.50 in.	0	0	0.00K	0.00K

Priority Hazards

- Flooding
- Tornado / Windstorm
- Thunderstorm with Hail & Lightning

Drought, Extreme Heat, and Severe Winter Weather were included in the discussion. Survey respondents indicated Drought with the highest frequency of Very Concerned, followed by Infrastructure Failure and Tornado/Windstorm. When asked to indicate top three concerns, respondents chose Drought (6/10), Tornado/Windstorm (4/10), and Thunderstorm with Hail and Lightning (3/10).

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Onawa	Carry over. Generators needed for Community Center and Nursing Home. <i>City Administrator, Waterworks, County EMA</i> (City – general fund, community benefit funds, IDOT program funds, PDM funds) HIGH PRIORITY
Equipment	Onawa	Carry over. Additional equipment is still needed. Snow removal equipment; <i>City Streets Dept</i> (City funds, transportation funds) LOW PRIORITY
Equipment	Onawa	Carry over. Portable pump with greater than 6" capacity – function @ 1,000 gallon per minute; <i>City Administrator, Public Works</i> , potential for county collaboration (City funds, PDM) LOW PRIORITY
Safety/Security Equipment	Onawa	New. City is considering installing cameras in city buildings and parks. Recent bids estimate project cost at \$20,000+. Cameras would contribute to monitoring conditions in and potentially contributing to emergency situations. <i>City administrator, Parks Dept., Response teams</i> (City funds, community benefits, public safety grants as may be available) HIGH PRIORITY
development		
Improve existing facilities & infrastructure	Onawa	New. Water Treatment Plant is planned. Estimated at \$17M, the new plant. <i>Public Works, USDA, IDNR</i> (Local funds, Bonds, Grants TBD) HIGH PRIORITY
Improve existing facilities & infrastructure	Onawa	New. Updates to the Electrical Substation are in discussion. Repair costs are currently at \$100,000 mark. Project would include assessment of options including but not limited to replacement and/or repair of various components. <i>City council, Public Works</i> (local funds, others to be determined pending project scope) HIGH PRIORITY

Bridges & Roads	Onawa	Carry over. Resurfacing projects that will address drainage issues and minimize the effects of inclement weather-caused deterioration. <i>City Streets Dept, collaborate with County Roads</i> (City funds, Community Benefit funds, Transportation funds, Disaster funds as may apply, PDM as applicable) HIGH PRIORITY
Policy	Onawa	Carry over. Review and formal revision of subdivision regulations to address runoff concerns resulting from displacement. <i>City Council, Zoning Commission, City Attorney</i> (Local funds) HIGH PRIORITY
flow control		
refuge		
technology		
natural barriers/supports		

Other actions in consideration over the next five years include but are not limited to the following.

- Consideration of annexation potential to align with bike trail connections/expansion opportunities.
- Provide support for projects as may be brought forward by County Sheriff's department to enhance/improve contracted services capacity for participating communities.

6. RODNEY

a. Profile

The city of Rodney is located near the center of Monona County's northern border. County Highway L12 runs from the southwest to the northeast of the City, with most commercial and residential structures located southeast of the highway. Just outside city limits to the southeast is the Rodney Pits Recreation Area. Southeast of that is the Little Sioux River.

City Governance & Community Supports

Rodney is governed by a Mayor, City Council, and City Clerk. The city does not have its own fire, police, or ambulance services, and must rely on nearby communities and related contracted services. The City is a member of the NFIP program.

Demographics, Housing, & Economics

CensusReporter.org estimates Rodney's population at 48 in 2023³⁰, showing a slight increase from 45 residents in 2020. The town includes 29 households, with a median household income of \$52,188—lower than the Monona County median of \$62,944. While Rodney does not currently have any residents under the age of five, about one-fifth of the population is 65 or older. The town has a very low poverty rate, with just one resident living below the poverty line. However, a significant portion of the community lives with a disability, suggesting a need for accessible services and support within this small population.

<i>Community Characteristics</i>	
Population (2023)	48
Population (2020)	45
Total Households	29
Median Household Income	\$52,188
Median Household Income – Monona County	\$62,944

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Monona</i>	<i>Iowa</i>
5 years and younger	0	0.0%	5.6%	5.7%
65 years and older	10	21%	23.8%	16.0%
Below the poverty level	1	2.1%	11.2%	11.3%
Living with a disability	15	30.0%	13.8%	18.5%

Rodney has a total of 21 housing units, all of which are currently occupied, leaving no vacant homes in the community. Mobile homes make up a notable portion of the housing stock, with seven in total. The majority of homes were built before 1970, while a smaller number were constructed between 1970 and 1999, and a few have been built since 2000. This mix of older and more recent construction reflects a small but stable housing environment with a high occupancy rate.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>

³⁰ Source: <https://censusreporter.org/profiles/16000US1968385-rodney-ia/>

Total Housing Units	21	
Occupied	29	100.0%
Vacant	0	0.0%
Mobile Homes	7	33%
<i>Age of Residential Structure</i>		
Built 2000 or later	4	13.8%
Built 1970 – 1999	10	34.5%
Build 1969 or earlier	15	51.7%

Local record based on utility billings shows 28 homes/businesses. There are five occupied mobile homes at present. More demographic and community data can be found on the US Census Bureau data site for Rodney.

Leading Employers

Most residents work outside of Rodney. However, the local grain elevator (Koster Grain), Hamann Trucking, and Hamann & Sons are prominent businesses operating in Rodney.

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

The nature of Rodney as a community necessitates an overlap of public and private entities serving as critical community facilities and gathering places.

The City Garage, City Park, and Community Center are the only listed assets as provided by city representatives in the compilation of this plan.

In addition to City-owned properties, facilities and personal property, each of Rodney's proposed Mitigation Actions and Strategies pursued/considered for implementation in the next five (5) years will take into account protections to privately owned assets and to the residents therein. Furthermore, privately owned facilities that offer services and support during times of crisis may be specifically included in mitigation actions and/or strategies receiving municipal-funded support to maintain function and operation those structures. Those entities are as follows.

- The United Church of Christ (County Highway L12 and Oak Avenue) and
- County-maintained Rodney Recreational Pit area, which falls outside city limits but still within the general scope of concern for the City.

Private businesses and organizations play an essential role in the City’s recovery efforts and communication network. As such, they categorized as essential or critical facilities. The list above is not exhaustive. Additional community churches and individuals, as well as those in nearby communities, work together to ensure communication and support in times of crisis.

Valuation of City Assets

A valuation of city holdings is not readily available. A summary of values will accompany the cost-benefit analysis for proposed projects including city and private properties as may be impacted by project implementation(s).

b. Participation

A planning meeting facilitated by SIMPCO was held in Rodney’s community center on October 10, 2024 with Mayor Shawn Hamann and City Clerk Marilyn Hamann in attendance. One survey was returned indicating Rodney as jurisdiction of residence.

c. Community Capabilities

The City of Rodney is historically a small community. Recent census totals show a decrease in population of about 25%, further reducing its already negligible operating budget. Fiscal constraints prohibit opportunity to invest in maintenance and other improvements, minimizing loan availability and therefore capacity for local match. Making do with its resources, the City does have the following in place to supplement resources as available within the county and region.

<i>Policies/Ordinance</i>
• Nuisance Ordinance
<i>Programs</i>

National Flood Insurance Program (NFIP) Participant	190921B
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, and electric services	

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
development		
Bridges & Roads	Rodney	Moved to Drainage Projects section under “Flow Control” 2020: Interest in roadway drainage improvements; <i>City Council</i> (City funds, transportation funds, Community Benefit funds) LOW PRIORITY
flow control		
Drainage Projects	Rodney	Pulled from “Bridges & Roads” category.
		2020: Interest in roadway drainage improvements; <i>City Council</i> (City funds, transportation funds, Community Benefit funds) LOW PRIORITY
		Update: Some work has been done on 1st, 2nd, 3rd, and Main Streets.
refuge		
technology		
Improve effectiveness	Rodney	2020: Promote available weather alert subscription services such as Alert Iowa and storm-spotter training as available. <i>City Clerk</i> (no cost anticipated) HIGH PRIORITY
		Update: No action specific was taken to on this project, however staff would like to revisit available opportunities and share with residents
Improve effectiveness	Rodney	2020: Improved communication w/County re: warning siren test schedule; <i>City administration, County EMA</i> (no cost anticipated) HIGH PRIORITY
Improve effectiveness	Rodney	Implemented. Siren was fixed in 2021 and testing is uniformly conducted on a routine schedule.
natural barriers/supports		
Trees	Rodney	2020: Funding support to sustain/improve tree population; <i>City administration</i> (City funds, IDNR programs, UPS Tree Grants and similar

		community reforestation funds, private funds) LOW PRIORITY
		Update: No action has been taken due to lack of available funds (including local match). Community will continue to seek funding opportunities to re-substantiate its tree population.

d. Risk Assessment

Contributing Factors

The annual budget is supplemented by donations and community grant requests for even minimum maintenance of city facilities and properties. Low/no cost options are ones the City is able to entertain at present. Because routine maintenance is not always in the budget, small issues— such as potholes or cracks in the road, escalate and/or compound other concerns.

Rodney city limits do not include floodplain so flooding concerns are directly related to periods of heavy rain and resulting runoff, especially when ground is frozen or already saturated. Consequently, road deterioration is accelerating. Road repair projects are needed but not currently realistic due to budget constraints.

Following are some considerations carried over from the previous plan affecting the community's resilience.

- City representatives would like to establish a clear line of communication with the County regarding its warning siren test schedule. Sporadic testing reduces effectiveness of alerts during an actual weather event.
- The City would benefit from resident participation in storm-spotter training to improve local awareness measures.

The National Weather Service warned this is life threatening for the communities of Smithland and Rodney.

The Monona County Sheriff's Office reported the town of Rodney was evacuated as of 7:30 a.m. Town roads are closed off to the public. The sheriff's office urges people avoid the area for their safety.

Water also broke through the levee near the town of Ticonic, according to the sheriff's office.

www.ketv.com/article/levee-failure-in-northwest-iowa-causes-life-threatening-flash-flooding

by Amsley Benes, KETV Omaha. Updated: 12:22 PM CDT Jun 25, 2024. (June 9, 2025)

An assessment of NOAA Storm Events as recorded includes one event specific to Rodney between 11/01/2019 and 12/31/2024 (source: <https://www.ncdc.noaa.gov/stormevents/>; see following table). Also for consideration are 16 Monona “Zone” events as impactful county-wide. Most larger scale events are related to severe winter weather conditions. Two were categorized as excessive heat and one was high wind.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
<u>RODNEY</u>	6/25/2024	3:56	Flash Flood		0	0	100.00K	100.00K

Priority Hazards

One survey of 18 received for Monona County indicated Rodney as residence. Indications in that survey as well as discussion with city representatives find the following to be priority hazards.

Cost-related concerns

- Flash Flood
- Severe Winter Weather

Other conditions posing threat to the community

- Drought
- Grass and Wildland Fire
- Tornado/Windstorm

e. Mitigation Needs, Actions, & Strategies

Again citing fiscal constraints, projects identified for Rodney are primarily no- or low-cost options, or are expected to be eligible for grant funding where applicable. Without immediately viable funding sources, most projects are identified as low priority.

communication/education		
tools/equipment		
development		
flow control		
Drainage Projects	Rodney	Carry over. Remaining streets throughout town still need work to improve drainage and drainage paths. Project is carried to 2025 HMP. <i>City Council</i> (City funds, transportation funds, Community Benefit funds) LOW PRIORITY
refuge		
technology		
Improve effectiveness	Rodney	Carry over. Promote available weather alert subscription services such as Alert Iowa and storm-spotter training as available. <i>City Clerk, Council, County EMA</i> (no cost anticipated) HIGH PRIORITY
natural barriers/supports		
Trees	Rodney	Carry over. Funding support to sustain/improve tree population. <i>City administration</i> (City funds, IDNR programs, UPS Tree Grants and similar community reforestation funds, private funds) LOW PRIORITY

7. SOLDIER

a. Profile

The city of Soldier is located near the center of the southeast quarter of Monona County. State Highways 37 and 183 intersect just south of the center of city limits; most commercial and residential structures are located northwest of this intersection. The city is situated west of the Soldier River cutoff. Oldham Recreation Area is a few miles north of Soldier.

City Governance & Community Supports

Soldier is governed by a five-person elected City Council and a Mayor. Offices in addition to the Mayor and Council include City Clerk and Public Works. The city does not have a police department and relies on the County Sheriff's office to provide law enforcement services. Fire services are provided by the Soldier Fire Department, which is staffed by volunteers. Ambulance services to Soldier are provided through Moorhead's Volunteer Ambulance Service.

Demographics, Housing, & Economics

CensusReporter.org estimates for 2023³¹ show Soldier's population at 123, a relatively significant decline from 184 residents as noted in the 2020 decennial census. The community is home to 65 households, with a median household income of \$49,375, which is lower than the Monona County median of \$62,944. A notable portion of Soldier's population is 65 or older, making up 33% of the community, well above both the county and state averages. The town also has a relatively low number of young children, with only 1.6% of residents aged five or younger. The poverty rate in Soldier is higher than the county and state averages, with 18.7% of residents living below the poverty line. Additionally, about 13.2% of the population lives with a disability, reflecting a need for accessible services and support for vulnerable groups within the community.

<i>Community Characteristics</i>	
Population (2023)	123
Population (2020)	184
Total Households	65

³¹ Source: <https://censusreporter.org/profiles/16000US1973785-soldier-ia/>

Median Household Income	\$49,375
Median Household Income – Monona County	\$62,944

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Monona</i>	<i>Iowa</i>
5 years and younger	2	1.6%	5.6%	5.7%
65 years and older	41	33%	23.8%	16.0%
Below the poverty level	22	18.7%	11.2%	11.3%
Living with a disability	29	13.2%	13.8%	18.5%

Soldier has a total of 77 housing units, with 65 currently occupied and 12 vacant, resulting in an occupancy rate of 84%. The community does not have any mobile homes within its housing stock. The majority of homes were built before 1970, with a smaller number constructed between 1970 and 1999. There are no residential structures built since 2000, reflecting an older housing market with limited recent development.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	77	-
Occupied	65	84%
Vacant	12	16%
Mobile Homes	0	0
<i>Age of Residential Structure</i>		
Built 2000 or later	0	0.0%
Built 1970 – 1999	30	24.6%
Build 1969 or earlier	92	75.4%

Leading Employers

- Community Bank
- Soldier Speedy Shop
- Cogdill's Grain Elevator
- Monona Co Secondary Roads Shed

Critical Facilities

City Hall/Library	108 Oak St,
Fire Department	210 IA-37
City Park (picnic shelter, playground)	200 block of Elm St
Campgrounds	
Community Building	113 1st St
Water Tower	Main St
Water Treatment (3 lagoons)	East of Co Shed
	SE Corner of Town
City Well	
Veteran's Memorial	

The city updated the playground equipment at the park and added mulch. Project was completed using local funds, a Gilchrist grant, and fundraising. The vendor offered a discount as an in-kind contribution. Equipment as added was chosen with weather extremes in mind, providing safe structures that include shade and promote physical activity for local families.

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Each of Soldier's proposed Mitigation Actions and Strategies pursued for implementation in the next five (5) years will fully consider protections to privately held assets (facilities, personal property, property in the open) and to the residents therein. Furthermore, privately owned facilities that offer services and support during times of crisis may be specifically included in mitigation actions and/or strategies receiving municipal-funded support to maintain function and operation of those structures. Some facilities may host vulnerable populations (children, seniors, disable persons) and are therefore significant in mitigation planning. Recreation areas outside the City's jurisdiction and/or privately owned are included among hosts of vulnerable populations. Such entities as described may include the following.

Midway Tavern	206 1st St
Sheri's Book Treasures	208 1st St
Soldier Lutheran Church	223 Lark Street

Low Income housing (12 units)	1st St

Private businesses and organizations play an essential role in the city's recovery efforts and communication network, and are therefore included in this itemizing of essential or critical facilities. The list is not exhaustive. Additional community churches and individuals, as well as those in nearby communities, work together to ensure communication and support in times of crisis.

Valuation of City Assets

Building	\$	1,498,182
Personal Property	\$	93,996
Property in the Open	\$	<u>285,511</u>
Total	\$	<u>1,877,689</u>

b. Participation

Facilitated by SIMPCO, a mitigation planning meeting was held on site at Soldier City Hall on February 19, 2025 with Melanie Mc Andrews, City Clerk in attendance.

c. Community Capabilities

<i>Policies/Ordinance</i>	
- Nuisance Ordinance - Storm Water Ordinance - Subdivision Ordinance	- Tree Trimming Ordinance - Zoning Ordinance
<i>Programs</i>	
NFIP Participant	CID #190805
ISO Fire Rating	Class 07
Tree Trimming Program	As outlined in Trees Ordinance
<i>Staff/Department</i>	
Emergency Response Team	Volunteer Fire Department
<i>Non-Governmental Organizations</i>	

American Legion Post #462 (Soldier Valley)	
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water and sewer services	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

At the time of Soldier's mitigation planning meeting, their municipal code update was in progress with completion planned by Summer 2025.

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
development		
Improve existing facilities & infrastructure	Soldier	2020: Improve waterworks-related infrastructure to better sustain extreme weather conditions and extremes in temperatures resulting in damages from frost and heave activity. Specific attention to water tower and waterlines throughout City. <i>City Council, City maintenance/waterworks.</i> (Local funds, CDBG funds, approved loan opportunities) HIGH PRIORITY
Improve existing facilities & infrastructure	Soldier	In progress - The city has completed phase I of its \$3.2M water tower replacement project, with expectation of going live fall 2025. Remaining aspects are carried into 2025 plan.
Bridges & Roads	Soldier	2020: Road construction improvements needed to address buckling and weather-related deterioration. Specifically needed on road serving access to Ute. Additional throughout City. <i>City Council, Streets department, collaboration with County Roads dept & City of Ute as applicable.</i> (Local funds, transportation funds, approved bonding and local programs) HIGH PRIORITY
Bridges & Roads	Soldier	Update. Phase I of the project has been completed. Scheduled improvements will continue through Spring and Fall on a rotating basis through 2030. Process will start over with overlay. At this time, this project will be removed from the priority list with mitigative actions met. The city may amend project back in if underwashing and runoff become prohibitive to routine maintenance, requiring more developed remediation.

flow control
refuge
technology
natural barriers/supports

The city completed well reconstruction with an added flood barrier. There are not immediate washout/underwashing concerns for the city. Soldier replaced 3 fire hydrants using COVID funds at the approximate cost of \$5000 each. They also looped the water system, improving circulation. This activity may have improved Soldier's ISO fire rating but the numbers were not readily available.

Soldier has conducted removal of dead/diseased trees on an annual basis. Every other year, the city applies with Trees Please program to support re-treeing efforts.

d. Risk Assessment

Contributing Factors

A review of the NOAA Storm Event database for 11/01/2019 through 12/31/2024 provides two reports specific to Soldier.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
SOLDIER	7/11/2022	2:15	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
SOLDIER	4/26/2024	16:23	Tornado	EF1	0	0	0.00K	0.00K

With Soldier River running along the eastern and southern boundaries of the city, Soldier is fortunate to have a hilly topography, protecting its critical facilities from potential flood damage for many types of events. On the other hand, the terrain does, unfortunately contribute to runoff-related issues affecting drainage needs and maintenance.

Priority Hazards

- Tornado/Windstorm
- Thunderstorm w/Hail & Lightning

- Sever Winter Storm

Discussion included drought concerns as well.

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Soldier	New. City is interested in having dedicated generator for critical facilities. City Council, Public Works (Local funds, PDM as available, community benefit grants, public safety funds as may be available) HIGH PRIORITY.
development		
Improve existing facilities & infrastructure	Soldier	Carry over. Completion of waterworks-related infrastructure improvements are in progress, allowing infrastructure to better sustain extreme weather conditions and extremes in temperatures that would otherwise result in damages from frost and heave activity. Specific attention to water tower and waterlines throughout City. Project is in progress - The city with phase I of its \$3.2M water tower replacement project completed. Expectation of going live fall 2025. Related and closing tasks carry over. <i>City Council, City maintenance/waterworks.</i> (Local funds, CDBG funds, approved loan opportunities) HIGH PRIORITY.
Improve existing facilities & infrastructure	Soldier	New. The city is seeking upgrade opportunities for its lagoon system and related lines. Established in the 1970s, it has been 32 years since the last discharge. They've undergone a preliminary engineering report and televised lines. 3-cell lagoon but only one has been used. Looking at using all 3 for treatment / discharge. <i>Public works, DNR</i> (CDBG, USDA RD, local funds) HIGH PRIORITY
Improve existing facilities & infrastructure	Soldier	New. Updated meters for the city's waterworks are warranted as means of improving monitoring and determining leakage or other flow problems, maintenance needs. Cost estimated at \$1.5M. <i>Public works, IDNR as may be applicable</i> (local funds, go bonds, CDBG, USDA as available) HIGH PRIORITY
Improve existing facilities & infrastructure	Soldier	New. City is planning to put in a new pump house. <i>Public works</i> (USDA, IDNR as applicable, local funds) HIGH PRIORITY
flow control		
refuge		
technology		
natural barriers/supports		

8. TURIN

Note: The city participated in the development of the Regional Hazard Mitigation Plan, however, they have not included any specified mitigation actions, strategies, or projects. Therefore, the City of Turin is not recognized as an active “Participant” in the Plan. To activate participant status, the city must process an amendment at the local level and file said amendment with Monona County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

The City of Turin is located near the center of Monona County. The majority of the City is located north of IA-175. East of city limits, this highway intersects with highway IA-37. Turin is situated between the Little Sioux River to the west and the Maple River to the east. Davis Wetland and Turin Preserve are located north of city limits.

City Governance & Community Supports

Turin is governed by a Mayor, City Council, and City Clerk. The city does not have its own fire, police, or ambulance services, and must rely on nearby communities.

Demographics, Housing, & Economics

Using the Census Reporter at <https://censusreporter.org/>, Turin recorded a population of 68 in 2023, a slight decrease from 72 residents in 2020. The town has 55 households, and its median household income is \$91,602, significantly higher than the Monona County median of \$62,944. Turin has a small percentage of young children, with only one resident aged five or younger. A quarter of the population is 65 or older, which is slightly above the county's average. Notably, none of the residents live below the poverty line, and only a small portion—4.1%—live with a disability, which is lower than both the county and state averages. This suggests that Turin has a relatively stable and prosperous population, with fewer vulnerable groups compared to surrounding areas.

<i>Community Characteristics</i>	
Population (2023)	68
Population (2020)	72
Total Households	55
Median Household Income	\$91,602
Median Household Income – Monona County	\$62,944

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Monona</i>	<i>Iowa</i>
5 years and younger	1	.8%	5.6%	5.7%
65 years and older	16	25.0%	23.8%	16.0%
Below the poverty level	0	0%	11.2%	11.3%
Living with a disability	5	4.1%	13.8%	18.5%

Turin has a total of 55 housing units, all of which are currently occupied, with no vacant homes in the community. There are no mobile homes in the area. The majority of the residential structures were built before 1970, reflecting an older housing base. A small number of homes were constructed between 1970 and 1999, and a few homes were built after 2000, indicating a predominately established housing market with limited recent development.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	55	
Occupied	55	100.0%
Vacant	0	0.0%
Mobile Homes	0	0.0%

<i>Age of Residential Structure</i>	<i>Count</i>	<i>Percent</i>
Built 2000 or later	23	5.9%
Built 1970 – 1999	2	5.9%
Build 1969 or earlier	30	88.2%

More demographic and community data can be found on the U.S. Census webpage for Turin (source: <https://data.census.gov/>).

Leading Employers

There are no large-scale employers within the City of Turin. Although a couple businesses employ a small staff, most employed residents work outside of town.

- Second Turin
- New Co-op

Critical Facilities

Community Building	115 Wolfe St
City Park	
City Well	
Maintenance Shed, Mower storage (shared property w/County)	
Well & Pump Station	btw IA-175 & Elm

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Private businesses and organizations play an essential role in the City's recovery efforts and communication network and may be categorized as essential or critical facilities. The following list is not exhaustive. Additional community churches and individuals, as well as those in nearby communities, work together to ensure communication and support in times of crisis.

- Turin United Methodist Church, 219 Wolfe Street

Valuation of City Assets

A comprehensive valuation of city assets has not been provided. Should Turin pursue any mitigation projects identified herein, the project preparation (and application if needed) will include a relative cost-benefit analysis incorporating affected city assets as well as private properties within the area of potential impact.

b. Participation

Facilitated by SIMPCO, an onsite planning meeting was held at Turin City Hall December 11, 2024 with Cinda Orr, City Clerk and Tony Orr, Councilmember in attendance. A Voluntary Participation Agreement, signed by Turin Mayor David Poole, 12/11/2024, is on file.

c. Community Capabilities

In addition to county, region, and state resources, Turin has implemented local supports to enable community resiliency.

<i>Policies/Ordinance – 2010</i>	
• Building Code	• Nuisance Ordinance
• Floodplain Ordinance	• Tree Trimming Ordinance
<i>Programs</i>	
NFIP Participant	CID #190951
<i>Staff/Department</i>	
Fire & Rescue	Coordinated services through Castana; Onawa
EMS	Coordinated services through Onawa Ambulance; Mapleton Ambulance
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Ability to incur debt through	• general obligation bonds
	• special tax bonds
	• private activities

Review of Actions Taken (Since 2019)

communication /education		
Warning Sirens	Turin	2020: City needs to install 2 nd warning siren to increase alert capacity during severe weather conditions. <i>City Council, County EMA.</i> (Local funds, County supports, PDM) HIGH PRIORITY
Warning Sirens	Turin	Completed. Second warning siren was added to increase awareness of pending severe weather. Hill served as barrier to single siren effectiveness for all residents.
tools/equipment		
development		

flow control
refuge
technology
natural barriers/ supports

d. Risk Assessment

Contributing Factors

A second warning siren was added to the area better serving the other side of town where hilly terrain reduced the effect of a single siren. Among activities completed by Turin in recent years, some dead and diseased trees have been removed from public rights of way as a mode of damage prevention. Additional trees were trimmed as required with a change in insurance coverage.

An assessment of NOAA's Storm Event database between 11/01/2019 and 12/31/2024 provided the following event specific to Turin.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
TURIN	4/19/2023	17:10	Hail	1.00 in.	0	0	0.00K	0.00K

Turin also experienced effects of 16 events categorized under Monona "Zone".

Priority Hazards

None of the survey responses from Monona County indicated a Turin residence. Based on cost of response and potential effect on residents, the city finds the following to be of priority concern.

- Sever Winter Storm
- Tornado/Windstorm
- Drought

e. Mitigation Needs, Actions, & Strategies

It is necessary to note that the City of Turin has participated in the development of this Plan. However, as the City has not identified a specific action, strategy, or project, an amendment must be filed for FEMA and the Iowa Department of Homeland Security to formally recognize this jurisdiction as an eligible applicant for pre-disaster mitigation funds.

9. UTE

a. Profile

The city of Ute is located near the center of the eastern boundary of Monona County. State Highways 141 and 183 intersect near the center of town. Just outside city limits to the southwest, East Soldier River splits. These two cutoffs flow west and south of the City. Rock Creek is located south of Ute. More information can be found on the City of Ute website at <http://cityofute.com/>.

City Governance & Community Supports

Ute is governed by a five (5)-person elected City Council and Mayor. The Mayor appoints a Mayor Pro-Tem. Offices in addition to the Mayor and Council include City Clerk, City Attorney, Fire Department, and Utilities. The City is also supported by several boards and committees including: Planning and Zoning Committee, Board of Adjustment Committee, and Library Board. Fire and Rescue services are provided by the Ute Fire Department, which is staffed by volunteers. Ute Volunteer Ambulance provides vital services to the city and surrounding area. Monona County Sheriff provides law enforcement services.

In recent years, the city has increased staffed positions to include a deputy clerk and an assistant serving under Streets and Parks.

The city of Ute is not a member of the NFIP program. An update to the city's Municipal Code of Ordinances is in progress at the time of meeting. The Comprehensive Plan was adopted in 2018.

Demographics, Housing, & Economics

Record of demographic information as presented here is sourced via the Census Reporter at <https://censusreporter.org/> unless otherwise noted.

As estimated in the Census Reporter, Ute's population in 2024 was estimated at 326, a decrease from 342 residents in 2020. Local accounting estimates population at 350-355 persons. The town is home to 171 households, with a median household income of \$55,947, which is below the Monona County median of \$62,944. Ute has a relatively high proportion of elderly residents, with 21.1% aged 65 or older, which is slightly below the county average. The town also has a significant portion of its population (12.5%) living below the poverty line. Additionally, 23.6% of residents live with a disability, which is notably higher than both the county and state averages, indicating a greater need for services and support for vulnerable groups within the community.

<i>Community Characteristics</i>	
Population (2024)	326
Population (2020)	342
Total Households	171
Median Household Income	\$55,947
Median Household Income – Monona County	\$62,944

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Monona</i>	<i>Iowa</i>
5 years and younger	22	6.3%	5.6%	5.7%
65 years and older	74	21.1%	23.8%	16.0%
Below the poverty level	42	12.5%	11.2%	11.3%
Living with a disability	83	23.6%	13.8%	18.5%

Ute has a total of 203 housing units, with 84% currently occupied and 16% vacant. There are no mobile homes in the community. The majority of residential structures in Ute were built before 1970, making up nearly 70% of the housing stock. A smaller portion of homes were constructed between 1970 and 1999, while only a few were built after 2000, indicating an older housing base with limited recent development.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>

Total housing units	203	-
Occupied units	171	84%
Vacant units	32	16%
Mobile Homes	0	0%
<i>Age of residential structure</i>		
Built 2000 or later	7	3.0%
Built 1970 – 1999	66	27.8%
Build 1969 or earlier	164	69.2%

More demographic and community data can be found at <https://data.census.gov/>.

Leading Employers

The city of Ute hosts dozens of small businesses with varying numbers of employees. Many have substantial local significance – serving as gathering places and/or contributing to the overall function and wellbeing of City operations. Included for consideration are the following.

- Ada J Steakhouse
- Ampride 2
- Community Bank
- New Co-op
- Spare Time
- Ute Tire & Automotive
- Valley Ag

Critical Facilities

City Hall/Public Library	130 Main St
Fire Department/Ambulance Services	141 E Main
Post Office	100 E Main St
City Park & Related Equipment/Structures	422 E Main St
Water Tower	101 S Day Ave
Treatment Plant & Various; Pump House, etc.; Public Restroom	E 7th St
Gazebo	121 E Main
Ute Community Bldg	313 S Monona Ave
Ute Senior Center	107 W Main St
Lift Stations	230 E 7th

	626 S Smith Ave
	210 E 7th St

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

In regard to Ute’s valuation of assets and valuation of privately owned properties, facilities and personal property, each of Ute’s proposed Mitigation Actions and Strategies pursued for implementation in the next five (5) years will fully consider protections to those assets and to the residents therein. Furthermore, privately owned facilities that offer services and support during times of crisis may be specifically included in mitigation actions and/or strategies receiving municipal-funded support to maintain function and operation those structures. Those entities are listed in the following table for reference.

St Paul's Lutheran Church	303 E 4th St
Ute Housing Complex	300 S Riddle
Ute VFW	115 W Main

Private businesses and organizations play an essential role in the City’s recovery efforts and communication network and could be categorized as essential/critical facilities. The above lists are not exhaustive. Additional community churches and individuals, as well as those in nearby communities, work together to ensure communication and support in times of crisis.

Valuation of City Assets

Using Ute’s current insurance valuation statement, an estimated base for cost-benefit analysis impacting all city properties is determined using dollar amounts as provided noting Actual Cash Value (ACV) and Replacement Cost (RC) as applicable. Values as provided do not include private properties, equipment, or non-city funded investments that may contribute to project determinations. Separately catalogued assets and equipment as may be used in the event of an emergency are not represented in this value but will accompany project specifications should funding ops be pursued.

Total Building	\$	413,246	ACV
	\$	2,796,663	RC

Personal Property	\$	608,796	RC
Property in the Open	\$	789,313	ACV
		<u>871,548</u>	<u>RC</u>
Total	\$	<u>5,479,566</u>	

b. Participation

A planning meeting was held at Ute City Hall on September 3, 2024. Facilitated by SIMPCO, the following city representatives were in attendance.

- Megan Peitsch, City Clerk
- Jim Henschen, Mayor
- Lonnie Carlson, Public Works

Further public input was sought with the city encouraging residents to complete the survey. No survey respondents indicated Ute as place of residence.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	Strategic Plan in place to guide economic dev & community growth
<i>Policies/Ordinance - https://cityofute.com/index.php/permits-and-ordinances/</i>	
• Building Code	• Tree Trimming Ordinance
• Nuisance Ordinance	• Zoning Ordinance
<i>Programs</i>	
NFIP non-participant	CID #190464
ISO Fire Rating (not updated)	Class 7
Planning/Zoning Commission	Board of Adjustment
	Zoning/Land Use Restrictions
Tree Trimming Program	
<i>Staff/Department</i>	
Building Code Official	City Clerk and/or Mayor
Building Inspector	City Clerk and/or Mayor
Local Emergency Response Plan	Fire and EMS
<i>Non-Governmental Organizations</i>	

Veterans Groups	American Legion Post #0442 (Abby Post)
Community Organizations	• Ute Community Club • Ute Garden Club • 4-H (w/Mapleton)
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water services	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

Recent changes throughout city hall staffing and council representation, Ute has assessed policies and procedures and is in the progress of making necessary updates. Among new policies, Ute initiated virtual meeting availability to allow open meetings, following state protocol during COVID. Policy remains in place to accommodate emergency action as necessary.

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
Generator & Related Projects	Ute	2020: Generator for community building; City Hall; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY Update. Ute implemented several projects in the past 5 years, resulting in this one being delayed. This project carries over into the 2025 HMP with continued high priority.
development		
Improve existing facilities & infrastructure	Ute	2020: Waterworks and water tower project including generator backup system. <i>City Clerk, Project administrator, Engineering consultant</i> (City funds, Loans, CDBG) HIGH PRIORITY
Improve existing facilities & infrastructure	Ute	Complete. Water tower replaced – higher capacity, updated system (December 2024). Project cost exceeded \$3M. Segment of water mains replaced, and generator added. Funded through USDA RD , CDBG, local funds, GO Bonds.

flow control
refuge
technology
natural barriers/supports

d. Risk Assessment

A review of NOAA Storm Events revealed one reportable incident specific to Ute in addition to the 16 Monona “Zone” events that affected the whole county.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
UTE	4/19/2023	18:00	Hail	1.00 in.	0	0	0.00K	0.00K

Contributing Factors

The City of Ute implemented numerous projects that substantially improve community wellbeing and resiliency. Following is a summary of those improvements in addition to mitigation-specific updates to planned strategies as listed in the previous section of this profile.

1. Ute has started the process of adding full-of-site daily backups of all systems and programs. The system should be installed and running before end of summer 2025. This is a full backup that in the event of a catastrophic event or security infiltration, the city can be at full capacity, up and running within a day or two.
2. Siren repair and new battery, bearings, and motor (summer 2024)
3. Well pump repair completed in preparation for new well. USDA SEARCH program funds awarded and process in progress.
4. Fire Department implemented communication improvements to better connect with adjacent communities (June 2024)
5. Alert Iowa promotions coordinated with EMA and provision of emergency contact info for residents (November 2023)
6. Water main improvements affecting 150 properties – replaced pipes and mapped
7. Ash trees at park have been treated, reducing loss from effects of Emerald Ash Borer Beetle. The city has also implemented an urban forestry plan to remove all untreated

ash trees in the right of way within the next 3 years. All trees in the right of way have been evaluated to lessen the chance of damage to property and infrastructure during high winds

8. Plan set to replace aging FD equipment, SCBAs specifically with 4 replaced using local funds and Monona County Community Partners grant funds
9. Southend drainage work completed along 6th St between Smith and Railway Sts
10. Fire Department added Grade 1 training to annual certifications
11. Code update is in progress with City reviewing Knox boxes, rental inspections, and nuisance language.
12. Comprehensive Plan update in budget discussion

In addition to public properties and infrastructure, Ute participates in a regional Owner-Occupied Rehabilitation Program that provides forgivable loans to income-eligible homeowners. This program supports repairs that:

- bring homes up to code (safety, ADA issues),
- stabilize structure (foundation or roof repair) to prevent more costly damage,
- enable efficiency improvements (new windows, insulation).

While local investment has prioritized community betterment overall, a number of mitigation needs remain. There are not any mobile home parks in Ute, however several residences are modular structures. Though set on permanent foundations, these homes are more vulnerable during high wind and other extreme weather events.

An aging population is of concern to city staff, with many not able to safely access their basements for refuge, and some simply wary of being alone in extreme weather conditions.

While not formally designated, the Fire Station is equipped with a generator and has served as a refuge location during power outages and extreme weather. The Community Building may serve in that capacity while open as long as power has not been interrupted. Facilities included in the *Community Supports* section may also serve informally as refuge locations pending emergency type and timing (keyed entry may be a barrier outside of fixed hours of operation).

Priority Hazards

- Tornado/Windstorm
- Severe Winter Storm
- Extreme Heat and Extreme Cold

e. Mitigation Needs, Actions, & Strategies

The city is assessing feasibility of designating the Community Building as a shelter/refuge as well as command center in the event of an emergency. Addition of a generator to enable that formal capacity is key to attaining this goal in the short term. Mitigation strategies identified for the next 5 years are as provided in the following table.

communication/education		
tools/equipment		
Generator & Related Projects	Ute	Carry over. To maintain continuity of operations, a generator is needed for community building; <i>Public Works</i> (Local budget line item, County supports, State/Federal response funds, pre-disaster/mitigation funds as available, Community Benefits funds) HIGH PRIORITY
development		
Improve existing facilities & infrastructure	Ute	New. City is planning new well. <i>Public works, USDA, contracted services</i> (Local budget line item, USDA RD) HIGH PRIORITY
flow control		
refuge		
technology		
natural barriers/supports		
Trees	Ute	New. Re-tree plan to be implemented. City reduced loss with treatment of ash trees in parks, however additional trees are needed to provide soil stabilization, respite from extreme heat/sun, and to serve as natural windbreak. <i>City administration</i> (Local budget line item, IDNR programs, UPS Tree Grants and similar community reforestation funds, private funds) HIGH PRIORITY

10. WHITING

a. Profile

The city of Whiting is centrally located in the northwest quarter of Monona County. County Highways K45 and E24 intersect near the center of the city, with most commercial and residential structures located west of the intersection. The city is located several miles east of Interstate 29. McCandless Cleghorn Ditch meanders north to south through the western portion of city limits. More information can be found on the City of Whiting's website.

Among Whiting's amenities is a new splashpad funded entirely through donations. Project expected to be complete 2026. Whiting hosts an annual gathering to celebrate the famed horror movie, Children of the Corn which was filmed in the area. Gathering includes a screening of the movie and a tour of the house featured in the film.

City Governance & Community Supports

Whiting is governed by a five (5)-person elected City Council and a Mayor. Offices in addition to Mayor and Council include City Clerk, Maintenance Engineer, Fire, and Police. Fire and rescue services are provided by the Whiting Fire Department, which is staffed by volunteers. Whiting does have a police officer on staff, however, law enforcement services are supplemented by the County. The City of Whiting is a member of the NFIP program.

Demographics, Housing, & Economics

Using CensusReporter.gov³² as a baseline, the town is home to 339 households, and its median household income is \$68,977, which is higher than the Monona County median of \$62,944. In 2023, Whiting had a population of 840, a slight increase from 829 residents in 2020. Whiting has a relatively small percentage of young children, with 3.7% of the population aged five or younger. A significant portion of the population (18%) is aged 65 or older, which is lower than the county's average. About 10.1% of residents live below the poverty line, and 10.7% live with a disability, both figures that are slightly below the county and state averages. These statistics suggest that Whiting has a diverse community with some economic and accessibility challenges, but also a relatively stable economic base.

³² Source: <https://censusreporter.org/profiles/16000US1985215-whiting-ia/>

<i>Community Characteristics</i>	
Population (2023)	840
Population (2020)	829
Total Households	339
Median Household Income	\$68,977
Median Household Income – Monona County	\$62,944

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Monona</i>	<i>Iowa</i>
5 years and younger	31	3.7%	5.6%	5.7%
65 years and older	165	18.0%	23.8%	16.0%
Below the poverty level	84	10.1%	11.2%	11.3%
Living with a disability	90	10.7%	13.8%	18.5%

Whiting has a total of 355 housing units, with 337 currently occupied and 18 vacant, resulting in a high occupancy rate of 95%. The community has 57 mobile homes, accounting for 16% of the housing stock. A significant portion of Whiting’s homes were built before 1970, making up about 70% of the housing units. The remainder of the housing stock includes homes built between 1970 and 1999, and a small number were constructed after 2000, reflecting a mix of older and more recent residential development.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	355	-
Occupied	337	95%
Vacant	18	5%
Mobile Homes	57	16%
<i>Age of residential structure</i>		
Built 2000 or later	35	9.2%
Built 1970 – 1999	78	20.4%
Build 1969 or earlier	269	70.4%

Leading Employers

Whiting has dozens of businesses that employ small staffs. Leading employers in the city of Whiting include:

- Whiting Community School District
- Pleasant View Health Facility

Critical Facilities

City Hall (Clerk's Office)	605 Whittier St.
Fire Department	513 Whittier
Public Library	407 Whittier St.
Whiting Elementary School	606 West St
Whiting Senior High School	606 West St
Pleasant View Assisted Living	200 Shannon Dr
Pleasant View Care Center	200 Shannon Dr
Badger Lake State Wildlife Management Area	outside city limits

The city is acquiring additional property, with a purchase in progress. The property will be used as a storage facility. They also sold some properties.

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Pleasant View Care Center and Assisted Living	200 Shannon Drive
Whiting Christian Church	716 West Street
First Congregational United Church of Christ	429 Whittier Street

Private businesses and organizations play an essential role in the City's recovery efforts and communication network, and are therefore included in this itemizing of essential or critical facilities. The list is not exhaustive.

Valuation of City Assets

In addition to city valuation, that of privately owned properties, facilities and personal property, also contributes to overall protected benefit when mitigation projects are considered. Each mitigation action, strategy, and/or project pursued for implementation in the next five (5) years will fully consider protections to those assets and to the residents therein. Furthermore, privately owned facilities that offer services and support during times of crisis may be specifically included in mitigation actions and/or strategies receiving municipal-funded support to maintain function and operation those structures. Some notable entities are shown.

Total Blanket TIV	\$	5,519,551
Building	\$	5,058,573
Personal Property	\$	523,563
Misc Property Sched	\$	296,817
Misc Property Unsched	\$	<u>245,562</u>
APD TIV	\$	532,957
Total TIV	\$	<u>6,124,515</u>

b. Participation

An on-site mitigation planning meeting was held at Whiting City Hall February 19, 2025, with SIMPCO and City Clerk Marie Bruns LaClair in attendance.

c. Community Capabilities

<i>Policies/Ordinances (2021)</i>	
• Building Code • Drainage Ordinance • Storm Water Ordinance • Subdivision Ordinance • Zoning Districts	
<i>Programs</i>	
Codes Building Site/Design	Via structured building permit process
National Flood Insurance Program (NFIP) Participant	CID #190684
ISO Fire Rating	Class 7/7X
<i>Staff/Departments</i>	
Public Works Official	Street Superintendent

Emergency Response Team	Fire, Police Chief, and EMS
<i>Non-Governmental Organizations</i>	
Emery Johnson American Legion Post #481	
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water & sewer services	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

communication/education		
Promo/Info	Whiting	2020: PSA program to promote education about tree types and planting; <i>City Clerk</i> (no funding anticipated) LOW PRIORITY
Promo/Info	Whiting	Completed. PSA was communicated through schools at no cost.
tools/equipment		
Equipment	Whiting	2020: Interest in additional/better performing snow removal equipment; <i>City Council</i> (City funds, IDOT program funds, PDM) LOW PRIORITY
Equipment	Whiting	Complete. The city has a box plow for tractor, new scraper, refurbished plow, and new (used) sander. Better removal plan is in place which included the addition of a part time position.
development		
Bridges & Roads	Whiting	2020: West St Bridge - pending evaluation and cost estimate; <i>City Council, Collaborate with County Engineer</i> (City funds, transportation funds, Community Benefit funds) HIGH PRIORITY
Bridges & Roads	Whiting	Complete. West St bridge and K45 bridge both redone in 2020. Project cost @ \$98,000. Loan balance remaining is \$45,000. K45 still needs new guard rails – pending (entered as new project).
Bridges & Roads	Whiting	2020: Elevate portion of roadway to correct dip in the road at Bertram intersection; <i>City Council</i> (City funds, transportation funds, Community Benefit funds) MEDIUM PRIORITY
Bridges & Roads	Whiting	Complete. Roadway elevation completed summer 2023.
Policy	Whiting	2020: Consider formalizing reference to DNR for Floodplain Development; <i>City Council, Zoning Commission, City Attorney</i> (Local funds) LOW PRIORITY
Policy	Whiting	Complete. City completed floodplain update in coordination with IDNR. City is participating in county-wide efforts to counter flooding. No cost associated with project outside of staffing hours.
flow control		

refuge

technology

natural barriers/supports

Other work completed since 2019 includes Whittier Rd reconstruction, Road was laid using concrete instead of asphalt to improve longevity and routine maintenance of facilities, infrastructure and roads. As a public health measure, a new OCI9 meter has been installed to provide more accurate assessment of water quality.

Ongoing efforts are in place for the removal of dead/diseased trees is in progress. 2024 included plans to remove 20+ trees, 8-10 from the park. Replacement plan is for five new trees annually involving a sturdy stock. The city will participate in MidAmerican's Trees Please program to facilitate funding.

d. Risk Assessment

Contributing Factors

NOAA Storm Event database reports from 11/1/2019 through 12/31/2024 include five events specific to Whiting. General effects of events attributed to Monona (Zone) and Woodbury (Zone) were also experienced locally.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
WHITING	5/12/2022	18:51	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
WHITING	6/12/2024	17:51	Hail	1.75 in.	0	0	0.00K	0.00K
WHITING	6/12/2024	18:14	Hail	2.75 in.	0	0	0.00K	0.00K
WHITING	7/21/2024	17:02	Funnel Cloud		0	0	0.00K	0.00K
WHITING	7/29/2024	23:05	Thunderstorm Wind	53 kts. MG	0	0	0.00K	0.00K

Other consideration for risk is given to conditions in the planning area. Floodplain is indicated along the northwest and western borders of Whiting, including some developed properties. The large floodplain area may not always be flooded in high river conditions; however, ground saturation and frequency of high water table may routinely impact the community.

Whiting has a relatively large population living in trailer and modular homes, affecting its resiliency in high wind and tornado incidents, as well as any extreme weather conditions. Vandalism has resulted in locking of park facilities that may otherwise serve as shelter from sudden inclement weather conditions.

Several projects are in the works to improve the water systems. Full systems replacement is ultimate goal, though not likely to be completed in the next five years.

Priority Hazards

Whiting has identified the following hazards as their top three concerns based on likelihood of occurrence as well as potential and historical damages due to named events.

- Flooding
- Tornado/Windstorm
- Severe Winter Storm

Thunderstorm with Hail and Lightning is quickly rising in priority.

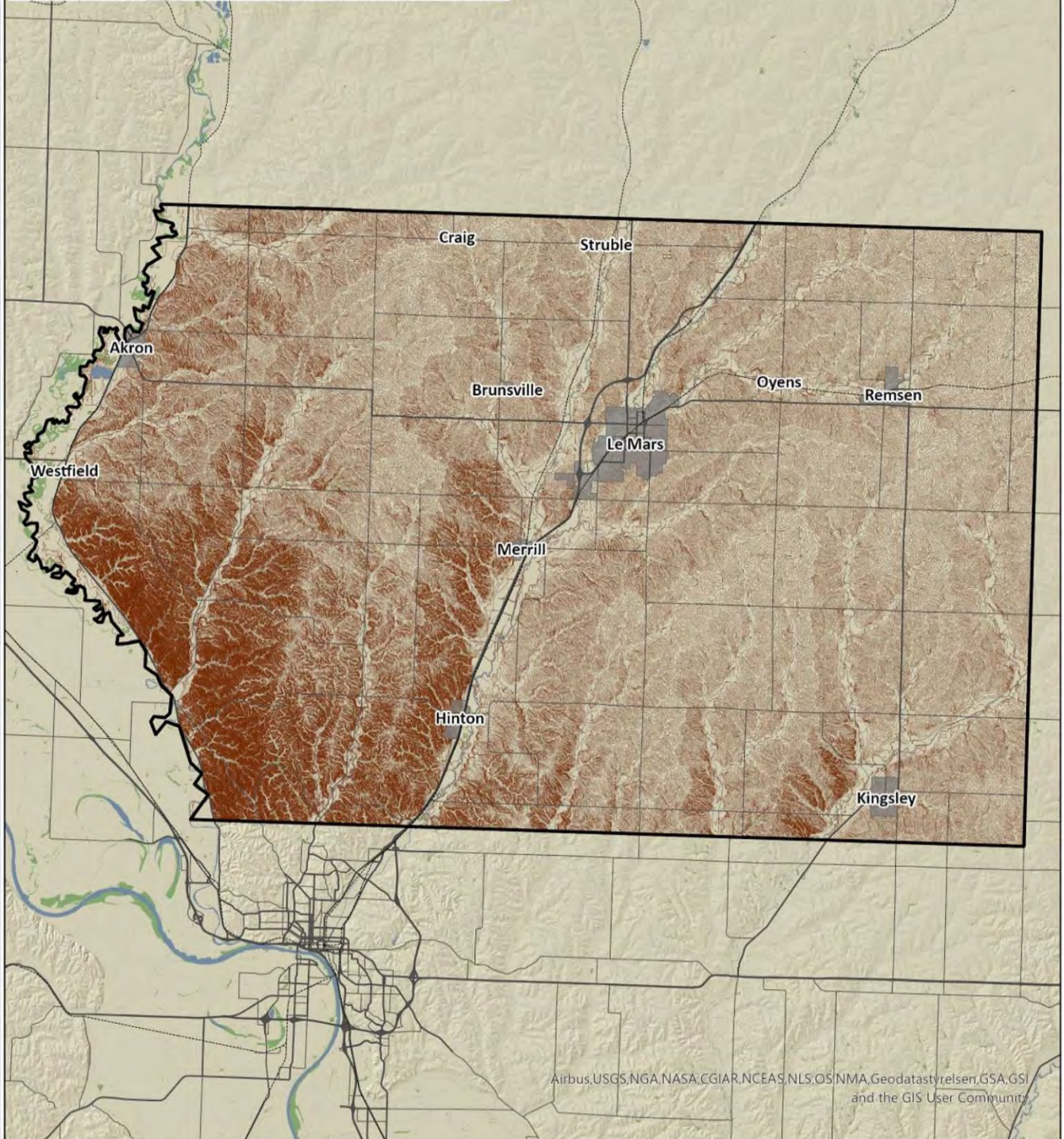
e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Whiting	New. There are no generators and no transformer switches in place for critical facilities. City is developing 2 new projects with generators needs identified. Generator also needed at sewer plant lift station. 1. water plant project in a phased overhaul, including consideration of another well (local, state, federal supports including loan ops) 2. New building for Fire Department (city funded at present, likely to include fundraising and community benefit funds) 3. Sewer plant lift station (not associated with other active or planned project) Addition of generators will enable continuity of operations in the event of a power outage. Public Works, County EMA (local funds, project funds as applicable, PDM funds as available) HIGH PRIORITY

Equipment	Whiting	New. Whiting Fire Department in need of a new rig-grass fire truck. Estimated cost is \$300,000. Fundraising efforts focused on new building therefore local funds are constrained. Priority reflects fund availability, not level need. <i>Fire Dept, City Council</i> (Response support funds as applicable, PDM if available) LOW PRIORITY
development		
Bridges & Roads	Whiting	New. K45 bridge needs new guardrails following improvements completed in 2020. Streets dept, County roads. (local road use funds, other road funding as may be available) HIGH PRIORITY
flow control		
refuge		
technology		
natural barriers/supports		

Other planned projects include overlays on roads to reduce deterioration rate in inclement weather conditions.

Topography Map, Plymouth County



Airbus, USGS, NGA, NASA, CGIAR, NCEAS, NLS, OS, NMA, Geodatastyrelsen, GSA, GSI, and the GIS User Community

Marsh, Swamp, Bog, Prairie
River

Lake, Reservoir
Incorporated Areas
County Boundary

Contours
Railroad

0 3 6 Miles



The map does not represent a survey, no liability is assumed for the accuracy of the data delineated herein, either expressed or implied by SIMPCO.

© 2025 Siouxland Interstate Metropolitan Planning Council. Please call 712-279-6286 to obtain permission for use.

IV. COUNTIES & CITIES PARTICIPATING AS JURISDICTIONS

D. Plymouth County

PROFILE – UNINCORPORATED AREA & COUNTY

Plymouth County is located along the western edge of northwest Iowa. The County is bordered by Sioux County to the north, Cherokee County to the east, Woodbury County to the south, and the state of South Dakota to the west. Plymouth County is approximately 864 square miles.

Incorporated cities within Plymouth County include Akron, Brunsville, Craig, Hinton, Kingsley, Le Mars, Merrill, Oyens, Remsen, Struble, and Westfield.

a. Rivers & Watersheds

The western border of Plymouth County follows the Big Sioux River. Other significant rivers in the County include the Broken Kettle Creek, Floyd River, Perry Creek, and the West Fork of the Little Sioux River.

There are five (5) watersheds within the County that drain storm water and snow melt into streams and lakes, wetland areas, or into groundwater reserves. These watersheds are Blackbird-Soldier Watershed, Floyd Watershed, Little Sioux Watershed, Monona-Harrison Ditch Watershed, and Lower Big Sioux Watershed. Regional breakdown for watersheds is provided in *Planning Area* information. The following map depicts the sub-watersheds within those as listed above. Sub-watersheds are determined based on hydrologic unit code (HUC) level 12, which includes more detail including tributary data.

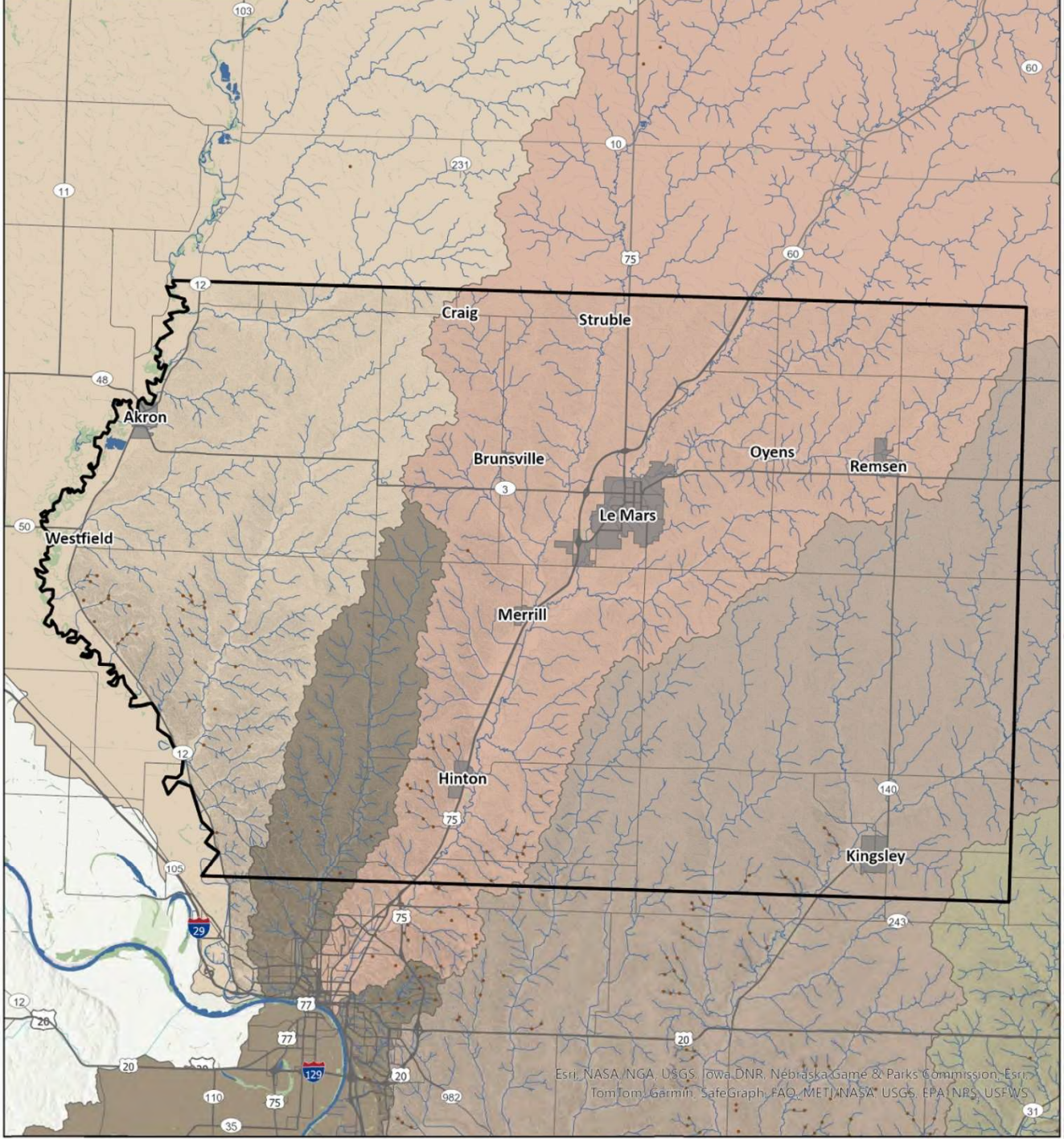
b. Landform Regions & Geology

Plymouth County is composed of three (3) distinct landform regions³³, which include Northwest Iowa Plains, Southern Iowa Drift Plains, and Loess Hills are said to have been formed by ancient

³³ Source: <https://iowageologicalsurvey.uiowa.edu/iowa-geology/landforms-iowa>

glaciers. The Northwest Iowa Plains and Southern Iowa Drift Plains are marked by rolling hills that are the result of the manipulation of glacial sediment deposits by glacial melt and streams.

Watershed and Water Resources, Plymouth County



• Dams	Incorporated Areas	Floyd	Monona-Harrison Ditch
Marsh	County Boundary	Little Sioux	
River	Watersheds	Lower Big Sioux	
Lake, Reservoir	Blackbird-Soldier	Maple	
River/Stream	Boyer		

0 3 6 Miles

The map does not represent a survey, no liability is assumed for the accuracy of the data delineated herein, either expressed or implied by SIMPCO.

© 2025 Siouxland Interstate Metropolitan Planning Council.
Please call 712-279-6286 to obtain permission for use.

The Loess Hills are unique to the region, and begin in Plymouth County. This landform was created from the accumulation of wind-blown silt. Today these steep hills rise from the surrounding landscape.

c. Transportation Network

U.S. Highway 75 and State Highway 3 intersect near the center of Plymouth County. The transportation network also includes State Highways 3, 12, and 140.

The County's secondary road system is composed of 1,423.27 miles. Within this category, Farm-to-Market roads make up 364.06 miles, while Area Service roads account for 1,059.21 miles. Gravel or earth surface types account for 1,056.23 miles of the secondary road system. The remaining 370.76 miles are composed of bituminous, asphalt, or PCC surface types.

d. County Governance & Supports

The county seat is in Le Mars, just north of the center of the County. Its jurisdiction covers all unincorporated portions within county boundaries. Plymouth County is governed by a five (5)-person Board of Supervisors. The Board is the legislative body of the county. Additional Offices include the following departments. Some departments have shared staff.

• Assessor	• Engineer / Secondary Roads
• Attorney	• Information Technology
• Auditor	• Juvenile Court Services
• Clerk of Courts	• Planning & Zoning / Sanitarian
• County Conservation	• Recorder
• E-911	• Sheriff
• Economic Development	• Treasurer
• Emergency Management	• Veteran Affairs

The Plymouth County Emergency Management Director serves as a key leader in planning, coordinator of operations, and chief of staff to the jurisdiction's executives during emergency response, community liaison to build the emergency program, and lead agency in coordination

of regional mitigation planning. The Plymouth County Sheriff's Office provides law enforcement services to the rural portions of the County and supports community departments. Mental Health services as administered in Plymouth County are relegated to state districting protocol.

County Facilities

County Courthouse	215 4 th St, Le Mars
Law Enforcement Center	451 14 th Ave NE, Le Mars
Engineer's Office	32802 170 th St, Le Mars
Roads Department - Equipment/Supply Storage	Several locations throughout County
Historical Museum	335 1 st Ave SW, Le Mars
County Fairgrounds	500 4 th Ave NE, Le Mars
County Veterans Memorial	1000 3 rd Ave SE, Le Mars
Hillview Recreation Area	25601 C60, Hinton
Five Ridge Prairie	15561 260 th St, (rural)Westfield
Big Sioux Park	14241 Hwy 12, Akron
Birkley's Bend	26779 Hwy 12, Westfield
Boyd's Bend	13469 Hwy 12, Akron
Doorenbos-Ford Wetland	120 th St & Hwy 12, Akron
E.C. Lippke Wetland	11132 240 th St, Westfield
Highway 75 Wetland	NE of Merrill, east side Hwy 75
Kohler Memorial Grassland	150 th St and Quest Ave, Remsen
Meadow Wildlife Area	45597 140 th St, Remsen
Millsite River Access	10001 Hwy 3, Westfield
O'Brien Prairie	26211 Noble Ave, Le Mars
River's Bend Wildlife Area	11826 180 th St, Akron
Ron Wilmot River Access	180 th St & Hwy 12, Akron
Rufus B. Hatch Memorial Grassland	L22 & 140 th St, Remsen
Southeast Wildwood	41564 310 th St, Kingsley

Education

Plymouth County is home to 18 public schools. Two of these schools are part of the grade-sharing agreement between the Marcus Meriden Cleghorn (MMC) and Remsen Union (RU)

Community School Districts, with portions located in Cherokee County. Additionally, there are four private schools within the county. The remaining 16 public schools are divided among four school districts, which include the following:

- Le Mars Community School District
- Hinton Community School District
- Akron-Westfield Community School District
- Kingsley-Pierson Community School District

Statistics show educational attainment in Plymouth County³⁴ reflects a relatively strong foundation in basic and postsecondary education. A higher percentage of residents have completed high school or some college compared to the state average. The county also has a notable portion of residents with associate's degrees, while fewer individuals hold bachelor's or graduate degrees compared to the state. The percentage of people without a high school diploma is slightly lower than the state average, indicating comparable access to early education. Overall, Plymouth County shows solid rates of high school and some college education but lags behind the state in advanced degree completion.

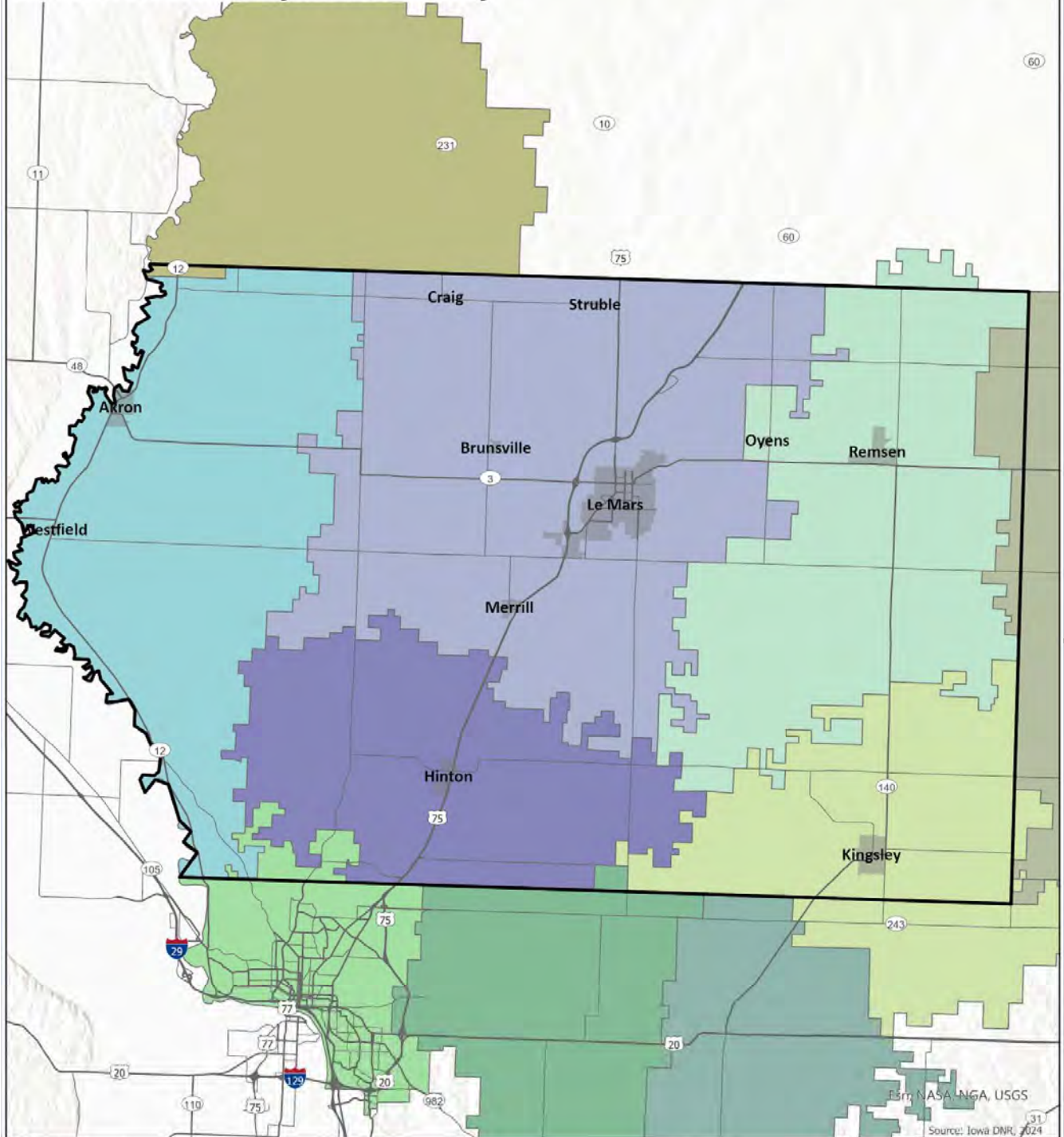
It is important to note that many residents as may be employed by one of the major manufacturing/production businesses in the county have attained certifications for machinery operation and maintenance as a credential for positions held. These certifications, while not included in education stats, can be applied to other employment opportunities and merit due consideration in employability and career advancement.

CensusReporter.gov estimates, the median household income is \$81,600 with about 6.8% of its population living below the poverty level.

Generally, the categories that FEMA identifies as vulnerable populations are present in the County at similar rates compared to the State.

³⁴ Source: <https://censusreporter.org/profiles/05000US19149-plymouth-county-ia/>

School Districts, Plymouth County



AKRON WESTFIELD	LE MARS	WEST SIOUX
HINTON	MARCUS-MERIDEN-CLEGHORN	WOODBURY CENTRAL
KINGSLEY-PIERSON	REMSEN-UNION	
LAWTON-BRONSON	SIOUX CITY	

0 3 6 Miles



The map does not represent a survey, no liability is assumed for the accuracy of the data delineated herein, either expressed or implied by SIMPCO.

© 2025 Siouxland Interstate Metropolitan Planning Council.
Please call 712-279-6286 to obtain permission for use.

Population

<i>Community Characteristics</i>	
Population (2023)	25,699
Population (2020)	25,141
Total Households	10,297
Median Household Income	\$81,600
Median Household Income – Iowa	\$73,147

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>
5 years and younger	1,453	5.7%
65 years and older	4,956	19.3%
Below the poverty level	1,799	6.8%
Living with a disability	2,992	11.8%

Healthcare Facilities

Plymouth County houses Floyd Valley Healthcare in Le Mars. The facility has experienced significant expansion in recent years. Services include Emergency Services, Urgent Care, Specialists, Primary Care, Assisted Living Facility, and Education and Wellness programming. There are several assisted living, nursing homes, and rehabilitation centers throughout the county, as well as local dental and vision care providers.

Housing

Plymouth County has a relatively high median home value compared to the state of Iowa, although its median rent is slightly lower. The county contains a total of 10,863 housing units, with the majority being occupied. Of the occupied units, a significant portion are owner-occupied, while a smaller proportion are renter-occupied. The county has a low vacancy rate, suggesting a stable housing market. These figures highlight a community with a strong emphasis on homeownership, while rental options are also well-represented.

<i>Housing Characteristics</i>	<i>Plymouth</i>	<i>Iowa</i>
Median Home Value	\$218,600	\$195,900

Median Rent	\$865	\$891
	<i>Count</i>	<i>Percent</i>
Total Housing Units	10,863	-
Occupied	10,319	95%
Owner-occupied	8,038	74%
Renter-occupied	2,824	26%
Vacant	543	5%

Income & Economics

In Plymouth County, the civilian employed population aged 16 and older totals 20,115 individuals. The largest employment sector is education, health care, and social assistance, which employs over one-fifth of the workforce. Manufacturing and retail trade are also major contributors, with a significant portion of the population working in these industries. Agriculture, including forestry, fishing, and hunting, remains an important sector, alongside transportation, warehousing, and utilities. Other notable sectors include finance, professional services, and public administration. While smaller portions of the workforce are employed in arts, entertainment, and other services, the data reflects a diverse economy with strong representation in both traditional industries and service-oriented sectors.

Much of Plymouth County's economic development and large scale employment is hosted in Le Mars, its county seat. In addition to county employees and City of Le Mars staff and administration, the following are recognized as leading employers as follows.

- Bekins, Inc.
- BoDeans Baking Company
- Dairy Farmers of America/Kemps Dairy
- Fareway
- Floyd Valley Healthcare
- Gehlen Catholic School
- Gus Pech Manufacturing Co.
- Hy-Vee
- Le Mars Community School District
- IML Containers of Iowa
- NorAm Cold Storage and Distribution
- SmithCo Side-Dump
- Walmart
- Wells Enterprises

<i>Industry for the Civilian Employed Population 16 and over</i>

Civilian employed population (16 and older)	20,115	-
Agriculture, forestry, fishing and hunting, and mining	937	6.9%
Construction	758	5.5%
Manufacturing	2,788	20.6%
Wholesale trade	90	2.1%
Retail trade	1,227	9.1%
Transportation and warehousing, and utilities	1,146	8.5%
Information	214	1.6%
Finance and insurance, and real estate and rental and leasing	657	4.9%
Professional, scientific, and management, and administrative and waste management services	612	4.5%
Education services and health care and social assistance	3,019	22.3%
Arts, entertainment, & recreation, and Accommodation & food services	625	4.6%
Other services except public administration	806	6%
Public administration	441	3.3%

Valuation of County Assets

Total Blanket TIV	\$	48,630,267
Building	\$	46,416,552
Personal Property	\$	2,213,715
Misc Property Sched	\$	8,040,445
Misc Property Unsched	\$	<u>809,345</u>
Total TIV	\$	57,480,057
APD TIV	\$	5,265,534
Grand Total TIV	\$	<u>62,745,591</u>
 Covered Vehicles	 \$	 5,313,511

PARTICIPATION

A Mitigation Planning meeting was held December 4, 2025 at the County Annex. Facilitated by SIMPCO, the following were in attendance.

- Rebecca Socknat, EMA

- Stacey Feldman, Auditor
- Nick Beeck, Conservation
- Shawn Olson, Director of IT
- Steven Chapman, Zoning Administrator

Additional participation was collected by way of surveys. Completed online or on paper, there is record of 248 primary survey respondents. Of those, 65 indicated residence in Plymouth County. A secondary survey was made available to participating school districts for distribution to junior and senior students. Of the 65 student surveys collected, 54 students noted residence in Plymouth County. Some insight from the perspective of area youth is discussed in the Risk Assessment portion of this profile.

CAPABILITIES

<i>Plans/Guidance Docs</i>	
• Builder's Plan • Comprehensive Plan • County Recovery Plan	• Land Use Plan • Local/County Emergency Plan
<i>Policies/Ordinances</i>	
• Building Code • Drainage Ordinance • Floodplain Ordinance • Historic Preservation Ordinance • Landscape Ordinance	• Nuisance Ordinance • Storm Water Ordinance • Subdivision Ordinance • Zoning Ordinance
Iowa Wetlands and Riparian Areas Conservation Plan	Plymouth County Conservation
<i>Programs</i>	
Zoning/Land Use Restrictions	
Codes Building Site/Design	
National Flood Insurance Program (NFIP) Participant	CID #190899
Property Acquisition	
Planning/Zoning Boards	
Mutual Aid Agreements	IMAC & EMAC
<i>Staff/Department</i>	
Zoning Official / Sanitarian	Planning and Zoning, and Environmental Health

Mapping Specialist (GIS)	
Engineer	
Development Planning (role assumed by Board of Supervisors)	
Emergency Management Coordinator	
NFIP Floodplain Administrator	
Emergency Response Team	Special Response Team
Historic Preservation	
<i>Non-Governmental Organizations</i>	<i>Comments</i>
Veterans Groups	County Veterans Affairs Commission
Environmental Groups	• County Environmental Health Department. • Conservation Foundation Board • Land Acquisition Conservation
<i>Local Funding Availabilities & Authorities</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Assess impact fees for new development	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities
Ability to withhold spending in hazard prone areas	
State / Federal grants by department	
Plymouth County Betterment Fund	
TIF program	Wind Turbine
	Ethanol Urban Renewal

While the county profiles are intended to cover unincorporated areas within defined border, it is impossible to completely separate county operations and services from cooperative planning strategies – especially in mitigation and response planning. One such collaboration is availability of the County Courthouse, located in Le Mars, to serve as gathering place in the event of an evacuation of Franklin Elementary School. Proximity, access, and ready-to-activate security features figure in such designations.

The primary goal of the county in the event of any emergency is the continuity of operations. Ongoing monitoring of protocol, policies, and procedure enable timely adjustments and improvements as may be dictated in real time.

Review of Actions Taken

communication/education		
Promo/Info	Plymouth Co	2020: Signage needed to better define restricted areas; <i>County Engineer, Sanitarian</i> (County funds) HIGH PRIORITY
Promo/Info	Plymouth County	Implemented: Plymouth County continues to administer general alerts. Assessing feasibility of adding employees to enable uniform communications and enabling external use specific to departments. System is used by Communications Center, CERT Team including Floyd Valley Hospital.
tools/equipment		
Generator & Related Projects	All Counties	2020: Assess availability of generators for all critical facilities, portable or permanent. Prep all critical facilities for connection to generators as applicable; <i>County EMA</i> (Varying levels of funds needed. Support may come through County, State, and Federal grant and loan programs) HIGH PRIORITY
Generator & Related Projects	Plymouth County	Implemented. County Courthouse, Courthouse Annex, and Law Enforcement office have added a generator with a \$300,000 investment. Portable generators are available for communities; no additional need for transfer switches.
Equipment	Plymouth County	Implemented. Plymouth County Law Enforcement added equipment to increase efficiency of services, especially in emergency situations. Additions include Bearcat, Incident Command Trailer, and multi-use (80-person capacity) Shelter trailer. <i>County law Enforcement.</i> (ARPA funds).
development		
Bridges & Roads	Plymouth County	2020: Roadway access/elevation projects identified @ Floyd River Basin and Deep Creek Basin areas. While floodmap revisions continue, the County does not anticipate significant changes in unincorporated areas. <i>IDNR, County Conservation, County Engineer</i> (Clean Water Conservation program funds, County funds, IDNR funds, Transportation funds) LOW PRIORITY
Bridges & Roads	Plymouth County	Update was not provided. Project removed from Priority List.
flow control		
refuge		
technology		

Some projects in place throughout the county include tree removal within drainage districts, tree planting projects to re-establish an appropriate tree canopy, and protections of the loess hills.

Plymouth County completed a shelter at the Fairgrounds in 2015 and invested \$3500 in refuge resource kits during the planning period since 2020. Some additional refuge/shelter-related projects are needed including notification systems improvements.

Following major flooding over the weekend in Iowa, President Joe Biden declared a major disaster in the state Monday night and approved federal aid to help recovery efforts.

"The President's action makes Federal funding available to affected individuals in the counties of Clay, Emmet, Lyon, Plymouth, and Sioux," a White House press release said.

"Assistance can include grants for temporary housing and home repairs, low-cost loans to cover uninsured property losses, and other programs to help individuals and business owners recover from the effects of the disaster."

Flooding in northwest Iowa, caused by [heavy rainfall](#), had impacted at least 1,900 properties, leaving hundreds destroyed, Iowa Gov. [Kim Reynolds](#) told reporters Sunday.

<https://abcnews.go.com/US/flooding-northwest-iowa-leads-250-water-rescues-hundreds/story?id=111355969> (by Mariama Jalloh, June 24, 2024, 11:10 PM) June 10, 2025

RISK ASSESSMENT

Local accounting of weather-related disasters and other hazards are detailed within jurisdiction profiles reflecting reported events in the NOAA Storm Event database and local accounts. Overall, Plymouth County's reports³⁵ from 11/01/2019 through 12/31/2024 included 183 storm events in 17 categories.

³⁵ <https://www.ncdc.noaa.gov/stormevents/>

<i>Event Summary for Plymouth County, Iowa</i>	
Number of County/Zone areas affected:	2
Number of Days with Event:	27
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	1
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	13

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
PLYMOUTH (ZONE)	12/28/2019	3:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/12/2020	14:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/17/2020	6:00	Blizzard		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/18/2020	11:00	Cold/wind Chill		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/12/2020	15:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/12/2020	23:00	Cold/wind Chill		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/19/2020	1:00	Winter Weather		0	0	0.00K	0.00K
AKRON	3/10/2020	7:00	Flood		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	3/19/2020	17:00	Winter Weather		0	0	0.00K	0.00K
AKRON	3/29/2020	11:00	Flood		0	0	0.00K	0.00K
WESTFIELD	3/30/2020	7:00	Flood		0	0	0.00K	3.00K
AKRON	4/1/2020	0:00	Flood		0	0	0.00K	0.00K
WESTFIELD	4/1/2020	0:00	Flood		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	4/12/2020	6:00	Winter Storm		0	0	0.00K	0.00K
WESTFIELD	6/21/2020	5:34	Thunderstorm Wind	56 kts. EG	0	0	1.00K	0.00K
PLYMOUTH (ZONE)	7/28/2020	0:00	Drought		0	0	0.00K	865.00K
PLYMOUTH (ZONE)	8/1/2020	0:00	Drought		0	0	0.00K	668.00K
HINTON	8/14/2020	14:25	Hail	1.75 in.	0	0	0.00K	0.00K
HINTON	8/14/2020	14:59	Hail	0.75 in.	0	0	0.00K	0.00K
MILLNERVILLE	8/14/2020	14:05	Hail	1.00 in.	0	0	0.00K	0.00K
WESTFIELD	8/14/2020	13:54	Hail	1.00 in.	0	0	0.00K	0.00K
MERRILL	8/31/2020	3:37	Hail	1.00 in.	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	9/1/2020	0:00	Drought		0	0	0.00K	60.00K

PLYMOUTH (ZONE)	10/1/2020	0:00	Drought		0	0	0.00K	77.00K
PLYMOUTH (ZONE)	10/25/2020	3:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	11/1/2020	0:00	Drought		0	0	0.00K	10.00K
PLYMOUTH (ZONE)	11/9/2020	22:00	Winter Weather		0	0	10.00K	0.00K
PLYMOUTH (ZONE)	12/1/2020	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/23/2020	10:00	Blizzard		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/29/2020	8:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/1/2021	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/14/2021	22:00	Blizzard		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/23/2021	17:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/25/2021	18:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/1/2021	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/4/2021	3:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/14/2021	6:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/21/2021	6:00	Winter Storm		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	3/1/2021	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	4/1/2021	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	5/1/2021	0:00	Drought		0	0	0.00K	73.00K
PLYMOUTH (ZONE)	6/1/2021	0:00	Drought		0	0	0.00K	2.350M
AKRON	6/11/2021	5:38	Thunderstorm Wind	61 kts. EG	0	0	35.00K	0.00K
O LEARY	6/22/2021	17:10	Hail	1.00 in.	0	0	6.00K	5.220M
O LEARY	6/22/2021	17:20	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
O LEARY	6/22/2021	17:23	Thunderstorm Wind	56 kts. EG	0	0	2.00K	0.00K
O LEARY	6/22/2021	17:34	Funnel Cloud		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	7/1/2021	0:00	Drought		0	0	0.00K	1.300M
NEPTUNE	7/8/2021	23:29	Hail	1.00 in.	0	0	0.00K	0.00K
NEPTUNE	7/8/2021	23:31	Hail	1.00 in.	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	8/1/2021	0:00	Drought		0	0	0.00K	866.00K
LE MARS	8/27/2021	0:16	Thunderstorm Wind	51 kts. MG	0	0	0.00K	30.00K
PLYMOUTH (ZONE)	9/1/2021	0:00	Drought		0	0	0.00K	282.00K
LE MARS	10/20/2021	8:17	Hail	0.88 in.	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/10/2021	13:00	Winter Weather		0	0	0.00K	0.00K
KINGSLEY	12/15/2021	16:38	Thunderstorm Wind	72 kts. EG	0	0	0.00K	0.00K
KINGSLEY	12/15/2021	16:39	Thunderstorm Wind	72 kts. EG	0	0	25.00K	0.00K

KINGSLEY	12/15/2021	16:39	Thunderstorm Wind	78 kts. EG	0	0	20.00K	0.00K
KINGSLEY	12/15/2021	16:39	Tornado	EF1	0	0	50.00K	0.00K
KINGSLEY	12/15/2021	16:40	Thunderstorm Wind	82 kts. EG	0	0	30.00K	0.00K
KINGSLEY	12/15/2021	16:40	Thunderstorm Wind	83 kts. EG	0	0	35.00K	0.00K
KINGSLEY	12/15/2021	16:41	Thunderstorm Wind	74 kts. EG	0	0	25.00K	0.00K
KINGSLEY	12/15/2021	16:41	Thunderstorm Wind	72 kts. EG	0	0	30.00K	0.00K
KINGSLEY	12/15/2021	16:44	Thunderstorm Wind	69 kts. EG	0	0	20.00K	0.00K
KINGSLEY	12/15/2021	16:44	Thunderstorm Wind	65 kts. EG	0	0	25.00K	0.00K
KINGSLEY	12/15/2021	16:47	Thunderstorm Wind	64 kts. EG	0	0	5.00K	0.00K
PLYMOUTH (ZONE)	12/15/2021	20:35	High Wind	55 kts. MG	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/1/2022	6:00	Cold/wind Chill		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/5/2022	7:00	Cold/wind Chill		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/21/2022	16:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/23/2022	4:00	Cold/wind Chill		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	3/5/2022	13:30	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	3/15/2022	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	3/25/2022	10:00	Strong Wind	27 kts. MS	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	4/1/2022	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	4/23/2022	10:00	High Wind	52 kts. MG	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	4/23/2022	13:00	Wildfire		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	5/1/2022	0:00	Drought		0	0	0.00K	500.00K
KINGSLEY	5/12/2022	18:30	Thunderstorm Wind	70 kts. EG	0	0	0.00K	16.00K
PLYMOUTH (ZONE)	6/1/2022	0:00	Drought		0	0	0.00K	7.140M
PLYMOUTH (ZONE)	7/1/2022	0:00	Drought		0	0	0.00K	10.210M
PLYMOUTH (ZONE)	8/1/2022	0:00	Drought		0	0	0.00K	12.370M
BRUNSVILLE	8/18/2022	16:44	Hail	0.88 in.	0	0	0.00K	0.00K
BRUNSVILLE	8/18/2022	16:56	Hail	1.00 in.	0	0	0.00K	0.00K
BRUNSVILLE	8/18/2022	16:58	Hail	1.25 in.	0	0	0.00K	11.00K
KINGSLEY	8/18/2022	18:22	Hail	1.50 in.	0	0	0.00K	0.00K
REMSEN	8/18/2022	18:00	Hail	1.00 in.	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	9/1/2022	0:00	Drought		0	0	0.00K	2.870M
PLYMOUTH (ZONE)	10/1/2022	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	11/1/2022	0:00	Drought		0	0	0.00K	0.00K

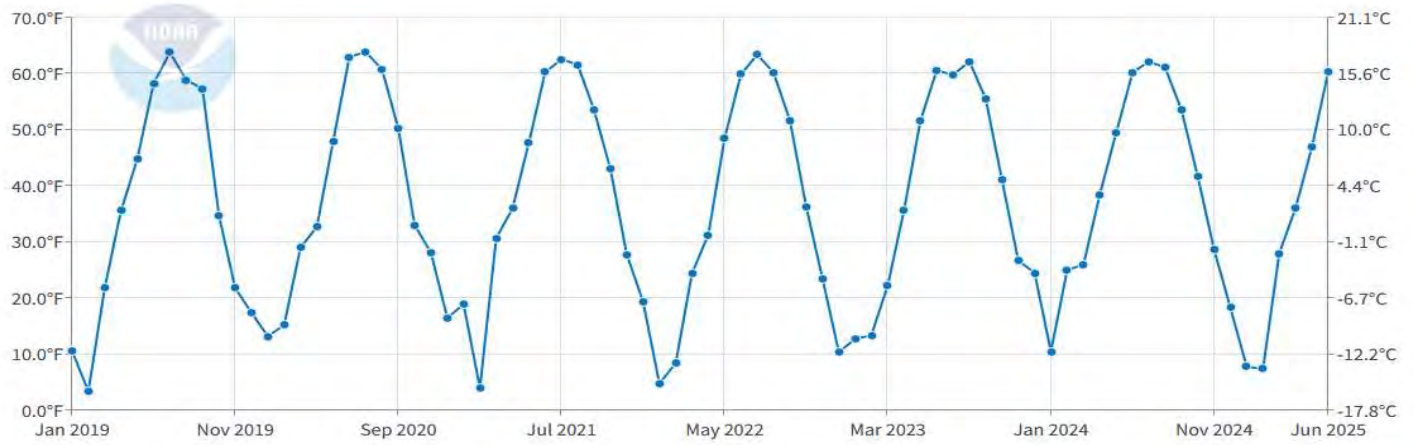
PLYMOUTH (ZONE)	11/29/2022	5:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/1/2022	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/8/2022	16:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/22/2022	0:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/1/2023	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/3/2023	3:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/18/2023	18:00	Winter Storm		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/28/2023	0:00	Winter Storm		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/1/2023	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/22/2023	10:30	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	3/1/2023	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	3/8/2023	17:30	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	3/22/2023	22:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	4/1/2023	0:00	Drought		0	0	0.00K	0.00K
AKRON	4/10/2023	23:00	Flood		0	0	0.00K	0.00K
WESTFIELD	4/12/2023	0:00	Flood		0	0	0.00K	0.00K
MERRILL	4/19/2023	19:39	Hail	1.00 in.	0	0	0.00K	0.00K
MILLNERVILLE	4/19/2023	19:03	Hail	1.00 in.	0	0	0.00K	0.00K
MILLNERVILLE	4/19/2023	19:09	Hail	1.00 in.	0	0	0.00K	0.00K
REMSSEN	4/19/2023	20:04	Hail	1.00 in.	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	4/30/2023	9:00	Strong Wind	39 kts. MG	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	5/1/2023	0:00	Drought		0	0	0.00K	0.00K
HINTON	5/10/2023	23:05	Hail	1.75 in.	0	0	0.00K	0.00K
OYENS	5/10/2023	23:40	Hail	1.75 in.	0	0	0.00K	0.00K
OYENS	5/10/2023	23:42	Hail	2.00 in.	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	6/1/2023	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	7/1/2023	0:00	Drought		0	0	0.00K	0.00K
HINTON	7/4/2023	13:50	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
NEPTUNE	7/4/2023	14:02	Thunderstorm Wind	61 kts. EG	0	0	0.00K	6.00K
MILLNERVILLE	7/12/2023	3:55	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
HINTON	7/21/2023	18:06	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	7/25/2023	10:00	Excessive Heat		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	8/1/2023	0:00	Drought		0	0	0.00K	0.00K

LE MARS MUNI ARPT	8/5/2023	17:25	Thunderstorm Wind	62 kts. MG	0	0	5.00K	0.00K
PLYMOUTH (ZONE)	8/19/2023	13:30	Excessive Heat		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	8/21/2023	11:00	Excessive Heat		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	9/1/2023	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	9/2/2023	12:00	Heat		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	10/1/2023	0:00	Drought		0	0	0.00K	7.460M
PLYMOUTH (ZONE)	10/12/2023	15:00	Strong Wind	45 kts. MG	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	10/28/2023	11:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/9/2023	9:00	Strong Wind	44 kts. MG	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/25/2023	3:00	Ice Storm		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/8/2024	4:00	Winter Storm		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/10/2024	13:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/11/2024	14:00	Winter Storm		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/12/2024	15:00	Blizzard		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/12/2024	18:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/18/2024	9:00	Winter Weather		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	1/19/2024	22:00	Cold/wind Chill		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	2/27/2024	15:00	Winter Weather		0	0	0.00K	0.00K
HINTON	4/16/2024	12:46	Tornado	EFU	0	0	0.00K	0.00K
JAMES	4/16/2024	12:49	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
MERRILL	4/16/2024	13:10	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
OYENS	4/16/2024	13:22	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
REMSEN	4/16/2024	13:21	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
STRUBLE	4/16/2024	13:00	Tornado	EF1	0	0	0.00K	0.00K
WEST LE MARS	4/16/2024	12:48	Tornado	EFU	0	0	0.00K	0.00K
REMSEN	4/30/2024	14:56	Hail	0.75 in.	0	0	0.00K	0.00K
REMSEN	4/30/2024	15:00	Hail	0.75 in.	0	0	0.00K	0.00K
REMSEN	4/30/2024	15:02	Hail	0.88 in.	0	0	0.00K	0.00K
REMSEN	4/30/2024	15:04	Hail	1.00 in.	0	0	0.00K	0.00K
MILLNERVILLE	5/20/2024	22:27	Hail	0.88 in.	0	0	0.00K	0.00K
REMSEN	5/20/2024	18:50	Hail	1.00 in.	0	0	0.00K	0.00K
O LEARY	5/21/2024	5:43	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
AKRON	6/21/2024	9:00	Flood		0	0	0.00K	0.00K

JAMES	6/21/2024	1:30	Flood		0	0	1.580M	0.00K
WESTFIELD	6/21/2024	16:00	Flood		0	0	0.00K	0.00K
STRUBLE	6/22/2024	2:00	Flood		0	0	0.00K	0.00K
STRUBLE	6/22/2024	14:00	Flood		0	0	0.00K	0.00K
WEST LE MARS	6/22/2024	18:00	Flood		0	0	0.00K	0.00K
HINTON	6/23/2024	3:00	Flood		0	0	0.00K	0.00K
MILLNERVILLE	6/23/2024	3:00	Flood		0	0	0.00K	0.00K
AKRON	7/1/2024	0:00	Flood		0	0	0.00K	0.00K
WESTFIELD	7/1/2024	0:00	Flood		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	7/13/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
KINGSLEY	7/29/2024	23:00	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
KINGSLEY	7/29/2024	23:08	Thunderstorm Wind	74 kts. EG	0	0	0.00K	0.00K
LE MARS	7/29/2024	22:55	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
LE MARS MUNI ARPT	7/29/2024	22:52	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
LE MARS MUNI ARPT	7/29/2024	22:52	Thunderstorm Wind	54 kts. MG	0	0	0.00K	0.00K
MERRILL	7/29/2024	22:46	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	7/31/2024	11:00	Excessive Heat		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	8/2/2024	12:00	Heat		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	8/5/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	8/25/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	10/22/2024	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	11/1/2024	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/1/2024	0:00	Drought		0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/4/2024	12:00	Strong Wind	43 kts. MG	0	0	0.00K	0.00K
PLYMOUTH (ZONE)	12/19/2024	11:00	Strong Wind	29 kts. MS	0	0	0.00K	0.00K
Totals:							1.906M	52.387M

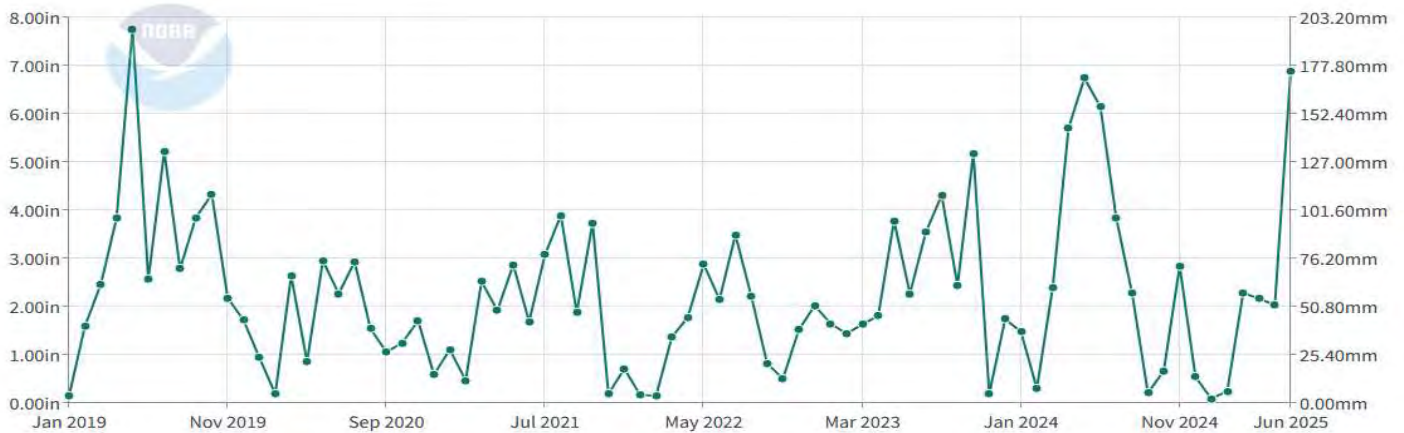
The following charts provide a visual of Plymouth County's record of maximum temperature, minimum temperature and precipitation by month from November 2019 through December 2024 (www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/IA).

Plymouth County, Iowa Minimum Temperature

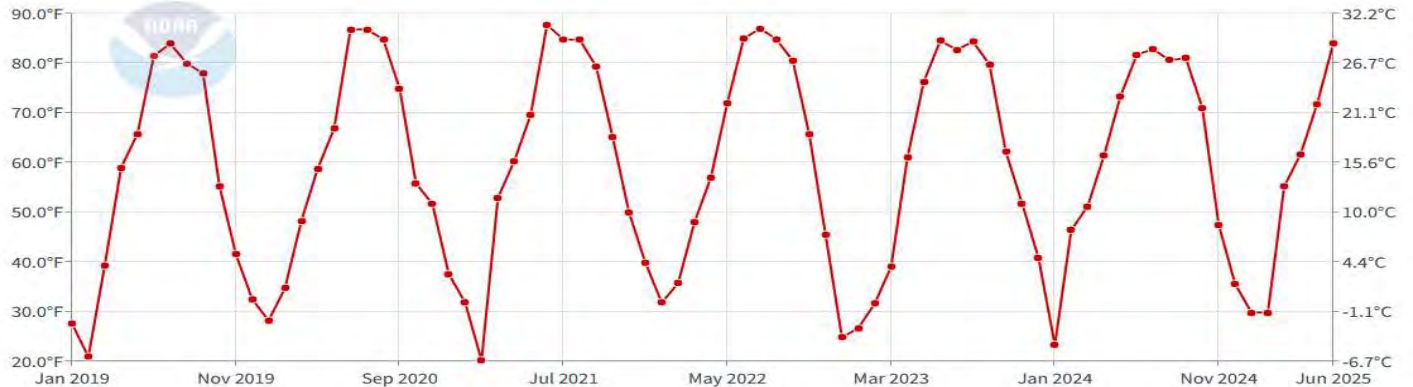


Powered by ZingChart

Plymouth County, Iowa Precipitation



Plymouth County, Iowa Maximum Temperature



Powered by ZingChart

Priority Hazards

Survey responses specific to Plymouth County indicated and Tornado/Windstorm at the greatest frequency at least somewhat concerned. Flooding (both flash and riverine) and Thunderstorm, Hail & Lightning follow, with notable concern indicated for Severe Winter Storm, Drought, Infrastructure Failure, Extreme Heat, and Hazardous Materials incidents. Issues have varied by community. In addition to Tornado/Windstorm concerns, the county identified top hazards by frequency of related projects.

Most concerning hazards as indicated by county officials are as follows. Determination of level of concern is primarily cost of recovery with sue consideration of risk to residents.

- Flood – Flash and Riverine
- Thunderstorm w/Hail & Lightning
- Severe Winter Storm

The top three most concerning hazards as ranked by survey response are Tornado/Windstorm, Severe Winter Storm, and Flash Flooding.

STORM LAKE, Iowa (KTIV) - A disaster proclamation has been signed for the counties impacted by the recent severe storms that started on Thursday, April 17.

On Friday, April 18, Iowa Gov. Reynolds issued a disaster proclamation for two Siouxland counties: Buena Vista County and Plymouth County. Other counties included are Page County and Fremont County.

Thousands left without power, numerous buildings damaged after severe weather hits Storm Lake, IA

This proclamation allows for state resources to be used to respond and recover from the aftereffects of the severe weather, effective immediately, and expires on Sunday, May 18.

Source: www.ktiv.com/2025/04/18/gov-reynolds-issues-disaster-proclamation... (By [Kathryn Vlaanderen](#))

Published: Apr. 18, 2025 at 3:50 PM CDT) June 10, 2025.

Future Risk

According to FEMA's National Risk Index³⁶, Plymouth County has an overall "Very Low" risk level relative state and national comparisons and Very High Community Resilience rating. An

³⁶ Source: <https://hazards.fema.gov/nri/map>

assessment of Hazard Types, Expected Annual Loss. Social Vulnerability, Risk Valuation and Risk Score provide a composite breakdown of vulnerability.

Composite Expected Annual Loss:	<u>\$ 4,815,286.01</u>
Composite Expected Annual Loss Rate National Percentile:	<u>30%</u>

Building EAL	<u>\$ 2,682,874.42</u>
Building EAL Rate	<u>\$ 1.00</u> per <u>\$2.82K</u> of building value
Agriculture EAL	<u>\$ 276,698.01</u>
Agriculture EAL Rate	<u>\$ 1.00</u> per <u>\$3.06K</u> of agriculture value
Population EAL	<u>0.16</u> fatalities
Population EAL Rate	<u>1</u> per <u>160.57K</u> people
Population Equivalence EAL	<u>\$ 1,855,713.57</u>

Hazard Type Risk Ratings

Hazard Type	Expected Annual Loss		Risk Factor Breakdown	
	EAL Value	EAL Rating	Risk Value	Risk Index Score
Cold Wave	\$ 136,389	Relatively Moderate	\$134,713	60.6
Drought*	\$ 239,042	Relatively Low	\$224,472	77
Earthquake	\$ 9,326	Very Low	\$9,623	16.3
Hail	\$ 101,390	Relatively Low	\$99,764	48.2
Heat Wave	\$ 60,596	Relatively Low	\$60,144	44.2
Ice Storm	\$ 37,814	Relatively Low	\$37,702	39.3
Landslide	\$ 21,900	Relatively Low	\$19,057	17.5
Lightning	\$ 30,060	Very Low	\$29,748	17
Riverine Flooding	\$ 21	Very Low	\$18	3.1
Strong Wind	\$ 479,908	Relatively Low	\$477,136	57.2
Tornado	\$ 3,415,905	Relatively Moderate	\$3,398,856	77.7
Wildfire	\$ 206,051	Relatively Low	\$180,774	69.6
Winter Weather	\$ 76,884	Relatively Low	\$76,006	56.3

*Note: Risk Index is based on Agricultural (crop only) impacts

<https://hazards.fema.gov/nri/report/viewer?dataLOD=Counties&dataIDs=C19149>

MITIGATION ACTIONS, STRATEGIES, & PROJECTS

Plymouth County identified several strategies and planned actions to address natural disasters and other hazards intended to reduce risk of property loss/damage and potential loss of life.

communication/education		
Promo/Info	Plymouth County	New. Plymouth County. Continuity of Operations plan development is in the works, assigning use of facilities when relocation is necessary. Plan includes consideration of displacement potential for all county services. Involved parties: all department heads, Clerk of Court, State Officers, DOT, DNR, VA.
Warning Sirens/Alerts	Plymouth Co	New. The county is interested in enhancing capacity for alerts at the fairgrounds. As large gatherings tend to slow cell networks, a booster is needed to ensure timely notifications, especially for larger scale outdoor events. <i>County EMA, Fair board</i> (Pre-disaster mitigation funds, Community Safety program funds, county funds, allocated fairground facility funds) HIGH PRIORITY
Warning Sirens/Alerts	Plymouth Co w/ City of Le Mars	New. Further consideration is needed for improved localized warnings in Le Mars, narrowing scope of generalized county-wide warnings for events that may have significant in-town effects. Such specification are expected to improve school district and shift adaptations for major employers as may be necessary. <i>County EMA, City of Le Mars, Emergency Response teams</i> (Pre-disaster mitigation funds, Community Safety program funds, county funds, allocated fairground facility funds) HIGH PRIORITY
tools/equipment		
Generator & Related Projects	All Counties	2020: Assess availability of generators for all critical facilities, portable or permanent. Prep all critical facilities for connection to generators as applicable; <i>County EMA</i> (Varying levels of funds needed. Support may come through County, State, and Federal grant and loan programs) HIGH PRIORITY
Generator & Related Projects	Plymouth County	Implemented. County Courthouse, Courthouse Annex, and Law Enforcement office have added a generator with a \$300,000 investment. Portable generators are available for communities; no additional need for transfer switches.
Generator & Related Projects	Plymouth County	New. The County will continue this project, coordinating with communities to ensure their panels are prepped for connection. Cost will vary by facility. <i>County EMA, City public works departments.</i> (Emergency preparedness programs, BRIC, local funds, county funds) HIGH PRIORITY
Equipment	Plymouth County	Implemented. Plymouth County Law Enforcement added equipment to increase efficiency of services, especially in emergency situations. Additions include Bearcat, Incident Command Trailer, and multi-use (80-person capacity) Shelter trailer. <i>County law Enforcement.</i> (ARPA funds).
development		
Bridges & Roads	Plymouth County	2020: Roadway access/elevation projects identified @ Floyd River Basin and Deep Creek Basin areas. While floodmap revisions continue, the County does not anticipate significant changes in

		unincorporated areas. <i>IDNR, County Conservation, County Engineer</i> (Clean Water Conservation program funds, County funds, IDNR funds, Transportation funds) LOW PRIORITY
Bridges & Roads	Plymouth County	Update was not provided. Project removed from Priority List.
flow control		
Drainage Projects	Plymouth Co	New & Ongoing. Drainage ditch improvements are needed throughout the county. Maintenance is performed as needed with monitoring in effect for Akron, Westfield, and Hinton as areas frequently affected by flash flooding. Monitoring includes assessing opportunities for long term improvements that may supplement drainage ditch network. Secondary Roads (County budget, IDNR as may be applicable, Disaster response as may be needed) HIGH PRIORITY
refuge		
technology		
natural barriers/supports		
Stabilization	Plymouth County	New. Rip rap repair and assessment for permanent stabilization is in progress for a man-made berm surrounding a 20-acre lake south of Akron. Flooding in 2024 exceeding historic high flood marks by 5', resulting in significant deterioration of berm. County departments, IDNR as applicable (County budget item, disaster response funds as may be applicable, mitigation funds as may be available) HIGH PRIORITY

JURISDICTIONS

1. AKRON

a. Profile

The City of Akron lies on the western-most border of Plymouth County, on the Iowa/South Dakota border. Akron occupies about 1.23 square miles. Big Sioux River Road, IA-12, travels north/south on a slight diagonal through the central part of Akron with IA-3 branching east from 12 before following the city's southeast boundary and continuing east. Big Sioux River runs on the north part of Akron City's boundary, serving as the Iowa/South Dakota border. Union Pacific railroad line passes through Akron between IA-12 and the Big Sioux River.

City Governance & Community Supports

Akron is governed by a five-person elected Council and the Mayor. Offices in addition to Mayor and Council include:

- Akron Fire & Rescue
- City Administrator
- City Attorney
- City Clerk
- Deputy Clerk
- Library
- Parks & Recreation
- Police Department
- Zoning Board & Commission
- (Elected) Akron Care Center Board

The Akron Fire & Rescue is composed of about 45 volunteers that respond to calls for service utilizing 10 different apparatus and provide a wide variety of skills and special abilities). The city contracts with the County for Emergency Management. Akron is a member of the NFIP program, though residents are known to be inactive under flood insurance. A comprehensive plan was adopted October 2011. More information about the City of Akron can be found on their website at <https://akronia.org/>.

Demographics, Housing, & Economics

CensusReporter.gov estimates a slight increase in the population of Akron from 1,558 in 2020 to 1,660 in 2023³⁷. The town is home to 748 households, with a median household income of

³⁷ Source: <https://censusreporter.org/profiles/16000US1900775-akron-ia/>

\$59,706. Akron has a poverty rate of 9.2%, indicating that while the community is relatively prosperous, there are still some economic challenges faced by a portion of its residents.

Akron has a total of 802 housing units, with 746 currently occupied and 56 vacant, resulting in a strong occupancy rate. There are no mobile homes in the community. The majority of residents have moved into their homes since 2000, reflecting a trend toward newer housing. Smaller portions of the population settled into homes built in the 1990s or earlier, indicating a mix of both recent and long-established residences throughout the town.

Leading Employers

The following businesses, as well as those listed under Community Supports, operate and have established a necessary presence in Akron. Those as provided are leading employers in the city.

- Akron-Westfield Com School District
- Akron Care Center
- Heyl Truck Lines
- Mike's Inc.

Critical Facilities

City Hall	220 Reed St
City Garage	N Hwy 12 @ 2 nd St
Library	350 Reed St
Senior Center	204 S 4 th St
Police Department	220 Reed Street
Fire Station	1000 Ridge Rd
Fire Siren	5 th St @ Dakota St
City Storage	140 2 nd St
Office Bldg	300 Reed St
(former) Nursing Home	121 South St
Huff Bldg	245 N 3 rd St
Pump House	260 N 3 rd St
Lefty Swift Ballfield & Park	2-58 N 4 th St
Main Lift Station	Reed St @ River Rd

Lift Station - Heyl	N Norka Dr
Lift Station - Waterbury	S River Rd
Substation	Hwy 12 @ Reed St
Water Tower & Equipment	S 9th St @ Main St
Well Bldg & Related	S end Akron Business Park
Children's Memorial Park	301 Iowa St
City Park, Sargent Field & related	
Bob Tucker Field	
Akron City Park	City Park Dr.
Akron Swimming Pool	340 North 5 th Street
Warning Siren	2 nd St @ Country Club Ln
Thrift Store	251 N 5 th St
Akron Golf Club	941 Country Club Dr

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Public and private gathering spaces and other community supports are integral to Akron's makeup. Following is a list of entities given due consideration in mitigation planning efforts. The list is not exhaustive but does highlight some of the community centers, gathering points, and supports known even to non-residents. These and other centers of activity and/or service will be itemized beneficiaries in project protection specifications as applicable.

<i>In Town</i>	
Akron-Westfield Senior High School	850 Kerr Dr
Akron-Westfield Middle School	
Akron-Westfield Elementary School	
Akron Care Center	991 Hwy 3
Akron Family Practice Clinic	321 Mill St
Akron Opera House	151 Reed Street
Akron Area Museum	S 6 th Street & Main St
Chub's Country Store	
CVA Grain Bin	
Casey's	

<i>Outside City Limits</i>	
Appley/Von Hagel Wetland	(South Dakota side of River)
Boyd's Bend	13469 Hwy 12
Big Sioux Park	14241 Hwy 12
Hole n' the Wall Lodge	14396 Diamond Ave
Doorenbos-Ford Wetland	near 120 th St & Hwy 12
Higman Wetland	(Iowa side of River)
Lazy H Campground	Little Pearl Lake
Ron Wilmont River Access	180 th St & Hwy 12

Valuation of City Assets

Part of determining overall benefit of any project implementation, Akron periodically reviews its city-held properties in terms of how effective and efficient its functionality is within city operations. In recent years, the city sold two buildings and consolidated operations into a single facility. Protecting city investments is primary mitigation and other development planning. Valuation of assets is based on the community's current insurance policy. Values are provided as a foundation for cost-benefit analysis for projects expected to improve resiliency of the community overall. A more specific assessment of value will be determined by project when included in an application for mitigation and pre-disaster programs. Numbers as provided are strictly for city-owned assets and do not include vehicles and equipment.

Total Building	\$	9,201,538
Total Personal Property	\$	1,004,917
Total Property in the Open	\$	<u>4,873,525</u>
Combined Total	\$	<u>15,079,980</u>

b. Participation

SIMPCO facilitated a virtual mitigation planning meeting via Teams, December 16, 2024 with Dan Rolfes, City Administrator and Becca Socknat, Plymouth Co EMA in attendance.

c. Community Capabilities

Capacity building is an ongoing process for the city. Informal designation of refuge locations has been made. Pending the emergency/incident, the Care Center and Fire Station will serve to shelter displaced or otherwise affected persons. Formalizing other actions is underway with updates to integrated community plans encompassing capital improvements, land use, and wellhead protect plans, including a master plan component. In addition to resources as available through State, Region, and County entities, the City has the following capabilities as locally derived and/or determined.

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
Capital Improvement Plan	
Local/County Emergency Plan	
Land Use Plan	
Wellhead protection plan	
Firewise or other fire mitigation plan	Fire Department incident command structure
Critical Facilities Plan (Mitigation/Response/Recovery)	within Emergency Ops Plan
<i>Policies/Ordinance</i>	
• Zoning Ordinance • Floodplain Ordinance • Subdivision Ordinance • Tree Trimming Ordinance	• Nuisance Ordinance • Storm Water Ordinance • Drainage Ordinance • Historic Preservation Ordinance
Building Code	UBC & IBC 2018
Property Maintenance (by reference w/exceptions)	IPMC 2022
<i>Programs</i>	
Zoning/Land Use Restrictions	
Codes Building Site/Design	
National Flood Insurance Program (NFIP) Participant	CID #190223
ISO Fire Rating	Akron class 4; Akron FD class 4/8B
Property Acquisition	
Planning/Zoning Boards	
Tree Trimming Program	
<i>Staff/Department</i>	
Zoning Administrator (volunteer position)	Building Code Official

	NFIP Floodplain Administrator
Public Works Official	role of Zoning Administrator
Emergency Response Team	Akron Fire & Rescue
Historic Preservation	
<i>Non-Governmental Organizations</i>	
Veterans Groups	Legion Post 186
Homeowner Associations	
Neighborhood Associations	Neighborhood Watch
Chamber of Commerce	
Community Organizations	• Lions • Friendship & Service Club • Knights of Columbus • Next Generation Club • PEO
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, or electric services	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

Projects as implemented in the past five (5) years may have a considerable effect on the City's ability to mitigate the effects of natural disasters when actions and strategies as proposed in the 2020 Plan were applied to those projects. Following is a status update.

communication/education		
Warning Sirens	Akron	2020: Assess need for additional warning siren near school; <i>School Board, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY Resolved. City assessed function of existing equipment and determined additional siren is not necessary. School facilities are adequately served by existing warning siren.
tools/equipment		

Generator & Related Projects	Akron	2020: Transformer needed at wells to make ready for generator connections; <i>City Public Works & Waterworks Depts</i> (Local funds, Community benefit fund grants) HIGH PRIORITY
		Phase 1 Implemented. A generator is in place at the Fire Station and 2 generators are incorporated into the Water Treatment Plant U.V. project underway (03/2025).
development		
flow control		
refuge		
technology		
natural barriers/supports		

Cars sit stranded in flash flood waters on Merriman Road in Akron in front of the Dollar General store on Aug. 6, 2024. From 3.5 to 5 inches of rain fell in the area in about a two-hour period, trapping drivers and leading to wide spread damage to homes and businesses. (Signal Akron / Wittman Sullivan)

The rain poured down last Thursday for about four hours, dumping as many as seven inches of water in some parts of the Akron area. The slow-moving storm resulted in a “very, very, very heavy rainfall in a very short period of time,” said Raelene Campbell, a meteorologist with the National Weather Service.

<https://signalakron.org/500-year-storm-tests-akron-areas-ability-to-handle-extreme-rainfall-events/> (by Arielle Kass August 16, 2024) June 10, 2025

d. Risk Assessment

Contributing Factors

Smaller towns, Akron included, continue to struggle filling vacancies in volunteer and service positions alike. At the time of the mitigation planning meeting, the city was actively conducting a search for a police officer to fill its second position. Volunteer participation in response departments has steadied somewhat, however there remains high turnover of new recruits brought in to fill in for retired persons. Adequate staffing directly impacts response capacity and Akron’s efforts have resulted in a relatively strong volunteer base.

Akron is taking preventive action by strategically removing ash trees. A plan is in place to replace one tree for every two removed. Overall, 7-8 have been removed and 5 have been planted. Work continues as needed.

In terms of natural disasters and other hazards, Akron shows 7 incidents reported in the NOAA Storm Event database from 11/01/2019 through 12/31/2025.

By [Dean Welte](#) and [Ervin Dohmen](#)

Published: Jun. 22, 2024 at 1:27 PM CDT



AKRON, Iowa (KTIV) - Plymouth County officials say the Floyd River at Le Mars and the Big Sioux River at Akron have crested. Water is expected to go down slowly from here on.

This news comes hours after Plymouth County Emergency Management told all Akron residents west of Highway 12 needed to evacuate immediately.

At about 3:30 p.m. Saturday water started coming up on Highway 12, with some residents reporting that the water was rising from the manholes on the street. Within two hours a large part of the area around Highway 12 was covered and Akron residents west of the highway were told to evacuate.

Before the evacuation was called, crews worked to place sandbags at places like Highway 12 and Reed Street but as the waters rose, they went further east into town to place bags closer to homes.

<https://www.ktiv.com/2024/06/22/officials-say-akron-ia-residents-low-lying-areas-should-be-prepared-evacuate/>

(By [Dean Welte](#) and [Ervin Dohmen](#) Published: Jun. 22, 2024 at 1:27 PM CDT) June 10, 2025

Location	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
AKRON	3/10/2020	7:00	Flood		0	0	0.00K	0.00K
AKRON	3/29/2020	11:00	Flood		0	0	0.00K	0.00K
AKRON	4/1/2020	0:00	Flood		0	0	0.00K	0.00K
AKRON	4/10/2023	23:00	Flood		0	0	0.00K	0.00K
AKRON	6/21/2024	9:00	Flood		0	0	0.00K	0.00K
AKRON	7/1/2024	0:00	Flood		0	0	0.00K	0.00K
AKRON	6/11/2021	5:38	Thunderstorm Wind	61 kts. EG	0	0	35.00K	0.00K

Priority Hazards

Among survey responses received from Plymouth County, none indicate Akron as jurisdiction of residence. From the perspective of the city, priority hazards are determined based on city expenses – one-time and ongoing, as accumulated due to natural disasters and other hazards. Due consideration is also given to residents. Flood mitigation remains an overwhelmingly high

priority in project planning. As drought conditions persist, flood impacts are frustratingly more severe.

- Flood – both River and Flash
- Dam/Levee Failure
- Drought

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Akron	2020: Transformer needed at wells to make ready for generator connections; <i>City Public Works & Waterworks Depts</i> (Local funds, Community benefit fund grants) HIGH PRIORITY
		Update. Well #4 has been updated with a transformer switch and is ready as needed. Second is still needed for the North Well and is carried over to the 2025 Plan. Carry over. Transformer needed at wells to make ready for generator connections; <i>City Public Works & Waterworks Depts</i> (Local funds, Community benefit fund grants) HIGH PRIORITY
development		
flow control		
Drainage projects	Akron	New. City is assessing check valve on storm sewer pipe seeking a viable solution to reduce flooding incidents. Other considerations include diverting water and/or adding a pump station. Likely to include study and implementation. <i>Public Works, DNR, County Engineer, Contracted services.</i> (local funds, disaster/flood mitigation program funds as may be available) HIGH PRIORITY
refuge		
technology		
natural barriers/supports		
Levees/Berms; Stabilization	Akron	New. Berms/Levees to reduce flood risk; rip rap for bank stabilization. <i>City, FEMA coordination</i> (Local funds, disaster/flood mitigation funds as may be available) HIGH PRIORITY

2. BRUNSVILLE

Note: The city participated in the development of the Regional Hazard Mitigation Plan, however, they have not included any specified mitigation actions, strategies, or projects. Therefore, the City of Brunsville is not recognized as an active “Participant” in the Plan. To activate participant status, the city must process an amendment at the local level and file said amendment with Plymouth County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

The City of Brunsville is situated just north of center in Plymouth County, and occupies .24 square miles. The main road that connects the city to surrounding communities is Highway 3, running east-west about 1.2 miles south of Brunsville.

City Governance & Community Supports

Brunsville is governed by a five-person elected Council and the Mayor. Offices in addition to Mayor and Council include City Clerk and City Administrator. City staff has designated the Legion Hall as significant support entity to community well-being. The City contracts with the county for law enforcement and with the City of Le Mars’s emergency response team.

The City of Brunsville is a member of the NFIP program, though the majority of residents are known to be inactive under flood insurance. The city is covered by the county’s Local/County Emergency Plan and has a few plans adopted and are specified in the discussion of Community Capabilities.

Demographics, Housing, & Economics

A review of demographic data was completed using Census Reporter³⁸. Brunsville's population rose to 180 from 129 between 2020 and 2023, reflecting notable growth in a short period. Using the 2020 Regional Hazard Mitigation Plan for reference, data from the 2010 decennial census estimated a population of 151.

³⁸ Source: <https://censusreporter.org/profiles/16000US1908875-brunsville-ia/>

The town includes 75 households, and the median household income stands at \$67,125. Despite a relatively solid income level, 21.6% of the population lives below the poverty line, indicating that a significant portion of residents may be facing economic hardship.

Brunsville has a total of 80 housing units, with 75 currently occupied and 5 vacant, indicating a high occupancy rate. There are no mobile homes in the community. Most residents have moved into their homes since 2000, while a smaller number settled in during the 1990s or earlier. This suggests a relatively modern housing stock with limited older residences, reflecting recent growth and development in the town.

Leading Employers

Drawn from records on file, Brunsville's leading employers are noted as follows.

- Corner Café
- Iowa State Bank

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Community facilities, both city-owned and independent as listed are determined from records on file.

- City Hall, 310 Oak St
- Brunsville Public Park, Oak St and Locust St
- ALCW (Lutheran Aid Society)
- American Legion Post 724 Heeren McHale Wilkens

Valuation of City Assets

A valuation of assets is not on file for Brunsville. For the purpose of cost-benefit considerations, a valuation of the City's assets may be compiled based on its insured properties, personal property, and facilities. Such calculations would be expected to accompany a mitigation project funding request.

b. Participation

Updates to the Brunsville profile were completed by SIMPCO using available online resources. Additional input was received from the County EMA regarding community capacity to withstand natural disasters and other hazards. One survey indicated Brunsville as jurisdiction of residence.

c. Community Capabilities

Community capabilities as provided are as retained on file from previous projects and related meetings.

<i>Policies/Ordinance</i>	
National Flood Insurance Program (NFIP) Participant	CID #190476
Mutual Aid Agreements	Countywide & with SCFR for Haz Mat Response
<i>Non-Governmental Organizations</i>	
Veterans Groups	American Legion Post 724 Heeren McHale Wilkens
Community Organizations	ALCW (Lutheran Aid Society)
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water, and sewer services	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

Brunsville did not include any scheduled projects in the 2020 HMP. A listing of other activities/projects has not been provided.

d. Risk Assessment

Contributing Factors

A compilation of storm events as recorded in the NOAA database show a single day of repeated reports of Hail. Brunsville likely experienced the effects of all events indicated for Plymouth “Zone” which include a wide range of event types (see Plymouth County profile for more information).

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
<u>BRUNSVILLE</u>	8/18/2022	16:44	Hail	0.88 in.	0	0	0.00K	0.00K
<u>BRUNSVILLE</u>	8/18/2022	16:56	Hail	1.00 in.	0	0	0.00K	0.00K
<u>BRUNSVILLE</u>	8/18/2022	16:58	Hail	1.25 in.	0	0	0.00K	11.00K

<https://www.ncdc.noaa.gov/stormevents/>

Priority Hazards

The city did not indicate priority hazards. One survey respondent indicated Brunsville as place of residence. While the respondent did not complete the ranking scale section of the survey, the following were all noted with “Very Concerned”.

- Drought
- Flooding (both flash and riverine)
- Severe Winter Storm
- Thunderstorm w/Hail & Lightning,
- Tornado/Windstorm,
- Pandemic Human Disease

e. Mitigation Needs, Actions, & Strategies

The city has not identified a specific action, strategy, or project. Therefore, an amendment must be filed for FEMA and the Iowa Department of Homeland Security to formally recognize this jurisdiction as an eligible applicant for pre-disaster and/or mitigation funds as may be available.

3. CRAIG

Note: The city participated in the development of the Regional Hazard Mitigation Plan, however, they have not included any specified mitigation actions, strategies, or projects. Therefore, the City of Craig is not recognized as an active “Participant” in the Plan. To activate participant status, the city must process an amendment at the local level and file said amendment with Plymouth County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

The City of Craig is situated near the northern-most border of Plymouth County, and occupies 0.09 square miles. The city lies about eight miles north of Highway 3, which runs east and west.

City Governance & Community Supports

The City of Craig is governed by a five-person Council and the Mayor. In addition to Mayor and Council, Craig staffs a City Clerk. The City contracts with the county for law enforcement and Emergency Management. Craig also contracts with Ireton Fire and Rescue, which is located five miles north on CR-K30; Law is enforced by the Plymouth County Sheriff’s Office.

Demographics, Housing, & Economics

Current demographic information as presented is drawn from the Census Reporter³⁹. For reference, the 2010 decennial census estimated Craig’s population at 89. In 2023, the population of Craig was 76, marking a slight decline from 79 residents in 2020. The town consists of 24 households, with a median household income of \$50,000. While the income level reflects a modest economic profile, about 13% of the population lives below the poverty line, indicating that a portion of residents may be experiencing financial difficulties.

Craig has a total of 24 housing units, all of which are currently occupied, leaving no vacant homes in the community. Two of the homes are mobile homes. The majority of residents have moved into their homes since 2000, while a smaller number have lived in their homes since

³⁹ Source: <https://censusreporter.org/profiles/16000US1916950-craig-ia/>

the 1990s or earlier. This suggests a relatively modern and fully occupied housing stock, with limited older structures and no recent vacancies.

Leading Employers

While not hosting a large number of employees, Farmers' Cooperative has an established and necessary presence in Craig.

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

• City Hall	725 Main St
• Poplar Park	Main St and Pine St
• St John's Evangelical Lutheran Church	400 Linn St

Valuation of City Assets

A valuation of assets is not on file. For the purpose of cost-benefit considerations, a valuation of the city's assets may be compiled based on its insured properties, personal property, facilities, and other holdings. Such calculations would be expected to accompany a mitigation project funding request.

b. Participation

Updates to the Craig profile were completed by SIMPCO using available online resources. Additional input was received from the County EMA regarding community needs to withstand natural disasters and other hazards. None of the submitted surveys included notation of Craig as residence.

c. Community Capabilities

Available summary of Craig's resources indicate a small population with a few localized resources. In addition to those as provided, Craig may benefit from county, region, and state resources as specified in respective sections of this plan.

Craig has a basic City code of Ordinances that is maintained with record of amendments, resolutions, and adoptions. Fire and Rescue services are provided through an agreement with the City of Ireton. Craig also has mutual aid agreements with all communities in Plymouth County and with SCFR (through Plymouth County) for hazardous materials response. Funding capabilities are as shown

<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water and sewer services	
Ability to incur debt through:	• general obligation bonds
	• special tax bonds
	• private activities

Review of Actions Taken (Since 2019)

The City of Craig did not include any scheduled projects in the 2020 HMP. A listing of other activities/projects has not been provided.

d. Risk Assessment

Contributing Factors

A review of available data in the NOAA Storm Event database revealed no recorded events centered in Craig between 11/01/2019 and 12/31/2024. However, Craig likely experienced the conditions as reported for 102 Plymouth “Zone” events including a broad range of weather events. More information about these events is catalogued in Plymouth County’s profile under Risk Assessment.

Priority Hazards

The city did not determine a prioritized list of hazard concerns. It can be expected that the natural disasters listed (as referenced in the 2020 HMP) remain significant concerns to the city.

- Tornado/Windstorm
- Sever Winter Storm
- Grass or Wildland Fire – Primarily due to lack of locally available resources to combat fire of any kind, this hazard may easily become widespread and travel to other communities.

e. Mitigation Needs, Actions, & Strategies

The city has not identified a specific action, strategy, or project. Therefore, an amendment must be filed for FEMA and the Iowa Department of Homeland Security to formally recognize this jurisdiction as an eligible applicant for pre-disaster and/or mitigation funds as may be available.

4. HINTON

a. Profile

Including some annexation activity in 2020 and property purchase in 2021, the City of Hinton covers about 0.9 square miles of land near Plymouth County's south border. US Highway 75, the main connector between Hinton and surrounding communities, runs north/south along much of the city's east border. The Floyd River runs about ¼ to ½ mile east of the highway, outside city limits. The Burlington Northern/Santa Fe, Illinois Central, and Union Pacific railroads lines run that same corridor.

City Governance & Community Supports

Hinton is governed by a six-person elected Council and the Mayor. Offices in addition to Mayor and Council include City Clerk, Municipal Utilities, Waterworks, Public Works, and Police Department. The Fire Department averages about 31 volunteer firefighters with, at last count, 11 emergency medical service certifications. An operation independent of the city, the Hinton Fire/Ambulance Department serves the city and rural surrounding areas. Hinton's Public Safety Building was recently built in 2012. The city recognizes the Legion as significant support entity to community well-being alongside additional community supports as specified in the discussion of Community Capabilities.

The City contracts with the county for law enforcement and Emergency Management. The City of Hinton is a member of the NFIP program, though residents are known to be inactive under flood insurance. A Comprehensive Plan was adopted July 18 2019. Hinton’s Zoning Ordinances and Municipal Code of Ordinances updates are in progress as of May 2025.

Demographics, Housing, & Economics

Hinton is a community that has experienced fairly consistent growth for decades, with just one drop shown in decennial census numbers – between 1910 and 1920. Recent data review via CensusReporter.org⁴⁰ provides a notable population estimate drop from 935 in 2020 to 881 in 2023. Local accounting is most consistent with population as determined in 2020 census records.

The community includes 357 households, and the median household income stands at \$108,125—well above average for the region. With only 2.5% of residents living below the poverty line, Hinton reflects a relatively affluent and economically stable community.

Hinton has a total of 369 housing units, with 358 currently occupied and just 11 vacant, indicating a high occupancy rate. There are no mobile homes in the community. Most of the housing development has occurred since 2000, with a smaller number of homes built in the 1990s and very few constructed before 1990. This points to a modern and well-maintained housing stock, reflecting the town’s growth and relatively recent residential development. As of October 2024, two additional residential developments were nearing completion and already at 75% occupancy.

Leading Employers

While not necessarily hosting a large number of employees, the following businesses operate, and have established a necessary presence, in Hinton. Additional business and organizations supporting the overall wellbeing of Hinton are included under Community supports.

⁴⁰ Source: <https://censusreporter.org/profiles/16000US1936480-hinton-ia/>

- Central Valley Ag
- Hinton Community School District

Critical Facilities

City Hall	205 W Main
Hinton City Park	15 S Center St
Hinton Community Center	205 W Main St
Substation & Equip	26505 C60
Pump Station	Pump Site
Ball Park & Tractor Pull	
Pump House	Sec 8, T90N, R46W
Deer Run Golf Course	801 First Ave
Warning Siren	315 W Grand St
Fire/Ambulance/Police Depts	308 1st Ave S
Water Booster Station	Titan Rd @ Springbrook Dr

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Hinton High School	315 W Grand
Hinton Middle School	312 W Grover
Hinton Elementary School	315 W Grand
Preschool & Daycare	315 W Grand (independent but onsite @ school)
3D Ag – Hardware & Supplies	1112 Starview
Hinton Baseball Field	C60 & S Center St
Held Sports Complex	1 st Ave S
Hillview Recreation Area	25601 C60
Hinton Hardware	107 Maple
American Legion	205 W Main St
Michael's Miracle Park	Valley Dr
Prime Time Hinton	201 E Main
Junkyard Pub & Grub	1116 Starview Dr

Valuation of City Assets

Total Building \$ 5,736,272

Total Personal Property	\$	597,400
Property in the Open	\$	<u>3,285,500</u>
Combined Total	\$	<u>9,619,172</u>

b. Participation

SIMPCO facilitated a mitigation planning meeting at Hinton City Hall on October 24, 2024 with the following in attendance.

- Kelly Kreber, Mayor
- Kelli Hill, City Clerk
- Kyle Utech, Public Works
- Logan Johnson, Police Department

Further participation was contributed via survey with 9 respondents indicating Hinton as their jurisdiction of residence in the primary survey (248 total responses) and 33 student responses from the Hinton Community School District to the student survey (65 total responses).

c. Community Capabilities

In addition to capabilities as included in the following table, Hinton also has access to resources as available through county, region, and state programs and supports. Those are identified within the region and county profiles respectively as applicable.

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
<i>Policies/Ordinance</i>	
• Building Code	• Subdivision Ordinance
• Nuisance Ordinance	• Zoning Ordinance
<i>Programs</i>	
Zoning/Land Use Restrictions	
Hinton Disaster Plan	
National Flood Insurance Program (NFIP) Participant	CID #190224
ISO Fire Rating	Class 5/5A (2019)

Planning/Zoning Boards	
<i>Staff/Department</i>	
Emergency Response Team	Hinton Fire and Rescue
<i>Non-Governmental Organizations</i>	
Veterans Groups	American Legion Post 477 Casper
Community Organizations	• Hinton Growth Org
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to apply for State Revolving Loan Fund programs	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, and municipal electric services	
Ability to incur debt through:	• general obligation bonds
	• special tax bonds
	• private activities

Review of Actions Taken (Since 2019)

In addition to planned strategies, Hinton has undertaken some massive infrastructure projects such as a water treatment facility, currently in design phase, with an estimated investment of approximately \$10M. Upcoming projects include a highway reconstruction collaboration with IA DOT which will affect roadway drainage/runoff. The following table logs actions taken specific to the 2020 HMP's identified strategies for Hinton.

communication/education		
Promo/Info	Hinton	2020: City is interested in formalizing communications with DOT to address default road closures and local authority on road closures to avoid ineffective detours; <i>City Administration & Public Works, County Engineer, Iowa DOT</i> (necessity for dedicated funds not anticipated) HIGH PRIORITY
		Update: Need for enhanced communications continues.
tools/equipment		
Generator & Related Projects	Hinton	2020: Generators for Lagoon Lift Station & @ 1 well location; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
		Complete. Part 1 of this project is complete with a generator added at the well location in 2022.
Equipment	Hinton	2020: Mobile pump; <i>City Maintenance/Public Works</i> (City funds) MEDIUM PRIORITY

		Update. Project still needed and funds were not sourced. City expects to implement project using local funds. <i>Public Works</i> . (City funds, local community benefit funds) elevate to HIGH PRIORITY.
Equipment	Hinton	2020: ATV for use during road blockage and flood staging; <i>City Council, Streets Dept</i> (City funds, Community Benefit funds, Response support funds) MEDIUM PRIORITY Completed. City purchased ATV for use when roadways or points of entry are inaccessible (storm debris, etc.) in 2022.
development		
Improve existing facilities & infrastructure	Hinton	2020: Water booster to improve capacity as accesses through fire hydrants. <i>City Waterworks, Fire Chief</i> (City funds, Fire Department funds, PDM) MEDIUM PRIORITY Update: No specific actions were taken to address this strategy. Project carries to 2025 HMP.
Improve existing facilities & infrastructure	Hinton	2020: Lining sewer and manholes in flood plane to eliminate infiltration from flooding and water table; <i>City Maintenance & Waterworks departments, IDNR</i> (IDNR program funds, City funds, PDM) HIGH PRIORITY Partial Completed. Manholes were lined in 2021. Project cost not provided. Remaining work carries to 2025 HMP
Improve existing facilities & infrastructure	Hinton	2020: Repair golf course crossings damaged and washed away during high flow events. <i>City Parks Dept, City Maintenance</i> (City funds, Active Transportation funds, Healthy Community/Recreation funds, PDM) LOW PRIORITY Complete. Project was implemented in 2020. Project cost not provided.
Bridges & Roads	Hinton	2020: Resurface alleys due to washout during rain events. <i>City Streets Dept</i> (City funds, PDM) HIGH PRIORITY Update: Some resurfacing has been completed with other still pending. and is carried over to the 2025 HMP, reduced to lesser priority.
flow control		
Flood protection	Hinton	2020: Floodgates @ dike; <i>City Council, IDNR</i> (City funds, PDM) HIGH PRIORITY Complete. Floodgate project completed 2021-2022. Cost & fund sources not provided.
Drainage projects	Hinton	2020: Stormwater management projects - drainage improvements; <i>City Administration, Contracted services, IDNR</i> (Local funds, IDNR program funds, Disaster funds, PDM) HIGH PRIORITY Update: Annual road maintenance projects have included some drainage improvements. Remaining work carries to 2025 HMP.
refuge		
Shelter	Hinton	2020: Storm Shelters @ City Parks; <i>City Administration, County EMA collaboration</i> (Local funds, Improving public spaces funds, PDM) LOW PRIORITY Update: The Elementary School is designated as a refuge site for large scale disaster vents.
technology		
natural barriers/supports		

d. Risk Assessment

Contributing Factors

Risk assessment is an ongoing evaluation of all community infrastructure and public spaces. Unexpected flooding in 2019 highlighted the city's need to prepare for the unexpected as well and anticipated issues. Removal of Ash Trees is a known need, however a clear plan has not yet been developed – in part due to lack of designated funds. Communication efforts are better coordinated between Hinton, nearby communities, Plymouth and Woodbury Counties, and the IA DOT. IBC and IPMC are being considered in zoning code updates to initiate better resident preparedness for natural disasters.

A review of available Storm Event data from NOAA provides record of 7 events specific to Hinton between 11/01/2019 and 12/31/2024. Hinton likely experienced the effects of 102 Plymouth “Zone” categorized events as well. Those events are noted in the county profile under Risk Assessment.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
HINTON	6/23/2024	3:00	Flood		0	0	0.00K	0.00K
HINTON	8/14/2020	14:25	Hail	1.75 in.	0	0	0.00K	0.00K
HINTON	8/14/2020	14:59	Hail	0.75 in.	0	0	0.00K	0.00K
HINTON	5/10/2023	23:05	Hail	1.75 in.	0	0	0.00K	0.00K
HINTON	7/4/2023	13:50	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
HINTON	7/21/2023	18:06	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
HINTON	4/16/2024	12:46	Tornado	EFU	0	0	0.00K	0.00K

Priority Hazards

The city identified the following as priority hazards in context of cost and general well-being of residents.

- Flood
- Severe Winter Weather
- Thunderstorm w/Hail & Lightning

Primary survey respondents from Hinton indicated Grass or Wildland Fire, Flooding (both flash and riverine), and Drought with the highest frequency of “Very Concerned”. Infrastructure Failure and Tornado/Windstorm ranked highest among top three hazards.

Hinton Schools student survey responses generally supported these issues as at least somewhat concerning. However, the three with highest frequency as most concerning are Tornado/Windstorm (19/33), Severe Winter Weather (15/33), and Pandemic Human Disease (10/33).

e. Mitigation Needs, Actions, & Strategies

communication/education		
Promo/Info	Hinton	Carry over. Some lines have improved but concern remains a factor in communicating course of action and conflicting chain of command (for example, C60 affecting County, DOT, City) as may result in road closures from varying directions and inadvertent closure of backup or designated alternate routes. City is still interested in formalizing communications with DOT to address default road closures and local authority on road closures to avoid ineffective detours <i>Public Works, County EMA, County Secondary Roads, IADOT</i> . (Intent is to use existing resources in improved format to ensure communications of intent. No additional funding needs anticipated) HIGH PRIORITY,
tools/equipment		
Generator & Related Projects	Hinton	Carry Over. Part 1 of this project is complete with a generator added at the well location in 2022. Remaining work carries over, maintaining the planned Lagoon Lift Station generator (scheduled for 2026) and the addition of need for a generator at the Public Safety Building. The project at the lagoon includes a loop connection with the Electric Company. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, BRIC, Community Benefits funds) HIGH PRIORITY
Equipment	Hinton	Carry over. Add mobile pump to city resources. Project still needed and funds were not sourced. City expects to implement project using local funds. <i>Public Works</i> . (City funds, local community benefit funds) elevate to HIGH PRIORITY.
	Hinton	New. City is interested in acquiring road barriers/blockade equipment for use during emergency road closure situations. <i>City Council, Public Works, Streets Dept</i> (City funds, Community Benefit funds, Response support funds) MEDIUM PRIORITY
	Hinton	New. City is interested in additional ATV for general use city-wide to ensure access as needed when multiple departments are active. <i>City Council, Public Works, Streets Dept</i> (City funds, Community Benefit funds, Response support funds) LOW PRIORITY
development		

Improve existing facilities & infrastructure	Hinton	Carry over. Capacity improvements are still desired through specific fire hydrants. Not a current over-riding concern. City will continue to seek funding opportunities to implement project. <i>City Waterworks, Fire Chief</i> (City funds, Fire Department funds, BRIC as applicable) MEDIUM PRIORITY
	Hinton	Carry over. : Lining sewer and manholes in flood plane to eliminate infiltration from flooding and water table is still needed. A portion has been completed with the following carried over. Sewer linings in floodplain to eliminate infiltration from flooding and water table. Project priority remains. <i>City Maintenance & Waterworks departments, IDNR</i> (IDNR program funds, City funds, Disaster Mitigation or Response/FMA as applicable) HIGH PRIORITY
Bridges & Roads	Hinton	Carry over. Continue to resurface alleys due to washout during rain events. Oversight is the responsibility of the <i>Streets Department</i> . (local funds via general budget) LOW PRIORITY.
flow control		
Drainage projects	Hinton	Carry over. Starview is in need of stormwater management improvements. With modified priority level, this project continues to the 2025 HMP. <i>City Administration, Contracted services, IDNR</i> (Local funds, IDNR program funds, Disaster Response/Mitigation funds) MEDIUM PRIORITY
refuge		
Shelter	Hinton	Carry over. Additional storm shelter options needed. The City would still like to incorporate a shelter at City parks to serve as refuge site during ball games and other events. This project will carry over to the 2025 HMP, maintaining assigned priority. <i>City Administration, County EMA collaboration</i> (Local funds, Improving public spaces funds, PDM) LOW PRIORITY
technology		
Improve effectiveness	Hinton	New. City has incorporated a plan to review their local Emergency Response and Emergency Operations Plans to assess and improve emergency response actions through: 1. Establishing a chain of command process specific to emergency type and area of effect 2. Designate command center, including alternate location if center is impacted by event 3. Identify refuge/shelter locations that may serve in a general capacity
	Hinton	
	Hinton	New. City is working to better inform residents of pending and potential extreme weather and other hazardous events through the promotion of existing services including but not limited to Alert Iowa. City Clerk (no funding outside of staffing hours necessary) HIGH PRIORITY
	Hinton	New. Implementation of improved ADA access is needed for restrooms at community center and city parks. Parks & Rec, Public Works (local funds, accessibility or multi-generational living program grants, fundraisers) HIGH PRIORITY
natural barriers/supports		

5. KINGSLEY

a. Profile

The City of Kingsley is situated southeast corner of Plymouth County, and occupies 1.61 square miles. The West Fork Little Sioux River runs northeast and southwest just west of the city. A floodplain intersects Kingsley running east/west, south of the centerline.

City Governance & Community Supports

Kingsley is governed by a five-person elected Council and the Mayor. Offices in addition to Mayor and Council include City Clerk, Water Clerk, Maintenance, Police, Fire Department, Ambulance and Rescue, Maintenance, City Attorney, and the Chamber. The Fire Department maintains a staff of about 25 volunteer firefighters. City staff has designated the Legion Hall as a significant support entity to community well-being. Additional community supports are specified in the discussion of Community Capabilities. More information on Kingsley and its services for the public can be found online at <http://kingsleyia.com/publicservices.html>.

The City of Kingsley is a member of the NFIP program, though the majority of residents are known to be inactive under flood insurance.

Demographics, Housing, & Economics

Demographic estimates are sourced using the Census Reporter. Though estimates tend to fluctuate, a consistent use of a single primary source allows for similar-based comparisons between jurisdictions. An increase in Kingsley's population was estimated from 1,396 in 2020 to 1,427 in 2023⁴¹. The community is home to 618 households, with a median household income of \$73,103. While the income level suggests relative economic stability, about 8.1% of the population lives below the poverty line, indicating that some residents may still face financial challenges.

Kingsley has a total of 653 housing units, with a high occupancy rate of 95% and only a small number of vacant homes. There are no mobile homes in the community. The majority of residents have moved into homes built since 2000, with fewer homes constructed in the 1990s

⁴¹ Source: <https://censusreporter.org/profiles/16000US1941385-kingsley-ia/>

or earlier. This indicates a predominantly newer housing stock and suggests ongoing residential development and investment in the area.

Leading Employers

As a smaller, rural community, Kingsley does not host a major employment center. The city recognizes its community support partners as leading employers. They are included in the Community Supports table.

Critical Facilities

City Hall	222 Main St
Kingsley Public Library	220 Main St
Kingsley Community Center	217 E 1 st St
Ambulance & Rescue	
Kingsley Volunteer Fire Dept	101 Clarendon St
Police Department	319 E 1 st St
City Maintenance Building	
Cemetery Building	222 Main St.
Water Tower	
Lagoon Building & Controls	
Water Pump House	
Lift Station	
No. 3 Well	
Little League Field	
Loring Aquatic and Fitness Center	Quest Ave
Kingsley City Park	Park Dr & Brandon St
Tennis Court/Basketball Court	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

US Post Office	210 Main St
Kingsley-Pierson High School	322 Quest Ave
Kingsley Elementary School	322 Quest Ave
Kingsley Medical Clinic	111 Main St

Kingsley Nursing & Rehab Center	305 W 3 rd St,
Brookside Golf Course	101 Iowa 140
Southeast Wildwood	310 th St & Quorn Rd

Valuation of City Assets

Summation of asset values provide current replacement cost and may not include equipment and materials. Valuations are provided as a base for general application to cost-benefit analysis. Project engineering and planning will include specific related asset protections for public assets as well as private property as may be affected by the given project.

Total Building	\$	5,022,257	RC
Total Personal Property	\$	752,937	RC
Property in the Open	\$	<u>2,661,187</u>	RC
Combined Total	\$	<u>8,436,381</u>	

b. Participation

Facilitated by SIMPCO, a planning meeting was held on December 11, 2024 at Kingsley City Hall with the following in attendance.

- Angela Becker, City Clerk
- Brandon Sitzmann, Fire Chief
- Brian Book, Maintenance Manager

One survey for Plymouth County was completed with Rural Kingsley noted as place of residence. Details are included for consideration but not specified as to eliminate potential for disclosure of personal information.

c. Community Capabilities

<i>Policies/Ordinance</i>	
• Floodplain Ordinance • Nuisance Ordinance	• Open Burn Ordinance • Zoning Ordinance
International Property Code adopted May 2019	

<i>Programs</i>	
Zoning/Land Use Restrictions	
National Flood Insurance Program (NFIP) Participant	CID #190477
ISO Fire Rating	Class 6/8B
Planning/Zoning Boards	
<i>Staff/Department</i>	
Public Works Official	
Building Inspector	
Emergency Response Team	Fire Dept, Ambulance & Rescue, Police Dept
Regional Planning Agencies	SIMPCO and Iowa League of Cities
<i>Non-Governmental Organizations</i>	
Veterans Groups	American Legion Nash Post 140
Chamber of Commerce	
Community Organizations	• Kingsley Community Action Club (KCAC) • School Clubs • Booster Club • 4-H
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water & sewer services	Water and Sewer
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

Kingsley has implemented several projects to improve its sustainability in the event of a natural disaster and other hazards. They've initiated a water main replacement project in 2024, purchased a generator for the community center to substantiate its designation as a refuge/shelter location (approximate cost @ \$50,000, install not funded and included in new project list), and the fire department has new pump trucks and a new fire station. The new building increases storage capacity, increasing flexibility of City Maintenance/Police Department building.

Always willing to take advantage of collaborative training opportunities, Kingsley hosted a region-wide full scale hazardous material response exercise October 2024. The exercise included a transportation-related hazardous materials incident simulation involving response interactions with 5 participating counties and a third-party administration team. Kingsley prioritizes preparedness and continues to demonstrate that focus in project planning.

The city has included tree maintenance as a line-item in its budget addressing necessary removals and replacement. The city is addressing removal of dead/diseased/at risk trees in the parking first, with 25 planned per year. Trees in parking will not be replaced, however other public spaces will assume the balance of new trees.

communication/education		
tools/equipment		
Generator & Related Projects	Kingsley	2020: Generators needed at lift station, water plant, and lagoon; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
		Completed. Generators are in place at the lift station and lagoon. Additional components will be carried over.
development		
flow control		
Drainage projects	Kingsley	2020: Terracing needed to ease floodplain restrictions. <i>City Administration, County Engineer collaboration, IDNR, Contracted services</i> (Local funds, County funds, IDNR Program funds, USDA program funds/loan program, Disaster funds, PDM) LOW PRIORITY
		Project closed. Updated floodplain resources decreased significance of potential impacts to indicated areas, thereby removing restrictions. City will continue to consider opportunities for terracing when implementing projects, however, this item has been removed from the priority list.
refuge		
technology		
natural barriers/supports		

d. Risk Assessment

Contributing Factors

As mentioned, Kingsley has floodplain running through town, just south of center. The Golf Course and undeveloped greenspace fills most of the designated area, though a few industries may be affected. The city has two warning sirens, audible throughout city limits. Kingsley has 15 reported weather events in the NOAA Storm Event Database between 11/01/2019 and 12/31/2024. Eleven of those events were from varying sources in response to a single event. Unchanged from 2020, Thunderstorm, Tornado, and Hail were notable locally while Drought was significant in Plymouth County and the region.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
KINGSLEY	12/15/2021	16:38	Thunderstorm Wind	72 kts. EG	0	0	0.00K	0.00K
KINGSLEY	12/15/2021	16:39	Thunderstorm Wind	72 kts. EG	0	0	25.00K	0.00K
KINGSLEY	12/15/2021	16:39	Thunderstorm Wind	78 kts. EG	0	0	20.00K	0.00K
KINGSLEY	12/15/2021	16:40	Thunderstorm Wind	82 kts. EG	0	0	30.00K	0.00K
KINGSLEY	12/15/2021	16:40	Thunderstorm Wind	83 kts. EG	0	0	35.00K	0.00K
KINGSLEY	12/15/2021	16:41	Thunderstorm Wind	74 kts. EG	0	0	25.00K	0.00K
KINGSLEY	12/15/2021	16:41	Thunderstorm Wind	72 kts. EG	0	0	30.00K	0.00K
KINGSLEY	12/15/2021	16:44	Thunderstorm Wind	69 kts. EG	0	0	20.00K	0.00K
KINGSLEY	12/15/2021	16:44	Thunderstorm Wind	65 kts. EG	0	0	25.00K	0.00K
KINGSLEY	12/15/2021	16:47	Thunderstorm Wind	64 kts. EG	0	0	5.00K	0.00K
KINGSLEY	12/15/2021	16:39	Tornado	EF1	0	0	50.00K	0.00K
KINGSLEY	5/12/2022	18:30	Thunderstorm Wind	70 kts. EG	0	0	0.00K	16.00K
KINGSLEY	8/18/2022	18:22	Hail	1.50 in.	0	0	0.00K	0.00K
KINGSLEY	7/29/2024	23:00	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
KINGSLEY	7/29/2024	23:08	Thunderstorm Wind	74 kts. EG	0	0	0.00K	0.00K

In addition to the above reports specific to Kingsley, the city also experienced the general effects of 102 events noted under Plymouth (County) “Zone”.

Priority Hazards

Discussion included Infrastructure Failure and costs associated with Severe Winter Storm. However, the city indicated the following as primary hazard concerns for the city.

- Tornado
- Flooding
- Grass and Wildland Fire

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Kingsley	Carry over. A portion has been completed as noted for the lift station and lagoon. Additional needs remain. Generators needed at water plant A portion of the backup power needs are included in the Water Plant. Replacement project slated for FY2026. Estimated project budget is \$5.5M. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, BRIC, Community Benefits funds, USDA) HIGH PRIORITY
Generator & Related Projects	Kingsley	New. The city has purchased a generator (\$50,000) for the community center. Funds have not yet been fully designated for installation. Cost to be determined pending correlation to other like projects. City Council, Public Works, County EMA as may be needed. (Local funds, safety/emergency response funds as may be available, pre-disaster/mitigation funds as may be available. HIGH PRIORITY
Generator & Related Projects	Kingsley-Pierson CSD	New. Highschool currently has a generator as installed in 1979. A new generator is need to meet capacity of updated facility and to ensure viability for use as a refuge location in the event of a disaster or other extreme event. Interest in transfer switches at all facilities. <i>Superintendent, District Maintenance/Crew, Plymouth and Woodbury County EMAs as applicable</i> (district and local funds, county supports, PDM as may be applicable) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/supports		

6. LE MARS

a. Profile

Serving as county seat, the City of Le Mars is situated near the center of Plymouth County. U.S. Highway 75 stretches north/south, primarily just outside city boundaries. Iowa Highway 3 stretches east/west through the city, before angling north and following east toward Cherokee. Iowa Highway 60 is accessible north of the city. The City of Le Mars accounts for the largest population and spatial area of Plymouth County occupying 8.9195 square miles. The Floyd River runs through Le Mars, following outside much of its east and north borders.

City Governance & Community Supports

Le Mars is governed by a five-person elected Council and the Mayor. Offices in addition to Mayor and Council include are as provided.

- Airport Library
- Board of Civil Service Commission
- Board of Zoning Adjustment Commission
- City Clerk
- Community Development/Code Enforcement
- Convention and Visitors Bureau
- Disaster Services Coordinator
- Finance Dept
- Fire-Rescue Department
- Historic Preservation Commission
- Hospital Trustee Board
- Mapping
- Park and Recreation Committee
- Planning and Zoning Commission
- Police Department
- Public Facilities
- Streets
- Trustees
- Waste and Recycling
- Wastewater Treatment
- Water Department

The Le Mars Fire-Rescue department has about 50 volunteers and is funded by a combination of township fire fees, city taxes, and fund-drive donations. The department provides coverage and protection extending 8 miles from City Limits and approximately 200 square miles of rural territory including all or partial areas of seven townships and five additional small communities/villages.

The City of Le Mars is a member of the NFIP, though residents are known to be inactive under flood insurance. A Community Development Plan was adopted in 2023.

Demographics, Housing, & Economics

Using the online Census Reporter⁴² estimates, Le Mars' population of 10,597 (2023) shows a slight increase from 2020's decennial census (10,571) reflecting steady community growth. The city includes 4,356 households and boasts a median household income of \$72,381, which suggests a relatively strong local economy. Despite this, about 8.9% of residents live below the poverty line, indicating that some households may still face economic challenges. Overall, Le Mars continues to show signs of stability and growth while maintaining a solid economic foundation.

Census.gov table B25034 - Year Structure Built⁴³ estimates the total number of houses in Le Mars to be 4,521 with approximately 88 of those homes built after 2020 and about 17% of total stock built 2000 or later. Table H1 – Occupancy Status⁴⁴ estimates show housing at 225 vacant. Local perception indicates a much lower vacancy rate when considering move-in-ready homes as the market remains very tight. Online real estate resources indicate a range of 30 – 35 homes for sale as of May 2025, and up to 22 units for rent. Census data shows an estimate of 329 mobile homes⁴⁵, representing about 7.6% of the total housing units available.

Leading Employers

As one of the larger communities in the planning region, Le Mars hosts a larger employee-base than resident population affecting its approach to effectively managing emergency response.

The following businesses are among the largest in the jurisdiction.

- BoDeans Baking Co.
- Le Mars Community Schools

⁴² Source: <https://censusreporter.org/profiles/16000US1944400-le-mars-ia/>

⁴³ <https://data.census.gov/table/ACSDT5Y2023.B25034?q=houses+year+built&g=160XX00US1944400>

⁴⁴ <https://data.census.gov/table?q=home+occupancy&g=160XX00US1944400>

⁴⁵ <https://data.census.gov/table/ACSST5Y2023.S2504?q=home+occupancy&g=160XX00US1944400>

- Floyd Valley Hospital
- Iowa National Guard
- Kemps
- Schuster Trucking Co.
- Wells Enterprises Inc.

Several expansions and investments were completed in recent years.

- Wells Enterprises completed multiple additions to their facilities
- Floyd Valley Health Care completed a \$10M specialty clinic and therapy expansions project
- Schuster Trucking added a \$4M maintenance building

Critical Facilities

<i>City Facilities</i>	
City Hall	40 Central Ave. SW
Police Department	205 5th Ave NW
Fire Rescue Department	45 1st Ave. SW, Station No. 1
Fire Station #2	25 - 12th St SE
Garage (FD)	45 1st Ave SW
Airport & Related	1621 Airport Drive
Public Works Bldg	800 18th St SW
Storage Facilities for various Depts	multiple addresses
Water Department & Treatment	1298 18th St. SW
Water Towers	1002 3rd Ave SE
	33082 200 th St
Well Houses	multiple addresses
Wastewater Treatment & Related	705 5th Ave NW
	17505 Key Ave
Lift Stations/Pumps	multiple addresses
Booster Station	33082 200th St
Misc Waterworks, Bldgs & Property	100 Park Lane Rd
Kemps Electrical Ctrl Bldg	1078 Lincoln St SW
Shed	301 9th Ave
Office Bldg	50 Central Ave
8 Warning Sirens (+1 planned for 2025)	Various locations

<i>Outdoor Recreation</i>	
Adler Park	Plymouth St SE
Bolser Park	2nd St & 5th Ave SE
Cleveland Park	2nd St & 6th Ave S.E.
Courts; Park; Golf Course; Related	935 Park Lane
Dog Park	Holton Dr
Foster Park	Central Ave & 6th St S.E.
Le Mars Area Family YMCA	241 12th St SE
Municipal Park	813 Park Ln
O'Toole Park	Central Ave & 4th St N.E
Outdoor Swimming Pool & Park	241 12th St SE
Paulin Park	12th St & 7th Ave S.E
Riverview Complex	N of Hwy 3
Schafer Park	15th St & Schafer Ave SE
Sunset Park	Holton Dr
Veterans Memorial Park	3 rd Ave SE & 10 th St
Walnut Park	11th St & Central Ave SE
West Floyd Park	3rd St & 12th Ave SW
Westmar Memorial Park	10th St SE
Willow Creek Campground	Hwy 3 & Park Lane
<i>Cultural and Wellness</i>	
Visitor Info Center	54 Central Ave SE
Veterans Memorial Park & related	3rd Ave SE @ 10th St SE
Olson Cultural Events Center	33 1st St NE
Post 21 Playhouse	105 1st St NE
Le Mars Sportsman Club	31549 C38
Civic Art Center	200 Central Ave SE
Royal Theatre	33 Central Ave SW
Le Mars Convention Center	275 12th Street SE
Le Mars Public Library	46 1st St SW
<i>County facilities</i>	
Plymouth County Historical Museum	335 1st Ave SW
Plymouth County Fairgrounds	500 4th Ave. NE
Plymouth County Veterans Memorial	1000 3rd Ave SE

It is important to note that as County Seat, several county facilities and services as listed in the Plymouth County Profile are hosted in Le Mars.

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Le Mars High School	921 3rd Ave SW
Individualized Learning Center	940 Lincoln Street SW
Le Mars Middle School	977 3rd Ave SW
Clark Elementary School	201 2nd Ave NW
Franklin Elementary School	400 3rd Ave SE
Kluckhohn Elementary School	1338 Central Ave SE
Floyd Valley Community Health Service	714 Lincoln St NE
Floyd Valley Hospital	714 Lincoln St NE
Good Samaritan Society - Le Mars	1140 Lincoln St NE
Park Place Estates	900 Lincoln St NE
Plymouth Manor Care Center	954 7th Ave SE
Pride Group Inc.	214 Plymouth Street SE
PRIDE 1 - Residential Care Facility	214 Plymouth Street SE
Prime Living Apartments	108 1st Ave NW
Blue Bunny Museum and Meeting Center	115 Central Ave NW
Mobile Homes & Mobile Home Courts	930 4 th St SW
	500 block 6 th Ave SW
	100 16 th Ave NW
Apartment Complexes	Multiple addresses

Valuation of City Assets

The following summation of city assets is intended to provide a foundation for cost-benefit analysis for mitigation projects. This total is not all inclusive and does not take into account private properties, businesses, residences, and other financial considerations as may be impacted through pre-disaster and resiliency-building efforts. A full cost-benefit analysis will accompany project descriptions in the application process where relevant.

Total Vehicle Value \$ 6,553,061

Blanket TIV \$ 149,425,314

Building	\$	145,506,894
Personal Property	\$	3,918,420
Misc Property Sched	\$	3,147,055
Misc Property Unsched	\$	<u>1,218,777</u>
Total TIV	\$	<u>153,791,146</u>

b. Participation

Facilitated by SIMPCO and Plymouth County EMA Rebecca Socknat, a planning meeting was held October 24, 2024 at the Le Mars City Council Chambers with the following in attendance.

- Jason Vacura, City Administrator
- Jan Feller, City Clerk
- Joe Mohning, Finance/HR Director
- Brad Eppling, Public Facilities
- Scott Kneip, Streets
- Doug Masuen, Wastewater Superintendent
- Rich Sudtelgte, Water Superintendent
- David Schipper, Fire Chief
- Shirley Taylor, Library Director
- Tom Mullally, Airport Manager

Also considered for discussion are 37 responses to the survey noting Le Mars as residence.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Community Development Plan (2023)	
2015 Builder's Plan	
Capital Improvement Plan	
Le Mars Emergency Operation Disaster Preparedness Plan	
Land Use Plan	
Firewise or other fire mitigation plan	Le Mars Fire Department
<i>Policies/Ordinance</i>	
• Building Code	• Landscape Ordinance
• City Code (2019)	• Nuisance Ordinance
• Debris Management Plan	• Storm Water Ordinance
• Drainage Ordinance	• Subdivision Ordinance
• Floodplain Ordinance	• Tree Trimming Ordinance

• Historic Preservation Ordinance • Zoning Ordinance	
<i>Programs</i>	
Codes Building Site/Design	Code Enforcement
Hazard Awareness Program	• Disaster Preparedness Plan • Plymouth Co Alerts (through Alert Iowa) – text/email
ISO Fire Rating	Class 2/2Y
Mutual Aid Agreements	• Countywide 28E • SCFR through County for HazMat Response
National Flood Insurance Program (NFIP) Participant	CID #190225
Planning/Zoning Boards	
Property Acquisition	guided via Iowa ROW Manual
Tree Trimming Program	
Zoning/Land Use Restrictions	
<i>Staff/Department</i>	
Code Enforcement Officer	
Community Development	
Building Inspector	
NFIP Floodplain Administrator	
Coordinator of Disaster Services	City Administrator
Emergency Response Team	Fire and Rescue (Ambulance integrated to department)
Historic Preservation	Historic Preservation Commission
Mapping Manager	
<i>Non-Governmental Organizations</i>	
Community Organizations	
• Le Mars Business Initiative Corp • Lions • Kiwanis	• Optimists • Rotary • Sertoma
Homeowner Associations in select neighborhoods	
Le Mars Area Chamber of Commerce	
Neighborhood Associations in select subdivisions	
Veterans Groups	American Legion Wasmer Post 241
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	

Levy taxes for a specific purpose	
Fees for water & sewer, stormwater, and solid waste services	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities
Withhold spending in hazard prone areas	Yes

Review of Actions Taken (Since 2019)

communication/education		
Assessment/Study	Le Mars	2020: Flood Risk Options Study. Improve elevation of roadway @ 4th Ave SE (Mahogany Ave). Primary access road to this portion of town, limiting access for response teams. A full study on options is needed in preparation of presenting issue of road closure to resident. <i>City Administrator, Engineer, County Roads communication, IDOT</i> (City funds, Planning funds, IDNR/IDOT programs, State/Federal programs, TIP, CIP) HIGH PRIORITY
Assessment/Study	Le Mars	Project closed. Surveys were completed and discussion held with IDNR, Army Corps of Engineers to assess potential improvements. Determination that a bridge is the only solution is not a feasible project for the City to consider. No further action is planned regarding this issue.
tools/equipment		
development		
Improve existing facilities & infrastructure	Le Mars	2020: Pedestrian bridge connecting rec trail to golf course. In interest of maintaining natural open spaces, and recoup loss due to lack of development in those areas, the city has invested in a thriving outdoor recreation network. Intending to be interconnected, rec trails connect most facilities. At present, a pedestrian bridge that connects the rec trail to the golf course is in need of major renovation or replacement. A temporary bridge is in place but it is not a long-term solution. The city is determining the best solution for the trail bridge, therefore costs are not yet determined. <i>City Administrator, Streets, Parks Depts</i> (City funds, Active Transportation funds, Health & Wellness program funds, Transportation Alternatives Program funds, Community Benefit funds) HIGH PRIORITY
Improve existing facilities & infrastructure	Le Mars	Update: Active implementation. Funding for this project are in place with work planned for 2025/2026. City streets and parks departments are involved in oversight. TAP funds with local match from City budget will cover project.
flow control		

Flood protection	Le Mars	2020: Airport Flooding Protection - Implement protections to minimize erosion damage to runway & property overall. Floyd River w/in 50" of north end of runway. Measures to further improve previous bank stabilization efforts. Option: Reroute river; channelize. <i>City Administrator, Airport administration, IDNR</i> (Local funds, Economic Development funds, PDM) HIGH PRIORITY
Flood protection	Le Mars	Update: Project was not implemented and will be carried over to the 2025 HMP.
refuge		
technology		
natural barriers/supports		

d. Risk Assessment

Contributing Factors

As presented throughout this profile, the abundant employment centers in Le Mars add an urgency to ongoing training and capacity building for the city's emergency response teams. Response teams must coordinate with each other as well as their industry partners, to correctly determine the number of people in an area at any given time. Fortunately, the city has an active Disaster Plan and formal Response Team in place. Each role is clearly identified noting chain of command so no communications are lost. Corporate safety teams routinely cross-train with city responders to facilitate the process.

Despite ongoing efforts to improve flood-prone areas, the intersecting waterways in and around the city remain a primary consideration in all planning efforts. Flooding in 2024 resulted in more significant damages than previously recorded, especially in and around the town's ball fields and trails.

Due to relative proximity, the NOAA Storm Event database search for Le Mars included the Le Mars Municipal Airport and West Le Mars in addition to the city itself. Between 11/01/2019 and 12/31/2024, 6 events were recorded with Thunderstorm Wind figuring prominently, with Hail, Tornado, and Flood noted at one occurrence each.

Location	Date	Time	Type	Mag	Dth	Inj	PrD	CrD

LE MARS	10/20/2021	8:17	Hail	0.88 in.	0	0	0.00K	0.00K
LE MARS	8/27/2021	0:16	Thunderstorm Wind	51 kts. MG	0	0	0.00K	30.00K
LE MARS	7/29/2024	22:55	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
LE MARS MUNI ARPT	8/5/2023	17:25	Thunderstorm Wind	62 kts. MG	0	0	5.00K	0.00K
LE MARS MUNI ARPT	7/29/2024	22:52	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
LE MARS MUNI ARPT	7/29/2024	22:52	Thunderstorm Wind	54 kts. MG	0	0	0.00K	0.00K
WEST LE MARS	4/16/2024	12:48	Tornado	EFU	0	0	0.00K	0.00K
WEST LE MARS	6/22/2024	18:00	Flood		0	0	0.00K	0.00K

LE MARS, Iowa (AP) — An explosion Wednesday morning destroyed two houses in the northwest Iowa city of Le Mars and injured three people.

The 6:30 a.m. explosion demolished two adjacent houses and damaged a third house, Le Mars Fire-Rescue Chief Dave Schipper told the [Sioux City Journal](#).

The three people who were injured were inside or around one of the homes. Two of them were taken to a Le Mars hospital and one was taken to a Sioux City hospital and later transferred to a burn center in Lincoln, Nebraska.

Schipper called it “very fortunate” that no one died in the explosion, which he thinks was caused by a gas leak.

[https://apnews.com/article/explosions-fires-iowa-city-des-moines-](https://apnews.com/article/explosions-fires-iowa-city-des-moines-1d9b3487db6ad7d0002dbe65f9f4af2e)

[1d9b3487db6ad7d0002dbe65f9f4af2e](https://apnews.com/article/explosions-fires-iowa-city-des-moines-1d9b3487db6ad7d0002dbe65f9f4af2e) *Le Mars explosion injures 3 people, destroys homes.* by Tim

Hynds, Sioux City Journal via AP; Published 1:38 PM CDT, July 13, 2022) June 10, 2025

Priority Hazards

In recent history, flooding is of the greatest concern, resulting in high expense repairs/recovery. The top three identified priorities are determined by likelihood of occurrence, cost of resulting damages, and potential impact on residents as well as the expansive and transient employee base.

- Flood – both Flash and Riverine
- Tornado/Windstorm
- Hazardous Materials Incident

Transportation Incident and Severe Winter Storm are also of significant concern. Particularly at risk are disaster-related blockages affecting the highways and railroad. Potential for bulk spills due to derailment can be catastrophic in terms of access and exhaustion of available supplies. Dam/Levee Failure and most other hazards as identified by the state are on the radar. Severe Winter Storm, Drought, and Extreme Heat factor considerably in local agriculture and manufacturing industries.

By **Klem Web Team** - Jun 24, 2024



<https://klem1410.com/2024/06/24/record-flood-at-le-mars/>

Record Flood at Le Mars (by [Klem Web Team](#) - Jun 24, 2024)

June 10, 2025

RECORD FLOOD AT LE MARS

Record floodwaters isolated Le Mars for a time, and the city is just now starting to weigh the impact of the flood.

Le Mars had a crest of 29 feet, which was just below the record crest of 26.4 feet.

Le Mars Fire Rescue Chief Dave Schipper said during their flood preparations, they discovered water would come in even higher than predicted.

Survey responses indicate the top three resident concerns to be fairly consistent with the city's determination, replacing Hazardous Materials Incidents with Severe Winter Storm. Thunderstorm w/Hail and Lightning also has a high frequency of notable concern.

e. Mitigation Needs, Actions, & Strategies

communication/education		
Warning Sirens	Le Mars	New. New warning siren at 34 th & Lake is planned for 2025.
Assessment/Study	Le Mars	New. Floyd River Redirection Study to address ongoing flood concerns as each recurring heavy flow and river flooding events decrease unaffected area surrounding the airport. Flow currently hooks around north end of runway, looping around again eastward at the south end. South end is progressively shifting east creating an unplanned contact point. The City would like to review options to redirect flow to protect its airport. <i>City Administrator, County departments as applicable, IDNR, State and Federal programs as may be applicable, contracted engineer.</i> (Local funds, BRIC/FMA technical support, other grants) HIGH PRIORITY
tools/equipment		
Equipment	Le Mars Community Schools	New. District is interested in acquiring weather radios for each facility. <i>Superintendent, School Board, County EMA</i> (County EMA and related supports) HIGH PRIORITY
development		
Improve existing facilities & infrastructure	Le Mars	New: Install new water main valves to improve flow control and access for maintenance. <i>Public Works.</i> (Local funds) HIGH PRIORITY.
	Le Mars	New. Several waterworks projects are planned including a new reverse osmosis system, well, waterlines between wells. <i>City utilities.</i> (Local funds, utility rates) HIGH PRIORITY
	Le Mars	New. City is planning new waste water treatment facility. <i>City utilities, public works.</i> (Local funds, state/federal program supports as may be available) HIGH PRIORITY
	Le Mars	New. New Fire Station facility slated for 2026, with a ballot measure to be brought in 2025. Project includes new buildings and storage shed. <i>Fire Department.</i> (Local funds, EOC funds). HIGH PRIORITY
Bridges & Roads	Le Mars	New. Action needed to improve conditions where Willow Creek meets the Floyd River. Increase in occurrence of flood events has highlighted lack of capacity of small railroad bridge crossing that area to handle such a large volume of water. If bridge is washed out, a significant impact would be felt regionally and potentially at the national level pending severity of damage. <i>City administrator, County departments as applicable, railroad, DOT, contracted consultant as applicable.</i> (local funds, BRIC/FMA, railroad programming, IDOT) HIGH PRIORITY
flow control		
Flood protection	Le Mars	2020: Airport Flooding Protection - Implement protections to minimize erosion damage to runway & property overall.

	Floyd River w/in 50" of north end of runway. Measures to further improve previous bank stabilization efforts. Option: Reroute river; channelize. <i>City Administrator, Airport administration, IDNR</i> (Local funds, Economic Development funds, PDM) HIGH PRIORITY Carry over. Project was not implemented and is carried over. Further efforts are needed to stabilize riverbanks and creekbanks to control or direct flow from Floyd River and Willow Creek, especially when in high water stages, from both riverine and flash flood events. North and South ends of airport are increasingly at risk as high flow rate of water continues to reform the Floyd River. Bridges at 24th Street and the RR bridge at 4th Ave NE and the walking bridge at Hwy 3 are faced with structure failure risk increasing with each high water event, as placement in proximity to river is changing. Issue is becoming increasingly urgent. Cost estimate not readily available. <i>City Administrator, Airport administration, IDNR</i> (Local funds, Economic Development funds, PDM) HIGH PRIORITY
refuge	
technology	
natural barriers/supports	

7. MERRILL

a. Profile

The City of Merrill is situated near the center of Plymouth County, just south of Le Mars City. US Highway 75 is the main road that travels north-south through the eastern portion of Merrill. Floyd River defines the path of Hwy 75, following northeast outside the city's immediate corporate boundaries. BNSF railroad has a line that runs through Merrill, intersecting the highway and separating a portion of Merrill's downtown from the rest of the city.

City Governance & Community Supports

Merrill is governed by a five-person elected Council and the Mayor. Offices in addition to Mayor and Council include City Clerk, Police Department, Ambulance Department, Maintenance Department, Library, and EDC Department. The Merrill Fire Department is staffed by 22 volunteer firefighters. City staff designates the Legion Hall as a significant support entity to community's well-being. Additional community supports are specified in the discussion of Community Capabilities.

Merrill contracts with the county for law enforcement and Emergency Management. The City of Merrill is a member of the NFIP program, though residents are known to be inactive under flood insurance.

Demographics, Housing, & Economics

Merrill had an estimated population of 885⁴⁶ in 2023, reflecting an increase from 717 residents in 2020 decennial census numbers. The city is home to 343 households and has a median household income of \$79,250, suggesting a relatively strong economic standing. With only 4.5% of the population living below the poverty line, Merrill appears to be a financially stable community overall.

In 2023, Merrill had a total of 382 housing units, with 343 of them being occupied, which accounts for 90% of the units. There are 38 vacant units, making up 10% of the housing stock. The community also includes 19 mobile homes, which represents 5% of the housing units. In terms of the age of the residential structures, 233 units were built before 1990, while 53 were constructed between 1990 and 1999, and another 53 were built in 2000 or later. This distribution highlights a mix of older and newer housing in Merrill.

Leading Employers

- Casey's
- Iowa State Bank
- US Post Office
- Hometown Mobility
- Plymouth Energy LLC
- Wells (Le Mars)

Critical Facilities

City Hall & Community Center	608 Main St,
Senior Center	
Library-Kissinger Ctr	
Police Department	
Fire Station	500 Roosevelt
EMS / Ambulance Department	

⁴⁶ Source: <https://censusreporter.org/profiles/16000US1951375-merrill-ia/>

Merrill Community Center	321 4th St
Garage Mntc Shop	301 2nd St
Sewer Lift Station	100 E Main St
	19 5 th St
Warning Siren	635 Center St
	205 Calhoun St
	725 Webster St
Merrill Community Park & Related	725 Webster
Park & Related	700 Webster
Misc Storage	301 2nd St
Water Treatment; Pump House & related	600 Center St
(RV Only) Campground	23 5 th St

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

In addition to those businesses listed under leading employers and various city facilities, the city recognizes the following as community gathering spots/events that may temporarily reflect a higher than average concentration of the local population.

- Cugini's Italian Restaurant
- Merrill Food Truck Night (Wednesdays)
- Merrill Shooting Range

Valuation of City Assets

Total Building	\$	6,310,118
Total Personal Property	\$	787,910
Total Property in the Open	\$	<u>469,066</u>
Combined Total	\$	<u>7,567,094</u>

b. Participation

Facilitated by SIMPCO and Plymouth County EMA Rebecca Socknat, a mitigation planning meeting was held February 14, 2025 via Teams with the following in attendance.

- Bruce Norgaard, Mayor
- Angela Gray, City Clerk
- Pat Gray, Public Works

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
Land Use Plan	
<i>Policies/Ordinance</i>	
Zoning Ordinance	within City Code
Floodplain Ordinance	within City Code
Drainage Ordinance	In covenants for HOAs
<i>Programs</i>	
National Flood Insurance Program (NFIP) Participant	CID #190478
ISO Fire Rating	Class 6/9
<i>Staff/Department</i>	
Public Works Official	
Emergency Response Team	Fire and Rescue
<i>Non-Governmental Organizations</i>	
Veterans Groups	American Legion Oleson-Halweg
Chamber of Commerce	
Community Organizations	Lions Club
<i>Local Funding Abilities</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water and sewer services	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

The city has adopted by reference the IBC and IPMC, with applicable exceptions as currently implemented at the state level. Merrill's Community Development department oversees

compliance for construction/development activities in relation to building codes, land development code, the Comprehensive Plan, and enforcement thereof.

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
development		
flow control		
Drainage projects	Merrill	2020: Improve ditch and drainway management. Conduct thorough clearing and implement maintenance plan. <i>City Council, City staff</i> (Local funds) HIGH PRIORITY
Drainage projects	Merrill	Update. Issues addressed at north end of town including routine maintenance. Problems still present with particular concern over riverine flooding. Additional attention is needed to determine prevention options. Ditch maintenance is ongoing and will continue. New project added for 2025 for other options to be determined.
refuge		
Shelter	Merrill	2020: Interest in designating refuge locations at City Park and Campgrounds. Structural enhancements to be considered for formal designation. <i>City Council, City staff County EMA as applicable.</i> (local funds, community benefit programs, local groups, fundraising)
		Update. No action taken due to lack of dedicated funding options. Project is still needed and carries into the 2025 HMP project list. Priority is due to funding constraints, not level of need.
technology		
natural barriers/supports		
Dyke improvement	Merrill	2020: Implementation of improvements to substantiate dyke as barrier to flooding. <i>City Council, County, and DNR collaboration as applicable.</i> (Local funds)
Dyke improvement	Merrill	Update. Cells were raised in lagoon project completed in 2019. Area was still severely impacted by floods in 2024 necessitating further consideration and expanded options.

In addition to updates as provided for planned projects in the 2020 Plan, the City of Merrill implemented several project components contributing to community resiliency.

- Backup generator at lift station
- Generator hookup at well (for mobile generator connection)
- Water access plan in place

- Highway work is planned with stormwater controls in place. Project is expected to retain those features sustaining drainage during and after construction

The city engaged IDNR to map ash trees throughout the community with findings indicated most are on private property. The city has plans in place to 1.) remove trees as affected and 2.) plant 6-8 new trees annually. Some mitigation efforts were implemented for the lagoon, however flooding in 2024 indicated a greater need that that addressed. Several other projects benefitting community resilience include the following.

d. Risk Assessment

Contributing Factors

An assessment of records in the NOAA Storm Event database include three reports from Merrill.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
MERRILL	8/31/2020	3:37	Hail	1.00 in.	0	0	0.00K	0.00K
MERRILL	4/19/2023	19:39	Hail	1.00 in.	0	0	0.00K	0.00K
MERRILL	4/16/2024	13:10	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K

Some areas housing critical facilities were raised in 2018/2019. Despite those efforts, flooding as occurred in 2024 affected the city's lagoon located on the east side of the river, outside the city's formal boundary. Resulting in severe damages, the FEMA recovery process was underway at the time of the planning meeting. The city is interested in determining viable solutions to reduce the impact of future flood events (see 2025 projects table).

The presence of a high frequency rail line intersecting US-75 and cutting through town adds to concerns about Transportation Incidents and Hazardous Materials Incidents.

Priority Hazards

The city continues to consider the following as priority hazards, with the addition of Thunderstorms with Hail and Lighting as being the most prevalent and most likely to result in damage.

- Thunderstorm with Hail and Lightning
- Flooding
- Tornado/Windstorm
- Severe Winter Storm

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
development		
flow control		
Drainage projects / Study-Assessment	Merrill	New. River flooding hits north side of town and around highway. Additional attention is needed to determine prevention options. Interested in feasibility study and implementation of related solutions. Funding is a barrier. <i>City Council, City staff</i> (Local funds, PDM, FMA) HIGH PRIORITY
refuge		
Shelter	Merrill	Carry over. No action taken due to lack of dedicated funding options. Project is still needed. Interest in designating refuge locations at City Park and Campgrounds. Structural enhancements to be considered for formal designation. <i>City Council, City staff County EMA as applicable.</i> (local funds, community benefit programs, local groups, fundraising). LOW PRIORITY
technology		
natural barriers/supports		
Dyke improvement	Merrill	New. Dyke enhancement and/or replacement with more effective protections against flood, especially for lagoon. Project may require a study to determine feasible options. <i>City Council, County, and DNR collaboration as applicable.</i> (Local funds)
Stabilization	Merrill	New. City is using rip rap for stabilization and reduction of wash out potential. Interested in more permanent means of stabilizing river bank and protective berms. Public Works, City Maintenance, DNR as may be applicable. (Local funds, PDM, Flood Disaster funds, community benefits program) HIGH PRIORITY

8. OYENS

a. Profile

The City of Oyens is situated near the northeastern part of Plymouth County and occupies 0.09 square miles. Highway 3 is accessible from less than a mile, just south of the city. Highway 3 and K-64 are the closest main road connectors to surrounding communities. There is a Canadian National railroad line that travels east-west through the southern part of the city.

City Governance & Community Supports

Oyens is governed by a five-person elected Council and the Mayor. Offices in addition to Mayor and Council include City Clerk, Maintenance, and Economic Development. The Volunteer Fire Department is independent of the city and staffs about 22 volunteer firefighters. Oyens contracts with the county for law enforcement and Emergency Management.

Demographics, Housing, & Economics

CensusReporter.gov estimates the population of Oyens at 89 in 2023⁴⁷, showing a slight decrease from 92 residents recorded in 2020 census numbers. The town is home to 32 households, with a relatively high median household income of \$96,250, indicating a strong economic standing. Although no specific poverty data is available, the community's income level suggests a relatively stable financial environment. However, city staff believes income and population estimates in determined from the 2020 census as well as American Community Survey estimates since to greatly misrepresent the actual population and relative income. A Community Development Block Grant (CDBG) guided income survey is currently underway to determine actual Low-to-Moderate-Income rates.

In Oyens, there are an estimated 32 total housing units, all of which are occupied, reflecting a fully utilized housing stock. None of the units are vacant or classified as mobile homes. The majority of the housing structures were built between 1990 and 2000, with a smaller portion built before 1990, and a notable number of homes were built in 2000 or later. This indicates a relatively newer housing market with stable occupancy.

⁴⁷ Source: <https://censusreporter.org/profiles/16000US1960780-oyens-ia/>

Leading Employers

Oyens has a few small businesses in town. The following are notable employers.

- Central Valley Ag
- US Post Office
- CVA Storage

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

City Hall	230 Main St
Fire Station	
Well House	401 Park St
Water Plant Shed	

Once established, the City Park will be included as a critical facility and gathering location for Oyens. It is important to note the above listed employers also serve as potential gathering locations. City Hall serves as command center and refuge location in the event of emergency. The Fire Department has a connection to a generator on county property that runs the sheds.

Valuation of City Assets

A current valuation of assets is not immediately available. However, based on valuation increases for communities throughout the region, the 2019 valuation of \$474,360 has likely increased between 20 and 50% in the last five years. Investments expected through planned projects may have an exponential impact on cost-benefit analyses applied to mitigation projects.

b. Participation

Facilitated by SIMPCO and Plymouth County EMA Coordinator Rebecca Socknat, a planning meeting was held on February 21, 2025 at the county EMA office. The following were in attendance.

- Donna Paulsen, Mayor
- Julie Athens, City Clerk

Further input was collected via survey with three of Plymouth County's 65 responses indicating Oyens as place of residence.

c. Community Capabilities

<i>Policies/Ordinance</i>	
Zoning Ordinance	
Nuisance Ordinance	
<i>Programs</i>	
Zoning/Land Use Restrictions	
NFIP Community Rating System (CRS) Participant	
ISO Fire Rating	Class 9/10
Staff/Department	Comments
Emergency Response Team	Yes, Fire and Rescue (no ambulance)
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water and sewer services	
Impact fees for new development through TIF	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

Much of the city's maintenance is contracted – lagoon, water, snow removal, utilities, and street repairs.

An income survey to determine CDBG eligibility is underway. Based on interactions with population, the city expects drastically different outcomes than those determined through 2020 decennial census estimates.

Review of Actions Taken (Since 2019)

Oyens did not have any projects included in the 2020 HMP. Projects completed were in line with routine maintenance with mitigation measures sustained or improved in the process, for example in street repairs.

d. Risk Assessment

Contributing Factors

Floodplain carries through south of city limits and surrounds (but does not overlap) the lagoon. As Plymouth County Floodplain maps are in preliminary stages, those determinations may change – especially when the frequency and intensity of local flooding is in a cycle of annual increases. Infrastructure plans, especially regarding water system improvements, will fully consider the potential changes in the final maps with specific attention given to the 500-year floodplain.

The city is looking into establishing a city park. A committee is in place and preliminary plans include a shelter that would serve as storm refuge as well as shade in extreme heat conditions. The city is also planning water systems improvements with the schedule being highly reliant on funding opportunities. At present, city water is testing at a high level for nitrates. The project is primarily a public health measure. Wastewater improvements are incorporated in the project as are mitigation efforts that protect the infrastructure from flooding and allow for, at minimum, generator connections. Pending fund availability and final engineering, a dedicated generator is expected to be part of the project. The shelter and generator aspects are included as projects for Oyens in this Plan. A mobile generator is available through the County as needed. However in the event of a large scale disaster, it may already be designated for an another use.

Water main capacity constrains the city's ISO Fire Rating with local infrastructure not meeting the 6" or greater size requirement. The city does not have independent ambulance services.

In addition to community conditions as outlined above, an assessment of NOAA Storm Event database records provides the following events specific to Oyens.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
OYENS	5/10/2023	23:40	Hail	1.75 in.	0	0	0.00K	0.00K
OYENS	5/10/2023	23:42	Hail	2.00 in.	0	0	0.00K	0.00K
OYENS	4/16/2024	13:22	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K

Oyens is included in the represented area indicated by Plymouth (Zone) within the NOAA system, noting general effects of regional weather conditions as noted for 102 reports. Oyens student population attend classes in the MMRU and Le Mars school districts, highlighting importance of passable roadways in inclement weather conditions.

Priority Hazards

The following hazard priority designations are carried over from the 2020 plan as their relative impacts are still of significant concern to the community.

- Tornado/Windstorm
- Thunderstorm w/Hail & Lightning
- Grass and Wildland Fire

A lightning strike cost the community \$35,000 in damages. Infrastructure failure ranks closely to those noted with particular concern for water quality and lagoon function.

e. Mitigation Needs, Actions, & Strategies

The city needs to look at opportunities to replace the propane tank for city hall to ensure function in the event of an emergency.

communication/education		
tools/equipment		
Generator & Related Projects	Oyens	New. As part of an infrastructure improvement project for the city's water systems, the city is looking at opportunities to include a dedicated generator at its wastewater treatment plant. Cost is to be determined and will dictate whether a dedicated generator is added or if a transfer switch alone is incorporated into the project. If a transfer switch is the implemented solution, the city will pursue

		funds for a mobile generator for use between its facilities. <i>City Council, contracted engineering firm, DNR.</i> (USDA, DNR, CDBG, Local funds, PDM) HIGH PRIORITY
development		
flow control		
refuge		
Shelter	Oyens	New. The city is in the process of establishing a city park. Plans include a shelter to offer moderate protection from thunderstorms, hail & lightning as well as shade in extreme heat conditions. <i>City Park Planning Committee, City Council</i> (Local funds, community betterment, PDM as applicable. HIGH PRIORITY
technology		
natural barriers/supports		

9. REMSEN

a. Profile

The City of Remsen is situated in the northeast quadrant of Plymouth County, occupying 1.27 square miles. Highway 3 is the main road that connects Remsen to surrounding communities and delineates much of the town's southern border. A Canadian National railroad line travels east-west through the center of town, following much of Remsen's northern border.

City Governance & Community Supports

Remsen is governed by a five-person elected Council and the Mayor. Offices in addition to Mayor and Council include City Clerk, Street Department, Sanitation Department, Utility Board, and Wastewater Department. Remsen City has a volunteer Fire Department in place. The Department staffs twenty members, headed by one Fire Chief and three officer/personnel positions. Outside of preventing and extinguishing fires, the Fire Department also takes on the responsibility of answering all emergency calls for which there is no other established agency (<http://www.remseniowa.org/>).

City staff designates the Legion Hall as a significant support entity to community's well-being. Additional community supports are specified in the discussion of [Community Capabilities](#). Remsen contracts with the county for law enforcement and Emergency Management, but has a Fire and Response team.

Demographics, Housing, & Economics

CensusReporter.gov estimates Remsen's population increased to 1,897⁴⁸ in 2023, up from 1,678 in 2020, indicating steady growth. The town is home to 677 households and boasts a median household income of \$98,250, suggesting a strong economic foundation. With only 4.1% of residents living below the poverty line, Remsen appears to be a financially stable community, reflecting positive economic trends.

Remsen has a total of 727 housing units, with 676 currently occupied, indicating a high occupancy rate and a relatively low number of vacancies. The housing stock includes 51 mobile homes. A significant portion of homes were built in 2000 or later, while smaller but equal shares were constructed in the 1990s and before 1990. This suggests a community with a predominantly newer housing base and ongoing residential development.

Leading Employers

MMC & RU Community School Districts	Marcus & Remsen offices
Happy Siesta Nursing Home	423 Roosevelt Ave,
Mid-Sioux Opportunity	418 S Marion St
Farmers' Cooperative	6 S Washington
Bavarian Meadows	632 L14 # 130
Gengler Feed	002 S Marion St
Wells Enterprises	(Region employer) Le Mars, IA

Critical Facilities

City Hall	008 W 2 nd St
Police Dept	205 Fulton
Fire Dept & Municipal Garage	108-112 1 st St
Remsen Public Library	209 Fulton St, Remsen, IA 51050
Maintenance Bldg	215 Fulton St
Well/Reservoir	124 E Nothem Ave
Well Field	North of Remsen
Water Tower	801 Madison St

⁴⁸ Source: <https://censusreporter.org/profiles/16000US1966405-remsen-ia/>

Remsen Swimming Pool & Related	209 Lincoln St,
Thelen Park; Football Field; North Park	
Garage	122 Marion
Sunrise Park & Shelter House	515 E 3 rd St
Beck Park & Shelter House	105 Madison St
Old Light Plant	125 E 1 st St
Ambulance Bldg	109 Fulton
Shop/Utility Bldg	320 S Marion St
Storage	16267 L12
Main Lift Station & Lab	Marion St
Remsen Cemetery	
Niggeling Ball Park & Related	Nothem Ave
Baseball Field & Related	
Water Treatment Facilities & Related	400 Lagoon Rd
Derby Arena	Marion St

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

MMC & RU Middle School	511 Roosevelt Ave, Remsen
RU Remsen Elementary (Pk-4)	
Avalon Ballroom	114 Fulton St
Remsen Golf Course	506 W 5 th St
<i>Outside city limits</i>	
Meadow Wildlife Area	45597 140 th Street
Rufus B. Hatch Memorial Grassland	Intersection of L22 and 140 th Street
Kohler Memorial Grassland	near 150 th St and Quest Ave

Locations indicated under leading employers are also considered as gathering locations and areas of interest. Similarly, gathering locations outside city limits are included as visitors during special events may temporarily cause a significant increase in population affecting resource availability in hazardous conditions.

Valuation of City Assets

Building	\$	17,504,426	RC
Personal Property	\$	1,462,083	RC
Property in the Open	\$	<u>8,238,220</u>	<u>RC</u>
Total	\$	<u>27,204,729</u>	

b. Participation

A mitigation planning meeting was facilitated by SIMPCO at Remsen City Hall on February 25, 2025 with the following in attendance.

- Rachel Keffeler, City Administrator
- Mike Wurth, Public Works Superintendent

Additional input was provided through survey response with five of Plymouth County's respondents indicating residence in Remsen.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
Builder's Plan - through Zoning Administrator	
<i>Policies/Ordinance</i>	
• Building Regulations Ordinance - IPMC by reference w/exceptions (2019) adopted 5/2024 • Dangerous Buildings Ordinance • Drainage Ordinance • Floodplain Ordinance • Historic Preservation Ordinance • Nuisance Ordinance • Open Burning Restrictions • Storm Water Ordinance • Subdivision Ordinance • Tree Ordinance • Well Protection • Zoning Regulations Ordinance	
<i>Programs</i>	
Zoning/Land Use Restrictions	
National Flood Insurance Program (NFIP) Participant	CID #190480
ISO Fire Rating	Class 5/8B

<i>Staff/Department</i>	
Building Code Official	Zoning Administrator
Public Works Official	
Emergency Response Team	Yes, Fire and Rescue
Historic Preservation	
Museum Board	
<i>Non-Governmental Organizations</i>	
Veterans Groups	American Legion Pieper
Chamber of Commerce	
Community Organizations	Lions Club
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, gas, and electric services	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

Actions taken to improve community resilience in Remsen include a water systems improvement project involving water main replacements, funded in part by CDBG. Projects completed in response to planned strategies in the 2020 plan include one amended addition as included in the following table.

communication/education		
Promo/Info	Remsen	2020: Interest in promotion of established warning systems such as Alert Iowa system; <i>City Clerk, County EMA</i> (No dedicated funding necessary) HIGH PRIORITY
Promo/Info	Remsen	Update. Remsen includes periodic postings recommending resident enrollment in Alert Iowa and similar online alert systems. Community will continue to do so but this will not be continued as an Ongoing mitigation-specific project into the 2025 plan.
tools/equipment		
development		
Bridges & Roads	Remsen	Amendment: Box culvert replacement in flood prone area (5 th St between Jackson and Marion Streets). <i>City of Remsen, Beck</i>

	(as amended at local level 8/10/2020)	<i>Engineering contracted services, City Clerk, Public Works.</i> (anticipated funding: FMA/BRIC, local match via Road Use funds, and local option funds) HIGH PRIORITY Complete. Flood mitigation project was completed with addition of box culvert and redirection of runoff. Project cost was \$475,000 - paid using entirely local funds.
flow control		
refuge		
technology		
natural barriers/supports		

Other work that contributes to local resiliency includes tiling work as completed on the Golf Course improving drainage systems on Country Club and Celebrity with one storm drain on each 24" tile. Runoff flows to the pond. Project cost was \$22,000 in materials. Labor was completed by Golf Course employees.

d. Risk Assessment

Contributing Factors

An assessment of the recorded events specific to Remsen includes eight reports. This is separate from the 102 Plymouth (Zone) events reported that also affected the area.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
REMSEN	8/18/2022	18:00	Hail	1.00 in.	0	0	0.00K	0.00K
REMSEN	4/19/2023	20:04	Hail	1.00 in.	0	0	0.00K	0.00K
REMSEN	4/16/2024	13:21	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
REMSEN	4/30/2024	14:56	Hail	0.75 in.	0	0	0.00K	0.00K
REMSEN	4/30/2024	15:00	Hail	0.75 in.	0	0	0.00K	0.00K
REMSEN	4/30/2024	15:02	Hail	0.88 in.	0	0	0.00K	0.00K
REMSEN	4/30/2024	15:04	Hail	1.00 in.	0	0	0.00K	0.00K
REMSEN	5/20/2024	18:50	Hail	1.00 in.	0	0	0.00K	0.00K

Priority Hazards

- Infrastructure Failure

- Tornado / Windstorm
- Thunderstorm with Hail & Lightning

Shown above in order of greatest concern, the city includes Flooding to the list. City flood-related expense is mainly focused on washout from uncontrolled runoff during flash flood events. Survey responses indicated Severe Winter Storm as a notable concern in addition to the city's #2 & #3 considerations. When asked to select the top three hazards, respondents selected Severe Winter Storm (4/5), Tornado/Windstorm (3/5) with the highest frequency. Transportation Incident and Terrorism were also noted.

e. Mitigation Needs, Actions, & Strategies

The city is in the process of moving its utilities underground. The \$1.2M project is in progress and set for completion in 2026. Additional mitigation-specific strategies to be implemented in the next five years are included in the following project table.

communication/education		
Promo/Info	Remsen	2020: Interest in promotion of established warning systems such as Alert Iowa system; <i>City Clerk, County EMA</i> (No dedicated funding necessary) HIGH PRIORITY
Promo/Info	Remsen	Update. Remsen includes periodic postings recommending resident enrollment in Alert Iowa and similar online alert systems. Community will continue to do so but this will not be continued as an Ongoing mitigation-specific project into the 2025 plan.
tools/equipment		
Equipment	Remsen	New. Fire Department is in need of equipment replacements including 12 SCBA units with harness/backpack, face piece, and 2 cylinders each and 24 spare cylinders. Cost at last estimate is about \$122K. <i>City Council, Fire Chief & Department reps</i> (local funds, AFG grant if awarded, community benefits funds). HIGH PRIORITY
development		
Bridges & Roads	Remsen (as amended at local level 8/10/2020)	Amendment: Box culvert replacement in flood prone area (5 th St between Jackson and Marion Streets). <i>City of Remsen, Beck Engineering contracted services, City Clerk, Public Works.</i> (anticipated funding: FMA/BRIC, local match via Road Use funds, and local option funds) HIGH PRIORITY
		Complete. Flood mitigation project was completed with addition of box culvert and redirection of runoff. Project cost was \$475,000 - paid using entirely local funds.
flow control		

Drainage Projects	Remsen	New. Storm drains are needed at each end of Beck Park. <i>City Council, public Works, Parks & Rec, DNR as applicable</i> (local funds, DNR as available, PDM/Flood prevention as available) HIGH PRIORITY
refuge		
technology		
natural barriers/supports		

10. STRUBLE

a. Profile

The City of Struble lies near the northern-most border of Plymouth County, and occupies .016 square miles. Highway 75 is the closest man road that connects Struble to surrounding communities. Less than a mile east of the city, Highway 75 travels north and south. West Branch Floyd River also runs north/south, less than half a mile east of the city.

City Governance & Community Supports

The City of Struble is governed by an elected Council and Mayor, and appointed City Clerk. Struble contracts with the county for law enforcement. The city does not have a Fire-Rescue department, but contracts with the City of Maurice (Sioux County) Fire and Rescue.

Demographics, Housing, & Economics

Struble had a population of 71 in 2023⁴⁹, reflecting a small increase from 67 residents in 2020. The town consists of 30 households and has a median household income of \$59,167. Despite the modest population growth and moderate income level, about 21.4% of residents live below the poverty line, indicating that a portion of the community may be experiencing economic hardship.

Struble has a total of 30 housing units, all of which are occupied, indicating full utilization of its housing stock. The community includes a small number of mobile homes. A majority of the homes were built in 2000 or later, with additional units constructed in the 1990s and a few dating back to before 1990. This suggests that Struble's housing is relatively modern, with most residents living in newer homes.

⁴⁹ censusreporter.org/profiles/16000US1975945-struble-ia/

Leading Employers

While hosting relatively small employee populations, Struble recognizes Urban's Lawn Care as its leading employers.

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

City Hall	210 William St
City Maintenance Shop	305 Main St
Town Hall	Block 7 Elgin Twp
City Park	(adjacent to City Hall)
Shelter House	Lot 11-13 Block 12

Valuation of City Assets

Valuation of assets as provided is based on the city's current insurance policy and does not necessarily provide full scope of public properties and equipment. This serves as a foundation for cost-benefit considerations when determining project scope and relative impacts. Further analysis including all properties/assets within the area of potential effect of a given project will accompany an application for mitigation funds or may be included as a deliverable in a scoping project or study.

Building	\$	349,350
Personal Property	\$	<u>30,108</u>
Total	\$	<u>379,458</u>

b. Participation

Facilitated by SIMPCO, a mitigation planning meeting was held at Struble City Hall on December 3, 2024 with the following in attendance.

- Marilyn Volmecke, City Clerk
- Mike Vander Molen, Mayor
- Linda Urban, Treasurer
- Bob Hughes, Councilmember
- Troy Hughes, Councilmember
- Shelbee Ropte, Councilmember
- Ken Urban, Councilmember
- Rick Weiler, Councilmember

In addition to the planning meeting, 9 of Plymouth County's survey respondents indicated residence as Struble.

c. Community Capabilities

A small community, Struble has limited local resources. However, there is a mutual aid agreement in place with all communities in Plymouth County response, with the Sheriff's department for law enforcement services, and with SCFR HazMat Response through the county as applicable. A border community, Struble also collaborates with nearby communities in Sioux County. Fire and rescue services are contracted with Maurice. Struble may also benefit from all supports as provided through county and regional programs as listed in their respective profiles. The following funding resources are available options for the City of Struble.

<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

communication/education		
Promo/Info	Struble	2020: Interest in promotion of established warning systems such as Alert Iowa system; Promote programs as available through regional resources. <i>City Clerk, County EMA</i> (No dedicated funding necessary) HIGH PRIORITY
Promo/Info	Struble	Update. informal promotion of available alert systems is provided through council discussion and interactions with residents. The city

		plans to continue promotion efforts to expand effectiveness of existing resources.
Promo/Info	Struble	Implemented and Ongoing. Promote established warning systems such as Alert Iowa system; Promote programs as available through regional resources. <i>City Clerk, County EMA</i> (No dedicated funding necessary) HIGH PRIORITY
tools/equipment		
development		
flow control		
technology		
natural barriers/supports		

The city completed other work as needed in recent years in terms of response as well as mitigation. Tree removal is completed to reduce potential effects of dead/diseased trees. The city is moving forward with tree replacement in the park and other public properties outside of parking. Scheduled ditch clearing was completed is on a monitoring schedule to prevent blockages that may escalate flash flooding instances. Funds as allocated from the 2019 floods were used to regravels heavily damaged roads. City Hall has a new roof that serves to help sustain that structure.

d. Risk Assessment

Contributing Factors

Steps taken to improve resilience have been modest due to lack of available funds. However, projects as implemented have all taken mitigation into account, maximizing return on investment. At present, access to/from Struble is severely restricted with bridges out at each the north and south ends of town. Without a local fire department, the city is fully reliant on mutual aid agreements for emergency response. Concerns for fire response, especially with recently prevalent drought conditions, serve as impetus for including acquisition of a tanker in their mitigation strategies. As residents serve on nearby volunteer departments, training to operate the tanker can be part of routine certifications.

A more complicated risk is that of hazardous materials incidents as BNSF railroad line runs through town. Depending on materials in transport and other factors involved in the incident, immediate action is critical.

Flooding remains a priority concern due to a high water table. A moderate or heavy rain will routinely result in some basement flooding.

A review of NOAA Storm Event database shows 3 recorded events between 11/1/2019 and 12/31/2024, all of which occurred in 2024.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
STRUBLE	4/16/2024	13:00	Tornado	EF1	0	0	0.00K	0.00K
STRUBLE	6/22/2024	2:00	Flood		0	0	0.00K	0.00K
STRUBLE	6/22/2024	14:00	Flood		0	0	0.00K	0.00K

Priority Hazards

Priority hazards are based on frequency/likelihood of occurrence, potential for catastrophic loss or damage, and ability (or lack thereof) to mitigate without outside supports.

- Flood
- Tornado/Windstorm
- Grass and Wildland Fire

Other natural disasters and other hazards on the city's radar are drought and infrastructure failure – one increases risk of priority concerns, the other prohibits prompt response.

e. Mitigation Needs, Actions, & Strategies

Following are Struble's identified strategies to improve their mitigative opportunities and resilience.

communication/education		
Promo/Info	Struble	Ongoing. Promote established warning systems such as Alert Iowa system; Promote programs as available through regional resources. <i>City Clerk, County EMA</i> (No dedicated funding necessary) HIGH PRIORITY

Warning Siren	Struble	New. City is interested in replacing warning siren. Current siren had aged out with replacement parts hard to find and very expensive. <i>City council, County EMA.</i> Local funds, pre-disaster/mitigation funds as may be available, community foundation grants, community betterment grants) HIGH PRIORITY
tools/equipment		
Equipment	Struble	New. City identified need to obtain tanker to keep in town to support local response efforts. Without a local fire department, Struble's risk is significantly high. Priority level reflects likelihood of extended time frame for completion due to limited funding availability. City Council, County and State EMA and other response network supports as available (Local funds, fundraising, response equipment grants, community foundation/betterment funds) MEDIUM PRIORITY
development		
flow control		
Drainage	Struble	New. City is in need of improved stormwater drainage and runoff controls for downtown. <i>City Council</i> (City funds, transportation funds, Community Benefit funds) LOW PRIORITY
refuge		
technology		
natural barriers/supports		

11. WESTFIELD

a. Profile

Westfield is the western-most incorporated city along the border of Plymouth County and occupies about 0.13 square miles. It is located on the northern edge of the "Loess Hills" landform leading to designation of the local portion of Highway 12 as the Loess Hills Scenic Byway. IA-12 is the main road that connects Westfield to surrounding communities and runs north-south through the City. County Road C38, just south of town, connects Westfield to Le Mars. The Big Sioux River runs north-south less than a mile west of the city, and the Dakota and Iowa Railroad (DAIR #211) passes north-south through the center of the city.

City Governance & Community Supports

Westfield is governed by a five-person elected Council and the Mayor. Offices in addition to Mayor and Council include City Clerk, Maintenance, and contracted water/wastewater supervisor.

Ambulance services are contracted with the City of Akron. Akron Fire/Ambulance provides pre-hospital patient care and ambulance service. A 28E Agreement is in place between all Plymouth County Communities and the Plymouth County EMA for Emergency Management.

Demographics, Housing, & Economics

In 2023, CensusReporter.org estimates Westfield's population at 133⁵⁰, showing a modest increase from 123 residents in 2020. The town is home to 70 households and has a median household income of \$60,000, indicating a relatively stable economic base. With only 4.5% of residents living below the poverty line, Westfield appears to maintain a solid level of financial well-being within the community.

Westfield has a total of 84 housing units, with 70 currently occupied and 14 standing vacant. The town includes 8 mobile homes as part of its housing stock. Most of the residential structures were built in 2000 or later, reflecting a relatively modern housing landscape. A smaller number of homes were constructed in the 1990s and before 1990, indicating that much of the community's housing is fairly new.

Leading Employers

- The Station
- Hummer's Roadhouse
- Steve McMahon Trucking
- Price Auction House
- Marilyn's Beauty Shop

Critical Facilities, Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

City Hall	223 Union St.
Westfield Baseball Field & Related	Plymouth St & Lindon St.

⁵⁰ Source: <https://censusreporter.org/profiles/16000US1984090-westfield-ia/>

Westfield City Park, Shelter, & Playground	Union & Elm St.
Loess Hills Welcome Center	320 Union
(New) City Shed/Garage	Elm
Lift Station & Lagoon	(South end) Railroad Dr
(New) Water Treatment Plant	Elm St
Community Center	215 Linden St
<i>Community Gathering Locations/Vulnerable Populations</i>	
Westfield Congregational Church	224 Linden St
<i>Outside City Limits</i>	
Birkley's Bend	26779 Highway 12
E.C. Lippke Wetland	11132 240th Street
Five Ridge Prairie	15561 260th St
Millsite River Access	10001 Highway 3

Valuation of City Assets

Total Building	\$	811,014
Total Personal Property	\$	163,334
Total Property in the Open	\$	<u>213,980</u>
Combined Total	\$	<u>1,188,328</u>

b. Participation

Facilitated by SIMPCO, a virtual mitigation planning meeting was held via Teams on February 17, 2025 with the following in attendance.

- Jenny Hartman-Mendoza, Mayor
- Karen Wardrip, City Clerk

A review meeting via phone call was conducted on August 5, 2025 with Karen Wardrip, City Clerk. A VPA was signed and filed on the same date.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
Land Use Plan	Future Land Use w/in Comp Plan
<i>Policies/Ordinance</i>	
Permitting process governed by Ordinance	
<i>Programs</i>	
National Flood Insurance Program (NFIP) Participant	CID #190482
<i>Staff/Department</i>	
Public Works Official	
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	
Levy taxes for a specific purpose	
Fees for water, sewer, and electric services	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities

In addition to policy and procedural supports, the city has some equipment in place to reduce the potential effects of natural disasters and other hazards. One generator is in place at the lift station, and one is at the community center for emergency use. Additional generators are needed. Response teams are not centered in Westfield so basic preliminary on-site actions may serve to stabilize situations (power outages, command center establishment, refuge location, etc.). City staff uses the City's UTV to access lagoon when roads are washed out.

The city has undertaken a zoning and land use update to better accommodate practical land use with some changes between commercial and residential designated lots where applicable. The city also transitioned some parcels from Ag to Commercial.

Review of Actions Taken (Since 2019)

Westfield included one mitigation strategy in the 2020 plan as shown in the following update table.

communication/education		
tools/equipment		
development		
flow control		
Flood protection	Westfield	2020: City assessing options to reinforce lagoon to protect from flooding. <i>City Council, City maintenance/waterworks, County EMA and DNR as applicable.</i> (Local funds, PDM, approved bond/loan programs as applicable)
Flood protection	Westfield	Update. This project did not advance to a more permanent solution due to expenses attributed to 2019 flood recovery and again in 2024. Substantial berm repairs were completed. However, they proved insufficient for unprecedented flooding as occurred in 2024. Lack of funding and available resources contributed to delay in permanent solution. Project is still needed and will carry over to the 2025 HMP.
refuge		
technology		
natural barriers/supports		

Other projects completed that improve local resilience include the following.

- City projects (totaling \$120,000):
 - Road to lagoon repaired, improving access in inclement weather conditions
 - Fencing repaired
 - Scheduled berm repair completed (though additional work is noted in current mitigation strategies section)
 - Removal of dead/diseased trees in city right of way is in progress, completed as needed. The County is addressing ditch trees.
- Impactful private property work:
 - Private dyke that had collapsed was repaired (\$35,000)

A Water Treatment Plant is in progress. Westfield has added two buildings to its inventory and added a concessions stand to the city ballfields.

d. Risk Assessment

Contributing Factors

An assessment of records in the NOAA Storm Event database includes seven reports specific to Westfield in addition to the 102 attributed to Plymouth (Zone) as likely experienced throughout the county.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
WESTFIELD	3/30/2020	7:00	Flood		0	0	0.00K	3.00K
WESTFIELD	4/1/2020	0:00	Flood		0	0	0.00K	0.00K
WESTFIELD	6/21/2020	5:34	Thunderstorm Wind	56 kts. EG	0	0	1.00K	0.00K
WESTFIELD	8/14/2020	13:54	Hail	1.00 in.	0	0	0.00K	0.00K
WESTFIELD	4/12/2023	0:00	Flood		0	0	0.00K	0.00K
WESTFIELD	6/21/2024	16:00	Flood		0	0	0.00K	0.00K
WESTFIELD	7/1/2024	0:00	Flood		0	0	0.00K	0.00K

Additional consideration is given to the six mobile homes located in city limits.

Priority Hazards

The City carried over the following as priority hazards.

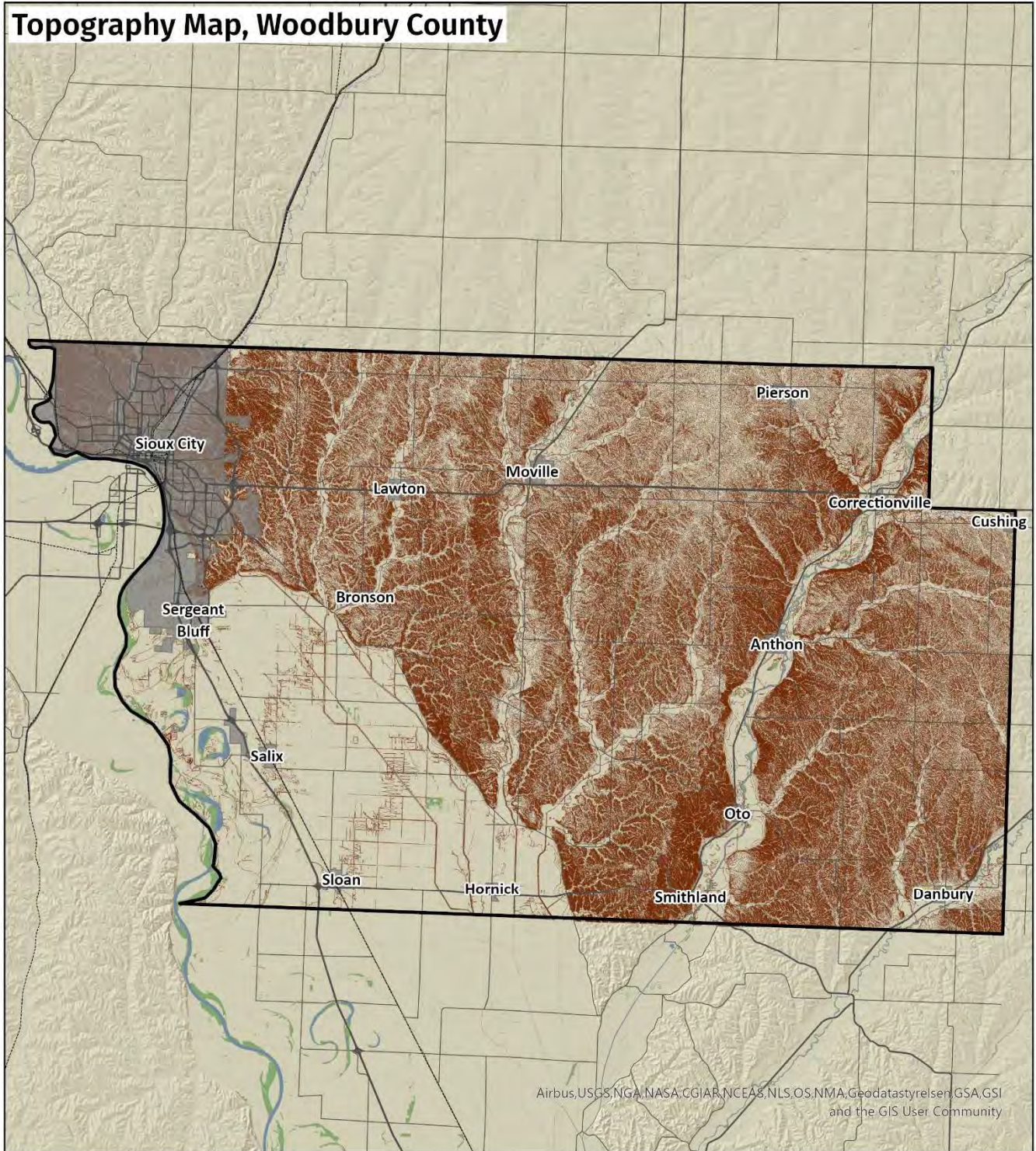
- Flood
- Thunderstorm w/Hail & Lightning
- Tornado/Windstorm

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
development		
Improve existing facilities & infrastructure	Westfield	New. City is in process of completing a new water treatment facility. Project is incorporating flood protections and continuity of operations features (generator/generator hook up). <i>Public Works, contracted project manager/administrator</i> (CDBG, Local funds) HIGH PRIORITY
flow control		

Flood protection	Westfield	Carry over. This project did not advance to a more permanent solution due to expenses attributed to 2019 flood recovery and again in 2024. Lack of available resources contributed to delay in permanent solution. Project is still needed. City seeking options to substantially reinforce berm and/or other flood protections around lagoon. <i>City Council, City maintenance/waterworks, County EMA , FEMA, and DNR as applicable.</i> (Local funds, Disaster Recovery funds as applicable) HIGH PRIORITY
refuge		
technology		
natural barriers/supports		

Topography Map, Woodbury County



Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI
and the GIS User Community

Marsh, Swamp, Bog,
Prairie
River

Lake, Reservoir
Incorporated Areas
County Boundary

Contours
Railroad

0 3.5 7 Miles



The map does not represent a survey, no liability is assumed for the accuracy of the data delineated herein, either expressed or implied by SIMPCO.

© 2025 Siouxland Interstate Metropolitan Planning Council.
Please call 712-279-6286 to obtain permission for use.

IV. COUNTIES & CITIES PARTICIPATING AS JURISDICTIONS

E. Woodbury County

PROFILE – UNINCORPORATED AREA & COUNTY

Woodbury County is located north of center along Iowa's west "coast". The County is bordered by Plymouth County to the north, Ida County to the east, Monona County to the south, and the Missouri River lines its western border with the state of Nebraska. Woodbury is 872 square miles in size. Incorporated communities in Woodbury County include Anthon, Bronson, Correctionville, Cushing, Danbury, Hornick, Lawton, Merville, Oto, Pierson, Salix, Sergeant Bluff, Sioux City, Sloan, and Smithland.

a. Rivers & Watersheds

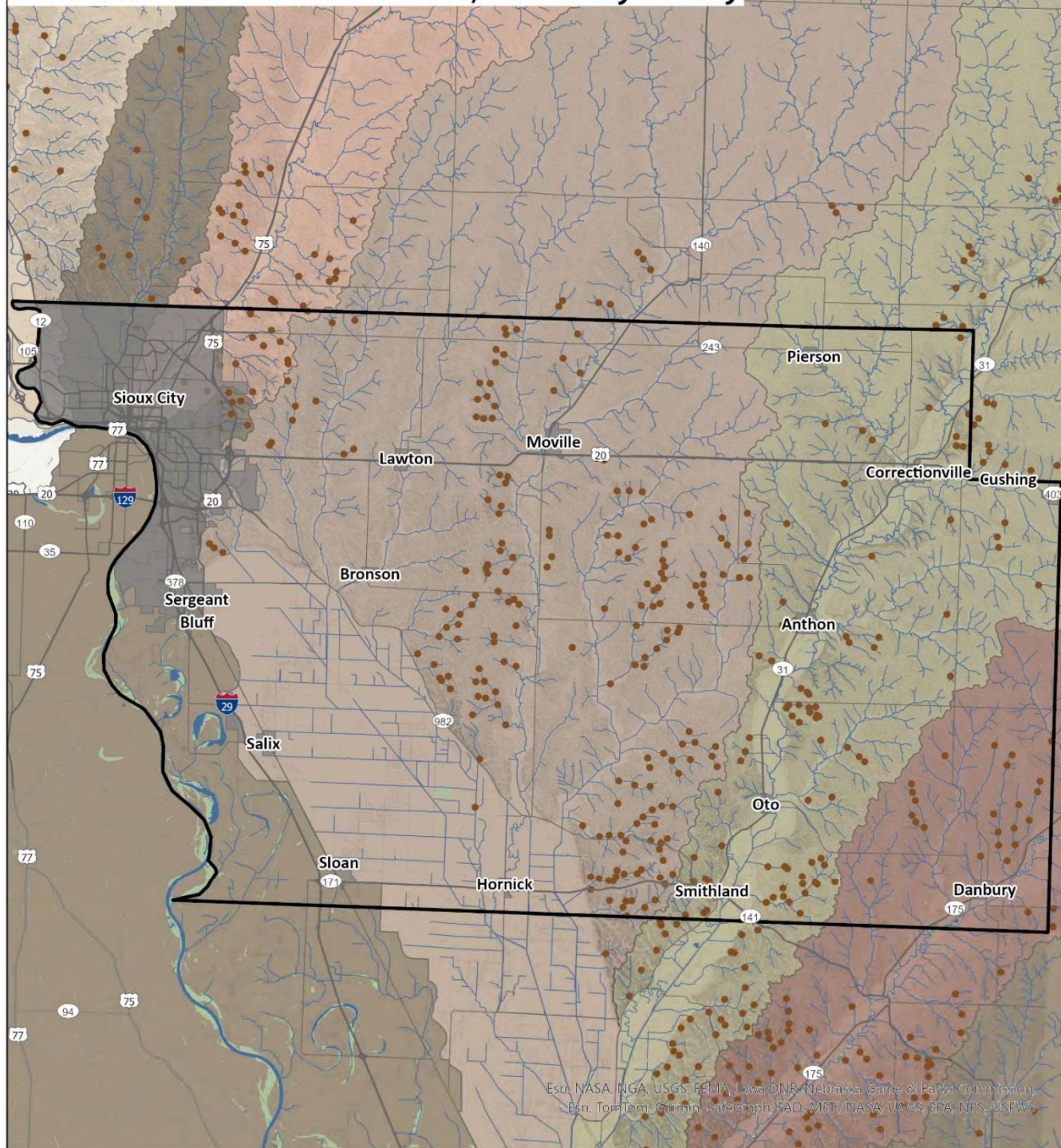
The western border of Woodbury County is the Missouri River. Other significant rivers in the County include the Floyd River, Maple River, Perry Creek, Pierson Creek, and the West Fork of the Little Sioux River.

There are six (6) watersheds within the County that drain storm water and snow melt into streams and lakes, wetland areas, or into groundwater reserves. These watersheds starting west and heading east are Lower Big Sioux Watershed, Blackbird-Soldier Watershed, Floyd Watershed, Monona-Harrison Ditch Watershed, Little Sioux Watershed, and Maple Watershed as shown in the map in the Region portion of this Plan. The following map depicts the sub-watersheds within those as listed above. Sub-watersheds are determined based on hydrologic unit code (HUC) level 12, which includes more detail including tributary data.

b. Landform Regions & Geology

Woodbury County is composed of four (4) distinct landform regions – Northwest Iowa Plains, Southern Iowa Drift Plains, Loess Hills, and Missouri Alluvial Plain.

Watershed and Water Resources, Woodbury County



c. Transportation Network

On the western side of the County is Interstate 29, which generally runs north to south. US Highways 20 and 75. State Highways 12, 31, 140, 14, and 175 are also included in the County's road network.

The County's secondary road system is composed of 1,353.48 miles. Within this category, Farm-to-Market roads make up 395.56 miles, while Area Service roads account for 957.92 miles. Gravel or earth surface types account for 938.85 miles of the secondary road system. The remaining 331.37 miles are composed of bituminous, asphalt, or PCC surface types.

d. County Governance & Supports

The county seat is located in Sioux City, in the northwest portion of the County. Its jurisdiction covers all unincorporated portions within county boundaries. Woodbury County is governed by a five (5)-person Board of Supervisors, supported by an administrative staff. The Board exercises power characteristic of each of the three branches of government: executive, legislative, and judicial. Additional county offices include the following departments.

- Assessor
- Attorney
- Auditor
- Communication Center (911)
- Conservation Board
- Elections
- Emergency Management
- Emergency Services
- Human Resources
- Motor Vehicle
- Recorder
- Secondary Roads
- Sheriff's Department
- Siouxland District Health
- Social Services
- Treasurer
- Veteran Affairs
- Weed Commissioner
- Planning & Zoning Commission/CED

The Woodbury County Department of Emergency Management supports and coordinates between local departments and emergency responses units. The Woodbury County Sheriff's Office (WCSO) provides law enforcement services to the county. The office has 120 employees and covers 872 miles.

County Facilities

<i>Facility Name/Type</i>	<i>Address</i>	<i>City</i>
Anthon Shed; Storage	NW Corner of Bridge St & Miller Ave	Anthon
Climbing Hill Shed	75 Deer Run Trail	Climbing Hill
Public Safety; Emerg Services Bldgs	121 Deer Run Trail	Climbing Hill
Correctionville Shed; Storage (PNBR)	112 Knotty Pine	Correctionville
Multiple structures	Little Sioux Park	Correctionville
Danbury Shed	NE Corner of 1st St & Thomas St	Danbury
Danbury Tower	3077 Osceola Ave	Danbury
Library - Leased Space	221 Main St	Danbury
Hornick Shed; Storage Shed (PNBR)	220 Main	Hornick
Library/City Hall - Rented Space	510 Main St	Hornick
Lawton Shed	Hwy 20	Lawton
Miller Township Shed	SW Corner of 250th & O'Brien Ave	Millersburg
Library - Leased Space	825 Main St	Moville
Moville Shed; Storage	Hwy 20	Moville
Secondary Roads Office	759 E Frontage Rd	Moville
Multiple structures	NE Corner of Hwy 31 & 290th St	Oto
Oto Radio Building	Corner of 2nd & Royal Sts	Oto
Oto Shed	205 Washington St	Oto
Library - Leased Space	321 4th St	Pierson
Pierson Shed	106 Summit St	Pierson
Cabins	2924 Snyder Bend Rd	Salix
Luton Shed	2508 Dallas Ave	Salix
Multiple structures	Snyder Bend	Salix
Multiple structures	Bigelow Park	Salix
County Building	401 - 8th St	Sioux City
County Building	1211 Tri-View Ave	Sioux City
Courthouse	620 Douglas St	Sioux City
Dorothy Pecaut Nature Ctr.	4500 Sioux River Rd	Sioux City
Law Enforcement Center	407 7th St	Sioux City
Law Enforcement Training Center	1600 County Home Rd	Sioux City
Prairie Hills facility & related	1600 County Home Rd	Sioux City
Siouxland District Health	1014 Nebraska St	Sioux City

Trosper-Hoyt County Serv Bldg	822 Douglas St	Sioux City
Comfort Station Storage; Open Shelter	Fowler Forest	Smithland
Multiple structures	Southwood, 1 Mi SW of Smithland	Smithland

Education

Within Woodbury County there are 48 public schools divided into six (6) school districts. These districts include:

- Lawton-Bronson Community School District, Lawton
- River Valley Community School District, Correctionville
- Sergeant Bluff-Luton Community School District, Sergeant Bluff
- Sioux City Community School District, Sioux City
- Westwood Community School District, Sloan
- Woodbury Central Community School District, Merville

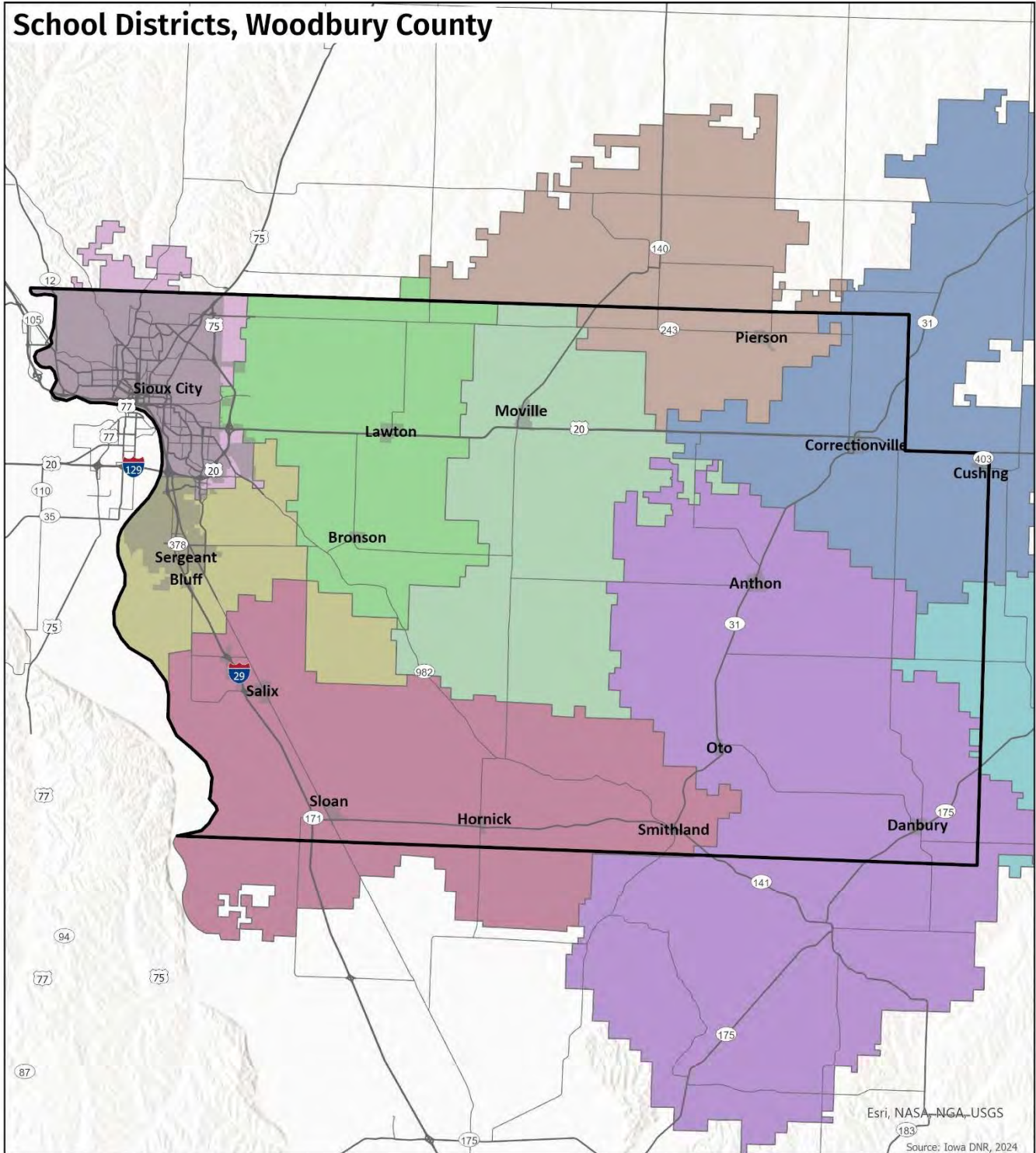
In addition, there are eight (8) private schools located within the County. The Sioux City Career Academy provides an alternative learning environment for students within the Sioux City Community School District.

While there are no public universities located with Woodbury County, there are a several other higher education institutions. Western Iowa Tech Community College is a public two-year college located in Sioux City. Private non-profit institutions include Briar Cliff University and Morningside College, also located in Sioux City.

Woodbury County generally has a higher percent of residents with a high school degree or some college compared to the state of Iowa. However, the County falls behind within the categories of bachelor's degree and graduate or professional degree.

Educational attainment in Woodbury County shows a higher percentage of residents without a high school diploma compared to the state average. However, the county has a relatively strong proportion of individuals who have completed high school or pursued some college education. The number of people with an associate's degree is close to the state average, but Woodbury

School Districts, Woodbury County



- KINGSLEY-PIERSON
- LAWTON-BRONSON
- MAPLE VALLEY-ANTHON OTO

- ODEBOLT ARTHUR BATTLE CREEK IDA GROVE
- RIVER VALLEY
- SERGEANT BLUFF-LUTON

- SIOUX CITY
- WESTWOOD
- WOODBURY CENTRAL

0 3.5 7 Miles



The map does not represent a survey, no liability is assumed for the accuracy of the data delineated herein, either expressed or implied by SIMPCO.

© 2025 Siouxland Interstate Metropolitan Planning Council.
Please call 712-279-6286 to obtain permission for use.

County has a lower percentage of residents with bachelor's and graduate degrees compared to the state. This indicates that while there is a solid foundation in basic and postsecondary education, there are opportunities for growth in higher education attainment within the county.

<i>Level of Education</i>	<i>Woodbury</i>	<i>Iowa</i>
No high school diploma	12.8%	6.8%
High school degree (includes equivalency)	32.6%	30.4%
Some college, no degree	19.8%	19.9%
Associate's degree	11.4%	12.1%
Bachelor's degree	15.6%	20.6%
Graduate or professional degree	7.8%	10.2%

Population

CensusReporter.org provides the following population⁵¹ and household statistics for Woodbury County. It's important to note the data as provided is a snapshot of available information at the time drawn. Number fluctuate as data is more thoroughly assessed over time, accounting for variations in using the same source with the same search criteria and retrieving varying results. For consistency, the point in time results are reflected as pulled and are presented as estimates.

<i>Community Characteristics</i>	
Population (2023)	105,760
Population (2020)	105,941
Total Households	40,348
Median Household Income	\$64,913
Median Household Income – Iowa	\$71,433

⁵¹ Source: <https://censusreporter.org/profiles/05000US19193-woodbury-county-ia/>

Healthcare Facilities

Woodbury County holds numerous healthcare facilities, clinics, and urgent care offices. There are a number of mental health services centers, eye doctors, dentists, orthodontists, surgery centers and more, geared to meet the needs of residents in the tri-state area. Some services are gradually consolidating, many with often changing management companies – especially nursing homes, rehab centers, and assisted living facilities.

The larger providers are listed below for reference. Several have branch offices/services and have more than one service location.

- Unity Point Health – St Luke’s
- June E Nylen Cancer Center
- Siouxland Community Health Center
- Briar Cliff University Physical Therapy Clinic
- Family Healthcare of Siouxland
- CNOS

Housing

Woodbury County’s housing picture is best defined within its incorporated communities, with very little discernable information available for unincorporated entities. The county does have an active planning and zoning commission serving under the board of supervisors. In general terms, CensusReporter.org provides an estimate of 43,622 housing units with a 92% occupancy rate. Median home values show at \$182,900 in comparison to the state at \$213,300 and the national median value of \$340,200. The national range has a significant impact on local markets, especially after significant relocation trends stemming from the COVID-19 pandemic. Seeking smaller communities with less density, many large urban residents overpaid for homes due to relative value of a similar home in their city of origin. This is consistent throughout the region.

Income & Economics

<i>Industry for the Civilian Employed Population 16 and over</i>		
Civilian employed population (16 and older)	51,663	-
Agriculture, forestry, fishing and hunting, and mining	1,108	2.1%
Construction	4,4047	7.8%

Manufacturing	9,368	18.1%
Wholesale trade	1,787	3.5%
Retail trade	5,182	10%
Transportation and warehousing, and utilities	3,300	6.4%
Information	1,153	2.2%
Finance and insurance, and real estate and rental and leasing	2,836	5.5%
Professional, scientific, and management, and administrative and waste management services	3,303	6.4%
Education services and health care and social assistance	10,732	20.8%
Arts, entertainment, and recreation, and accommodation and food services	5,420	10.5%
Other services except public administration	2,528	4.9%
Public administration	899	1.7%

The budgeted projects outlined in the Capital Improvement Plan and the scheduled Equipment Replacement Plan play a significant role in mitigation efforts. These initiatives help ensure access, enhance security, and establish reliable infrastructure, all of which contribute to the county's ongoing resiliency through daily decision-making at the local level.

Valuation of County Assets

A valuation of county assets was not provided for this Plan update. To provide an accurate cost-benefit analysis prior to project implementation, the county will consider valuations of affected properties - both public and private, to validate project expense.

PARTICIPATION

SIMPCO facilitated a mitigation planning meeting at the Security Institute, WITCC on January 13, 2025 with the following in attendance.

- Mike Montino, EMA Coordinator
- John Holmes, Assistant EMA Coordinator
- Dan Priestly, Zoning Coordinator
- Laura Sievers, Engineer (via phone conference)

Woodbury County residents comprised 78 of the 251 primary survey respondents, offering public input for consideration herein.

CAPABILITIES

<i>Plans/Guidance Documents</i>	
- Comprehensive Plan (May 2025) - Builder's Plan - Capital Improvement Plan	- Local/County Emergency Plan - County Recovery Plan - Land Use Plan
<i>Policies/Ordinance</i>	
Building Code	Roof Load Capacity Ordinance
Debris Management Plan	Storm Water Ordinance
Drainage Ordinance	Subdivision Ordinance
Floodplain Ordinance	Tree Trimming Ordinance
Nuisance Ordinance	Zoning Ordinance
<i>Programs</i>	
Zoning/Land Use Restrictions	
Codes Building Site/Design	
National Flood Insurance Program (NFIP) Participant	CID #190536
Hazard Awareness Program	
Property Acquisition	
<i>Programs</i>	
Planning/Zoning Boards	
Tree Trimming Program	
Mutual Aid Agreements	28E agreement with all communities within Woodbury County
<i>Staff/Department</i>	<i>Comments</i>
- Building Code Official - Building Inspector - Mapping Specialist (GIS) - Engineer - Development Planner	- Emergency Management Coordinator - NFIP Floodplain Administrator - Emergency Response Team - Historic Preservation
<i>Non-Governmental Organizations</i>	<i>Comments</i>
American Red Cross	Sioux City
Salvation Army	Sioux City
Veterans Groups	in communities

Homeowner Associations	in some cities
Neighborhood Associations	in some cities
Chamber of Commerce	Sioux City
Community Organizations (Lions, Kiwanis, etc.)	in communities
<i>County Funding Abilities & Authorities</i>	
Ability to apply for Community Development Block Grants	
Authority to levy taxes for a specific purpose	
Levy taxes for a specific purpose	
Impact fees for new development	
Incur debt through	• general obligation bonds • special tax bonds • private activities
Withhold spending in hazard prone areas	

Review of Actions Taken

communication /education		
Assessment/Study	Woodbury Co	2020: Econ Dev - Work on measures necessary to reduce NFIP participant costs for communities. County Economic Dev, IDNR (County funds as needed) HIGH PRIORITY Project closed. Economic Development department consolidated into Zoning. Project deemed not immediately feasible, though county will reassess situation given an opening to such opportunity.
tools/equipment		
Generator & Related Projects	Woodbury Co	2020: All communities: Standby generator on site for each Community Center/City Hall as may be designated for command center during a disastrous event) LOW PRIORITY
Generator & Related Projects	Woodbury Co	Update. Some communities have added generators and/or transfer switches to accommodate mobile equipment. The county will continue to pursue opportunity to install dedicated generators where necessitated and transfer switches where still needed.
Generator & Related Projects	Woodbury Co	2020: A generator needed at Courthouse; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Woodbury Co	Update. Carry over to 2025 plan.
Equipment	Woodbury County	2020: Sandbagging equipment/HESCO bags; <i>County Engineer, potential collaboration with partner County</i> (County funds, IDOT program funds, PDM) HIGH PRIORITY

Equipment	Woodbury County	Complete (with ongoing inventory maintenance required). County acquired 10 pallets of HESCO bags in addition to two 2" pumps, a 6" pump. Bags and sandbagging equipment was issued to address current year flooding. Old stock was used first with remainder stored for future use. Bags hold an approximate 10-year useful life so no additional are needed at this time.
Equipment	Woodbury County	2020: Additional trailer w/ 5 sets of road barricades. 3 trailered and ready to roll. 5 sets per trailer; <i>County Engineer</i> , (County funds, IDOT program funds, PDM) LOW PRIORITY
Equipment	Woodbury County	Project Closed. County determined that while extra equipment would be beneficial, it is not a practical cost consideration in the near future with county funds, nor response funding as may become available.
Equipment	Woodbury County	2020: Additional pumps - 12" & 18" capacity; <i>County Engineer</i> (County funds, IDNR program funds, PDM) HIGH PRIORITY
Equipment	Woodbury County	Update: Current practice is to borrow from established resources as needed (local farmer).
development		
Bridges & Roads	Woodbury Co	2020: Secondary Roads - about 30 bridge replacements necessary -- some immediate, <i>County Engineer, Contracted services</i> (County funds, IDOT Transportation funds) HIGH PRIORITY
Bridges & Roads	Woodbury Co	Specifics regarding completed and pending bridge projects were not provided, though the county continues to address its bridge repair backlog annually. Unless incorporated into a specific event-related recovery or prevention effort and amended, this item will not carry over to the 2025 HMP.
Bridges & Roads	Woodbury Co	2020: Secondary Roads - about 50 bridge needing rip rap, scour, overlay or other maintenance; <i>County Engineer, Contracted services</i> (County funds, IDOT Transportation funds) HIGH PRIORITY
Bridges & Roads	Woodbury Co	Specifics regarding completed and pending rip rap restoration/fortification projects were not provided. Replacement of rip rap is an annual maintenance item, with additional attention given post extreme weather event (flood, heavy rain, heavy snow, other incurred displacement). Unless incorporated into a specific event-related recovery or prevention effort and amended, this item will not carry over to the 2025 HMP.
Bridges & Roads	Woodbury Co	2020: Further incorporate mindful planning to accommodate overflow at some road points such as Old Hwy 141 and D38; <i>County Engineer, Contracted services</i> (County funds, IDOT Transportation funds) HIGH PRIORITY
Bridges & Roads	Woodbury Co	Update was not provided at the county's mitigation planning meeting.
flow control		
refuge		

technology		
Improve effectiveness	Woodbury Co	2020: EMA - Improve weather radio/communication receptors in southeast area of county; County EMA, County Board, State Communications (County funds, state program funds, PDM) MEDIUM PRIORITY
Improve effectiveness	Woodbury Co	Implemented. The county completed an upgrade of their communications systems, improving reception in problem areas. Funding source and cost were not provided.
natural barriers/ supports		

RISK ASSESSMENT

The county is undergoing the development of a continuity of government operations plan, anticipated for completion by 2026. Policy updates are integral to the plan. Woodbury County must take into account the actions, mitigative and otherwise, implemented in nearby communities and states. Substantial and unexpected flooding caused significant loss in several communities. Tributary flooding caused enactment of an antiquated water diversion plan on the South Dakota side of the river. A similarly unexpected levee breach in Smithland highlighted a gap in updated flood modeling. Otherwise protected areas are increasingly becoming exposed. This and other flooding events in 2024 emphasized the need for a feedback process within the county's scope of control – interdepartmental to start and interstate and regional in the long term. Process development includes continuous and practical review of procedures to gauge effectiveness and feasibility.

Demographic changes in the region dictate need for Woodbury County to assess capacity to communicate with visitors and occupants of county facilities in varying languages and modes. This factors into notifications of emergency situations, especially for new residents and the homeless population. Technology provides an opportunity for better in-time language translation. However, tech may not be the best answer for those living in tents along the river and other hazard-prone locations.

Risk stemming from natural disasters and other hazards are generalized by an accounting of records as reported in the NOAA Storm Event database⁵². A summary of events reported in Woodbury County includes 189 events between 11/01/2019 and 12/31/2024 (1888 days). Total

⁵² Source: www.ncdc.noaa.gov/stormevents/

reported property damage estimate is \$5,261,000 and crop damages are estimated at \$48,262,000.

<i>Summary</i>	
Number of County/Zone areas affected:	2
Number of Days with Event:	133
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	8
Number of Days with Event and Crop Damage:	19
Number of Event Types reported:	18

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
WOODBURY (ZONE)	11/26/2019	14:30	Winter Storm		0	0	0.00K	0.00K
WOODBURY (ZONE)	11/28/2019	18:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	12/29/2019	9:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/17/2020	5:30	Blizzard		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/19/2020	4:00	Cold/wind Chill		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/22/2020	0:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/12/2020	16:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/12/2020	22:00	Cold/wind Chill		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/19/2020	1:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	3/19/2020	18:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	4/12/2020	8:00	Winter Weather		0	0	0.00K	0.00K
LEEDS	5/24/2020	3:29	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BRONSON	6/21/2020	5:30	Hail	1.00 in.	0	0	0.00K	0.00K
BRONSON	6/21/2020	5:30	Hail	0.88 in.	0	0	0.00K	0.00K
LEEDS	7/14/2020	1:05	Lightning		0	0	25.00K	0.00K
WOODBURY (ZONE)	7/28/2020	0:00	Drought		0	0	0.00K	475.00K
WOODBURY (ZONE)	8/1/2020	0:00	Drought		0	0	0.00K	617.00K
MOVILLE	8/10/2020	7:40	Thunderstorm Wind	50 kts. MG	0	0	0.00K	4.00K
SIOUX CITY ARPT	8/10/2020	7:20	Thunderstorm Wind	50 kts. MG	0	0	0.00K	0.00K
SIOUX CITY ARPT	8/10/2020	7:24	Thunderstorm Wind	58 kts. MG	0	0	0.00K	0.00K

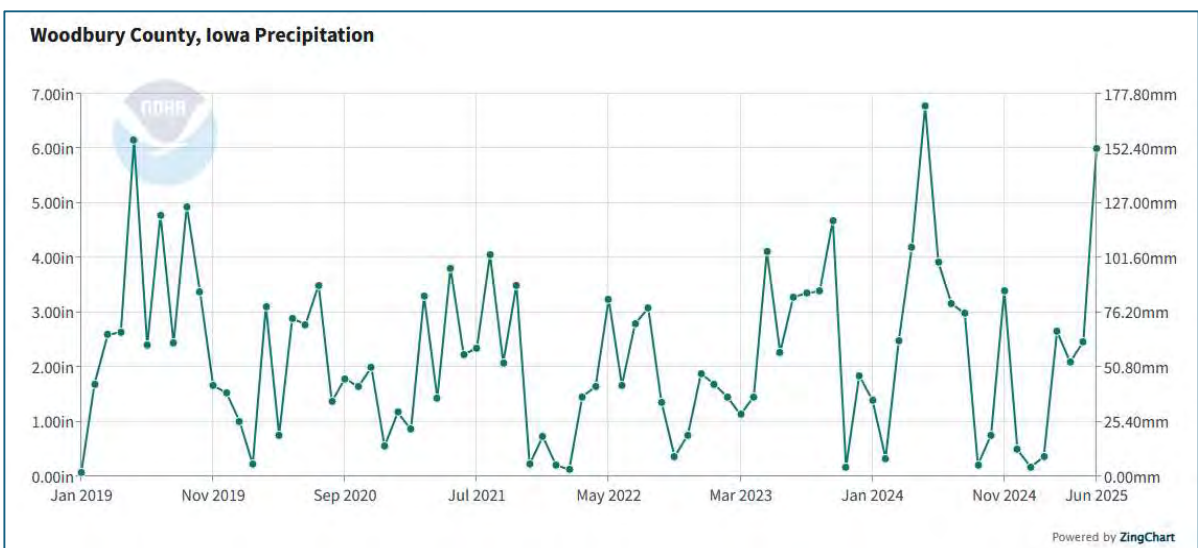
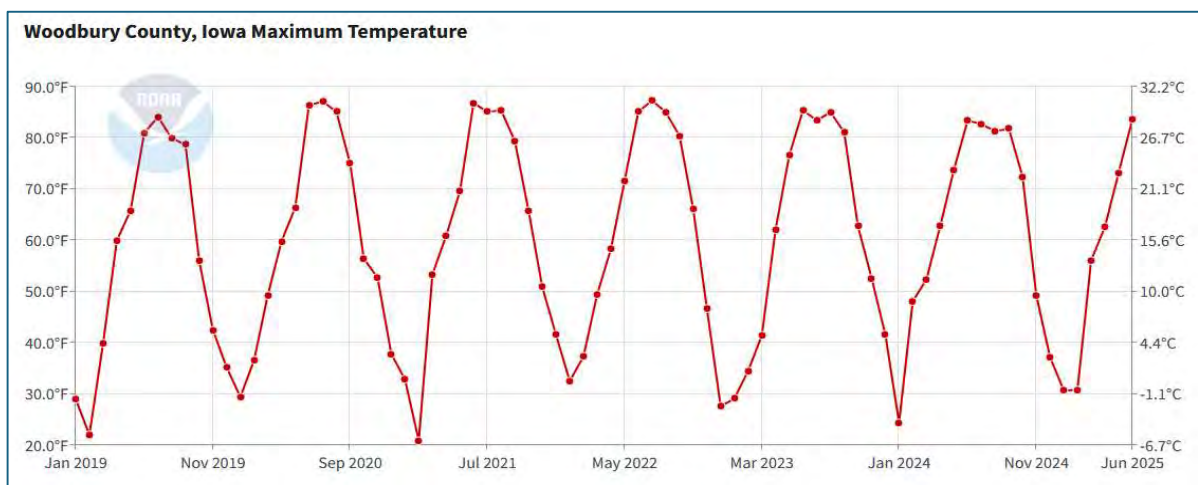
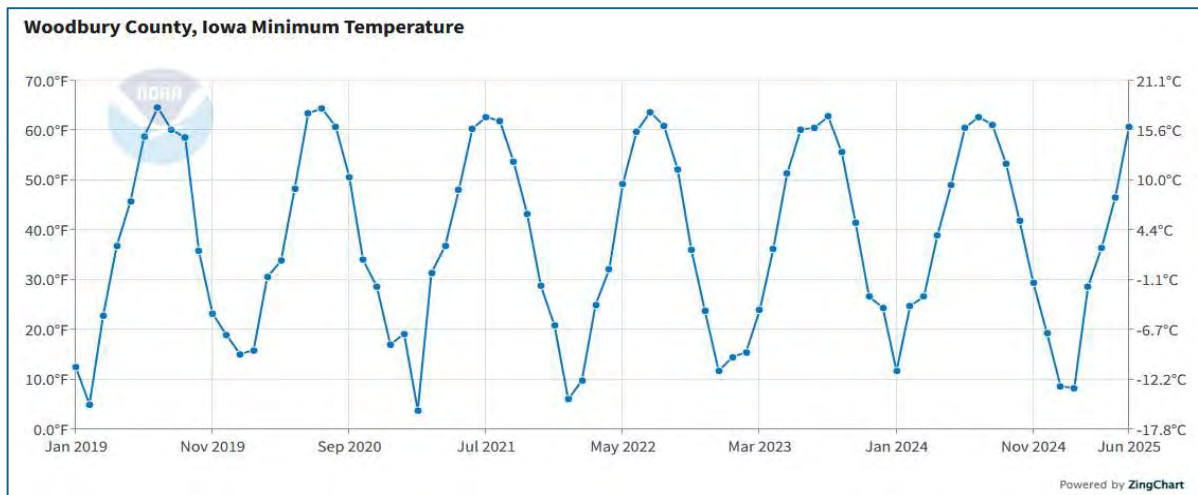
SPRINGDALE	8/10/2020	7:16	Thunderstorm Wind	56 kts. EG	0	0	1.00K	0.00K
WOODBURY (ZONE)	9/1/2020	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	10/6/2020	0:00	Drought		0	0	0.00K	47.00K
LEEDS	10/11/2020	17:59	Thunderstorm Wind	54 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	10/11/2020	12:00	Wildfire		0	0	300.00K	20.00K
WOODBURY (ZONE)	10/25/2020	2:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	11/1/2020	0:00	Drought		0	0	0.00K	107.00K
WOODBURY (ZONE)	11/9/2020	21:00	Ice Storm		0	0	6.00K	0.00K
WOODBURY (ZONE)	12/1/2020	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	12/23/2020	10:00	Blizzard		0	0	0.00K	0.00K
WOODBURY (ZONE)	12/29/2020	7:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/1/2021	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/15/2021	3:00	Blizzard		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/23/2021	17:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/25/2021	11:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/1/2021	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/4/2021	2:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/15/2021	0:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/21/2021	5:00	Winter Storm		0	0	0.00K	0.00K
WOODBURY (ZONE)	3/1/2021	0:00	Drought		0	0	0.00K	0.00K
PIERSON	6/22/2021	17:46	Hail	1.75 in.	0	0	0.00K	8.00K
WOODBURY (ZONE)	7/27/2021	0:00	Drought		0	0	0.00K	583.00K
WOODBURY (ZONE)	8/1/2021	0:00	Drought		0	0	0.00K	336.00K
SIOUX CITY	8/5/2021	23:22	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
PIERSON	8/20/2021	17:16	Thunderstorm Wind	56 kts. EG	0	0	2.00K	0.00K
WOODBURY (ZONE)	9/1/2021	0:00	Drought		0	0	0.00K	76.00K
WOODBURY (ZONE)	12/10/2021	12:00	Winter Weather		0	0	0.00K	0.00K
ANTHON	12/15/2021	16:34	Thunderstorm Wind	74 kts. EG	0	0	75.00K	0.00K
BRONSON	12/15/2021	16:23	Thunderstorm Wind	61 kts. EG	0	0	25.00K	0.00K
BRONSON	12/15/2021	16:25	Tornado	EF2	0	0	500.00K	0.00K
DANBURY	12/15/2021	16:38	Thunderstorm Wind	64 kts. EG	0	0	10.00K	0.00K
HORNICK	12/15/2021	16:19	Thunderstorm Wind	65 kts. EG	0	0	25.00K	0.00K
LAWTON	12/15/2021	16:28	Thunderstorm Wind	70 kts. EG	0	0	25.00K	0.00K
LAWTON	12/15/2021	16:28	Thunderstorm Wind	69 kts. EG	0	0	25.00K	0.00K

LAWTON	12/15/2021	16:31	Thunderstorm Wind	69 kts. EG	0	0	10.00K	0.00K
MOVILLE	12/15/2021	16:35	Tornado	EF1	0	0	200.00K	0.00K
SALIX	12/15/2021	16:15	Tornado	EFU	0	0	0.00K	0.00K
SALIX	12/15/2021	16:20	Tornado	EF1	0	0	250.00K	0.00K
SIOUX CITY	12/15/2021	16:21	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SIOUX CITY	12/15/2021	16:25	Thunderstorm Wind	65 kts. EG	0	0	10.00K	0.00K
SIOUX CITY ARPT	12/15/2021	16:23	Thunderstorm Wind	71 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	12/15/2021	20:20	High Wind	58 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	1/4/2022	18:20	High Wind	53 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	1/6/2022	5:00	Cold/wind Chill		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/21/2022	17:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/22/2022	22:30	Cold/wind Chill		0	0	0.00K	0.00K
WOODBURY (ZONE)	3/15/2022	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	3/25/2022	10:00	Strong Wind	46 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	4/1/2022	0:00	Drought		0	0	0.00K	0.00K
CORRECTIONVILLE	4/12/2022	16:15	Hail	1.75 in.	0	0	0.00K	0.00K
HOLLY SPGS	4/12/2022	16:24	Hail	1.50 in.	0	0	0.00K	0.00K
HOLLY SPGS	4/12/2022	16:27	Hail	1.50 in.	0	0	0.00K	0.00K
HORNICK	4/12/2022	16:22	Hail	1.00 in.	0	0	0.00K	0.00K
WOODBURY (ZONE)	4/12/2022	19:20	High Wind	55 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	4/12/2022	19:25	High Wind	61 kts. EG	0	0	0.00K	0.00K
WOODBURY (ZONE)	4/23/2022	9:15	High Wind	59 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	5/1/2022	0:00	Drought		0	0	0.00K	937.00K
MOVILLE	5/12/2022	18:15	Thunderstorm Wind	50 kts. MG	0	0	0.00K	29.00K
SERGEANT BLUFF	5/12/2022	18:01	Tornado	EFU	0	0	0.00K	0.00K
SIOUX CITY	5/12/2022	15:54	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SIOUX CITY ARPT	5/12/2022	18:09	Thunderstorm Wind	59 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	5/30/2022	13:41	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
WOODBURY (ZONE)	6/1/2022	0:00	Drought		0	0	0.00K	500.00K
WOODBURY (ZONE)	7/1/2022	0:00	Drought		0	0	0.00K	5.020M
SIOUX CITY ARPT	7/5/2022	15:49	Thunderstorm Wind	51 kts. MG	0	0	0.00K	80.00K
SIOUX CITY	7/7/2022	16:40	Flash Flood		0	0	0.00K	0.00K
WOODBURY (ZONE)	8/1/2022	0:00	Drought		0	0	0.00K	5.090M
WOODBURY (ZONE)	9/1/2022	0:00	Drought		0	0	0.00K	1.260M
WOODBURY (ZONE)	10/1/2022	0:00	Drought		0	0	0.00K	0.00K

WOODBURY (ZONE)	11/1/2022	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	11/29/2022	6:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	12/1/2022	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	12/8/2022	15:30	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	12/22/2022	1:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/1/2023	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/2/2023	18:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/18/2023	17:00	Winter Storm		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/27/2023	22:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/1/2023	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/15/2023	3:20	High Wind	50 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	2/22/2023	12:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	3/1/2023	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	3/8/2023	16:30	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	3/22/2023	21:30	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	4/1/2023	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	4/18/2023	22:16	High Wind	57 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	4/19/2023	19:14	Hail	1.00 in.	0	0	0.00K	0.00K
WOODBURY (ZONE)	4/30/2023	8:00	Strong Wind	48 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	5/1/2023	0:00	Drought		0	0	0.00K	0.00K
SIOUX CITY	5/10/2023	22:54	Hail	1.00 in.	0	0	0.00K	0.00K
LEEDS	5/10/2023	22:53	Hail	1.00 in.	0	0	0.00K	0.00K
LEEDS	5/10/2023	22:54	Hail	1.00 in.	0	0	0.00K	0.00K
SLOAN	5/12/2023	18:46	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
WOODBURY (ZONE)	6/1/2023	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	7/1/2023	0:00	Drought		0	0	0.00K	0.00K
SERGEANT BLUFF	7/4/2023	16:56	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SERGEANT BLUFF	7/12/2023	4:28	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	7/12/2023	4:20	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
SIOUX CITY ARPT	7/12/2023	4:26	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
SLOAN	7/12/2023	4:35	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
WOODBURY (ZONE)	7/25/2023	10:00	Excessive Heat		0	0	0.00K	0.00K
WOODBURY (ZONE)	8/1/2023	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	8/19/2023	12:00	Excessive Heat		0	0	0.00K	0.00K

WOODBURY (ZONE)	8/21/2023	11:00	Excessive Heat		0	0	0.00K	0.00K
WOODBURY (ZONE)	9/1/2023	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	9/2/2023	12:00	Heat		0	0	0.00K	0.00K
MOVILLE	9/18/2023	23:50	Hail	1.00 in.	0	0	0.00K	0.00K
SIOUX CITY	9/23/2023	11:30	Hail	1.25 in.	0	0	0.00K	0.00K
WOODBURY (ZONE)	10/1/2023	0:00	Drought		0	0	0.00K	33.070M
SERGEANT BLUFF	10/3/2023	19:29	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SIOUX CITY	10/3/2023	19:25	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
WOODBURY (ZONE)	10/28/2023	10:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	12/9/2023	9:00	Strong Wind	39 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	12/25/2023	3:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/8/2024	3:00	Winter Storm		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/10/2024	16:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/11/2024	15:00	Winter Storm		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/12/2024	15:00	Blizzard		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/12/2024	18:00	Extreme Cold/wind Chill		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/18/2024	10:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	1/19/2024	22:00	Cold/wind Chill		0	0	0.00K	0.00K
WOODBURY (ZONE)	2/27/2024	17:00	Winter Weather		0	0	0.00K	0.00K
WOODBURY (ZONE)	4/2/2024	19:00	High Wind	50 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	4/6/2024	14:30	High Wind	50 kts. MG	0	0	0.00K	0.00K
LEEDS	4/16/2024	12:50	Hail	1.00 in.	0	0	0.00K	0.00K
ANTHON	4/26/2024	11:06	Hail	1.00 in.	0	0	0.00K	0.00K
SERGEANT BLUFF	5/20/2024	21:42	Hail	1.25 in.	0	0	0.00K	0.00K
SERGEANT BLUFF	5/20/2024	21:42	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
SIOUX CITY ARPT	5/20/2024	21:42	Thunderstorm Wind	63 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	5/21/2024	5:26	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
SIOUX CITY ARPT	5/21/2024	5:19	Thunderstorm Wind	62 kts. MG	0	0	0.00K	0.00K
LEEDS	5/21/2024	5:24	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
SALIX	6/12/2024	17:25	Hail	1.50 in.	0	0	0.00K	0.00K
SALIX	6/12/2024	17:25	Hail	1.25 in.	0	0	0.00K	0.00K
SERGEANT BLUFF	6/12/2024	17:04	Hail	1.25 in.	0	0	0.00K	0.00K
SLOAN	6/12/2024	17:29	Hail	1.50 in.	0	0	0.00K	0.00K
SLOAN	6/12/2024	17:33	Hail	1.50 in.	0	0	0.00K	3.00K

SLOAN	6/12/2024	17:49	Hail	1.75 in.	0	0	0.00K	0.00K
SLOAN	6/12/2024	17:50	Hail	2.00 in.	0	0	0.00K	0.00K
CORRECTIONVILLE	6/15/2024	20:08	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
SLOAN	6/22/2024	22:00	Flood		0	0	4.130M	0.00K
PIERSON	6/23/2024	4:00	Flood		0	0	0.00K	0.00K
LEEDS	6/23/2024	3:00	Flood		0	0	0.00K	0.00K
LEEDS	6/23/2024	10:00	Flood		0	0	0.00K	0.00K
SIOUX CITY	6/24/2024	19:00	Flood		0	0	0.00K	0.00K
SERGEANT BLUFF	7/7/2024	16:50	Hail	1.25 in.	0	0	0.00K	0.00K
WOODBURY (ZONE)	7/13/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
SIOUX CITY	7/28/2024	14:40	Flash Flood		0	0	0.00K	0.00K
LEEDS	7/28/2024	15:00	Flash Flood		0	0	0.00K	0.00K
LAWTON	7/29/2024	23:02	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
PIERSON	7/29/2024	23:06	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
SIOUX CITY	7/29/2024	22:39	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	7/29/2024	22:40	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SIOUX CITY	7/29/2024	22:46	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
SIOUX CITY ARPT	7/29/2024	22:45	Thunderstorm Wind	60 kts. MG	0	0	0.00K	0.00K
LEEDS	7/29/2024	22:44	Thunderstorm Wind	62 kts. MG	0	0	0.00K	0.00K
SMITHLAND	7/29/2024	23:08	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
SPRINGDALE	7/29/2024	22:45	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
WOODBURY (ZONE)	7/31/2024	11:00	Excessive Heat		0	0	0.00K	0.00K
WOODBURY (ZONE)	8/2/2024	12:00	Heat		0	0	0.00K	0.00K
WOODBURY (ZONE)	8/5/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
WOODBURY (ZONE)	8/25/2024	12:00	Excessive Heat		0	0	0.00K	0.00K
SIOUX CITY	8/29/2024	15:30	Flash Flood		0	0	0.00K	0.00K
WOODBURY (ZONE)	10/8/2024	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	11/1/2024	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	11/20/2024	4:00	Strong Wind	43 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	12/1/2024	0:00	Drought		0	0	0.00K	0.00K
WOODBURY (ZONE)	12/4/2024	12:00	Strong Wind	48 kts. MG	0	0	0.00K	0.00K
WOODBURY (ZONE)	12/19/2024	10:30	Strong Wind	47 kts. MG	0	0	0.00K	0.00K



The vast list of weather events as recorded in NOAA does not include all incidents and effects of extreme weather in Woodbury County, but it does offer a base for consideration of what

extreme events occur as well as frequency. The following charts depict Woodbury County's maximum temperature, minimum temperature, and precipitation by month from November 2019 through December 2024.

Priority Hazards

The county maintained the following as priority hazards.

- Flood – River and Flash
- Dam Failure/Levee Failure
- Tornado/Windstorm

From survey responses, Severe Winter Storms can be added for consideration. The highest frequency of *Very Concerned* was indicated for Flooding, both Flash (45/78) and Riverine (46/78), and Tornado / Windstorm (43/78). When asked to mark the top three priority hazards, Tornado / Windstorm (45/78), Flash Flooding (40/78) Severe Winter Storm (28/78). Dam and Levee Failure figured into many community conversations, however, other risks as indicated were given precedence.

MITIGATION ACTIONS, STRATEGIES, & PROJECTS

Woodbury County has planned several strategies incorporating mitigative activities into new and existing projects.

communication/education		
tools/equipment		
Generator & Related Projects	Woodbury Co	Carry over. Standby generator on site for each Community Center/City Hall as may be designated for command center during a disastrous event. Coordination between <i>County EMA and participating city public works and/or utilities</i> . (Funding TBD pending location and affected population specifications.) LOW PRIORITY
Generator & Related Projects	Woodbury Co	Carry over. Generator still needed. Plans in place to apply for generator through HMGP funding source. There are 2 small mobile generators available however, capacity is insufficient for extended period of need.
Generator & Related Projects	Woodbury Co	New. 1 dedicated/fixed and 1 mobile generator needed for secondary roads to <i>County Board of Supervisors County</i>

		EMA (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Equipment	Woodbury County	Carry over. Should funding be available, county will further consider addition of pumps to their inventory. Priority level is decreased in bringing project into current plan. <i>County Engineer</i> (County funds (general budget), IDNR program funds, BRIC/FMA) LOW PRIORITY
development		
flow control		
refuge		
technology		
Improve effectiveness	Woodbury Co	New. County is in the process of developing a Continuity of Operations Plan including alternate worksite locations for county offices in the event of displacement due to disaster, including reprioritization process for alternate work sites.
natural barriers/ supports		

The county has begun the process of assessing opportunity for nuclear energy generation. As the assessment proceeds, the county is actively incorporating mitigation considerations in seeking such development.

JURISDICTIONS

1. ANTHON

a. Profile

The city of Anthon is situated in the center of the east half of Woodbury County. The City is located along State Highway 31, with the majority of the total area situated southeast of the highway. The Little Sioux River serves as the eastern border. Go to www.cityofanthon.com for more local details.

City Governance & Community Supports

Anthon is governed by a five (5)-person elected City Council and the Mayor. Offices in addition to Mayor and Council include City Clerk and Public Works. The Anthon Fire Department is independent of the city but does receive some funding from Anthon. The City contracts with the County for law enforcement and maintains a 28E agreement with Anthon Community Ambulance Service, Inc. for medical response services. This ambulance service is staffed by volunteers. The city of Anthon is a member of the NFIP program.

Demographics, Housing, & Economics

In 2023, CensusReporter.gov⁵³ estimates Anthon's population at 531, reflecting an assumed decrease from 545 residents as reported in decennial census data from 2020. The city is home to 277 households and has a median household income of \$52,500, which is below the median for Woodbury County. The community includes a notable number of residents who are age 65 or older, as well as individuals living with disabilities. Additionally, some residents live below the poverty line, indicating ongoing economic challenges for a portion of the population.

<i>Community Characteristics</i>	
Population (2023)	531
Population (2020)	545
Total Households	277
Median Household Income	\$52,500
Median Household Income – Woodbury County	\$64,913

⁵³ Source: <https://censusreporter.org/profiles/16000US1902350-anthon-ia/>

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	32	6.6%	7.3%	6.3%
65 years and older	123	25.2%	14.3%	16.0%
Below the poverty level	87	13.4%	14.0%	12.0%
Living with a disability	87	13.4%	12.4%	11.6%

Anthon has a total of 296 housing units, with 277 currently occupied and 19 vacant. The housing stock includes a small number of mobile homes. Most of the residential structures were built in 1969 or earlier, with a smaller portion constructed between 1970 and 1999, and only a few built after 2000. This suggests that much of the town's housing is older, reflecting a more established residential landscape.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	296	-
Occupied	277	93.6%
Vacant	19	6.4%
Mobile Homes	5	1.7%
<i>Age of Residential Structure</i>		
Built 2000 or later	9	3.0%
Built 1970 – 1999	44	14.9%
Built 1969 or earlier	243	82.1%

More demographic and community data can be found on the [U.S. Census webpage for Anthon](#).

Leading Employers

- Maple Valley-Anthon Oto Community Schools
- Fireside Steak and Lounge

Critical Facilities

City Hall	301 E Main St,
Substation	Hwy 31 South
(Community) Event Center	110 N 5th Ave
Stahl Park	510 State St
Sewer Plant/Lift Station	
House, Pump, & Well	506 W Main St
Warehouse/Office	200 W Main St
Pump House/Warehouse	504 W Main St
Town Hall	301 E Main St
Town Garage	510 W Main St
Water Treatment Plant	508 W Main St
Water Tower	501 W Bridge St
Well & Control Panel	601 E Bridge St
Honey House	506 State St
Hamann Memorial Library	311 E Main St
Sand Bunker	South End of Town @ Tree Dump
O'Neil Park	
Lee Schroeder Memorial Park	203 Westgate Rd
Forsling Park	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Anthon Fire-Rescue	4035 Fox Ave
US Post Office	109 N 2nd Ave
MVAO Elementary School	110 West Division
Anthon United Methodist Church	401 E Bridge St
St Joseph's Church	400 E Randolph St
Trinity Lutheran Church	106 E Arnold St

Valuation of City Assets

Total Building	\$	8,754,141	RC
Personal Property	\$	30,3160	RC
Property in the Open	\$	<u>2,074,473</u>	<u>RC</u>

Total \$ 11,128,930

b. Participation

A mitigation planning meeting was facilitated by SIMPCO at Anthon City Hall on December 17, 2024 with Nikki Kelsheimer, City Clerk in attendance. Follow up information and additional data was provided by Amy Buck, Deputy Clerk via phone and email.

One survey respondent of 251 submissions indicated Anthon as jurisdiction of residence.

c. Community Capabilities

<i>Capabilities</i>	
Comprehensive Plan (2020)	
Local Emergency Plan	
County Recovery Plan	
<i>Policies/Ordinance</i>	
• Building Code • Drainage Ordinance • Floodplain Ordinance • Nuisance Ordinance	• Storm Water Ordinance • Subdivision Ordinance • Tree Trimming Ordinance • Zoning Ordinance
<i>Programs</i>	
• Tree Trimming Program	• Zoning/Land Use Restrictions
Codes Building Site/Design	Refer to State's Code
National Flood Insurance Program (NFIP) Participant	CID #190236
ISO Fire Rating	Anthon Class 8, eff 3/1/1995; Anthon FD, class 8/9, eff 3/1/95
<i>Staff/Department</i>	
Building Code Official	Mayor
Building Inspector	Mayor
Public Works Official	Public Works Superintendent
Emergency Manager	City Clerk @ city level
Emergency Response Team	Anthon Fire and Rescue
<i>Non-Governmental Organizations</i>	
Veterans Groups	McNiff Post 389
Community Organizations	Anthon Community Development Corporation

<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, and electric services	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

communication /education		
tools/equipment		
development		
flow control		
refuge		
technology		
natural barriers/ supports		
Stabilization	Anthon	2020: Riverbank stabilization @ access point; City administration (City funds, Disaster funds, PDM) HIGH PRIORITY
		Update. Stabilization was implemented, however, the city would like a more permanent solution to reduce continuous rip rap replacement. Project will carry into 2025 HMP.

Additional actions taken to introduce mitigation measures include:

- The city has designated the Event Center as refuge/shelter location in the event of an emergency.
- For waterway emergencies, the city has access to the fire department's boat.
- The city completed upgrades to the water plant in recent years
- Utility service transition to underground electrical lines is in progress.
- The city actively promotes Alert Iowa to residents using community messaging network of signage, city website, and social media.

d. Risk Assessment

Contributing Factors

Floodplain wraps around the east side of Anthon, covering a good portion of the city's southeast quadrant. Most affected land is designated for agriculture use. Only two events are reported showing Anthon in the NOAA Storm Event database between 11/01/2019 and 12/31/2024.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
ANTHON	12/15/2021	16:34	Thunderstorm Wind	74 kts. EG	0	0	75.00K	0.00K
ANTHON	4/26/2024	11:06	Hail	1.00 in.	0	0	0.00K	0.00K

Priority Hazards

- Flood – Flash and River
- Thunderstorm w/Hail & Lightning
- Tornado/Windstorm

The city's determination of priority hazards is consistent with the record of events and the single survey as submitted for Anthon. Extreme heat is also indicated as a priority concern.

e. Mitigation Needs, Actions, & Strategies

In addition to the mitigation-specific stabilization project for Anthon described below, the city is also seeking to improve inner-community communications. Their current texting service is expensive and inadequate for anticipated uses.

communication /education
tools/equipment
development
flow control
refuge
technology
natural barriers/ supports

Stabilization	Anthon	Carry over. Riverbank stabilization @ access point. Routine efforts are made using rip rap. City is seeking long-term solutions to reduce recurring maintenance. City administration (City – General funds, Disaster funds, PDM) HIGH PRIORITY

2. BRONSON

a. Profile

The city of Bronson is centrally located in the western half of Woodbury County. County Highways K42 and D38 intersect in Bronson. Elliot Creek runs through the southeast corner of city limits, and Elliot Creek and Deer Creek converge just east of the City.

City Governance & Community Supports

Bronson is governed by a five (5)-person elected City Council and the Mayor. Offices in addition to Mayor and Council include City Clerk. Fire and rescue services are provided by the Bronson Fire Station, which is staffed by volunteers. The City contracts with the County for police protection services.

Bronson is a member of the NFIP program. The Municipal Code of Ordinances and the Comprehensive Plan are both in the process of being updated. The Municipal Code of Ordinances were updated in 2019.

Demographics, Housing, & Economics

CensusReporter.org estimates Bronson's population reached 302 in 2023⁵⁴, showing a modest increase from 294 residents in 2020. The community includes 116 households and reports a median household income of \$83,500, notably higher than the median for Woodbury County. While a small portion of the population lives below the poverty line or lives with a disability, Bronson appears to be a relatively affluent and stable community. The age distribution includes a mix of young children and older adults, reflecting a balanced demographic.

⁵⁴ Source: <https://censusreporter.org/profiles/16000US1908650-bronson-ia/>

<i>Community Characteristics</i>	
Population (2023)	302
Population (2020)	294
Total Households	116
Median Household Income	\$83,500
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	19	6.3%	7.3%	6.3%
65 years and older	33	10.9%	14.3%	16.0%
Below the poverty level	12	3.6%	14.0%	12.0%
Living with a disability	19	6.3%	12.4%	11.6%

Bronson has a total of 118 housing units, with nearly all of them occupied, indicating a high demand for housing and a stable residential base. The community does not include any mobile homes, and most homes were built before 1970, giving the town a more established and historic character. A significant portion of the housing stock was also constructed between 1970 and 1999, while a smaller number of newer homes have been added since 2000. This mix of housing ages suggests a blend of long-standing residences alongside some newer development.

Housing Characteristics	Count	Percent
Total Housing Units	118	-
Occupied	116	98%
Vacant	2	2%
Mobile Homes	0	0%
<i>Age of Residential Structure</i>		
Built 2000 or later	9	8.1%
Built 1970 – 1999	43	38.7%
Build 1969 or earlier	59	53.2%

Leading Employers

City of Bronson City Hall

Randy's Auto
Lawton-Bronson Community School District
Bronson Bar

Critical Facilities

City Hall/Community Center	100 1st St E
City Maintenance Shed	90 Pine St
Water Tower	214 3rd St
Lift Stations & Related	524 E Front St
	Front St (West End)
Parker-Smith Athletic Complex	100 Walnut
Well House	213 3rd St
Lagoon	
Bronson Ambulance	
Bronson Ball Park	100-198 Maple Street,

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

City of Bronson City Hall
Randy's Auto
Bronson Bar
Lawton-Bronson Community School District

Valuation of City Assets

For the purpose of cost-benefit considerations, a valuation of the City's assets was compiled based on its insured properties, personal property, and facilities. The value as provided does not include private properties, equipment, or non-city funded investments that may contribute to project determinations. Separately catalogued assets and equipment may not be represented in this value.

Total Blanket TIV	\$	2,325,948
Building	\$	2,253,084
Personal Property	\$	91,740
Misc Property Sched	\$	101,640
Misc Property Unsched	\$	<u>32,340</u>
APD TIV	\$	149,215
Total TIV	\$	<u>2,478,804</u>

b. Participation

A planning meeting facilitated by SIMPCO was held via phone conference on December 11, 2024 with the following in attendance.

- Lindy Jessen, City Clerk
- Jason Garnand, Mayor
- Dave West, Councilman

c. Community Capabilities

Locally developed and available supports in the table below are supplemented by resources available through county, region, and state programs.

<i>Plans/Guidance Documents</i>	
Comprehensive Plan (2020)	
<i>Policies/Ordinance</i>	
• Building Code • Floodplain Ordinance • Nuisance Ordinance	• Subdivision Ordinance • Zoning Ordinance
<i>Programs</i>	
Zoning/Land Use Restrictions	
National Flood Insurance Program (NFIP) Participant	CID #190287
Floodplain management program (updated 2023)	
<i>Response</i>	
ISO Fire Rating	Bronson class 9; Bronson FD, class 9/10

<i>Staff/Department</i>	
Public Works Official	
NFIP Floodplain Administrator	role filled by City Clerk
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Authority to levy taxes for a specific purpose	
Fees for water, sewer services	
Ability to incur debt through:	• general obligation bonds • special tax bonds • private activities
Ability to withhold spending in hazard prone areas	

Among efforts to improve its capacity for resilience, the city is in the process of updating its tree ordinance to include pre-disaster designation of a scrap site for tree-related debris. The city also added a generator at the city water pump. The installation of a second warning siren has reduced some concern about tornado activity as audible warnings cover the whole community into the immediate surrounding area.

Review of Actions Taken (Since 2019)

communication/education		
Warning Sirens	Bronson	2020: Considering warning siren replacement; Recent repairs were necessary on current siren; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) LOW PRIORITY
Warning Sirens	Bronson	Implemented. The warning siren was replaced in June 2022, at the cost just over \$19,000.
tools/equipment		
Generator & Related Projects	Bronson	2020: Generator for Community Center/City Hall and critical facilities; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Bronson	Update. Due to lack of funding, the project was not implemented. Carry project into 2025 plan.
Equipment	Bronson	Implemented. City purchased Stair Chair (lift) for ambulance to facilitate building exit for persons otherwise requiring use of a mobility device (such as a wheelchair or walker) in the event of an emergency and/or evacuation when stairs are involved. Cost: \$990. Local funds.
development		

flow control		
refuge		
technology		
natural barriers/ supports		
Retention Pond	Bronson	2020: Consideration to addition of Retention Pond to mitigate flooding; improve effectiveness of natural space in mitigation; <i>City administration, IDNR, Collaboration with County EMA, Contracted engineer services</i> (Local funds, Community Benefit funds, IDNR Program funds, PDM) LOW PRIORITY
Retention Pond	Bronson	Update: Action has not been taken due to other priorities, however project remains a concern for the city and will continue through the 2025 HMP planning period.

In addition to the activities noted in response to the 2020 HMP, Bronson Fire Department added a new pump truck.

d. Risk Assessment

Contributing Factors

Bronson has floodplain designation for nearly half of its incorporated boundaries. Most property to the south of Front Street is agricultural; however, some developed properties are impacted.

Reports to the NOAA Storm Event database⁵⁵ from 11/01/2019 through 12/31/2024 includes the following events.

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
BRONSON	6/21/2020	5:30	Hail	1.00 in.	0	0	0.00K	0.00K
BRONSON	6/21/2020	5:30	Hail	0.88 in.	0	0	0.00K	0.00K
BRONSON	12/15/2021	16:23	Thunderstorm Wind	61 kts. EG	0	0	25.00K	0.00K
BRONSON	12/15/2021	16:25	Tornado	EF2	0	0	500.00K	0.00K

Priority Hazards

- Flood

⁵⁵ Source: <https://www.ncdc.noaa.gov/stormevents/>

- Grass or Wildland Fire (and its potential effects on local business and residential structures)
- Severe Winter Storms (roadway clearing)

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Bronson	Carry over. The City is still seeking funding supports and will carry Generator for Community Center/City Hall and critical facilities project into 2025 Plan with modified priority level. City has designated Community Center as refuge site/command center in the event of an emergency. A dedicated generator would facilitate that use. <i>City Council, County EMA</i> (Local general fund, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/ supports		
Retention Pond	Bronson	Carry over. Assess opportunity to implement retention pond to mitigate flooding through natural methods. <i>County EMA, Public Works, Contracted engineer services</i> (Local general fund as match, Community Benefit funds, IDNR Program funds, pre-disaster funds as may be available) LOW PRIORITY

3. CORRECTIONVILLE

a. Profile

The city of Correctionville is located in the northeastern portion of Woodbury County, near the county border. Most of the City is located south of and adjacent to U.S. Highway 20, with a small portion situated north of the highway. IA-31 intersects the city as Driftwood Street, connecting the city to Washta to the north and Anthon to the southwest.

Meandering to the north and west is the Little Sioux River. Bacon Creek is located south of the City. The Sioux Bend Wildlife Area is just west of Correctionville and shares a border with the

west bank of the Little Sioux River. South of that is Copland Park, a significant green space. More information can be found at the City of Correctionville website⁵⁶.

City Governance & Community Supports

Correctionville is governed by a five-person City Council and the Mayor. In addition to these offices, the city is also supported by City Hall (City Clerk) Board of Adjustment, Zoning Commission, and two maintenance personnel. Correctionville is also served by two municipal boards, which are the Zoning Commission and the Board of Adjustments. The City contracts with the county for law enforcement services. Fire and rescue services are provided by the Correctionville Fire Department, which is staffed by volunteers. The response team consists of an average of 18 firefighters, with 6 at FF1 status (+4 in training), 1 at FF2 status (+2 in training), and 4 EMTs. Numbers fluctuate with changes in volunteer availability.

Demographics, Housing, & Economics

In 2023, CensusReporter.gov estimated Correctionville’s population⁵⁷ at 746, showing a slight decline from 766 residents in 2020. The community includes 293 households, with a median household income of \$51,125—just below the county median. While the town supports a diverse range of residents, it has a significant number of individuals over 65 and several residents living with disabilities. Additionally, a portion of the population lives below the poverty line, reflecting some economic challenges despite an otherwise modest income level.

<i>Community Characteristics</i>	
Population (2023)	746
Population (2020)	766
Total Households	293
Median Household Income	\$51,125
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	65	8.5%	7.3%	6.3%

⁵⁶ <https://correctionville.govoffice2.com/>

⁵⁷ Source: <https://censusreporter.org/profiles/16000US1916545-correctionville-ia/>

65 years and older	185	24.1%	14.3%	16.0%
Below the poverty level	112	14.8%	14.0%	12.0%
Living with a disability	108	14.7%	12.4%	11.6%

Correctionville contains 336 total housing units, with 299 of those currently occupied and 37 remaining vacant. The housing stock features a mix of structures, with a notable portion built before 1969. A smaller number of homes were constructed between 1970 and 1999, and some more recent development has taken place since 2000. Mobile homes are also present in the community, contributing to the variety of housing options available.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	336	-
Occupied	299	89%
Vacant	37	11%
Mobile Homes	134	4%
<i>Age of Residential Structure</i>		
Built 2000 or later	40	9.6
Built 1970 – 1999	95	22.9
Build 1969 or earlier	280	67.5

More demographic and community data can be found on the US Census Bureau webpage for Correctionville.

Leading Employers

City of Correctionville
River Valley Community School District
Correctionville Nursing & Rehabilitation
Valley Lodge Assisted Living
Nursing Home
Western Iowa Cooperative
Dixon Construction Co
Mathers Construction Co
VT Industries (Holstein)

Critical Facilities

City Hall/Community Bldg	312 Driftwood
Firehouse/Ambulance	315 Cedar
Garage/Storage	
Warehouse	701 5th St
Tennis Court	824 Hackberry
Library	532 Driftwood
City Maintenance	705 5th St
Water Tower	
Water Treatment Plant	
Pump House	
Pool Facility & Related	815 8th St
Pump House	
Emergency Well	416 7th St
Generator Bldg/Lift Station	4138 160th St
American Legion Bldg	119 Driftwood
Military Displays	
Copeland Park	4173 S Hwy 31
Storm Siren	522 Driftwood
Van Houten-Southwell Roadside Park	4138 160 St

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

River Valley High School
Correctionville Nursing & Rehabilitation
Valley Lodge Assisted Living
MercyOne Correctionville Family Medicine
Los Amigos
GAR Hall / Vet Center
Church of Christ
Grace Lutheran Church
Grace United Methodist Church

Valuation of City Assets

Total Blanket TIV	\$	6,714,061
Building	\$	6,158,635
Personal Property	\$	679,964
Misc Property Sched	\$	363,248
Misc Property Unsched	\$	<u>176,256</u>
Total TIV	\$	7,378,102
APD TIV	\$	1,843,944
Grand Total TIV	\$	<u>9,222,046</u>

Both public and private properties directly affected by a given project will be considered in appropriate context. A Water Systems Improvements project, for example, is in the planning stages and includes replacement of the water tower, well, and water mains – all of which were impacted in the 2019 and 2024 flood events. Generators and/or connections for generator hookups where applicable will be included in final project plans.

b. Participation

SIMPCO facilitated a mitigation planning meeting Correctionville City Hall December 23, 2024 with the following in attendance.

- April Putzier, City Clerk
- Amanda Curtin, Deputy Clerk
- Pat Langschwager, Roads/Sewer (City Maintenance)

Three surveys of the 78 submitted for Woodbury County indicated residence in Correctionville.

c. Community Capabilities

<i>Capabilities</i>
Comprehensive Plan
Local Emergency Plan
Watershed Plan

Firewise or other fire mitigation plan	
<i>Policies/Ordinance</i>	
- Floodplain Ordinance - Nuisance Ordinance - Subdivision Ordinance - Provision for Historic Preservation	- Tree Trimming Ordinance - Zoning Ordinance (2023 – new map) - Provision for Drainage
<i>Programs</i>	
Zoning/Land Use Restrictions	
National Flood Insurance Program (NFIP) Participant	Yes, CID #190288
ISO Fire Rating (not updated)	Class 8/9
Property Acquisition	as needed
Planning/Zoning Boards	
Tree Trimming Program	
<i>Staff/Department</i>	
Public Works Official	
Emergency Management Coordinator	City Clerk is the emergency manager for the city
Emergency Response Team	Fire and Rescue
Historic Preservation	
<i>Non-Governmental Organizations</i>	
- Chamber of Commerce - Community Betterment Club	- Veterans Groups
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water, sewer services	
TIF Districts (implemented in 2018 and 2024)	
Ability to incur debt through	- general obligation bonds - special tax bonds - private activities

A Municipal Code of Ordinances update is in progress. Removal of dead/diseased trees is ongoing with priority given to visibly distressed trees. The Watershed plan is under review with implementation planned to include mitigation projects as identified in the Mitigation Needs, Actions, and Strategies table at the end of this profile.

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
Equipment	Correctionville	2020: ATV with water tank capacity - remote access for fire response and other uses as applicable; <i>City Council, Fire Chief</i> (City funds, Fire Department funds, Fire Association funds, fundraisers, Community Benefit funds, Federal funds for response programs) HIGH PRIORITY
Equipment	Correctionville	Complete. \$55,000 project complete 2022 – funded through grant (USDA).
development		
flow control		
Drainage projects	Correctionville	2020: Implement drainage projects as identified; <i>City Administrator/Streets/Public Works</i> (Local funds, IDNR project funds, PDM) HIGH PRIORITY
Drainage projects	Correctionville	Update: Driftwood Street ditches completed. Additional areas in need of attention.
refuge		
Shelter	Correctionville	2020: Considering means of enabling refuge when community center and city hall are not open. Assess feasible options in accessing when otherwise closed, or alternate location available 24 hrs. <i>City administration, Local services, agencies, businesses</i> (Local funds – additional supports unknown until solution has been identified) MEDIUM PRIORITY
Shelter	Correctionville	Implemented. Community Center remains unlocked during anticipated extreme weather events, particularly in winter. The school was designated as command center, recovery center, and temporary residence for displaced families during the 2024 flood events.
technology		
natural barriers/ supports		

d. Risk Assessment

Contributing Factors

A review of reports in the NOAA Storm Event database from 11/01/2019 through 12/31/2024 provided only two records specific to Correctionville. However, local records provide a different picture. It is important to note that the NOAA database is contributor-sourced and is therefore somewhat limited. Those experiencing extreme effects of natural disasters, such as the severe flooding that occurred 6/24/2024, rarely have the afterthought of updating such reports. The following table underrepresents both property and crop losses due to that specific flood event.

Location	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
CORRECTIONVILLE	4/12/2022	16:15	Hail	1.75 in.	0	0	0.00K	0.00K
CORRECTIONVILLE	6/15/2024	20:08	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K

Correctionville is substantially affected by flooding potential, surrounded on the north, west and south by floodplain. While still in the preliminary stages, the Iowa Flood Center map shows a significant area on the city's west and south sides in the floodway. Such designation is restrictive to community growth and recovery opportunities within that zone. The north end of town is protected from riverine flooding by a hill that serves as a natural berm. However, the Little Sioux River continues through lower-level land areas, as does Bacon Creek, enabling accumulated collection of flood waters in both river flooding and flash flood events. Property acquisition is under consideration by the city as means of mitigating future loss and damages. If pursued, acquired property in part will be designated and maintained as a wetlands conservation area, and will likely evolve into an education site.


Correctionville - Jog Down Our Main Street
Apr 12 · 🌐

Please read!


Woodbury County Emergency Management · Follow
Apr 12 · 🌐



Woodbury County Grass Fire Safety Tips

1. Be mindful of open flames and heat sources to prevent unintentional ignitions.
2. Monitor weather conditions. High winds and low humidity contribute to rapid fire spread.
3. Avoid burning before and during dry and windy periods.
4. Dial 911 immediately if you believe a fire may be out of control or unsupervised!

Woodbury County Fire Association

Like Comment Send Share

8


Correctionville - Jog Down Our Main Street
May 23 · 🌐



Still need help after last years flooding?

Need guidance with FEMA?

Do you have food or housing insecurities due to the flood?

Reach out to Megan at the Community Action Agency
712.274.1610 ext 211

Or contact the Correctionville City Clerk's Office
712.372.4791 cvillejog@gmail.com

Like Comment Send Share

3 9 shares

Share

Source: Facebook, 2025 06-10

As flood and other natural events continue to intensify in frequency and severity, the city uses existing resources to further awareness for such events. The city provides education to residents on disaster preparedness through promotion of the Alert Iowa system, sharing information on Facebook, and having info cards available at City Hall.

Priority Hazards

The city maintained the priority hazard designations as indicated in the 2020 plan as follows.

- Flood
- Tornado/Windstorm
- Grass and Wildland Fire

Survey respondents indicated Flooding – both Flash and Riverine at the highest frequency under “Very Concerned”. When asked to choose top hazards, Drought and Flood topped the list.

e. Mitigation Needs, Actions, & Strategies

communication /education		
tools/equipment		
development		
Improve existing facilities & infrastructure	Correctionville	New. City is in the planning stages of replacing its critical water systems infrastructure. The well, water tower, and water mains are all in need of replacing. Generators/transfer switches anticipated as part of planned projects where applicable. Public works, contracted services, IDNR, USDA (Disaster Recovery funds, CDBG, USDA, local general fund, SRF for design) HIGH PRIORITY
flow control		
		Carry over. Continue implementation of drainage projects. Additional areas need attention. Project will be recurring with opportunity to instill better long term controls should such process be made known.. Implement drainage projects as identified. Citywide culvert and ditch maintenance improvements including but not limited to bigger culverts, dredging ditches, add drainways where appropriate. <i>City Maintenance</i> (Local operations and road use funds, IDNR project funds, PDM) HIGH PRIORITY
refuge		

Shelter	Correctionville / River Valley School District	New. Formalize shelter/refuge/command center designation(s) and declaration process specific to hazard type and need. <i>City Maintenance, River Valley School District, County EMA.</i> (No funding needs anticipated) HIGH PRIORITY
technology		
natural barriers/ supports		

4. CUSHING

a. Profile

The city of Cushing is located near the eastern border of Woodbury County, occupying about .3 square miles. The city is south of US Highway 20 and bisected by 160th Street. Several small creeks and streams travel through city boundaries including Bacon Creek to the north.

City Governance & Community Supports

Cushing is governed by a five (5)-person elected City Council and a Mayor. Offices in addition to the Mayor and Council includes the City Clerk and Maintenance. The Cushing Fire Department is staffed by volunteers and provides emergency response services. The City contracts with the county for law enforcement services.

Demographics, Housing, & Economics

For 2023, CensusReporter.org estimates Cushing's population⁵⁸ at 223, reflecting a slight decrease from 230 residents in 2020. The community includes 75 households and reports a median household income of \$70,139, which is notably higher than the county median. Despite this relatively strong income level, some residents face challenges, including those living with disabilities or below the poverty line. Additionally, the town is home to both young children and older adults, highlighting a diverse age range among its population.

<i>Community Characteristics</i>	
Population (2023)	223
Population (2020)	230

⁵⁸ Source: <https://censusreporter.org/profiles/16000US1917940-cushing-ia/>

Total Households	75
Median Household Income	\$70,139
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	18	8.5%	7.3%	6.3%
65 years and older	32	15%	14.3%	16.0%
Below the poverty level	49	22.1%	14.0%	12.0%
Living with a disability	21	9.9%	12.4%	11.6%

Cushing has a total of 77 housing units, the majority of which are occupied, with only a small number of vacancies. The housing stock is primarily composed of older homes, with most residential structures built before 1970. A smaller number of homes were constructed between 1970 and 1999, and only a few have been built since 2000. The community does not have any mobile homes, reflecting a housing landscape made up entirely of traditional residential structures.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	77	-
Occupied	75	97%
Vacant	2	3%
Mobile Homes	0	0%
<i>Age of Residential Structure</i>		
Built 2000 or later	4	3.9%
Built 1970 – 1999	36	35.0%
Build 1969 or earlier	63	61.2%

Leading Employers

Wiese Construction
Anfinson Farm Store
United Bank of Iowa
Shever Family Trans, Inc.

Squatch Construction
Old 20 Bar

Critical Facilities

City Hall	200 Main St,
Fire Department	201 Main St
City Maintenance Shop	203 Main St
Water Tower	302 Hill St
Pump House/Pump	1 st St
Pump House	90 Valley St
	101 Valley St
Library	202 Main St
Storage Shed	204½ Main St
City Park	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Fire Station / Community Center	
Legion Hall	
St. John Evangelical Lutheran Church	206 School Street
Cushing Methodist Church	506 2 nd Street
Old 20 Bar	310 3 rd Street

Valuation of City Assets

Total Building	\$	375,112	ACV
	\$	2,428,154	RC
Total Personal Property	\$	7,492	ACV
	\$	231,969	RC
Total Property in the Open	\$	<u>1,171,720</u>	RC
Combined Total	\$	<u>4,214,447</u>	

b. Participation

A mitigation planning meeting was facilitated by SIMPCO on January 7, 2025 at Cushing Town Hall. The following city representatives were in attendance.

Jesse VanHouten, Mayor

Nicole Huisinga, City Clerk

Shawn M Joy, Councilmember

Brennan Hoaglund, Councilmember

Keith Jackson, Councilmember

Mary Tyler, Councilmember

Cushing residents accounted for five of Woodbury County's 78 surveys as submitted for public input. Responses are included in section summaries where applicable.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
• Comprehensive Plan	• Flood Mitigation Assistance (FMA) Plan
<i>Policies/Ordinance</i> Updated 2023	
• Building Code	• Nuisance Ordinance
• Drainage Ordinance	• Storm Water Ordinance
• Floodplain Ordinance	• Tree Trimming Ordinance
• Landscape Ordinance	
<i>Programs</i>	
Codes Building Site/Design	<i>Included in Code of Ordinances Residential Dwelling Standards</i>
National Flood Insurance Program (NFIP) Participant	CID# 190289
ISO Fire Rating	Cushing class 8, Cushing FD class 9/9
<i>Staff/Department</i>	
Public Works Official	
Emergency Management Coordinator	City Clerk is the emergency manager for the city
NFIP Floodplain Administrator	Authority of the Mayor or Fire Chief
Emergency Response Team	Cushing Fire and Rescue
Law enforcement contracted through County	
<i>Non-Governmental Organizations</i>	
Veterans Groups	F Roger Baumann Legion and Auxiliary
Community Organizations	• Betterment Club

• Business Club • Old 20 Community Development Corp	
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water and sewer services	
Impact fees for new development by way of sewer and water connection fees for new homes	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
development		
Improve existing facilities & infrastructure	Cushing	2020: Extensive repairs on City Hall/Community Building necessary due to cumulative damages from wind, heavy snow, heavy rain, and fluctuating weather conditions. <i>City Council, City Maintenance</i> (City funds, Community Catalyst Building Remediation funds, Facility Improvements funds, PDM) HIGH PRIORITY
Improve existing facilities & infrastructure	Cushing	Completed. \$20- to \$30,000 has been invested in City hall improvements. Over \$1M have been invested in water systems improvements including a lift station and water distribution system improvements. Funding included \$350,000+ DNR grant, IFA funds, \$890,00 loan, and \$150,000+ in imminent threat funds (water mains).
flow control		
refuge		
technology		
natural barriers/ supports		

Tree removals are in progress with 9 complete and 13 remaining in the park. Approximately 10 in parking and rights of way not yet addressed. A replacement plan is not in place, however the city is in communications with the state arborist.

d. Risk Assessment

Contributing Factors

Geographically, Cushing sits with its north and west borders adjacent to floodplain, along with much of its east border. Old Hwy 20 is particularly prone to flash flooding in heavy rain.

A review of the NOAA Storm Event database provided zero reports directly associated with Cushing between 11/01/2019 and 12/31/2024, however, residents likely experienced the effects of the 104 Woodbury (Zone) events. It is important to note that NOAA is a user-fed data base where individuals submit reports of local weather events. It is possible that no current residents are contributors.

Priority Hazards

- Infrastructure Failure (facilities and streets repair needs)
- Tornado / Windstorm
- Severe Winter Storm

Tornado/Windstorm figured in at the highest frequency of Very Concerned. When asked to indicate the respondents' top three hazards, Infrastructure Failure and Drought followed Tornado/Windstorm.

e. Mitigation Needs, Actions, & Strategies

communication/education		
Promo/Info	Cushing	New. City is committing to incorporating public awareness for disaster preparedness through promotion of Alert Iowa system. <i>City Clerk, Council, County EMA</i> (no funding needs anticipated). HIGH PRIORITY
tools/equipment		
development		
flow control		
refuge		
technology		
natural barriers/ supports		

5. DANBURY

a. Profile

The city of Danbury is located in the southeastern corner of Woodbury County. State Highway 175 runs diagonally through the southeastern portion of the city. Maple River is located south and east of city limits, and several smaller streams are present to the north and west. More information can be found on the Danbury website.

City Governance & Community Supports

Danbury is governed by an elected five (5)-person City Council and a Mayor. Offices include City Clerk/Treasurer and City Maintenance. The City contracts with the County for law enforcement. Danbury has a volunteer fire department, which is supported by surrounding communities. Danbury contracts with Danbury Ambulance Service for emergency response.

Portions of Danbury are located within the floodplain (Zone A); however, the city is not a member of the NFIP program.

Demographics, Housing, & Economics

CensusReporter.org estimates Danbury's 2023 population⁵⁹ at 311, reflecting a slight decrease from 320 in 2020. The town is home to 172 households, with a median household income of \$64,028, which is well above the county average of \$51,350. Despite this relatively strong economic position, a portion of the population lives below the poverty line. The community also includes a significant number of seniors, and many residents are living with a disability. Overall, while Danbury boasts a solid economic foundation, there are still challenges, particularly among its older residents.

<i>Community Characteristics</i>	
Population (2023)	311
Population (2020)	320
Total Households	172
Median Household Income	\$64,028

⁵⁹ Source: <https://censusreporter.org/profiles/16000US1918390-danbury-ia/>

Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	19	6.5%	7.3%	6.3%
65 years and older	74	25.4%	14.3%	16.0%
Below the poverty level	34	11.3%	14.0%	12.0%
Living with a disability	49	16.8%	12.4%	11.6%

Danbury has a total of 162 housing units, with the majority being occupied and a smaller portion vacant. Most of the homes were built prior to 1970, with a significant number also constructed between 1970 and 1999. A small number of homes were built after the year 2000. The town does not currently have any mobile homes, reflecting a predominantly traditional housing structure.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	162	
Occupied	139	86%
Vacant	23	14%
Mobile Homes	0	0.0%
<i>Age of Residential Structure</i>		
Built 2000 or later	8	4.2%
Built 1970 – 1999	58	30.2%
Build 1969 or earlier	126	65.6%

More demographic and community data can be found on the US Census Bureau webpage for Danbury.

Leading Employers

- Barry Motors
- Bluejay Boutique
- Colbert's Market
- Danbury Catholic Schools
- First Security Bank
- GFG
- KCK Convenience Store
- Nutrien Solutions
- Premier Roofing Systems
- Sexton Oil

- Shelby County State Bank
- Welte Vault Co.
- Shrank's Bar & Grill

Critical Facilities

City Hall	207 1st St,
Danbury Fire Department	201 Main St
Danbury Ambulance Service	201 Main St
Library	215 Main St
Storage Facility	
Water Tower	
Shop/Water Treatment Plant	108 2nd St
Well House	
Water Treatment Tank	
Lagoon	
Lift Station	L37
City Ballpark	West edge of 3rd St
City Park	W 2nd & 4th Sts
Dana Apartment Bldg	303 Main St
Health & Recreation Facility	206 East St

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

St. Mary's Catholic Church and School	604 Peach Street
Danbury United Methodist Church	200 Liston St
Schrank's Bar & Grill	117 Main St

Valuation of City Assets

Total Blanket TIV	\$	5,468,785
Building	\$	4,553,509
Personal Property	\$	949,824
Misc Property Sched	\$	104,907
Misc Property Unsched	\$	<u>32,533</u>

Total TIV	\$	5,640,773
APD TIV	\$	89,703
Grand Total TIV	\$	<u>5,730,476</u>

b. Participation

SIMPCO facilitated an online mitigation planning meeting via Teams on February 25, 2025 with Cristy Nelson, Danbury City Clerk in attendance.

One survey was returned indicating Danbury as jurisdiction of residence.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
<i>Policies/Ordinance</i>	
• Drainage Ordinance • Nuisance Ordinance • Storm Water Ordinance	• Subdivision Ordinance • Tree Trimming Ordinance • Zoning Ordinance
<i>Programs</i>	
ISO Fire Rating	Danbury class 7; Danbury FD class 9/9
Property Acquisition	
<i>Staff/Department</i>	
Public Works Official	
Emergency Management Coordinator	City Clerk @ local level
Emergency Response Team	Fire and Rescue
<i>Non-Governmental Organizations</i>	
Veterans Groups	Carlson-Frum American Legion
Community Organizations	Danbury Community Club
<i>Local Funding Availabilities and Authorities</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	
Levy taxes for a specific purpose	
Fees for water and sewer services	
Ability to incur debt through	• general obligation bonds • special tax bonds

- private activities

Danbury's Municipal Code of Ordinances is currently under revision. An urban renewal area has been designated, however, the program has not been utilized. At the time of the planning meeting, the city was in the process of filling the vacant Public Works position.

Review of Actions Taken (Since 2019)

communication /education		
Warning Sirens	Danbury	2020: Warning Siren needs replacing; <i>City Council, County EMA</i> (Local funds, County Funds, PDM, Community Benefit funds) HIGH PRIORITY
Warning Sirens	Danbury	Complete. Warning siren installed 2020+/- . Project was funded through various local grant programs.
tools/equipment		
Generator & Related Projects	Danbury	2020: Portable generator <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY Update. Project still needed. Lagoon project has taken precedence for current year. Project will carry to 2025 HMP.
Equipment	Danbury	2020: Pumps; <i>City Council, Public Works, collaboration with County EMA</i> (Local funds, County funds, Community Benefit funds, fundraising, Federal programs, PDM) HIGH PRIORITY Resolved. City has worked out agreement with Fire Department. FD will provide equipment as needed.
	Danbury	2020: Utility ATV/snowmobile; <i>City Council, Fire Chief, Public Works, collaboration with County EMA</i> (Local funds, County funds, Community Benefit funds, fundraising, Federal programs, PDM) MEDIUM PRIORITY
		Complete. City purchased a Gator in 2020 using local funds.
development		
Bridges & Roads	Danbury	2020: Road repairs from runoff damages. Interest in preventive measures by way of redirection and retention methods. <i>City Maintenance/Council, County Engineer collaboration</i> (City funds, Transportation funds) HIGH PRIORITY Complete. Road repairs necessitated by runoff from flood events have been completed and were covered by FEMA funds.
flow control		
refuge		
technology		
natural barriers/ supports		

Other projects completed or in progress:

- New lagoon with dedicated generator
- Most dead/diseased/at risk trees in city parks and rights of way have been removed
- Community Club has been gradually adding trees since 2022+/- to balance those removed. No formal plan in place.

d. Risk Assessment

Contributing Factors

A review of the NOAA Storm Event database includes one report specific to Danbury. It is important to note that the database is user-based record of events, not necessarily a collection of all known events. Due to proximity, Danbury likely experienced of all recorded county zone events for Woodbury, Ida, Monona, and Crawford Counties.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
DANBURY	12/15/2021	16:38	Thunderstorm Wind	64 kts. EG	0	0	10.00K	0.00K

Preliminary Iowa Flood Plain maps, a coordinated effort between Iowa DNR and the Iowa Flood Center, indicate a significant amount of floodplain surrounding Danbury, but not affecting any current structures.

Priority Hazards

- Tornado/Windstorm
- Thunderstorm w/Hail & Lightning
- Severe Winter Storm
- Drought

Additional concerns in discussion and through survey response include Flood (both flash and riverine), Animal/Plant/Crop Disease, Hazardous Materials Incidents, and Transportation Incidents.

e. Mitigation Needs, Actions, & Strategies

communication /education		
tools/equipment		
Generator & Related Projects	Danbury	Expanded - carry over. Portable generator needed for water plant with potential to serve various facilities. Added: Transformer switches needed to enable connections. <i>City Council, County EMA</i> (Local – general fund, County supports, State/Federal response funds, PDM, Community Benefits funds, local funds) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/ supports		

6. HORNICK

a. Profile

The city of Hornick is situated near the southernmost border of Woodbury County, just west of center. Most of the city lies north of Highway 141, with about 20% of the total area extending south of the highway.

City Governance & Community Supports

Hornick is governed by a five (5)-person elected council and the Mayor. Offices in addition to Mayor and Council include City Clerk and Public Works. The Hornick Volunteer Fire Department is independent of the City but does receive some funding from Hornick. City staff designates the Legion Hall and the United Methodist Church as significant support entities to community well-being. These and additional community supports are specified in the discussion of Community Capabilities. The City contracts with the County for law enforcement and maintains a 28E agreement with regional emergency response providers.

The City of Hornick is a member of the NFIP program, though the majority of residents are known to be inactive under flood insurance.

Demographics, Housing, & Economics

CensusReporter.org estimates Hornick's 2023 population⁶⁰ at 335, a noticeable increase from 255 residents in 2020. The town is home to 117 households, with a median household income of \$77,917, reflecting a relatively stable economic base. However, a portion of the population lives below the poverty line, suggesting that some households may face economic challenges.

Hornick has a total of 128 housing units, with 116 of them occupied. The town has a relatively low vacancy rate, with only 12 vacant units. A small portion of the housing units are mobile homes. The majority of the homes were built in 2000 or later, with a smaller number constructed between 1990 and 1999, and a few built before 1990.

Leading Employers

New Cooperative
3-Speed Repairs
Chance "R" Bar

Critical Facilities

City Hall; Fire Dept Garage	400 Main St
Community Center	419 Main St
Water treatment Facility	420 Main St
Maintenance Shop	
Water Tower	Lots 16-18, Block 7
Museum	201 Main St
City Park	405 4 th St, Ste 1
Library	510 Main St
Lift Station	208 4 th St
Garage	406 5 th St

⁶⁰ Source: <https://censusreporter.org/profiles/16000US1937200-hornick-ia/>

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

In addition to businesses designated as Leading Employers, the following serve as community centers and gathering locations.

Legion Hall	306 Main St
United Methodist Church	411 5 th St

Valuation of City Assets

Total Building	\$	3,390,402
Total Personal Property	\$	301,066
Total Property in the Open	\$	<u>712,592</u>
Combined Total	\$	<u>4,404,060</u>

b. Participation

A mitigation planning meeting, facilitated by SIMPCO, was held at Hornick City Hall on February 10, 2025 with the following in attendance.

- Scott Mitchell, Mayor
- Lori Teel, City Clerk
- Mat Andresen, City Council
- Scott Mathias, City Council
- Eric Bebee, City Council
- Steve Holst, City Council
- Dustin Johnson, City Council

Hornick residents accounted for 7 of Woodbury County's 78 survey responses, providing additional consideration regarding natural hazard concerns.

c. Community Capabilities

<i>Plans/Guidance Documents</i>
Comprehensive Plan
<i>Policies/Ordinance</i>
• Floodplain Ordinance (updated per DNR) • Subdivision Ordinance

• Nuisance Ordinance • Restricted Residence District • Storm Water Ordinance • Tree Trimming Ordinance • Subdivision Regulation	
<i>Programs</i>	
NFIP	CID #190291
ISO Fire Rating	Hornick, Class 8; Hornick FD, Class 8/9
<i>Staff/Department</i>	
Engineer	County representation; Contracted consult as needed
Public Works Official	Public Works Superintendent
Emergency Management Coordinator	City Clerk @ local level
Emergency Response Team	Hornick Fire and Rescue
<i>Non-Governmental Organizations</i>	
Veterans Groups	• Hindman-Steele American Legion and Auxiliary • Sons of the Legion
Community Organizations	Library Group
<i>Local Funding Availabilities & Authorities</i>	
Community Development Block Grants	
Capital Improvements funding	
Authority to levy taxes for a specified purpose	
TIF District allocations as applicable	
Fees for water, sewer	
Incur debt through	• general obligation bonds • private activities • special tax bonds
Withhold spending in hazard prone areas is in place but unlikely to be used.	

Review of Actions Taken (Since 2019)

communication /education		
Programs	Hornick	2020: Assess opportunities for homeowners with uninhabitable properties months after flood events of 2019; <i>City Council/Administration SIMPCO</i> (no cost allocated outside of staff hours for assessment) MEDIUM PRIORITY Closed. Based on city finances, skewed market value of homes/property, and ability to repurpose flood-prone areas, the city determined implementation of a home

		acquisition program is not feasible. City will continue to monitor potential of opportunities as they arise, however, the project is removed from the priority list.
tools/equipment		
development		
flow control		
Flood protection	Hornick	2020: Berm/raised rec trail to protect city from Ditch flooding; <i>City Council, County EMA, engineering consultant</i> (PDM and FEMA Disaster funds) HIGH PRIORITY Update – Phase 1, the mitigation portion of the project is complete. Berm has been substantially raised with primary phase of project completed 12/2024. Funded with IA Flood Mitigation dollars, the \$2.1M project included the development of a local Flood Mitigation Board. Phase 2 of the project, the trail, is not complete. The trail remains on the city's project list but will not be carried into the 2025 HMP as a mitigation action.
refuge		
technology		
natural barriers/ supports		

Other projects completed since 2019 include the following.

<i>Project description</i>	<i>Funding Sources</i>	<i>Cost</i>
1. Raised generator at lift station 3.5'. Included new generator.	local funds, MRHD Grant	\$50K
2. New water plant. Project began prior to 2019 flood, finally completed. Includes additional shop space.		\$360K
3. Drainage issues overall improved with berm-raising project		
4. Road work repairs/replacement due to 2019 flood in progress. Repairs include improved storm runoff controls through sloped channel, and ditch clearing. Anticipated completion: Fall 2025	FEMA 404 project	\$2.4M
5. Ash trees treated to sustain current tree canopy		
6. County re-did Main St . City addressed ADA improvements to sidewalk concurrently.	Federal Hwy program funds, local funds	
7. Improved response equipment with purchase of		
• Payloader	MRHD	
• Skid loader	local funds, community grants	

d. Risk Assessment

Contributing Factors

The events related to the flood in 2019 are still primary consideration in city planning efforts as Hornick pulls itself back together. NOAA Storm Event database records between 11/01/2019 and 12/31/2024 include only 2 reports specific to Hornick, though the city likely experienced the effects categorized as “Zone” under Woodbury County and Monona County.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
HORNICK	12/15/2021	16:19	Thunderstorm Wind	65 kts. EG	0	0	25.00K	0.00K
HORNICK	4/12/2022	16:22	Hail	1.00 in.	0	0	0.00K	0.00K

Priority Hazards

- Tornado / Windstorm
- Flood – Flash and River
- Grass and Wildland Fire

Survey responses include Thunderstorm with Hail & Lightning at a relatively high frequency in addition to those as determined above. When asked to choose top three hazards, Infrastructure Failure joins all those as listed.

e. Mitigation Needs, Actions, & Strategies

communication /education		
Programs	Hornick	New. Interest in implementing Smoke Detector check/install program in collaboration with Fire Department and County departments as applicable (i.e. Health, EMA). City is aware that county has units available. Distribution & Install process not established. <i>City, City Fire Department, County EMA, FD</i> (no funding needs anticipated) MEDIUM PRIORITY
tools/equipment		

Equipment	Hornick	New. Interested in new communications radios. Potentially available through County supports. <i>City staff, Public Works, County EMA</i> (Local operations funds, Response / Community Safety programming) MEDIUM PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/ supports		

7. LAWTON

a. Profile

The city of Lawton is centrally located in the northwestern quarter of Woodbury County. Covering about .7 square miles, the majority of the city is situated north of U.S. Highway 20, with a small portion including an assisted living facility located south of the highway. Elliott Creek is located in the western portion of the city and runs north to south. More information can be found on the City of Lawton website at <https://www.lawtoniowa.com/>.

City Governance & Community Supports

Lawton is governed by a Mayor and City Council who are elected by city residents. City Council is composed of five (5) members. Offices in addition to the Mayor and Council include City Clerk and Public Works. The Lawton Community Fire Department is staffed by volunteers and provides fire suppression and rescue services to Banner Township and Concord Township in addition to the City. Lawton has its own ambulance service, the Provisional Paramedic Service, which includes 10 responders and one ambulance. It serves the surrounding 72 square miles. The city's volunteer fire department has an average of 22 firefighters, ready to serve.

Demographics, Housing, & Economics

Based on Census Reporter's 2023 estimates⁶¹, Lawton's population is 938, reflecting a slight decrease from 943 in 2020. The town is home to 352 households, with a median household

⁶¹ Source: <https://censusreporter.org/profiles/16000US1943905-lawton-ia/>

income of \$90,278, significantly higher than the Woodbury County median of \$51,350. Vulnerable populations in Lawton include 44 children aged 5 years and younger, and 157 residents aged 65 or older. About 75 residents live below the poverty level, and 65 residents are living with a disability. While Lawton shows a relatively strong economic foundation, these figures suggest that there are still some challenges faced by certain segments of the community.

<i>Community Characteristics</i>	
Population (2023)	938
Population (2020)	943
Total Households	352
Median Household Income	\$90,278
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	44	4.9%	7.3%	5.7%
65 years and older	157	17.3%	14.3%	16.0%
Below the poverty level	75	8.3%	14.0%	11.3%
Living with a disability	65	7.2%	12.4%	18.5%

Lawton has a total of 390 housing units, with 351 of them occupied and 39 units vacant. The town does not have any mobile homes. A significant portion of the housing stock (102 units) was built in 2000 or later, while the remaining homes are older. This reflects a mix of newer and more established homes in the community.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	390	-
Occupied	351	90%
Vacant	39	10%
Mobile Homes	0	0.0%
<i>Age of Residential Structure</i>		
Built 2000 or later	102	26.6%
Built 1970 – 1999	128	33.3%
Build 1969 or earlier	154	40.1%

More demographic and community data can be found on the US Census Bureau site for Lawton.

Leading Employers

Agrivision Equipment
Lawton-Bronson Community Schools
Lawton Senior Living
Pronto Market
Scarecrow Farms (Seasonal)
Western Iowa Telecom

Critical Facilities

Garage	206 W Main
City Hall/Community Center	315 Ash St
Friendship Center	300 Cedar St
Fire Station	104 W Maple
Pump House	300 W Main
City Park	111-113 Tara Way
Water Tower	
Park, Gazebo	SE Corner - Cedar & Maple
Ballpark	1592 Eastland Ave
Water Treatment Facility	321 Ash St
Well Heads; Related	
Sewer Lift Station	301 W Main
Emergency Siren	Maple St

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Lawton-Bronson Junior High School	100 Tara Way
Lawton-Bronson High School	
American Family Insurance	101 E Maple St
Bethel Lutheran Church	322 Pine St
Bob & Ellen's	311 Cedar St
Community Presbyterian Church	411 E Birch St
The Friendship Center	300 Cedar St

Security National Bank	315 Cedar St

Valuation of City Assets

Total Blanket TIV	\$	6,294,860
Building	\$	6,110,316
Personal Property	\$	239,825
Misc Property Sched	\$	433,696
Misc Property Unsched	\$	251,455
APD TIV	\$	1,503,087
Grand Total TIV	\$	7,035,292

b. Participation

SIMPCO facilitated a virtual mitigation planning meeting via Teams on December 18, 2024. The following were in attendance.

- Tricia Jernberg, City Clerk
- Jesse Pedersen, Mayor
- Justin Dunnington, Public Works Supervisor
- Travis Ludwig, Fire Chief

For additional consideration, four surveys were submitted with jurisdiction indicated as Lawton.

The city’s signed Voluntary Participation Agreement, dated 12/18/2024, is on file.

c. Community Capabilities

<i>Plans/Guidance Documents</i>
Comprehensive Plan

<i>Policies/Ordinance</i>	
• Building Code (Standard by reference: IBC) • Floodplain Ordinance (2024) • Nuisance Ordinance	• Subdivision Ordinance • Tree Trimming Ordinance
Some provisions for Stormwater included in the Code of Ordinances	
Some provisions for Debris Management included in the Codes of Ordinances	
<i>Programs</i>	
Some provisions for Drainage included in the Codes of Ordinances	
National Flood Insurance Program (NFIP) Participant	CID #190292
ISO Fire Rating	Class 5/5x
Property Acquisition	
<i>Staff/Department</i>	
Public Works Official	Water Superintendent
Emergency Management Coordinator	City Clerk @ local level
Emergency Response Team	Fire and Rescue
<i>Non-Governmental Organizations</i>	
Veterans Groups	American Legion Post 718
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	
Levy taxes for a specific purpose	
Fees for water and sewer services	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities

The city is actively implementing mitigation strategies into planned projects. They have a tree removal plan in place addressing dead/diseased trees in public rights of way and parking. In 2024, approximately \$15,000 was invested, which included replacements in the City Park.

The city has a collaborative relationship with Lawton Senior Living Center to work with response teams to coordinate transfers to the Holstein facility as may be needed in the event of a disaster. The school facilities throughout town host potential for a helipad should such equipment be needed.

The schools are partners with the city in community development efforts. The community center is an identified refuge location if students are displaced during the school day or during school activities. The district has an active Safe Routes to School program reducing the risk of pedestrian/bicyclist vs vehicle crashes.

Review of Actions Taken (Since 2019)

communication/education		
tools/equipment		
Generator & Related Projects	Lawton	2020: Generator needed for Fire Department; <i>Fire Chief, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
		Complete. Phase I is complete. A generator has been purchased for the Fire Department. A new project for 2025 HMP is for hook-up and installation.
development		
flow control		
refuge		
Shelter	Lawton	2020: Include tornado-rated safety features in plans for new community center; <i>City administration, Project coordinator, EMA collaboration</i> (Local funds, private funds, fundraisers, PDM) MEDIUM PRIORITY
		Implemented. City constructed a new city hall/community center/maintenance facility that enables reasonable shelter from extreme weather. While not FEMA-level designated, the center has interior space designated as a safe area. The county has designated the new facility has been designated by the county as a recovery center as needed. Project overall cost is about \$1.3M. In addition to city staff, the fire department has access to the building in the event of an emergency or extreme weather conditions.
technology		
natural barriers/ supports		

In addition to completion of a new city building (housing City Hall, the Community Center, and Maintenance), Lawton repaired their warning siren to full function. Approximate cost was \$5,000.

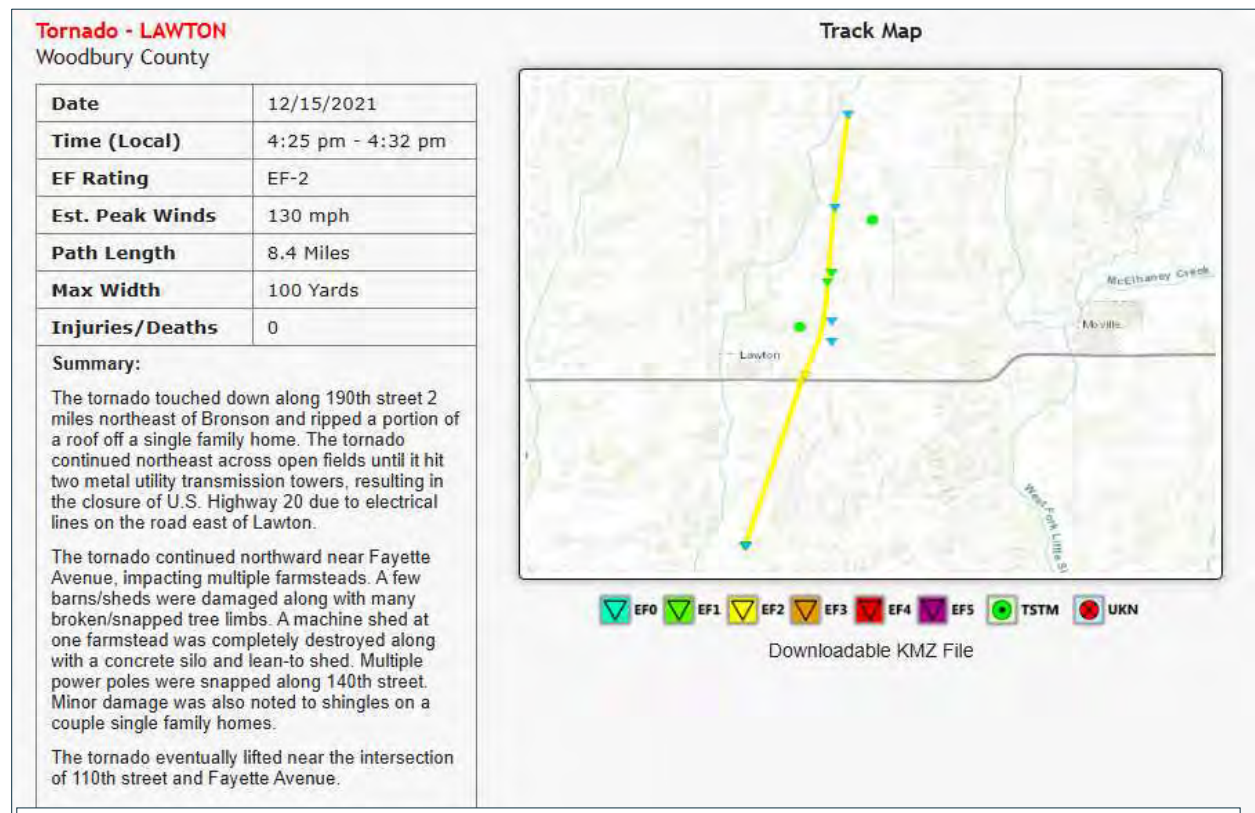
d. Risk Assessment

Contributing Factors

The NOAA Storm Event database included four reports specific to Lawton. The city likely suffered the effects of the 104 Woodbury (Zone) events as well.

Location	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
LAWTON	12/15/2021	16:28	Thunderstorm Wind	70 kts. EG	0	0	25.00K	0.00K
LAWTON	12/15/2021	16:28	Thunderstorm Wind	69 kts. EG	0	0	25.00K	0.00K
LAWTON	12/15/2021	16:31	Thunderstorm Wind	69 kts. EG	0	0	10.00K	0.00K
LAWTON	7/29/2024	23:02	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K

Below is a depiction of the Dec 2021 storms that affected much of the region. Storm activity cut through Lawton resulting in extensive damage. The NOAA system, which relies on residential reports, does not include the accurate Tornado designation as determined following the events of that day.



Source: <https://www.weather.gov/fsd/20211215-Tornado-nwia> (June 9, 2025)

Priority Hazards

- Tornado / Windstorm
- Severe Winter Storm
- Grass and Wildland Fire

Priority hazards remain consistent with those specified in 2020. A greater emphasis is place on concern of Windstorms as well as Thunderstorms with Hail and Lightning. Survey responders aligned their top three concerns with the priorities indicated by the City.

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Lawton	New. Prepare generator connection and install at Fire Station. <i>Fire Chief, City Council, County EMA</i> (Local general fund, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/ supports		

8. MOVILLE

a. Profile

The city of Movable is centrally located in the northern half of Woodbury County. The majority of the City is situated north of U.S. Highway 20, with a small portion located south of the highway. Several streams are located to the west of the city including McElhaney Creek, West Mud Creek, Mud Creek, and West Fork Little Sioux River. Only McElhaney Creek passes through city limits. More information can be found on the City of Movable website.

City Governance & Community Supports

Moville is governed by a Mayor and City Council who are elected by city residents. A Mayor Pro Tem is appointed by the mayor and may vote as a member of the Council. Five (5) additional members serve on Council. Offices in addition to Mayor and Council include City Clerk, Public Works, Police, Fire and Rescue, and Ambulance Services.

Demographics, Housing, & Economics

In 2023, Moville's population was 1,840⁶², showing a slight increase from 1,687 in 2020. The city has 666 households, with a median household income of \$96,250, significantly higher than the median income of Woodbury County, which is \$51,350. The community includes a notable portion of vulnerable populations, with a significant number of residents aged 5 years and younger, as well as a considerable percentage of individuals aged 65 and older. Additionally, some residents are living below the poverty level, and a portion of the population is living with a disability.

<i>Community Characteristics</i>	
Population (2023)	1840
Population (2020)	1,687
Total Households	666
Median Household Income	\$96,250
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	177	9.6%	7.3%	5.7%
65 years and older	208	11.3%	14.3%	16.0%
Below the poverty level	143	3.2%	14.0%	11.3%
Living with a disability	204	11.2	12.4%	18.5%

Moville has a total of 624 housing units, with 612 occupied and 12 vacant. There are 25 mobile homes, comprising a small portion of the housing stock. The majority of homes in Moville were

⁶² Source: <https://censusreporter.org/profiles/16000US1954930-moville-ia/>

built before 1999, with a significant number constructed in 1969 or earlier, and a sizable portion built between 1970 and 1999. A smaller number of homes were built in 2000 or later.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	624	-
Occupied	612	98%
Vacant	12	2%
Mobile Homes	25	4%
<i>Age of Residential Structure</i>		
Built 2000 or later	52	7.4%
Built 1970 – 1999	277	39.2%
Built 1969 or earlier	378	53.5%

Leading Employers

The largest employer in the City of Merville is the Woodbury Central Schools, which employs approximately 75 people. In addition to education, the manufacturing and retail trade industries employ the next greatest amount of people.

EGR Insurance, Inc.
MF Construction
Nutrien AG Solutions
Western Iowa Telephone Association
Woodbury Central Community School District

Critical Facilities

City Hall	21 Main St
Police	
Ambulance	24 W Main St
Fire & Rescue	
Lift Station	1 Hwy 140
Haskell Pool; Park	2 Hwy 140
Community Center/Library	815 Main St
Fire Station #2; Vehicle Storage	19 S 1st

Well House	111 N 3rd St
Siren	
Well House; Well Heads	211 N 4 th St
N Lift Station	112 N 2 nd St
Lagoon Bldg	2431 160 th St
Water Tower & Control Panel	111 Fair St
Pumps	
Midway Park	N 4 th St
Ball Fields	221 N 2 nd St
Main St Park	Main St
The Ridge Park	845 Park Ridge Pl
Memorial Park	
Veterans Park	
Post Office	
Woodbury Co RAC	
Woodbury Co Engineer's Office	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Woodbury County Fairgrounds	206 Fair St
Woodbury Central High School	408 S 4 th St
Woodbury Central Middle School	
Moville Elementary School	
Eastside Acres Campground	811 E Frontage Rd
Mobile Home Park	
County Conservation Board	State Highway 140
Churches	
• New Hope Church	516 Main St
• Moville United Methodist Church	450 S 1st St
• Trinity Lutheran Church	323 S 4th St
• Immaculate Conception Church	419 Jones St
Family Health Care of Siouxland	410 Main St
CNOS Medical Clinic	
Dollar General	
Lewis Drug	

Senior Center / American Legion Hall	11 S 2nd St

County and private entities are included here as areas of interest, essential services, and/or where places with increased vulnerability during a disaster. Additional County Facilities as may be located in Merville are itemized in the County Profile.

Valuation of City Assets

A partial valuation of assets at \$2,511,868 was provided as preliminary base for cost-benefit analysis. This value does not include all city property and facilities. An assessment of values will accompany project plans including public as well as private assets as may be affected by a given action.

b. Participation

A mitigation planning meeting was held at Merville City Hall on August 26/2024.SIMPCO facilitated the discussion and the following people were in attendance.

- Michaela Peterson, City Clerk
- Jerry Sailer, Fire Chief
- Mike Montino, Co EMA Coordinator
- Casey Stratten, EMT
- Pat Rogers, Agent
- Bret Hayworth, Council
- Dave Christensen, Bldg Inspector
- Joe Barnes, Chief, PD
- Pat Smith, PWD

c. Community Capabilities

Merville has the following local supports in place in addition to resources as uniformly available through county, region, and state programs.

<i>Plans/Guidance Documents</i>
Comprehensive Plan
Capital Improvement Plan (5-yr update in progress as of 8/26/24)
Land Use Plan
<i>Policies/Ordinance</i>

• Building Code • Nuisance Ordinance • Subdivision Ordinance • Tree Trimming Ordinance • Zoning Ordinance	
<i>Programs</i>	
Zoning/Land Use Restrictions	
National Flood Insurance Program (NFIP) Participant	CID #190293
ISO Fire Rating	FD Class 5/5 Rural
Planning/Zoning Board	
<i>Staff/Department</i>	
Building Code Official	Independently contracted
Building Inspector	Independently contracted
Public Works Official	Public Works Directors
NFIP Floodplain Administrator	City Clerk
Emergency Response Team	Fire and Rescue
<i>Local Funding Availabilities & Authorities</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	
Levy taxes for a specific purpose	
Fees for water and sewer services	
Impact fees for new development	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

communication /education		
Warning Sirens	Moville	2020: Add warning sirens to supplement existing. Assess need for additional at southeast edge of town and at Ridge Park; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
		Update. Action not taken. Maintain project for 2025 Plan.
tools/equipment		
Equipment	Moville	2020: Drone for Fire Department -- assess and prepare before entering situation; determine best approach for grass fires, etc.; Assess areas of concern. <i>Fire Chief, City Council</i> (Department funds, Response support funds, PDM) MEDIUM PRIORITY
		Update not provided.

development		
flow control		
refuge		
technology		
Improve effectiveness	Moville	2020: Increase supply of handheld radios to improve inner and inter-department communications; <i>City Council, Collaboration with EMA</i> (City funds, potential PDM funds) LOW PRIORITY
		Implemented. The city police and fire departments are inter-connected allowing for immediate, in-time communications as needed. The city offices use All Contact enabling constant communication through departments.
natural barriers/ supports		

In addition to actions in response to the 2020 HMP, Moville has implemented other projects affecting community wellbeing. A generator is in place at the water treatment plant. There is a portable generator dedicated for use at the well house and lift station. A new water plant and tower are in the planning stages. A new floodplain ordinance was enacted in 2024. An ash tree replacement plan is in place in response to Ash Borer Beetle concerns.

d. Risk Assessment

Contributing Factors

Nutrien operations in town, while vital to local economy, does pose concern due to on-site propane product tanks. Traffic volume along US 20 heightens threat of not only transportation incidents, but hazardous materials incidents as well. The city is looking at formalizing refuge options through conversations with churches, the fairgrounds board, and schools. Current understanding is no pets may accompany residents to refuge locations, however lack of formal plan makes that difficult to maintain. Residents would benefit from full awareness enabling them to make alternate arrangements. The ball diamonds and a single residence on S Pearl are flood prone properties.

The NOAA Storm Event database shows four reports for Moville between 11/01/2019 and 12/31/2024⁶³.

⁶³ Source: <https://www.ncdc.noaa.gov/stormevents/>

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
MOVILLE	8/10/2020	7:40	Thunderstorm Wind	50 kts. MG	0	0	0.00K	4.00K
MOVILLE	12/15/2021	16:35	Tornado	EF1	0	0	200.00K	0.00K
MOVILLE	5/12/2022	18:15	Thunderstorm Wind	50 kts. MG	0	0	0.00K	29.00K
MOVILLE	9/18/2023	23:50	Hail	1.00 in.	0	0	0.00K	0.00K

Priority Hazards

- Flood (riverine)
- Tornado / Windstorm
- Hazardous Materials Incident
Transportation Incident

Difficult to narrow concerns to a top three priority, haz mat and traffic accidents stem from a common source: traffic volume on US 20. Thunderstorms with Hail & Lightning are prevailing issues as well with incidents often resulting in at least some damage.

e. Mitigation Needs, Actions, & Strategies

communication /education		
Warning Sirens	Moville	Carry over. City still interested in fully assessing need for additional siren(s) at southeast edge of town and at Ridge Park. Cell phone-based alerts may meet needs of most, but not all. <i>City Council, Public Works, Moville Police and Fire Departments, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
tools/equipment		
Generator & Related Projects	Moville	New. City is looking at generator purchases for Fairgrounds (County collaboration), Community Center and Fire Hall. Community Center serves as shelter when open. <i>City, Public Works, County EMA</i> (local funds, pre-disaster/mitigation funds as available) HIGH PRIORITY
development		
flow control		
Flood Protection	Moville	New. Improvements to the existing berm at the North Lift Staton are needed as it has been compromised three times. <i>Public Works, Engineering supports as available</i> (local funds, Flood/Disaster mitigation funds as available, community foundation grants) HIGH PRIORITY
refuge		

technology

natural barriers/ supports

9. Oto

a. Profile

The city of Oto is centrally located in the southeastern quarter of Woodbury County. State Highway 31 and County Highway D54 intersect in Oto. The city is situated west of the Little Sioux River. To the west is Oak Ridge Conservation Area, and to the north is Curtin Timber Public Wildlife Area.

City Governance & Community Supports

Oto is governed by a Mayor and City Council. The Council is composed of three (3) voting members. In addition to these offices, Oto is served by the following departments: Clerk/Treasurer and Maintenance. The City contracts with Woodbury County for law enforcement services. Oto is served by independently operated, volunteer emergency response teams -- Oto Ambulance and Oto Fire Department.

Although portions of the City are located within a floodplain (Zone A), Oto is not a member of the NFIP program. Both the Municipal Code of Ordinances and the Comprehensive Plan have been recently updated.

Demographics, Housing, & Economics

CensusReporter.org shows Oto with a population of 66 in 2023⁶⁴, showing a slight decrease from 72 residents in 2020. The town is home to 33 households, though the median household income is not available. A significant portion of Oto's population is 65 years or older, and many residents face economic challenges, with a notable number living below the poverty line. Additionally, a considerable number of residents are living with a disability, highlighting some of the community's unique needs.

Community Characteristics

⁶⁴ Source: <https://censusreporter.org/profiles/16000US1960240-oto-ia/>

Population (2023)	66
Population (2020)	72
Total Households	33
Median Household Income	n/a
Median Household Income (all of Woodbury County)	\$51,350

Available estimates are disparate and not reflective of what is likely the actual per capita income level, especially when paralleled with an estimate more reflective of local perception of the poverty rate. The CensusReporter.org site estimates per capita at more than double the state and Sioux City metro area numbers, with poverty rate also more than double the metro and state rates. Local summation is more consistent with estimated poverty rate as included in the following table.

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	2	3%	7.3%	6.3%
65 years and older	18	27.3%	14.3%	16.0%
Below the poverty level	17	25.8%	14.0%	12.0%
Living with a disability	21	31.8%	12.4%	11.6%

Oto's housing stock is largely made up of homes that are 50 or more years old, with minimal new construction in recent years. Only one house has been built in the 21st century. The city also has a relatively high vacancy rate, with 15 of the 50 total housing units currently unoccupied.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	49	-
Occupied	33	67%
Vacant	16	33%
Mobile Homes	2	4%
<i>Age of Residential Structure</i>		
Built 2000 or later	1	2.0%
Built 1970 – 1999	12	24.0%
Build 1969 or earlier	37	74.0%

More information regarding demographics can be found on the U.S. Census webpage for Oto.

Leading Employers

While not hosting a large number of employees, the following businesses operate and have established a necessary presence in Oto.

- Lyle's Auto Salvage
- Oto Pub & Grub

Critical Facilities Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

City Hall	215 1st Ave
Ambulance Service	27 Washington
Sewage Lift Station	242 Water St
Fire Department	
Pump/Well #3	300 3rd Ave
Town Mtnc Bldg	Washington St
Water Tower	Royal St
Pump House #2	110 2nd Ave

In addition to city facilities, private establishments including but not limited to the leading employers as listed are critical to the function of the city as community supports.

Valuation of City Assets

Total Building	\$	140,065	RC
Total Personal Property	\$	52,634	RC
Total Property in the Open	\$	<u>310,221</u>	RC
Total	\$	<u>502,920</u>	

b. Participation

A planning meeting, facilitated by SIMPCO, was held at Oto City Hall on December 17, 2024. City Clerk Nikki Kelsheimer was present.

c. Community Capabilities

In addition to state, region, and county programs, the City of Oto has the following identified as locally available resources.

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
<i>Policies/Ordinance</i>	
Nuisance Ordinance	Trees Ordinance
Building and Land Use Regulations	
<i>Programs</i>	
National Flood Insurance Program (NFIP) Participant	Yes, 190294C
ISO Fire Rating (updated class not provided)	Oto Class 9; Oto FD Class 9/10
<i>Staff/Department</i>	
Public Works Official	Superintendent for the City
Emergency Response Teams (Independent of City)	Ambulance
	Fire Rescue
<i>Non-Governmental Organizations</i>	
Veterans Groups	Henry V McKenna American Legion
Oto Days Committee	
<i>Local Funding Availabilities & Authorities</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	
Levy taxes for a specific purpose	
Fees for water, sewer, gas, or garbage collection services	
Assess impact fees for new development	
Incur debt through	• general obligation bonds • special tax bonds • private activities
Withhold spending in hazard prone areas	

The ambulance building is designated as a cooling station during extreme heat events. Oto now participates in NFIP. The city follows state codes for building standards and floodplain regulations. Active promotion of the Alert Iowa system is ongoing through Facebook and neighbor to neighbor.

Review of Actions Taken (Since 2019)

communication /education		
Warning Sirens	Oto	2020: Warning siren needed immediately. Malfunction due to lightning strike. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
		Resolved. Oto’s warning siren is now functioning.
tools/equipment		
Equipment	Oto	2020: Fire Dept in need of equipment and new facility; <i>Fire Chief</i> (City support, Department funds, Fire Association funds, FEMA AFG, CDBG facilities funds, State Revolving Fund loan) LOW PRIORITY
		Update. Facility and equipment improvements are still needed for the Oto Volunteer Fire Department. No action has been taken due to lack of funds. This project will carry into the 2025 HMP. Priority reflects feasibility, not need.
development		
flow control		
refuge		
technology		
natural barriers/ supports		

d. Risk Assessment

A review of events recorded in the NOAA Storm Event database did not show any reports for Oto between 11/01/2019 and 12/31/2024. It can be expected that Oto did experience the effects of all 104 events reported for the Woodbury "Zone".

Contributing Factors

Weather extremes of all kinds are troublesome for Oto and most small communities. The city is making strides in coordinating planning effort to ensure mitigation efforts are incorporated into all planning projects where applicable.

Priority Hazards

- Tornado/Windstorm
- Severe Winter Storm
- Thunderstorm w/Hail & Lightning

e. Mitigation Needs, Actions, & Strategies

communication /education		
tools/equipment		
Generator & Related Projects	Oto	New. Oto is seeking the opportunity to purchase a generator to facilitate operation of critical functions during power outages. <i>Public Works, County EMA</i> (local funds, community foundation grants, pre-disaster/mitigation funds as available. MEDIUM PRIORITY
Equipment	Oto	Carry over. Fire Dept in need of equipment and new facility; <i>Fire Chief</i> (City support, Department funds, Fire Association funds, FEMA AFG, CDBG facilities funds, State Revolving Fund loan) LOW PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/ supports		

10. PIERSON

a. Profile

The city of Pierson is situated in the northeast quarter of the Woodbury County, near the northern border. County Highways D12 and L25 intersect at the northeastern corner of the city. Several small streams meander through city limits. More local details can be found on the City of Pierson website at <https://www.piersonia.com/>.

City Governance & Community Supports

Pierson is governed by a five (5) person elected City Council and the Mayor. Offices in addition to the Mayor and Council include City Clerk and Public Works. Fire and rescue services are

provided by the Pierson Fire Department, which is staffed by volunteers. This department provides fire response services to surrounding communities. Pierson contracts with Woodbury County for police protection services.

Demographics, Housing, & Economics

Pierson, Iowa, had a population of 331 in 2023, showing a slight decline from 337 in 2020. The town includes 103 households and has a median household income that exceeds the average for Woodbury County. Pierson has a relatively large number of young children compared to the surrounding area, while the number of older adults is somewhat lower. Fewer residents live below the poverty line than in both the county and the state, indicating a relatively stable economic situation. However, the town has a higher number of individuals living with disabilities, which may point to a greater need for supportive services and accessibility resources in the community.

<i>Community Characteristics</i>	
Population (2023)	331
Population (2020)	337
Total Households	103
Median Household Income	\$56,563
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	29	10%	7.3%	6.3%
65 years and older	34	11.7%	14.3%	16.0%
Below the poverty level	25	7.6%	14.0%	12.0%
Living with a disability	41	14.1%	12.4%	11.6%

Pierson, Iowa has a total of 120 housing units, with 103 currently occupied and 17 standing vacant. The vast majority of these homes are older, with nearly all residential structures built before 1970, and none constructed after the year 2000. Only a small portion of the housing stock was built between 1970 and 1999. Mobile homes make up a very small share of the housing, reflecting a predominantly traditional housing landscape. This aging housing

inventory may present challenges related to maintenance, energy efficiency, and modernization, but also suggests a community with deep roots and long-standing character.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	120	-
Occupied	103	86%
Vacant	17	14%
Mobile Homes	4	3%
<i>Age of Residential Structure</i>		
Built 2000 or later	0	0.0%
Built 1970 – 1999	21	11.4%
Build 1969 or earlier	163	88.6%

More demographic and community data can be found on the US Census Bureau webpage for Pierson.

Leading Employers

- NEW Co-op
- Culligan Water
- United Bank of Iowa
- Mahoney Auto

Critical Facilities

City Hall/Library	201 Main St
Community Center	514 2nd St
Fire Station	
Water Tower; Pump House	300 Main St
City Park	Main St
Tennis Courts/Sand Volleyball	208 Maple St
Maintenance Bldg	601 Front St
Pump house & Related	290 Maple

Utility Bldg	
Pump House; Control Panel	Lenox Ave
Sewage Treatment Plant	Minnesota Ave
Ballpark	210 Maple St
Cemetery	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

US Post Office
Pierson Elementary & Middle School (4-8)
Pierson United Methodist Church
Gas Lantern Restaurant
Thonny's Bar and Grill

Valuation of City Assets

A valuation of city assets was not provided for this plan. However, a base value of \$2,251,801 from the 2020 HMP can be estimated to have doubled based on improvements and across the board building/property increases in recent years. A full assessment of values of public and private properties as may be impacted by mitigation actions/strategies will be formed for cost benefit analysis to be incorporated into project plans and funding requests.

b. Participation

A formal mitigation planning meeting was not held, however, communications regarding mitigation planning were conducted between SIMPCO, and the City of Pierson with Jeanette Beekman, City Clerk and Mayor Dallas Groen providing input. Information was provided via email and completion of the jurisdiction update survey.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
<i>Policies/Ordinance</i>	
- Floodplain Ordinance - Nuisance Ordinance	- Storm Water Ordinance - Subdivision Ordinance

<i>Programs</i>	
National Flood Insurance Program (NFIP) Participant	CID #190295
ISO Fire Rating (not updated)	Pierson Class 5; Pierson FD, Class 8/9
Tree Trimming Program	In effect @ parkings
<i>Staff/Department</i>	
Public Works Official	
Emergency Management Coordinator	City Clerk @ local level
Emergency Response Team	Fire and Rescue
<i>Non-Governmental Organizations</i>	
Veterans Groups	American Legion Harrison/Pedersen Post #291
	American Legion Auxiliary
Community Organizations	Pierson Town and Country
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water and sewer services	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities
Ability to withhold spending in hazard prone areas	

Review of Actions Taken (Since 2019)

communication /education		
tools/equipment		
Generator & Related Projects	Pierson	2020: Generator for Community Building for continuation of use as refuge location in the event of power outage; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
		Update. Action not taken as other projects took precedence. Carry over to 2025 HMP.
Equipment	Pierson	2020: ATV for use during road blockages; <i>City Council</i> (City funds, PDM) LOW PRIORITY
		Update. Action not taken. Carry into 2025 HMP with same priority level.
development		
flow control		

refuge
technology
natural barriers/ supports

Pierson has taken steps implementing drainage improvements, however more work is needed. The city has completed their 4th Street Drainage Improvements project, and is moving ahead in planning drainage improvements on Front Street. Front Street strategies are included in the project table. The city does have a CIP that is guided by city planning documents and short/long-term goals. An IDNR Tree Assessment has been completed with removals completed as needed and replacement taking place on an intermittent schedule pending funding. Generators and SCADA (Supervisory Control and Data Acquisition) have been added to the water plant to ensure availability of water in case of an electrical outage. The city is also in the planning and approval stages of a new wastewater treatment system. Mitigative protections and a generator connection are anticipated components.

d. Risk Assessment

Contributing Factors

An assessment of NOAA Storm Event database provides record of four reports specific to Pierson between 11/01/2019 and 12/31/2024. Due to its location, it can be assumed that the community experienced effects of “Zone” classified events as declared for Woodbury, Plymouth, Cherokee, and Ida Counties.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
<u>PIERSON</u>	6/22/2021	17:46	Hail	1.75 in.	0	0	0.00K	8.00K
<u>PIERSON</u>	8/20/2021	17:16	Thunderstorm Wind	56 kts. EG	0	0	2.00K	0.00K
<u>PIERSON</u>	6/23/2024	4:00	Flood		0	0	0.00K	0.00K
<u>PIERSON</u>	7/29/2024	23:06	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K

Pierson is surrounded on three sides with floodplain. Current flood concerns are more relevant to runoff and flash flood events, especially when preceded by periods of drought and extremely dry conditions. The same conditions intensify riverine flooding when concurrent.

Priority Hazards

- Tornado/Windstorm
- Severe Winter Storm
- Flood

Pierson maintained declared priority hazards as included in the 2020 HMP, though flood is more relevant to effects on surrounding areas than within city limits.

e. Mitigation Needs, Actions, & Strategies

communication /education		
tools/equipment		
Generator & Related Projects	Pierson	Carry over. Dedicated generator for Community Building for continuation of use as refuge location in the event of power outage; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
		Carry over. ATV for use during road blockages; <i>City Council</i> (City operations fund, PDM) LOW PRIORITY
development		
Improve existing facilities & infrastructure	Pierson	New. Sewer lining project. City is lining sewers to improve existing infrastructure, and extend useful life. Approx cost is \$200,000 – planned for 2026. Public Works, DNR. (Local general fund) HIGH PRIORITY
flow control		
Drainage Projects	Pierson	New. The city has made some drainage improvements in recent years (4 th St), but more work is needed along Front Street. <i>Public Works</i> (local funds, other infrastructure funds as may be available) HIGH PRIORITY
refuge		
technology		
natural barriers/ supports		

11. SALIX

a. Profile

The city of Salix is centrally located in the southwestern quarter of Woodbury County. Interstate 29 bisects the city, although most of the commercial and residential structures are located east of the interstate.

Along the western border is Browns Lake, and beyond that is the Missouri River. Brown's Lake, Bigelow Park, and Woodbury County Conservation are also located west of city boundaries. Further from city limits and to the east is the Luton Wildlife Management Area, and to the south is the Lakeport Area. More information can be found on the City of Salix's website at <https://salixiowa.com/>.

City Governance & Community Supports

Salix is governed by a Mayor and City Council who are elected by residents. The Mayor appoints a Mayor Pro Tem who serves as a voting member of Council. In addition, Council is composed of five (5) voting members. Staffed positions include City Clerk and Maintenance. Salix Fire & Rescue is located in the center of town, staffed by an average of 35 volunteers. This department also provides ambulance services. The city contracts with the County for law enforcement.

Demographics, Housing, & Economics

Salix's population in 2023⁶⁵ according to CensusReporter.org is estimated at 413, showing what is locally considered a more accurate depiction of city population. With 184 households, the city enjoys a median household income of \$62,143 – well above the Woodbury County average – indicating a relatively strong economic base. The community has a significant number of older adults, making up nearly a quarter of the population, while the number of young children is comparatively low. Despite its aging population, Salix reports a very low poverty rate, suggesting a generally stable and well-supported community. A notable portion of residents live with a disability, which may signal a need for accessible infrastructure, healthcare services, and community support tailored to these individuals.

⁶⁵ Source: <https://censusreporter.org/profiles/16000US1970320-salix-ia/>

<i>Community Characteristics</i>	
Population (2023)	413
Population (2020)	295
Total Households	184
Median Household Income	\$62,143
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	21	5.1%	7.3%	6.3%
65 years and older	96	23.2%	14.3%	16.0%
Below the poverty level	9	3.4%	14.0%	12.0%
Living with a disability	60	14.5%	12.4%	11.6%

Salix, Iowa has a total of 193 housing units, with 183 currently occupied and only 10 vacant, reflecting a high occupancy rate. The housing stock in Salix is fairly well-distributed in age, with over half of the homes built before 1970 and more than a third constructed between 1970 and 1999. A smaller share of homes – about 9% – have been built since 2000, indicating some recent development activity. Mobile homes make up a small portion of the housing, suggesting a predominance of traditional, single-family structures. Overall, Salix’s housing profile shows a stable and well-maintained community with a mix of older homes and gradual new growth.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	193	-
Occupied	183	95%
Vacant	10	5%
Mobile Homes	8	4%
<i>Age of Residential Structure</i>		
Built 2000 or later	15	8.7%
Built 1970 – 1999	63	36.4%
Build 1969 or earlier	95	54.9%

More demographic and community data can be found on the US Census webpage for Salix.

Leading Employers

- Walkers
- Steinhoff Construction

Critical Facilities

City Hall	317 Tipton St,
Salix City Park	
Filtration House	203 Tipton St
Pump House	110 Tipton St
Pump House	120 Tipton St
Water Tower	130 Tipton St
Lift Station, West	Tama St at Willow St
Lift Station, East	Hwy 75 at Walnut
Aspen Lift Station	Lakeport & Aspen Sts
Park Buildings	303 Walnut
City Maintenance Shed	311 Tipton

The city has other holdings including but not limited to the old Pioneer Bank Building at 405 Poplar. As the property is expected to be sold, it is not specified on the above critical facilities list.

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Arnold's Trailer Sales & Service	Walker's Restaurant and Bar
Head and Nails Beauty Shop	Salix Community United Methodist Church
Roger's I-29 Auto Repair	St. Joseph Catholic Church
Steinhoff Landscape & Construction	
Brown's Lake (State Park)	722 Bigelow Park Rd
Snyder Bend Park (State Park)	2924 Snyder Bend Rd

Valuation of City Assets

Total Blanket TIV	\$	2,889,134
Building	\$	2,855,091
Personal Property	\$	34,043
Misc Property Sched	\$	89,760
Misc Property Unsched	\$	<u>36,905</u>
APD TIV	\$	2,500
Total TIV	\$	<u>3,015,799</u>

b. Participation

SIMPCO facilitated a virtual mitigation planning meeting on December 19, 2025, via Teams, with City Clerk Kathy Brouillette in attendance. The survey was completed with Salix indicated as jurisdiction of residence.

c. Community Capabilities

<i>Plans/Guidance Documents</i>		
• Capital Improvement Plan	• Flood Mitigation Assistance (FMA) Plan	
• Comprehensive Plan	• Land Use Plan	
<i>Policies/Ordinance</i>		
• Debris Management Plan	• Storm Water Ordinance	
• Drainage Ordinance	• Subdivision Ordinance	
• Floodplain Ordinance	• Tree Trimming Ordinance	
• Nuisance Ordinance	• Zoning Ordinance	
<i>Programs</i>		
Zoning/Land Use Restrictions		
National Flood Insurance Program (NFIP) Participant		CID #190296
ISO Fire Rating (<i>Not updated</i>)		4 (in town)/4Y (Brown's Lake area)
Planning/Zoning Boards		
Tree Trimming Program		
<i>Staff/Department</i>		
Building Code Official		
Building Inspector		
Public Works Official		Public Works Director
NFIP Floodplain Administrator		

Emergency Response Team	Fire and Rescue
<i>Non-Governmental Organizations</i>	
Community Organizations	• Park Committee
<i>Local Funding Availability</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
TIF funding for designated use	
Authority to levy taxes for a specific purpose	
Fees for water, sewer, gas, or electric services	
Impact fees for new development	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities
Ability to withhold spending in hazard prone areas	Yes

Review of Actions Taken (Since 2019)

communication /education		
Warning Sirens	Salix	2020: Warning sirens – Replace existing in town; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY As amended 01/12/2022: Complete. A new weather siren was installed in December 2020. The weather siren is connected to the County Communications Center as a primary means of notifying residents and visitors to Salix of imminent danger due to extreme weather conditions such as tornado and/or windstorms. The siren is multi-tonal allowing variation in sounds to differentiate the causes for warning.
tools/equipment		
development		
flow control		
Drainage Projects	Salix (As amended 01/12/2022)	2022. Recent changes in permissible stormwater drainage methods have increased flood risk in Salix during periods of heavy rainfall and/or rapid snow/ice melt. Phase I: The City plans to pursue technical assistance including but not limited to a study or preliminary engineering to assess probable solutions. Phase II: Implement stormwater drainage system to resolve issues created by cancelation of agreement to direct stormwater into nearby

		Drainage District. Public Works, County Board of Supervisors, IDNR, USDA, other regulatory bodies as applicable (FEMA BRIC/FMA, local funds) HIGH PRIORITY
Drainage Projects	Salix	Update – Phase I: Complete. City worked with Farmer’s Drainage District and Woodbury County, assisted with contracted engineering firm, to conduct study and form a new drainage district – Approved 12/10/2024. Phase II will now be implemented under status as a drainage district, enabling a more expeditious and streamlined process.
refuge		
technology		
natural barriers/ supports		

The city added a lift station to accommodate the new Aspen development which is set to include 4-5 townhomes when complete. The interior of the water tower was painted to improve longevity. The project was funded through a loan which will be paid out using TIF. Dead/diseased trees are tracked and removed as necessary. Replacements are planned for the city park. The floodplain ordinance was updated in 2024 under direction of IDNR. Several projects were implemented affecting the city’s ability to respond to emergency incidents including but not limited to the following.

- The city has added two AED units – one at the park and one at city hall. Project is funded through a Railroad grant (an offset for the effects of a derailment incident) and is set to align with Woodbury County 911/Communication Center for a coordinating unlocking process.
- Keyless entry locking system was installed at fire station. Remote capabilities enable resident access to tornado room when building otherwise closed.
- Several major improvements to the city’s water infrastructure led to an improvement in the city’s fire ISO rating. The City’s ISO Fire Rating improved from 7 to 4.
- A new truck, equipped for plowing, was added to city inventory.

d. Risk Assessment

Contributing Factors

An assessment of the NOAA Storm Event database provided four reports specific to Salix.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
SALIX	12/15/2021	16:15	Tornado	EFU	0	0	0.00K	0.00K
SALIX	12/15/2021	16:20	Tornado	EF1	0	0	250.00K	0.00K
SALIX	6/12/2024	17:25	Hail	1.50 in.	0	0	0.00K	0.00K
SALIX	6/12/2024	17:25	Hail	1.25 in.	0	0	0.00K	0.00K

Salix has corporate boundaries that are disjointed at the I-29 on/off ramp area. The western area of the city does have some floodplain including ag lands and into Brown's Lake. Proximity to businesses involving volatile products/ingredients/components (MidAmerican, Port Neal, and CF Industries, for example) and historical events (1996 Terra Industries explosion) serve as impetus for concern over hazardous materials incidents. Not only the production and use of such products, but the transport through the city's cross section at I-29 and Old Hwy 75 are factors in city emergency preparedness considerations.

Priority Hazards

- Flood
- Severe Winter Storm
- Tornado/**Windstorm**

Infrequency of hazardous materials incidents, as well as potentially exorbitant costs keep this from being a higher priority in mitigative action planning.

e. Mitigation Needs, Actions, & Strategies

communication /education

tools/equipment

development

flow control		
Drainage Projects	Salix	Carry over. Phase II - The project identified through the study included the construction of a flow channel connecting the Salix Drainage District to the Farmers Drainage District, including a retention pond and other flow diversions. Project is awaiting finalization of cost-benefit analysis as interim conditions put Salix at heightened risk for street flood potential, storm drain backup, and home infiltration. <i>Salix Drainage District</i> (Drainage district funds, others to be determined pending necessitated corrections) HIGH PRIORITY
refuge		
technology		
natural barriers/ supports		

The city has adopted by reference the IPMC, IBC, IFGC, and IMC standards as adopted at state level, with exceptions. A full code update is budgeted for 2026.

12. SERGEANT BLUFF

a. Profile

The city of Sergeant Bluff is located in western Woodbury County. The city is bordered by Interstate 29 to the west, and is bisected by County Highway D38. The Sioux Gateway Airport is located to the west of the City and separates Sergeant Bluff from the Missouri River. More information can be found on the City of Sergeant Bluff website.

City Governance & Community Supports

Sergeant Bluff is governed by a Mayor and City Council who are elected by city residents. The Mayor serves as a non-voting member of the City Council. Voting members include the five (5) members of the Council including the Mayor Pro Tem. Offices, Departments, and Boards include the following.

<i>Staff and Departments</i>	
Building Inspector	Human Resources
City Administrator	Library Director
Assistant City Administrator	Planning & Zoning
City Clerk	Police Department

Finance Director	Public Works (& Maintenance Crew)
Fire Department	Receptionist

<i>Boards, Commissions, & Programs</i>	
Board of Adjustment	Planning & Zoning Commission
Mayor Committee Board	Senior Committee Board
Parks & Recreation Board	Urban Revitalization

The Sergeant Bluff Police Department is staffed by a Police Chief, Assistant Police Chief, Office Manager, and eight (8) Police Officers. The city also has a volunteer Fire Department. The Fire Department provides ambulance services. A 28E agreement exists between Sergeant Bluff and Woodbury Township, ensuring that Sergeant Bluff will provide fire protection and other emergency services for all property within the Township. The city also participates in the Enhanced 911 system through the Woodbury County Communication Center in Sioux City. The city conducts an annual review and update of its Municipal Code of Ordinances.

Demographics, Housing, & Economics

CensusReporter.gov estimates Sergeant Bluff, Iowa, had a population of 5,274⁶⁶ in 2023, up from 5,009 in 2020, reflecting steady growth over the past decade. The city includes 1,734 households and boasts a strong median household income of \$122,610—more than double the average for Woodbury County—indicating a high level of economic prosperity. The population includes a balanced number of young children and a lower-than-average share of older adults compared to both the county and state, suggesting a relatively youthful and family-oriented community. While past estimates indicated a higher poverty rate, more recent data shows only 7.7% of residents living below the poverty level, well below county and state averages. Additionally, the percentage of residents living with a disability is in line with the county and significantly lower than the state average. Overall, Sergeant Bluff presents as a growing, economically strong community with a solid quality of life and relatively low rates of poverty and vulnerability.

<i>Community Characteristics</i>	
Population (2023)	5,274

⁶⁶ Source: <https://censusreporter.org/profiles/16000US1971625-sergeant-bluff-ia/>

Population (2020)	5,009
Total Households	1,734
Median Household Income	\$122,610
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	371	7.3%	7.3%	6.3%
65 years and older	588	11.6%	14.3%	16.0%
Below the poverty level	369	7.7%	14.0%	12.0%
Living with a disability	615	12.2%	12.4%	11.6%

Sergeant Bluff, Iowa, has a total of 1,837 housing units, with 1,727 of them currently occupied, indicating a strong demand for housing in the area. The city also has a relatively low vacancy rate, with just 110 units vacant. Mobile homes make up a small portion of the housing stock, while the majority of homes were built between 1970 and 1999. A significant portion of the housing was constructed after 2000, reflecting ongoing development and modernization in the community. Additionally, many homes were built prior to 1970, contributing to a mix of older and newer homes that offer diverse housing options for residents.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	1,837	-
Occupied	1,727	94%
Vacant	110	6%
Mobile Homes	110	6%
<i>Age of Residential Structure</i>		
Built 2000 or later	462	28.5%
Built 1970 – 1999	705	43.5%
Build 1969 or earlier	453	28.0%

More demographic and community data can be found on the U.S. Census webpage for Sergeant Bluff.

Leading Employers

Embassy Rehabilitation and Care Center
Fareway food Stores
Pioneer Valley Living and Rehab
Sergeant Bluff-Luton Community Schools
Sioux City Brick and Tile
185 th ARW (within planning boundaries)
CF Industries (within planning boundaries)
Gelita USA, Inc (within planning boundaries)

Critical Facilities

An itemized listing of city properties and facilities was not provided for this update. Included for discussion are the many improvements and additions completed within the past five years. The following list is not exhaustive, however, it does present a summary of newer investments, improvements, and amenities.

- Dog Park
- Library
- City Hall (new facility)
- School Sports Complex – East Campus (new)
- Police Department (Relocated to former City Hall building)
- Lift station (new)
- Splash Pad

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Sergeant Bluff-Luton Elementary School	Floyd Place
Sergeant Bluff-Luton Primary School	Elevate Community Church
Sergeant Bluff-Luton Middle School	
Sergeant Bluff-Luton High School	Pioneer Valley Living/Rehab
American Legion	River Bend Apartments & Townhomes
Bluff View Home	Shepherd of Peace Lutheran Church
Community United Methodist Church	Eye Doctor

Embassy Rehab & Care Center	Dentist

Valuation of City Assets

A current valuation of assets was not provided for this update. Using the 2019 total of \$26,041,575, current estimated valuation with all investments and improvements considered, can easily increase that number by 50%. The city will provide appropriate valuations for cost-benefit analyses for not only city assets, but also for private properties as may be affected by mitigative actions.

b. Participation

Facilitated by SIMPCO, a mitigation planning meeting was held December 11, 2024 at Sgt Bluff City Hall. In attendance were:

- Aaron Lincoln, City Administrator
- John Robinson, Crew Chief
- Anthony Gaul, Fire Chief

Of the 78 Woodbury County survey respondents, 7 indicated residence in Sgt Bluff.

c. Community Capabilities

Sergeant Bluff has in place several supports to guide planning focused on resiliency. In addition to those listed, county, region, and state programs are also available.

<i>Plans/Guidance Documents</i>	
Comprehensive Plan (2024)	
Capital Improvement Plan	
Land Use Plan	
<i>Policies/Ordinance</i>	
• Building Code (IBC 2021)	• Nuisance Ordinance

• Debris Management Plan • Drainage Ordinance • Floodplain Ordinance • Historic Preservation Ordinance • Landscape Ordinance	• Storm Water Ordinance • Subdivision Ordinance • Tree Trimming Ordinance • Zoning Ordinance
<i>Programs</i>	
Zoning/Land Use Restrictions	
Codes Building Site/Design	
National Flood Insurance Program (NFIP) Participant	Yes, CID #190297
ISO Fire Rating	Sergeant Bluff Class 2; Sergeant Bluff FD, Class 2
Property Acquisition	
Planning/Zoning Boards	
Tree Trimming Program	
Mutual Aid Agreements	County & Surrounding communities
	North Sioux City SD
	South Sioux City NE
<i>Staff/Department</i>	
Building Code Official	Engineer
Building Inspector	Historic Preservation
Development Planner	Public Works Official
Emergency Management Coordinator	City Clerk @ Local Level
Emergency Response Team	Fire and Rescue
<i>Non-Governmental Organizations</i>	<i>Comments</i>
Veterans Groups	George Nelson American Legion
Community Organizations	
• Community Action Team • Sgt Bluff Community Foundation	• Sgt Bluff-Luton Community School Foundation • Sgt Bluff-Luton PTO
<i>Local Funding Availabilities & Authorities</i>	
Ability to apply for Community Development Block Grants	
Ability to fund projects through Capital Improvements funding	
Authority to levy taxes for a specific purpose	
Fees for water and sewer services	
Impact fees for new development	
TIF (for specified projects)	
Ability to incur debt through	• general obligation bonds

	• special tax bonds • private activities
Ability to withhold spending in hazard prone areas	

Review of Actions Taken (Since 2019)

Sergeant Bluff has an extensive list of community investments completed since 2019 that include resiliency building and mitigative action. The following table provides updates to projects as included in the 2020 HMP.

communication/education		
tools/equipment		
Generator & Related Projects	Sgt Bluff	2020: Generator for PD; <i>Police Chief, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY Project closed. One large portable generator is available as needed. Police Department is prepared for such connection if needed. Fire Station has been designated as command center in the event of an emergency and is equipped to serve that role.
Equipment	Sgt Bluff	2020: Pumps for clean water transfer; City Administrator, Streets Department (City funds, PDM) HIGH PRIORITY Complete. Pumps for use in diverting accumulated water during flooding and heavy rain events have been added to city equipment inventory. Cost of project completion not provided.
Equipment	Sgt Bluff	2020: Replace rescue boat. <i>Fire Department/EMS</i> (Department funds, City supports, Response support funds, fundraisers, PDM) LOW PRIORITY Update. Fire Department has replaced pump tanker. Some additional equipment on budgeted (see new projects). Rescue boat replacement removed from priority list.
Equipment	Sgt Bluff	In progress – carry over. Handheld radios are in process of being replaced. Spring 2025 10 replaced with 4 still pending. <i>City, Fire Department.</i> (Local funds for those already replaced, Local funds and response funds as available for remaining) HIGH PRIORITY
Equipment	Sgt Bluff	2020: ATV for police Department to minimize access issues. <i>Police Dept</i> (Department funds, City supports, fundraisers, PDM) LOW PRIORITY Update: UTV replacement has been initiated in budget conversations with a plan to replace at least one UTV within the next five years.
development		
Relocate critical facilities	Sgt Bluff	2020: Interest in relocating 2nd Fire Station for improved response to more areas; <i>City Admin, Fire Chief, Zone Administrator</i> (City Funds, Fire Dept Funds, Fire Assoc funds, fundraisers, Response Support funds) LOW PRIORITY

		Update. Project not completed. Carry over to 2025 HMP.
flow control		
refuge		
technology		
natural barriers/ supports		

Infrastructure investments outside of those indicated in 2020 include mitigative measures. Some significant projects include:

- \$1M investment in moving electric utilities underground. Process is reducing redundancy in service lines as well as outages. Lines are looped with water mains streamlining access points for maintenance.
 - Side effect: update water modeling / systems to assess southend for fire response
- Large capacity generator for Interstate Lift Station (2023 @ \$55,000)
- Cyber-threat preventions with a migration to independent VPN-based systems with IT firm
- Active shooter/intruder collaboration with schools including designating evacuation / refuge meet-up locations as a coordinated effort with strategic community partners
- Standardized hydrants in place with all fire protections monitored/tracked on scheduled maintenance

d. Risk Assessment

Contributing Factors

First consideration for risk awareness is summarizing the impact of extreme weather events and other hazards. NOAA Storm Event database includes 8 reports specific to Sergeant Bluff between 11/1/20219 and 12/31/2024. It is important to note that the city's response teams are among those first on the scene for emergencies in nearby communities and rural areas. Therefore, incidents recorded for the much of Woodbury and Monona Counties also affect Sgt Bluff's resources.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
<u>SERGEANT BLUFF</u>	5/12/2022	18:01	Tornado	EFU	0	0	0.00K	0.00K
<u>SERGEANT BLUFF</u>	7/4/2023	16:56	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
<u>SERGEANT BLUFF</u>	7/12/2023	4:28	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
<u>SERGEANT BLUFF</u>	10/3/2023	19:29	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
<u>SERGEANT BLUFF</u>	5/20/2024	21:42	Hail	1.25 in.	0	0	0.00K	0.00K
<u>SERGEANT BLUFF</u>	5/20/2024	21:42	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
<u>SERGEANT BLUFF</u>	6/12/2024	17:04	Hail	1.25 in.	0	0	0.00K	0.00K
<u>SERGEANT BLUFF</u>	7/7/2024	16:50	Hail	1.25 in.	0	0	0.00K	0.00K

Sgt Bluff has benefited from lessons learned and in-time response based on outcomes. Hosting large gatherings for special events (such as RAGBRAI) offers a trial-by-fire scenario requiring in-time adaptations and recovery. These experiences with an exponential (albeit temporary) growth in local population trigger other considerations. In particular – specifically a change in local demographics and a steady population increase. Several actions implemented in Sgt Bluff have reduced the risk of damages to/loss of property and offer protections to residents and visitors. Continuing a mindful approach to resiliency, the city is considering assessment of relatively new circumstances.

- Continuous growth in residential development. Population has steadily increased expanding the number of residential units (single- and multiple family) and all that goes with such growth – use of resources, utilities, facilities, and schools.
- Communication to migrant populations and homeless persons. As homelessness (by choice and circumstantial) rises, the city recognizes
 - The need to be able to communicate preparedness information and warnings of imminent dangers in multiple formats so that neither lack of technology nor language are barriers to safety.
 - Citizen rights and responsibilities. The city is assessing means of informing new residents, visitors, and migrant populations of their rights and responsibilities to better define mutual expectations between them and the city as well as their neighbors.

- Consideration of proposed economic development measures as may be implemented at county and state levels.
 - CO2 pipeline plans will directly affect local response teams requiring additional training and equipment
 - Discussion of potential nuclear energy plant. While just introduced as an option, proactive measures are needed to prepare response units and residents for related awareness, including protocol for worst-case-scenario situations.

Priority Hazards

The city maintains the following as priority hazard concerns, largely due to cost of cleanup and broad impact on entire community.

- Tornado/Windstorm
- Severe Winter Weather
- Thunderstorm w/Hail & Lightning

Survey respondents indicated a high frequency of Very Concerned for Severe Winter Storm (5/7) and Tornado/Windstorm (5/7). Also notable concern was indicated for Expansive Soils (4/7), Infrastructure Failure, and Transportation Incidents. The hazards chosen when asked for the top three priority concerns are Thunderstorm with Hail & Lightning (5/7), Tornado/Windstorm, (4/7), and Infrastructure Failure (4/7).

e. Mitigation Needs, Actions, & Strategies

communication/education		
Promo/Info	Sgt Bluff	New. Interest in developing public awareness campaign for emergency preparedness. Specific topic of interest: lightning awareness and safety. Others as deemed appropriate for season. Collaborate with County EMA for materials. <i>City Clerk</i> , (Local – General fund, no additional dedicated funding expected to be necessary) HIGH PRIORITY
Warning Siren	Sgt Bluff	New. City is considering need for additional warning siren due to development of East Campus which includes outdoor school sports facilities in addition to expansion of homes and trail connections. Implementation is dependent on school district

		development planning as well as population changes. <i>Fire Chief</i> . (Local - general fund, PDM funds, local community and foundation grants, School District funds) Currently HIGH PRIORITY but may downgrade pending school bond measure (2025)
tools/equipment		
Generator & Related Projects	Sgt Bluff	New: Dedicated generator still desired at Fire Department should funding become available. Fire Station serves as designated command center as needed. <i>Fire Chief</i> . (Local - general fund, GO Bond, PDM) MEDIUM PRIORITY
Generator & Related Projects	Sgt Bluff	New. Generator connections at all facilities. <i>Public Works Director</i> (Local - general fund, GO Bond, PDM) LOW PRIORITY
Equipment	Sgt Bluff	Carry Over (continuation of in-progress project). Handheld radios are in process of being replaced. Spring 2025 10 replaced with 4 still pending. <i>Fire Chief</i> . (Local funds for those already replaced, Local funds and response funds as available for remaining) HIGH PRIORITY
Equipment	Sgt Bluff	New. Fire department replacing Ambulance at \$305,000. <i>Fire Chief</i> . (Fire/EMS Foundation Funds) HIGH PRIORITY
Equipment	Sgt Bluff	New. Replace AED units. 2 existing units aging out of effective life. Seeking funding supports. <i>Fire Chief</i> . (Local – general fund, GO Bond, PDM) HIGH PRIORITY
Equipment	Sgt Bluff	New. Replace Life Packs. 35 are aging out of useful life. Expected cost is \$60,000. <i>Fire Chief</i> . (Local – GO Bond, general fund, Fire/EMS Foundation Funds, PDM) HIGH PRIORITY
Equipment	Sgt Bluff	New. Fire Dept planning replacement of Brush Truck pending funding availability. Replacement is approximately a year-long process with an estimated cost of \$100- to \$120,000. <i>Fire Chief</i> . (GO Bonds, fundraisers, community benefit grant, PDM) HIGH PRIORITY
Equipment	Sgt Bluff	Carry over. Replace 1 of 2 UTVs within 5 years. This remains a low priority activity. <i>Police Chief</i> (Local - general fund, fundraisers, pre-disaster/mitigation funds as applicable, emergency response equipment grants as available) LOW PRIORITY
Safety/Security Equipment	Sgt Bluff	New. Interested in acquiring and installing Flock Camera as means of community protection. This would be a collaborative effort with the City of Sioux City as a bordering community – due to planned placement, it may also be affected. <i>Police Chief</i> . (PD funds, local - general fund, private donations/fundraisers) HIGH PRIORITY
Safety/Security Equipment	Sgt Bluff	New. Collaborative effort to enable communication connections via software in Law Enforcement between City, County, and Sioux City. Cost estimates not currently available. <i>Police Chief</i> . (departmental and local general fund, Response funds as available, public safety funds as available) HIGH PRIORITY
development		
Relocate critical facilities	Sgt Bluff	Carry over. City maintains an Interest in relocating 2nd Fire Station for improved response to more areas; <i>City Admin</i> . (City general fund, Fire Dept Funds, Fire Assoc funds, fundraisers, Response Support funds) LOW PRIORITY

flow control
refuge
technology
natural barriers/ supports

Mitigation-specific projects are provided in the preceding project table. Other new projects

- Implementation of new Thorgaard lightning prediction system
- Additional generator for city facilities needed at City Hall, Public Works, Parks & Rec, and Police Department
- C Street road project planned to include flow control
- West Ridge Rd drainage project (collaboration with Sioux City) – across railroad and MidAmerican gas line
- Tree removal at a cost of \$20,000 per year. City is underequipped to handle volume.

13. SIOUX CITY

a. Profile

Sioux City is the largest city in Woodbury County. It is located in the northwestern quarter of the county. Interstate 29 runs along the western edge of the City. U.S. Highway 20 and State Highway 75 converge in Sioux City, as do several other County Roads and Highways. North Sioux City, South Dakota and South Sioux City, Nebraska contribute to the greater Sioux City metro region.

The Missouri River is located to the west of Sioux City and acts as a portion of its western border. This river also divides Iowa from Nebraska. The Big Sioux River meets with the Missouri River along the west side of the northern half of the City. The Floyd River meets with the Missouri in the Center of Sioux City. Several significant greenspaces include Stone State Park, Bacon Creek Park, Sioux City State Prairie Preserve, Riverside Park, South Ravine Park, Sertoma Park, Cone Park, and Chautauqua Park. More information can be found on the City of Sioux City website.

City Governance & Community Supports

Sioux City is governed by a five (5)-person City Council, which includes the Mayor and Mayor Pro-Tem. Offices in addition to Council include the following.

- Airport
- Art Center
- City Clerk
- City Manager
- Com Center (911)
- Community Development
- Customer Service
- Economic Development
- Engineering
- Environmental Services
- Events Facilities
- Field Service
- Finance
- Fire Rescue
- Human Resources
- Human rights
- Legal
- Library
- Museum
- Parking
- Parks & Recreation
- Police
- Public Works
- Transit
- Underground Utilities
- Utilities
- Water Plant
- Waste Water Treatment

Sioux City is also served by several municipal boards including:

- Active Transportation Advisory Committee
- Airport Board of Trustees
- Art Center Board of Trustees
- Board of Adjustment
- Building & Housing Code Board
- Civil Service Commission
- Effective Fiscal & Public Policy Committee
- Environmental Advisory Board
- Events Facilities & Tourism Advisory Board
- Gjilan Kosovo Sister City Committee
- Historic Preservation Commission
- Human Rights Commission
- Library Board of Trustee
- Mayor's youth Commission
- Museum Board of Trustees
- Parking & Skywalk System Board of Trustees
- Parks and Recreation Advisory Board
- Planning & Zoning Commission
- Senior Advisory Committee
- Transit System Advisory Board
- Woodbury County Information & Communication Commission
- Yamanashi City Sister City Committee

The Sioux City Police Department is composed of 119 sworn officers and 25 civilian personnel. The City also has a Fire and Rescue Department. Services performed by this department include fire suppression, emergency medical services, prevention and education, and training. Fire Personnel are employed by the city. There are eight (8) stations throughout the city and one

training center. Several 28E agreements exist between Sioux City and surrounding communities and counties in regard to fire response and emergency response. Hazardous materials response serves other communities as a contracted service.

Demographics, Housing, & Economics

Sioux City, Iowa population from CensusReporter.gov⁶⁷ is estimated at 85,651 in 2023, presuming a decrease from 85,776 in 2020. The city has 32,843 households and a median household income of \$65,473, which is notably higher than the average for Woodbury County, reflecting a relatively strong economic position. Sioux City's population includes a significant number of both young children and older adults, with a larger share of seniors compared to both the county and the state. The percentage of residents living below the poverty line is in line with the county but higher than the state average, indicating a moderate level of economic hardship within the community. Additionally, Sioux City has a higher percentage of residents living with a disability compared to both Woodbury County and the state, suggesting a need for targeted services and support for individuals with disabilities.

<i>Community Characteristics</i>	
Population (2023)	85,727
Population (2020)	85,776
Total Households	32,843
Median Household Income	\$65,473
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	5,221	6.1%	7.3%	6.3%
65 years and older	12,744	15%	14.3%	16.0%
Below the poverty level	12,859	14.6%	14.0%	12.0%
Living with a disability	13,304	15.8%	12.4%	11.6%

Sioux City, Iowa, has a total of 34,901 housing units, with 32,807 of them occupied, reflecting a strong housing demand. This estimate indicates an increase of over 1000 housing units since

⁶⁷Source: <https://censusreporter.org/profiles/16000US1973335-sioux-city-ia/>

the 2020 HMP which reflected 2010 decennial census estimates. The city has a relatively low vacancy rate of 6%, indicating stability in its housing market. Mobile homes make up a small portion of the housing stock. The majority of homes in Sioux City were built before 1970, with a significant number constructed between 1970 and 1999. A smaller share of the housing was built after 2000, suggesting that while there is some new development, the housing stock is largely composed of older homes. This mix of housing ages provides a variety of living options for residents, though it may also highlight potential needs for updating and modernization in some areas.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	34,901	-
Occupied	32,807	94%
Vacant	2,094	6%
Mobile Homes	1,047	3%
<i>Age of Residential Structure</i>		
Built 2000 or later	2,122	6.3%
Built 1970 – 1999	8,851	26.2%
Build 1969 or earlier	22,836	67.5%

More demographic and community data can be found on the U.S. Census webpage for Sioux City.

Leading Employers

Large-scale employers operating within the City include but are not limited to:

- City facilities/offices
- 185th Air Refueling Wing / IA ANG
- Woodbury County offices/operations
- Bomgaars
- Hard Rock Hotel & Casino Sioux City
- Hy-Vee
- Mercy One
- Unity Point Health
- MidAmerican Energy
- Sabre Industries
- Wilson Trailer
- Seaboard Triumph Foods
- Smithfield Foods
- Sioux City Community School District

- Briar Cliff University
- Morningside University
- Western Iowa Tech Community College

Critical Facilities

<i>Miscellaneous City Facilities</i>	
City Hall	405 6 th St.
Animal Control Shelter	2400 Hawkeye Dr
Roth Fountain	924 4 th St
Martin Towers (bsmt + 2 flrs)	4th & Pierce St
SFD w/attached single car garage	2804 S Lewis Blvd
Transit Office & Garage	2505 4 th St.
Sign & Signal Shed; Shed	717-723 Omaha St.
<i>Airport Facilities</i>	
Airport Terminal	Duplex (21 units)
Passenger Loading Bridges (2)	Dwellings (4 units)
Parking Booth	Hangars (133 units)
Misc Bldgs, Equipment Storage, Offices	
<i>Police Department Facilities</i>	
Police Training Center	6602 Allison Ave
Police/Fire Headquarters	601 Douglas St
Police/Fire/Sheriff Memorial Monument	405 6th St
<i>Fire Department Facilities</i>	
Fire Stations (7)	<i>varied</i>
Fire Training Center	1701 Terminal Dr
Fire Storage Building	2119 18 th St
Regional Training Tower	6608 Allison Ave
<i>Central Maintenance</i>	
CM Garage; Fuel Station	1823 18 th St
CM Storage Building 10	1723 18 th St
<i>Public Works Facilities</i>	
Public Works HQ Field Office	1723 18 th St
Salt Storage Building	
Asphalt Plant	
Mntc & Storage Building	1823 18 th St

Public Service Garage & Storage, Bldg	1821 18 th St
<i>Environmental Services</i>	
ES Field Hdqtrs	1921 18 th St
Multiple Facilities & Bldgs	(36 addresses)
<i>Parking Ramps</i>	
- Heritage Parking (Ramp A) - Discovery Parking (Ramp B)	- River's Landing Parking (Ramp D) - Martin Luther King, Jr Transportation Center
<i>Skywalk</i>	
Skywalk network - 13 connections	
<i>Libraries</i>	
Morningside Branch	4005 Morningside Ave
Perry Creek Branch	2912 Hamilton Blvd Lower B
Wilbur Aalfs Library	529 Pierce St
<i>Museums/Arts</i>	
Art Center	225 Nebraska St
Gilchrist Learning Center	220 Pierce St
Lamb Productions	417 Market St
Peirce Mansion	2901 Jackson St
Sgt. Floyd Welcome Center	1100 Larsen Park Rd
Sioux City History Museum	607 4 th St
<i>Indoor Rec/Event Centers</i>	
Convention Center	801 4 th St
IBP Ice Center	3808 Stadium Dr
Long Lines Family Center	401 Gordon Dr
Tyson Events Center	
Expo Center	
<i>Cemeteries</i>	
Floyd Park Cemetery	2500 7th St
Graceland Park Cemetery	2651 S Lakeport St
Logan Park Cemetery	3901 Stone Park Blvd

<i>City Parks, Pools, Splash Pads</i>	
Parks Storage/Misc Bldgs	1665 18th Street

• Anderson Dance Pavilion	• Floyd Monument, Park	• Lewis & Clark Stadium
• Bacon Creek Park	• George St Children's Park	• Lewis Park, Pool
• Boat Ramp	• Grandma Moos Park	• Lyons Park
• Cecelia Park	• Grandview Park	• Macomb Park
• Chautauqua Park	• Headington Park	• MidCity Park
• Chris Larsen Park (expanded)	• Hillcrest Park	• Riverfront Playground
• Cone Park (expanded)	• Hi-View Park	• Riverside Park, Aquatic Center
• Cook Park, Skate Park, Splash Pad	• Kelly Park	• Rose Hill Park, Splash Pad
• Dale St Park; Splash Pad	• Kiddie Park	• Sanford Center Park
• Dinosaur Park	• Krumann Park	• Sertoma Park
• Emerson Park	• Leeds Park, Splash Pad	• Smith Villa Playground
• Fairmount Park	• Legacy Park	• Thompson Park
• Flight 232 Memorial	• Leif Erickson Park, Pool	• War Eagle Monument
<i>Ball Parks/Recreation Fields</i>		
• Center St. Park	• Kirk Hansen Park	• Riverside Recreational Complex
• Chautauqua Park	• Merch Headid Park	• Rueger Field
• Goldie Park	• Miracle Field	• Strikers Field
• Hubbard Park	• Pulaski Park	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

- Schools:
 - Bryant Elementary School, 3040 Jones Street
 - Clark Early Childhood Center, 4315 Hamilton Boulevard
 - Hunt Elementary School, 2002 Nebraska Street
 - Irving Elementary School, 901 Floyd Boulevard
 - Leeds Elementary School, 3919 Jefferson Street
 - Liberty Elementary School, 1623 Rebecca Street
 - Loess Hills Elementary School, 1717 Casselman Street
 - Morningside Elementary School, 3601 Bushnell Avenue
 - Nodland Elementary School, 3300 S. Cypress Street
 - Perry Creek Elementary School, 3601 Country Club Boulevard
 - Riverside Elementary School, 2303 Riverside Boulevard
 - Spalding Park Elementary School, 4101 Stone Avenue
 - Sunnyside Elementary School, 2700 S Maple Street
 - Unity Elementary School, 1901 Unity Avenue

- East Middle School, 5401 Lorraine Avenue
 - North Middle School, 2101 Outer Drive North
 - West Middle School, 3301 W. 19th Street
 - East High School, 3200 S. Cypress Street
 - North High School, 4200 Cheyenne Boulevard
 - West High School, 2001 Casselman Street
 - Sioux City Career Academy, 627 4th Street
- Colleges & Universities
 - Briar Cliff University, 3303 Rebecca Street
 - Morningside College, 1501 Morningside Avenue
 - St. Luke's College – UnityPoint Health, 2800 Pierce Street
 - Western Iowa Tech Community College, 4647 Stone Avenue
- Hospitals
 - MercyOne Siouxland, 801 5th Street
 - UnityPoint Health – St. Luke's, 2720 Stone Park Boulevard
 - Siouxland Surgery Center, 600 Sioux Point Road
- American Legion, 4021 Floyd Boulevard
- Churches (numerous)
- Hotels and conferences centers (numerous)

This list is not exhaustive. Additional community supports may include private businesses and individuals. Residents of Sioux City can also utilize facilities and services provided by nearby communities. Cumulatively, these all add to the city's network of support and communication in times of crisis.

Valuation of City Assets

A current valuation of assets was not provided for this update. Using the 2019 total of \$311,964,787, current estimated valuation with all investments and improvements considered,

can increase that number by as much as 50%. The city will provide appropriate valuations for cost-benefit analyses for not only city assets, but also for private properties as may be affected by mitigative actions.

b. Participation

Facilitated by SIMPCO, Sioux City’s mitigation planning meeting was held at City Hall on October 30, 2024 with the following participants in attendance.

- Brad Bollinger, Police Lieutenant
- Brad Puetz, Utilities
- Jeremy McClure, Police Lieutenant
- Gordon Phair, Public Works
- Robert Padmore, City Manager
- Tom Pingel, Utilities
- Aaron Lisle, Fire Captain
- Chris Madsen, Senior Planner

Survey participation for the city accounted for 43 of 78 Woodbury County submissions. It is important to note that many of the responses were received during the Riverside Flood Recovery Resources Fair. As the recent disaster was the focus of the gathering, those responses are reactive but also particularly relevant, offering significant input on how residents may be better prepared for future like events.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
• Comprehensive Plan (2024)	• City Economic Development Plan
• Capital Improvement Plan (annual)	• Land Use Plan
Critical Facilities Plan (Mitigation/Response/Recovery)	
Emergency Response Plan (water systems)	
<i>Policies/Ordinance</i>	
• Building Code	• Open Burn Restrictions
• Drainage Ordinance	• Storm Water Ordinance
• Floodplain Ordinance	• Subdivision Ordinance
• Historic Preservation Ordinance	• Tree Trimming Ordinance
• Landscape Ordinance	• Zoning Ordinance
• Nuisance Ordinance	

<i>Programs</i>	
Zoning/Land Use Restrictions	
Codes Building Site/Design	
National Flood Insurance Program (NFIP) Participant	CID #190298
ISO Fire Rating (not updated)	Class 2/9
Property Acquisition	For funded flood control projects (permanent easement plan, not implemented)
Planning/Zoning Boards	
<i>Staff/Department</i>	
• Building Code Official • Building Inspector • Development Planner • Emergency Management Coordinator • Emergency Response Team • Historic Preservation • Engineer • Mapping Specialist (GIS) • NFIP Floodplain Administrator • Public Works Official • Sioux City Fire Rescue • Commission and staff liaison	
<i>Non-Governmental Organizations</i>	
American Red Cross	
Salvation Army	
Veterans Groups • American Legion Post 307 • Veterans of Foreign Wars Post 10753 • VFW Post 1973 • Daughters of the American Revolution (Martha Washington Chapter) • Children of the American Revolution (Sgt. Charles Floyd Society)	
Homeowner Associations	Yes, In certain subdivisions
Neighborhood Associations	approximately 11 Neighborhood Coalitions
Chamber of Commerce	Siouxland Chamber of Commerce
<i>Community Organizations</i>	
• Junior League of Sioux City • Sioux City Lions Club • Rotary Club-Downtown Sioux City • Downtown Partners • Downtown Kiwanis • Fraternal Order of Eagles Sioux City #77 • Quota International of Sioux City • Rotary Club-Suburban Sioux City	
<i>Local Funding Availabilities & Authorities</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	

Levy taxes for a specific purpose	
Collect fees for water and sewer services	
Impact fees for new development	
Incur debt through	• general obligation bonds • special tax bonds • private activities
Withhold spending in hazard prone areas	

Capabilities specific to Sioux City Fire & Rescue include:

- 137 Uniformed personnel and 4 Civilian personnel, Total 141
- These are all the first response vehicles-7 fire engines, 2 Trucks, 1 Heavy Rescue vehicle, 1 Command vehicle, 2 EMS Response vehicles, 4 first due Ambulances, Boats and 3 Fire Prevention vehicles.
- Also 4 Reserve Engines , 1 Truck, and 4 reserve ambulances.

Review of Actions Taken (Since 2019)

The following table updates the status of projects as identified in the 2020 HMP including those added by amendment in 2025.

communication /education		
tools/equipment		
Generator & Related Projects	Sioux City	2020: Generators for critical facilities where none are currently in place; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Sioux City	Update: Some generator acquisition/placement still needed.
development		
Improve existing facilities & infrastructure	Sioux City (amended & adopted 01/13/25)	2025: Carry over to 2025 HMP. Bacon Creek Conduit. Estimated \$35M project - Reconstruction and relocation beginning at Rustin Street continuing to the outlet west of Lewis Boulevard. The project addresses the deteriorated condition of the existing conduit underneath Gordon Drive and the risk of structural failure, posing a risk to the traveling public on Gordon Drive. The conduit will be relocated from underneath Gordon Drive off-alignment and the capacity will be expanded to withstand a 100-year flooding event. The project improves resiliency of the utility, transportation

		infrastructure, and the region. <i>City of Sioux City, IA DOT</i> . (City of Sioux City Engineering Dept, CIP FY 2028) HIGH PRIORITY.
Improve existing facilities & infrastructure	Sioux City (amended & adopted 01/13/25)	2025: Carry over to 2025 HMP. Bacon Creek Channel Reconstruction. Estimated \$18M project is a collaborative effort to stabilize the channel built in 1930. Flooding events have resulted in Missouri River backing up channel, causing entry to the combined sanitary sewer system. Backwater infiltration has caused significant damage to Wastewater Treatment Plant. Project addresses the compromised combined sanitary system and includes repurposing the existing site to coordinate with economic development and urban use vision planning. <i>City of Sioux City, IA DOT</i>. (City of Sioux City Engineering Dept., CIP FY2028) HIGH PRIORITY.
flow control		
refuge		
technology		
natural barriers/ supports		

Additional mitigation-related projects completed since 2019 include the following.

- Updated power system needs are reflected in the CIP with a generator at the Police Department/Fire Department HQ facility.
- Fully equipped response UTV in place at training center – 2 more needed with 1 at urgent status.
- One well has been reconstructed with the addition of a flood barrier. Cost and Funding sources were not specified.

d. Risk Assessment

Contributing Factors

Review of the NOAA Storm Event database for Woodbury County between 11/1/2019 and 12/31/2024 provides 27 Sioux City/Sioux City Airport-specific events. Woodbury “Zone” records include 104 events generally impacting the city as well.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
SIOUX CITY ARPT	8/10/2020	7:20	Thunderstorm Wind	50 kts. MG	0	0	0.00K	0.00K
SIOUX CITY ARPT	8/10/2020	7:24	Thunderstorm Wind	58 kts. MG	0	0	0.00K	0.00K

SIOUX CITY	8/5/2021	23:22	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
SIOUX CITY	12/15/2021	16:21	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SIOUX CITY	12/15/2021	16:25	Thunderstorm Wind	65 kts. EG	0	0	10.00K	0.00K
SIOUX CITY ARPT	12/15/2021	16:23	Thunderstorm Wind	71 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	5/12/2022	15:54	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SIOUX CITY ARPT	5/12/2022	18:09	Thunderstorm Wind	59 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	5/30/2022	13:41	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SIOUX CITY ARPT	7/5/2022	15:49	Thunderstorm Wind	51 kts. MG	0	0	0.00K	80.00K
SIOUX CITY	7/7/2022	16:40	Flash Flood		0	0	0.00K	0.00K
SIOUX CITY	4/19/2023	19:14	Hail	1.00 in.	0	0	0.00K	0.00K
SIOUX CITY	5/10/2023	22:54	Hail	1.00 in.	0	0	0.00K	0.00K
SIOUX CITY	7/12/2023	4:20	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
SIOUX CITY ARPT	7/12/2023	4:26	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	9/23/2023	11:30	Hail	1.25 in.	0	0	0.00K	0.00K
SIOUX CITY	10/3/2023	19:25	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SIOUX CITY ARPT	5/20/2024	21:42	Thunderstorm Wind	63 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	5/21/2024	5:26	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
SIOUX CITY ARPT	5/21/2024	5:19	Thunderstorm Wind	62 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	6/24/2024	19:00	Flood		0	0	0.00K	0.00K
SIOUX CITY	7/28/2024	14:40	Flash Flood		0	0	0.00K	0.00K
SIOUX CITY	7/29/2024	22:39	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	7/29/2024	22:40	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
SIOUX CITY	7/29/2024	22:46	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
SIOUX CITY ARPT	7/29/2024	22:45	Thunderstorm Wind	60 kts. MG	0	0	0.00K	0.00K
SIOUX CITY	8/29/2024	15:30	Flash Flood		0	0	0.00K	0.00K

Cumulative record of estimated property damage is \$12, 000 and crop damage is \$80,000. It is important to note that this system is record of reported incidents and related damages, not a full accounting of actual assessed damages. For example, the flooding event as recorded for June 24, 2024 resulted in significant damages in the Leeds and Riverside neighborhoods, including the complete loss of some homes. As of May 25, 2024, the city and many residents continue to work with FEMA and insurance providers to assess the full scope of loss.

Additional factors in determining risk include the following.

- Recent I-29 reconstruction improved roadway capacity and continues to serve as a north-south conductor from Kansas City to Canada.
- The Police Department specified a concern for turnover with 25 new appointments to the department within 2 years. At the time of the mitigation planning meeting, 119 of 131 positions are filled. Several factors contribute to high turnover including but not limited to retiring long-term employees, surplus of other employment opportunities, and it can be expected that there is some reduction of viable candidates due to overall low unemployment rates in the region. Other city department are experiencing similar staffing shortages. Where feasible, roles are consolidated to fill the gaps. The city is conducting ongoing assessment of organizational structure to efficiently serve the community with available human resources.

Priority Hazards

The city maintains the following as priority hazards .

- Flood
- Severe Winter Weather
- Thunderstorm w/Hail & Lightning

Considerable discussion was held regarding Drought and its strain on the city's water supply. As expected, Flooding - Riverine and Flash (34 of 43) and Levee /Dam Failure (23/43) figure highly in the frequency of Very Concerned indications. Sever Winter Storm (22/43) and Tornado/Windstorm (21/43) are also recognized as concerning. Overall, when asked what they consider their top three concerns, respondents indicated Flash Flood, Tornado/Windstorm, and Sever Winter Storm.

Specific open-ended responses to the Personal Impacts portion of the survey include the following. Again, this is notable due to relevance of severe impacts of flooding suffered by many respondents who were either victims of the flood or agents of the community programs that

serve(d) them. Comments are provided in context of how they were written or discussed at time of survey where applicable. Some notes are added to clarify intent of comment.

- [note veteran & homeless impact] I am one of many that live on and off the river considered "non traditional housing" by FEMA, most call it homeless or encampment. When the waters hit a high point and flash flooding came from North of State or North levee gates releasing water many of us were took by surprise. Lack of access to "local news", "no emergency" or "early warning systems". The water rose quickly with little time to evacuate putting us between flood barriers and the water. Most of us lose gear critical to our survival. I am part of homeless vets not help by VA, westcare, but gave all at times.
- early notification of potential flooding -improved levee integrity
- Erosion-losing more of the riverbank. maybe putting red rock along the riverbank.
- Housing-displaced, needs accessible option -Not ready due to unknown
 - Note: Recommendation as noted per discussion with respondent: evac plan include actions for ADA
- IN NEED OF SUPPORT!!
- More notification of evacuation. More communication for City.
- Resident stated more warning would have been helpful.
- Resident stated sandbags were needed and not available.
- Resident stated earlier information would have been good
- It would have been prevented if it was sand bagged. It would help a lot if they would make fixing the appt, top priority.
- Concerned about extreme heat with regard to the low and moderate income populations
- We lack the staff and funding to respond to any issues at this point, existing infrastructure is overwhelmed and when the day comes, we will be face down and ass up.
- Investment in infrastructure is very important
- Notification from our natural disasters such as flooding and what plan the government plans to conduct. (2) For the people whose lives are in danger from the natural disaster (flood) have emergency crews contact them early so they have time to get out. (3) For

tornadoes having more buildings around with basements for people that live in mobile homes.

- Financial extreme hardships and high increase in costs of living. That is making it harder and harder to continue with providing the basic needs
- economic uncertainty; resource consumption
- none at this time
- Hail damage
- Yard washed away in most recent food

e. Mitigation Needs, Actions, & Strategies

The following table includes specific projects identified by the city.

communication /education		
tools/equipment		
Generator & Related Projects	Sioux City	Carry over. Generators still needed at Police Department and other City Facilities. Project remains necessary and carries into 2025 plan. <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Equipment	Sioux City (interest in same expressed by Ida Co.)	New. Sandbagging machine needed for local inventory. City would maintain as property with access through mutual aid for adjacent/nearby communities. Machine enables responders to produce the same amount of bags in 5 hours with 4-5 people as you can with 12-15 people loading manually in 30 hours. Investment estimated under \$50K. Regional impact. Parks Department. (Local - general fund, PDM/FMA) HIGH PRIORITY
Equipment	Sioux City	New. Add large capacity pump to city inventory. Estimated at \$210,000. Sioux City Utilities. (CIP FY 2026) HIGH PRIORITY
Equipment	Sioux City	New. Department needs an updated tool to open and close flood gates that is not electric. <i>Parks Department</i> (Local - general fund, PDM/FMA)) HIGH PRIORITY
development		
Policy	Sioux City	New. Policy/regulation needed to ensure all future wells and well projects must include means for permanent protections upon implementation. City Council, City Planning & Zoning. (No funds anticipated aside from staff hours to compile ordinance &/or modification of existing) HIGH PRIORITY

Improve existing facilities & infrastructure	Sioux City (amended & adopted 01/13/25)	2025: Carry over to 2025 HMP. Bacon Creek Conduit. Estimated \$35M project - Reconstruction and relocation beginning at Rustin Street continuing to the outlet west of Lewis Boulevard. The project addresses the deteriorated condition of the existing conduit underneath Gordon Drive and the risk of structural failure, posing a risk to the traveling public on Gordon Drive. The conduit will be relocated from underneath Gordon Drive off-alignment and the capacity will be expanded to withstand a 100-year flooding event. The project improves resiliency of the utility, transportation infrastructure, and the region. <i>City of Sioux City, IA DOT.</i> (City of Sioux City Engineering Dept, CIP FY 2028) HIGH PRIORITY.
Improve existing facilities & infrastructure	Sioux City (amended & adopted 01/13/25)	2025: Carry over to 2025 HMP. Bacon Creek Channel Reconstruction. Estimated \$18M project is a collaborative effort to stabilize the channel built in 1930. Flooding events have resulted in Missouri River backing up channel, causing entry to the combined sanitary sewer system. Backwater infiltration has caused significant damage to Wastewater Treatment Plant. Project addresses the compromised combined sanitary system and includes repurposing the existing site to coordinate with economic development and urban use vision planning. <i>City of Sioux City, IA DOT.</i> (City of Sioux City Engineering Dept., CIP FY2028) HIGH PRIORITY.
Improve existing facilities & infrastructure	Sioux City	New: Wastewater Plant Improvement Project. In conjunction with other flood-affected area projects, the City is planning significant improvements to its wastewater treatment plant. Estimated at \$300M, the project will address system capacity updates, flood infiltration protections, and improved function overall. <i>City Utilities Department.</i> (BRIC, Local matching funds) HIGH PRIORITY
Improve existing facilities & infrastructure	Sioux City	New. Improve outflow systems at Wastewater Plant. Estimated at \$1.5M. Protects river, local bodies of water. <i>Sioux City Utilities Dept. and related regulatory bodies – IDNR, etc.</i> (Local funds, BRIC) HIGH PRIORITY
Improve existing facilities & infrastructure	Sioux City	New. Reconstruction of well planned, including addition of flood barrier. Project cost not provided. <i>Public Works, Water Dept.</i> (Local funds, Federal/state funds as may be applicable) HIGH PRIORITY.
Improve existing facilities & infrastructure	Sioux City	New. City is seeking to construct a designated storage shed or container for flood response equipment. <i>Parks department.</i> (Local - general fund, PDM/FMA)) HIGH PRIORITY
Relocate critical facilities	Sioux City	New. Sioux City is looking at relocation of Riverside lift station outside of potential flood area. Due to existing structure's age, replacement may be warranted. Still in preliminary planning stages with expected cost not immediately available. <i>Public Works, Waterworks.</i> (local funds, may be eligible for disaster/disaster mitigation funds, TBD) HIGH PRIORITY
flow control		
Flood protection	Sioux City	New. Flood Mitigation Ponding project for FY27 in Leeds area. Full scope to be determined – intent is to mitigate frequent

		occurrence of flash flood points by creating intentional water retention areas. Cost is estimated at \$4M. Public Works, contracted services/labor. Local funds, state mitigation funds as available. HIGH PRIORITY
Flood protection	Sioux City:	New. Levee Extension along Big Sioux River affecting Riverside neighborhood. The project estimated at \$2.5M is under review for implementation. Extreme historical flooding in 2024 resulted in flood protection actions as dictated in neighboring state jurisdiction. Outcome of that last-resort implementation exposed an otherwise protected area, with significant damage to or loss of approximately 70 homes. <i>Sioux City Public Works, related regulatory systems including but not limited to the Army Corp of Engineers.</i> (CIP requested, Local Funds, BRIC) HIGH PRIORITY
Flood protection	Sioux City:	New. Infrastructure protection. Riverside Collector well-permanent flood barrier and elevated access to the well. <i>Parks Department.</i> (Local - general fund, PDM/FMA) HIGH PRIORITY
Flood protection	Sioux City:	New. Infrastructure protection. Well and switchgear in Chris Larsen boat ramp- needs a deployable closure structure instead of sand bags. Needs to have plan to increase wall height if necessary as it was under built. <i>Parks Department.</i> (Local - general fund, PDM/FMA) HIGH PRIORITY
Flood Protection	Sioux City	New. Hesco sandbags needed to improve flood prevention. This \$40, 000 project may also be categorized as Equipment. <i>Public Works.</i> (Local funds, FMA funds, other response/emergency management funds as may be available) HIGH PRIORITY
Flood Protection	Sioux City	New. City is looking to replace wire weight gauge on Floyd River with USGS Auto-Read gauge, allowing remote alerts. <i>Parks Department.</i> (Local - general fund, PDM/FMA) HIGH PRIORITY
Drainage projects	Sioux City	New. Southbridge development will affect function of existing drainage ditch, which protects water treatment plant. A 46M project is planned and funded to ensure sufficient function FY26-28. <i>City Utilities</i> (CIP) HIGH PRIORITY
Drainage projects	Sioux City	New. City is planning stormwater drainage improvements at Pulaski Park area in Morningside. A collaborative effort with Morningside university resulted in \$1.5M investment, in the planning stage in 2025 with implementation set for 2026. <i>Environmental Services Dept. coordinated with Morningside University</i> (CIP) HIGH PRIORITY
refuge		
technology		
natural barriers/ supports		
Stabilization	Sioux City	New: Tree replacement plan included in CIP. Replace trees that have been removed due to dead/diseased as means of soil stabilization, wind break, and relief from extreme heat/sun events. Parks & Recreation Department. Local funds via CIP, grants as available - DNR, tree foundations, MidAmerican, etc.) HIGH PRIORITY.

Additional projects identified as necessary include the following.

- Re-establish voice-over capacity to warning siren system
- Generators at firehouses – added in recent project but still needed at other stations
- Police dept needs:
 - High end drone with thermal imaging capacity (\$25,000)
 - UTV (\$30,000 fully equipped as PD unit)

Projects specific to SCFR department include:

- CIP 159-018 – Apparatus Replacement – In FY207, we will be replacing the squads, to include chassis and lift arm mechanisms/mounts. This is utilized both as EMS response vehicles, but also grass rigs, tow vehicles for rescue boats, and general utility functions. The estimated cost is \$392,094.
- CIP 159-031 Public Safety Generators – Station 1 will be replaced in 2025, so may be a little late on that one. But HQ is scheduled to be replaced in 2028 at an estimated cost of \$83,000.
- CIP 539-227 Bypass Pumping Equipment – According to Brad Puetz, the city is looking into purchasing a 10-inch portable dry prime trash pump and 400 feet of suction and discharge hose for use during flood emergencies. This project was proposed after the Riverside flood and has an estimated cost of \$120,000.
- Storm Sirens (unspecified locations)
 - Currently using old radio technology, interest in updating internal radios to be on 800 trunked system – HIGH PRIORITY
 - Update to the sirens to solar power to eliminate the need for MidAmerican feed.
 - Study to determine proper city coverage

14. SLOAN

a. Profile

The city of Sloan is located in the southwest corner of Woodbury County, just east of Interstate 29. State Highway 141 and Old Highway 75 intersect at the southwest corner of the city. Boyer Ditch continues south out of the City. More information about Sloan can be found on the city's website at <https://sloania.com/>.

City Governance & Community Supports

Sloan is governed by a five (5) person elected council and the Mayor. Offices in addition to the Mayor and Council include the following.

- Emergency Services (Fire & Rescue Department)
- Gas & Electric Utilities
- Local Phone / Cable / Internet Utilities
- Parks & Recreation
- Sanitation & Recycling
- Water Utility

The city is also served by the Planning & Zoning Commission. The City of Sloan Fire and Rescue Department is staffed by volunteers. Law enforcement is provided by the County.

Demographics, Housing, & Economics

CensusReporter.org estimates a population of 884 for Sloan in 2023⁶⁸, showing a decline from decennial census estimate of 1,042 in 2020. With 372 households, the community enjoys a median household income of \$73,750, which is significantly higher than the Woodbury County average, reflecting a stronger local economy. Sloan's population includes a larger percentage of older adults compared to the county and state, with nearly 19% of residents aged 65 and over. The number of young children is relatively low, which is in line with the state average.

⁶⁸ Source: <https://censusreporter.org/profiles/16000US1973605-sloan-ia/>

While the poverty rate in Sloan is slightly below the county average, it still reflects some economic challenges. Additionally, the percentage of residents living with a disability is lower than the state average but slightly above the county's, indicating a moderate need for accessible services and support.

<i>Community Characteristics</i>	
Population (2023)	884
Population (2020)	1,042
Total Households	372
Median Household Income	\$73,750
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	51	5.8%	7.3%	6.3%
65 years and older	167	18.9%	14.3%	16.0%
Below the poverty level	138	12.6%	14.0%	12.0%
Living with a disability	91	10.3%	12.4%	11.6%

Sloan, Iowa, has a total of 378 housing units, with 370 of them occupied, resulting in a high occupancy rate of 98%. The vacancy rate is quite low, with only 8 units vacant. Mobile homes make up a small portion of the housing stock. The majority of homes were built before 1970, while nearly half of the housing was constructed between 1970 and 1999. A smaller number of homes were built after 2000, indicating that most of the housing stock in Sloan is older. This mix of housing ages suggests a relatively well-established community, though there may be opportunities for updating and modernizing some of the older structures.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	378	-
Occupied	370	98%
Vacant	8	2%
Mobile Homes	4	1%
<i>Age of Residential Structure</i>		
Built 2000 or later	32	6.9%

Built 1970 – 1999	206	44.7%
Build 1969 or earlier	223	48.4%

More demographic and community data can be found on the U.S. Census webpage for Sloan.

Leading Employers

Sloan is primarily composed of smaller businesses and workplaces. Leading employers in/near the city include:

- Westwood Community School District
- Uncommon Grounds
- WinnaVegas Casino and Hotel (outside city limits)

Critical Facilities

City Hall	428 Evans St
Community Center	423 Evans St
Park & Splash Pad	418 Alderson St
Park Restrooms	403 Buckley
Water Treatment Plant	700 Johnson St
Maintenance Garage	
Sewage Treatment Plant	
Pump/Electric Switches	5th St @ Brown St
Water Tank	Old Hwy 75 @ Johnson St
Pump House	425 4th St
Sports Complex	400 8th St
Hopkins Bldg	502 Brown St
Library	502 Evans St
Lift Station	1870 Hwy 141
Golf Course/Clubhouse	3212 Old Hwy 75
Transformer	
Pump House	208 5th St
Water Tower	

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

Westwood Schools	1000 Rebel Way
Burgess Clinic	409 Evans St
Community Church of Christ	502 Beall
Skien Lutheran Church	11929 Aspen Ave
Evangelical Covenant Church	306 Buckley

This list is not exhaustive. Additional community supports may include other private businesses and individuals. Residents of Sloan can also utilize facilities and services provided by nearby communities. Cumulatively, these all add to the city's network of support and communication in times of crisis.

Valuation of City Assets

Total Blanket TIV	\$	10,685,053
Building	\$	10,031,530
Personal Property	\$	653,523
Misc Property Sched	\$	158,500
Misc Property Unsched	\$	<u>67,788</u>
Total TIV	\$	<u>10,911,341</u>

b. Participation

An in-person mitigation planning meeting, facilitated by SIMPCO was held at Sloan City Hall on February 18, 2025 with City Clerk Dixie Peters in attendance. One survey was submitted indicating Sloan as jurisdiction of residence.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan	
<i>Policies/Ordinance</i>	
• Building Code	• Storm Water Ordinance
• Drainage Ordinance	• Subdivision Ordinance
• Floodplain Ordinance	• Tree Trimming Ordinance
• Landscape Ordinance (w/in covenants)	• Zoning Ordinance
• Nuisance Ordinance	
<i>Programs</i>	
Zoning/Land Use Restrictions	
Codes Building Site/Design	w/in covenants; restrictions when buying
National Flood Insurance Program (NFIP) Participant	CID #190299
ISO Fire Rating (not updated)	Sloan Class 6; Sloan FD, Class 6/9
Property Acquisition	
Planning/Zoning Boards	
Tree Trimming Program	
<i>Staff/Department</i>	
Building Code Official	
Building Inspector	
Public Works Official	
Emergency Management Coordinator	City clerk @ local level
Emergency Response Team	Fire and Rescue
<i>Non-Governmental Organizations</i>	
Veterans Groups	Smith-Rhodes American Legion
<i>Local Funding Availability</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	
Levy taxes for a specific purpose	
Collect fees for water and sewer services	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

communication/education		
Warning Sirens	Sloan/ Westwood Schools	2020: Warning siren at south end of town, serving school & rec facilities; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Sloan	Complete. A siren was installed to better serve the areas of outdoor school facilities.
tools/equipment		
development		
flow control		
refuge		
technology		
natural barriers/supports		

The city's comprehensive plan was completed in 2020. In time for anticipated housing development, Sloan has adopted the IBC and IPMC by reference with exceptions as means of increasing resiliency. The city installed a new bathroom at the city park serving dual purpose as a modest shelter. They have also added a splash pad to better offer residents and visitors respite from extreme heat.

The city is monitoring dead/diseased trees in easements, rights of way, and parking. Removal is drawn from the annual budget as needed. Replacement will be addressed through Parks and Recreation, as an ongoing assessment of need.

d. Risk Assessment

Contributing Factors

An assessment of the NOAA Storm Event database includes seven reports specific to Sloan, many for the same day.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
SLOAN	5/12/2023	18:46	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
SLOAN	7/12/2023	4:35	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K

SLOAN	6/12/2024	17:29	Hail	1.50 in.	0	0	0.00K	0.00K
SLOAN	6/12/2024	17:33	Hail	1.50 in.	0	0	0.00K	3.00K
SLOAN	6/12/2024	17:49	Hail	1.75 in.	0	0	0.00K	0.00K
SLOAN	6/12/2024	17:50	Hail	2.00 in.	0	0	0.00K	0.00K
SLOAN	6/22/2024	22:00	Flood		0	0	4.130M	0.00K

Priority Hazards

- Tornado/Windstorm
- Severe Winter Storm
- Flood – *both river and flash flood issues as they impact residential basement flooding*

Survey response indicates significant concern about Dam / Levee failure.

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
development		
Improve existing facilities & infrastructure	Sloan	New. Sloan is preparing for a water infrastructure improvement project including wastewater treatment and a new water tower. The project will include generators and/or generator transfer switches where applicable and practical. Project is expected to exceed \$3M. <i>Public Works, contracted engineer.</i> (Local funds, loans, others as may become available.) HIGH PRIORITY
Improve existing facilities & infrastructure	Sloan	New. Sloan is seeking funding to support add lighting to parks and enhance trail network to improve access as well as general public safety and wellbeing. City Council, Parks committee. (Local funds, others to be determined.) HIGH PRIORITY
flow control		
refuge		
technology		
natural barriers/supports		

Road projects are planned, with most consisting of routine maintenance. Drainage maintenance/improvements will be addressed as applicable. Projects that are not necessarily mitigative but essential for community health include a new housing development.

15. SMITHLAND

a. Profile

The city of Smithland is situated in south central Woodbury County. State Highways 141, 31, and 92 all converge near the center of Smithland. The Little Sioux River runs to the east and south of the City. An oxbow lake can be found just south of city limits.

City Governance & Community Supports

Smithland is governed by a five (5) person elected City Council and a Mayor. Offices in addition to Mayor and Council include City Clerk. The Little Sioux Grant Township Fire Department is located in Smithland and is staffed by volunteers. The City contracts with Woodbury County for law enforcement services. The City of Smithland is a member of the NFIP program.

Demographics, Housing, & Economics

For Smithland, Iowa, CensusReporter.gov shows an estimated population of 148 in 2023⁶⁹, down from decennial census estimates of 187 in 2020. The same source shows town has 76 households and boasts a relatively high median household income of \$83,000, significantly higher than the average for Woodbury County. Smithland has a notably older population, with nearly 38% of its residents aged 65 and over, far above both the county and state averages. The town has a very small percentage of young children, consistent with a more mature demographic. The poverty rate in Smithland is low, reflecting overall economic stability, though the town does have a higher percentage of residents living with disabilities compared to the county. This may indicate a need for additional services and support for individuals with disabilities in the community.

⁶⁹ Source: <https://censusreporter.org/profiles/16000US1973650-smithland-ia/>

<i>Community Characteristics</i>	
Population (2023)	148
Population (2020)	187
Total Households	76
Median Household Income	\$83,000
Median Household Income – Woodbury County	\$51,350

<i>Vulnerable Populations</i>	<i>Count</i>	<i>Percent</i>	<i>Woodbury</i>	<i>Iowa</i>
5 years and younger	2	1.4	7.3%	6.3%
65 years and older	56	37.8%	14.3%	16.0%
Below the poverty level	9	4.7%	14.0%	12.0%
Living with a disability	36	17.6%	12.4%	11.6%

Smithland, Iowa, has a total of 93 housing units, with 76 currently occupied, resulting in an occupancy rate of 82%. The town has a relatively high vacancy rate of 18%, indicating some availability in the housing market. Mobile homes make up a small portion of the housing stock. The majority of the homes in Smithland were built before 1970, with a smaller number constructed between 1970 and 1999. Very few homes have been built since 2000, suggesting that most of the housing in the area is older. This aging housing stock may point to opportunities for renovation or updating to meet the needs of the community's current residents.

<i>Housing Characteristics</i>	<i>Count</i>	<i>Percent</i>
Total Housing Units	93	-
Occupied	76	82%
Vacant	17	18%
Mobile Homes	7	8%
<i>Age of Residential Structure</i>		
Built 2000 or later	2	2.2%
Built 1970 – 1999	22	24.2%
Build 1969 or earlier	67	73.6%

More demographic and community data can be found on the U.S. Census webpage for Smithland.

Leading Employers

Leading employers in town include the Country Store and Buffalo Joe's.

Critical Facilities

Smithland City Hall	110 Jackson St
Pump House	N Hickory
Ball Park	
City Maintenance Bldg	
Museum	S Hickory
Lagoon & Related	301 W Main St
Back-Up Well; Water Pump	210 Pine St

Community Supports, Vulnerable Populations, Gathering Locations, & Local Areas of Interest

No major gathering places outside those as included in the Leading Employers list were noted.

Valuation of City Assets

Valuation of assets based on the 2025 statement of valuations provided by Smithland's insurance company including Building and Business Personal Property is **\$816,510** – more than double the valuation provided in 2020.

b. Participation

Facilitated by SIMPCO, a mitigation planning meeting was held at the Clerk's Office on December 16, 2024 with the following in attendance.

- Courtney Schmitt, City Clerk
- Paul R Frahm, Maintenance Superintendent

Three surveys of the 251 total primary surveys submitted indicate Smithland as jurisdiction of residence.

c. Community Capabilities

<i>Plans/Guidance Documents</i>	
Comprehensive Plan (2020)	
<i>Policies/Ordinance</i>	
• Building Code • Debris Management Plan • Floodplain Ordinance (updated 07/18/24)	• Nuisance Ordinance • Subdivision Ordinance • Tree Trimming Ordinance
<i>Programs</i>	
National Flood Insurance Program (NFIP) Participant	CID #190300
ISO Fire Rating	Smithland Class 8; Smithland FD Class 8/9
<i>Staff/Department</i>	
Public Works Official	
Emergency Management Coordinator	City clerk @ Local level
Emergency Response Team	Fire Department; Oto Ambulance
<i>Non-Governmental Organizations</i>	
Veterans Groups	Leslie F Seaton American Legion and Auxiliary
<i>Local Funding Availabilities & Authorities</i>	
Apply for Community Development Block Grants	
Fund projects through Capital Improvements funding	
Levy taxes for a specific purpose	
Collect fees for water and sewer services	
Ability to incur debt through	• general obligation bonds • special tax bonds • private activities

Review of Actions Taken (Since 2019)

Smithland included one project in the 2020 HMP. The project described in the table below is carried over with modification to this Plan.

communication /education		
Warning Sirens	Smithland	2020: Warning siren improvement/replacement needed to better perform alerts for residents. Replacement or updating must include connection to County Communications Center. City Council. City staff, County EMA. (Local funds, county supports, community benefits programs, fundraising, PDM) HIGH PRIORITY
Warning Sirens	Smithland	Update. City has determined replacement of siren is necessary as parts are no longer available to maintain current siren.
tools/equipment		
development		
flow control		
refuge		
technology		
natural barriers/ supports		

Other actions taken since 2019 include a Floodplain Ordinance update.

d. Risk Assessment

Contributing Factors

The NOAA Storm Event database indicates one report specific to Smithland between 11/01/2019 and 12/31/2024. Events as categorized under Woodbury Zone and Monona Zone affected Smithland as well. Details of those events are included in respective county profiles under Risk Assessment.

<i>Location</i>	<i>Date</i>	<i>Time</i>	<i>Type</i>	<i>Mag</i>	<i>Dth</i>	<i>Inj</i>	<i>PrD</i>	<i>CrD</i>
SMITHLAND	7/29/2024	23:08	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K

Priority Hazards

- Tornado/Windstorm
- Flood
- Grass or Wildland Fire

Survey respondents provided a high frequency indication of Very Concerned about Tornado/Windstorm, Flood, and Thunderstorm with Hail & Lightning. Specific response to Top Three Concerns prioritized Infrastructure Failure, Flood, and Tornado/Windstorm.

e. Mitigation Needs, Actions, & Strategies

communication /education		
Warning Sirens	Smithland	Carry over. Replace warning siren. <i>Public Works, City Clerk, County EMA</i> (local funds, community foundation grants) HIGH PRIORITY
tools/equipment		
Generator & Related Projects	Smithland	New. Generators are needed at the Wastewater Plant and Fire Hall as means of maintaining operations during power outages. <i>City Maintenance, County EMA</i> (local funds, community benefit funds, fundraisers, pre-disaster / mitigation funds as available)
development		
flow control		
refuge		
technology		
natural barriers/ supports		

V. SCHOOL DISTRICTS PARTICIPATING AS JURISDICTIONS

A. Summary of Relevance to Plan

Most school districts serving the Region and containing at least one facility within Region boundaries have participated in the development of this Plan. Each participating district is interested in enhancing available training in regard to tornado, fire, and active shooter/intruder drills, and others as specified in various profiles. Security and related systems undergo constant review and analysis, with upgrades implemented as needed. Additionally, many have identified projects that have a side benefit of positively supporting mitigation of weather-related disasters including but not limited to:

- Roofing and/or structural improvements to reduce hail damage potential and/or leaks from heavy rain/snow,
- improved drainage to specifically redirect water flows away from structures,
- enhanced protocol for tornado and lightning emergencies during outdoor activities,
- establishing water reservoirs or drainways to reduce effects of washout during heavy rain and/or rapid snowmelt.

While most districts discussed interest in these and other projects related to hazard mitigation, only a few provided specified actions, strategies and projects, thereby deeming those districts eligible for funding supports for projects as may be outlined in this Plan. School districts may also benefit from projects initiated by the community or county hosting district facilities, either directly or indirectly, from those implemented by respective host entities. Collaborative and independent projects may also be mutually beneficial. In the interest of maintaining the context of a Regional Plan, identified details as available for needed and/or planned projects for all School Districts are included in the Region listing of Mitigation Actions, Strategies, & Projects. As applicable, projects may be listed according to the city hosting the facility needing mitigation action. In the event of district-wide program implementation, the project may be included under the listing of the city hosting administrative offices.

Effects of weather events through the region are likely to have overlapping effects as all districts allow open enrollment, attracting students from other districts, towns, and/or counties. This compounds effects of extreme weather events and other hazards from road blockages to cross contamination when hazardous materials or pandemic disease are factors. This exemplifies need of coordinated communications and procedures across all systems – city, county, state, and federal.

Preparation of this Regional Plan includes student input by way of student surveys. Each jurisdiction was invited to share a modified version of the mitigation planning survey with students. With three districts responding administering the survey, 65 were submitted providing perspective of regional youth. Jurisdictions and the region as a whole are encouraged to take the cumulative student response into consideration when determining action plans and communication thereof.

Please note that school districts included in the jurisdiction listing, unless specifically indicated, have actively participated in the development of this Plan. However, for districts that have not identified a specific action, strategy, or project, an amendment must be filed for FEMA and the Iowa Department of Homeland Security to formally recognize respective jurisdictions as eligible applicants for Pre-Disaster Mitigation Funds.

Information outlining the amendment process is discussed in Title I. *Introduction*, Section H. *Amendments and Plan Maintenance*. Templates for amendments and subsequent adoption at the School Board level are found in [Appendix D](#).

B. Jurisdictions

1. AKRON-WESTFIELD COMMUNITY SCHOOL DISTRICT

a. Profile

Akron-Westfield Community School District

850 Kerr Dr

Akron, 51001

Students & Staffing

2024-2025 School Year Enrollment

Grade	Enrolled	Grade	Enrolled	Grade	Enrolled	Grade	Enrolled
PreK	17	3	45	7	40	11	40
K	42	4	41	8	48	12	57
1	33	5	29	9	45	total	563
2	38	6	41	10	47		

Staffing

Certified Teachers	52.5	Support Staff	73

Facilities

Akron-Westfield Facility Name	Address	Building Construction Date	Damages	Structure in Floodplain	Tornado Safe rooms	Bldg. Ins. Valuation
Elementary School	850 Kerr Dr Akron, IA 51001	1977/1997	Wind	No	No	\$29,316,999
Middle School						
High School						
Bus Barn	300 N Hwy 12	n/a				

b. Participation

Facilitated by SIMPCO and the Plymouth County EMA, a virtual planning meeting was held via Teams on January 8, 2025, with Superintendent Derek Briggs in attendance. All school districts were invited to administer an adapted survey to their junior and senior students. Akron-Westfield students accounted for 28 of the total 65 student surveys submitted.

c. Capabilities

Review of Actions Taken

communication/education
tools/equipment
development
flow control
refuge

technology		
Improve effectiveness	Akron-Westfield CSD	2020: Fire Alert System is under review to determine options for audio alerts and direction cues for visually impaired students/staff – Flashing beacon in place for hearing impaired persons; <i>School Board, Plant Engineering/Maintenance</i> (District funds, ADA supports, local funds, fundraisers, PDM) HIGH PRIORITY Complete. District invested \$150,000 on updates to its emergency alert system (2023). Already suited with flashing lights for deaf/hard of hearing students/staff/visitors, audio commands are now incorporated into the system to better serve visually impaired individuals.
natural barriers/supports		

In addition to projects as noted, the school board has approved use of district facilities for emergency refuge, shelter, and/or command centers as may be needed in a disaster situation.

The district has invested \$16M in facilities updates in recent years, with additional projects in a long-term plan. One small generator supplies emergency short-term power for the kitchen and emergency lights during power outages. Transfer switches are in place for pending generator connections.

Trees are in plentiful supply throughout the district campus. There have been 12 trees lost due to disease. No replacement needs have been identified. One area has been modified through a remodel with buildings providing windbreak and shade at times.

Emergency radios have been installed. Inter-staff communications are enhanced by an app enabling any user to issue alerts. The system is connected to Emergency Response and connects to 100% of the building.

Improved resolution cameras have been added to the interior and exterior of buildings. Facility entry/exit controls provide monitoring of number of persons in/out, open door alerts, and intercom and sound system access.

Other security-based improvements include:

- Protective glass

- Secured entry
- Intercom at entry

d. Risk Assessment

Contributing Factors

A-W CSD is located on the north end of Akron, not far from the Big Sioux River. River flooding has been a consistent concern in recent years; however, Flash Flood is more of an issue. With saturated ground, nearby standing water and washout from displaced storm runoff is a community issue. The school's bus barn is in the only flood-prone area, with flooding events on the rise accumulating as much as 3 feet of water in one week.

Road closures due to flooding are an issue for access to the schools, but not necessarily within the control of the school to make improvements.

A culvert that runs under the highway diverts water directly onto the A-W campus. The district is without means to drain effectively. Resolving this issue is among the district's planned strategies.

Student responses are relevant to future consideration as may be determined by the School Board and/or the Superintendent. Measures implemented based on student perspective can boost confidence throughout the district in safety/security and general student wellbeing. Some of the open-ended questions and responses are included below for reference.

➤ Has anything been done to reduce the impacts of hazardous or disastrous events for the school district you are representing?

Several students indicated that they didn't know if actions had been implemented, some stated none, and a few referenced only drills. Additional comments are as follows.

- Has not been any threat of events no need to reduce so far.
- Making better dams
- no, not really concerned for school
- Planning for a emergency ahead of time can be useful.

- Salt
- Some drills have been put in place for these things.
- They had tests done on the air at our school and they clean every class room everyday.
- Unsure, possibly safer bus routes.

➤ What personal impacts have you experienced due to any of the hazards identified above?

Nine students indicated none. Additional comments are provided.

- Flooding, my house got flooded
- Floods personally affected friends and family members, terrorism is terrifying
- Nothing but flooding has had impacts on my friends and Tornados have effected family and crops. while severe heat and drought have caused crops to die leaving my family farms with no money. the severe weather also effects the green house we have at the school.
- Tornados have been around here for decades but we had a flood here that got to my friends house and not a pandemic right now but years ago we went into lockdown but a few kids have been sick a lot actually.
- flood
- covid, blizzard, 2024 flooding
- [There] will be sickness going around at least once a school year.
- Flooding and levee failure.
- I walk to and from school even when it's cold or raining besides the occasional ride from my Mom or brother.
- Getting sick more often and seeing other students getting sick in our school.
- It's probably just the flooding.
- I helped clean up the flood
- having to clean up my town after the flooding
- Flooding which swept out my entire house
- my house was flooded
- [Couldn't] get to the top of the hill when it was snowy
- Couldn't go to Akron

- Are there any mitigation projects you would like to see implemented to reduce the impact of hazard/disastrous events in your school district?

Several students indicated no or n/a. Remaining are as follows.

- I honestly don't know what this means
- Yes, but i'm not sure what you can do to stop flooding, [droughts], or a heat wave.
- Probably just some safety protocols for more than just a fire and tornado.
- Not that I can specifically know of.
- Something to see how many diseases and germs are in each classroom would be pretty cool to see. and maybe even on the drinking fountains in the hallways.
- I don't know what that word means.
- Having better-built dams and backup situations
- Yes, some schools do try to reduce the hazard of a dangerous event
- we sandbagged businesses
- Higher levees

Priority Hazards

The district carried over the same priorities as in previous plans.

- Flood – Flash
- Tornado / Windstorm
- Thunderstorm with Hail & Lightning

Student survey respondents indicated Flooding (Flash & Riverine), Tornado/Windstorm, and Pandemic Human Disease with the highest frequency of Very Concerned. When asked top three concerns, respondents indicated Flash Flooding (16/28), Severe Winter Storm, and Thunderstorm with Hail & Lightning (each at 9/28). Relevant in determining wording on notifications, respondents indicated the following as most trusted source to provide information on how to make their household and home safer from natural disaster.

- Family member
- Red Cross
- Government Agency

e. Mitigation Needs, Actions, & Strategies

communication/education		
Promo/Info	Akron-Westfield CSD	New. School is interested in sharing information with students & their families. District plans to coordinate with Plymouth Co EMA for PSA formatted messages to include in communications and on website. District admin team, Principal, County EMA (no funding needs anticipated) HIGH PRIORITY
tools/equipment		
Generator & Related Projects	Akron-Westfield CSD	New. Generator on facilities list but purchase and implementation not scheduled. Cost estimated at \$350,000. <i>School Board, Collaboration with city hosting facility, County EMA</i> (district general fund, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
development		
flow control		
Drainage projects	Akron-Westfield CSD	New. Culvert under highway directs water to school facilities in high water events, leaving district with excess water accumulation and no means of draining. District is interested in partnering with city and IA DOT as applicable to determine drainage and/or flow control solutions. Project may include study and/or implementation of solution as identified. Potential solution is plug for culvert that will sustain flow unless highway is overtaken by water. <i>District facilities staff, City of Akron, Plymouth Co Roads, and Plymouth Co EMA</i> (fund sources to be determined upon identifying feasible solution) HIGH PRIORITY
Drainage projects	Akron-Westfield CSD	New. Address bus barn flooding by waterproofing and implementing a process allowing the structure to serve as a “passthrough” to minimize effects of flooding. <i>District maintenance staff</i> (district facility maintenance funds, PDM as may be available) HIGH PRIORITY
refuge		
technology		
natural barriers/supports		

2. ALTA-AURELIA COMMUNITY SCHOOLS

a. Profile

Alta-Aurelia Community Schools

1009 S. Main St.

Alta, 51002

<https://www.alta-aurelia.org/>

Aurelia hosts one of the district's elementary program which includes a daycare and preschool. With the City of Alta (Buena Vista County) hosting the administrative offices for Alta-Aurelia Community Schools, the district is a participant in the 2023 Buena Vista County Hazard Mitigation Plan. Therefore, Alta-Aurelia Schools are included in this Regional Hazard Mitigation Plan by reference and as a potential partner in strategies as identified by the City of Aurelia and/or Cherokee County. The Buena Vista HMP can be found on the county website at <https://buenavistacounty.iowa.gov/wp-content/uploads/2024/05/2023-Buena-Vista-County-Hazard-Mitigation-Plan.pdf>.

3. CHEROKEE COMMUNITY SCHOOLS

a. Profile

District Administration Offices

600 W Bluff St

Cherokee, 51012

<https://www.ccsd.k12.ia.us/>

Serving as the district school for the cities of Cherokee and Larrabee, facilities are all located in Cherokee.

District Mission: *With community involvement, we will empower learners to become contributing members to our changing world.*⁷⁰

District Goals:

1. To support and expand career opportunities with local entities, in addition to college readiness, by prioritizing/allocating resources, both staff and facilities.

⁷⁰ Source: <https://www.ccsd.k12.ia.us/>

2. To develop problem solving skills, interpersonal skills, and team building skills for all students, while increasing implementation/alignment of Iowa Common Core, by prioritizing/allocating resources.
3. Improve communication between all stakeholders in the district that will promote an atmosphere that encourages positive relationships.

Students & Staffing

Based on the district's website, enrollment for the 2024-2025 school year was 1,194 students with 207 staff and faculty.

Facilities

• Cherokee Elementary School	206 E. Indian Street
• Cherokee Middle School	208 E. Indian Street
• Cherokee Washington High School	600 W. Bluff Street

b. Participation

Superintendent Tom Ryherd attended the Cherokee County mitigation planning meeting held at the Cherokee County EMA office January 17, 2025. Additional information was exchanged via email between the superintendent and SIMPCO.

c. Capabilities

Review of Actions Taken

A complete list of implementations since 2019 was not provided by the district, though routine maintenance included consideration of mitigative support strategies.

d. Risk Assessment

Contributing Factors

School district serves an area of about 114 square miles, contributing to concern of weather impacting travelers – staff and students alike, whether riding a bus or in a personal vehicle. With potential for longer commutes, transportation incidents are among district concerns.

Latent human-caused hazards provide an additional layer of preparedness requirements. Drills are in place for tornado, fire, and active shooter incidents.

Priority Hazards

The Cherokee Community School district recognizes the county's prioritized hazards including Flood, Tornado/Windstorm, and Drought. However, the following concerns are elevated at the school district level.

- Terrorism (Active Shooter)
- Transportation Incident
- Infrastructure Failure
- Hazardous Materials Incident

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Cherokee County, Cherokee CSD	New. generator to facilitate use of High School as refuge / shelter location <i>County EMA, School Superintendent / Board, City of Cherokee</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
development		
Improve existing facilities & infrastructure	Cherokee, Cherokee CSD	New. Collaborative effort to implement ADA improvements on school campus and at access routes as applicable throughout the City. Some projects have been implemented (no detail provided). Costs will be determined by project as implemented. <i>Cherokee Community Schools, City of Cherokee.</i> (accessibility grants, local funds, trail funds where applicable, wellness grants, Safe Routes to School funds as applicable, CDBG) HIGH PRIORITY.
flow control		
refuge		
technology		
natural barriers/supports		

4. GALVA-HOLSTEIN (RIDGE VIEW SCHOOL DISTRICT)

a. Profile

Ridge View School District

519 E Maple Street
Holstein, 51025

The Galva-Holstein School District and the Schaller-Crestland School District combine to create the Ridge View School District. The programs offer career and technical programs in the following areas: Agricultural Education, Business Education, Industrial Education, Medical Opportunity Education, and Family and Consumer Sciences Education. A unified school district, both programs share facilities. Information as provided reflects Galva-Holstein facilities and student populations as they are based within the planning region. More information about the Galva-Holstein and the Ridge View School District can be found on their website at <https://www.rvraptors.org/>.

Students & Staffing

Current year enrollment

Grade	Enrolled	Grade	Enrolled	Grade	Enrolled	Grade	Enrolled
PreK	n/a	2	39	6	48	10	49
T-K	n/a	3	39	7	58	11	68
K	48	4	29	8	51	12	57
1	28	5	47	9	70	total	428

Staffing

Staff	47	Administration	3

Facilities

School	Address
Ridge View High School	519 E Maple St, Holstein
G-H Elem School	
G-H Upper Elem	207 Noll St, Galva
G-H Middle School	100 Noll St, Galva
Bus Garage	605 E 2nd St, Holstein
Bldg	316 S Lubeck St, Holstein

A current valuation of district facilities is not provided. A base valuation from 2019 was \$30,133,785. It can be expected that the valuation increased by at least 25%. The district did acquire additional property adjacent to the bus barn that is earmarked for a new alternate ed facility to house trade and career programming.

b. Participation

Facilitated by SIMPCO and the Ida County EMA Coordinator, a virtual mitigation planning meeting was held via Teams on February 13, 2025 with Superintendent Adam Bisenius in attendance.

c. Capabilities

Review of Actions Taken

The district has upgraded security cameras, entries, and has implemented a fob access system, using funding supports through the Department of Education. Radios have been provided through County EMA. The district has invested in new facilities, with more projects pending. Since 2019, improvements have been made to the north gym, the daycare center, offices. The automotive shop and bays are all new (\$11.5M-\$12M investment).

One of the benefits of a unified school district is a built in shared-facility network. Galva-Holstein is able to coordinate with all facility administration for each location to assess conditions and relocate as needed. Such relocation would be temporary and for emergency situations, however, if a disaster were to occur in or around any of the communities hosting facilities, it would be likely that neighboring residents would be able to access refuge if needed. No formal agreement is in place to use schools as shelter or command centers, but such use is implied should circumstances necessitate such use.

d. Risk Assessment

Contributing Factors

A recent push to center facility utilities on electric systems is problematic in power outages. Some facilities have gas-powered options which has proved beneficial in maintaining operations and function in even short-term power outages. Tree removal is needed throughout

the campuses, with many falling within the host city’s jurisdiction. Replacement of removed trees is not currently a concern.

Priority Hazards

With buildings in five towns, there is a constant and ongoing need for roof repairs. Keeping in mind the types of recurring damages, the district identified the following as priority hazards.

- Tornado / Windstorm
- Thunderstorm with Hail and Lightning

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Ridge View SD (Galva-Holstein)	New. Generators and transfer switch installment need for facilities throughout the district. Galva-Holstein Elementary is all electric, allowing for no recourse should there be a power failure (heat in winter, hot water, lights, etc.). District is seeking opportunity to provide backup power to sustain operation during school year and to enable use a community refuge location in a major disaster/evacuation situation. <i>School Superintendent, City Council, City Public Works, School Facilities team, County EMA.</i> (School funds, city support funds and/or partner for grant opportunity through PDM.) HGIH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/supports		

In addition to mitigation-specific projects included in the above table, the district is in the planning stages of facility expansion including a new weighroom, new wrestling rooms, and classrooms with a price tag estimated between \$5M and \$8M. During the planning process, the district is considering the feasibility of a saferoom within the new facilities.

5. HINTON COMMUNITY SCHOOLS

a. Profile

Hinton Community School District

315 West Grand

Hinton, 51024

Students & Staffing

Current year enrollment and staffing details were not provided for this plan.

Facilities

School	Address	Building Construction Date	Bldg RC Valuation
Elementary School	315 W. Grand Hinton IA 51024	2011	\$ 13,818,933
Hinton Middle School		1956 /1962 / 1968	\$ 24,273,469
Hinton High School			\$ <u>2,373,322</u>
Bus Barn; Other Service Bldgs			\$ <u>40,465,724</u>
total			\$ <u>40,465,724</u>

b. Participation

SIMPCO facilitated a virtual mitigation planning meeting via Teams on February 13, 2025 with Hinton CSD Superintendent Ken Slater in attendance. Input provided included contribution from the following administrative supports comprising the Jurisdictional Planning Team.

- Ben Hertenstein, Tech Director
- Sue Popken, School Nurse
- Noah Phillips, High School Principal

Additional input was collected via student survey. Hinton students comprised 33 of the total 65 responses.

The district's signed VPA is on file, dated 2/26/2025.

c. Capabilities

Review of Actions Taken

Hinton Schools have implemented a \$6M improvements project including HVAC, lighting, and electrical work. Work scheduled for 2025 includes 2 roof projects with age being the primary impetus for replacement/repair. Damages due to hail storms on two facilities have been completed. Surface repairs were completed at the elementary playground. District buses have all new cameras and door access.

District facilities are not formally designated as shelters or emergency command centers, however there is a general understanding between the school administration, city officials, and the county EMA enabling use. Hinton Community Schools have instituted the Crisis Go app, an internal alert system with the capacity to connect to 911.

Hinton student responses to the survey indicate News Media, Family Members, and Social Media as trusted information sources regarding natural disasters and other hazards. Three students indicated prior awareness of the Regional Hazard Mitigation Plan prior to being asked to participate in the survey.

d. Risk Assessment

Contributing Factors

Several consideration are given regarding mitigative priorities and strategies, including but not limited to the following.

- Flooding is not an prevailing concern, though stormwater runoff in heavy rain or rapid snow melt may be an issue. Flash floods and other extreme weather is a concern for students commuting to school, especially from rural areas via personal vehicle, carpool, or bus.
- Sheltering-in-place designations send facility occupants to middle hallways for tornado/wind weather events.

- Due to the school campus' proximity to US 20, hazardous materials incidents, especially those in transport, are an overriding concern.

Open-ended questions in the survey allowed students opportunity to specify understanding and/or concerns about various hazards. Following is a sampling representative of all responses.

➤ Has anything been done to reduce the impacts of hazardous or disastrous events for the school district you are representing?

- no we keep having school even when its cold vehicles wont start its so cold
- Yes, weather related.
- I think that precautions have been taken to help with dealing the disasters.
- Tornado drills and fire drills
- Unsure. Doors have been replaced, and HVAC has been done, but there are still concerns.
- Unsure
- Late starts and no school days help keep students and parents off the roads and in the safety of their home.
- Extreme Heat/Cold - We got new Heating & AC this year. In previous years we had window air conditioners that did not cool off the rooms. In the winter, our boilers didn't work right so it was always very hot on the side of the school where the boilers are and was cold on the other side.
- Watching road conditions for all areas students live
- late starts
- I'm not sure but proper actions are taken when disaster occurs.
- Yes
- No. We take per cautions when it does happen.
- not really
- I'm not sure, but we take careful action when a natural disaster does happen.

➤ What personal impacts have you experienced due to any of the hazards [as identified]?

- cars/ trucks dont start and cant leave the house bc of ice or snow.
- Iced up parking lot
- Housing damage.
- Getting to school late friends in ditches
- I have been away on a trip and been concerned for my house during a windstorm with hail.
- Hail damage and downed trees from storms
- My school does not know how to call off on days that we should not have school on due to icy roads!!! (which is concerning because we have had students die from this before)
- Anxiety about said events happening
- Driving in the winter is scary sometimes, not because of my inability to do so but also because of younger drivers not taking necessary precautions.
- I have gotten headaches/migraines from the heat sometimes last school year. This has not happened since we got the new HVAC.
- Decrease in farm yield. Car accidents
- Much harder for me to transport myself to school. Much harder to focus and complete my work in ample time when hazards are looming/underway
- bad roads, icy
- I have only had family members affected by pandemic (Covid)
- Some of the droughts make it hard to raise crop and livestock
- my house flooded, my crops were dry, and hail damage
- We had farm land flood in the spring of 2024
- Coronavirus made me go into isolation for a long time.
- Just covid-19

➤ Are there any mitigation projects you would like to see implemented to reduce the impact of hazard/disastrous events in your school district?

- call off school sooner
- Prevention of Sioux River from flooding, which it keeps doing.

- I would like to see a superintendent who will actually call off snow days when the roads are icy
- More safe shelters for severe weather, like a designated tornado shelter that does not have windows, etc.
- More preparations in place in case of a brush fire, the hill behind our school is covered in dry grass and brush in the spring, summer, and fall.
- no
- I don't know
- No idea
- not specifically
- not really
- Not that I can think of
- No but just how to handle yourself when something like this happens would be good.
- A new school

Priority Hazards

District priorities remained consistent from the 2020 HMP noting the following.

- Terrorism –
- Thunderstorm w/Hail & Lightning
- Tornado/Windstorm

Student respondents indicated Very Concerned under Severe Winter Storm, Tornado/Windstorm, and Pandemic Human Disease at the highest frequency. The same received the most tallies when asked top three priority concerns.

Active shooter concerns, and general student safety is priority for administration. Though not in the top three, students did indicate at least Somewhat Concerned about Terrorism. Trainings are implemented but there remains a significant concern for staff and students.

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Safety/Security Equipment	Hinton CSD	New. District is considering opportunity to improve security systems for facilities including but not limited to locking systems with remote control capacity. <i>Superintendent, District Maintenance</i> (District funds, School safety program, fundraisers, local grant funds) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/supports		

6. KINGSLEY-PIERSON COMMUNITY SCHOOL DISTRICT

a. Profile

Kingsley School

322 Quest Ave. Kingsley, 51028

Pierson School

321 4th St. Pierson, 51048

District website: <https://k-pcsd.org/>

Students & Staffing

Current year enrollment

Grade	Enrolled	Grade	Enrolled	Grade	Enrolled	Grade	Enrolled
PreK	n/a	2	33	6	29	10	31
T-K	n/a	3	33	7	38	11	41
K	33	4	49	8	32	12	30
1	27	5	27	9	38	total	441

Staffing

Based on the online staff directory, there are about 88 employees including staff, faculty, teachers, and bus drivers.

Facilities

School	Address	Construction Date(s)
Kingsley Elementary School (K-4)	322 Quest Ave Kingsley	1991/1997/2002
Kingsley-Pierson High school (9-12)		
Pierson Elementary (4)	321 4th St Pierson	1915/1970/2003
K-P Middle School (5-8)		

b. Participation

SIMPCO facilitated a virtual mitigation planning meeting via Teams with Superintendent Scott Bailey on February 7, 2025 in attendance.

c. Capabilities

Review of Actions Taken

Though the district did not include specific projects in the 2020 HMP, the following mitigative measures taken since 2019 include the following projects.

- Entry security improvements including key access and cameras are in place at both campuses. Sprinkler heads have been replaced throughout district facilities.
- Annual safety trainings include active shooter/intruder training, tornado, and fire drills.

Additional projects improving facility sustainability include but are not limited to the following.

- Renovation investments valuing \$3.8M have been implemented at the Kingsley rec center and gym.
- Roof repairs are ongoing with extensive work nearly complete in Kingsley.
- Iowa DNR performed a tree inspection for the district. Trees are removed as necessary.

Both the Kingsley and Pierson facilities are open to serve as refuge locations in the event of an emergency. Generators would be beneficial in ensuring that capacity.

d. Risk Assessment

Contributing Factors

Alternating flash flooding and drought conditions are an overlying concern resulting in ongoing monitoring of district campuses to determine future projects. Location of facilities and proximity of the staff and student bases contribute to considerable concern for extreme weather – primarily rain, snow, and ice.

Priority hazard determinations are centered on transportation, outdoor recreation/athletics, and damages and related repair/cleanup costs.

Priority Hazards

- Thunderstorm w/Hail & Lightning
- Severe Winter Storm
- Tornado/Windstorm

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Kingsley-Pierson CSD	New. Highschool currently has a generator as installed in 1979. A new generator is need to meet capacity of updated facility and to ensure viability for use as a refuge location in the event of a disaster or other extreme event. Interest in transfer switches at all facilities. <i>Superintendent, District Maintenance/Crew, Plymouth and Woodbury County EMAs as applicable</i> (district and local funds, county supports, PDM as may be applicable) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/supports		

7. LAWTON-BRONSON COMMUNITY SCHOOL DISTRICT

Note: Requests to the Lawton-Bronson Community School District to participate in preparation of this Plan were unanswered. The cities of Lawton and Bronson, as hosts of district facilities, are participants. Should those jurisdictions choose to seek mitigation funds for projects affecting or directly benefiting the district, an amendment may be requested by FEMA or the Iowa Department of Homeland Security and Emergency Management. The Lawton-Bronson Community School District itself is not recognized as an active “Participant” in the Plan. To activate participant status, the city must process an amendment at the local level and file said amendment with Woodbury County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

Lawton-Bronson Jr./Sr. High
100 Tara Way
Lawton, 51030

Lawton-Bronson Elementary
113 W. 1st Street
Bronson, 51007

Information as provided is sourced from the Lawton-Bronson CSD website at <https://www.lb-eagles.org/>.

Facilities

Building	Address
Lawton Junior-Senior High School	100 Tara Way, Lawton, IA 51030
Bronson Elementary School	115 W. 1st St, Bronson, IA 51007
Bus Barn	110 E. Maple, Lawton, IA 51030

8. LE MARS COMMUNITY SCHOOLS

a. Profile

Educational Service Center

Le Mars Community Schools
 940 Lincoln St. SW
 Le Mars, 51031
<https://www.lemarscsd.org/home>

Students & Staffing

Current year enrollment

Grade	Enrolled	Grade	Enrolled	Grade	Enrolled	Grade	Enrolled
SpEd PreK	13	2	129	6	162	10	179
T-K	16	3	145	7	161	11	179
K	123	4	165	8	145	12	158
1	138	5	156	9	151	total	2,020

Staffing

Staffing is estimated at about 290 including administration, teachers, staff, and faculty.

Facilities

School	Address	Year Constructed
Clark Elementary School	201 2nd Ave NW	1939
Franklin Elementary School	400 3rd Ave SE	1939
Kluckhohn Elementary School	1338 Central Ave SE	1974
Le Mars Middle School	977 3rd Ave SW	1972
Le Mars High School		
The Individualized Learning Center	940 Lincoln Street SW	1964
<i>Misc & Auxiliary Bldgs</i>		
• Bus Barn	• Concession Stand	• Weight Room
• Admin Bldg	• Bathroom/Concession Bldg	• Car Garage - Kissinger
• Concession Stand	• Maintenance Bldg	• Car Garage - Le Mars

Valuation of District Assets

Total Buildings	\$	95,314,620
Total Personal Property	\$	5,866,638

Total property in the Open	\$	<u>1,471,142</u>
Total	\$	<u>102,652,400</u>

b. Participation

Facilitated by SIMPCO, a mitigation planning meeting was held at the district offices on December 13, 2024 with the following in attendance.

- Steve Webner, Superintendent
- Codie Kellen, Transportation Director
- Mark Staab, Mechanic
- Jayden Wurth, Maintenance
- Becca Socknat, County EMA Coordinator

c. Capabilities

- The district has agreements with the fire department re: facility and bus availability in the event of an accident. They have designated remote sites for each school building with procedure in place should students need to relocate or evacuate premises.
- No significant changes were implemented due to COVID. Broadband provision is very good with opportunity to check out laptops and hot spots as needed.
- Family alerts are issued via School Messenger, implemented 2021
- There is a generator for the high school science programs. Connections are in place at other facilities.
- Protocol is in place for late starts, early release, and cancelation due to weather or other emergency conditions.
- Tree removal is completed as needed. Trees were added to the Middle School site.

d. Risk Assessment

Contributing Factors

Located in Le Mars, all considerations as noted under the Le Mars Profile and Risk Assessment are applicable to the school district in general. The district includes the following as mitigative measures in response to their Threat Assessment.

- Fencing, cameras, and access fobs for all facilities
- Annual intruder training
- Medical emergency response team and training in First Aid and CPR/AED
- SRO assigned to district
- School bus security – equipped with radios allowing communication with all buildings/buses

Risks related to extreme weather include the following.

- Extreme cold conditions resulted in pipes bursting and flooding classrooms.
- Roof repair/replacement is needed
 - Weight room
 - Garage

Priority Hazards

- Severe Winter Storm

e. Mitigation Strategies, Actions, and Projects

The district included one project specific to mitigation.

communication/education		
tools/equipment		
Generator & Related Projects	Le Mars Community Schools	New. District is interested in acquiring weather radios for each facility. <i>Superintendent, School Board, County EMA</i> (County EMA and related supports) HIGH PRIORITY
development		

flow control
refuge
technology
natural barriers/supports

A major project planned in the next 3 years is a new elementary school building. Mitigative components are included in the project, though not specified for inclusion in this plan.

9. MAPLE VALLEY-ANTHON-OTO COMMUNITY SCHOOLS

Note: While the Maple Valley-Anthon Oto Community School District participated in the development of this Plan, they did not identify any mitigation-specific projects anticipated for completion in the next five years.

Therefore, MVAO CSD is not recognized as a “Participant” under FEMA regulations guiding the development of this Hazard Mitigation Plan. To activate participant status, the district must process an amendment at the local level and file said amendment with the host County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

MVAO Central Office
501 South 7th St
Mapleton, 151034

<https://www.mvaoschool.com/>

Maple Valley – Anthon Oto Community School District has a Whole Grade Sharing Agreement with the Charter Oak-Ute CSD. The elementary school in Charter Oak is not included in this information. A participating jurisdiction within the region, the City of Ute is served by both districts but does not host any district facilities.

Students & Staffing

Current year enrollment

Grade	Enrolled	Grade	Enrolled	Grade	Enrolled	Grade	Enrolled
PreK	20	2	30	6	34	10	57
T-K	n/a	3	35	7	30	11	73
K	37	4	42	8	36	12	64
1	34	5	35	9	62	total	589

Staffing

Administration	11	Teachers	60	Support Staff	47

Facilities

Maple Valley-Anthon Oto High School	501 S 7th St, Mapleton
Mapleton Elementary School	
Athletic Fields	
MVAO Middle School	110 W Division St, Anthon
Anthon Elementary	

Valuation

Estimated valuation of district property is about \$61, 500,000. Vehicle and equipment values may not be included in this assessment.

b. Participation

SIMPCO facilitated a virtual mitigation planning meeting via Teams on February 13, 2025 with Superintendent Jeff Thelander in attendance.

c. Capabilities

Though a formal agreement is not in place, the school district enabled facilities to be used as emergency shelters/refuge locations in the past and plans to continue to do so. Generators are in place to maintain operations in the event of a power outage.

The district has invested in several facility improvements in recent years, with most including mitigative purpose.

Review of Actions Taken

- Phone and communication systems were updated -- \$48,000
- 100+ cameras throughout all buildings & buses -- \$110,000
- Upgrades at the Athletic Complex in Mapleton included sidewalk work that improved access/egress for track, baseball, and football venues -- \$50,000
- New curbs and sidewalks at the Anthon facility improve access/egress and stormwater runoff -- \$30,000
- Improved stability of batting cages structure
- A retractable sun shade was added to the preschool area in Mapleton -- \$5,600
- Reactive procedures to COVID established a more thorough protocol addressing illness.

d. Risk Assessment

Contributing Factors

Weather patterns are always a consideration for the district, especially with the large geographic area the district serves. Transportation Incidents, Infrastructure Failure, and hazards specific to each served community are all to be considered.

Priority Hazards

- Flood
- Tornado /Windstorm
- Extreme weather in general including Extreme Winter Storm and Thunderstorm with Hail and Lightning

e. Mitigation Needs, Actions, & Strategies

The MVAO CSD did not identify any specific projects planned for the next five years. However, the district may be a collaborative partner in projects implemented by host communities. The district continues to include reasonable consideration of mitigation needs when implementing all projects.

10. MARCUS-MERIDEN-CLEGHORN AND REMSEN UNION DISTRICTS

a. Profile

The MMC and RU Districts collaborated in 2016 to form a Whole Grade Sharing Agreement between the Marcus Meriden Cleghorn (MMC) and Remsen Union (RU) Schools. Information as provided was sourced from both administrative offices overseeing the district. Where district-specific information is available, it is noted accordingly.

Students & Staffing

not provided

Facilities

MMC District (Marcus, IA 51035)	
MMCRU High School	400 East Highland Drive
Marcus Elementary School	500 East Fenton St.
MMCRU Alternative High School	403 N Main St.
MMC Bus Barn	200 Eagle Ave.

RU District Facilities (Remsen, IA 51050)	
MMCRU Middle School & Remsen Elementary School	511 Roosevelt
Remsen-Union Bus Barn	717 Madison St.

Each district owns and operates its own buses. RU CSD owns and operates 8 buses. MMC owns and operates 7 buses.

Valuations of District Assets

Marcus-Meriden-Cleghorn CSD	\$40,175,892
Remsen-Union CSD	\$23,185,448

b. Participation

Facilitated by SIMPCO, a mitigation planning meeting was held at the Remsen Union administrative offices on December 13 with the following in attendance.

- Dan Barkel, Superintendent
- Toby Young, PS-8 Principal
- Brandon Weisert, PS-4/9-12 Principal
- Becca Socknat, County EMA (co-facilitator)

c. Capabilities

Review of Actions Taken

MMC and RU districts consider their overall status as much improved regarding implementation of preventive measures. MMC has completely remodeled the high school and constructed a new facility for the elementary program.

Online record maintenance measures were implemented following COVID-related procedures. Emergency response plans are shared with both host counties. MMC enabled access fobs for all its facilities in law enforcement vehicles.

All facilities have cameras in place and are equipped with emergency radios as funded through a state program. Facilities all have controlled access protections in place.

Removal of dead/diseased/at risk trees has been completed for Marcus facilities, and the softball complex in Cleghorn.

tools/equipment		
development		
flow control		
refuge		
technology		
Improve effectiveness	MMC-RU CSD	2020: District would like to place weather radios in each building; <i>School Board, Collaboration with EMA</i> (District funds, potential PDM funds) MEDIUM PRIORITY
	Marcus-Meriden-Cleghorn and Remsen Union CSDs	Implemented. Both Systems within the MMC-RU School District are fully equipped with weather radios.
natural barriers/supports		

d. Risk Assessment

Contributing Factors

Considering students in general as a vulnerable population, the Marcus facility includes an on-site day care center. Staffing allocations assist in preventing an increased risk to the youngest of students.

Broadband access continues to be a concern in both districts as each serves an extended rural area.

MMC and RU are interested in taking advantage of a state program allowing implementation of an SRO at each campus. Law enforcement offices consist of smaller staffing pools, limiting availability.

A combination of age and extreme weather events recently resulted in extensive and costly repairs at both districts affecting:

- Gym floors
- Roofs
- Windows

Trees are needed at the Remsen facility.

Priority Hazards

Weather events and related concerns as documented in Marcus, Remsen, and Cleghorn are to be considered for MMC and RU schools. District identified priorities are as follows.

- Thunderstorm w/Hail & Lightning
- Tornado/Windstorm
- Severe Winter Storm

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Marcus-Meriden-Cleghorn and Remsen Union CSDs	New. Both districts comprising MMC and RU are interested in outfitting their facilities with generators and related connection/transfer switches. This is especially relevant as facilities are likely to be designated as refuge/shelter locations in the event of a disaster. Priority level reflects lack of funding not level of need. <i>Superintendent, Maintenance depts of each district, Host County EMAs</i> (district funds, host community and county supports, PDM funds as may be available) LOW PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/supports		

11. ODEBOLT ARTHUR BATTLE CREEK IDA GROVE (OABCIG) COMMUNITY SCHOOL DISTRICT

Note: While the OABCIG Community School District participated in the development of this Plan, they did not identify any mitigation-specific projects anticipated for completion in the next five years.

Therefore, MVAO CSD is not recognized as a “Participant” under FEMA regulations guiding the development of this Hazard Mitigation Plan. To activate participant status, the district must process an amendment at the local level and file said amendment with the host County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

OABCIG Community School District
900 John Montgomery Drive
Ida Grove, 51445
<https://www.oabcig.org/>

Facilities located in Odebolt fall under jurisdiction of Sac County which is outside regional planning area represented in this plan. Facilities are noted for reference and may be collaborative partners in projects and/or emergency response and preparedness as applicable.

Students & Staffing

Current year enrollment

Grade	Enrolled	Grade	Enrolled	Grade	Enrolled	Grade	Enrolled
SpEd PreK	n/a	2	68	6	67	10	74
T-K	51	3	62	7	61	11	75
K	51	4	56	8	55	12	82
1	60	5	63	9	86	total	911

Staffing

Staff/Admin/Faculty, Bus Drivers, & Seasonal Employees	145

Facilities

School	Address	RC Valuation
OABCIG High School	900 John Montgomery Dr, Ida Grove	\$ 33M
Ida Grove Elementary School	403 Barnes St, Ida Grove	\$ 14M
Western Iowa Tech	801 2nd St, Ida Grove	\$ 1.1M
Flex Education Center		
Maintenance Facility		
Odebolt Middle School	600 S. Maple, Odebolt	\$ 23M
Odebolt Elementary School		
Ballfields/Softball Complex	Multiple locations	\$ 2.5M

b. Participation

SIMPCO and the Ida County EMA Coordinator facilitated a virtual mitigation planning meeting via Teams on February 25, 2025 with Superintendent Matt Alexander in attendance.

c. Capabilities

The district maintains annual trainings for staff (response and procedures) and drills for students. There is not formal agreement however it is assumed facilities in Ida Grove and Odebolt can be used in the event of a disaster. Potential use as temporary respite for extreme hot and extreme cold temperatures can be considered.

Review of Actions Taken

communication/education		
tools/equipment		
development		
flow control		
refuge		
Drainage projects	Ida Grove, OABCIG	2020: Drainage improvements are needed between the high school and Badger Creek; <i>City Administrator, School Board or Plant Engineering, IDNR</i> (Local funds, School District funds, IDNR program funds) HIGH PRIORITY
Drainage projects	Ida Grove, OABCIG	Complete. Addressing some of the needs expressed in this project, the city has implemented a \$200,000 drainage project, installing a 36" tube along 7 th Street.
technology		

The school district has collaborated with the school district in response to flooding and need to assess flow controls and drainage options near and surrounding its facilities in Ida Grove. Greatest impacts of drainage issues affect town properties. Residents have not been interested in pursuing available solutions. City has made some modification, but property owner cooperation would enable more effective solutions. District is not heading project but is a willing partner.

Since 2019, the district has made considerable investments in its facilities, security systems, and expanding capacity for programming. The district has doubled its property area at the high school facility. Security implements include extreme measures as protections for students – doors, cameras. Costs of projects range from \$1.5M to \$17M.

d. Risk Assessment

Contributing Factors

School properties are generally elevated relative to surrounding areas, reducing effects of flooding. Management of tree population is part of routine maintenance schedule – dead/diseased removed as needed. Replacement trees also on as-needed schedule.

While district is open to collaborating facility use as refuge/shelter locations, there are no on-site generators, nor transfer switches. Ideally alternate facilities can be used if one campus is affected by a power outage or other event, and others are not.

Priority Hazards

Extreme Winter Storms and other extreme weather events as they may hinder transportation to/from facilities for staff and students are priority concerns.

e. Mitigation Needs, Actions, & Strategies

OABCIG CSD has not identified any mitigation-centered projects for the near future. However, the district may be a collaborative partner in projects implemented by host communities. The

district continues to include reasonable consideration of mitigation needs when implementing all projects.

12. RIVER VALLEY

a. Profile

River Valley Community School District

916 Hackberry St

Correctionville, 51016

<https://www.rvwolverines.org/>

Facilities

Elementary Primary School	100 S 5th St, Washta
Junior/Senior High School	916 Hackberry St, Correctionville
Bus Barn	Cushing

Valuation of District Assets

Total Building	\$	27,887,604	RC
Total Personal Property	\$	3,379,813	RC
Total Property in the Open	\$	<u>690,741</u>	RC
Total	\$	<u>31,958,158</u>	

b. Participation

Facilitated by SIMPCO, a mitigation planning meeting was held via Teams on December 3, 2024 with Superintendent Scott Bailey in attendance.

c. Capabilities

Review of Actions Taken

communication/education		
Programs	River Valley CSD	2020: Interested in funded First Aid/CPR training for staff; <i>School Board, Collaborate with EMA to coordinate training</i> (District training funds, Community Benefit funds, fundraising, Response support funds) MEDIUM PRIORITY

Programs	River Valley CSD	Completed. District implements mandatory training on annual basis. Funds still needed to support training, with expense review and new programming pending review. Project will remain HIGH PRIORITY in updated plan as district continues to seek training and funding partners.
tools/equipment		
development		
flow control		
refuge		
technology		
natural barriers/supports		

d. Risk Assessment

Contributing Factors

Weather events and other hazards as documented in profiles for Cushing, Washta, Correctionville, and their respective counties are given consideration in actions planned for the River Valley School District.

School facilities are used as refuge locations for host communities as necessary.

Priority Hazards

- Tornado/Windstorm
- Flood
- Transportation Incident – In regard to student/staff travel to and from school.
- Terrorism – active shooter/intruder concerns are significant for staff and students.

Trees have been affected by extreme weather conditions and some affected by Ash Borer beetle. No defined plan is in place. Removal is addressed as needed.

Transportation Incidents figure prominently pertaining to student/staff travels to and from school.

e. Mitigation Strategies, Actions, and Projects

communication/education		
tools/equipment		
Generator & Related Projects	River Valley CSD	New. Generator(s) needed to maintain operation/function in greater capacity in the event of loss of power. School facilities serve as refuge /shelter location for Correctionville and neighboring communities. District interested in partnering with city, county, in coordinating generator, or at minimum generator connection. Cost with full facility function up to \$300, 000. <i>School Superintendent, City Council, City Public Works, School Facilities team, County EMA.</i> (School funds, city support funds and/or partner for grant opportunity through PDM.) HIGH PRIORITY
Equipment	River Valley CSD	New. District interested in acquiring additional response equipment including but not limited to De-Choker devices to be made available in several key locations throughout district facilities. These devices offer low-cost lifesaving solutions. <i>School board, Superintendent, internal emergency response team.</i> (District funds, grants) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/supports		

13. SERGEANT BLUFF-LUTON

a. Profile

With a consistent student population in classrooms at maximum capacity, SB-L continues its efforts to expand capacity with a new middle school facility.

Students & Staffing

Current year enrollment

Building	# Students
Primary	442
Elementary	384
Middle School	401
High School	549
Total:	1776

Staffing

The district employees 308 faculty, teachers, and administrative staff including 29 citizen coaches.

Facilities

School	Address	Bldg RC Valuation
SB-L Senior High School	708 Warrior Rd, Sergeant Bluff	\$ 47,187,000
SB-L Middle School	208 Port Neal Rd, Sergeant Bluff	\$ 35,930,250
SB-L Elementary School	201 Port Neal Rd, Sergeant Bluff	\$ 35,930,250
SB-L Primary School	206 South D St, Sergeant Bluff	\$ 35,930,250
Bus Barn	101 Bluffs Blvd	\$ 4,425,000

Investments in recent years include the addition of a new rec complex (baseball, softball, tennis) estimated at \$9M as part of the East Campus. Roof repair projects are implemented at approximately \$20,000 annually. A ballot measure was renewed in November 2024 receiving 55.5% in favor to fund a new primary building adjacent to the elementary school, infrastructure updates at the high school, and a new career/tech ed building.

Valuation of District Assets

Building	\$	158,787,750
Personal Property	\$	35,952,200
Property in the Open	\$	<u>2,570,500</u>
Total RC Valuation	\$	<u>197,310,450</u>

b. Participation

A planning meeting facilitated by SIMPCO was held at SB-L administrative offices on January 7, 2025 with Superintendent Chad Janzen in attendance.

c. Capabilities

Review of Actions Taken

- Security improvements have resulted in a \$200,000 investment in secured entry access and cameras in all buildings. The district overhauled its crisis plan in 2024 to include in part:
 - annual training,
 - tech equipment at evacuation site, and
 - partnerships with the city, Fire Dept, and Police Dept.
- Plan is in place to use facilities for refuge/shelter in emergency situations. The elementary school is designated refuge location for nursing home.
- East Campus project included fill to elevate property, modifying the floodplain. The district/city has submitted a LOMA to FEMA.

d. Risk Assessment

Contributing Factors

Weather incidents recorded in the Sergeant Bluff profile are given consideration for SB-L's student, staff, and facility concerns. Fluctuations in extreme weather conditions have resulted in concrete frost/heave issues. Other projects include:

- Continued roof work
- HVAC work
- generator at high school, low capacity to run emergency lights

Addition of trees recommended by DNR for new East Campus facility.

Priority Hazards

- Thunderstorm with Hail and Lightning (primarily hail)
- Tornado/Windstorms
- Haz Mat (rail-related) incidents – particularly as it pertains to the district's emergency response plan.

e. Mitigation Strategies, Actions, and Projects

communication/education		
tools/equipment		
Generator & Related Projects	Sgt Bluff-Luton (SB-L) CSD	New. Generator connections at all facilities. <i>Maintenance, County/City collaboration as applicable for refuge location designation</i> (district, city, county funds, PDM as available) LOW PRIORITY
development		
Improve existing facilities & infrastructure	Sgt Bluff-Luton (SB-L) CSD	New. Improvements to roof and HVAC. Roof repairs need more permanent fix. HVAC work necessary to maintain function of facility during extreme temperatures – both hot and cold. Project is tiered. Maintenance work will be funded by district. Priority is determined due to cost, not level of need. Replacement for long-term resiliency as preferred would require collaborative efforts. District Maintenance, City/County officials, County EMA (district funds, PDM funds as applicable) LOW PRIORITY
flow control		
refuge		
technology		
natural barriers/supports		
flow control		

14. SIOUX CITY COMMUNITY SCHOOL DISTRICT

a. Profile

Sioux City Community School District

Administrative Offices

627 4th St

Sioux City, 51101

<https://www.siouxcityschools.org/>

Students & Staffing

Current enrollment & staffing details were not provided. Students served through the district including transitional kindergarten through high school is estimated to be about 15,000. Staffing is estimated at about 2,500 employees.

Facilities

The largest district within the planning region, SCCSD has numerous facilities throughout the city, including shared use facilities for certain events (i.e. Morningside University Olsen Stadium).

School	Address
East High School	3200 S Cypress St
North High School	4200 Cheyenne Blvd
West High School	2001 Casselman St
East Middle School	5401 Lorraine Ave
North Middle School	2101 Outer Dr N
West Middle School	3301 W 19th St
Bryant Elementary School	3040 Jones St
Clark Early Childhood School	4315 Hamilton Blvd
Hunt Elementary	615 20th St
Irving Elementary School	901 Floyd Blvd
Irving Preschool	7001 Iowa St
Leeds Elementary School	3919 Jefferson St
Liberty Elementary School	1623 Rebecca St
Lincoln Elementary School	115 Midvale Ave
Loess Hills Elementary	1717 Casselman St
Morningside Elementary	3601 Bushnell Ave
Nodland Elementary School	3300 S Cypress
Perry Creek Elementary School	3501 Country Club Blvd
Riverside Elementary School	2303 Riverside Blvd
Spalding Park Elementary School	4101 Stone Ave
Sunnyside Elementary School	2700 S. Maple St
Unity Elementary School	1901 Unity Ave
Accessory & Misc Buildings	
Administrative offices; Career Academy	627 4th St
Bus Barn; Main Admin; O&M Bldg	2620 28th St
Fairview School House	3601 Country Club Blvd

Food Services/Auto Career Center	3000 N US HWY 75
SCCSD High Schools Stadium & Related	S Paxton @ Peters Ave
Misc Buildings	

b. Participation

SIMPCO facilitated a mitigation planning meeting at the SCCSD Administrative Office on December 9, 2024 with the following in attendance.

- Leslie Heying, Director of Communications
- Timothy Paul, Director – Operations & Maintenance Department
- Angela Bemus, Associate Superintendent

c. Capabilities

Over the course of several years, the district replaced or renovated nearly all of their elementary schools, improving physical conditions for students – most notably increasing building capacities reducing need for on site trailer-classrooms and addressing extreme heat conditions with air conditioning.

The district has collaborative programming with the police and fire departments serving several functions. First, students are familiar with the officers in both programs facilitating interactions in emergency situations. Second, interaction with officers and related career-minded programming introduces students to extensive roles assumed by responders in their daily work.

The district has a text/call alert system for in-time communications with parents/families/guardians. All facilities have controlled entry systems and formal procedural guidelines as part of protocol when allowing access by volunteer including but not limited to classroom parents/volunteers.

Facility maintenance is on-going with annual projects including routine repairs to major renovations.

Review of Actions Taken

A detailed report of projects was not provided, with construction of new Hunt and re-opening of Bryant schools accounting for the largest projects since 2019. No mitigation-specific projects were included in the 2020 HMP.

d. Risk Assessment

Contributing Factors

The district is the largest in the region, accommodating students even beyond the regional planning boundaries for special needs accommodations as well as career programs. All facilities have designated refuge locations for tornado, some with deliberately fortified safe rooms.

A combination of new and old facilities presents varying challenges in extreme weather conditions. Failing infrastructure has resulted in water mains issues on occasion. The district continues to monitor effects of varying extreme weather events to determine best practices when replacing and/or renovating facilities.

Priority Hazards

- Tornado/Windstorm
- Thunderstorm w/Hail & Lightning
- Severe Winter Storm

Additional emphasis is placed on relative concerns for Flood and Terrorism. Flood has not been an impact directly on facilities. However, property in the open as used for athletics and other scheduled activities is compromised when used during and after flood conditions. Flood is also a factor in safe transport of students to/from school.

Terrorism is an ongoing stress point for students and staff, as well as their families.

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Promo/Info	SCCSD	New. Interest in promotion of established practice of Alert Iowa system in conjunction with school's internal alert system; School communications teams, County EMA (No dedicated funding necessary) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/supports		
flow control		

15. WEST MONONA COMMUNITY SCHOOL DISTRICT

Note: West Monona Community School District provided a signed Voluntary Participation Agreement. However, district details, past and future projects, and mitigation needs and strategies were not provided.

Therefore, this district is not recognized as a “Participant” under FEMA regulations guiding the development of this Hazard Mitigation Plan. To activate participant status, the district must process an amendment at the local level and file said amendment with the host County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

West Monona CSD

1314 15th St

Onawa, 51040

<https://www.westmonona.org/>

West Monona Community School District serves students from preschool through high school. Two facilities in Onawa serve all grade levels with students primarily from the cities of Onawa, Turin, and Blencoe.

Students & Staffing

Enrollment and staffing numbers were not provided. An online search provides an estimate of 645 students and about 68 employees.

Facilities

School	Address
West Monona Jr/Sr High	1314 15th St, Onawa
West Monona Elementary	611 4th St, Onawa

b. Participation

Email communications between SIMPCO and the district superintendent did not result in a planning meeting. A signed Voluntary Participation Agreement was provided via email listing Marty Fonley, Superintendent and Joe Monona, Maintenance Director.

16. WESTWOOD COMMUNITY SCHOOL DISTRICT

a. Profile

Westwood CSD
1000 Rebel Way
Sloan, 51055
<https://www.wwrebels.org/>

Westwood Community School District operates out of a single facility in Sloan. The district provides elementary education for preschool through 3rd grade, and secondary education 4th grade through high school.

Students & Staffing

Current year enrollment

Grade	Enrolled	Grade	Enrolled	Grade	Enrolled	Grade	Enrolled
PreK	34	2	42	6	56	10	47
T-K	n/a	3	32	7	36	11	61
K	40	4	46	8	46	12	55
1	38	5	46	9	48	total	627

Staffing

Admin, Teachers, Staff	115

Facilities

Building Purpose	Address
Westwood Schools; Rec & Other Facilities	1000 Rebel Way, Sloan
Bus Barn & Storage	317 8 th St @ Beall St

Valuation of District Assets

Buildings	\$	38,405,018
Personal Property	\$	6,188,716
Property in the Open	\$	<u>670,369</u>
Total	\$	<u>45,264,103</u>

b. Participation

SIMPCO facilitated a virtual mitigation planning meeting via Teams on December 9, 2025 with Superintendent Jay Lutt and Maintenance Director John Mitchell in attendance. Additional input on behalf of Westwood Community Schools was provided through surveys with 4 students responding.

c. Capabilities

Review of Actions Taken

communication/education

Warning Sirens	Sloan/ Westwood Schools	2020: Warning siren at south end of town, serving school & rec facilities; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) MEDIUM PRIORITY
Warning Sirens	Sloan	Complete. A siren was installed to better serve the areas of outdoor school facilities.
tools/equipment		
Generator & Related Projects	Westwood CSD	2020: Generator for backup during crisis events & to maintain use as refuge location in event of power outage; <i>City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
Generator & Related Projects	Westwood CSD	Update. Project has not been completed with funding and other projects taking precedence. Still interested in dedicated generator and transfer switches at minimum.
development		
flow control		
refuge		
technology		
natural barriers/supports		

District has a text alert system in place for internal communications as well as for students/families/guardians.

d. Risk Assessment

Contributing Factors

School administration would like additional alert capacity for its outdoor facilities. Existing sirens may not be audible pending direction of the wind and other ambient noise attributed to the need of notification.

Repairs in recent years included replacement of wind damaged shed with permanent structure. Hail caused significant damage requiring window and skylight replacements.

Priority Hazards

Administration regards Severe Winter Weather as a primary concern, with transportation of students/staff as well as removal and maintenance expense taking a toll on the district. Priorities based on overall potential loss, frequency of occurrence, and relative impacts to facilities are as follows.

- Tornado/Windstorm
- Thunderstorm w/Hail & Lightning
- Flood (most relevant to resulting transportation barriers)

Student respondents indicated Severe Winter Weather and Thunderstorm with Hail & Lightning with the highest frequency of Very Concerned. Tornado/Windstorm, Pandemic Human Disease, and Transportation Incidents had a high response rate with 100% indicating at least Somewhat Concerned. Severe Winter Weather, Tornado/Windstorm, and Thunderstorm with Hail & Lightning received the most indications when specifically asked to choose the top three concerns.

e. Mitigation Needs, Actions, & Strategies

communication/education		
tools/equipment		
Generator & Related Projects	Westwood CSD	Carry over. Generator for backup during crisis events & to maintain use as refuge location in event of power outage or other emergency. <i>Superintendent, School Board, City Council, County EMA</i> (Local funds, County supports, State/Federal response funds, PDM, Community Benefits funds) HIGH PRIORITY
development		
flow control		
refuge		
technology		
natural barriers/supports		
Trees	Westwood CSD	New. District is seeking viable mode of tree replacement including an implementation plan and funding sources. Superintendent, District Maintenance, Re-Tree programs as applicable (district funds, community grants, IDNR, others as may be applicable) LOW PRIORITY

17. WHITING COMMUNITY SCHOOL DISTRICT

Note: Whiting Community School District provided a signed Voluntary Participation Agreement. However, district details, past and future projects, and mitigation needs and strategies were not provided.

Therefore, this district is not recognized as a “Participant” under FEMA regulations guiding the development of this Hazard Mitigation Plan. To activate participant status, the district must process an amendment at the local level and file said amendment with the host County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

Whiting Community School

606 West St

Whiting, 51063

<https://www.whitingcsd.org/>

“The Whiting Community School District offers career and technical programs in the following service areas: Applied Science, Technology, Engineering & Manufacturing, Business, Finance, Marketing & Management, Human Services, and Information Solutions.”

Students & Staffing

An internet search indicates student enrollment is estimated at 170 students, Pre-K through 12th grade. The district has an estimate of 43 employees.

Facilities

School	Address
Whiting Schools - PK-12	600-620 West St, Whiting
Bus Barn & Other Misc Bldgs	

b. Participation

Email communications between SIMPCO and the district superintendent did not result in a planning meeting. A signed Voluntary Participation Agreement was provided via email listing Marty Fonley, Superintendent, Bret Doorenboos – PK-12 Principal, and Nick Warren – Custodian.

18. WOODBURY CENTRAL COMMUNITY SCHOOL DISTRICT

Note: Information as provided is derived from the Woodbury Central Community School District website and general internet searches.

This district is not recognized as a “Participant” under FEMA regulations guiding the development of this Hazard Mitigation Plan. To activate participant status, the district must process an amendment at the local level and file said amendment with the host County and FEMA. Procedures to amend this plan are included in Title I. Introduction, section H. Amendments and Plan Maintenance.

a. Profile

Woodbury Central Community School District

408 S 4th St

Moville, 51039

<https://www.woodbury-central.k12.ia.us/>

Woodbury Central provides education for transitional kindergarten through high school. All classes are provided on a single property.

Students & Staffing

An internet search provides an estimate of 577 students enrolled in Woodbury Central School District offering preschool through 12th grade. There are about 54 staff, faculty, and administrative employees.

Facilities

School	Address
Woodbury Central Schools & Related Bldgs/Facilities	408 S 4th St, Merville