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County Profile

Hitchcock County

Hayes, Hitchcock, and Frontier Counties Hazard Mitigation Plan

2023

Local Planning Team

Hitchcock County's local planning team for the hazard mitigation plan are listed in the table below along with the meetings attended. All participant worksheets were filled out and returned by members of the local planning team.

Table HTC.1: Hitchcock County Local Planning Team

Name	Title	Jurisdiction	R1 Meeting	R2 Meeting
Brandon Myers	Emergency Manager	Hitchcock County	Trenton	-
Margaret Pollmann	County Clerk	Hitchcock County	-	-
Paul Nichols	County Commissioner	Hitchcock County	Trenton	Trenton
Kyle Clapp	Deputy Emergency Manager	Hitchcock County	Trenton	Trenton
Darin Morgan	Floodplain Administrator / Zoning Administrator	Hitchcock County	-	-
Joanna LeMoine	Deputy Emergency Manager	Region 51 EMA	-	-

Location, Geography, and Climate

Hitchcock County is located in southwestern Nebraska and is bordered by Chase, Dundy, Frontier, Hayes, and Red Willow Counties and the State of Kansas. There are four incorporated communities in the county, Village of Culbertson, Village of Palisade, Village of Stratton, and Village of Trenton. The Village of Trenton serves as the county seat. The total area of Hitchcock County is 718 square miles. Major bodies of water include the Republican River, Muddy Creek, Bobtail Creek, Frenchman Creek, Blackwood Creek, Driftwood Creek, Swanson Lake. Topographic regions in the county include plains, dissected plains, valleys, and large reservoirs.¹

Climate

Hitchcock County, like almost all of the Midwest, sits in the humid continental climate zone of the United States, and thus, experiences a wide temperature difference between its average high and low temperatures. The average high temperature in Hitchcock County for the month of July is 91.6 degrees Fahrenheit and the average low temperature for the month of January is 14 degrees Fahrenheit. On average, Hitchcock County receives over 22 inches of rain and 26 inches of snowfall per year. The table below compares county-wide climate indicators with those of the entire state. Climate data are helpful in determining if certain events are higher or lower than normal. For example, if the high temperatures in the month of July are running well into the 90s, high heat events are likely to impact vulnerable populations.

Table HTC.2: Hitchcock County Climate

	Hitchcock County	State of Nebraska
July Normal High Temp	91.6°F	87.3°F
January Normal Low Temp	14.0°F	13.9°F
Annual Normal Precipitation	22.5"	24.2"
Annual Normal Snowfall	26.5"	25.9"

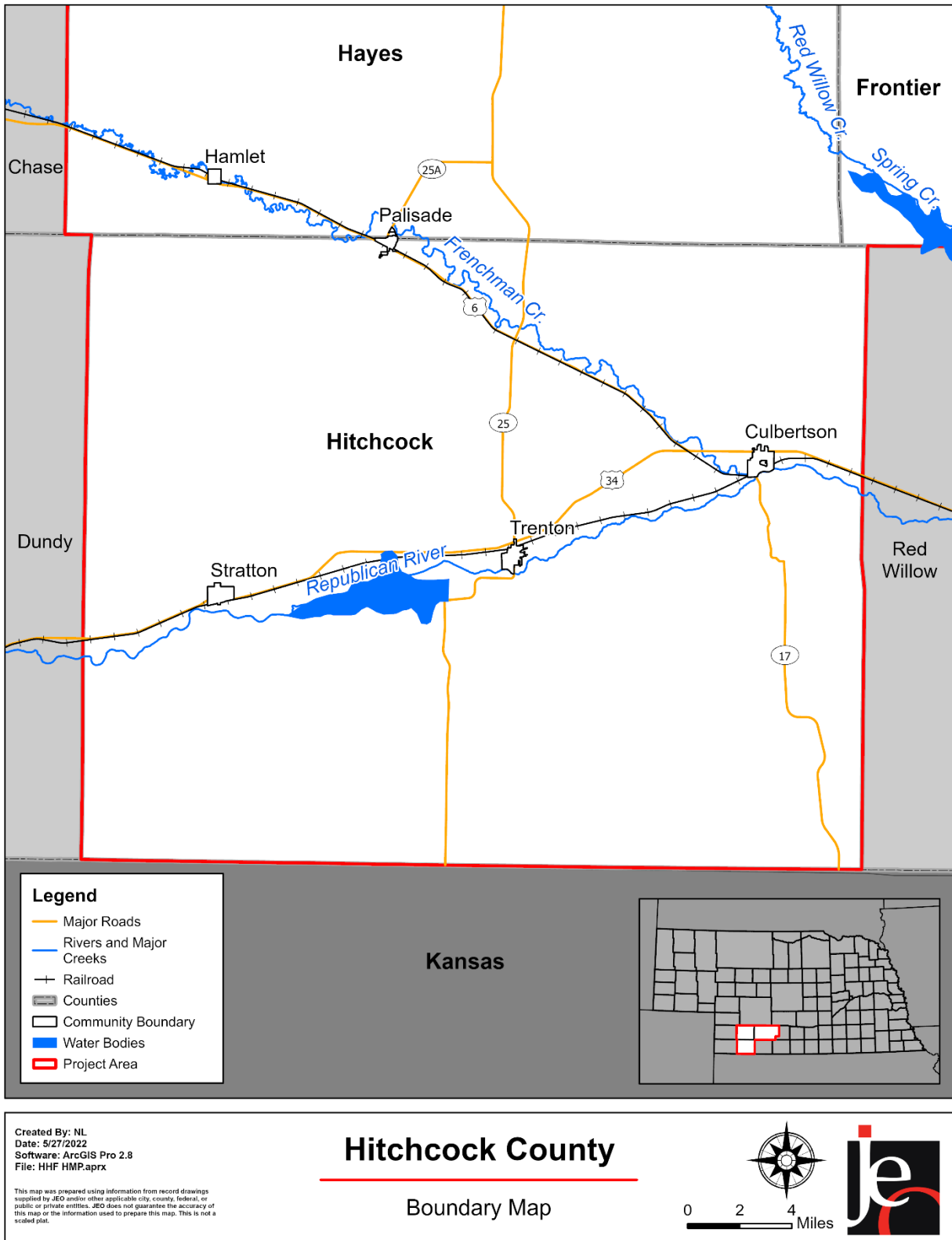
Source: NCEI 1991-2020 Climate Normals²
Precipitation includes all rain and melted snow and ice.

¹ University of Nebraska-Lincoln, 1973. "Topographic Regions Map".

<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1461&context=conservationsurvey>.

² National Centers for Environmental Information. "Data Tools: 1991-2020 Normals." Accessed June 2022.
<https://www.ncei.noaa.gov/access/us-climate-normals/>.

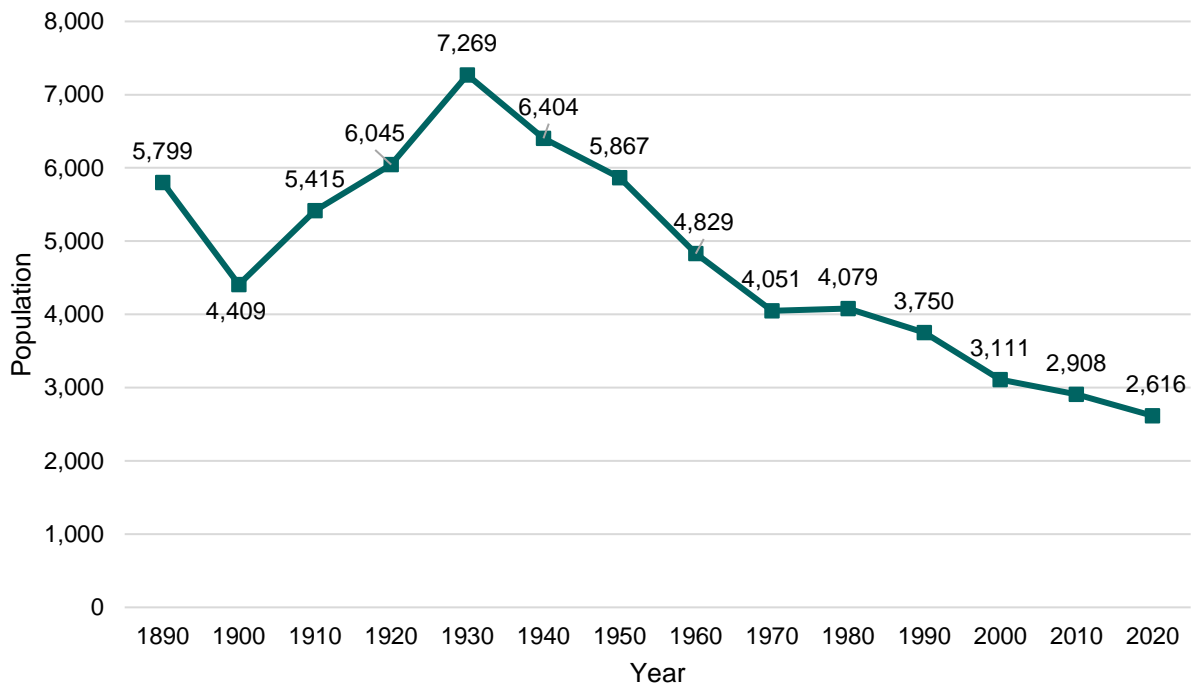
Figure HTC.1: Hitchcock County



Demographics

The following figure displays the historical population trend from 1890 to 2020. This figure indicates that the population of Hitchcock County has been decreasing since 1980 to 2,616 people in 2020. A declining population can lead to more unoccupied and unmaintained housing that is then at risk to high winds and other hazards. Unoccupied housing may also be an economic indicator that future development is unlikely to occur. Furthermore, with fewer residents, tax revenue decreases for the county, which could make implementing mitigation projects more fiscally challenging. Hitchcock County’s population accounted for 0.1% of Nebraska’s population in 2020.³

Figure HTC.2: Population 1890 - 2020

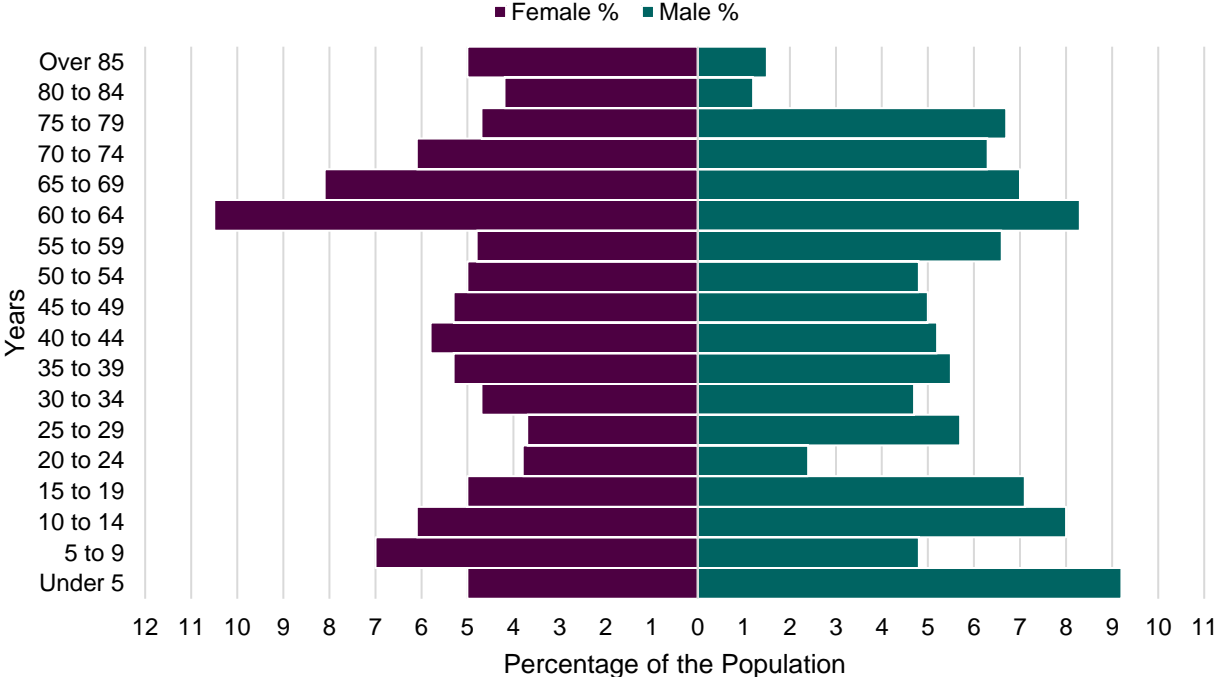


The young and elderly populations may be at greater risk from hazards than other age groups. The following figure shows Hitchcock County’s population percentage broken down by sex and five-year age groups.⁴ population is top heavy. This suggests future population decline as older generations are replaced by fewer younger residents. For a more elaborate discussion of this vulnerability, please see *Section Four | Risk Assessment*.

³ United States Census Bureau. “2020 Census Bureau Decennial Census: P1: Race.” <https://data.census.gov/>.

⁴ United States Census Bureau. “2020 Census Bureau American Community Survey: S0101: Age and Sex.” <https://data.census.gov/>.

Figure HTC.3: Hitchcock County’s Population Pyramid



Economics and Housing

The following table indicates that median household income and per capita income for the county is lower than the State of Nebraska. Median home value and rent are also both lower than the rest of the state. Areas with relatively low economic indicators may influence a county’s level of resilience during hazardous events.

Table HTC.3: Housing and Income

	Hitchcock County	State of Nebraska
Median Household Income	\$46,000	\$63,015
Per Capita Income	\$29,278	\$33,205
Median Home Value	\$75,900	\$164,000
Median Rent	\$642	\$857

Source: U.S. Census Bureau^{5,6}

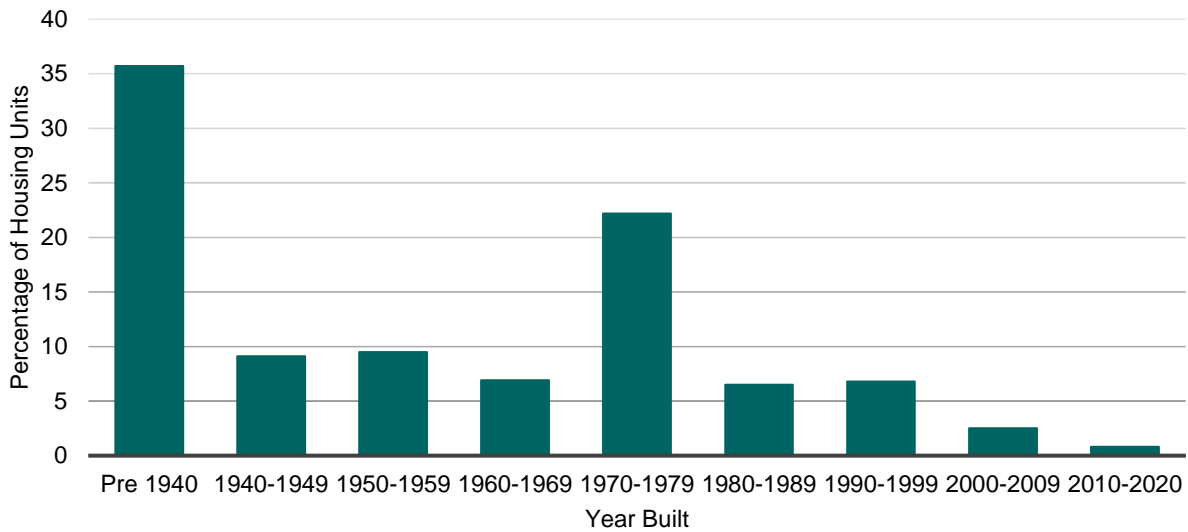
The following figure indicates that most of the housing in Hitchcock County was built before 1940 (35.7%). Housing age can serve as an indicator of risk, as structures built prior to the development of state building codes may be at greater risk. The State of Nebraska first adopted building codes in 1987, with the International Building Code (IBC) adopted in 2010. The current edition of the IBC was updated in 2018. According to the 2020 American Community Survey, the county has 1,741 housing units with 70.5% of those units occupied. There are approximately 270 mobile homes in the county. A large number of mobile homes are located at the Marina at Trenton Lake. Counties with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe thunderstorms if those homes are not anchored correctly. Renters are particularly vulnerable, as renter-occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disaster. Renters are less likely

5 United States Census Bureau. “2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics.” <https://data.census.gov/>.

6 United States Census Bureau. “2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics.” <https://data.census.gov/>.

than homeowners to have flood insurance, have ready access to financial resources to evacuate, or to know their risks to flooding and other hazards.

Figure HTC.4: Housing Units by Year Built



Source: U.S. Census Bureau⁵

Table HTC.4: Housing Units

Jurisdiction	Total Housing Units				Occupied Housing Units			
	Occupied		Vacant		Owner		Renter	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Hitchcock County	1,228	70.5%	513	29.5%	949	77.3%	279	22.7%
Nebraska	766,663	90.8%	77,585	9.2%	507,291	66.2%	259,372	33.8%

Source: U.S. Census Bureau⁵

Broadband Access

Internet or broadband access—through Wi-Fi or cellphone coverage—is a critical means of sharing and receiving information regarding hazardous events, including storm warnings, evacuation orders, or weather updates. Rural communities often lack adequate internet or broadband access. However, internet access is as vital a utility as electricity, as seen through the COVID-19 pandemic when many people worked or attended school from home.

- **73.0% of households have a broadband internet subscription.** Hitchcock County has a smaller share of households with broadband (73.0%) compared to the state (85.6%).⁷

Employment

According to 2020 Business Patterns Census Data, Hitchcock County had 67 business establishments. The following table presents the number of businesses, number of paid employees, and the annual payroll in thousands of dollars.

⁷ United States Census Bureau. "2020 Census Bureau American Community Survey: DP02: Selected Social Characteristics in the United States." <https://data.census.gov/>.

Table HTC.5: Business in Hitchcock County

	Total Businesses	Number of Paid Employees	Annual Payroll (In Thousands)
Total for All Sectors	37	429	\$16,317

Source: U.S Census Bureau⁸

Agriculture is the backbone of Nebraska’s economy. Hitchcock County’s 288 farms cover 392,644 acres of land about 85.4% of the county’s total area. Crop and livestock production are the visible parts of the agricultural economy, but many related businesses contribute to agriculture by producing, processing, and marketing farm products. These businesses generate income, employment, and economic activity throughout the region.

Table HTC.6: Agricultural Inventory

Agricultural Inventory	
Number of Farms with Harvested Cropland	288
Acres of Harvested Cropland	392,644

Source: USDA Census of Agriculture, 2017⁹

Governance

The county’s governmental structure impacts its capability to implement mitigation actions. Hitchcock County is governed by a board of commissioners. Other offices and departments that may be involved in implementing hazard mitigation initiatives are listed below.

- County Clerk
- County Assessor
- County Attorney
- County Treasurer
- Emergency Manager
- Highway Superintendent
- Planning/Zoning
- Floodplain Administrator
- Sheriff
- Veteran Services Officer
- Extension Office

Capability Assessment

The planning team assessed Hitchcock County’s hazard mitigation capabilities by reviewing local existing policies, regulations, plans, and programs related to hazard mitigation. The following tables summarize the county’s planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. The planning team anticipates adding capabilities in the future. Possible additions include storm ready certification and CERT Team creation.

County funds are limited to maintaining current facilities and systems with a large portion already dedicated to a county network and IT services cybersecurity project. Funds have stayed the same over recent years.

⁸ United States Census Bureau. “County Business Patterns and 2020 Nonemployer Statistics.” <https://data.census.gov/>.

⁹ United States Department of Agriculture. “2017 Census of Agriculture.” <https://www.nass.usda.gov/Publications/AgCensus/2017/>.

Table HTC.7: Capability Assessment

	Capability/Planning	Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Local Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes (State)
	National Flood Insurance Program	Yes
	Community Rating System	No
	Regional Community Wildfire Protection Plan	Yes
	Other (if any)	-
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administration	Yes
	GIS Capabilities	Yes
	Chief Building Official	No
	Civil Engineering	Yes
	Local staff who can assess county's vulnerability to hazards	Yes
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	-
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for grants in the past	Yes
	Awarded a grant in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	Yes
	Gas/Electric Service Fees	No
	Storm Water Service Fees	No
	Water/Sewer Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	-
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	No

Capability/Planning	Yes/No
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes
Natural disaster or safety related school programs	Yes
StormReady Certification	No
Other (if any)	-

Table HTC.8: Overall Capability

Overall Capability	Limited/Moderate/High
Financial resources to implement mitigation projects	Limited
Staff/expertise to implement projects	Moderate
Public support to implement projects	Limited
Time to devote to hazard mitigation	Limited

Social Vulnerability

FEMA’s National Risk Index is a new mapping tool that analyzes a county’s risk to natural hazards on a scale of 0 (lowest possible value) to 100 (highest possible value). The overall risk for Hitchcock County is Very Low (6.26). The average for the State of Nebraska is 9.43.¹⁰

- **Social Vulnerability:** Social groups in Hitchcock County have a Relatively Moderate (43.40) susceptibility to adverse impacts of natural hazards when compared to the rest of the U.S.
- **Community Resilience:** Communities in Hitchcock County have a Relatively Low (51.99) ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruption when compared to the rest of the U.S.

An additional tool developed by Headwaters Economics, the Rural Capacity Index evaluates rural communities and counties across the country for local capacity. Capacity includes the staffing, resources, and expertise to both apply for funding and fulfill reporting requirements, as well as design, build, and maintain infrastructure products over the long term. Counties lacking local capacity often have the greatest need for infrastructure investments—particularly rural counties. The Rural Capacity Index helps identify communities and counties with limited capacity on a scale of 0 (no capacity) to 100 (high capacity). This index is based on 10 variables that can function as proxies for county capacity. The following table lists out the components and scores for Hitchcock County.

¹⁰ Federal Emergency Management Agency. “National Risk Index”. Accessed July 2022. <https://hazards.fema.gov/nri/map>.

Table HTC.9: Rural Capacity Index

Components of Index	Hitchcock County
County is Metropolitan?	No
Has a Head of Planning?	Yes
Has a College or University?	No
Adults with Higher Education:	18%
Families Below Poverty Level:	7%
Households with Broadband:	69%
People without Health Insurance:	10%
Voter Turnout:	77%
Income Stability Score (0 to 100):	47
Population Change (2000 to 2019):	-349
Overall Rural Capacity Index Score	65

Source: Headwaters Economics¹¹

National Flood Insurance Program (NFIP)

Hitchcock County is a member of the NFIP having joined on 4/8/2008, and the county's Floodplain Administrator (Darin Morgan) oversees the commitments and requirements of the NFIP including enforcement of the local floodplain management regulations. The initial FIRM for the county was delineated in 3/18/2008 and the current effective map date is 3/18/2008, which has been adopted and incorporated into the county's floodplain management regulations in 2012. As of August 31, 2021, there are three NFIP policies in-force covering \$494,100. Hitchcock County currently has one repetitive loss single-family structure. A mitigation action can be found in the county's Mitigation Strategy to address this structure.

Hitchcock County requires permits for any development that wants to build in the floodplain. In addition, floodplain maps are reviewed as part of the application process. If violations are found, the county makes contact via official notification.

After a flood event, the county implements substantial improvement and substantial damage provisions as outlined in the Substantial Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA_Handbook_FINAL.pdf. The local planning team has said that Hitchcock County will remain in good standing and continue involvement with the NFIP in the future.

Plans and Studies

Hitchcock County has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the county updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

11 Headwaters Economics. January 2022. "Rural Capacity Map". Accessed July 2022.
<https://headwaterseconomics.org/equity/rural-capacity-map/>.

Comprehensive Plan (2001)

The comprehensive plan is designed to guide the future actions and growth of the county. Due to the age, the hazard mitigation plan has not been integrated with the plan. However, it contains goals aimed at Safe Growth, directs housing away from chemical storage facilities, and encourages elevation of structures located in the floodplain. The comprehensive plan is set to be updated in the next five years.

Floodplain Regulations (2012), Zoning Ordinance (2012), Subdivision Regulations (2012)

The county's floodplain regulations, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. Due to their age, the hazard mitigation plan has not been integrated with these documents. However, the documents discourage new structures in the floodplain, discourage housing and vulnerable populations near chemical storage sites, restrict the subdivision of land located in the floodplain, and include well setback requirements.

Hitchcock County Local Emergency Operations Plan (2019)

The Hitchcock County Local Emergency Operations Plan (LEOP) establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. The hazard mitigation plan has not been integrated with this plan. Flooding, dam failure, and mass shelter information from the LEOP was used to inform hazard prioritization and community lifelines.

Southwest Nebraska Community Wildfire Protection Plan (2019)

The purpose of the Southwest Nebraska Community Wildfire Protection Plan (CWPP) is to help effectively manage wildfires and increase collaboration and communication among organizations who manage fire. The CWPP discusses county-specific historical wildfire occurrences and impacts, identifies areas most at risk from wildfires, discusses protection capabilities, and identifies wildfire mitigation strategies. Wildfire projects and concerns from the 2018 HMP were included in the CWPP and wildfire projects in the current HMP will be included during the next CWPP update. Projects identified in the CWPP were reviewed for inclusion in this county profile. This document is updated every five years.

Future Development Trends

No significant developments have been in the county over the past five years due to the population decline that has occurred. This likely keeps the county's vulnerabilities the same unless structures have not been properly maintained. In the next five years, the Castaway Parkway Subdivision will be completed near Highway 34 and Trenton Lake. This will add many several new homes to the county. The figures below show the future land use map for the county. Most new housing will occur in and around the various communities.

Figure HTC.5: Future Land Use Map 1 of 2

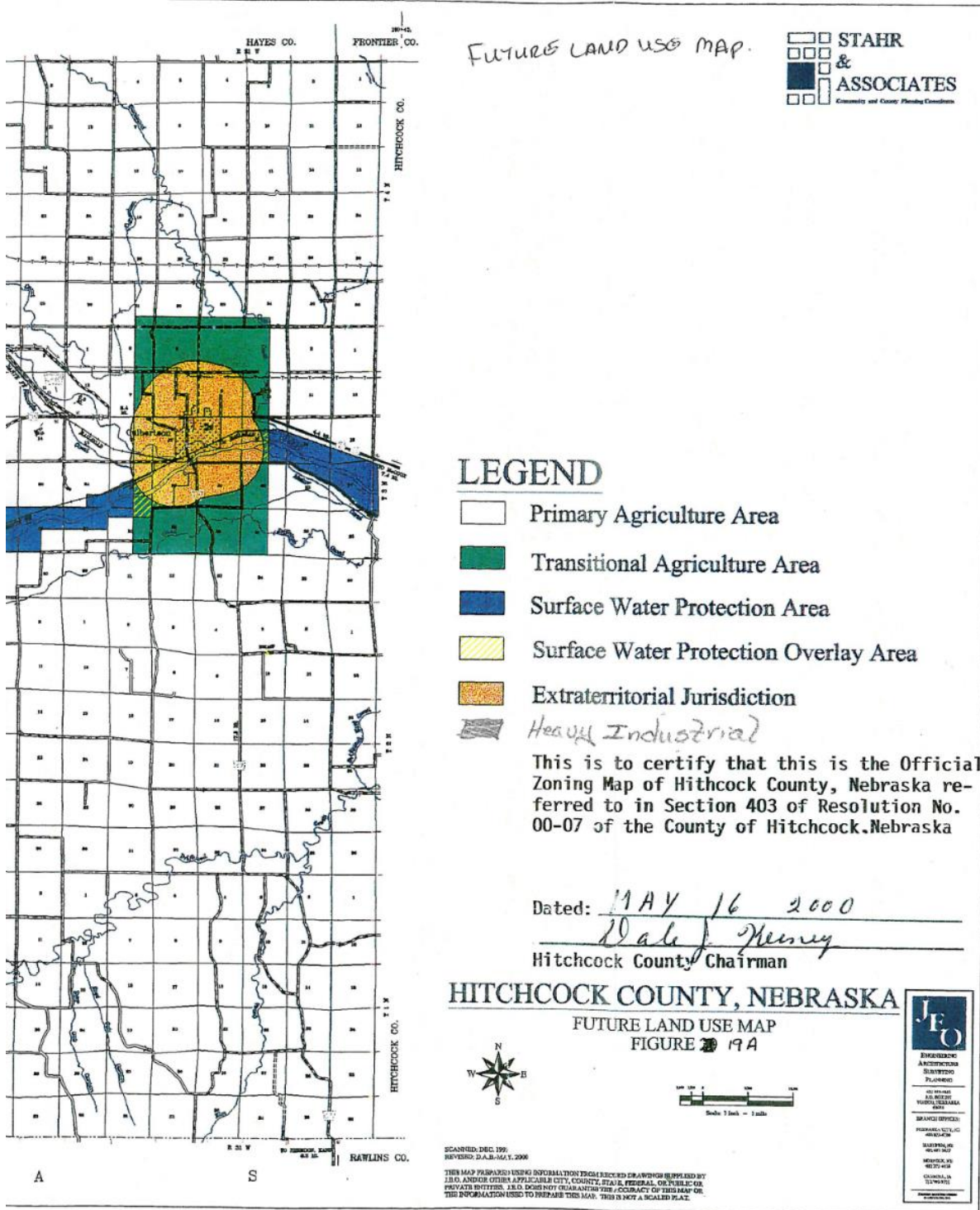
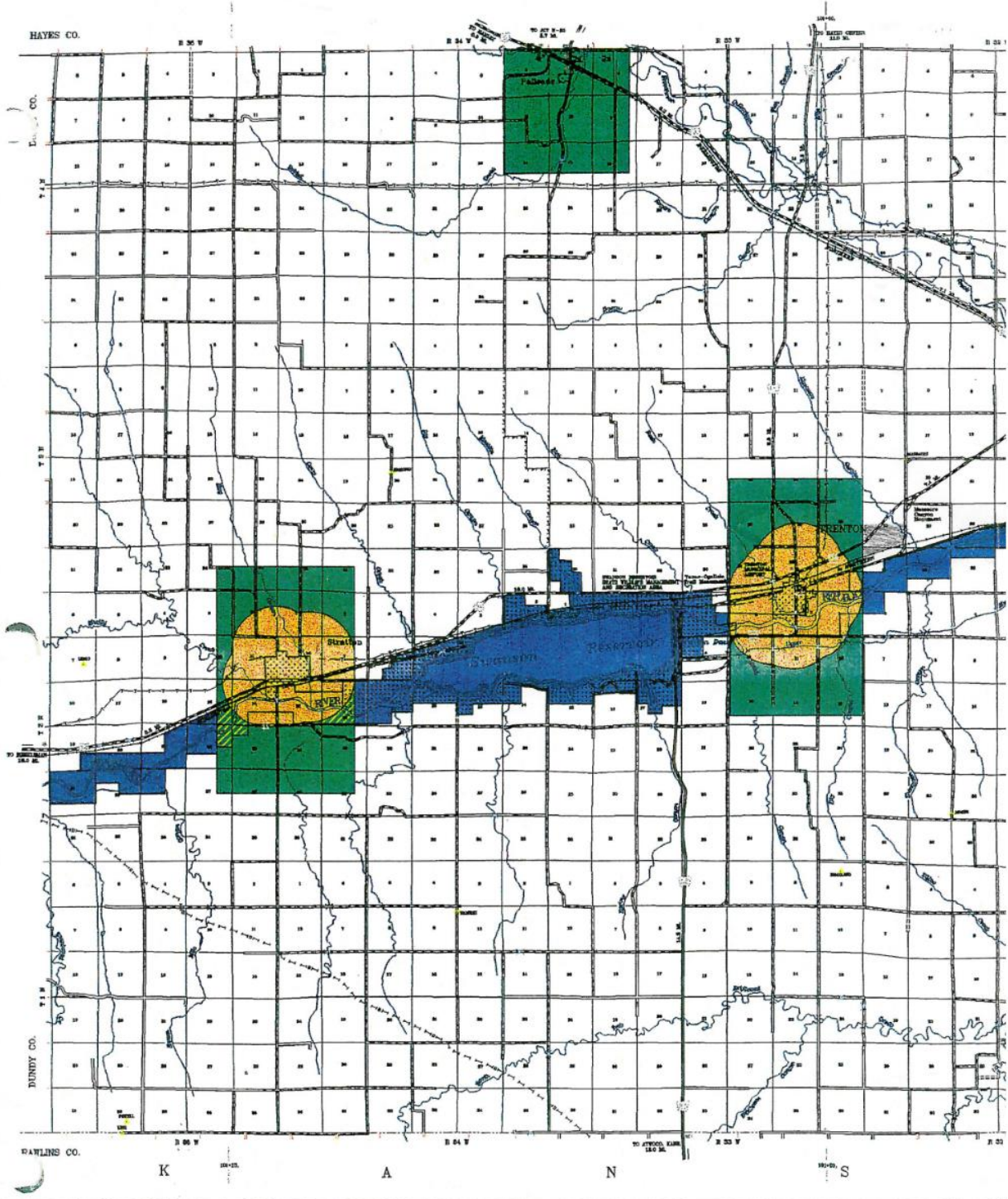


Figure HTC.6: Future Land Use Map 2 of 2



Community Lifelines

Each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The following subsections list those community lifelines by type, as identified by the local planning team.

Safety and Security

The Safety and Security Lifeline includes law enforcement, security, fire services, search and rescue, government services, and safety. The table below lists Safety and Security Lifelines for Hitchcock County.

Table HTC.10: Safety and Security Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
1	County Courthouse, Sheriff's Office, Sheriff's Communications	G (Sheriff's Office)	N

Food, Water, Shelter

Components of this lifeline include food, water, shelter, and agriculture. Food, Water, and Shelter Lifelines for Hitchcock County are included in the table below.

Table HTC.11: Food, Water, and Shelter Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
2	Dollar General	-	N
3	Dundy County/Stratton Schools	S	N
4	Hitchcock County Schools – Culbertson	S	N
5	Hitchcock County Schools – Trenton	S	N
6	Trails West	-	N
7	Wauneta/Palisade Schools	S	N

Health and Medical

Health and Medical Lifeline components can include medical care, patient transport, public health, fatality management, and the medical supply chain. The following medical and health facilities are located within the county.

Table HTC.12: Health and Medical Lifelines

CL Number	Name	Type of Facility	Number of Beds	Generator (G) Shelter (S)	Floodplain (Y/N)
8	El Dorado Manor Nursing/Residential Home	Long Term Care & Assisted Living	48	-	N
9	Quality Healthcare Services Medical Clinic	Rural Health Clinic	0	-	N
10	Trenton Regional Medical Center	Rural Health Clinic	0	-	N

Source: Nebraska Department of Health and Human Services^{12,13,14,15}

Energy

Energy Lifeline components include power, the power grid, and fuel. The table below lists Energy Lifelines for the county.

Table HTC.13: Energy Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
11	Farmers Co-op	-	N
12	Jay Bird Express	-	N

Communications

Components of the Communications Lifeline include communication infrastructure, alerts, 911 dispatch, responder communications, and finance. Communication Lifelines for Hitchcock County are included in the table below.

Table HTC.14: Communications Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
13	Cell Tower #1	-	N
14	Cell Tower #2	-	N
15	Cell Tower #3	-	N
16	Cell Tower #4	-	N
17	Cell Tower #5	-	N
18	Warning Siren – Culbertson	-	N
19	Warning Siren – Palisade	-	N
20	Warning Siren – Stratton	-	N
21	Warning Siren – Trenton	-	N

Transportation

Transportation Lifeline components include interstates, highways, major roadways, mass transit, railway, and aviation. Hitchcock County’s major transportation corridors include US Highways 6 and 34 and Nebraska State Highways 17 and 25. The most traveled route is Highway 6 with an average of 4,235 vehicles daily, 365 of which are trucks.¹⁶ A Burlington Northern Santa Fe Railway rail line, an Amtrak line, and a Nebraska Kansas Colorado Railway line all travel through Hitchcock County. The county also has three airports, a public airport is located one mile northwest of Trenton, a private airport is located five miles northeast of Culbertson, and a private airport is located 10 miles southwest of Culbertson. All highways have been closed in the past because of weather and fires. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors, as well as areas more at risk of transportation incidents.

12 Department of Health and Human Services. 2022. “State of Nebraska: Assisted Living Facilities.” <https://dhhs.ne.gov/licensure/Documents/ALF%20Roster.pdf>.

13 Department of Health and Human Services. 2022. “State of Nebraska Roster: Hospitals.” <https://dhhs.ne.gov/licensure/Documents/Hospital%20Roster.pdf>.

14 Department of Health and Human Services. 2022. “State of Nebraska Roster: Long Term Care Facilities.” <https://dhhs.ne.gov/licensure/Documents/LTCRoster.pdf>.

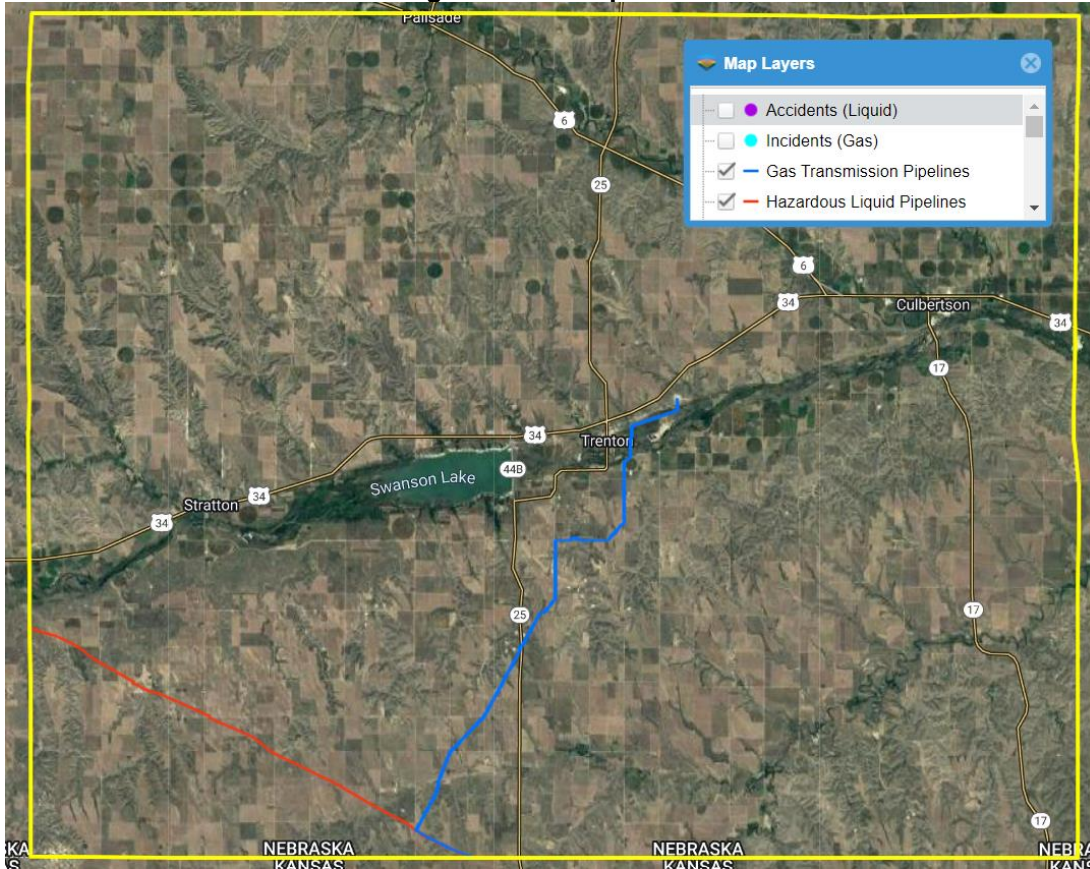
15 Department of Health and Human Services. 2022. “State of Nebraska Roster: Rural Health Clinic.” https://dhhs.ne.gov/licensure/Documents/RHC_Roster.pdf.

16 Nebraska Department of Transportation. 2021. “Annual Average Daily Traffic Flow.” Accessed July 2022. <https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

Hazardous Materials

The Hazardous Materials Lifeline includes chemical storage facilities, pipelines, and transported chemical tanks. A gas transmission and hazardous liquid pipeline travel through the county and can be seen on the figure below.

Figure HTC.7: Pipelines



Source: National Pipeline Mapping System¹⁷

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there 104 chemical storage sites throughout Hitchcock County which house hazardous materials.¹⁸ See the map below for the locations of the chemical storage sites.

Other Community Lifelines

Hitchcock County identified lifelines that did not fit into the previous seven FEMA lifeline categories but are considered lifelines by the county. The other community lifelines are listed in the table below.

Table HTC.15: Other Community Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
22	Trenton Ag	-	N
23	Kugler's Inc.	-	N
24	Frenchman Valley Co-op	-	N

¹⁷ National Pipeline Mapping System. 2022. "Public Viewer." Accessed July 2022. <https://pvnpmns.phmsa.dot.gov/PublicViewer/>.

¹⁸ Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed May 2022.

Figure HTC.8: Fixed Chemical Storage Sites

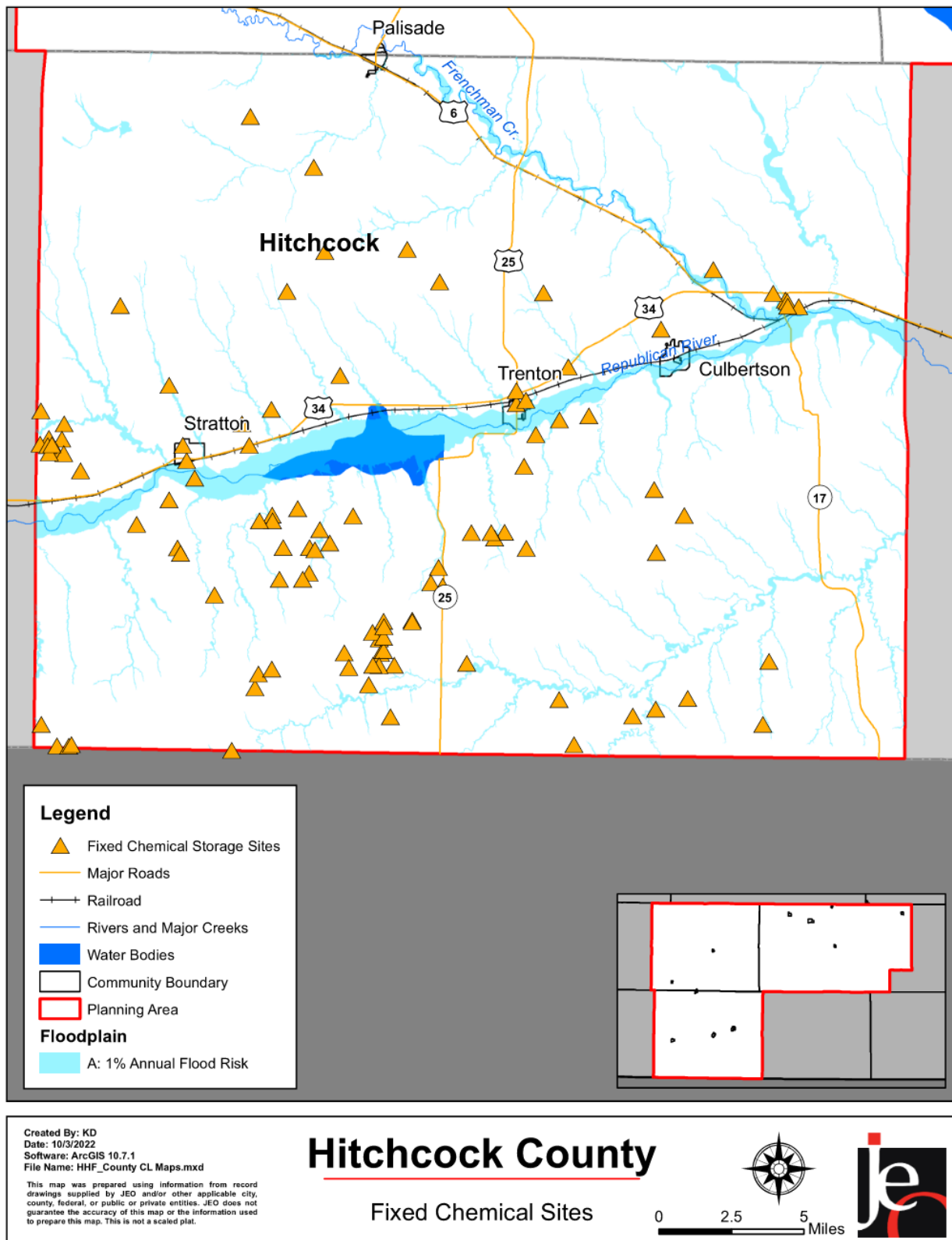
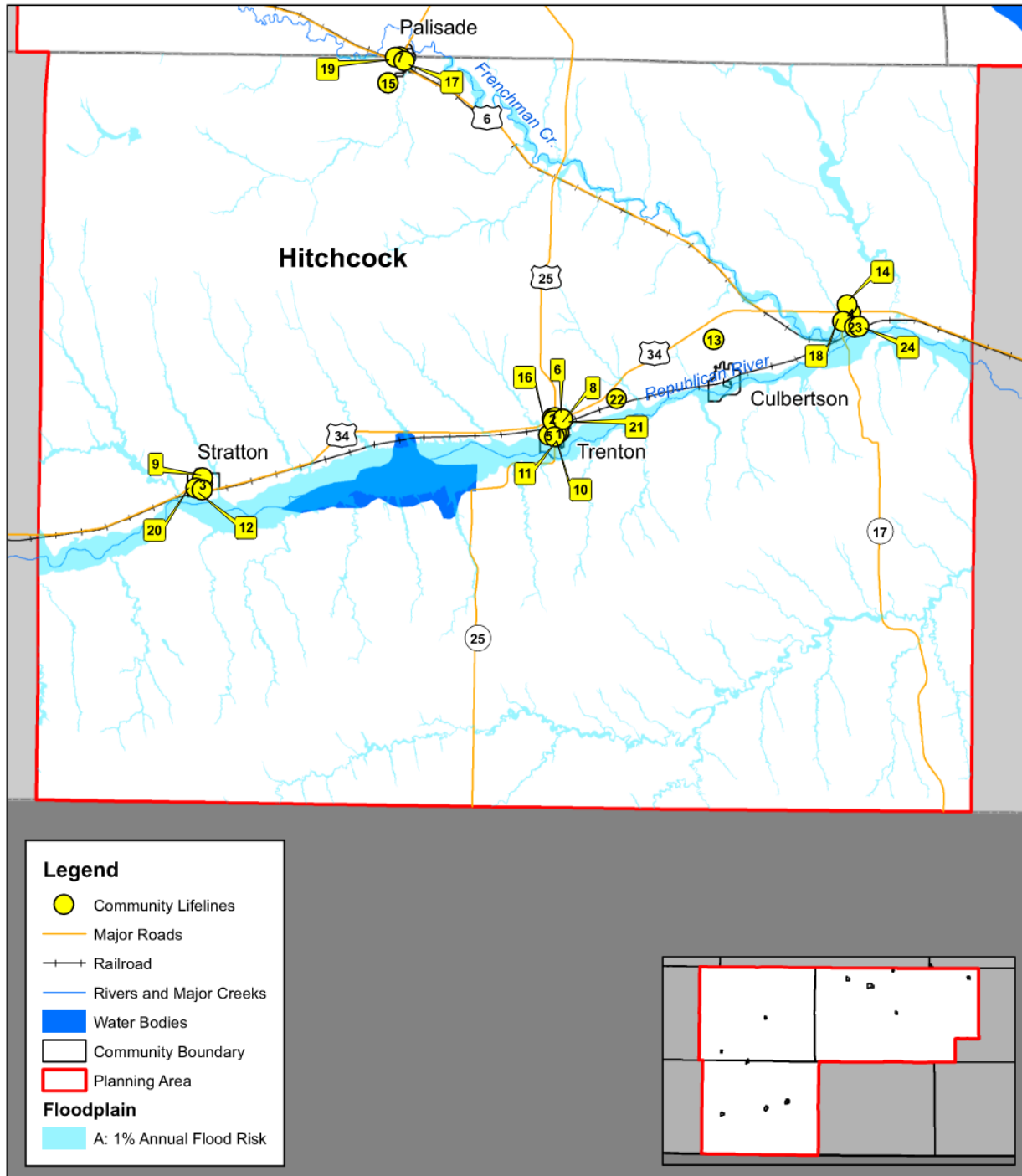


Figure HTC.9: Community Lifelines



Created By: KD
 Date: 10/3/2022
 Software: ArcGIS 10.7.1
 File Name: HHF_County CL Maps.mxd

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plat.

Hitchcock County

Community Lifelines Map



0 2.5 5 Miles



Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

Table HTC.16: Parcel Improvements and Value in the Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
1,860	\$149,002,185	343	\$34,022,649	18.4%

Source: County Assessor, 2021

Historical Occurrences

The following table provides a statistical summary for hazards that have occurred in the county. The property damages from the NCEI Storm Events Database (January 1996 through February 2022) should be considered only as broad estimates. Crop damages reports come from the USDA Risk Management Agency for Hitchcock County between 2000 and 2021.

Table HTC.17: County Hazard Loss History

Hazard Type		Count	Property Damage	Crop Damage ²
Animal & Plant Disease	Animal Disease ¹	1	1 Animal	N/A
	Plant Disease ²	20	N/A	\$218,754
Dam Failure⁵		4	N/A	N/A
Drought⁶		446 out of 1,525 Months	\$0	\$62,945,975
Extreme Heat⁷		Avg. 12 Days a Year	N/A	\$6,539,144
Flooding⁸	Flash Flood	14	\$515,000	\$25,750
	Flood	2	\$0	
Grass/Wildfires⁹ <i>1 Fatality</i>		123	\$71,037	\$44,586
Hazardous Materials Release	Fixed Site ³	12	\$0	N/A
	Transportation ⁴	2	\$700	N/A
Public Health Emergency		2	N/A	N/A
Severe Thunderstorms⁸	Hail Range: 0.75 – 4 in. Average: 1.19 in.	243	\$71,000	\$14,297,748
	Thunderstorm Wind Range: 58 – 105 mph Average: 68 mph 1 Fatality	81	\$5,731,500	
	Heavy Rain	0	\$0	
	Lightning	3	\$6,750	
	Blizzard	15	\$40,000	
	Extreme Cold/Wind Chill	6	\$0	
Severe Winter Storms⁸	Heavy Snow	17	\$0	\$6,123,361
	Ice Storm	3	\$0	
	Winter Storm	17	\$0	

Hazard Type		Count	Property Damage	Crop Damage ²
Terrorism and Cyber Security ¹⁰	Winter Weather	7	\$30,000	
		0	\$0	N/A
Tornadoes and High Winds ⁸	High Winds Range: 40 – 81 mph Average: 61 mph	39	\$6,500	\$1,414,010
	Tornadoes Range: EF0 Average: EF0	7	\$0	\$33,386
Total		618	\$6,472,487	\$93,153,663

N/A: Data not available
 1 - NDA, 2014 – 2021
 2 - USDA RMA, 2000 – 2021
 3 - NRC, 1990 – 2021
 4 - PHSMA, 1971 – April 2022
 5 – DNR Communication, June 2022

6 - NOAA, 1895 – May 2022
 7 – High Plains Regional Climate Center, 1905 – May 2022
 8 - NCEI, 1996 - February 2022
 9 - NFS, 2000 - 2020
 10 - University of Maryland, 1970-2019

Hazard Prioritization

The Hayes, Hitchcock, and Frontier Counties Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. However, during the planning process, the local planning team identified specific hazards of top concern for Hitchcock County which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the hazards of top concern identified by the county. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Four | Risk Assessment*.

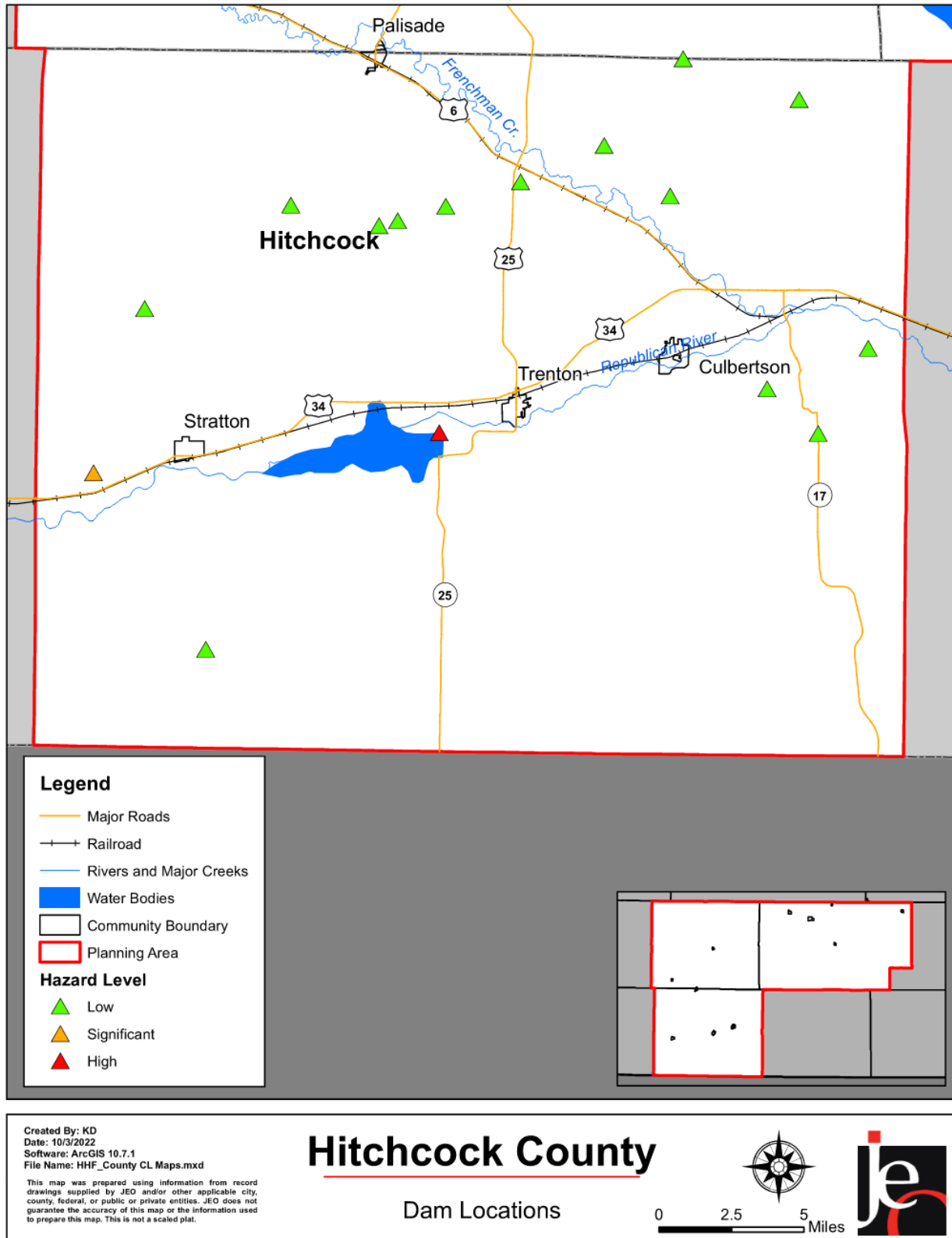
Dam Failure

While not identified as a hazard of top concern by the local planning team, Hitchcock County has one high hazard dam. The Trenton Dam is located along the Republican River and creates the Swanson Reservoir. Normal storage for the dam is 112,214 acre-feet. If the dam were to fail it would likely impact the Village of Trenton and the Village of Culbertson. The figure below shows the location of the dams in the county.

Drought

The county has been experiencing a prolonged severe drought since 2021. Without rain and snow accumulation, many creeks have run dry, and the ground has become dry as well. Because of this, wildfires are occurring more often and have become harder to contain. In 2022 the county received a USDA Disaster Designation. The drought has also reduced the availability of water for fighting fires. Hitchcock County’s economy is largely based in agriculture. During a drought crops and cattle are affected which negatively impact the local economy. Trenton and Stratton both have had drought impact their water supply in the past and may need an additional water source in the future. If a water emergency were to impact a community, the county would help to bring in water from an outside source.

Figure HTC.10: Dam Locations

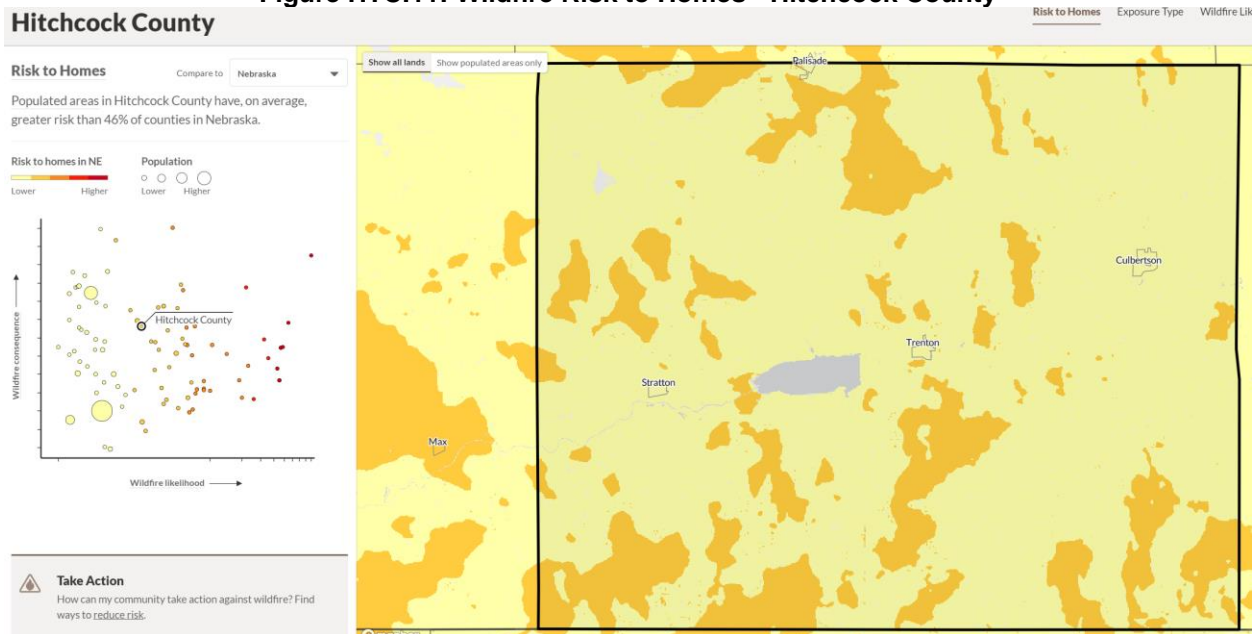


Grass/Wildfires

Numerous wildfires occur each year in the county. Most recently there were three wildland fires in one day on July 19th, 2022. Loss of crops and rangeland are typically the biggest impacts from the fires. The largest reported fire occurred August 3, 2002, when a lightning caused fire burned 3,010 acres of land. A fire in October 2006 resulted in one death. The past several years have been very dry in the county. This along with high winds are a big concern for large wildfires. Local volunteer fire departments are not getting enough new volunteers to respond to the growing number of fires. More fires and longer fire durations are causing a strain on volunteers. There are four fire districts in the county, Culbertson Rural Fire District, Palisade Rural Fire District, Trenton Rural Fire District, and Stratton Rural Fire District.

Homes that are at the greatest risk to wildfire in Hitchcock County are located primarily in the southern portions of the county (Figure HTC.11). Populated areas in Hitchcock County have, on average, a greater risk than 46% of counties in Nebraska.

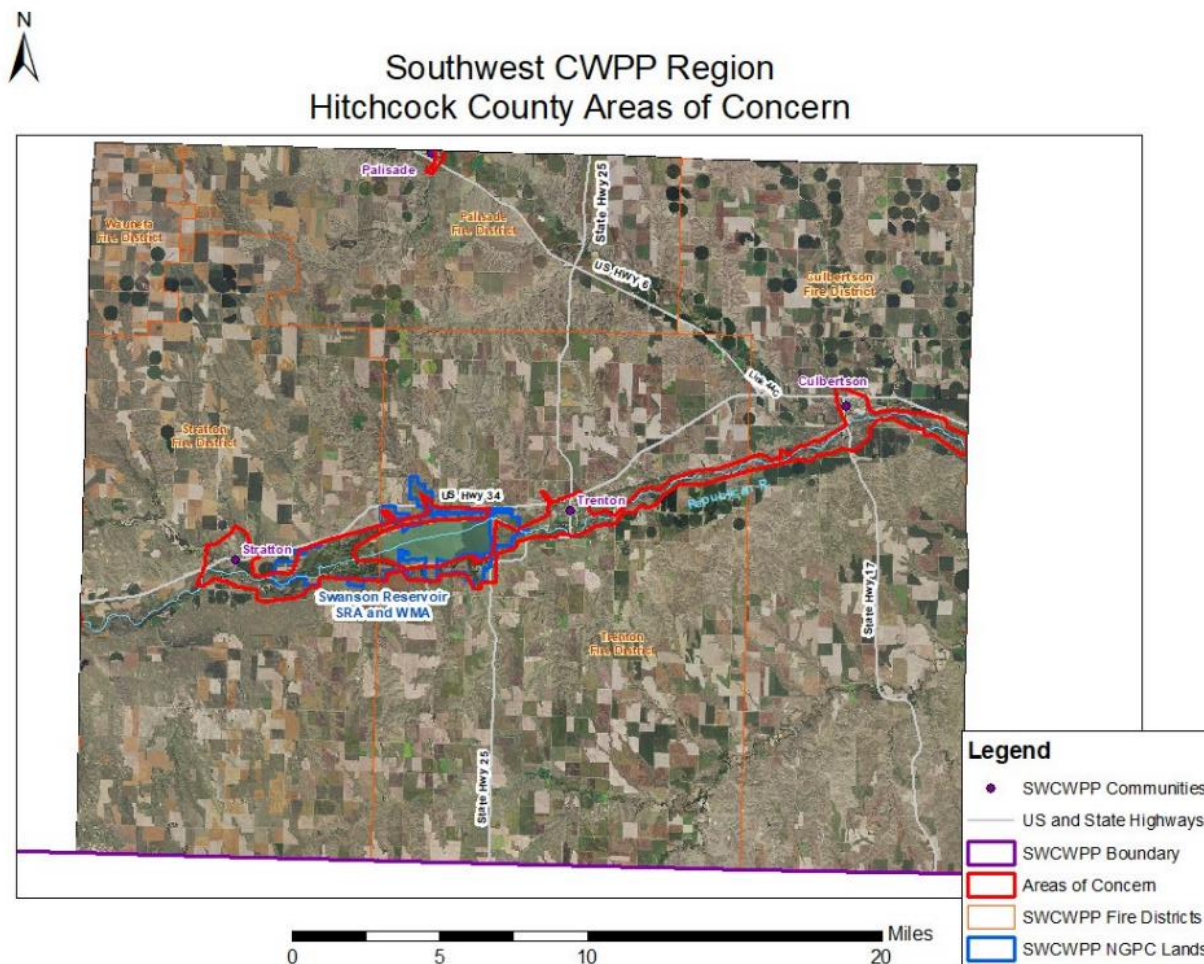
Figure HTC.11: Wildfire Risk to Homes - Hitchcock County



According to the Southwest Nebraska CWPP, “the area most at-risk from wildfire is located along the Republican River from Stratton to Culbertson, including the land surrounding Swanson Reservoir. In this area eastern redcedar has encroached into both woodlands and grasslands, creating high fire hazard. Another high-risk area runs from Palisade north into Hayes County. The Palisade fire chief stated that most of their fire district is isolated from water, with Palisade being the only water source.” Identified areas of concern can be found in the figure on the next page.

19 United States Department of Agriculture, United States Forest Service. 2022. “Wildfire Risk to Communities.” <https://wildfirerisk.org/>.

Figure HTC.12: Wildfire Areas of Concern



Source: Nebraska Forest Service

Severe Thunderstorms

In 2022, the county experienced several dry severe thunderstorms as well as typical severe thunderstorms. Lightning strikes from these events have caused numerous wildland fires. The most damaging event occurred on August 7, 2015. During this thunderstorm wind event, \$4,100,000 in damages occurred to power poles, trees, and buildings east of Palisade. Fires and power outages are the primary concerns related to severe thunderstorms. To reduce the potential impacts of severe thunderstorms, a mass notification system is available to the public along with ongoing public education. However, the mass notification system is voluntary, and more people need to sign up for it. County Emergency Management would like every fire district and community in the county to have a backup generator. All county owned buildings have insurance in the event of hail damage.

Tornadoes and High Winds

During January to March 2022, the county experienced a record-breaking number of days with wind gusts above 60 mph. In addition, the county experienced a couple of tornadoes in the spring as well. Damage from the high wind and tornado events were limited mostly to crops and outbuildings. The local planning team indicated that storms that produce high winds and tornadoes are becoming more frequent in the area. Because of the ongoing drought, high winds causing dust storms are also a concern. In order to reduce the risk from tornadoes and high winds,

the county has implemented a mass alert system and performs continuous education to the public on what to do and how to prepare. However, more education is needed along with more public participation on the mass alert system. There are no safe rooms in the county, but emergency management would like to identify a potential location. The area around Trenton Lake needs a warning siren but does not currently have one.

Mitigation Strategy

New Mitigation Actions

Mitigation Action	Backup Generators
Description	Identify locations that are in need of backup generators. Purchase and install backup generators at the identified locations.
Hazard(s) Addressed	Extreme Heat, Flooding, Grass/Wildfires, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	\$40,000+ per Generator
Local Funding	General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	Emergency Management
Status	Not Started. The county does not have the capability to implement this project due to a lack of funding.

Mitigation Action	Implement Actions Identified in the CWPP
Description	Implement actions identified in the CWPP and assist the county fire districts implement actions. Actions identified include increasing emergency preparedness, training and education, and fuels mitigation.
Hazard(s) Addressed	Grass/Wildfire, Drought
Estimated Cost	Staff Time - \$100,000+
Local Funding	General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Emergency Management, Local Fire Departments
Status	Not Started. The county has the capability to implement this project.

Mitigation Action	Increase Mass Alert System Participation
Description	Increase the number of individuals signed up for the county's mass alert system.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Heat, Flooding, Grass/Wildfires, Hazardous Materials Release, Public Health Emergency, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	Staff Time
Local Funding	Staff Time
Timeline	Ongoing
Priority	Low
Lead Agency	Emergency Management
Status	Ongoing. Additional outreach is needed.

Mitigation Action	Public Awareness and Education
Description	Through activities such as outreach projects, distribution of maps, and environmental education increase public awareness of natural and manmade hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Heat, Flooding, Grass/Wildfires, Hazardous Materials Release, Public Health Emergency, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	Staff Time
Local Funding	Staff Time
Timeline	Ongoing
Priority	Low
Lead Agency	Emergency Management
Status	Ongoing. Public education is ongoing throughout the year, but more is needed.

Mitigation Action	Repetitive Loss Property Mitigation
Description	Identify and perform flood mitigation options on repetitive loss properties within the county.
Hazard(s) Addressed	Flooding
Estimated Cost	Varies by Project
Local Funding	General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Floodplain Administrator
Status	Not Started. The county does not have the capability to implement this project as funding options still need to be investigated.

Kept Mitigation Actions

Mitigation Action	Alert and Warning Sirens
Description	Install warning sirens at Trenton Lake that currently do not have any system. Identify other areas in need of a warning siren. Purchase and install sirens in those locations.
Hazard(s) Addressed	Severe Thunderstorms, Tornadoes and High Winds
Estimated Cost	\$52,000+
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Emergency Management
Status	Planning Stage. The county does not have the capability to implement this project due to a lack of funding. A grant was applied for but was not chosen.

Mitigation Action	Storm Shelter and Safe Rooms
Description	Assess, design, and construct fully supplied safe rooms in areas throughout the planning area. Asses the adequacy of current buildings to be used as safe rooms. Construct safe rooms in areas of greatest need, either as new construction or retrofitting.
Hazard(s) Addressed	Severe Thunderstorms, Tornadoes and High Winds
Estimated Cost	\$350 - \$500 per square foot
Local Funding	General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	Emergency Management, Planning, County Administration
Status	Not Started. The county does not have the capability to implement this project due to a lack of funding.

Removed Mitigation Actions

Mitigation Action	Participate or Maintain Good Standing in the NFIP
Description	Participate in the NFIP or maintain good standing with the NFIP including floodplain management practices/requirements and regulation enforcement and updates. Hitchcock County will be the main manager of Trenton’s participation in the NFIP. Hitchcock County will monitor and fully enforce floodplain management regulations as part of NFIP participation.
Hazard(s) Addressed	Flooding
Status	Removed as this is a maintenance action. The county will continue to maintain good standing with the NFIP.

Mitigation Action	Floodplain Development Ordinance Enforcement
Description	Continue floodplain management practices such as enforcement of floodplain management requirements, floodplain identification, and mapping. Continue to enforce local floodplain regulations for structures location in the 100-year floodplain.
Hazard(s) Addressed	Flooding
Status	Removed as this is a maintenance action. The county will continue to enforce floodplain regulations.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside county planning documents (e.g., annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

County Emergency Management will be responsible for reviewing and updating this county profile outside of the five-year update. Hitchcock County will review the plan bi-annually and the public will be notified using social media and at county commissioner’s meetings.

Community Profile

Village of Culbertson

Hayes, Hitchcock, and Frontier Counties Hazard Mitigation Plan

2023

Local Planning Team

The Village of Culbertson’s local planning team for the hazard mitigation plan are listed in the table below along with the meetings attended. All planning worksheets were filled out and returned by members of the local planning team.

Table CLB.1: Culbertson Local Planning Team

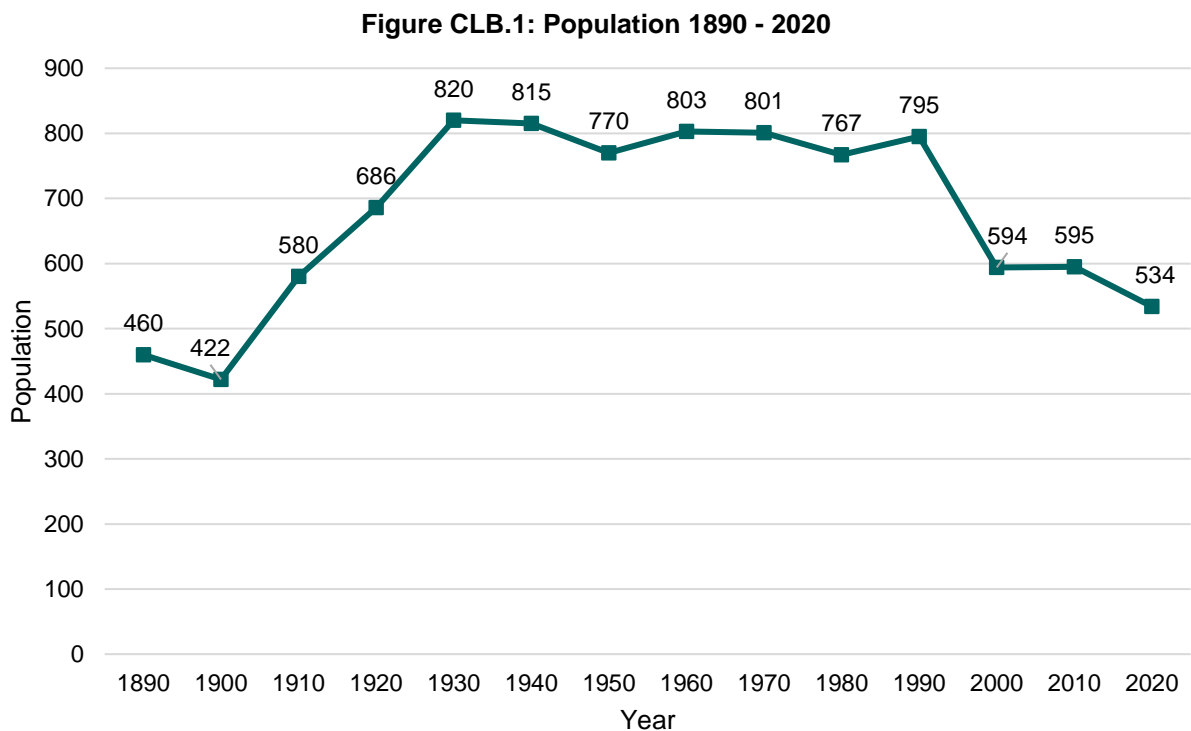
Name	Title	Jurisdiction	R1 Meeting	R2 Meeting
JoLyn Hare	Clerk / Treasurer	Village of Culbertson	Curtis	Curtis

Location and Geography

The Village of Culbertson is in northeastern Hitchcock County and covers an area of 0.84 square miles. It is the largest community by population in Hitchcock County. Frenchman Creek and the Republican River run through the southern portion of the village.

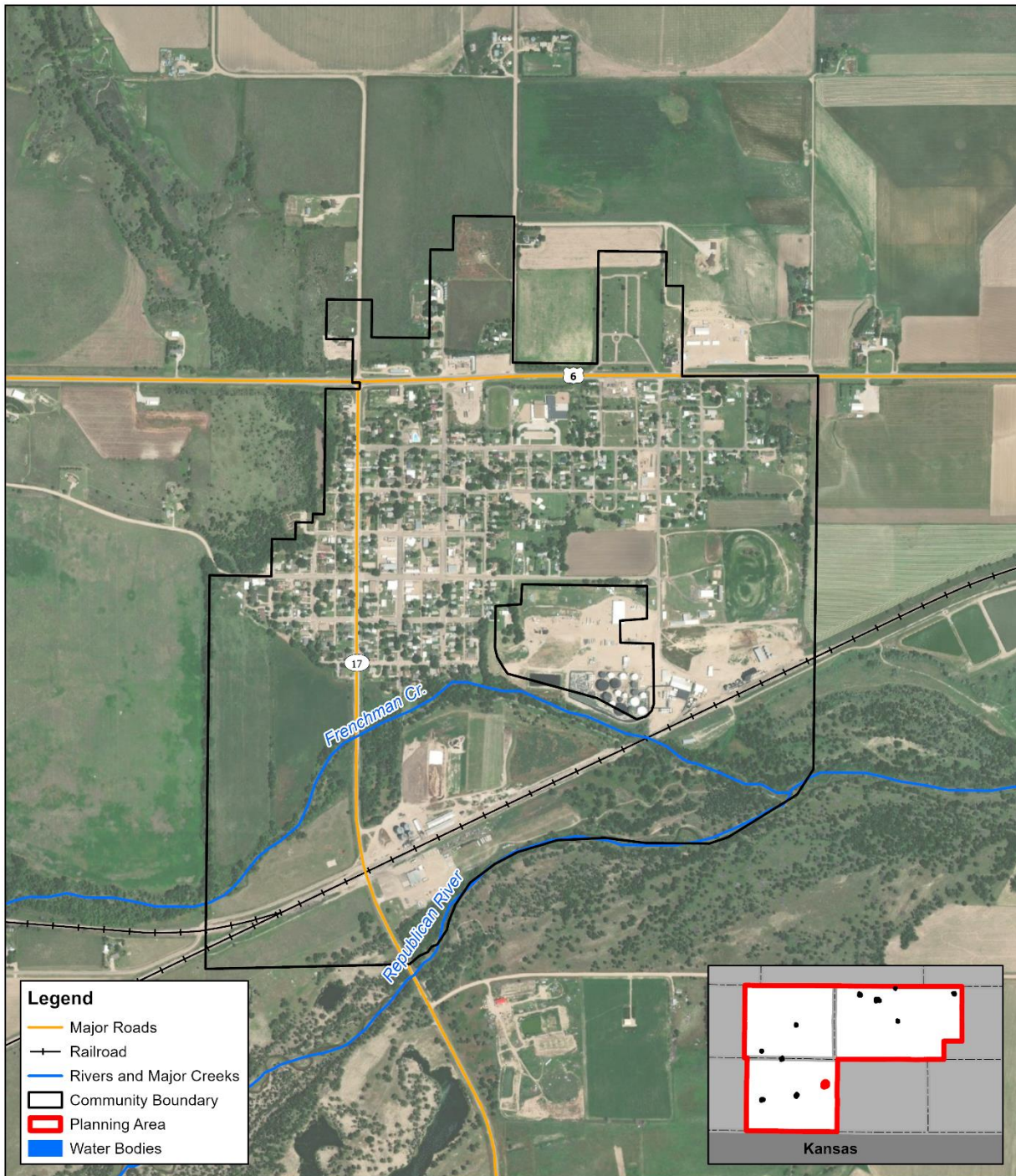
Demographics

The following figure displays the historical population trend for the Village of Culbertson. This figure indicates that the population of Culbertson has been declining since 2010 to 534 people in 2020. A declining population can lead to more unoccupied and unmaintained housing that is then at risk to high winds and other hazards. Unoccupied housing may also be an economic indicator that future development is unlikely to occur. Furthermore, with fewer residents, tax revenue decreases for the community, which could make implementing mitigation projects more fiscally challenging. Culbertson’s population accounted for 20.4% of Hitchcock County’s population in 2020.²⁰



²⁰ United States Census Bureau. “2020 Census Bureau Decennial Census: P1: Race.” <https://data.census.gov/>.

Figure CLB.2: Village of Culbertson

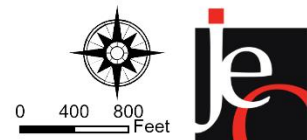


Created By: NL
Date: 5/26/2022
Software: ArcGIS Pro 2.8
File Name: HHFCCommunityBasemap.mxd

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

Village of Culbertson

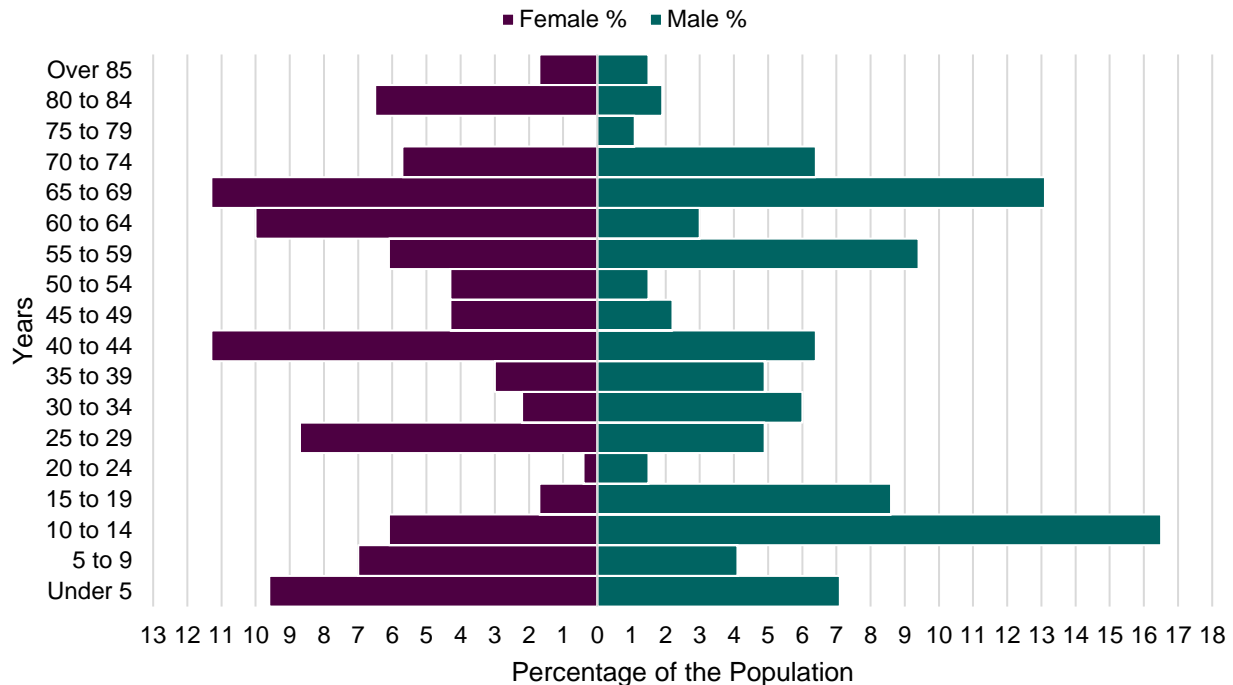
Boundary Map



The young, elderly, and minority populations may be more vulnerable to hazards than other groups. Looking at Culbertson’s population:

- **4.5% is non-white.** Since 2010, Culbertson became more ethnically diverse. In 2010, 2.5% of the Culbertson’s population was non-white. By 2020, 4.5% was non-white.²¹
- **Median age of 40.7.** The median age of Culbertson was 40.7 years old in 2020. The population became younger since 2010, when the median age was 43.2.²²

Figure CLB.3: Culbertson’s Population Pyramid



The figure above shows Culbertson’s population percentage broken down by sex and five-year age groups. Culbertson’s population is equally spread out between different age groups. This indicates that the population is likely to remain stable in the future.

Employment and Economics

Low-income populations, long distance commuters, and the unemployed may be more vulnerable to certain hazards like extreme heat and flooding than other groups. Culbertson’s population has:

- **12.1% of people living below the poverty line.** The poverty rate (12.1%) in the Village of Culbertson was higher than the state’s poverty rate (10.4%) in 2020.²³
- **\$51,250 median household income.** Culbertson’s median household income in 2020 (\$51,250) was \$11,765 lower than the state (\$63,015).²³
- **1.2% unemployment rate.** In 2020 Culbertson has a lower unemployment rate (1.2%) when compared to the state (3.4%).²³

21 United States Census Bureau. “2020 Census Bureau American Community Survey: DP05: ACS Demographic and Housing Estimates.” <https://data.census.gov/>.

22 United States Census Bureau. “2020 Census Bureau American Community Survey: S0101: Age and Sex.” <https://data.census.gov/>.

23 United States Census Bureau. “2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics.” <https://data.census.gov/>.

- **11.2% of workers commuted 30 minutes or more to work.** Fewer workers in Culbertson commuted 30 minutes or more to work than compared to workers commuting less than 15 minutes (11.2% compared to 39.3%).²⁴

Major Employers

Major employers in Culbertson include Kugler's, Frenchman Valley Co-op, Go Light, and Hillside Perk. A lot of residents commute to McCook for employment.

Housing

Multiple factors inform the vulnerability of housing units to hazard events. Housing age, for example, may indicate which housing units were built prior to the development of state building codes. Older houses and vacant housing generally more vulnerable to hazards if poorly maintained. Additionally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe thunderstorms if those homes are not anchored correctly. Renters are particularly vulnerable, as renter-occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. Renters are less likely than homeowners to have flood insurance, have ready access to financial resources to evacuate, or to know their risks to flooding and other hazards. Culbertson's housing stock has:

- **74.1% of housing built prior to 1970.** Culbertson has a larger share of housing built prior to 1970 than the state (74.1% compared to 45.5%).²⁵
- **24.9% of housing units vacant.** Culbertson has a higher vacancy rate 24.9% compared to the rest of the state (9.2%).²⁵
- **4.2% mobile and manufacture housing.** The Village of Culbertson has a larger share of mobile and manufactured housing (4.2%) compared to the state (3.3%).²⁵ The village has an ordinance that mobile homes cannot be placed west of Railroad Street.
- **20.3% renter-occupied.** The rental rate of Culbertson was 20.3% in 2020. This is lower than the state's rate of 33.8%.²⁵

Broadband Access

Internet or broadband access – through Wi-Fi or cellphone coverage – is a critical means of sharing and receiving information regarding hazardous events, including storm warnings, evacuation orders, or weather updates. Rural communities often lack adequate internet or broadband access. However, internet access is as vital a utility as electricity, as seen through the COVID-19 pandemic when many people worked or attended school from home.

- **75.1% of households have a broadband internet subscription.** Culbertson has a smaller share of households with broadband (75.1%) compared to the state (85.6%).²⁶

24 United States Census Bureau. "2020 Census Bureau American Community Survey: S0802: Means of Transportation to Work by Selected Characteristics." <https://data.census.gov/>.

25 United States Census Bureau. "2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." <https://data.census.gov/>.

26 United States Census Bureau. "2020 Census Bureau American Community Survey: DP02: Selected Social Characteristics in the United States." <https://data.census.gov/>.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. The Village of Culbertson is governed by a village board of trustees; other governmental offices and departments that may be involved in implementing hazard mitigation initiatives are listed below.

- Clerk/Treasurer
- Attorney
- Utility Superintendent
- Village Marshal
- Fire Department
- Sewer/Street/Water Commissioner
- Planning Committee
- Parks Department
- Floodplain Administrator

Capability Assessment

The planning team assessed the Village of Culbertson's hazard mitigation capabilities by reviewing local existing policies, regulations, plans, and programs related to hazard mitigation. The following tables summarize the community's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. Culbertson does not anticipate improving or adding to existing capabilities due a lack of funding and personnel.

Village funds are limited to maintaining current facilities and systems, but a large portion of funds have not already been dedicated to a specific project. Funds have stayed the same in recent years.

Table CLB.2: Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	No
	Capital Improvements Plan	No
	Economic Development Plan	No
	Local Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	Yes
	Building Codes	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No
	Regional Community Wildfire Protection Plan	Yes
	Other (if any)	Water System Emergency Response Plan, Wellhead Protection Ordinance
Planning Commission	Yes	

Capability/Planning Mechanism		Yes/No
Administrative & Technical Capability	Floodplain Administration	Yes
	GIS Capabilities	Yes
	Chief Building Official	No
	Civil Engineering	No
	Local staff who can assess community's vulnerability to hazards	Yes
	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	-
Fiscal Capability	1- & 6-Year plan	Yes
	Applied for grants in the past	Yes
	Awarded a grant in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	No
	Gas/Electric Service Fees	No
	Storm Water Service Fees	No
	Water/Sewer Service Fees	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
	Other (if any)	-
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	No
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	No
	Natural disaster or safety related school programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
Other (if any)		

Table CLB.3: Overall Capability

Overall Capability	Limited/Moderate/High
Financial resources to implement mitigation projects	Limited
Staff/expertise to implement projects	Limited
Public support to implement projects	Limited
Time to devote to hazard mitigation	Limited

Social Vulnerability

FEMA's National Risk Index is a new mapping tool that analyzes a community's risk to natural hazards on a scale of 0 (lowest possible value) to 100 (highest possible value). The overall risk for Hitchcock County, which includes Culbertson, is Very Low (6.26). The average for the State of Nebraska is 9.43.²⁷

- **Social Vulnerability:** Social groups in Hitchcock County have a Relatively Moderate (43.40) susceptibility to adverse impacts of natural hazards when compared to the rest of the U.S.
- **Community Resilience:** Communities in Hitchcock County have a Relatively Low (51.99) ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S.

An additional tool developed by Headwaters Economics, the Rural Capacity Index, evaluates rural communities and counties across the country for local capacity. Capacity includes the staffing, resources, and expertise to both apply for funding and fulfill reporting requirements, as well as design, build, and maintain infrastructure products over the long term. Communities lacking local capacity often have the greatest need for infrastructure investments particularly, rural communities and communities of color. The Rural Capacity Index helps identify communities with limited capacity on a scale of 0 (no capacity) to 100 (high capacity). This index is based on 10 variables that can function as proxies for community capacity. The following table lists the components and scores for the Village of Culbertson compared to the county.

Table CLB.4: Rural Capacity Index

Components of Index	Village of Culbertson	Hitchcock County
County is Metropolitan?	No	No
Has a Head of Planning?	No	Yes
Has a College or University?	No	No
Adults with Higher Education:	17%	18%
Families Below Poverty Level:	8%	7%
Households with Broadband:	77%	69%
People without Health Insurance:	9%	10%
Voter Turnout:	77%	77%
Income Stability Score (0 to 100):	47	47
Population Change (2000 to 2019):	-7	-349
Overall Rural Capacity Index Score	46	65

Source: Headwaters Economics²⁸

National Flood Insurance Program (NFIP)

Culbertson is a member of the NFIP having joined on 9/1/1986, and the village's Floodplain Administrator (Chad Dixon) oversees the commitments and requirements of the NFIP including enforcement of the local floodplain management regulations. The initial FIRM for the village was delineated in 5/10/1974 and the current effective map date is 3/18/2008, which has been adopted and incorporated into the most recent local floodplain regulations (Ordinance 461) on 8/7/2012. As of August 31, 2021, there are no NFIP policies in-force for the village. Culbertson does not currently have any repetitive loss or severe repetitive loss structures. The village requires permits for any development in the floodplain and violators of the floodplain regulations will be fined. After a flood event, the community implements substantial improvement and substantial damage

27 Federal Emergency Management Agency. "National Risk Index". Accessed July 2022. <https://hazards.fema.gov/nri/map>.

28 Headwaters Economics. January 2022. "Rural Capacity Map". Accessed July 2022. <https://headwaterseconomics.org/equity/rural-capacity-map/>.

provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA_Handbook_FINAL.pdf. The local planning team has said the Village of Culbertson will remain in good standing and will continue involvement with the NFIP in the future.

Plans and Studies

Culbertson has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the village updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Building Code (1976)

The building code sets standards for constructed buildings and structures. Due to the age of the code, it has not been integrated with hazard mitigation principles. Enforcement of the building code is handled by the village's planning committee. During the code's next update, the hazard mitigation plan will be reviewed for inclusion.

Floodplain Regulations (2012) and Zoning Ordinance (1979)

The village's floodplain regulations, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. Since this is the village's first time participating in the hazard mitigation plan, these documents have not been integrated. However, the documents discourage development in the floodplain and discourage housing and vulnerable populations near chemical storage sites.

Hitchcock County Local Emergency Operations Plan (2019)

Trenton is an annex in the Hitchcock County Local Emergency Operations Plan (LEOP). The hazard mitigation plan has not been integrated with this plan; however, the LEOP establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. Flooding, dam failure, and mass shelter information from the LEOP was used to inform hazard prioritization and community lifelines.

Water System Emergency Response Plan (2022)

A water system emergency response plan serves as a guideline for water operators and village administration to minimize the disruption of normal services to consumers and to provide public health protection during an emergency event. The document identifies several natural and human-caused events and discusses the water system's response during those events. The hazard mitigation plan has not been integrated with this plan, because this is the village's first time participating.

Future Development Trends

There has been little to no development in the community over the last five years likely due to a decreasing population. Vulnerability to hazards likely stays the same because of this. However, if buildings or infrastructure are not being properly maintained, vulnerability to hazards may increase due to aging materials. In the next five years, there are no plans for new housing or commercial developments as the population will likely to remain stable. Culbertson does not have a future land use map.

Community Lifelines

Each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The following subsections list those community lifelines by type, as identified by the local planning team.

Safety and Security

The Safety and Security Lifeline includes law enforcement, security, fire services, search and rescue, government services, and community safety. The table below lists Safety and Security Lifelines for Culbertson.

Table CLB.5: Safety and Security Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Ambulance Barn	G	N
2	Fire Department	-	N
3	Library	-	N
4	Village Office	-	

Food, Water, Shelter

Components of this lifeline include food, water, shelter, and agriculture. Food, Water, and Shelter Lifelines for the Village of Culbertson are included in the table below.

Table CLB.6: Food, Water, and Shelter Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
5	Hitchcock County Elementary	S	N
6	Water Tower	G	N

Health and Medical

Health and Medical Lifeline components can include medical care, patient transport, public health, fatality management, and the medical supply chain. The following medical and health facilities are located within the community. All identified medical lifelines are identified in other lifeline categories.

Energy

Energy Lifeline components include power, the power grid, and fuel. The table below lists Energy Lifelines for Culbertson. Culbertson did not identify any energy lifelines for the community.

Communications

Components of the Communications Lifeline include communication infrastructure, alerts, 911 dispatch, responder communications, and finance. Communication Lifelines for the Village of Culbertson are included in the table below.

Table CLB.7: Communications Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
7	Siren Tower #1	-	N
8	Siren Tower #2	-	N

Transportation

Transportation Lifeline components include interstates, highways, major roadways, mass transit, railway, and aviation. Culbertson's major transportation corridors include U.S. Highway 6 and State Highway 17. The most traveled route is Highway 6 with an average of 3,280 vehicles daily, 525 of which are trucks.²⁹ The local planning team also identified Wyoming Street, Railroad Street and Kleven Avenue as having heavy truck traffic and chemical transportation. Culbertson has three rail lines (Burlington Northern Santa Fe, Amtrack, and Nebraska, Kansas Colorado Railway) traveling through the southern portion of the community. Two private airports are located near the village. The Hoyt Airport is 10 miles southwest and Hock Airport is five miles northeast. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk of transportation incidents. No significant transportation events have occurred in the village.

Hazardous Materials

The Hazardous Materials Lifeline includes chemical storage facilities, pipelines, and transported chemical tanks. There are no gas transmission or hazardous liquid pipelines in or near the community.³⁰ According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are seven chemical sites within or near Culbertson which house hazardous materials (listed below).

Table CLB.8: Chemical Storage Lifelines

CL Number	Name	Generator (G)	Floodplain (Y/N)
9	CenturyLink	G	N
10	Farmers Co-op Grain & Supply	-	N
11	Kugler Oil Co Fertilizer Plant	-	Y
12	Mentzer Oil Co Bulk Plant	-	N
13	Rippen Oil	-	N

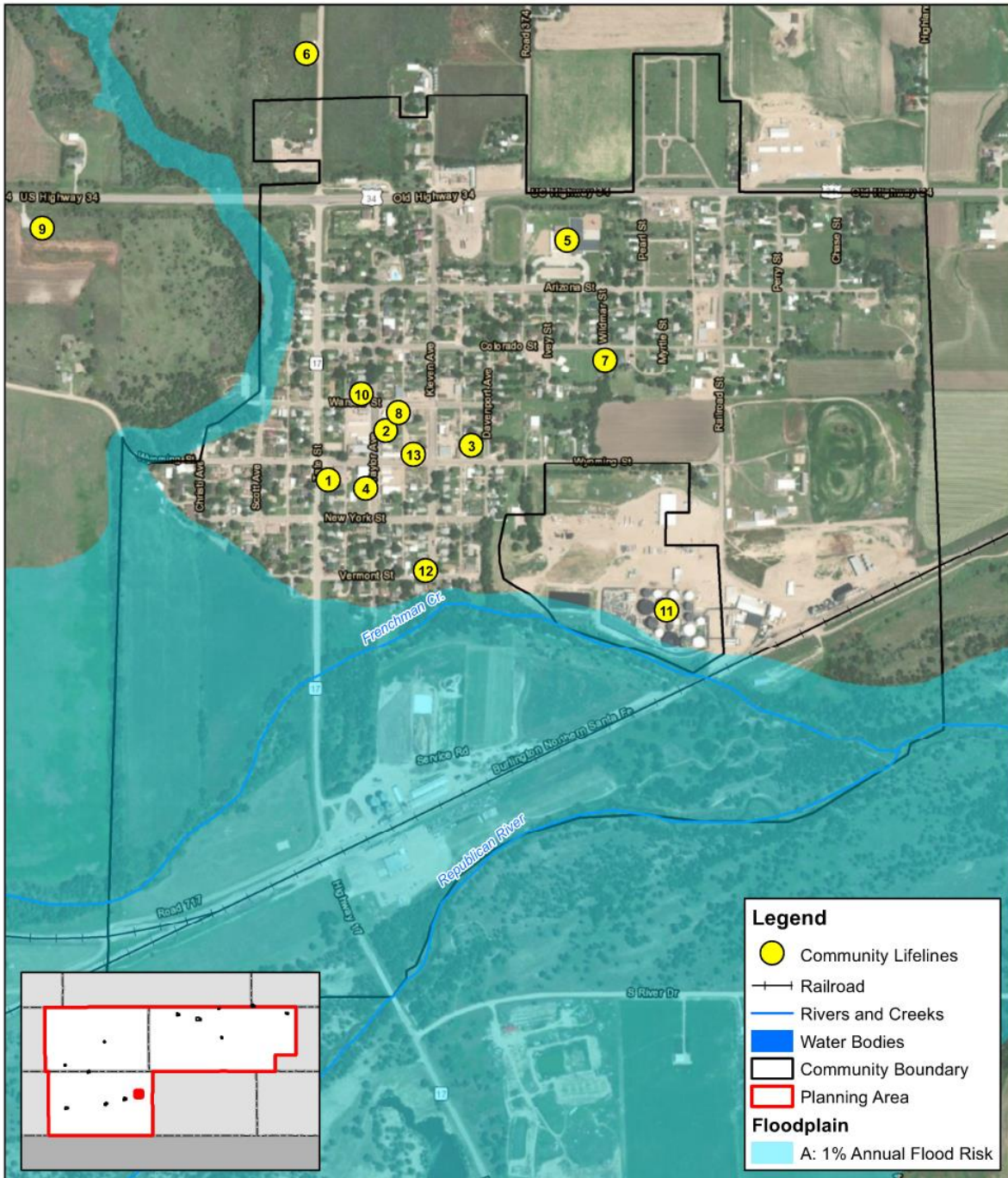
Source: Nebraska Department of Environment and Energy³¹

29 Nebraska Department of Transportation. 2021. "Annual Average Daily Traffic Flow." Accessed July 2022. <https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

30 National Pipeline Mapping System. 2022. "Public Viewer." Accessed July 2022. <https://pvnpm.phmsa.dot.gov/PublicViewer/>.

31 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed May 2022.

Figure CLB.4: Community Lifelines



Created By: KD
 Date: 10/14/2022
 Software: ArcGIS 10.8.1
 File: HHF_CL Maps.mxd

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Village of Culbertson

Community Lifelines Map



Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

Table CLB.9: Parcel Improvements and Value in the Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
318	\$17,750,690	30	\$3,010,325	9.4%

Source: County Assessor, 2021

Historical Occurrences

See the Hitchcock County profile for historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

Hazard Prioritization

The Hayes, Hitchcock, and Frontier Counties Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. However, during the planning process, the local planning team identified specific hazards of top concern for Culbertson which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the hazards of top concern identified by the Village of Culbertson. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Four: Risk Assessment*.

Drought

The village and region are currently experiencing a prolonged drought event. According to the High Plains Regional Climate Center, Culbertson has seen its driest year on record in 2022. During the summer of 2022 the village had to implement water restrictions to help reduce demand because of the drought. The primary concern for the village is wells running dry and not having any water for residents. Culbertson has four wells that are used for drinking water. During past drought events these wells have started to pump air due to a lack of groundwater. In the future, the village would like additional water storage to help prolong water use when the wells start to pump air.

Flooding

The Village of Culbertson is located right along Frenchman Creek and the Republican River. This creates a large area of floodplain in the southern portion of the community. Fortunately, the area is mostly farmland and there are very few homes or businesses located in the floodplain. There have been three reported flood events in the community totaling \$475,000 in damages. The most recent and most damaging event occurred in 2008 and caused \$250,000 in damages. According to the Risk Factor website, Culbertson has a minor risk of flooding with 14 properties and two miles of roads having a greater than 26% chance of being affected by flooding over the next 30 years. That risk is unlikely to change in the next 30 years.³² To help reduce the impacts of flooding, Culbertson has discouraged building structures in the floodplain.

32 Risk Factor. "Flood Factor: Culbertson, Nebraska". Accessed October 2022. https://riskfactor.com/city/culbertson/3111615_fsid/flood.

Grass/Wildfires

Due to the ongoing drought, grass/wildfires have become a concern. Vegetation in the region is very dry, which increases the risk of wildfires. Culbertson Rural Fire District provides fire coverage for the village. It typically has 20-25 volunteer firefighters. Areas of concern include where agricultural land is located next to residential areas. According to the Nebraska Forest Service's *Wildfire Risk Explorer*, the area surrounding the northern portion of the community has moderate risk of wildfires and the area surrounding the southern portion of the community has low risk of wildfires.³³ This is likely because of Frenchman Creek and the Republican River being located on the southern portion of the village. The local planning team also identified the northern portion of the village as being at a much higher risk to wildfires. The fire department indicated that fire breaks are needed in these areas and could be very beneficial in the wildland-urban interface.

Hazardous Materials Release

There are five Tier II chemical storage facilities located in or near the community. Because of this, chemicals are also regularly transported on local routes through the village. Five chemical spills have occurred in the village. The largest event occurred in 1995 when a chemical transportation truck was overfilled and spilled 700 gallons of fuel. No injuries were reported from any of the events. The largest and most concerning site for the local planning team is Kugler Oil. This site is partially located in the floodplain, which increases the risk of a spill and contamination. If a spill were to occur in the village, the local fire department would likely be the first to respond. However, they do not have the proper equipment or training to deal with a hazardous materials event. Assistance would be needed from the Hazmat Team located in McCook, which is 15 minutes away.

Tornadoes and High Winds

While no reported tornado events have impacted the village, tornadoes are still a concern for the local planning team because of the potential destruction if one were to go through the community. If needed, the basement of the village office can be used as a sheltering location for the public. In addition, most homes in the community have basements. Power loss is a concern for the village's wells. Less than 10% of power lines are buried in the community, which puts the village at an increased risk to power loss. Southwest Public Power has a tree trimming program for any trees that are located near power lines.

Mitigation Strategy

New Mitigation Actions

Mitigation Action	Additional Water Storage
Description	Construct an additional water storage structure to help meet demand during drought or a water outage event.
Hazard(s) Addressed	Drought, Grass/Wildfire
Estimated Cost	\$100,000+
Local Funding	General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	Board of Trustees
Status	Planning Stage. The village does not currently have the capability to implement this project due to a lack of funding.

³³ Nebraska Forest Service. "Nebraska Wildfire Risk Explorer". Accessed October 2022. <https://nebraskawildfirerisk.com/>.

Mitigation Action	Backup Generators
Description	Identify locations that are in need of backup generators. Purchase and install backup generators at each identified location. A backup generator is needed at the village wells.
Hazard(s) Addressed	Extreme Heat, Flooding, Grass/Wildfires, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	\$36,000+ per Generator
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	Board of Trustees
Status	Planning Stage. The village currently has the capability to implement this project.

Mitigation Action	Drainage Improvements
Description	Add curb and gutter and storm drains in places where drainage is an issue.
Hazard(s) Addressed	Flooding
Estimated Cost	\$10,000+
Local Funding	Streets Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Board of Trustees
Status	Planning Stage. The village currently has the capability to implement this project.

Mitigation Action	Fuel Load Reduction
Description	Remove vegetation and add rock around village wells and water tower to create a fire break.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	Less than \$10,000
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Board of Trustees
Status	Planning Stage. The village currently has the capability to implement this project.

Mitigation Action	Public Awareness and Education
Description	Through activities such as outreach projects, distribution of maps, and environmental education increase public awareness of natural and manmade hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Heat, Flooding, Grass/Wildfires, Hazardous Materials Release, Public Health Emergency, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	\$500+
Local Funding	General Fund
Timeline	5+ Years
Priority	Low
Lead Agency	Board of Trustees
Status	Not Started. The village has the capability to implement this project.

Mitigation Action	Surge Protection
Description	Install and maintain surge protection on critical electronic equipment. Eight locations that need protection have been identified.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	\$100+
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	Board of Trustees
Status	Planning Stage. The village currently has the capability to implement this project.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (e.g., annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The Village Clerk and Utility Superintendent will be responsible for reviewing and updating this community profile outside of the five-year update. Culbertson will review the plan bi-annually and the public will be notified during village board meetings.

Community Profile

Village of Palisade

Hayes, Hitchcock, and Frontier Counties Hazard Mitigation Plan

2023

Local Planning Team

The Village of Palisade’s local planning team for the hazard mitigation plan are listed in the table below along with the meetings attended. All planning worksheets were filled out and returned by members of the local planning team.

Table PLD.1: Palisade Local Planning Team

Name	Title	Jurisdiction	R1 Meeting	R2 Meeting
Kerry Miller	Clerk / Treasurer	Village of Palisade	Curtis	Curtis
Brock Malcolm	Board Chairperson / Floodplain Administrator	Village of Palisade	-	-
Jason Hicks	Ex-Board Chairperson / Ex-Floodplain Administrator	Village of Palisade	Curtis	-

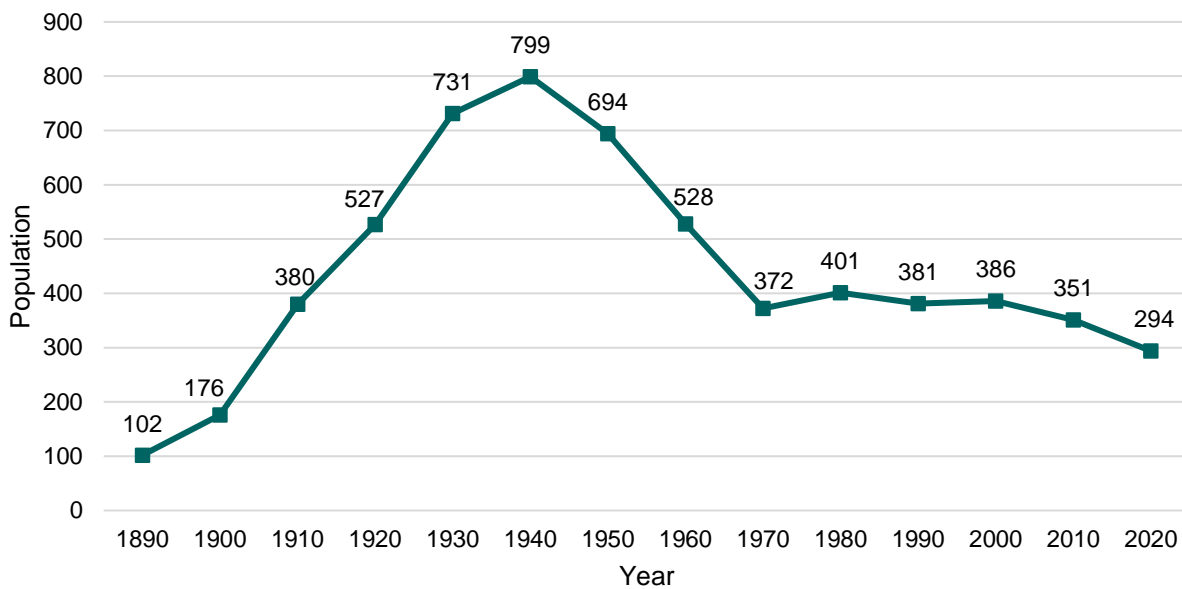
Location and Geography

The Village of Palisade is located on the border of Hayes and Hitchcock Counties, with most of the community in Hitchcock County. The village covers an area of 0.35 square miles. Frenchman Creek is located less than a mile north of the village and Bobtail Creek runs along the eastern border.

Demographics

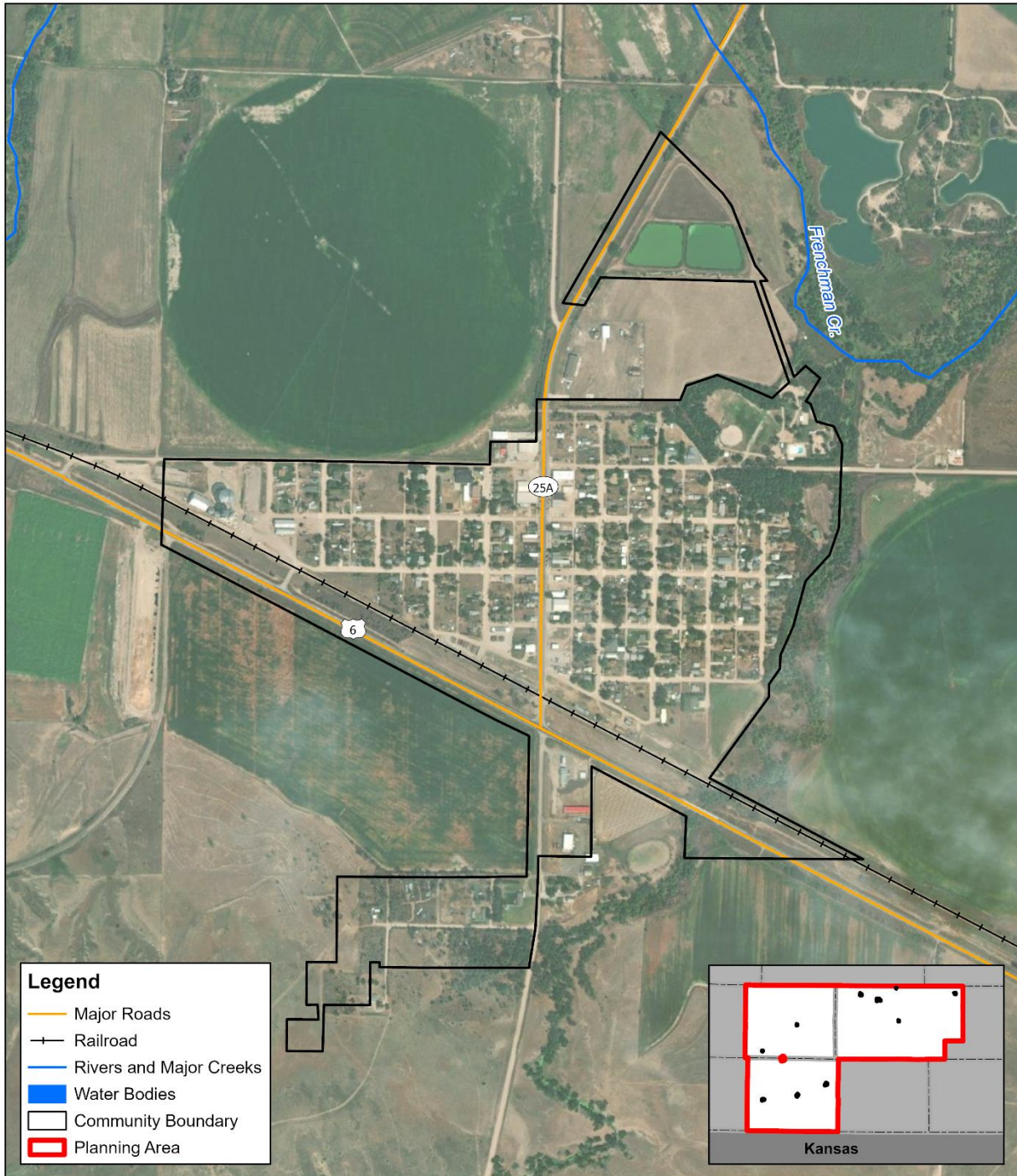
The following figure displays the historical population trend for the Village of Palisade. This figure indicates that the population of Palisade has been declining since 2000 to 294 people in 2020. A declining population can lead to more unoccupied and unmaintained housing that is then at risk to high winds and other hazards. Unoccupied housing may also be an economic indicator that future development is unlikely to occur. Furthermore, with fewer residents, tax revenue decreases for the community, which could make implementing mitigation projects more fiscally challenging. Palisade’s population accounted for 11.2% of Hitchcock County’s population in 2020.³⁴

Figure PLD.1: Population 1890 - 2020



³⁴ United States Census Bureau. “2020 Census Bureau Decennial Census: P1: Race.” <https://data.census.gov/>.

Figure PLD.2: Village of Palisade



Created By: NL
Date: 5/26/2022
Software: ArcGIS Pro 2.8
File Name: HHFCCommunityBasemap.mxd

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Village of Palisade

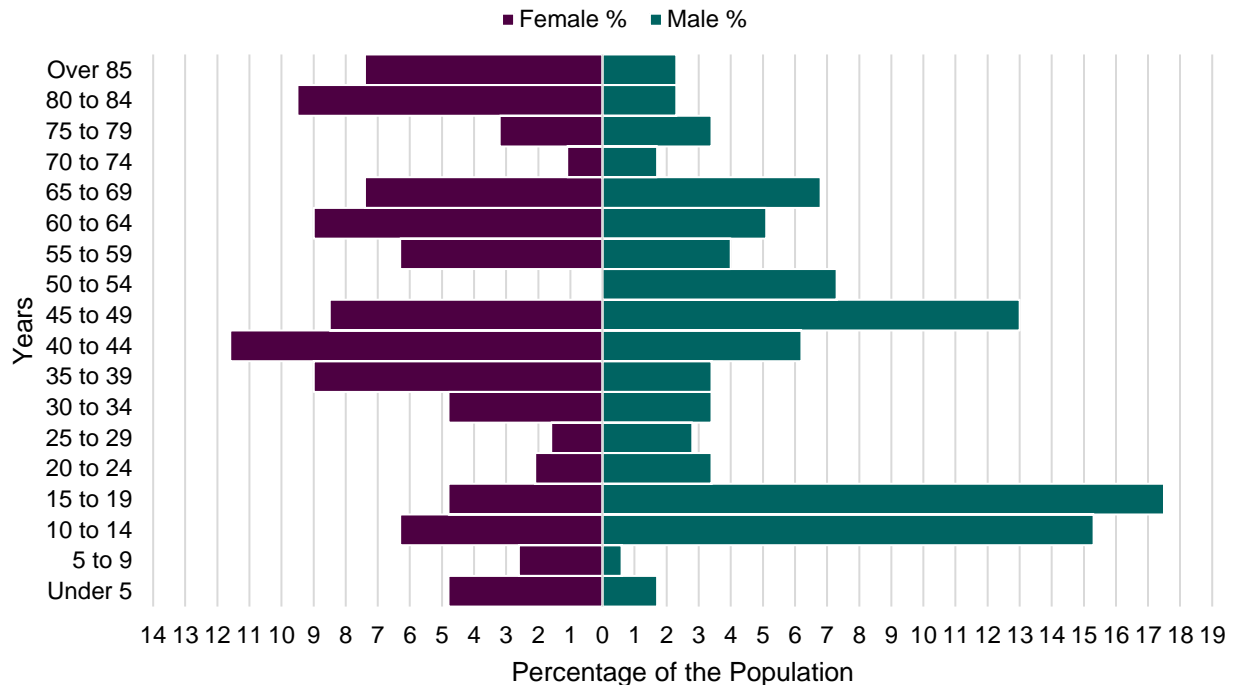
Boundary Map



The young, elderly, and minority populations may be more vulnerable to hazards than other groups. Looking at Palisade’s population:

- **4.1% is non-white.** Since 2010, Palisade became more ethnically diverse. In 2010, 1.1% of the Palisade’s population was non-white. By 2020, 4.1% was non-white.³⁵
- **Median age of 43.8.** The median age of Palisade was 43.8 years old in 2020. The population became slightly older since 2010, when the median age was 43.5.³⁶

Figure PLD.3: Palisade’s Population Pyramid



The figure above shows Palisade’s population percentage broken down by sex and five-year age groups. Palisade’s population is equally spread out between different age groups. This indicates that the population is likely to remain stable in the future.

Employment and Economics

Low-income populations, long distance commuters, and the unemployed may be more vulnerable to certain hazards like extreme heat and flooding than other groups. Palisade’s population has:

- **9.3% of people living below the poverty line.** The poverty rate (9.3%) in the Village of Palisade was lower than the state’s poverty rate (10.4%) in 2020.³⁷
- **\$46,667 median household income.** Palisade’s median household income in 2020 (\$46,667) was \$16,348 lower than the state (\$63,015).³⁷
- **0% unemployment rate.** In 2020 Palisade has a lower unemployment rate (0%) when compared to the state (3.4%).³⁷

35 United States Census Bureau. “2020 Census Bureau American Community Survey: DP05: ACS Demographic and Housing Estimates.” <https://data.census.gov/>.

36 United States Census Bureau. “2020 Census Bureau American Community Survey: S0101: Age and Sex.” <https://data.census.gov/>.

37 United States Census Bureau. “2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics.” <https://data.census.gov/>.

- **41.8% of workers commuted 30 minutes or more to work.** More workers in Palisade commuted 30 minutes or more to work than compared to workers commuting less than 15 minutes (41.8% compared to 25.4%).³⁸

Major Employers

Major employers in the Village of Palisade include Southwest Public Power District and Palisade School. A large number of residents commute to McCook for employment.

Housing

Multiple factors inform the vulnerability of housing units to hazard events. Housing age, for example, may indicate which housing units were built prior to the development of state building codes. Older houses and vacant housing generally more vulnerable to hazards if poorly maintained. Additionally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe thunderstorms if those homes are not anchored correctly. Renters are particularly vulnerable, as renter-occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. Renters are less likely than homeowners to have flood insurance, have ready access to financial resources to evacuate, or to know their risks to flooding and other hazards. Palisade's housing stock has:

- **86.4% of housing built prior to 1970.** Palisade has a larger share of housing built prior to 1970 than the state (86.4% compared to 45.5%).³⁹
- **13.0% of housing units vacant.** Palisade has a higher vacancy rate 13.0% compared to the rest of the state (9.2%).³⁹
- **1.9% mobile and manufacture housing.** The Village of Palisade has a smaller share of mobile and manufactured housing (1.9%) compared to the state (3.3%).³⁹
- **19.4% renter-occupied.** The rental rate of Palisade was 19.4% in 2020. This is lower than the state's rate of 33.8%.³⁹

Broadband Access

Internet or broadband access – through Wi-Fi or cellphone coverage – is a critical means of sharing and receiving information regarding hazardous events, including storm warnings, evacuation orders, or weather updates. Rural communities often lack adequate internet or broadband access. However, internet access is as vital a utility as electricity, as seen through the COVID-19 pandemic when many people worked or attended school from home.

- **76.1% of households have a broadband internet subscription.** Palisade has a smaller share of households with broadband (76.1%) compared to the state (85.6%).⁴⁰

38 United States Census Bureau. "2020 Census Bureau American Community Survey: S0802: Means of Transportation to Work by Selected Characteristics." <https://data.census.gov/>.

39 United States Census Bureau. "2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." <https://data.census.gov/>.

40 United States Census Bureau. "2020 Census Bureau American Community Survey: DP02: Selected Social Characteristics in the United States." <https://data.census.gov/>.

Governance

A community’s governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. The Village of Palisade is governed by a board of trustees; other governmental offices and departments that may be involved in implementing hazard mitigation initiatives are listed below.

- Clerk/Treasurer
- Attorney
- Utility Superintendent
- Fire Department
- Street Commissioner
- Water Commissioner
- Parks & Recreation
- Planning Commission
- Floodplain Administrator
- Building Inspector / Zoning Administrator

Capability Assessment

The planning team assessed the Village of Palisade’s hazard mitigation capabilities by reviewing local existing policies, regulations, plans, and programs related to hazard mitigation. The following tables summarize the community’s planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. The local planning team does not anticipate adding or improving existing capabilities due to a lack of funding.

Village funds are limited to maintaining current facilities and systems, but a large portion is not already dedicated to a specific project. Funds have decreased over recent years.

Table PLD.2: Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	No
	Local Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No
	Regional Community Wildfire Protection Plan	Yes
	Other (if any)	Water System Emergency Response Plan, Wellhead Protection Plan

Capability/Planning Mechanism		Yes/No
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administration	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	Yes
	Local staff who can assess community's vulnerability to hazards	
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	-
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for grants in the past	Yes
	Awarded a grant in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	Yes
	Gas/Electric Service Fees	Yes
	Storm Water Service Fees	No
	Water/Sewer Service Fees	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
Other (if any)	-	
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	Yes
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	No
	Natural disaster or safety related school programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	-

Table PLD.3: Overall Capability

Overall Capability	Limited/Moderate/High
Financial resources to implement mitigation projects	Limited
Staff/expertise to implement projects	Moderate
Public support to implement projects	Limited
Time to devote to hazard mitigation	Limited

Social Vulnerability

FEMA’s National Risk Index is a new mapping tool that analyzes a community’s risk to natural hazards on a scale of 0 (lowest possible value) to 100 (highest possible value). The overall risk for Hitchcock County which includes Palisade is Very Low (6.26). The average for the State of Nebraska is 9.43.⁴¹

- **Social Vulnerability:** Social groups in Hitchcock County have a Relatively Moderate (43.40) susceptibility to adverse impacts of natural hazards when compared to the rest of the U.S.
- **Community Resilience:** Communities in Hitchcock County have a Relatively Low (51.99) ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S.

An additional tool developed by Headwaters Economics, the Rural Capacity Index, evaluates rural communities and counties across the country for local capacity. Capacity includes the staffing, resources, and expertise to both apply for funding and fulfill reporting requirements, as well as design, build, and maintain infrastructure products over the long term. Communities lacking local capacity often have the greatest need for infrastructure investments particularly, rural communities and communities of color. The Rural Capacity Index helps identify communities with limited capacity on a scale of 0 (no capacity) to 100 (high capacity). This index is based on 10 variables that can function as proxies for community capacity. The following table lists the components and scores for the Village of Palisade compared to the county.

Table PLD.4: Rural Capacity Index

Components of Index	Village of Palisade	Hitchcock County
County is Metropolitan?	Not Available	No
Has a Head of Planning?	Not Available	Yes
Has a College or University?	Not Available	No
Adults with Higher Education:	Not Available	18%
Families Below Poverty Level:	Not Available	7%
Households with Broadband:	Not Available	69%
People without Health Insurance:	Not Available	10%
Voter Turnout:	Not Available	77%
Income Stability Score (0 to 100):	Not Available	47%
Population Change (2000 to 2019):	Not Available	-349
Overall Rural Capacity Index Score	Not Available	65

Source: Headwaters Economics⁴²

National Flood Insurance Program (NFIP)

Palisade is a member of the NFIP having joined on 6/3/1986, and the village’s Floodplain Administrator (Brock Malcolm) oversees the commitments and requirements of the NFIP including enforcement of the local floodplain management regulations. The initial FIRM for the village was delineated in 6/3/1986 and the current effective map date is 3/18/2008, which has been adopted and incorporated into the local floodplain management regulations in 2009. As of August 31, 2021, there are no NFIP policies in-force for the village. Palisade does not currently have any repetitive loss or severe repetitive loss structures. The village requires permits for any development in the community which are reviewed by the floodplain administrator. Any needed enforcement would go through the Board of Trustees. After a flood event, the community implements substantial

41 Federal Emergency Management Agency. “National Risk Index”. Accessed July 2022. <https://hazards.fema.gov/nri/map>.

42 Headwaters Economics. January 2022. “Rural Capacity Map”. Accessed July 2022. <https://headwaterseconomics.org/equity/rural-capacity-map/>.

improvement and substantial damage provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here:

https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA_Handbook_FINAL.pdf. The local planning team has said the Village of Palisade will remain in good standing and will continue involvement with the NFIP in the future.

Plans and Studies

Palisade has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the village updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Building Code (2012)

The building code sets standards for constructed buildings and structures. The village has adopted the 2012 International Building Codes with no amendments made. Enforcement of the code is handled through the building inspector/zoning administrator and the Board of Trustees. Due to the age of the document, the hazard mitigation plan has not been integrated into it.

Comprehensive Plan (2008)

The comprehensive plan is designed to guide the future actions and growth of the village. Due to the age of the document, the hazard mitigation plan has not been integrated; however, it contains goals and objectives aimed at Safe Growth, directs development away from the floodplain, directs housing away from chemical storage facilities, directs housing and vulnerable populations away from major transportation routes, encourages infill, and encourages the elevation of structures in the floodplain.

Floodplain Regulations (2009), Zoning Ordinance (2009), Subdivision Regulations (2009)

The village's floodplain regulations, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. Due to their age, the hazard mitigation plan has not been integrated with these documents. However, the documents prohibit development in the floodplain, discourage housing and vulnerable populations near chemical storage sites, include well setback requirements, and include the ability to implement water restrictions.

Hitchcock County Local Emergency Operations Plan (2019)

Palisade is an annex in the Hitchcock County Local Emergency Operations Plan (LEOP). The hazard mitigation plan has not been integrated with this plan; however, the LEOP establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. Flooding, dam failure, and mass shelter information from the LEOP was used to inform hazard prioritization and community lifelines.

Water System Emergency Response Plan (2022)

A water system emergency response plan serves as a guideline for water operators and village administration to minimize the disruption of normal services to consumers and to provide public health protection during an emergency event. The document identifies several natural and human-caused events and discusses the water system’s response during those events. It also includes contact information for vital individuals. The hazard mitigation plan has not been integrated with this plan.

Wellhead Protection Plan

The purpose of wellhead protection plans is to protect the public drinking source water supply from contamination. It includes identifying potential sources of groundwater contamination in the area and managing the potential contaminant sources. The hazard mitigation plan has not been integrated with this plan.

Future Development Trends

Over the past five years new businesses were added south of Highway 6, just off the highway and some buildings were demolished likely due to the population decline. By demolishing the buildings, the village’s vulnerability likely decreased because the buildings were not being properly maintained. The new businesses are not located in the floodplain or other known hazardous areas. In the next five years, no new housing or commercial development is planned for at this time. This is consistent with the project population stability.

Community Lifelines

Each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction’s functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The following subsections list those community lifelines by type, as identified by the local planning team.

Safety and Security

The Safety and Security Lifeline includes law enforcement, security, fire services, search and rescue, government services, and community safety. The table below lists Safety and Security Lifelines for Palisade.

Table PLD.5: Safety and Security Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
1	City Office	-	N
2	Fire Department / EMS	G	N

Food, Water, Shelter

Components of this lifeline include food, water, shelter, and agriculture. Food, Water, and Shelter Lifelines for the Village of Palisade are included in the table below.

Table PLD.6: Food, Water, and Shelter Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
3	Sodtown Sundries	-	N
4	Wauneta/Palisade Schools	S	N
5*	Well	G	N

*Location is not mapped. Located approximately 10 miles south of the village.

Health and Medical

Health and Medical Lifeline components can include medical care, patient transport, public health, fatality management, and the medical supply chain. The fire department (CL #1) also includes EMS services.^{43,44,45,46}

Energy

Energy Lifeline components include power, the power grid, and fuel. The table below lists Energy Lifelines for Palisade.

Table PLD.7: Energy Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
6	Frenchman Valley Co-op	G	N
7	Happys Fuel Center	-	N

Communications

Components of the Communications Lifeline include communication infrastructure, alerts, 911 dispatch, responder communications, and finance. Communication Lifelines for the Village of Palisade are included in the table below.

Table PLD.8: Communications Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
8	Communication Tower – Vaiero	-	N
9*	Dispatch Center 911	G	N

**Location is not mapped. Dispatch is located in the Village of Trenton.*

Transportation

Transportation Lifeline components include interstates, highways, major roadways, mass transit, railway, and aviation. Palisade’s major transportation corridors include U.S. Highway 6 and State Highway 25A. The most traveled route is Highway 6 with an average of 1,555 vehicles daily, 290 of which are trucks.⁴⁷ Palisade has one Nebraska, Kansas, Colorado Railway line traveling next to Highway 6 on the southern portion of the village. The rail line and highways regularly transport chemicals. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk of transportation incidents.

43 Department of Health and Human Services. 2022. “State of Nebraska: Assisted Living Facilities.” <https://dhhs.ne.gov/licensure/Documents/ALF%20Roster.pdf>.

44 Department of Health and Human Services. 2022. “State of Nebraska Roster: Hospitals.” <https://dhhs.ne.gov/licensure/Documents/Hospital%20Roster.pdf>.

45 Department of Health and Human Services. 2022. “State of Nebraska Roster: Long Term Care Facilities.” <https://dhhs.ne.gov/licensure/Documents/LTCRoster.pdf>.

46 Department of Health and Human Services. 2022. “State of Nebraska Roster: Rural Health Clinic.” https://dhhs.ne.gov/licensure/Documents/RHC_Roster.pdf.

47 Nebraska Department of Transportation. 2021. “Annual Average Daily Traffic Flow.” Accessed July 2022. <https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

Hazardous Materials

The Hazardous Materials Lifeline includes chemical storage facilities, pipelines, and transported chemical tanks. There are no gas transmission or hazardous liquid pipelines traveling through or near the community.⁴⁸ According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there is one chemical site within or near Palisade which houses hazardous materials (listed below).

Table PLD.9: Chemical Storage Lifelines

CL Number	Name	Generator (G)	Floodplain (Y/N)
10	NDOT Palisade Yard	G	N

Source: Nebraska Department of Environment and Energy⁴⁹

Other Community Lifelines

The Village of Palisade identified lifelines that did not fit into the previous seven FEMA lifeline categories but are considered lifelines by the community. The other community lifelines are listed in the table below.

Table PLD.10: Other Community Lifelines

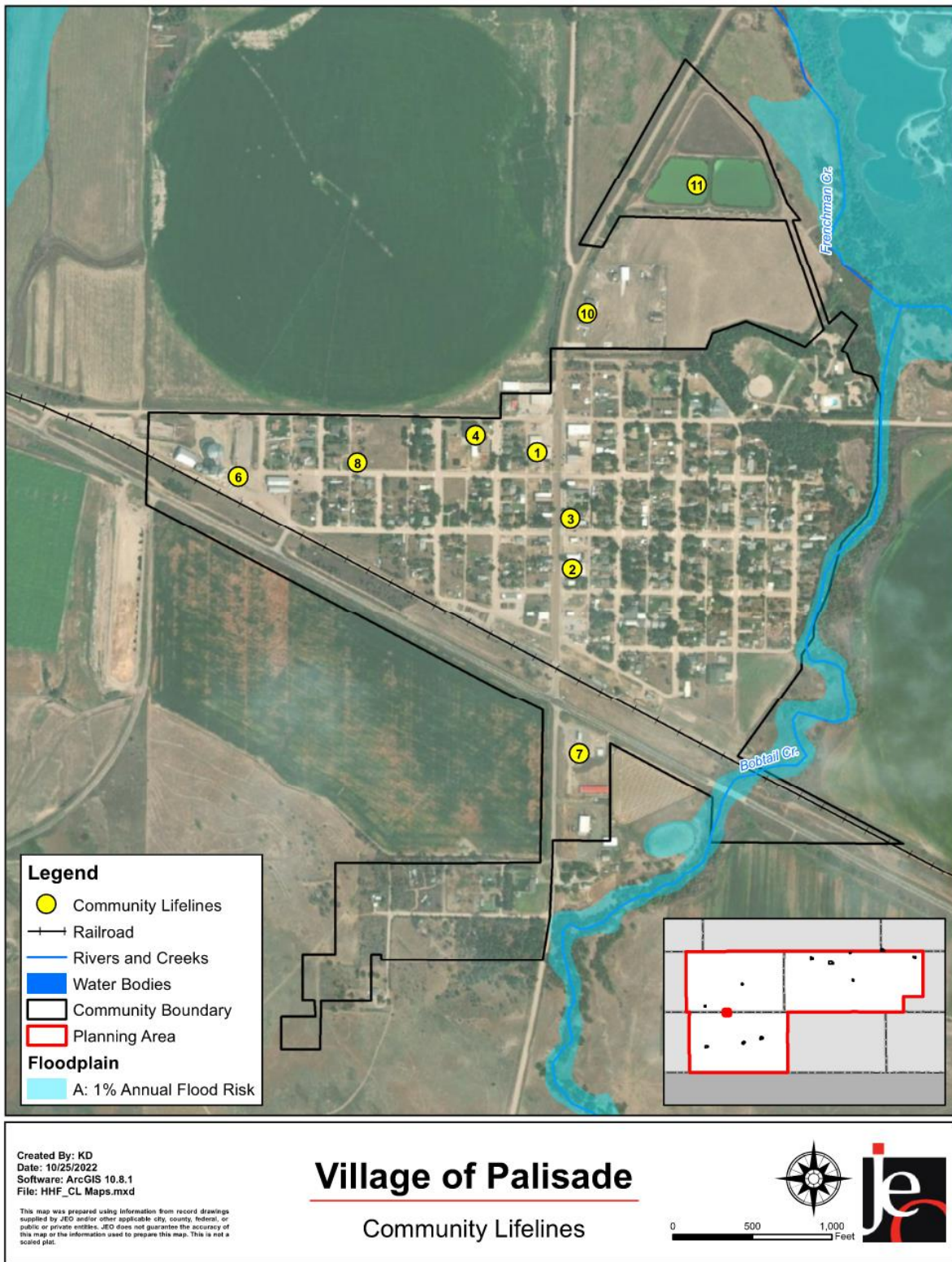
CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
11	Lagoons	-	N
12*	Lift Station	-	N

*Location is not mapped. Located approximately 10 miles south of the village.

48 National Pipeline Mapping System. 2022. "Public Viewer." Accessed July 2022. <https://pvnprms.phmsa.dot.gov/PublicViewer/>.

49 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed May 2022.

Figure PLD.4: Community Lifelines



Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

Table PLD.11: Parcel Improvements and Value in the Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
211	\$9,709,020	3	\$108,710	1.4%

Source: County Assessor, 2021

Historical Occurrences

See the Hitchcock and Hayes County profiles for historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

Hazard Prioritization

The Hayes, Hitchcock, and Frontier Counties Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. However, during the planning process, the local planning team identified specific hazards of top concern for Palisade which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the hazards of top concern identified by the Village of Palisade. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Four: Risk Assessment*.

Grass/Wildfires

Recently there have been multiple grass fires near the community because of dry conditions from the ongoing drought in the area. While these fires have not directly damaged the community, the local planning team is concerned with this happening because the volunteer fire department is small. There are 22 volunteer firefighters, three of which are also EMTs. According to the Nebraska Forest Service's *Wildfire Risk Explorer*, the area surrounding the village is either low or moderate risk to wildfires.⁵⁰ The community has not completed any projects to reduce wildfire risk but would like to clean away ditch debris and start wildfire education.

Public Health Emergency

This hazard was selected by the local planning team because of the ongoing COVID-19 pandemic. Most of the stores and businesses in Palisade were closed down at some point during the pandemic due to a low number of customers but all were able to reopen. The pandemic drastically impacted the local economy and school. Many school activities were canceled and some churches in the village cancelled services. To help reduce the spread of the virus, the village followed all state mandates, and the village office was only accessible through phone or appointments. No vaccination clinics were held in the community. The closest location for vaccination was the City of McCook.

⁵⁰ Nebraska Forest Service. "Nebraska Wildfire Risk Explorer". Accessed October 2022. <https://nebraskawildfirerisk.com/>.

Tornadoes and High Winds

In the summer of 2022, a windstorm came through knocking down trees and damaging structures. Since 1996 two tornadoes have occurred near the village but did not cause any damage. The local planning team is concerned that with climate change tornado and high wind events will increase in the region. Additionally, because of the drought, trees and other vegetation may be weaker making them more susceptible to high wind events. Locations of trees that need to be trimmed include the park area around the swimming pool and in several alleyways. Palisade would like to have volunteer cleanup days where trees can be trimmed and removed. Power outage is a concern as less than five percent of powerlines in the community are buried.

Mitigation Strategy

Completed Mitigation Actions

Mitigation Action	Civil Service Improvements
Description	Improve emergency rescue and response equipment and facilities by providing additional or updating existing emergency response equipment. This could include fire equipment, ATVs, water tanks/truck, snow removal equipment, pumps, etc. This could also include developing backup systems for emergency vehicles, identifying and training additional personnel for emergency response, or continuing educational opportunities for current personnel.
Hazard(s) Addressed	All Hazards
Status	Completed. New equipment for the fire department has been purchased recently.

New Mitigation Actions

Mitigation Action	Hazardous Fuel Reduction
Description	Clean away debris in ditches and reduce hazardous fuel loads in other areas around the community.
Hazard(s) Addressed	Grass/Wildfire
Estimated Cost	\$1,000+
Local Funding	General Budget, Fire Department Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Board of Trustees, Fire Department
Status	Not Started. The village has the capability to implement this project.

Mitigation Action	Public Awareness and Education
Description	Through activities such as outreach projects, distribution of maps, and environmental education increase public awareness of natural and manmade hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Heat, Flooding, Grass/Wildfires, Hazardous Materials Release, Public Health Emergency, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	\$500+
Local Funding	General Budget
Timeline	5+ Years
Priority	Low
Lead Agency	Board of Trustees
Status	Not Started. The village has the capability to implement this project.

Mitigation Action	Tree Trimming and Removal
Description	Identify trees in the community that need to be trimmed or removed. Work with community members to trim or remove the identified trees.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	\$200+ per Tree
Local Funding	General Budget
Timeline	5+ Years
Priority	Medium
Lead Agency	Board of Trustees
Status	Not Started. The village does not have the capability to implement this project due to a lack of funds.

Kept Mitigation Actions

Mitigation Action	Backup Generators
Description	Provide a portable or stationary source of backup power to redundant power supplies for existing wells, village office, and other community lifelines.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	\$20,000 - \$35,000 per generator
Local Funding	General Budget
Timeline	5+ Years
Priority	High
Lead Agency	Board of Trustees
Status	Not Started. The village currently does not have the capability to implement this project due to a lack of funds.

Mitigation Action	Storm Shelter and Safe Rooms
Description	Assess, design, and construct a fully supplied safe room in the community. Assess the adequacy of current public buildings to be used as safe rooms.
Hazard(s) Addressed	Severe Thunderstorms, Tornadoes and High Winds
Estimated Cost	\$350 - \$500 per square foot
Local Funding	General Budget
Timeline	2-5 Years
Priority	High
Lead Agency	Board of Trustees, County Emergency Management
Status	Not Started. The village currently does not have the capability to implement this project due to a lack of funds.

Removed Mitigation Actions

Mitigation Action	Participate or Maintain Good Standing in the NFIP
Description	Participate in the NFIP or maintain good standing with the NFIP including floodplain management practices/requirements and regulation enforcement and updates. Hitchcock County will be the main manager of Trenton’s participation in the NFIP. Hitchcock County will monitor and fully enforce floodplain management regulations as part of NFIP participation.
Hazard(s) Addressed	Flooding
Status	Removed as this is a maintenance action. The village will continue to maintain good standing with the NFIP.

Mitigation Action	Floodplain Development Ordinance Enforcement
Description	Continue floodplain management practices such as enforcement of floodplain management requirements, floodplain identification, and mapping. Continue to enforce local floodplain regulations for structures location in the 100-year floodplain.
Hazard(s) Addressed	Flooding
Status	Removed as this is a maintenance action. The village will continue to enforce floodplain regulations.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (e.g., annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The Village Clerk, Board Chairman, and Fire Chief will be responsible for reviewing and updating this community profile outside of the five-year update. Palisade will review the plan annually and the public will be notified during public board meetings.

Community Profile

Village of Stratton

Hayes, Hitchcock, and Frontier Counties Hazard Mitigation Plan

2023

Local Planning Team

The Village of Stratton’s local planning team for the hazard mitigation plan are listed in the table below along with the meetings attended. All planning worksheets were filled out and returned by member of the local planning team.

Table STR.1: Stratton Local Planning Team

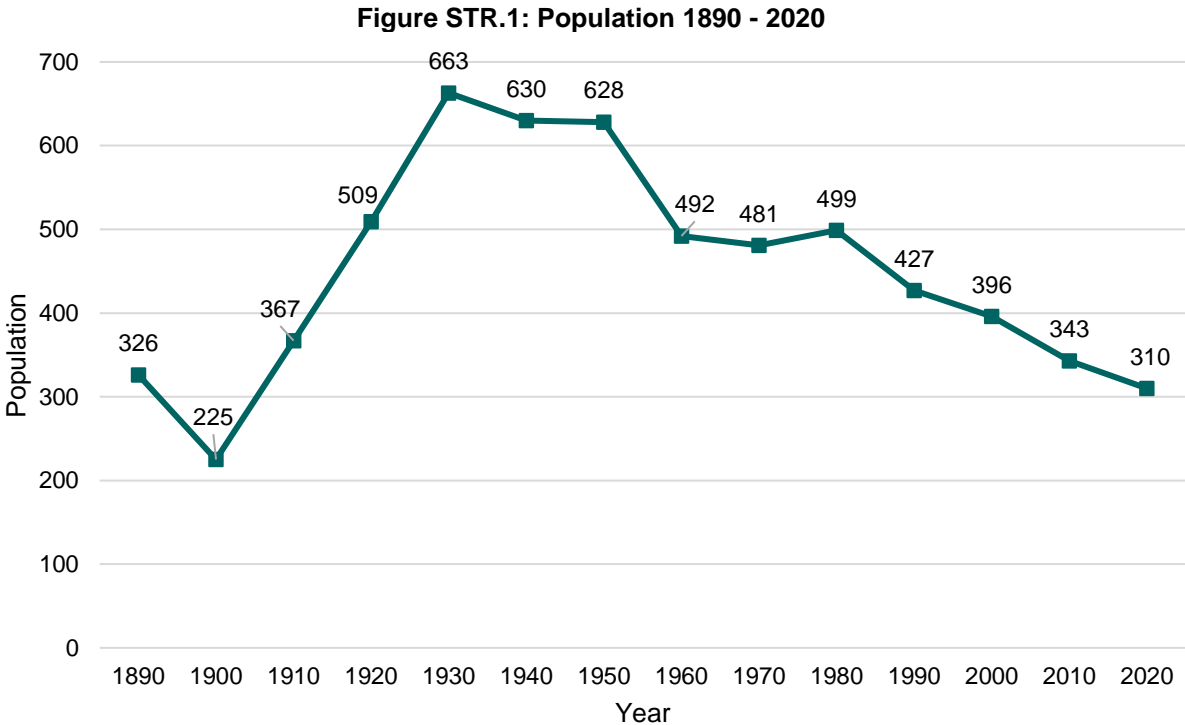
Name	Title	Jurisdiction	R1 Meeting	R2 Meeting
Tara Hedrick	Clerk / Treasurer	Village of Stratton	Recording	Trenton

Location and Geography

The Village of Stratton is in west-central Hitchcock County and covers an area of 0.43 square miles. The Republican River runs directly south of the community and Swanson Lake is approximately two miles to the east.

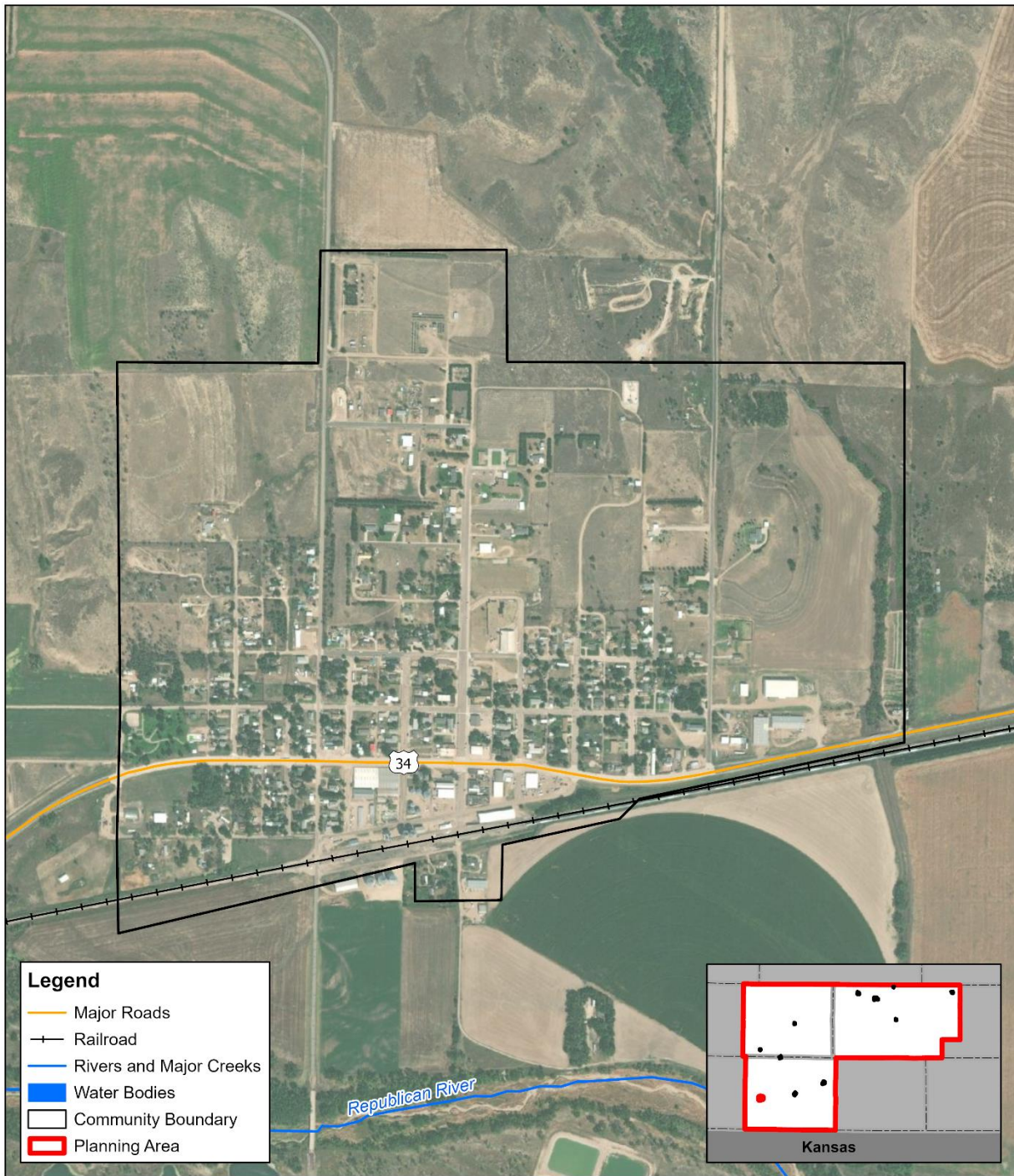
Demographics

The following figure displays the historical population trend for the Village of Stratton. This figure indicates that the population of Stratton has been declining since 1980 to 310 people in 2020. A declining population can lead to more unoccupied and unmaintained housing that is then at risk to high winds and other hazards. Unoccupied housing may also be an economic indicator that future development is unlikely to occur. Furthermore, with fewer residents, tax revenue decreases for the community, which could make implementing mitigation projects more fiscally challenging. Stratton’s population accounted for 11.9% of Hitchcock County’s population in 2020.⁵¹



51 United States Census Bureau. “2020 Census Bureau Decennial Census: P1: Race.” <https://data.census.gov/>.

Figure STR.2: Village of Stratton

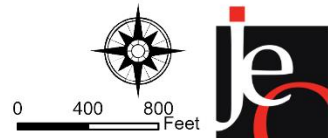


Created By: NL
Date: 5/26/2022
Software: ArcGIS Pro 2.8
File Name: HHCommunityBasemap.mxd

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

Village of Stratton

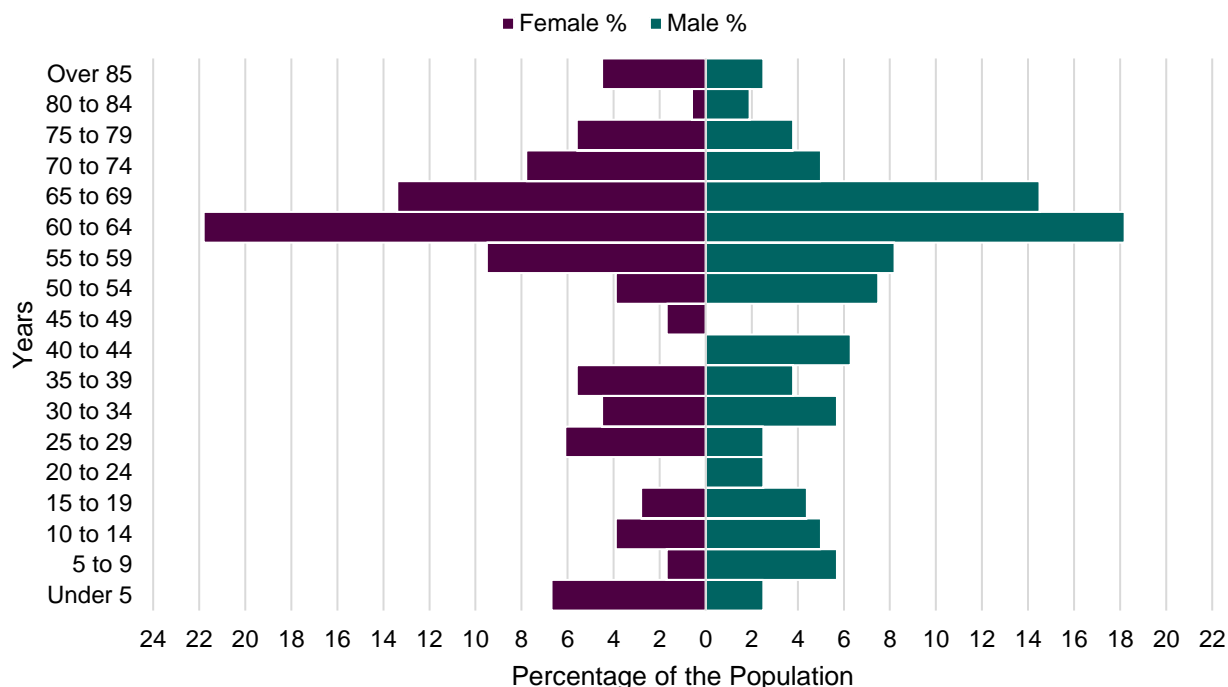
Boundary Map



The young, elderly, and minority populations may be more vulnerable to hazards than other groups. Looking at Stratton’s population:

- **5.5% is non-white.** Since 2010, Stratton became slightly more ethnically diverse. In 2010, 5.0% of the Stratton’s population was non-white. By 2020, 5.5% was non-white.⁵²
- **Median age of 60.0.** The median age of Stratton was 60.0 years old in 2020. The population became older since 2010, when the median age was 53.6.⁵³

Figure STR.3: Stratton’s Population Pyramid



The figure above shows Stratton’s population percentage broken down by sex and five-year age groups. Stratton’s population is top heavy. This suggests future population decline as older generations are replaced by fewer younger residents.

Employment and Economics

Low-income populations, long distance commuters, and the unemployed may be more vulnerable to certain hazards like extreme heat and flooding than other groups. Stratton’s population has:

- **10.9% of people living below the poverty line.** The poverty rate (10.9%) in the Village of Stratton is slightly higher than the state’s poverty rate (10.4%) in 2020.⁵⁴
- **\$34,750 median household income.** Stratton’s median household income in 2020 (\$34,750) was \$28,065 lower than the state (\$63,015).⁵⁴
- **3.6% unemployment rate.** In 2020 Stratton has a similar unemployment rate (3.6%) when compared to the state (3.4%).⁵⁴

52 United States Census Bureau. “2020 Census Bureau American Community Survey: DP05: ACS Demographic and Housing Estimates.” <https://data.census.gov/>.

53 United States Census Bureau. “2020 Census Bureau American Community Survey: S0101: Age and Sex.” <https://data.census.gov/>.

54 United States Census Bureau. “2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics.” <https://data.census.gov/>.

- **14.9% of workers commuted 30 minutes or more to work.** Fewer workers in Stratton commuted 30 minutes or more to work than compared to workers commuting less than 15 minutes (14.9% compared to 38.3%).⁵⁵

Major Employers

Major employers in the Village of Stratton include Grandview Activity Center / Hitch & Hay Transport, Voss Food Services, Richardson Industries, the Village of Stratton, J.A. Auto, and Farmers Coop. Some residents commute to McCook or Benkelman for employment.

Housing

Multiple factors inform the vulnerability of housing units to hazard events. Housing age, for example, may indicate which housing units were built prior to the development of state building codes. Older houses and vacant housing generally more vulnerable to hazards if poorly maintained. Additionally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe thunderstorms if those homes are not anchored correctly. Renters are particularly vulnerable, as renter-occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. Renters are less likely than homeowners to have flood insurance, have ready access to financial resources to evacuate, or to know their risks to flooding and other hazards. Stratton’s housing stock has:

- **78.6% of housing built prior to 1970.** Stratton has a larger share of housing built prior to 1970 than the state (78.6% compared to 45.5%).⁵⁶
- **15.0% of housing units vacant.** Stratton has a higher vacancy rate 15.0% compared to the rest of the state (9.2%).⁵⁶
- **3.4% mobile and manufacture housing.** The Village of Stratton has a similar share of mobile and manufactured housing (3.4%) compared to the state (3.3%).⁵⁶
- **13.1% renter-occupied.** The rental rate of Stratton was 13.1% in 2020. This is lower than the state’s rate of 33.8%.⁵⁶

Broadband Access

Internet or broadband access – through Wi-Fi or cellphone coverage – is a critical means of sharing and receiving information regarding hazardous events, including storm warnings, evacuation orders, or weather updates. Rural communities often lack adequate internet or broadband access. However, internet access is as vital a utility as electricity, as seen through the COVID-19 pandemic when many people worked or attended school from home.

- **82.3% of households have a broadband internet subscription.** Stratton has a smaller share of households with broadband (82.3%) compared to the state (85.6%).⁵⁷

55 United States Census Bureau. “2020 Census Bureau American Community Survey: S0802: Means of Transportation to Work by Selected Characteristics.” <https://data.census.gov/>.

56 United States Census Bureau. “2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics.” <https://data.census.gov/>.

57 United States Census Bureau. “2020 Census Bureau American Community Survey: DP02: Selected Social Characteristics in the United States.” <https://data.census.gov/>.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. The Village of Stratton is governed by a village board of trustees; other governmental offices and departments that may be involved in implementing hazard mitigation initiatives are listed below.

- Clerk/Treasurer
- Utilities Superintendent
- Fire Department
- Floodplain Administrator

Capability Assessment

The planning team assessed the Village of Stratton's hazard mitigation capabilities by reviewing local existing policies, regulations, plans, and programs related to hazard mitigation. The following tables summarize the community's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. The local planning team does not anticipate improving or adding capabilities due to a lack of resources.

Municipal funds are limited to maintaining current facilities and systems. A large portion of funds are not already dedicated to a specific project. Funds have stayed the same over recent years.

Table STR.2: Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	No
	Local Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	Yes
	Building Codes	No
	National Flood Insurance Program	Yes
	Community Rating System	No
	Regional Community Wildfire Protection Plan	Yes
Other (if any)	Water System Emergency Response Plan, Wellhead Protection Plan	
Administrative & Technical Capability	Planning Commission	No
	Floodplain Administration	Yes
	GIS Capabilities	No
	Chief Building Official	No
	Civil Engineering	Yes

Capability/Planning Mechanism		Yes/No
	Local staff who can assess community's vulnerability to hazards	Yes
	Grant Manager	No
	Mutual Aid Agreement	No
	Other (if any)	-
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for grants in the past	Yes
	Awarded a grant in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	No
	Gas/Electric Service Fees	Yes
	Storm Water Service Fees	No
	Water/Sewer Service Fees	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	-
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	No
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes
	Natural disaster or safety related school programs	Yes
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Table STR.3: Overall Capability

Overall Capability	Limited/Moderate/High
Financial resources to implement mitigation projects	Limited
Staff/expertise to implement projects	Limited
Public support to implement projects	Limited
Time to devote to hazard mitigation	Limited

Social Vulnerability

FEMA’s National Risk Index is a new mapping tool that analyzes a community’s risk to natural hazards on a scale of 0 (lowest possible value) to 100 (highest possible value). The overall risk for Hitchcock County which includes Stratton is Very Low (6.26). The average for the State of Nebraska is 9.43.⁵⁸

- **Social Vulnerability:** Social groups in Hitchcock County have a Relatively Moderate (43.40) susceptibility to adverse impacts of natural hazards when compared to the rest of the U.S.
- **Community Resilience:** Communities in Hitchcock County have a Relatively Low (51.99) ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S.

An additional tool developed by Headwaters Economics, the Rural Capacity Index, evaluates rural communities and counties across the country for local capacity. Capacity includes the staffing, resources, and expertise to both apply for funding and fulfill reporting requirements, as well as design, build, and maintain infrastructure products over the long term. Communities lacking local capacity often have the greatest need for infrastructure investments particularly, rural communities and communities of color. The Rural Capacity Index helps identify communities with limited capacity on a scale of 0 (no capacity) to 100 (high capacity). This index is based on 10 variables that can function as proxies for community capacity. The following table lists the components and scores for the Village of Stratton compared to the county.

Table STR.4: Rural Capacity Index

Components of Index	Village of Stratton	Hitchcock County
County is Metropolitan?	No	No
Has a Head of Planning?	No	Yes
Has a College or University?	No	No
Adults with Higher Education:	20%	18%
Families Below Poverty Level:	11%	7%
Households with Broadband:	81%	69%
People without Health Insurance:	16%	10%
Voter Turnout:	77%	77%
Income Stability Score (0 to 100):	47	47
Population Change (2000 to 2019):	-49	-349
Overall Rural Capacity Index Score	45	65

Source: Headwaters Economics⁵⁹

National Flood Insurance Program (NFIP)

Stratton is a member of the NFIP having joined on 9/24/1984, and the village’s Floodplain Administrator (Kevin League) oversees the commitments and requirements of the NFIP including enforcement of the local floodplain management regulations. The initial FIRM for the village was delineated in 3/18/2008 and the current effective map date is 3/18/2008, which has been adopted and incorporated into the local floodplain management regulations on 3/18/2008. As of August 31, 2021, there are no NFIP policies in-force for the village. Stratton does not currently have any repetitive loss or severe repetitive loss structures. Enforcement of the floodplain regulations has been difficult in the past and the village may need assistance in floodplain management, substantial damage/improvement, and enforcement in the future. A mitigation action has been

58 Federal Emergency Management Agency. “National Risk Index”. Accessed July 2022. <https://hazards.fema.gov/nri/map>.

59 Headwaters Economics. January 2022. “Rural Capacity Map”. Accessed July 2022. <https://headwaterseconomics.org/equity/rural-capacity-map/>.

added to address this issue. The local planning team has said the Village of Stratton will remain in good standing and will continue involvement with the NFIP in the future.

Plans and Studies

Stratton has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. The village also has a comprehensive plan but was completed in 2000 and is very outdated. When the village updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Floodplain Regulations (2008)

The village's floodplain regulations outline where and how development in the floodplain should occur in the future. Due to its age, the regulations restrict development in the floodplain and require structures to be at least one foot of elevation above base flood elevation.

Hitchcock County Local Emergency Operations Plan (2019)

Stratton is an annex in the Hitchcock County Local Emergency Operations Plan (LEOP). The hazard mitigation plan has not been integrated with this plan; however, the LEOP establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. Flooding, dam failure, and mass shelter information from the LEOP was used to inform hazard prioritization and community lifelines.

Water System Emergency Response Plan (2022)

A water system emergency response plan serves as a guideline for water operators and village administration to minimize the disruption of normal services to consumers and to provide public health protection during an emergency event. The document identifies several natural and human-caused events and discusses the water system's response during those events. The hazard mitigation plan has not been integrated with this plan.

Wellhead Protection Plan

The purpose of wellhead protection plans is to protect the public drinking source water supply from contamination. It includes identifying potential sources of groundwater contamination in the area and managing the potential contaminant sources. The hazard mitigation plan has not been integrated with this plan.

Future Development Trends

No major changes in development have occurred in the last five years due to the declining population. This likely keeps the village's vulnerability to hazards the same unless housing, businesses, and infrastructure have not been properly maintained. If not being properly maintained, vulnerability may increase due to aging materials. The local planning team does not anticipate any new housing or commercial developments to occur over the next five years. This is consistent with the projected population decline.

Community Lifelines

Each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction’s functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The following subsections list those community lifelines by type, as identified by the local planning team.

Safety and Security

The Safety and Security Lifeline includes law enforcement, security, fire services, search and rescue, government services, and community safety. The table below lists Safety and Security Lifelines for Stratton.

Table STR.5: Safety and Security Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
1	Community Center	-	N
2	Fire Department	-	N
3	Village Office	-	N

Food, Water, Shelter

Components of this lifeline include food, water, shelter, and agriculture. Food, Water, and Shelter Lifelines for the Village of Stratton are included in the table below.

Table STR.6: Food, Water, and Shelter Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
4	Stratton Country Market	-	N
5	Stratton Elementary	S	N
6	Water Tower	G	N

Health and Medical

Health and Medical Lifeline components can include medical care, patient transport, public health, fatality management, and the medical supply chain. The following medical and health facilities are located within the community.

Table STR.7: Health and Medical Lifelines

CL Number	Name	Type of Facility	Number of Beds	Generator (G) Shelter (S)	Floodplain (Y/N)
7	Quality Healthcare Services Medical Clinic	Rural Health Clinic	0	-	N

Source: Nebraska Department of Health and Human Services^{60,61,62,63}

60 Department of Health and Human Services. 2022. “State of Nebraska: Assisted Living Facilities.” <https://dhhs.ne.gov/licensure/Documents/ALF%20Roster.pdf>.

61 Department of Health and Human Services. 2022. “State of Nebraska Roster: Hospitals.” <https://dhhs.ne.gov/licensure/Documents/Hospital%20Roster.pdf>.

62 Department of Health and Human Services. 2022. “State of Nebraska Roster: Long Term Care Facilities.” <https://dhhs.ne.gov/licensure/Documents/LTCRoster.pdf>.

63 Department of Health and Human Services. 2022. “State of Nebraska Roster: Rural Health Clinic.” https://dhhs.ne.gov/licensure/Documents/RHC_Roster.pdf.

Energy

Energy Lifeline components include power, the power grid, and fuel. The table below lists Energy Lifelines for Stratton.

Table STR.8: Energy Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
8	Substation	-	N

Communications

Components of the Communications Lifeline include communication infrastructure, alerts, 911 dispatch, responder communications, and finance. Communication Lifelines for the Village of Stratton are included in the table below.

Table STR.9: Communications Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
9	Siren	-	N

Transportation

Transportation Lifelines components include interstates, highways, major roadways, mass transit, railway, and aviation. Stratton’s major transportation corridor includes U.S. Highway 34. It is traveled by an average of 1,465 vehicles daily, 205 of which are trucks.⁶⁴ Stratton has one Burlington Northern Santa Fe Railway and Amtrak line traveling east to west on the southern edge of the community. No significant accidents have occurred in the community. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk of transportation incidents.

Hazardous Materials

The Hazardous Materials Lifeline includes chemical storage facilities, pipelines, and transported chemical tanks. There are no gas transmission or hazardous liquid pipelines traveling in or near the community.⁶⁵ According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are three chemical sites within or near Stratton which house hazardous materials (listed below).

Table STR.10: Chemical Storage Lifelines

CL Number	Name	Generator (G)	Floodplain (Y/N)
10	Diehl 1-13	-	Y
11	Farmers Co-op Grain & Supply	-	N
12	Farmers Co-op Grain & Supply	-	N

Source: Nebraska Department of Environment and Energy⁶⁶

64 Nebraska Department of Transportation. 2021. “Annual Average Daily Traffic Flow.” Accessed July 2022. <https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

65 National Pipeline Mapping System. 2022. “Public Viewer.” Accessed July 2022. <https://pvnpm.phmsa.dot.gov/PublicViewer/>.

66 Nebraska Department of Environment and Energy. “Search Tier II Data.” Accessed May 2022.

Other Community Lifelines

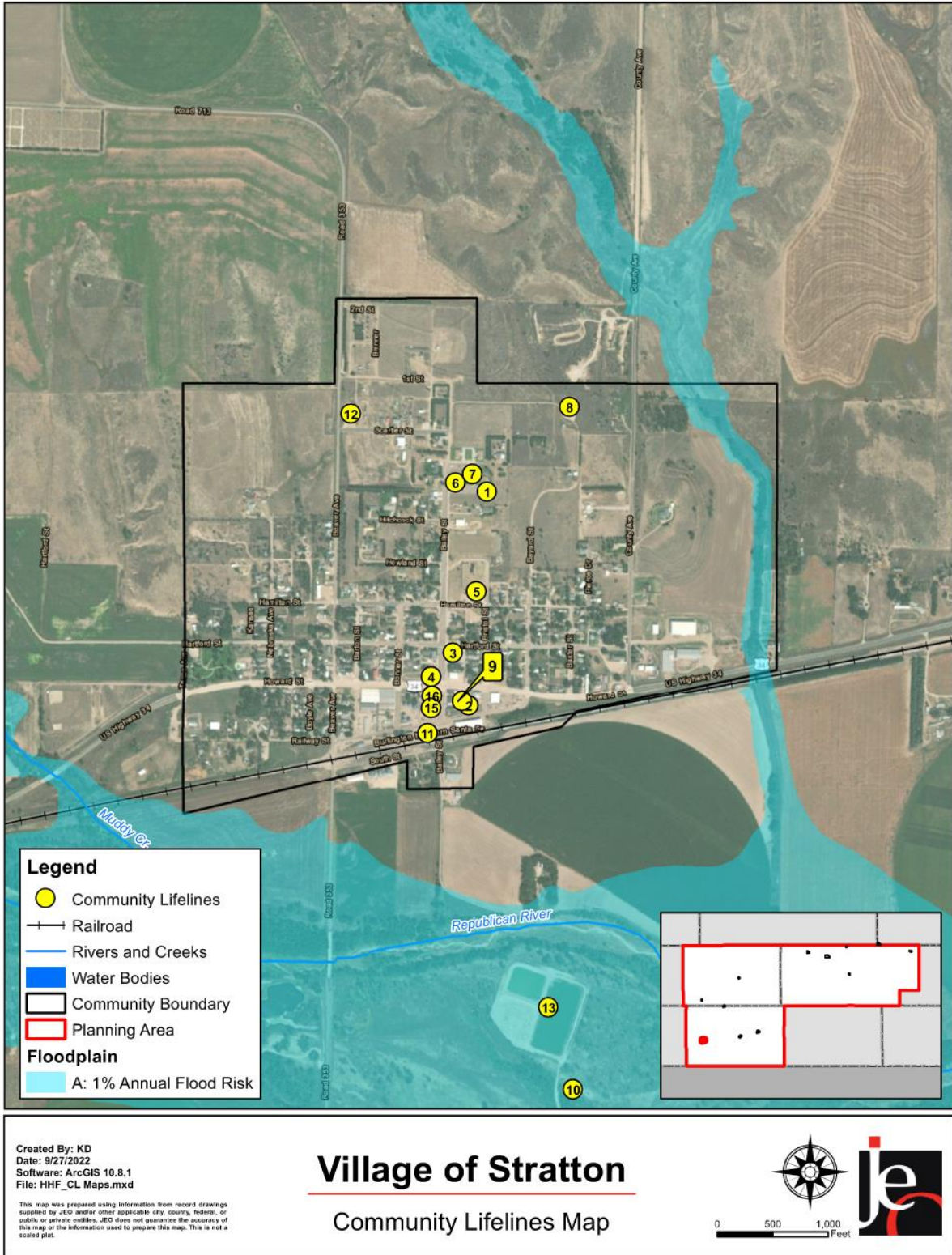
The Village of Stratton identified lifelines that did not fit into the previous seven FEMA lifeline categories but are considered lifelines by the community. The other community lifelines are listed in the table below.

Table STR.11: Other Community Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
13	Lagoons	-	Y
14*	Lift Station	-	N
15	Maintenance Shop	-	N
16	Post Office	-	N

*Not mapped. Located north of the community.

Figure STR.4: Community Lifelines



Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

Table STR.12: Parcel Improvements and Value in the Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
248	\$11,038,775	4	\$737,940	1.6%

Source: County Assessor, 2021

Historical Occurrences

See the Hitchcock County profile for historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

Hazard Prioritization

The Hayes, Hitchcock, and Frontier Counties Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. However, during the planning process, the local planning team identified specific hazards of top concern for Stratton which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the hazards of top concern identified by the Village of Stratton. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Four: Risk Assessment*.

Severe Thunderstorms

The most recent damaging event occurred in July of 2022. Lightning hit the water well and damaged the well's pump and motor. The well was unable to be used for several days while repairs were made. During that time the community was able to use the stored water in the water tower. However, if the repair took longer, the village may have needed to implement water restrictions because there is not a backup water source for the community. Parts for the water system are not readily available and must be ordered when an issue occurs, which could make repairs take longer. The most damaging severe thunderstorm event occurred on August 7, 2015, when a thunderstorm wind gust caused \$1,040,000 in damages. Trees were snapped and uprooted, power poles were damaged which led to power outages, one garage and one unanchored mobile home were destroyed, roofs and siding were damaged, and a camper was overturned. One fatality occurred because of this event. The village has a portable generator that can run the water well and sewer lift station in the event of power loss. However, a permanent generator is needed at the well.

Severe Winter Storms

Snowstorms are an annual occurrence for the community. Damage to the electrical system is the primary concern for the local planning team. Stratton has an increased vulnerability to power loss with at least one power outage occurring each year and very few power lines being buried. There is no shelter location with a backup generator should power be lost during extremely cold temperatures. Snow removal in the community is handled by village employees using a dump truck and pickup with a snowplow. The equipment is sufficient to handle most winter storms; however, the equipment is aging and needs to be replaced soon.

Terrorism and Cyber Security

While a cyber-attack has not occurred to the village, computers are becoming more of a risk as technology advances. Village employees have a lack of training and knowledge on cyber security, which puts Stratton at a higher risk of being hacked and losing vital information or losing operation of daily functions. Vital records are backed up using a USB drive and the cloud regularly. However, there is not a plan in place to ensure backups are tested. The local planning team would like additional security and training for all computer systems and online data transmission.

Tornadoes and High Winds

A tornado in the early 1990s damaged many homes and infrastructure in the community. There have been no tornado events that have impacted Stratton since then. High winds and tornadoes can damage electrical poles and cause power outages for the entire community. Resources repairing large amounts of damage would be a concern for the village. Stratton has one tornado siren which provides coverage to the entire village. Residents are also notified of severe weather through the radio, Facebook, and cellphone applications. There is no safe room or shelter location that residents can use during a tornado, private homes and basements are the only option.

Mitigation Strategy

New Mitigation Actions

Mitigation Action	Cyber Security Improvements
Description	Improve security for all computer systems and online data transmission. Include staff training on the improvements and general cyber security.
Hazard(s) Addressed	Terrorism and Cyber Security
Estimated Cost	\$7,000+
Local Funding	General Budget
Timeline	2-5 Years
Priority	High
Lead Agency	Village Board
Status	Not Started. The village does not have the capability to implement this project due to a lack of resources and training.

Mitigation Action	Floodplain Management Assistance
Description	Work with the Nebraska Department of Natural Resources for floodplain management and enforcement assistance.
Hazard(s) Addressed	Flooding
Estimated Cost	Staff Time
Local Funding	Staff Time
Timeline	2-5 Years
Priority	Low
Lead Agency	Floodplain Administrator
Status	Not Started. The village has the capability to implement this project.

Mitigation Action	Public Awareness and Education
Description	Through activities such as outreach projects, distribution of maps, and environmental education increase public awareness of natural and manmade hazards to both public and private property owners, renters, businesses, and local officials about hazards and ways to protect people and property from these hazards.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Heat, Flooding, Grass/Wildfires, Hazardous Materials Release, Public Health Emergency, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	\$500+
Local Funding	General Budget
Timeline	5+ Years
Priority	Low
Lead Agency	Village Board
Status	Not Started. The village has the capability to implement this project.

Kept Mitigation Actions

Mitigation Action	Backup Generators
Description	Provide a source of backup power for a village shelter and water well.
Hazard(s) Addressed	Extreme Heat, Flooding, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	\$40,000 per generator
Local Funding	General Budget
Timeline	1 Year
Priority	High
Lead Agency	Village Board
Status	Stratton is currently obtaining information and quotes for a backup generator for the water well and has the capability to implement this project.

Mitigation Action	Civil Service Improvements
Description	Improve emergency rescue and response equipment and facilities by providing additional or updating existing emergency response equipment. This could include fire equipment, ATVs, water tanks/truck, snow removal equipment, pumps, etc.
Hazard(s) Addressed	Drought, Flooding, Grass/Wildfires, Hazardous Materials Release, Public Health Emergency, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	\$5,000+
Local Funding	General Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board, Hitchcock County Emergency Management
Status	There has been some discussion of looking for quotes for some new equipment. This village has the capability to implement this project.

Mitigation Action	Storm Shelter and Safe Rooms
Description	Assess, design, and construct fully supplied safe room in the new village building.
Hazard(s) Addressed	Severe Thunderstorms, Tornadoes and High Winds
Estimated Cost	\$500,000
Local Funding	General Budget
Timeline	5+ Years
Priority	Low
Lead Agency	Village Board
Status	Not Started. The village has the capability to implement this project.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (e.g., annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The Village Clerk, Utilities Superintendent, and Chairman of the Board of Trustees will be responsible for reviewing and updated this community profile outside of the five-year update. Stratton will review the plan annually and will notify the public during a public village board meeting and through social media.

Community Profile

Village of Trenton

Hayes, Hitchcock, and Frontier Counties Hazard Mitigation Plan

2023

Local Planning Team

The Village of Trenton’s local planning team for the hazard mitigation plan are listed in the table below along with the meetings attended. All planning worksheets were filled out and returned by members of the local planning team.

Table TRT.1: Trenton Local Planning Team

Name	Title	Jurisdiction	R1 Meeting	R2 Meeting
Cindy Borges	Board Chair	Village of Trenton	-	1-on-1
Brandon Caddick	Utility Supervisor	Village of Trenton	-	-
Wendy McKain	Ex - Clerk / Treasurer / Floodplain Administrator	Village of Trenton	Curtis	Hayes Center

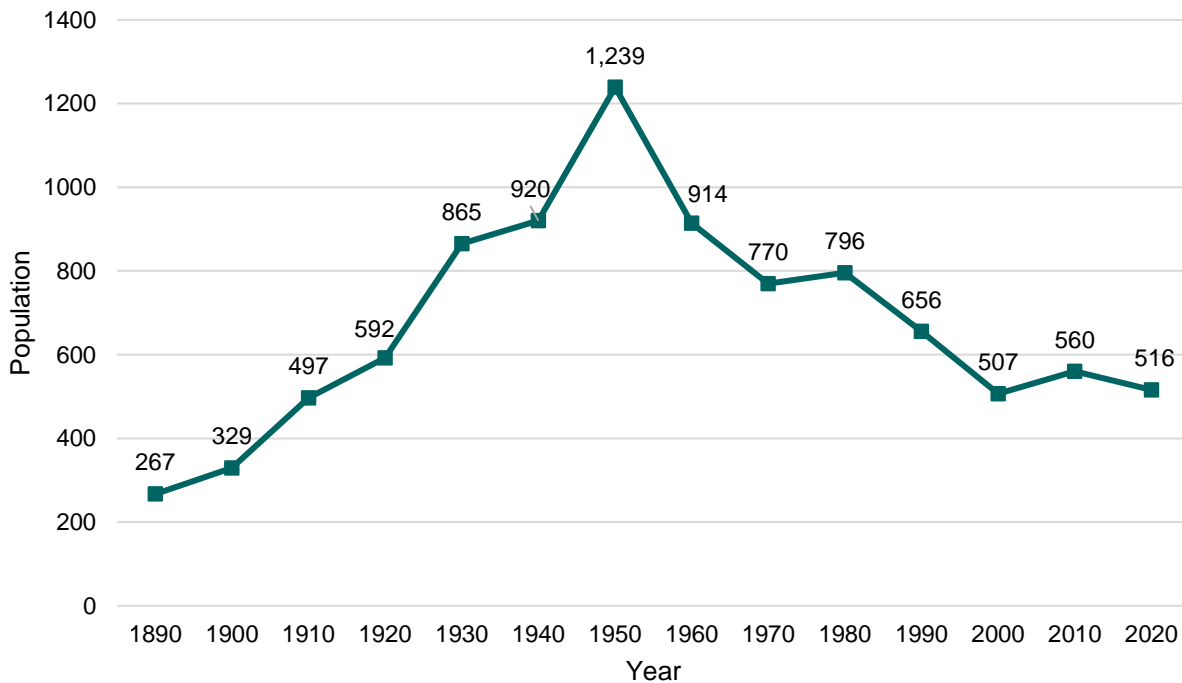
Location and Geography

The Village of Trenton is in central Hitchcock County and covers an area of 0.58 square miles. Trenton is the county seat of Hitchcock County. The Republican River runs directly south of the village and Swanson Lake is approximately one mile to the west.

Demographics

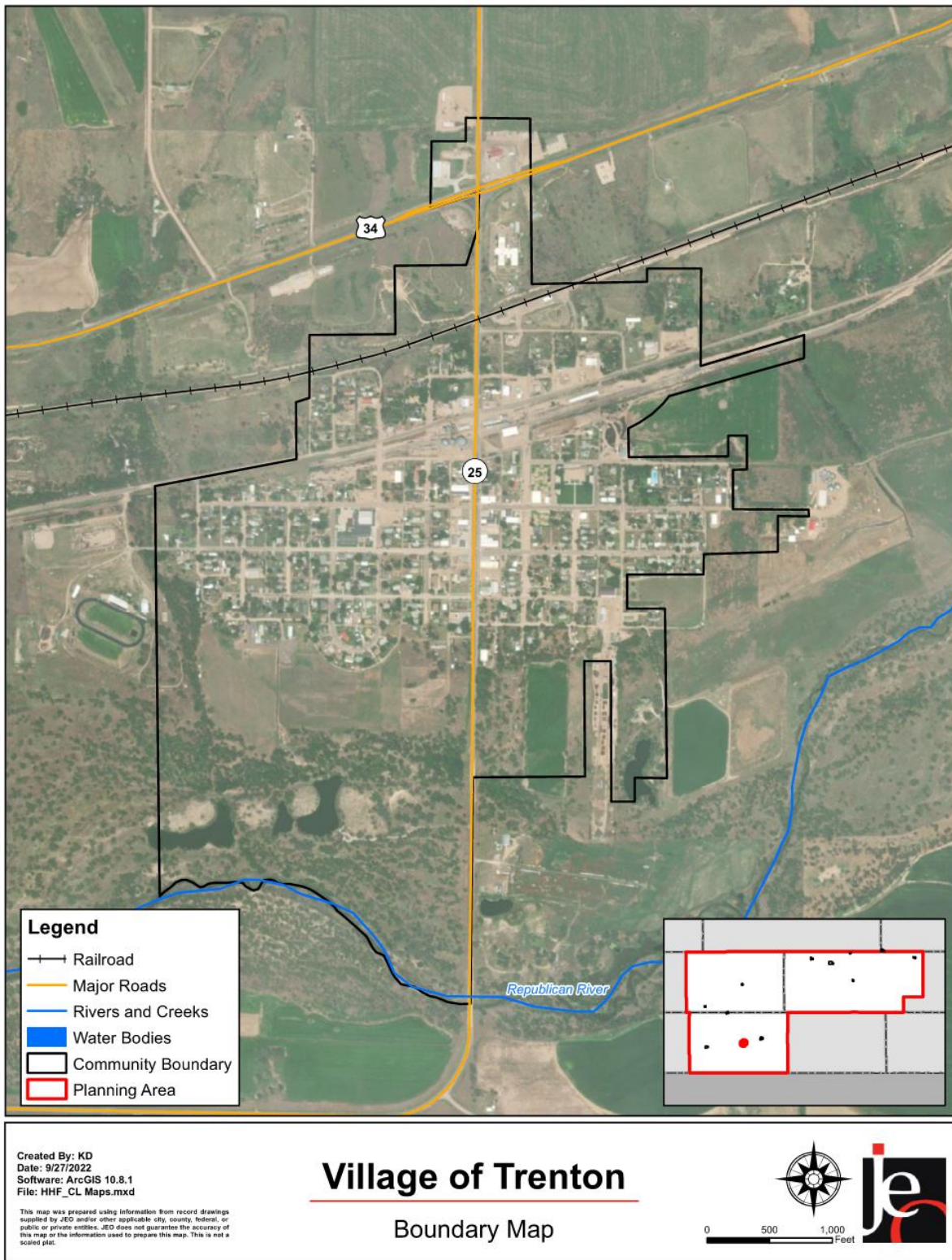
The following figure displays the historical population trend for the Village of Trenton. This figure indicates that the population of Trenton has been declining since 2010 to 516 people in 2020. A declining population can lead to more unoccupied and unmaintained housing that is then at risk to high winds and other hazards. Unoccupied housing may also be an economic indicator that future development is unlikely to occur. Furthermore, with fewer residents, tax revenue decreases for the community, which could make implementing mitigation projects more fiscally challenging. Trenton’s population accounted for 19.7% of Hitchcock County’s population in 2020.⁶⁷

Figure TRT.1: Population 1890 - 2020



67 United States Census Bureau. “2020 Census Bureau Decennial Census: P1: Race.” <https://data.census.gov/>.

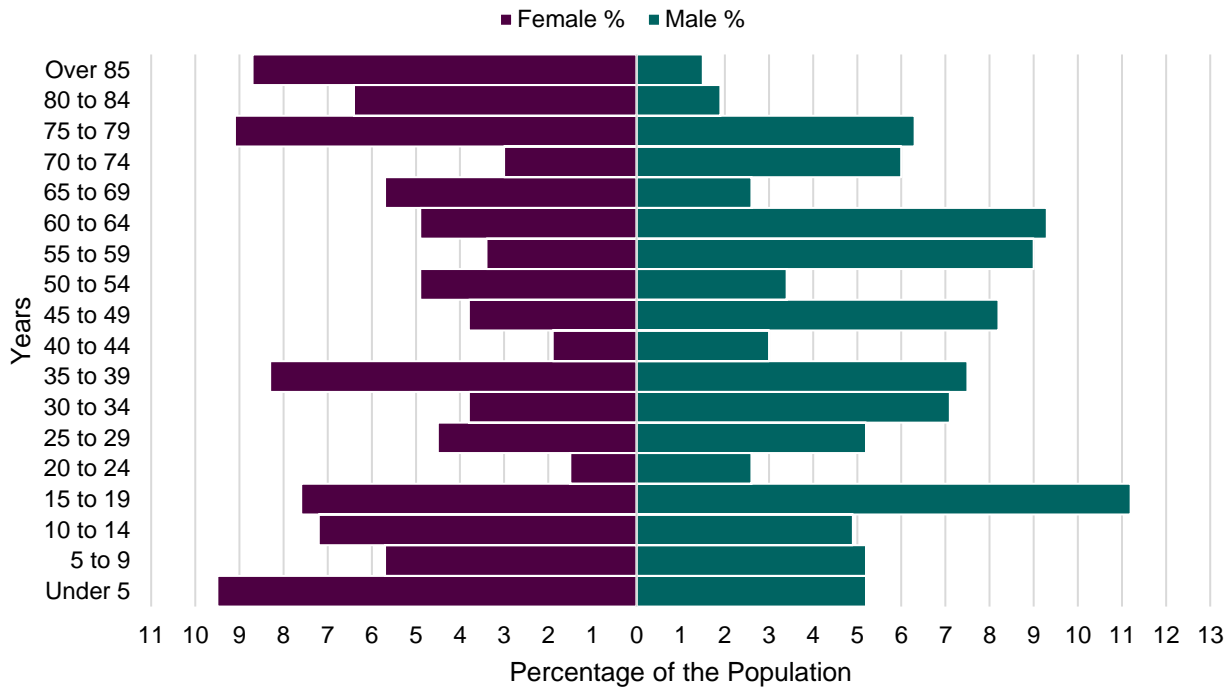
Figure TRT.2: Village of Trenton



The young, elderly, and minority populations may be more vulnerable to hazards than other groups. Looking at Trenton’s population:

- **5.4% is non-white.** Since 2010, Trenton became more ethnically diverse. In 2010, 1.6% of the Trenton’s population was non-white. By 2020, 5.4% was non-white.⁶⁸
- **Median age of 44.3.** The median age of Trenton was 44.3 years old in 2020. The population became younger since 2010, when the median age was 54.1.⁶⁹

Figure TRT.3: Trenton’s Population Pyramid



The figure above shows Trenton’s population percentage broken down by sex and five-year age groups. Trenton’s population is top heavy. This suggests future population decline as older generations are replaced by fewer younger residents.

Employment and Economics

Low-income populations, long distance commuters, and the unemployed may be more vulnerable to certain hazards like extreme heat and flooding than other groups. Trenton’s population has:

- **5.7% of people living below the poverty line.** The poverty rate (5.7%) in the Village of Trenton was lower than the state’s poverty rate (10.4%) in 2020.⁷⁰
- **\$43,462 median household income.** Trenton’s median household income in 2020 (\$43,462) was \$19,553 lower than the state (\$63,015).⁷⁰
- **2.7% unemployment rate.** In 2020 Trenton has a slightly lower unemployment rate (2.7%) when compared to the state (3.4%).⁷⁰

68 United States Census Bureau. “2020 Census Bureau American Community Survey: DP05: ACS Demographic and Housing Estimates.” <https://data.census.gov/>.

69 United States Census Bureau. “2020 Census Bureau American Community Survey: S0101: Age and Sex.” <https://data.census.gov/>.

70 United States Census Bureau. “2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics.” <https://data.census.gov/>.

- **32.3% of workers commuted 30 minutes or more to work.** Fewer workers in Trenton commuted 30 minutes or more to work than compared to workers commuting less than 15 minutes (32.3% compared to 44.1%).⁷¹

Major Employers

Major employers in the Village of Trenton include Hitchcock County Schools and El Dorado Manor. A large percentage of residents commute to Palisade, Culbertson, and McCook for employment.

Housing

Multiple factors inform the vulnerability of housing units to hazard events. Housing age, for example, may indicate which housing units were built prior to the development of state building codes. Older houses and vacant housing generally more vulnerable to hazards if poorly maintained. Additionally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe thunderstorms if those homes are not anchored correctly. Renters are particularly vulnerable, as renter-occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. Renters are less likely than homeowners to have flood insurance, have ready access to financial resources to evacuate, or to know their risks to flooding and other hazards. Trenton's housing stock has:

- **59.9% of housing built prior to 1970.** Trenton has a larger share of housing built prior to 1970 than the state (59.9% compared to 45.5%).⁷²
- **38.6% of housing units vacant.** Trenton has a higher vacancy rate 38.6% compared to the rest of the state (9.2%).⁷²
- **18.3% mobile and manufacture housing.** The Village of Trenton has a larger share of mobile and manufactured housing (18.3%) compared to the state (3.3%).⁷²
- **33.7% renter-occupied.** The rental rate of Trenton was 33.7% in 2020. This is similar to the state's rate of 33.8%.⁷²

Broadband Access

Internet or broadband access – through Wi-Fi or cellphone coverage – is a critical means of sharing and receiving information regarding hazardous events, including storm warnings, evacuation orders, or weather updates. Rural communities often lack adequate internet or broadband access. However, internet access is as vital a utility as electricity, as seen through the COVID-19 pandemic when many people worked or attended school from home.

- **66.3% of households have a broadband internet subscription.** Trenton has a smaller share of households with broadband (66.3%) compared to the state (85.6%).⁷³

71 United States Census Bureau. "2020 Census Bureau American Community Survey: S0802: Means of Transportation to Work by Selected Characteristics." <https://data.census.gov/>.

72 United States Census Bureau. "2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." <https://data.census.gov/>.

73 United States Census Bureau. "2020 Census Bureau American Community Survey: DP02: Selected Social Characteristics in the United States." <https://data.census.gov/>.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. The Village of Trenton is governed by a village board; other governmental offices and departments that may be involved in implementing hazard mitigation initiatives are listed below.

- Clerk/Treasurer/Floodplain Administrator
- Attorney
- Utility & Maintenance Superintendent
- Fire Department
- Planning Commission
- Nursing Home Board
- Housing Board
- Library Board
- Tree Board

Capability Assessment

The planning team assessed the Village of Trenton's hazard mitigation capabilities by reviewing local existing policies, regulations, plans, and programs related to hazard mitigation. The following tables summarize the community's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects. There is an ongoing review of different plans and capabilities for possible improvements. At this time the community does not anticipate adding capabilities due to a lack of funding and staffing.

Municipal funds are limited to maintaining current facilities and systems with capital projects being put off due to funding issues. Funds have increased in recent years due to payback funds from the nursing home.

Table TRT.2: Capability Assessment

Capability/Planning Mechanism		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	Yes
	Local Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No
	Regional Community Wildfire Protection Plan	Yes
	Other (if any)	Water System Emergency Response Plan

Capability/Planning Mechanism		Yes/No
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administration	Yes
	GIS Capabilities	No
	Chief Building Official	No
	Civil Engineering	No
	Local staff who can assess community's vulnerability to hazards	No
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	-
Fiscal Capability	1- & 6-Year Plan	Yes
	Applied for grants in the past	Yes
	Awarded a grant in the past	Yes
	Authority to levy taxes for specific purposes such as mitigation projects	Yes
	Gas/Electric Service Fees	No
	Storm Water Service Fees	No
	Water/Sewer Service Fees	No
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
Other (if any)	-	
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	No
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes
	Natural disaster or safety related school programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	Yes
	Other (if any)	-

Table TRT.3: Overall Capability

Overall Capability	Limited/Moderate/High
Financial resources to implement mitigation projects	Limited
Staff/expertise to implement projects	Limited
Public support to implement projects	Limited
Time to devote to hazard mitigation	Limited

Social Vulnerability

FEMA’s National Risk Index is a new mapping tool that analyzes a community’s risk to natural hazards on a scale of 0 (lowest possible value) to 100 (highest possible value). The overall risk for Hitchcock County which includes Trenton is Very Low (6.26). The average for the State of Nebraska is 9.43.⁷⁴

- **Social Vulnerability:** Social groups in Hitchcock County have a Relatively Moderate (43.40) susceptibility to adverse impacts of natural hazards when compared to the rest of the U.S.
- **Community Resilience:** Communities in Hitchcock County have a Relatively Low (51.99) ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S.

An additional tool developed by Headwaters Economics, the Rural Capacity Index, evaluates rural communities and counties across the country for local capacity. Capacity includes the staffing, resources, and expertise to both apply for funding and fulfill reporting requirements, as well as design, build, and maintain infrastructure products over the long term. Communities lacking local capacity often have the greatest need for infrastructure investments particularly, rural communities and communities of color. The Rural Capacity Index helps identify communities with limited capacity on a scale of 0 (no capacity) to 100 (high capacity). This index is based on 10 variables that can function as proxies for community capacity. The following table lists the components and scores for the Village of Trenton compared to the county.

Table TRT.4: Rural Capacity Index

Components of Index	Village of Trenton	Hitchcock County
County is Metropolitan?	No	No
Has a Head of Planning?	Yes	Yes
Has a College or University?	No	No
Adults with Higher Education:	11%	18%
Families Below Poverty Level:	3%	7%
Households with Broadband:	59%	69%
People without Health Insurance:	13%	10%
Voter Turnout:	77%	77%
Income Stability Score (0 to 100):	47	47
Population Change (2000 to 2019):	7	-349
Overall Rural Capacity Index Score	53	65

Source: Headwaters Economics⁷⁵

National Flood Insurance Program (NFIP)

Trenton is a member of the NFIP having joined on 9/1/1986, and the village’s Floodplain Administrator (Cindy Borges) oversees the commitments and requirements of the NFIP including enforcement of the local floodplain management regulations. The initial FIRM for the village was delineated in 9/1/1986 and the current effective map date is 3/18/2008, which has been adopted and incorporated into the local floodplain management regulations in 2001. As of August 31, 2021, there is one NFIP policy in-force for the village covering \$74,000. Trenton does not currently have any repetitive loss or severe repetitive loss structures. Developments in the floodplain are reviewed by the village board before any building permit is issued.

74 Federal Emergency Management Agency. “National Risk Index”. Accessed July 2022. <https://hazards.fema.gov/nri/map>.

75 Headwaters Economics. January 2022. “Rural Capacity Map”. Accessed July 2022. <https://headwaterseconomics.org/equity/rural-capacity-map/>.

After a flood event, the community implements substantial improvement and substantial damage provisions as outlined in the Substation Damage Assessment Handbook from the Nebraska Department of Natural Resources, which can be found here: https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/floodplain/resources/20220301_eSDA_Handbook_FINAL.pdf. The local planning team has said the Village of Trenton will remain in good standing and will continue involvement with the NFIP in the future.

Plans and Studies

Trenton has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan or how it contains hazard mitigation principles. When the village updates these planning mechanisms, the local planning team will review the hazard mitigation plan for opportunities to incorporate the goals and objectives, risk and vulnerability data, and mitigation actions into the plan update.

Building Code (2012)

The building code sets standards for constructed buildings and structures. The village has adopted the 2012 International Building Codes with no amendments made. Due to the age of the document, the hazard mitigation plan has not been integrated into it. Enforcement of the building code is handled by the village board and village attorney.

Comprehensive Plan (2021)

The comprehensive plan is designed to guide the future actions and growth of the village. The hazard mitigation plan has not been integrated; however, it contains goals and objectives aimed at Safe Growth, directs development away from the floodplain, directs housing away from chemical storage facilities, encourages the elevation of structures located in the floodplain, and directs housing and vulnerable populations away from major transportation routes. There is currently no timeline to update the comprehensive plan.

Hitchcock County Local Emergency Operations Plan (2019)

Trenton is an annex in the Hitchcock County Local Emergency Operations Plan (LEOP). The hazard mitigation plan has not been integrated with this plan, however, the LEOP establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years. Flooding, dam failure, and mass shelter information from the LEOP was used to inform hazard prioritization and community lifelines.

Subdivision Regulations (2001), Zoning Ordinance (2015), Floodplain Regulations (2001)

The village's floodplain regulations, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. Due to their age, the hazard mitigation plan has not been integrated with these documents. However, the documents restrict development in hazard prone areas, discourage development in the floodplain, limit population density in the floodplain, and discourage housing and vulnerable populations near chemical storage sites.

Water System Emergency Response Plan (2020)

A water system emergency response plan serves as a guideline for water operators and village administration to minimize the disruption of normal services to consumers and to provide public health protection during an emergency event. The document identifies several natural and human-caused events and discusses the water system’s response during those events. The hazard mitigation plan has not been integrated with this plan.

Future Development Trends

Over the past five years, the village annexed the Dollar General, demolished several buildings, a few homes have been remodeled and resold. This is consistent with the population decline that has been seen recently. The remodeling of homes and demolishing of buildings likely decreased Trenton’s vulnerability to hazards because there are less structures being poorly maintained. The annexing of Dollar General may slightly increase vulnerability as there is now more property that could be damaged during a hazard event. In the next five years, no housing or commercial buildings are planned at this time likely due to the projected population decline.

Community Lifelines

Each participating jurisdiction identified community lifelines that are vital for disaster response and essential for returning the jurisdiction’s functions to normal during and after a disaster per the FEMA Community Lifelines guidance. The following subsections list those community lifelines by type, as identified by the local planning team.

Safety and Security

The Safety and Security Lifeline includes law enforcement, security, fire services, search and rescue, government services, and community safety. The table below lists Safety and Security Lifelines for Trenton.

Table TRT.5: Safety and Security Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
1	County Courthouse / County Sheriff	G	N
2	Fire Department	G	N

Food, Water, Shelter

Components of this lifeline include food, water, shelter, and agriculture. Food, Water, and Shelter Lifelines for the Village of Trenton are included in the table below.

Table TRT.6: Food, Water, and Shelter Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
3	Hitchcock County High School	S	N
4*	Well	-	N

*Not mapped. Located three miles north of the village.

Health and Medical

Health and Medical Lifeline components can include medical care, patient transport, public health, fatality management, and the medical supply chain. The following medical and health facilities are located within the community.

Table TRT.7: Health and Medical Lifelines

CL Number	Name	Type of Facility	Number of Beds	Generator (G) Shelter (S)	Floodplain (Y/N)
5	El Dorado Manor Nursing/Residential Care	Assisted Living & Long Term Care	58	-	N
6	Trenton Regional Medical Center	Rural Health Clinic	0	-	N

Source: Nebraska Department of Health and Human Services^{76,77,78,79}

Energy

Energy Lifeline components include power, the power grid, and fuel. The table below lists Energy Lifelines for Trenton.

Table TRT.8: Energy Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
7	Co-op Fuel Storage	-	N
8	Trails West	-	N
9	Trenton Sub Station	-	N

Communications

Components of the Communications Lifeline include communication infrastructure, alerts, 911 dispatch, responder communications, and finance. No communication lifelines were identified for the city.

Transportation

Transportation Lifeline components include interstates, highways, major roadways, mass transit, railway, and aviation. Trenton’s major transportation corridors include U.S. Highway 34 and State Highway 25. The most traveled route is Highway 34 with an average of 1,805 vehicles daily, 275 of which are trucks.⁸⁰ Trenton has one Burlington Northern Santa Fe Railway and one Amtrak line traveling east to west on the northern portion of the community. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk of transportation incidents.

Hazardous Materials

The Hazardous Materials Lifeline includes chemical storage facilities, pipelines, and transported chemical tanks. There is one gas transmission pipeline that travels through the community and can be seen on the figure below.

76 Department of Health and Human Services. 2022. “State of Nebraska: Assisted Living Facilities.” <https://dhhs.ne.gov/licensure/Documents/ALF%20Roster.pdf>.

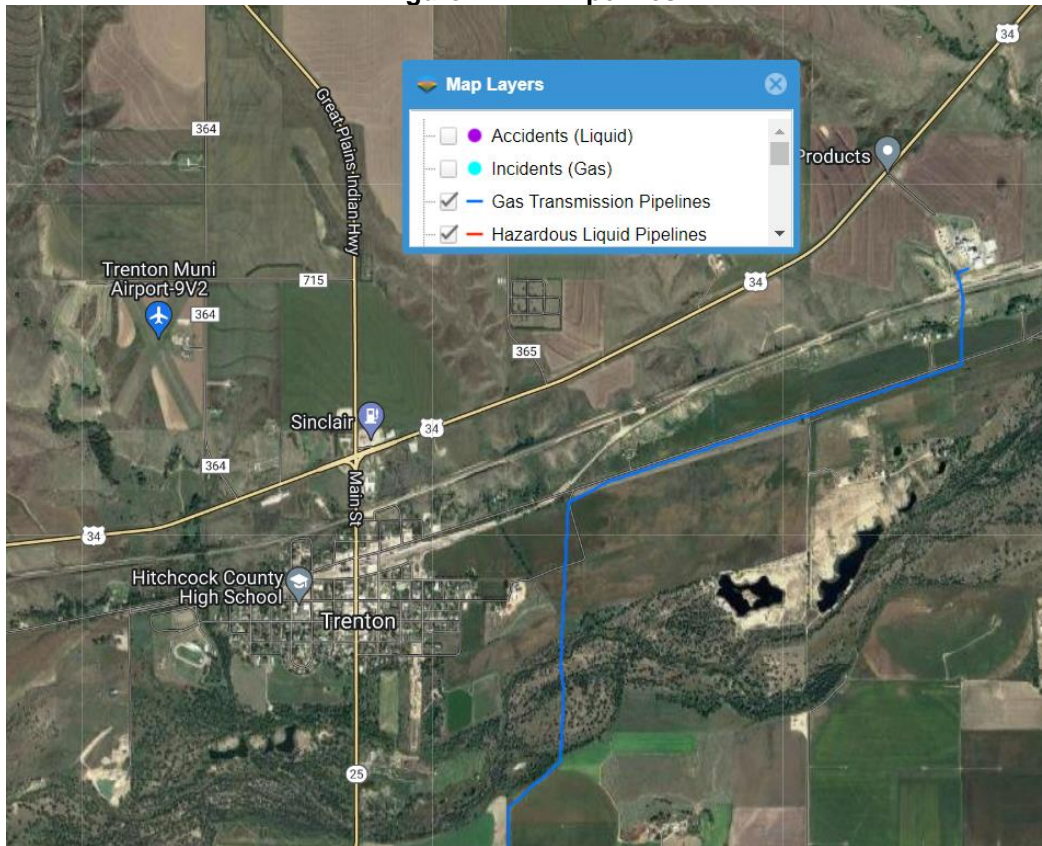
77 Department of Health and Human Services. 2022. “State of Nebraska Roster: Hospitals.” <https://dhhs.ne.gov/licensure/Documents/Hospital%20Roster.pdf>.

78 Department of Health and Human Services. 2022. “State of Nebraska Roster: Long Term Care Facilities.” <https://dhhs.ne.gov/licensure/Documents/LTCRoster.pdf>.

79 Department of Health and Human Services. 2022. “State of Nebraska Roster: Rural Health Clinic.” https://dhhs.ne.gov/licensure/Documents/RHC_Roster.pdf.

80 Nebraska Department of Transportation. 2021. “Annual Average Daily Traffic Flow.” Accessed July 2022. <https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

Figure TRT.4: Pipelines



Source: National Pipeline Mapping System⁸¹

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are four chemical sites within or near Trenton which house hazardous materials (listed below). Chemicals are also regularly transported on Highways 25 and 34.

Table TRT.9: Chemical Storage Lifelines

CL Number	Name	Generator (G)	Floodplain (Y/N)
10	Farmers Co-op Grain & Supply	-	N
11	Farmers Co-op Grain & Supply	-	N
12	Farmer Co-op Grain & Supply	-	N
13	Southwest Fertilizer Inc	-	N

Source: Nebraska Department of Environment and Energy⁸²

Other Community Lifelines

The Village of Trenton identified lifelines that did not fit into the previous seven FEMA lifeline categories but are considered lifelines by the community. The other community lifelines are listed in the table below.

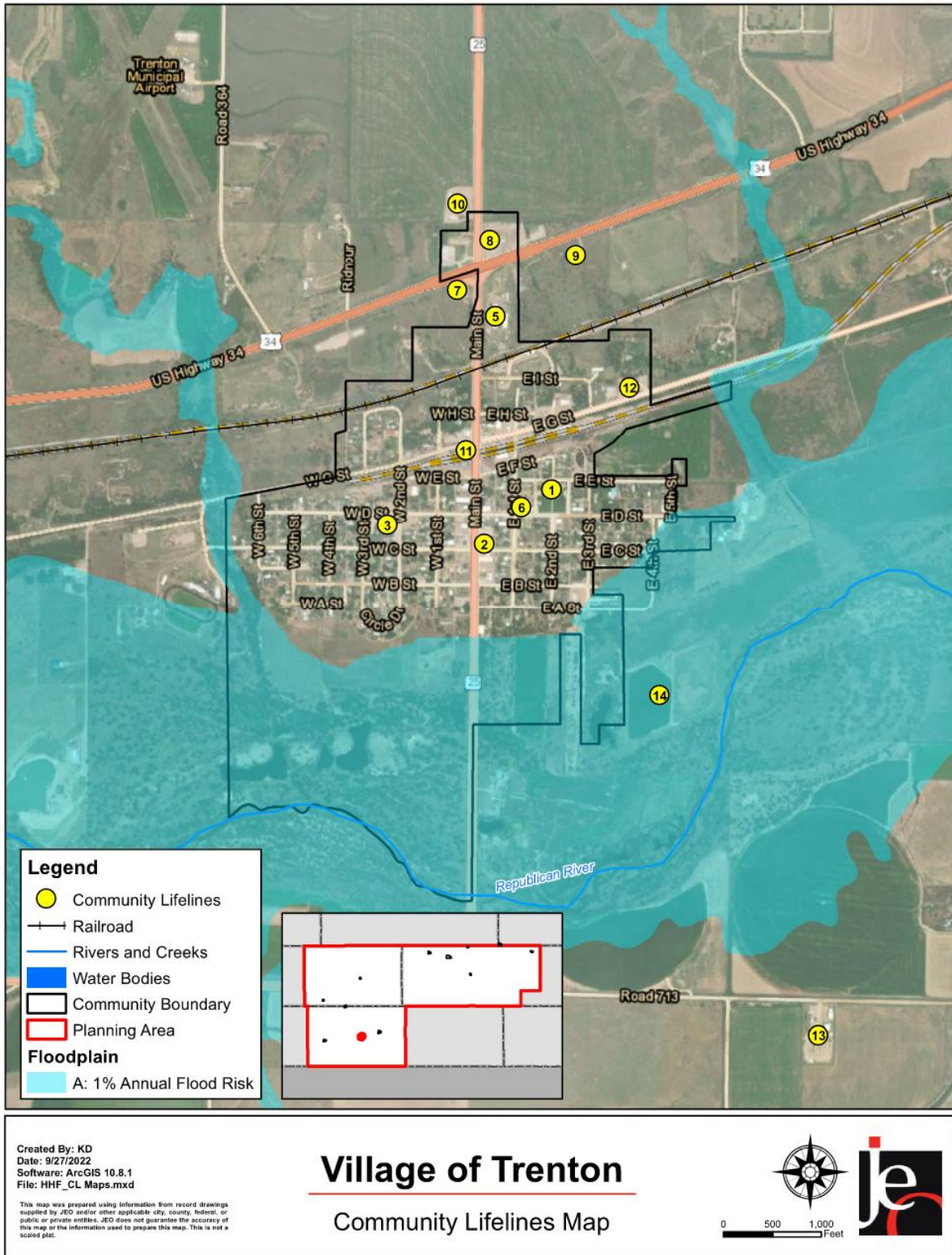
Table TRT.10: Other Community Lifelines

CL Number	Name	Generator (G) Shelter (S)	Floodplain (Y/N)
14	Lagoons	-	Y

81 National Pipeline Mapping System. 2022. "Public Viewer." Accessed July 2022. <https://pvnpm.phmsa.dot.gov/PublicViewer/>.

82 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed May 2022.

Figure TRT.5: Community Lifelines



Parcel Improvements and Valuation

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, garages, sheds etc.) at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

Table TRT.11: Parcel Improvements and Value in the Floodplain

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
326	\$14,922,460	25	\$1,309,360	7.7%

Source: County Assessor, 2021

Historical Occurrences

See the Hitchcock County profile for historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

Hazard Prioritization

The Hayes, Hitchcock, and Frontier Counties Hazard Mitigation Plan evaluates a range of natural and human-caused hazards which pose a risk to the counties, communities, and other participants. However, during the planning process, the local planning team identified specific hazards of top concern for Trenton which required a more nuanced and in-depth discussion of past local events, potential impacts, capabilities, and vulnerabilities. The following section expands on the hazards of top concern identified by the Village of Trenton. Based on this analysis, the local planning team determined their vulnerability to all other hazards to be of low concern. For a review and analysis of other regional hazards, please see *Section Four: Risk Assessment*.

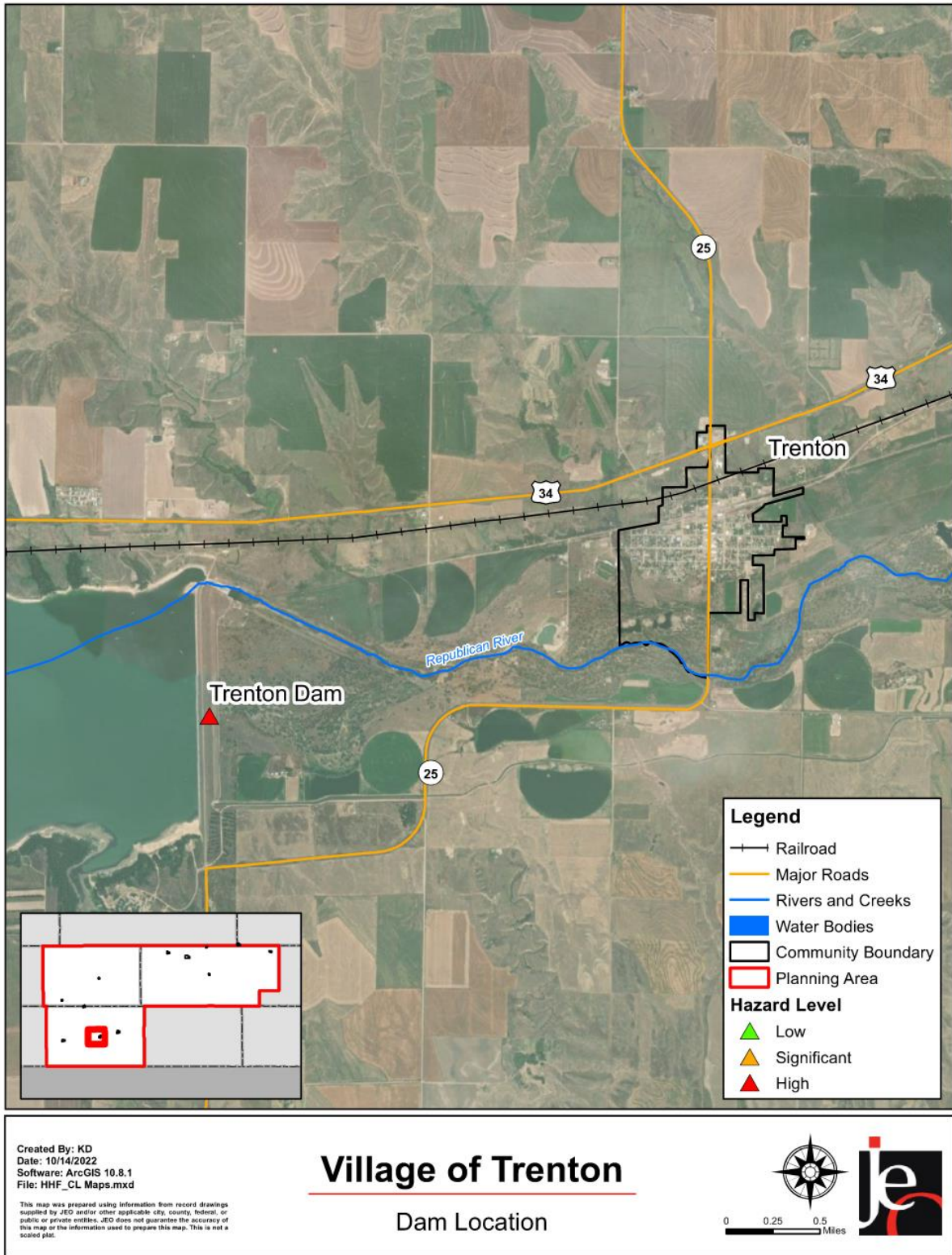
Dam Failure

While not identified as a hazard of top concern by the local planning team, the village is located near a high hazard dam. The Trenton Dam is located along the Republican River and creates the Swanson Reservoir. Normal storage for the dam is 112,214 acre-feet. If the dam were to fail it would likely cause flooding slightly greater than the 100-year floodplain. The figure below shows the location of the Trenton Dam.

Drought

The ongoing drought since 2019 has caused economic impacts to the village as there is a shortage in crops and cattle. Agriculture is a major economic driver for the village and drought has caused trickle down affects to businesses and residents. In addition, there is a concern for the village’s water supply if the drought were to continue. The village has two wells and a 141,000-gallon water tower. To help reduce the impacts of drought, the village is currently working on bringing Trenton’s third well into use. The third well had not been in operation due to contamination issues; however, it can still be used for fire suppression and irrigation. This will help reduce demand on the village’s first two wells. While it has not been done in the past, the village is able to implement water restrictions if needed and approved by the Village Board. The village does not currently do any education regarding drought but would be willing to in the future.

Figure TRT.6: High Hazard Dam Location



Grass/Wildfires

The current drought has caused very dry conditions, which has increased the number of grass/wildfires in the area. Trenton has not had any recent large fires but has provided mutual aid to fires that have occurred to the southwest. According to the Nebraska Forest Service’s *Wildfire Risk Explorer*, the majority of the area around the community has either low or moderate wildfire risk.⁸³ Fire response for the village is handled by the Trenton Rural Fire District. The fire district recently purchased a new fire truck and some additional equipment, but more is still needed. In the future the village would like to educate residents about the risks of starting fires from driving in pastures and road ditches.

Severe Thunderstorms

In August 2019, a severe thunderstorm with hail caused approximately \$250,000 in damage to buildings in Trenton. This was the most damaging event that has occurred recently. Trenton has very few resources to help property owners and businesses clean up after a severe thunderstorm event. The local planning team estimates that 25% of power lines in the community are buried. However, most power outages are caused by issues in the grid outside of the community. All of the village’s wells have a backup generator but they do need to be replaced as they are aging. Trenton is still evaluating if any other locations need a backup power generator.

Tornadoes and High Winds

High winds have caused damage to the village, most recently in April 2022. The high winds caused approximately \$100,000 in roof damage to buildings in Trenton. Four tornadoes have occurred near the community, but none have impacted the village. This hazard was selected as a hazard of top concern because the village lacks the resources to effectively clean up after an event. Residents are notified of severe weather through the tornado siren, radios, and television. The village is currently discussing adding text message alerts as well. Trenton does not have a safe room in the community and residents must basements in homes. In the future, the village would like to build a community safe room if funding is available.

Mitigation Strategy

New Mitigation Actions

Mitigation Action	Backup Generators
Description	Identify locations that are in need of backup generators. Purchase and install backup generators at the identified locations. Well back up generators need to be replaced.
Hazard(s) Addressed	Extreme Heat, Flooding, Grass/Wildfire, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	\$40,000+ per Generator
Local Funding	General Budget
Timeline	1 Year
Priority	High
Status	Planning and Financing Stage.

83 Nebraska Forest Service. “Nebraska Wildfire Risk Explorer”. Accessed October 2022. <https://nebraskawildfirerisk.com/>.

Kept Mitigation Actions

Mitigation Action	Alert and Warning Sirens
Description	Perform an evaluation of existing alert sirens in order to determine sirens which should be replaced or upgraded.
Hazard(s) Addressed	Severe Thunderstorms, Tornadoes and High Winds
Estimated Cost	\$25,000+
Local Funding	General Budget
Timeline	5+ Years
Priority	Medium
Lead Agency	Village Board
Status	Not Started. Current siren does not need to be replaced but may need to be upgraded soon. The village has the capability to implement this action.

Mitigation Action	Civil Service Improvements
Description	Improve emergency rescue and response equipment and facilities by providing additional or updating existing emergency response equipment. This could include fire equipment, ATVs, water tanks/truck, snow removal equipment, pumps etc. This would also include developing systems for emergency vehicles, identifying and training additional personnel for emergency response, or continuing educational opportunities for current personnel.
Hazard(s) Addressed	Drought, Flooding, Grass/Wildfires, Hazardous Materials Release, Public Health Emergency, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	\$5,000+
Local Funding	General Budget, Fire District Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board, Hitchcock County Emergency Management
Status	In Progress. The fire district recently bought a new fire truck and some new equipment. More fire district equipment is needed. The village is in need of a new snowplow blade.

Mitigation Action	Drought Monitoring Plan
Description	Develop and implement a plan to monitor the effects of drought.
Hazard(s) Addressed	Drought
Estimated Cost	\$45,000
Local Funding	General Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Public Works, Village Board
Status	Not Started. The village does not currently have the capability to implement this project due to funding.

Mitigation Action	Emergency Communications
Description	Establish an action plan to improve communication between agencies to better assist residents and businesses during and following emergencies. Establish inner-operable communications.
Hazard(s) Addressed	All Hazards
Estimated Cost	\$10,000+
Local Funding	General Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board
Status	Not Started. A radio is needed in the utility office. The village has the capability to implement this action.

Mitigation Action	Evacuation Plan and Location
Description	Prepare and implement an emergency evacuation plan for when the immediate and urgent movement of people away from the threat or actual occurrence of a hazard is necessary.
Hazard(s) Addressed	Flooding, Grass/Wildfires, Hazardous Materials Release
Estimated Cost	\$40,000
Local Funding	General Budget
Timeline	2-5 Years
Priority	High
Lead Agency	Village Board, Fire Chief, Hitchcock County Emergency Management
Status	Not Started. The village does not currently have the capability to implement this project due to funding.

Mitigation Action	Public Awareness and Education Campaigns
Description	Through activities such as outreach projects, distribution of maps, and environmental education, increase public awareness of hazards to both public and private property owners, renters, businesses, and local officials.
Hazard(s) Addressed	Animal and Plant Disease, Dam Failure, Drought, Extreme Heat, Flooding, Grass/Wildfires, Hazardous Materials Release, Public Health Emergency, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	\$1,000+
Local Funding	General Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board
Status	Not Started. The village has the capability to implement this project.

Mitigation Action	Storm Shelter and Safe Rooms
Description	Assess, design, and construct fully supplied safe room for use by residents of the Village of Trenton during weather events.
Hazard(s) Addressed	Severe Thunderstorms, Tornadoes and High Winds
Estimated Cost	\$350 - \$500 per square foot
Local Funding	General Budget
Timeline	5+ Years
Priority	Medium
Lead Agency	Village Board
Status	Not Started. The village does not currently have the capability to implement this project due to the high cost of the project.

Mitigation Action	Warning Systems
Description	Perform an evaluation of existing warning systems. Look into additional methods of warning systems such as smart phone warning system.
Hazard(s) Addressed	Flooding, Grass/Wildfires, Hazardous Materials Release, Severe Thunderstorms, Severe Winter Storms, Terrorism and Cyber Security, Tornadoes and High Winds
Estimated Cost	\$3,000 per Year
Local Funding	General Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board
Status	Planning Stage. The village is discussing implementing a text message that can message those that sign up.

Mitigation Action	Weather Radios
Description	Conduct an inventory of weather radios at community lifelines. Provide new radios as needed.
Hazard(s) Addressed	Flooding, Grass/Wildfires, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	\$75 per Radio
Local Funding	General Budget
Timeline	2-5 Years
Priority	Medium
Lead Agency	Village Board
Status	Not Started. An inventory still needs to be conducted. The village has the capability to implement this project.

Removed Mitigation Actions

Mitigation Action	Electrical System Redundancies
Description	Provide looped distribution service and other redundancies in the electrical system in the event the primary system is destroyed or fails.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Status	This project would be handled by the public power district.

Mitigation Action	Floodplain Development Ordinance Enforcement
Description	Continue floodplain management practices such as enforcement of floodplain management requirements, floodplain identification, and mapping. Continue to enforce local floodplain regulations for structures location in the 100-year floodplain.
Hazard(s) Addressed	Flooding
Status	Removed as this is a maintenance action. The village will continue to enforce floodplain regulations.

Mitigation Action	New Alternate Power Source
Description	Investigate, develop, and implement new alternative sources of power.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Status	This project would be handled by the public power district.

Mitigation Action	Participate or Maintain Good Standing in the NFIP
Description	Participate in the NFIP or maintain good standing with the NFIP including floodplain management practices/requirements and regulation enforcement and updates. Hitchcock County will be the main manager of Trenton’s participation in the NFIP. Hitchcock County will monitor and fully enforce floodplain management regulations as part of NFIP participation.
Hazard(s) Addressed	Flooding
Status	Removed as this is a maintenance action. The village will continue to maintain good standing with the NFIP.

Mitigation Action	Sewage Lagoon Upgrades
Description	Identify, design, and construct lagoon upgrades as necessary.
Hazard(s) Addressed	Drought, Flooding
Status	No lagoon upgrades were identified.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to ensure effectiveness and reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (e.g., annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The Village Board Chair, Village Clerk, and Utility Supervisor will be responsible for reviewing and updating this community profile outside of the five-year update. Trenton will review the plan every six months and the public will be notified through social media and at board meetings.