

COUNTY PROFILE

FILLMORE COUNTY

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table FIL.1: Fillmore County Local Planning Team

| Name | Title | Jurisdiction |
|------------|-----------------------------|-----------------|
| Jim Dunker | Emergency Manager (retired) | Fillmore County |
| Jean Engle | Emergency Manager | Fillmore County |

Location, Geography, & Climate

Fillmore County is located in southwest Nebraska and is bordered by York County, Seward County, Saline County, Jefferson County, Thayer County, Nuckolls County, Clay County, and Hamilton County. Geneva is the county seat.

The total area of Fillmore County is 576 square miles. Major waterways within the county include the West Fork Big Blue River, Dry Sandy Creek, Indian Creek, Little Sandy Creek, Johnson Creek, School Creek, and Turkey Creek. The county is not heavily forested, nor is located in a geographic area of the state prone to landslides. Most of Fillmore County lies in the plains topographic region, with the vast majority of the county's land characterized by agricultural fields.

Climate

The average high temperature in Fillmore County for the month of July is 87.1 degrees and the average low temperature for the month of January is 16.6 degrees. On average, Fillmore County gets 29 inches of rain and 20 inches of snowfall per year. The following table compares these climate indicators with those of the entire nine-county planning area. Climate data is 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 may be more likely which could impact vulnerable populations.

Table WEB.2: Webster County Climate Normals

| | Fillmore County | Planning Area Average |
|-----------------------------|-----------------|-----------------------|
| July Normal High Temp | 87.1°F | 88.5°F |
| January Normal Low Temp | 16.6°F | 14.2°F |
| Annual Normal Precipitation | 29.27" | 29.37" |
| Annual Normal Snowfall | 19.9" | 21.63" |

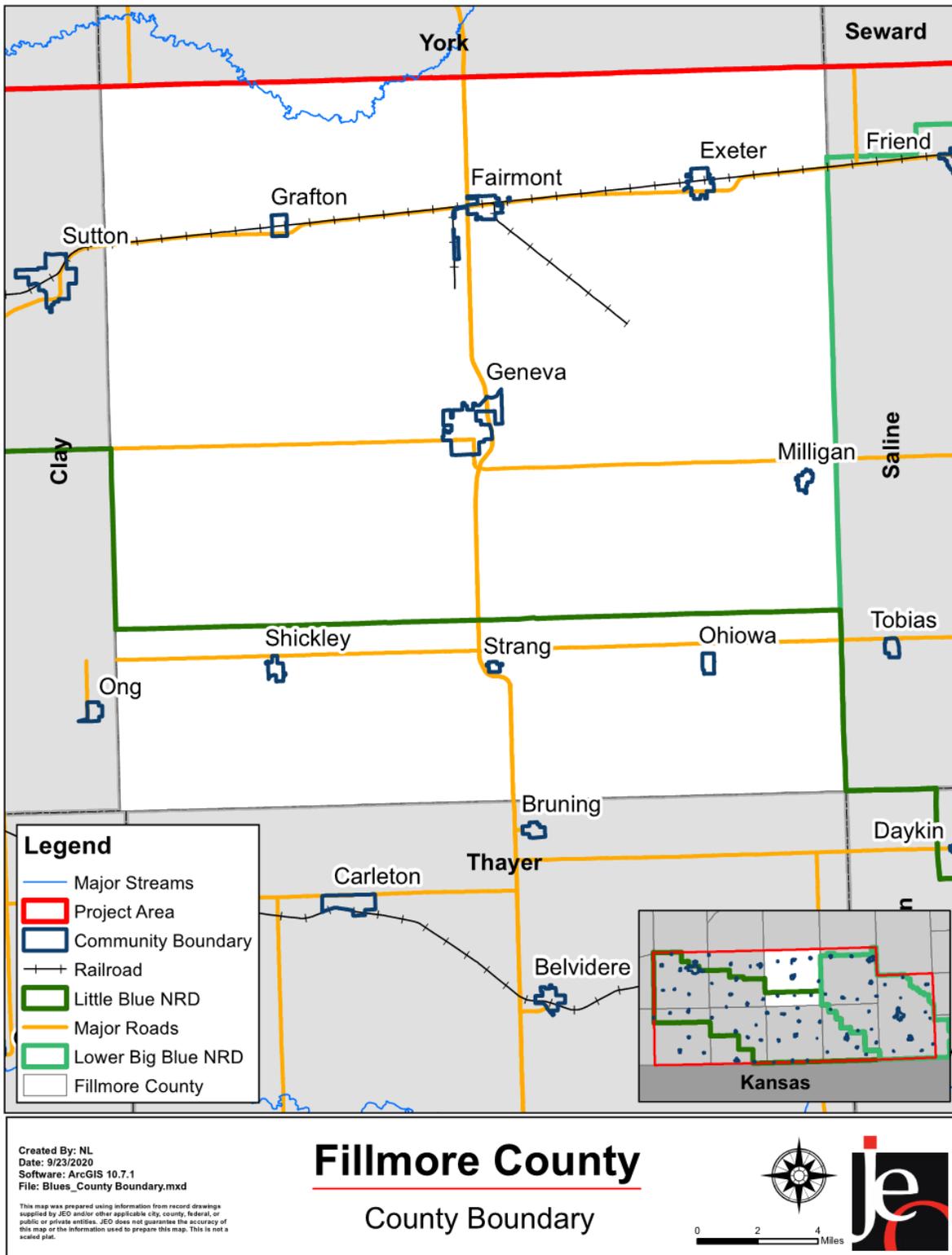
Source: NCEI 1981-2010 Climate Normals¹, High Plains Regional Climate Center, 1981-2010²

Precipitation includes all rain and melted snow and ice.

¹ NOAA National Centers for Environmental Information. August 2020. "Data Tools: 1981-2010 Normals." [datafile]. <https://www.ncdc.noaa.gov/cdo-web/datatools/normals>.

² High Plains Regional Climate Center. 2020. "CLIMOD." <http://climod.unl.edu/>.

Figure FIL.1: Fillmore County Jurisdictional Boundary



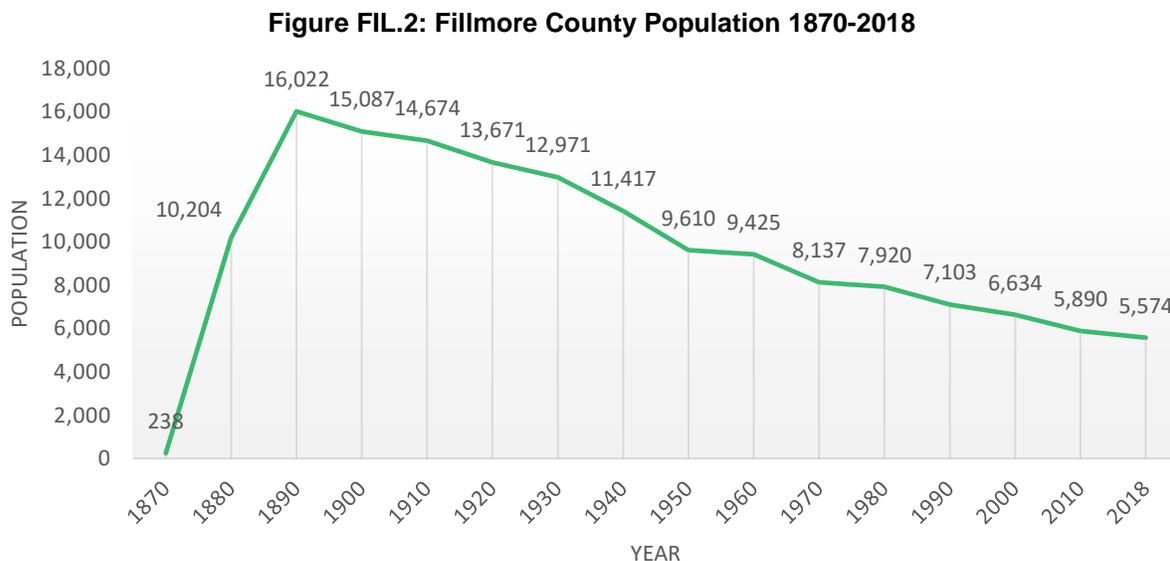
Transportation

Fillmore County’s major transportation corridors include U.S Route 81 (4 lane expressway), which runs north-south through Geneva and U.S. Highway 6, which runs east-west through the north part of the county. Other notable routes include Highway 74, which passes through the lower half of the county, running east-west, and Highway 41, which runs through the center of the county, running east-west. Several critical chemical facilities are located along major transportation routes including Flint Hills Ethanol by Highway 81 and Nustar pipeline and storage terminal by Geneva.

The county also has two railroads, one owned by BNSF and the other by Manning Railroad. Fairmont State Airfield (KFMZ) is located three miles south of Fairmont. The county also has a number of air landing strips dispersed throughout the county. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors as well as transportation risk areas.

Demographics

The following figure displays the historical population trends from 1870 to 2018 (estimated). This figure indicates that the population of Fillmore County has declined steadily since the late 1800s. This is notable for hazard mitigation as communities with declining population have a higher probability of unoccupied housing that is not being maintained and may be less prone to pursuing residential/commercial development, which may reduce the number of structures vulnerable to hazards in the future.



Source: U.S. Census Bureau³

The following table indicates the State of Nebraska has a higher percentage of people under the age of 5 and between the ages of 5 and 64 than Fillmore County. Fillmore County has a higher median age, and a significantly higher percentage of people over the age of 65. This is relevant

³ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

to hazard mitigation insofar as the very young and elderly populations may be at greater risk from certain hazards than others. For a more elaborate discussion of this vulnerability, please see *Section Four: Risk Assessment*.

Table FIL.2: Population by Age

| Age | Fillmore County | State of Nebraska |
|------------|-----------------|-------------------|
| <5 | 4.7% | 6.9% |
| 5-64 | 72.0% | 78.1% |
| <64 | 23.3% | 15% |
| Median Age | 47.7 | 36.2 |

Source: U.S. Census Bureau⁴

The following table indicates that the county's median household income, median home values, and median rent are slightly lower than those of the state. However, per capita income is greater in Fillmore County than the state. These economic indicators are relevant to hazard mitigation because they show the relative economic strength compared to the state as a whole. Areas with economic indicators which are relatively low may influence a community's level of resiliency during hazardous events.

Table FIL.3: Housing and Income

| Age | Fillmore County | State of Nebraska |
|-------------------------|-----------------|-------------------|
| Median Household Income | \$55,625 | \$59,116 |
| Per Capita Income | \$32,631 | \$31,101 |
| Median Home Value | \$79,100 | \$147,800 |
| Median Rent | \$596 | \$805 |

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

The following figure indicates that the majority of the housing in Fillmore County was built prior to 1980. According to Census Bureau, the county has 2934 housing units; with 85.5 percent of those units occupied. Approximately 1.1 percent of the county's housing is classified as mobile homes and 59.7 percent of the county's housing was built before 1960. The local planning team noted there are no mobile homes located in unincorporated portions of the county.

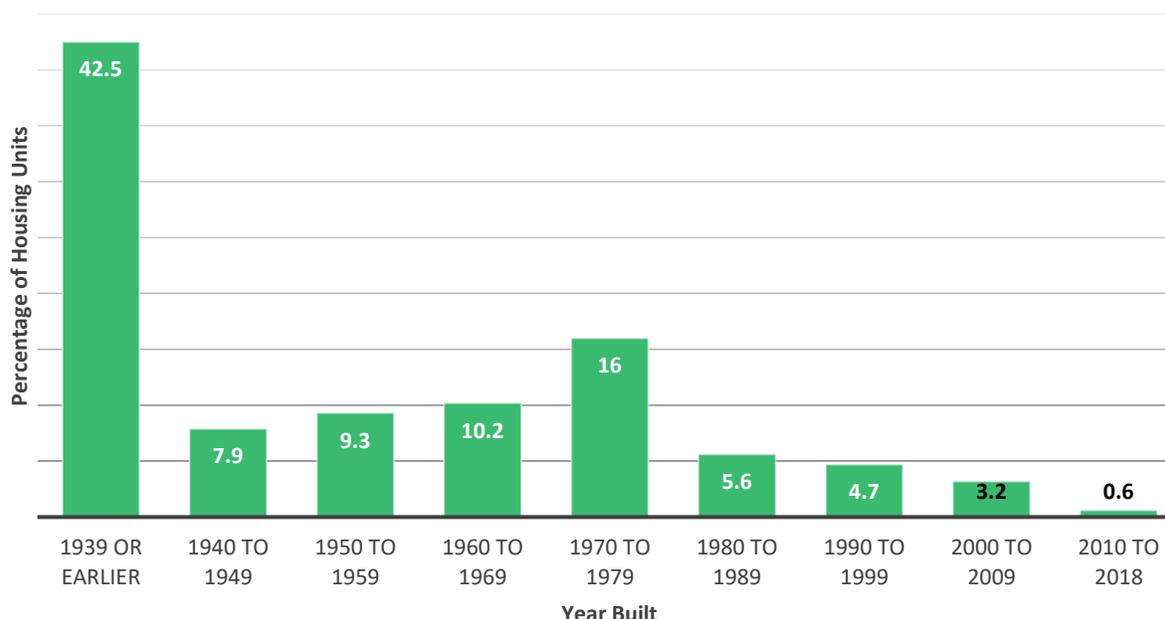
Housing age can serve as an indicator or risk as structures built prior to state building codes being developed may be at greater risk. The State of Nebraska first adopted building codes in 1987, the state currently has adopted the 2018 International Building Code. Finally, communities with a substantial number of mobile homes may have a higher number of residents vulnerable to the impacts of high winds, tornados, and severe winter storms.

⁴ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁵ United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

⁶ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

Figure FIL.3: Housing Units by Age



Source: U.S. Census Bureau⁷

Table FIL.4: Housing Units

| Jurisdiction | Total Housing Units | | | | Occupied Housing Units | | | |
|-----------------|---------------------|---------|--------|---------|------------------------|---------|---------|---------|
| | Occupied | | Vacant | | Owner | | Renter | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Fillmore County | 2,510 | 85.5% | 424 | 14.5% | 1,898 | 75.6% | 612 | 24.4% |
| Nebraska | 754,063 | 90.8% | 76,686 | 9.2% | 498,567 | 66.1% | 255,496 | 33.9% |

Source: U.S. Census Bureau⁸

Employment Factors

The following table presents the number of establishments, number of paid employees, and the annual payroll in thousands of dollars. Communities which have a diverse economic makeup may be more resilient following a hazardous event, especially if certain industries are more impacted than others.

Table FIL.5: Businesses in Fillmore County

| | Total Businesses | Number of Paid Employees | Annual Payroll (in thousands) |
|------------------------------|------------------|--------------------------|-------------------------------|
| Total for All Sectors (2012) | 223 | 1,447 | \$50,079 |
| Total for All Sectors (2016) | 223 | 1,758 | \$61,129 |
| Total for All Sectors (2018) | 224 | 1,692 | \$71,030 |

Source: U.S. Census Bureau⁹

7 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

8 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

9 United States Census Bureau. 2020. "2018 County Business Patterns and Nonemployer Statistics Combined Report."

Agriculture is also important to the economic fabric of Fillmore County, and the state of Nebraska as a whole. Fillmore County's 392 farms cover over 300,000 acres of land. Both the number of farms and acres of harvested cropland have decreased since 2012. Crop and livestock production are the visible parts of the agricultural economy, but many related businesses contribute as well by producing, processing and marketing farm and food products. These businesses generate income, employment and economic activity throughout the region.

Table FIL.6: Fillmore County Agricultural Inventory

| | 2012 Census | 2017 Census | Percent Change |
|---|---------------|---------------|----------------|
| Number of Farms with Harvested Cropland | 472 | 392 | -20.4% |
| Acres of Harvested Cropland | 328,386 acres | 300,205 acres | -9.4% |

Source: USDA Census of Agriculture^{10,11}

Future Development Trends

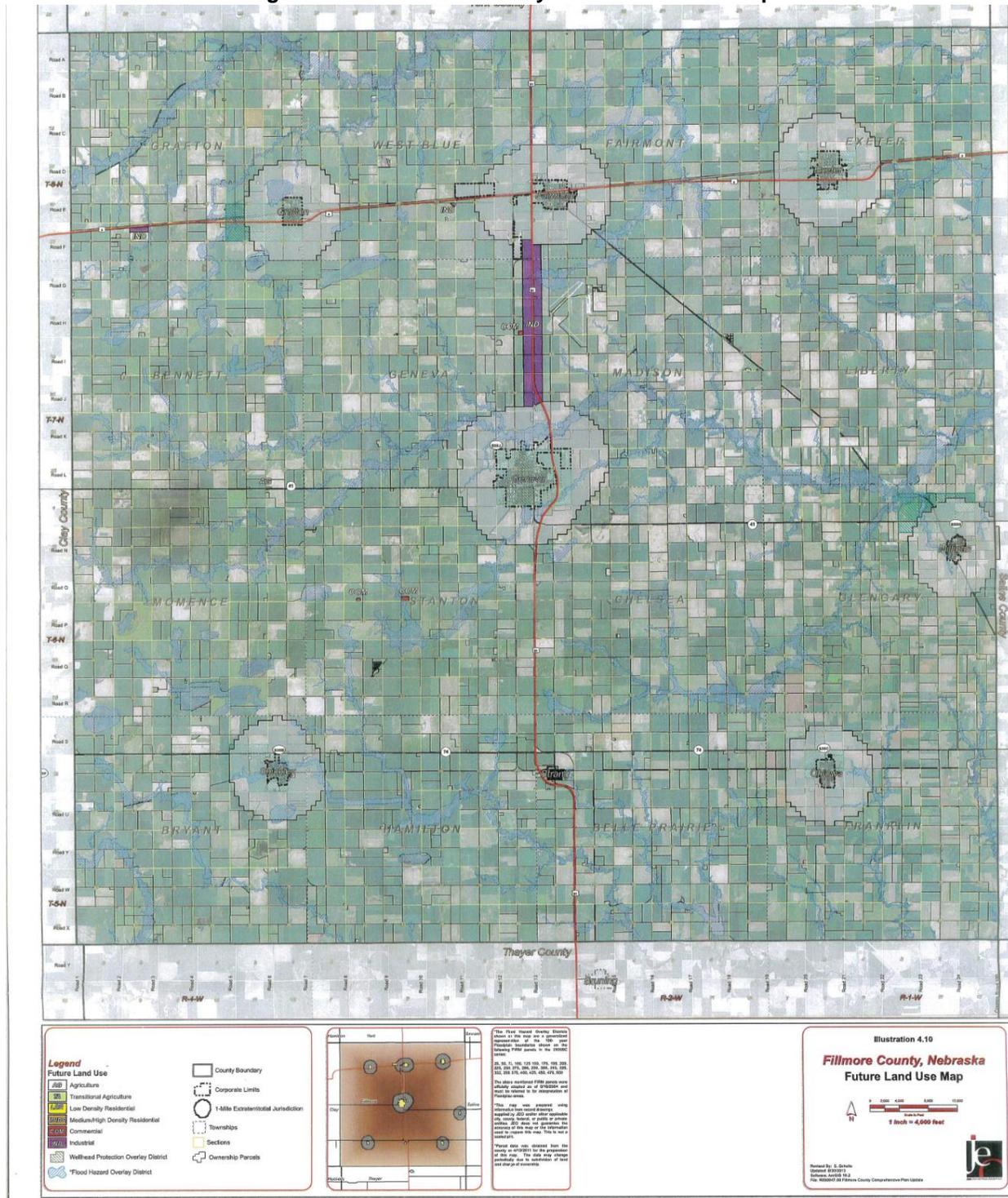
In the past five years major development in Fillmore County occurred only in incorporated areas. However, the local planning team noted no development has occurred, or is allowed, within the floodplain. The county's population is declining which the local planning team attributed to a lack of available jobs. At this time there is currently no residential or commercial development planned for the next five years.

¹⁰ United States Department of Agriculture, National Agricultural Statistics Server. 2014. "2012 Census of Agriculture – County Data."

¹¹ United States Department of Agriculture, National Agricultural Statistics Server. 2019. "2017 Census of Agriculture – County Data."

SECTION SEVEN: FILLMORE COUNTY COMMUNITY PROFILE

Figure FIL.4: Fillmore County Future Land Use Map



Parcel Improvements and Valuation

GIS parcel data as of December 2019 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements 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. Several structures in unincorporated Clay County have been removed from the floodplain via LOMA. A summary of LOMAs can be found in the table below.

Table FIL.7: Fillmore County Parcel Valuation

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|-------------------|------------------------|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| 7,649 | 2,913 | \$259,949,565 | 255 | 9% | \$28,677,310 |

Source: County Assessor, GIS Workshop

Table FIL.8: Fillmore County Flood Map Products

| Type of Product | Product ID | Effective Date | Details |
|-----------------|--------------------|----------------|---------------------------------------|
| LOMA | 08-07-1301A-310433 | 8/12/2008 | Structure removed from SFHA |
| LOMA | 12-07-2806A-310433 | 8/2/2012 | Portion of property removed from SFHA |
| LOMA | 12-07-3118A-310433 | 10/2/2012 | Portion of property removed from SFHA |
| LOMA | 18-07-1073A-310433 | 4/4/2018 | Structure removed from SFHA |

Source: FEMA Flood Map Service Center

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy in 2019, there are 29 chemical storage sites throughout Fillmore County which house hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident. Specific concerns exist for Geneva's Flint Hills Ethanol plant spills impacting Highway 81. A long term care facility, Heritage Crossing, and several schools facilities are located near chemical fixed sites and are of concern. While no major spills have occurred in the county, a waste water leak was discovered in Turkey Creek in the past. No major damages were reported. For a description and map of chemical sites located in incorporated areas, please see the jurisdiction's participant section.

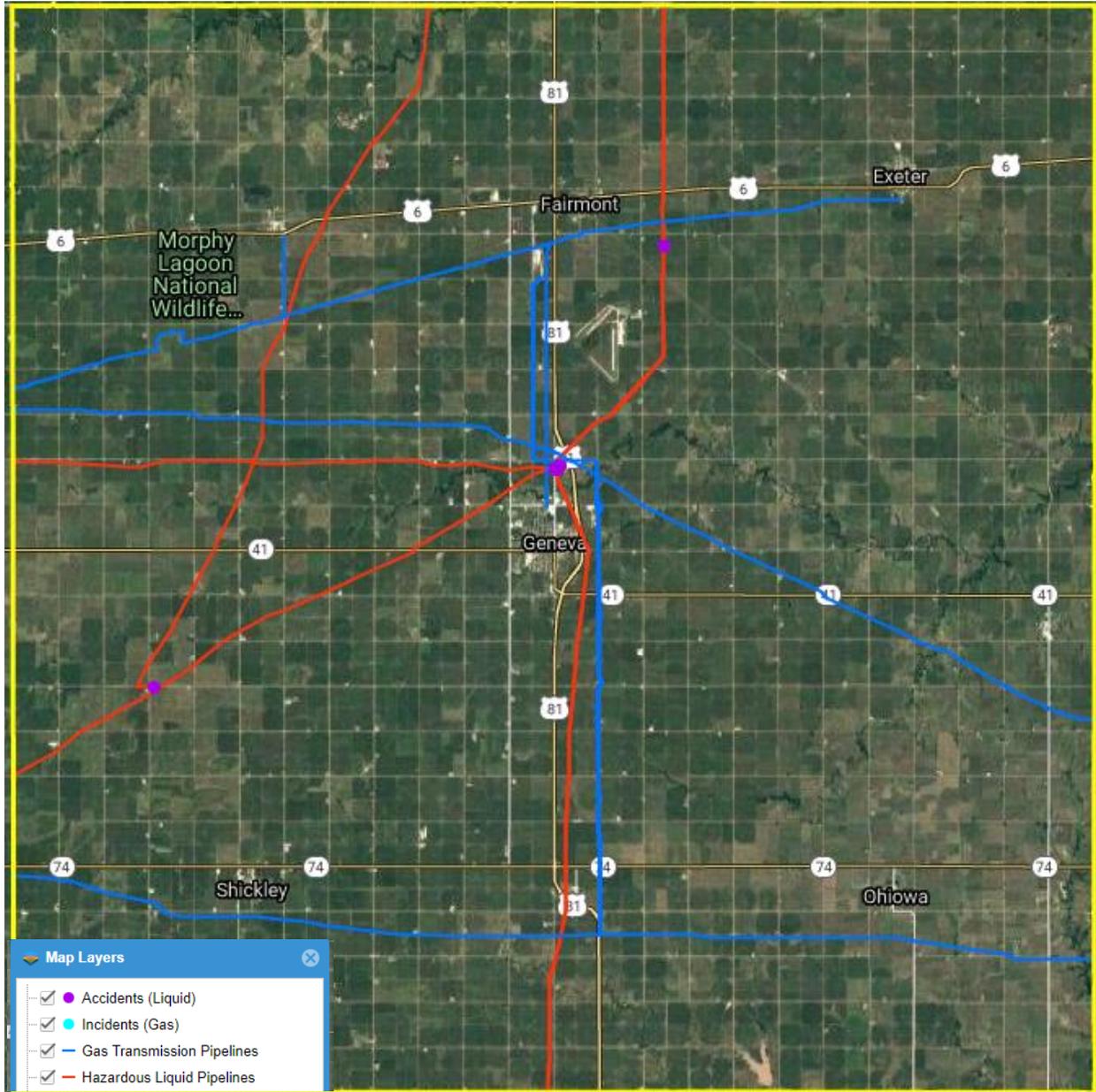
Chemical Transportation

Hazardous chemicals, particularly agricultural based chemicals, are commonly transported through the county. The county has two railroads, one owned by BNSF and the other by Manning Railroad. The BNSF runs east-west in the northern section of the county entering from Saline County, passing through Exeter, Fairmont, and Grafton before exiting into Clay County. The Manning Railroad connects to the BNSF line with a terminal in Burrell. While no major chemical spills have been reported in the county with injuries or fatalities, in the past several years a center pivot system was blown into a highway and collided with a passenger train.

SECTION SEVEN: FILLMORE COUNTY COMMUNITY PROFILE

While incident proximity will always occur near or on transportation methods, it is not possible to predict precise locations of possible future events. Proximity of pipelines, rail lines, and highways near critical facilities or vulnerable population centers, including schools, daycares, nursing homes, and/or hospitals, increases overall vulnerability to chemical transportation spills. Private entities, local emergency response units, and state resources have strict regulatory oversight and emergency action plans in place to respond to significant chemical spills.

Figure FIL.4: Fillmore County Chemical Pipelines



Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update.

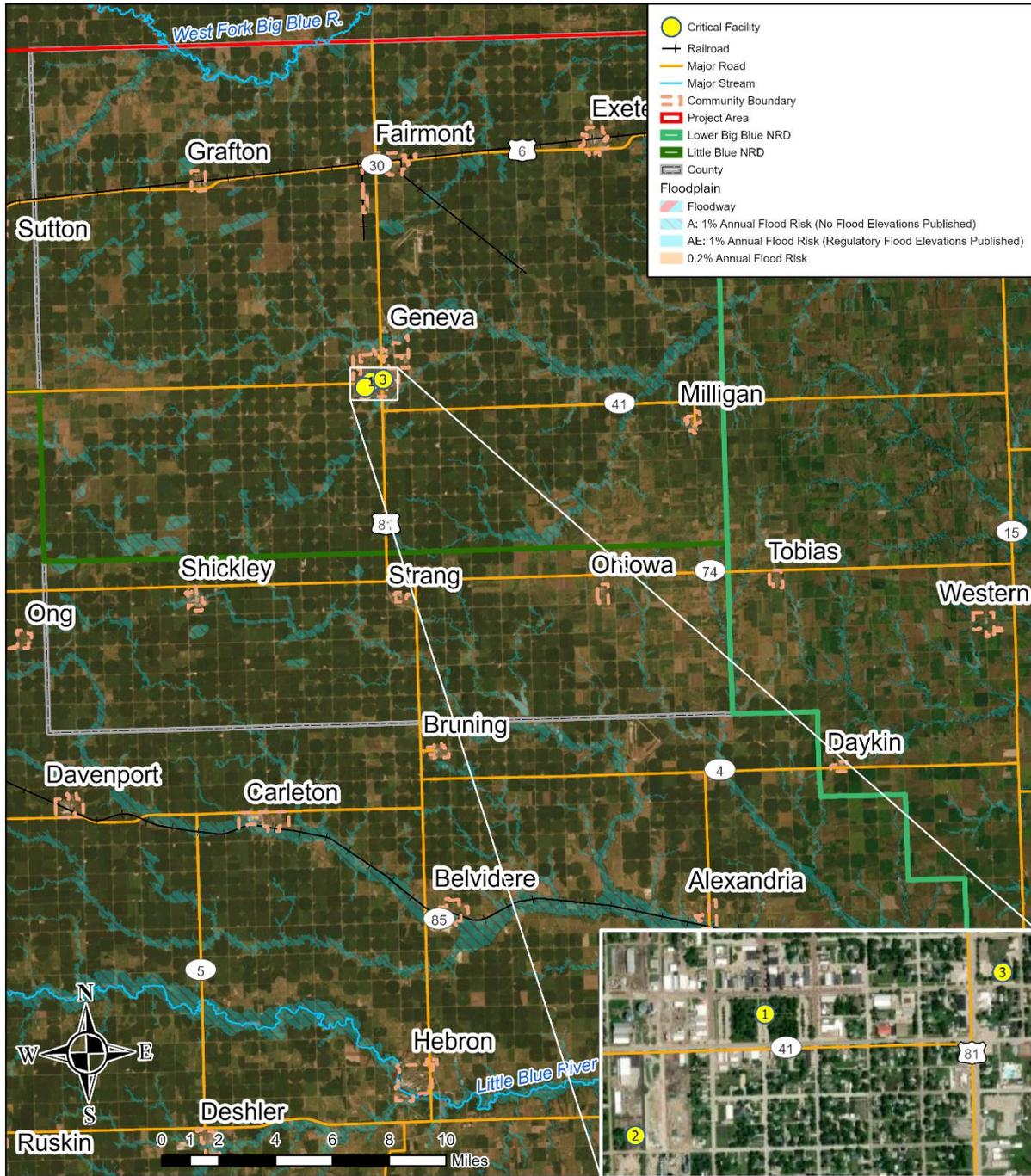
Critical facilities for Fillmore County are located primarily in the county's incorporated communities. All critical facilities for Fillmore County are located outside of the established floodplain. The National Register of Historic Places lists 15 entries within Fillmore County. These entries are spread across Fairmont, Geneva, Strang, Shickley, Milligan, and Ohiowa.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table FIL.9: Fillmore County Critical Facilities

| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|---------------------|----------------------------|---------------|-----------------|-----------------------------|
| 1 | Safety and Security | Fillmore County Courthouse | Y | Y | N |
| 2 | Communication | Communication Tower | N | N | N |
| 3 | Safety and Security | County Office Building | N | N | N |

Figure FIL.4: Fillmore County Critical Facilities





Created By: NL
Date: 5/21/2021
Software: ArcGIS Pro 2.8.0
File: Blues Critical Facilities.aprx

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.

Fillmore County

Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021



Kansas

Historical Occurrences

The following table provides a statistical summary for hazards that have occurred in the planning area. The property damages from the NCEI Storm Events Database (January 1996 – April 2020) should be considered only as broad estimates. Sources include but are not limited to: emergency management; local law enforcement; Skywarn spotters; NWS damage surveys; newspaper clipping services; insurance industry; and the general public. Crop damages reports come from the USDA Risk Management Agency between 2000 and June 2020. For the complete discussion on historical occurrences, please refer to *Section 4: Risk Assessment*.

Table FIL.10: Hazard Risk Assessment – Fillmore County

| Hazard | | Count | Property Damage | Crop Damage ³ |
|---|---|-------------------------|---------------------|--------------------------|
| Agricultural Disease | Animal Disease ² | 9 | 13 animals | N/A |
| | Plant Disease ³ | 22 | N/A | \$250,474 |
| Dam Failure ⁷ | | 0 | \$0 | N/A |
| Drought ⁸ | | 493 out of 1,504 months | \$0 | \$30,189,872 |
| Earthquakes ¹¹ | | 0 | \$0 | \$0 |
| Extreme Heat ⁹ | | Avg 6 days/yr | \$0 | \$2,361,886 |
| Flooding ¹ | Flash Flood | 9 | \$3,160,000 | \$145,257 |
| | Flood | 4 | \$310,000 | |
| Grass/Wildfire ⁴ | | 257 | 6,995 acres | \$13,840 |
| Hazardous Materials | Chemical Fixed Site Spills ⁵ | 15 | \$0 | N/A |
| | Chemical Transportation Spills ⁶ | 8 | \$501 | N/A |
| Levee Failure ¹² | | 0 | \$0 | N/A |
| Public Health Emergency ¹³ | | ~497 cases; 10 deaths | \$0 | N/A |
| Severe Thunderstorms ¹ 4 injuries | Hail | 165 | \$4,737,000 | \$7,128,529 |
| | Heavy Rain | 16 | \$102,000 | \$2,981,452 |
| | Lightning | 1 | \$2,000 | N/A |
| | Thunderstorm Wind | 78 | \$12,563,000 | N/A |
| Severe Winter Storms ¹ | Blizzard | 10 | \$25,000 | \$352,008 |
| | Extreme Cold/Wind Chill | 2 | \$0 | |
| | Heavy Snow | 3 | \$0 | |
| | Ice Storm | 7 | \$565,000 | |
| | Winter Storm | 44 | \$235,000 | |
| | Winter Weather | 23 | \$5,000 | |
| Terrorism ¹⁰ | | 1 | \$0 | N/A |
| Tornadoes and High Winds ¹ | High Winds | 19 | \$112,080 | \$1,272,777 |
| | Tornadoes | 19 | \$13,703,000 | \$354 |
| Totals | | 712 | \$35,519,581 | \$44,696,449 |

1 – NCEI, Jan 1996-April 2020

2 – USDA, 2014-June 2020

3 – USDA RMA, 2000-Aug 2020

4 – NFS, 2000-2020

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- 5 – NRC, 1990-2019
- 6 – PHSMA, 1971-2020
- 7 – NeDNR Dam Safety Division, 2020
- 8 – NOAA, 1985-2020
- 9 – NOAA Regional Climate Center, 1983-2020
- 10 – Global Terrorism Database, 1970-2017
- 11 – USGS, 1960-2020
- 12 – USACE, 2020
- 13 – CDC, April 28 2021 (COVID only)

The following table provides a summary of hazards that have or have the potential to affect each jurisdiction in the county. Each jurisdiction was evaluated for previous hazard occurrence and the probability of future hazard events on each of the hazards profiled in this plan. The evaluation process was based on data collected and summarized in the previous table; previous impacts or the potential for impacts to infrastructure, critical facilities, people, and the economy; and the proximity to certain hazards such as dams and levees. For example, while there may not been instances of dam failure in the planning area, there exists a possibility for a dam to fail in the future due to the presence of dams.

Table FIL.11: Fillmore County and Communities Hazard Matrix

| Jurisdiction | Agricultural Animal and Plant Disease | Dam Failure | Drought & Ex Heat | Earthquakes | Flooding | Grass/ Wildfire | Hazardous Materials | Levee Failure | Public Health Emergency | Severe Thunderstorms | Severe Winter Storms | Terrorism | Tornadoes and High Winds |
|-----------------|---|-------------|----------------------|-------------|----------|-----------------|------------------------|---------------|----------------------------|-------------------------|-------------------------|-----------|-----------------------------|
| Fillmore County | | | X | | X | X | X | | X | | X | | X |
| Exeter | | | | | X | | | | | X | X | | X |
| Fairmont | | | | | | | | | | X | X | | X |
| Geneva | | | | | X | | | | | X | | | X |
| Grafton | | | | | | | X | | | X | X | | X |
| Milligan | | | X | | | | | | | X | X | | X |
| Ohiowa | | | | | X | | | | | | | | X |
| Shickley | | | X | | X | | | | | | X | | X |
| Strang | | | | | | | | | | X | X | | X |

Hazard Prioritization

For additional discussion regarding area wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the county's capabilities.

Drought and Extreme Heat

Like other areas in Nebraska, Fillmore County does have periods of drought and extreme heat events. While these events have not cause injuries or deaths, the county's main concern with this hazard is heat impacts on elderly people and effects to the agricultural areas throughout the county. A large portion of the county's economy is based upon agriculture. Past drought events have caused over \$30million in damages to agriculture. To mitigate this hazard, the county will continue coordinating with Public Health Solutions, which maintains a database of vulnerable populations which the county can use during high heat events. The Little Blue NRD and Upper Big Blue NRDs which cover areas of the county have water allocation restrictions and plans in place in case of prolonged water shortages.

Flooding

Fillmore County has several rivers through it including West Fork Big Blue River and Turkey Creek. The county has been afflicted by flood events in the past and primary concerns include public safety and blocked transportation routes from flooding. The most damaging flood event on record occurred in May 2005 and caused over \$2,000,000 in property damages. In Fillmore County five to eight inches of rainfall were reported across the county and twelve center pivot irrigation systems were damaged.

The northwestern portion of the county has experienced regularly flooding on School Creek and West Fork Big Blue River. Past events have caused significant road damages and degradation of non-paved surfaces. These roads could be reinforced or paved in the future to prevent future damages.

The county has updated the emergency communication system including IPAWS and Reverse 911 and the last five years. The county has also identified mitigation actions to remove flow restrictions. The county participates in the NFIP and, as of November 2020, had four policies in force for \$560,000.

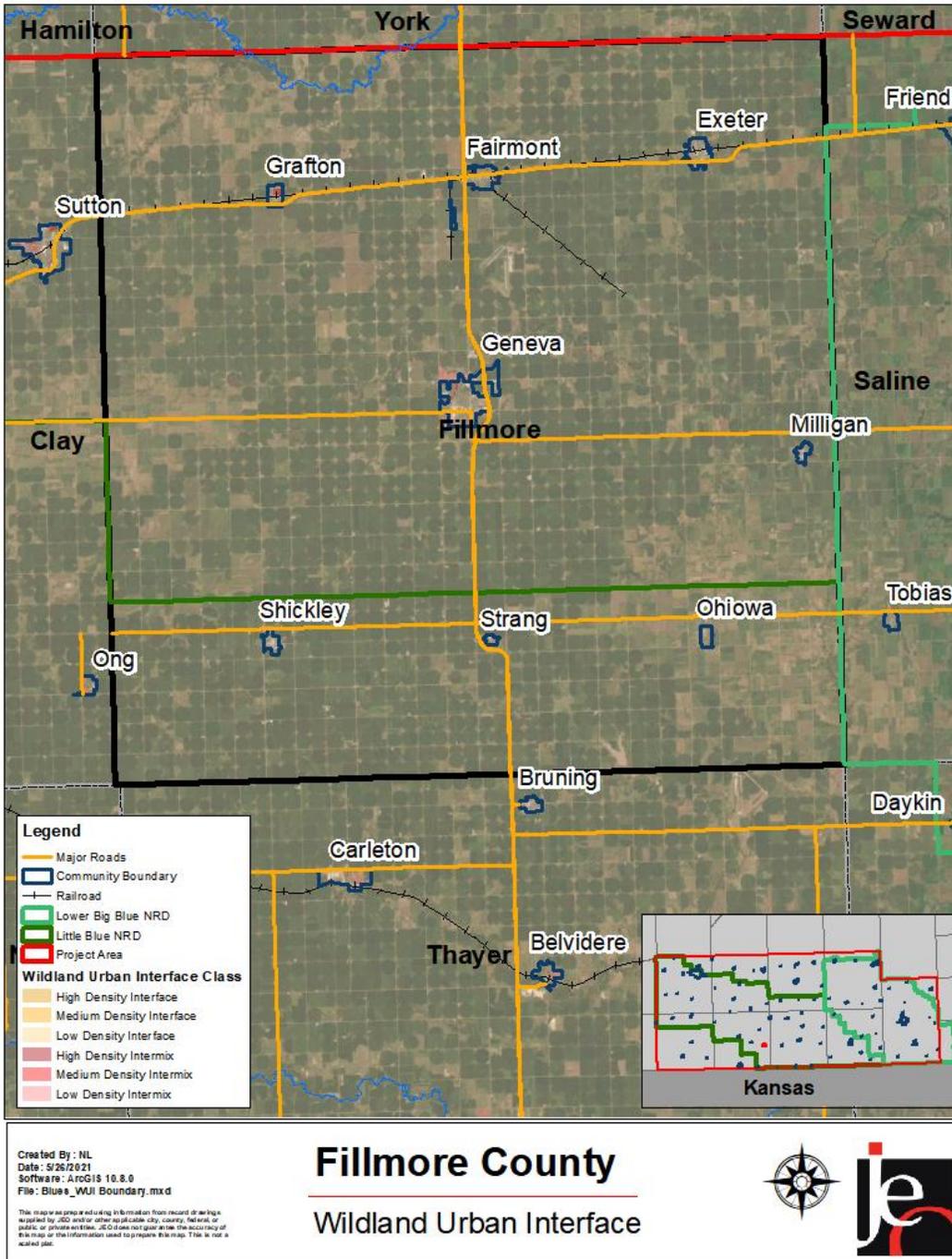
Grass/Wildfire

The county's main historical problem and concern for this hazard is primarily related to crop fires. Rural fire districts are entirely volunteer based and the first responders for this hazard across the county. The majority of the county is used for agriculture and the local planning team noted there are few natural barriers to contain wildfire events. Past events have caused significant damages to crops, livestock, roads, bridges, and power lines.

At the county level, the county has worked to create two "DISK" groups – which are groups of farmers that can disk a break in rural field areas to reduce the fuel for crop fires. There is one

group in the west and one in the east. This program was implemented in 2012. The county would like to maintain this program and work with townships, farmers, and other parties to do this. The county noted invasive Red Cedar trees need to be removed throughout the county and rural road ditches need to be cleared of brush and vegetation. Additionally, the county identified the need to educate farmers on equipment maintenance to prevent fire sparks. Many farms also have mobile water tanks that they move field to field for emergency fire suppression.

Figure FIL.4: Fillmore County WUI



Hazardous Materials (Transportation)

While the county has not experienced major chemical transportation spills in the past, the main concern for this hazard is with the BNSF railroad that runs through the northern part of the county. The line passes through Exeter, Fairmont, and Grafton. Another major transportation route is US Highway 81, which regularly sees semi-trucks and other automotive traffic with hazardous materials. One incident occurred during a roll over near Strang, however no chemicals were dispersed. The local planning team did note minor leaks on anhydrous ammonia trailers have occurred, but local capabilities were sufficient.

During this plan update, the county identified a project to work with state officials on developing evacuation or sheltering place educational awareness materials for communities along the BNSF rail line. The county also noted a need for additional information for commercial agriculture businesses and conducting a tabletop exercise or drill.

Public Health Emergency

Public health emergency is a new hazard evaluated in the 2021 HMP update. The development of the novel corona virus in Nebraska and Fillmore County has threatened the safety of residents. There is one hospital located in the City of Geneva. The County is served by Public Health Solutions which provided directed response and treatment. Fillmore County Emergency Management assisted as available and requested. As of November 2020, Fillmore County had reported 182 positive cases and two fatalities associated with COVID-19.

Severe Winter Storms

Severe winter storms include impacts from blizzards, extreme cold, ice accumulation, heavy snow, and winter storms. The county experiences severe winter storms annually, however the majority of storms do not cause significant damages or concerns. Top concerns for severe winter storms are power outages and snow removal. For US Highway 81, snow removal is a state priority, however, if motorists become stranded or stuck on the highway, the county is tasked with rescue and sheltering services. For county-maintained roads, the county has maintainer sheds in each village in the county. Present snow removal equipment in these areas is sufficient. The county also has snow removal priorities in place.

Tornadoes and High Winds

Tornadoes and high winds are common across the planning area and concerns exist for resident safety, blocked transportation routes, property damages, and power outages from downed power lines. On May 11, 2014, two EF3 tornadoes hit near the Village of Exeter and Grafton and an EF2 was also reported near Grafton. The NCEI reported for these events:

- *EF3 tornado near Exeter - This tornado was the second to be rated an EF3 that affected south central Nebraska, starting in far northern Fillmore County before traversing a portion of York County and passing north of Cordova in Seward County. Damage along the track in Fillmore County was widespread, including one home which was totally destroyed. All 6 occupants took shelter in the basement. Another home suffered less significant damage, but outbuildings on the same property were destroyed. Also along the path of this tornado, and to the south of the path where rear flank downdraft winds occurred, numerous irrigation pivots were overturned, power poles were broken as well as trees and grain bins either damaged or destroyed. The strongest and widest time of this tornado occurred in*

Seward County, with a peak wind estimated to be 140 MPH and a maximum width of 2,640 yards, or 1.5 miles.

- *EF2 tornado near Grafton - This tornado traveled rural areas of northern Fillmore County, bumping the York County line along the way. It touched down a few miles north-northwest of Grafton and lifted a few miles north-northeast of Fairmont. One home suffered damage when part of the roof was torn away, while another older home was pushed approximately 30 feet off of its foundation. There was widespread power pole and tree damage, with some trees containing debris from grain bins, and a number of irrigation pivots were overturned. The peak wind with this tornado was estimated to be 120 MPH. South of the main tornado track, strong rear flank downdraft winds resulted in additional power pole and irrigation pivot damage, and an outbuilding suffered damage near Highway 81 north of Fairmont.*
- *EF3 tornado near Grafton - This tornado traveled rural areas of northern Fillmore County, bumping the York County line along the way. It touched down a few miles north-northwest of Grafton and lifted a few miles north-northeast of Fairmont. One home suffered damage when part of the roof was torn away, while another older home was pushed approximately 30 feet off of its foundation. There was widespread power pole and tree damage, with some trees containing debris from grain bins, and a number of irrigation pivots were overturned. The peak wind with this tornado was estimated to be 120 MPH. South of the main tornado track, strong rear flank downdraft winds resulted in additional power pole and irrigation pivot damage, and an outbuilding suffered damage near Highway 81 north of Fairmont.*

The County has reverse 911 calls and automatic weather notification procedures. Each village has an alert siren, most of which are activated by dispatch at the county dispatch center. The sirens are owned by each village. Fillmore County Emergency Management noted sirens in Milligan, Ohiowa, Exeter, and Strang need updated. The county courthouse does not have a saferooms, but does have vaults on each floor and the hallway of the basement. The sheriff's office has a plan for their office and prisoners. Staff would go to a reinforced room, prisoners would go under their bunks.

Governance

A community's governance structure impacts its capability to implement mitigation actions. The county is governed by a seven-member board of supervisors. The county also has the following offices or departments: assessor, attorney, board of equalization, clerk, county court, district court, election commissioner, emergency management, extension office, highway department, planning commission, register of deeds, senior services, sheriff, treasurer, veterans office, waste oil collection, weed superintendent, and zoning administrator. The county also has an UNL Extension Office which assists with some projects.

Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

Table FIL.12: Capability Assessment

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| Survey Components | | Yes/No |
|---------------------------------------|---|--------|
| Planning & Regulatory Capability | Comprehensive Plan | Yes |
| | Capital Improvements Plan | Yes |
| | Economic Development Plan | Yes |
| | Local Emergency Operational Plan | Yes |
| | Floodplain Ordinance | Yes |
| | Zoning Ordinance | Yes |
| | Subdivision Regulation/Ordinance | No |
| | Building Codes | Yes |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | No |
| | National Flood Insurance Program | Yes |
| | Community Rating System | No |
| Other (if any) | | |
| 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 | 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 and Outreach | 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) | Yes |
| | Natural Disaster or Safety related school programs | Yes |
| | StormReady Certification | No |
| | Firewise Communities Certification | No |

| Survey Components | | Yes/No |
|-------------------|----------------|--------|
| | Tree City USA | No |
| | Other (if any) | |

Table FIL.13: Overall Capability

| Overall Capability | Limited/Moderate/High |
|---|-----------------------|
| Financial Resources Needed to Implement Mitigation Projects | Limited |
| Staff/Expertise to Implement Projects | Limited |
| Community Support to Implement Projects | Moderate |
| Time to Devote to Hazard Mitigation | Limited |

Plan Integration

Fillmore County has a Comprehensive Plan, Capital Improvements Plan, Hazard Mitigation Plan, Economic Development Plan, Local Emergency Operations Plan (LEOP), Natural Resources Protection Plan, Floodplain Management Plan, Subdivision Ordinance, Floodplain Ordinance, and Building Codes.

The county has applied for and received Emergency Management Planning Grants in the past to assist with emergency management activities. The local planning team noted the annual budget is generally limited to maintaining current facilities and systems and funds have remained relatively consistent over the past several years.

The LEOP for Fillmore County, which was updated in November 2019, is an all-hazards plan that provides a clear assignment of responsibility in case of an emergency. It includes, as annexes, EOPs for the City of Geneva, and the Villages of Exeter, Fairmont, Grafton, Milligan, Ohiowa, Shickley, and Strang.

Fillmore's zoning regulations were last update in 2013. The county's emergency manager is also the floodplain administrator. Zoning regulations for the county greatly restrict development in the floodplain. Two requests for construction agricultural storage facilities in the floodplain have come in during the past five years. Each of these structure were required to be elevated above the BFE. No residential structure have been built in the floodplain in the past five years, and no request for future development have been submitted.

Fillmore's Comprehensive plan, last updated in 2013, also contains specific language regarding floodplain development: "The County and villages should not encourage development within identified 100-year flood plains and in some instances any identified 500-year flood plain. In addition to development, locating major livestock confinements and industrial uses within these areas should also be discouraged due to the potential of pollutants, animal loss, and contamination during high water periods." No other language regarding hazard mitigation is included in the plan.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. 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.

Fillmore County last reviewed their section of the HMP in 2016 during the plan update. The local planning team including County Emergency Management, Planning and Zoning, and Roads Department are responsible for reviewing and updating the plan. The local planning team will review the Community Profile annually at a minimum. The public will be notified and involved in the update review process through newspaper publications and social media outreach.

Mitigation Strategy

Completed Mitigation Actions

| MITIGATION ACTION | "DISK" PROGRAM |
|-------------------|--|
| DESCRIPTION | Work with farmers, townships, and fire departments to maintain the "DISK" program to stop cropland fire fuel supply, as needed |
| HAZARD(S) | Grass/Wildfire |
| STATUS | This is an established and ongoing project. |

| MITIGATION ACTION | EMERGENCY COMMUNICATIONS |
|-------------------|---|
| DESCRIPTION | Improve emergency communications |
| HAZARD(S) | All hazards |
| STATUS | The emergency alert system has been updated through IPAWS and AlertSense emergency notifications. Four sirens in communities need to be updated to remote operation/activation, but they are village responsibilities. The county will assist as requested. |

| MITIGATION ACTION | EVACUATION OR SHELTERING EDUCATION |
|-------------------|--|
| DESCRIPTION | Work with the state and railroad to develop education materials for populations at risk to chemical spills from train derailments |
| HAZARD(S) | Hazardous Materials |
| STATUS | The county hired a private contractor to develop plans and share resources. A safety representative met with civic leaders and local schools to demonstrate sheltering procedures. |

| MITIGATION ACTION | SNOW RESCUE/REMOVAL |
|-------------------|--|
| DESCRIPTION | Coordinate with the State to maintain safe road conditions during winter storms. |
| HAZARD(S) | Severe Winter Storms |
| STATUS | New and upgraded road graders have been purchased in the past five years. |

Continued Mitigation Actions

| MITIGATION ACTION | REMOVE FLOW CONSTRICTIONS |
|-------------------|--|
| DESCRIPTION | Conduct removal of flow constrictions |
| HAZARD(S) | Flooding |
| ESTIMATED COST | \$100,000 |
| FUNDING | Tax funds |
| TIMELINE | 5+ years |
| PRIORITY | Low |
| LEAD AGENCY | Roads Dept |
| STATUS | This project has not yet been started. Grader ditches are the main concern and need clearing at numerous county sites. |

Removed Mitigation Actions

| MITIGATION ACTION | NFIP CONTINUATION AND ENFORCEMENT |
|--------------------|---|
| DESCRIPTION | Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs). |
| REASON FOR REMOVAL | While the county will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA. Enforcement of floodplain policies is required as part of ongoing codes. |

| MITIGATION ACTION | VULNERABLE POPULATION DATABASE |
|--------------------|---|
| DESCRIPTION | Work with Public Health Solutions to use their database of vulnerable populations as needed |
| HAZARD(S) | All hazards |
| REASON FOR REMOVAL | This project was identified as no longer a priority for the county. |

COMMUNITY PROFILE

VILLAGE OF EXETER

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table EXE.1: Village of Exeter Local Planning Team

| Name | Title | Jurisdiction |
|---------------|------------------------|-------------------|
| Becky Erdkamp | Village Clerk | Village of Exeter |
| John Mueller | Maintenance Supervisor | Village of Exeter |
| Alan Michl | Board Chairman | Village of Exeter |

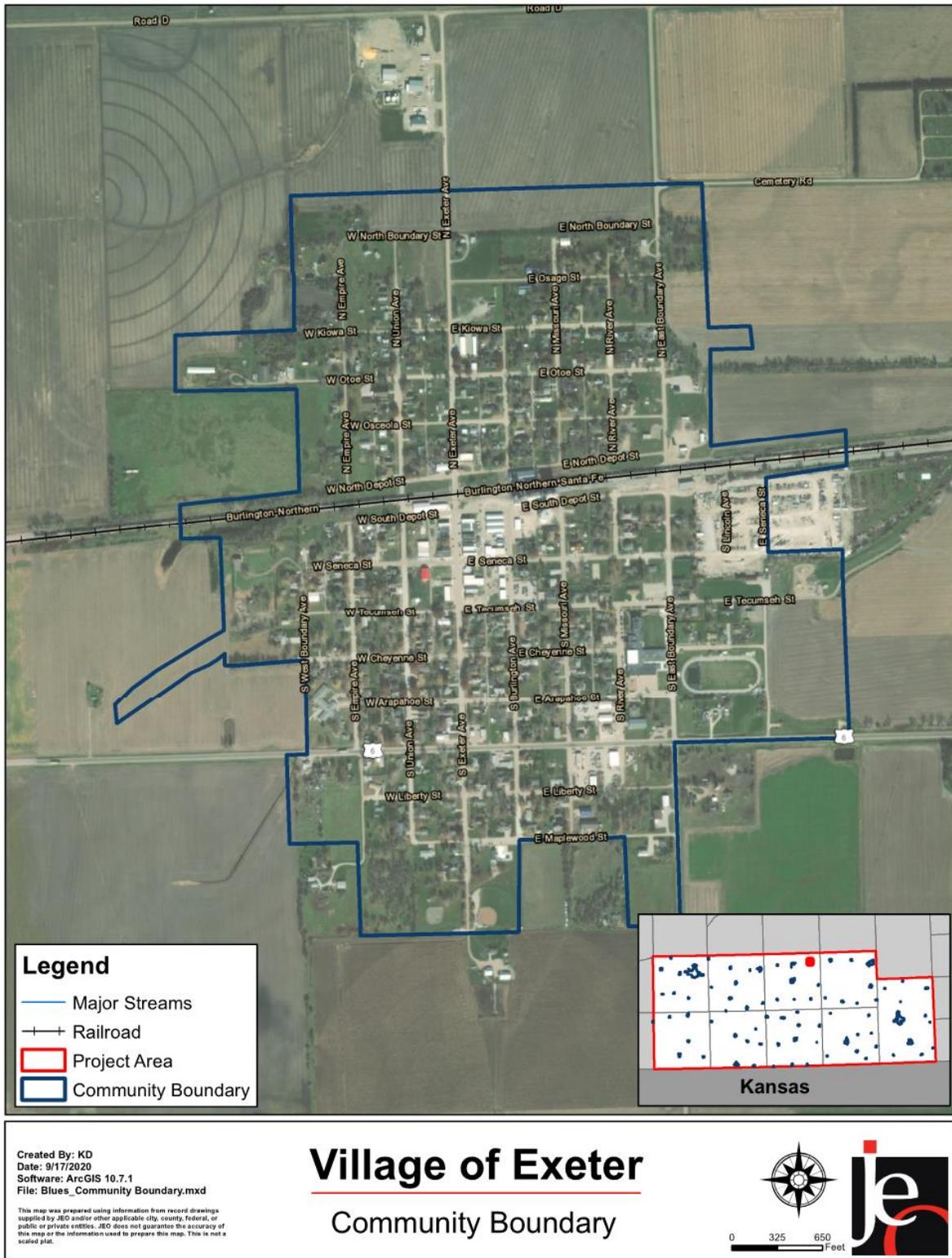
Location and Geography

The Village of Exeter is located in the north eastern portion of Fillmore County. The Village of Exeter covers an area of 0.63 square miles. There are no major waterways within the area. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. The village lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

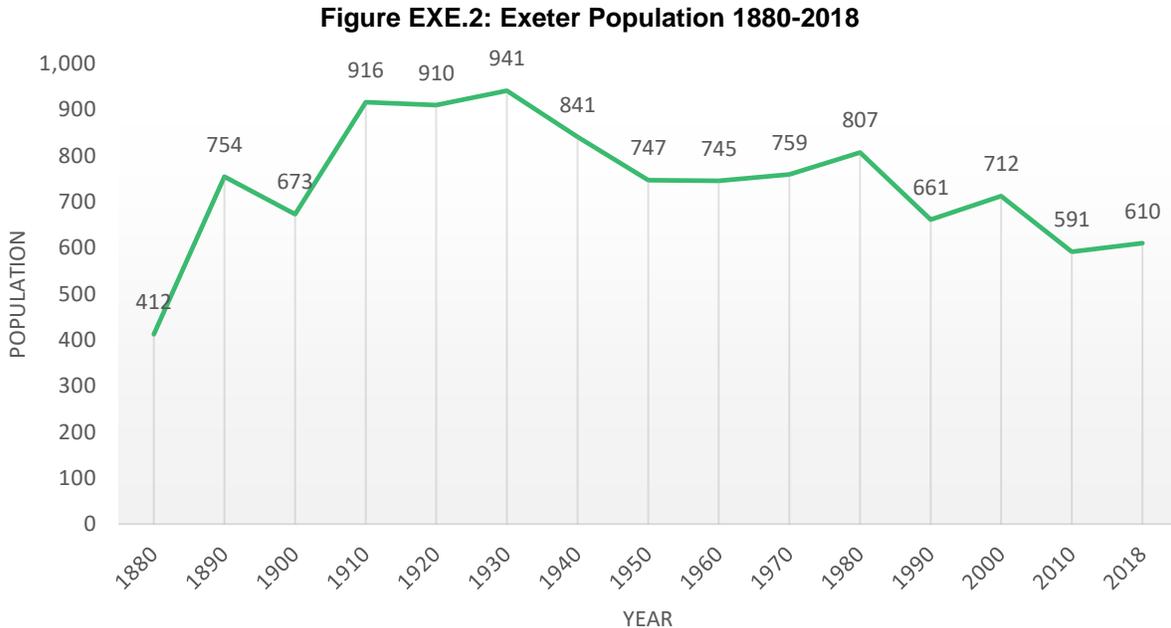
Exeter's major transportation corridors include State Highway 6, which runs east-west, to the south of Exeter. NE-6 accommodates on average 2,110 vehicles per day, 320 of which are heavy commercial vehicles. Exeter has two rail lines, Burlington Northern Santa Fe line, and Amtrak, which runs on the same line. At Exeter, the BNSF runs east-west headed into Lincoln and west to Hastings. Hazardous materials including gas, fuel, anhydrous ammonia, and other agricultural chemicals are commonly transported through the village. The village has experienced two train derailments on the east edge of town in the 1980's, but no other major events have impacted the community. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

Figure EXE.1: Village of Exeter Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1880 to 2018 (estimated). This figure indicates that the population of Exeter grew until 1930. Since the 1980s the population has fluctuated between growth and decline. This is relevant to hazard mitigation because communities with a growing population may be more prone to developing additional land and building new structures while communities with declining populations may have larger shares of unoccupied housing or decreasing tax revenues. The village's population accounted for 11% of Fillmore County's Population in 2018.



Source: U.S. Census Bureau¹²

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Exeter's population was:

- **Older.** The median age of Exeter was 44.9 years old in 2018, compared with the County average of 47.7 years. Exeter's population has grown older since 2010, when the median age was 44.0 years old. Exeter had a smaller proportion of people under 20 years old (20.7%) than the County (21.3%).¹³
- **Less ethnically diverse.** Since 2010, Exeter declined in diversity. In 2010, 1% of Exeter's population was other races. By 2018 100% of Exeter's population was White, non-Hispanic. During that time, Fillmore County had: 1% Black, 0% to 1% American Indian, 1% other races and 1% two or more races from 2010 to 2018 respectively.¹⁴
- **Less likely to be at the federal poverty line.** The poverty rate of all persons in Exeter (7.8%) was lower than the County (10.0%) in 2018.¹⁵

¹² United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

¹³ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

¹⁴ United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

¹⁵ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

Employment and Economics

The community's economic base is a mixture of industries. In comparison to Fillmore County, Exeter's economy had:

- **Similar mix of industries.** Employment sectors accounting for 10% or more of employment in Exeter included Construction and Education. In comparison Fillmore County's included Agriculture and Education in 2018.¹⁶
- **Higher household income.** Exeter's median household income in 2018 (\$57,955) was about \$2,000 greater than the County (\$55,625).¹⁷
- **Fewer long-distance commuters.** About 72.2% percent of workers in Exeter commuted for fewer than 15 minutes, compared with about 55.6% of workers in Fillmore County. About 15.6% of workers in Exeter commute 30 minutes or more to work, compared to about 20.8% of the County workers.¹⁸

Major Employers

Major employers in the village include Horizontal Boring and Tunneling, Exeter-Milligan Schools, the Farmer's Co-Op, and Generations Bank. However, some residents do commute to York or Lincoln for employment.

Housing

In comparison to Fillmore County, Exeter's housing stock was:¹⁹

- **More owner occupied.** About 77.4% of occupied housing units in Exeter are owner occupied compared with 75.6% of occupied housing in Fillmore County in 2018.
- **Greater share of aged housing stock.** Exeter has more houses built prior to 1970 than the county (70.2% compared to 69.9%).
- **More multi-family homes.** The predominant housing type in the village is single family detached and Exeter contains fewer multifamily housing with five or more units per structure than the County (0.0% compared to 5.2%). About 95.0% of housing in Exeter was single-family detached, compared with 90.6% of the County's housing. Exeter has a larger share of mobile and manufactured housing (2.0%) compared to the County (1.1%). However, the local planning team noted only one trailer is left in town.

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

¹⁶ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

¹⁷ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

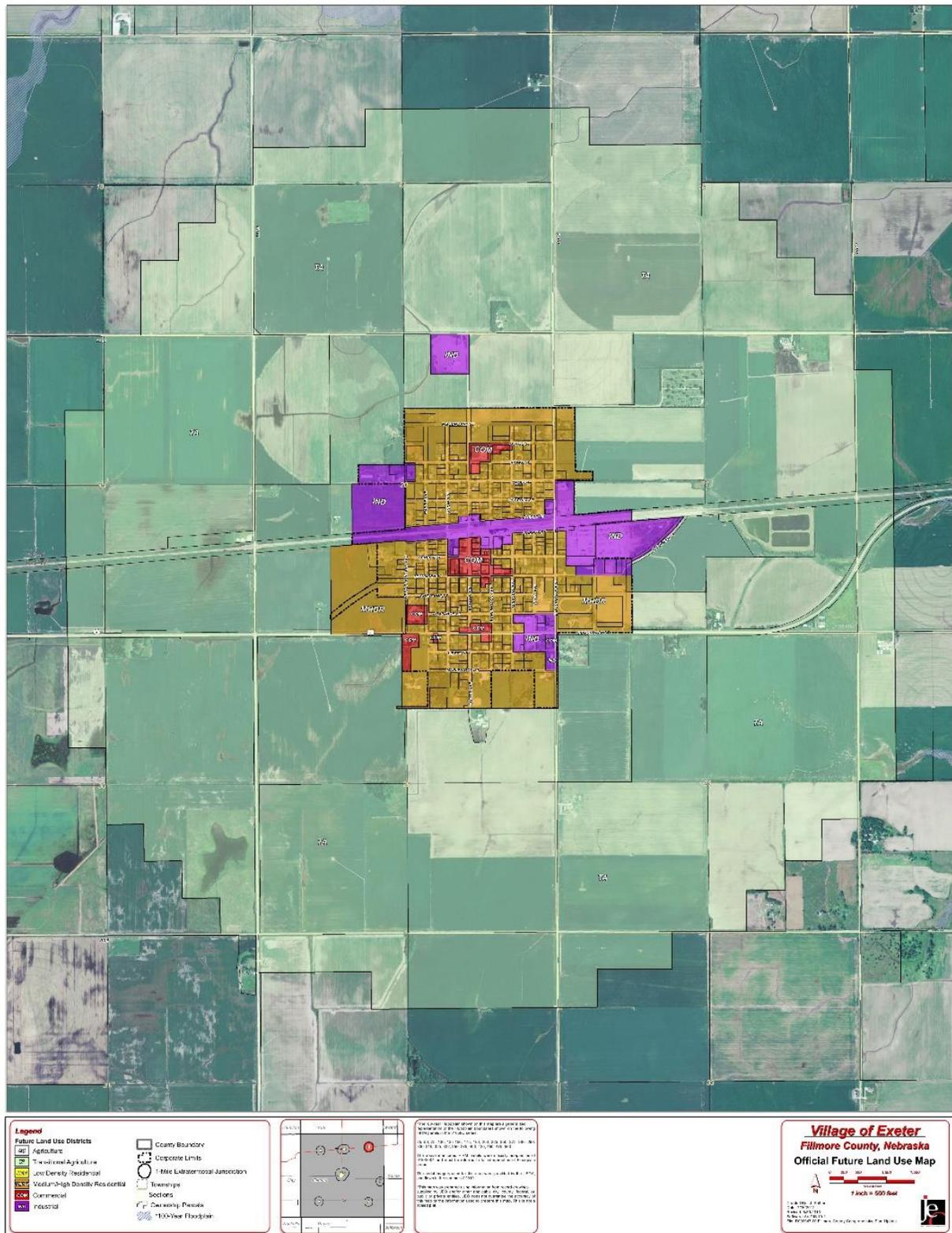
¹⁸ United States Census Bureau. "2018 American Fact Finder: s0802: Means of Transportation to Work by Selected Characteristics." [database file]

¹⁹ United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

Twelve new structures have been built in Exeter since 2011: five houses, St. Stephen's Parish Hall, five sheds, and a new duplex. The village is not in a floodplain, but two of the new houses were built in high groundwater areas. One home has a basement with drain tile, and the other is built on a slab. Since 2015 two dilapidated buildings were demolished and three new houses were built by the football field. Several businesses have also opened in town: Harre Seed, a massage clinic, day care, and additional building at the fertilizer plant. Three of the new homes and the seed plant are located within a block of the municipal sewer lift station, but no additional buildings have been built in the floodplain or hazardous areas. The population of Exeter has fluctuated in the past few decades which the local planning team attributed to changes in the local agricultural farm size and family size.

Figure EXE.4: Exeter Future Land Use Map



Parcel Improvements and Valuation

GIS parcel data as of December 2019 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements 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. No LOMAs were identified in the Village of Exeter.

Table EXE.2: Exeter Parcel Valuation

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|-------------------|------------------------|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| 475 | 326 | \$21,886 | 0 | 0% | \$0 |

Source: County Assessor, GIS Workshop

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are two chemical storage sites throughout Exeter which house hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident. The local planning team noted Burress also stores anhydrous ammonia for farm use and North Exeter Avenue turns into a county road running past the Co-Op chemical plant.

Table EXE.3: Chemical Storage Fixed Sites

| Facility Name | Address | Located in Floodplain? |
|--------------------------------|----------------------|------------------------|
| Farmers Cooperative Grain | 134 S Burlington Ave | N |
| Farmers Cooperative Bulk/Chems | 919 N Exeter Dr | N |

Source: Nebraska Department of Environment and Energy²⁰

Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

²⁰ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

SECTION SEVEN: VILLAGE OF EXETER COMMUNITY PROFILE

Table EXE.4: Exeter Critical Facilities

| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|--------------------------|--------------------------------|---------------|-----------------|-----------------------------|
| 1 | Food, Water, and Shelter | Exeter-Milligan Public School | Y | N | N |
| 2 | Safety and Security | City Office and Library | Y | N | N |
| 3 | Transportation | City Maintenance Building | N | N | N |
| 4 | Transportation | City Maintenance Building | N | N | N |
| 5 | Safety and Security | Fire Hall | Y | Y | N |
| 6 | Food, Water, and Shelter | Water Tower | N | N | N |
| 7 | Food, Water, and Shelter | Well House - Back up | N | N | N |
| 8 | Food, Water, and Shelter | City Senior Center | Y | N | N |
| 9 | Health and Medical | Sewer Lift Station | N | Y | N |
| 10 | Food, Water, and Shelter | Well House 1 | N | Y | N |
| 11 | Food, Water, and Shelter | Well House 2 | N | Y | N |
| 12 | Food, Water, and Shelter | Pool Bathhouse - Storm Shelter | Y | N | N |
| 13 | Health and Medical | Sewer Lagoons | N | N | N |

Figure EXE.3: Exeter Critical Facilities



Created By: NL
Date: 5/21/2021
Software: ArcGIS Pro 2.8.0
File: Blues Critical Facilities.aprx

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.

Village of Exeter

Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021

Kansas

Historical Occurrences

See the Fillmore County community profile for historical hazard events.

Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

Flooding

While riverine or flash flooding are not major concerns for the village, the groundwater levels in the village have been rising since 1984. Many basements have been flooded in the past and have installed pumps and drainage equipment to alleviate these problems. There is a pond located ¼ mile west of town on Highway Six-North. This pond regularly overflows, most recently in the spring of 2015. The local planning team noted the pond contributes to ground water problems in the village and they would like to fill this pond to prevent future flooding. Heavy rain events can cause poor drainage due to the high-water table. The village participates in the NFIP but had no active policies in force as of November 2020.

Severe Thunderstorms

Severe thunderstorms are common in the area and include impacts from heavy rain, lightning, hail, and strong winds. A severe thunderstorm impacted the village in June of 2014. Virtually every house and vehicle sustained damages and several homes still have boarded up windows or siding missing siding as of 2021. The main concerns for these hazards pertain to providing advance warnings, preventing power outages, and providing shelters to those in need. The village has backup generators at the fire hall, well house, and sewage lift station. There is no local tree board. Weather radios are available the fire hall. A backup generator was recently installed at the fire hall.

Severe Winter Storms

Severe winter storms can include impacts from heavy snow, ice accumulation, blizzards, extreme cold, and winter storms. The main concern for this hazard involves keeping the elderly safe. Priority snow routes are the business district, school routes, with residences being done last. The Maintenance supervisor and hourly laborers are in charge of snow removal. The village has a motor grader, car loader, and UTV for sidewalks. In the winter of 2011 several blizzards occurred and forced school closures. City staff spent a lot of time keeping roads open. Power outages occurred as well.

Tornadoes and High Winds

The most recent significant tornado event occurred in May 2014 when an EF3 tornado touched down near the village. Major impacts were felt in neighboring towns and rural areas and reported damages exceeded \$7,500,000. Many homes, grain binds, and pivots were destroyed in the surrounding areas near Exeter. There have been many high wind events over the years. In the

past power lines have been knocked down and structural damages has been caused to buildings. Strong winds blew the roof off of the local grocery store in 1992. Tree damage occurred in May and June of 2014 which resulted in blocked streets.

Exeter's main concerns for these hazards include being able to warn people in advance, setting up a command center, and sheltering citizens. Community members seek shelter at the pool, bath house, city hall basement, and home basements. Exeter would like to partner with Exeter-Milligan Public schools to install a safe room for students.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Exeter has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a five member council and the following offices: clerk/treasurer, attorney, utility superintendent, fire chief, rescue captain, sewage plant operator, and street/water/sewer commissioner.

Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

Table EXE.5: Capability Assessment

| Survey Components | | Yes/No |
|---------------------------------------|---|--------|
| Planning & Regulatory Capability | Comprehensive Plan | No |
| | Capital Improvements Plan | No |
| | Economic Development Plan | No |
| | Local Emergency Operational Plan | Yes |
| | Floodplain Ordinance | Yes |
| | Zoning Ordinance | Yes |
| | Subdivision Regulation/Ordinance | Yes |
| | Building Codes | No |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | No |
| | National Flood Insurance Program | Yes |
| | Community Rating System | No |
| | Other (if any) | |
| Administrative & Technical Capability | Planning Commission | No |
| | Floodplain Administration | Yes |
| | GIS Capabilities | No |
| | Chief Building Official | No |
| | Civil Engineering | No |
| | Local Staff Who Can Assess Community's Vulnerability to Hazards | Yes |
| | Grant Manager | No |
| | Mutual Aid Agreement | Yes |

| Survey Components | | Yes/No |
|------------------------|---|----------------------------------|
| | Other (if any) | |
| Fiscal Capability | 1 & 6 Year Plan | No |
| | Applied for grants in the past | No |
| | Awarded a grant in the past | No |
| | 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 | Yes |
| | Other (if any) | |
| Education and Outreach | 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) | <i>Livestock Friendly County</i> |

Table EXE.6: Overall Capability

| Overall Capability | Limited/Moderate/High |
|--|-----------------------|
| Financial Resources Needed to Implement Mitigation Projects | Limited |
| Staff/Expertise to Implement Projects | Moderate |
| Community Support to Implement Projects | Limited |
| Time to Devote to Hazard Mitigation | Limited |

Plan Integration

The local planning team noted the annual municipal budget is limited to maintaining current facilities and systems. The village’s funds have increased over the past few years which may allow for additional mitigation activities.

The village does not have a comprehensive plan and utilizes the county’s zoning and building code standards for development. The Zoning Ordinance for the county was last updated in March 2013 and is updated on an as needed basis. The ordinance discourages development in the floodplain or other hazardous areas.

The Local Emergency Operations Plan (LEOP) for Exeter, which was last updated in 2017, is an annex of Fillmore County's LEOP. The plan addresses hazards such as chemical releases, severe winter storms, severe thunderstorms, and tornadoes. The plan provides a clear assignment of responsibility in case of an emergency, shelter locations, and evacuation routes but does not identify any gaps related to a particular hazard.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. 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 local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the Village Clerk, maintenance supervisor, and village board members. The local planning team will review the plan no less than annually and will include the public in the review and revision process by: updating the website, newsletters, and sharing information at village board meetings open to the public.

Mitigation Strategy

Completed Mitigation Actions

| MITIGATION ACTION | BACKUP MUNICIPAL RECORDS |
|-------------------|---|
| DESCRIPTION | Develop protocol for back-up of critical municipal records |
| HAZARD(S) | All hazards |
| STATUS | The villages computers are now backed up to the cloud, an external hard drive, and flash drives weekly. |

| MITIGATION ACTION | DESIGNATE SNOW ROUTES |
|-------------------|--|
| DESCRIPTION | During winter events, the community will have designated snow routes for the community to use. |
| HAZARD(S) | Severe Winter Storms |
| STATUS | Snow routes have been designated in town and routes are evaluated each year. The village also provides salt for sidewalks in downtown areas. |

| MITIGATION ACTION | EDUCATIONAL PROGRAMS |
|-------------------|---|
| DESCRIPTION | Promote educational programs |
| HAZARD(S) | All hazards |
| STATUS | The community conducts fire safety outreach through the school and other educational programs for hazards. The main focus is to keep youth safe. In the past, the city has also distributed information for mosquito abatement and black mold for flooded |

SECTION SEVEN: VILLAGE OF EXETER COMMUNITY PROFILE

| | |
|--|---|
| | basements. The local police officers also do outreach programs at the school. |
|--|---|

| MITIGATION ACTION | EMERGENCY OPERATIONS CENTER |
|-------------------|---|
| DESCRIPTION | Develop emergency operations center for the village including communications |
| HAZARD(S) | All hazards |
| STATUS | Fire hall has been identified as the EOC and a backup generator has been installed. City computers have external backups. Clerk has emergency forms kept on and off site. |

| MITIGATION ACTION | HAZARDOUS TREE REMOVAL |
|-------------------|--|
| DESCRIPTION | Identify and remove hazardous limbs and/or trees. |
| HAZARD(S) | Drought and Extreme Heat, Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| STATUS | Low hanging branches have been removed every few years by property owners and city maintenance staff. Property owners and city staff continue to remove dead trees throughout the village on an ongoing basis. |

| MITIGATION ACTION | IMPROVE AND REVISE SNOW/ICE REMOVAL PROGRAM |
|-------------------|--|
| DESCRIPTION | As needed, continue to revise and improve the snow and ice removal program for streets. Revisions should address situations such as plowing snow, ice removal, parking during snow and ice removal, and removal of associated storm debris. This would include equipment that is needed and paving routes. |
| HAZARD(S) | Severe Winter Storms |
| STATUS | All streets are cleared within 12 hours post event and salt/ice melt is provided for downstream businesses. |

| MITIGATION ACTION | SURGE PROTECTORS |
|-------------------|--|
| DESCRIPTION | Purchase and install surge protectors on sensitive equipment in critical facilities. |
| HAZARD(S) | Severe Thunderstorms |
| STATUS | Surge protectors have been installed on computers at city office and library. |

Continued Mitigation Actions

| MITIGATION ACTION | CIVIL SERVICE IMPROVEMENTS |
|-------------------|--|
| DESCRIPTION | Purchase a new fire truck |
| HAZARD(S) | Grass/Wildfire |
| ESTIMATED COST | \$100,000 |
| FUNDING | Local Taxes, HMGP, BRIC |
| TIMELINE | 2-5 years |
| PRIORITY | High |
| LEAD AGENCY | Fire Department |
| STATUS | The village is currently in the planning process to purchase this and working with the Rural Board to purchase equipment in fall 2021. |

SECTION SEVEN: VILLAGE OF EXETER COMMUNITY PROFILE

| MITIGATION ACTION | STORMWATER SYSTEM AND DRAINAGE IMPROVEMENTS |
|-------------------|--|
| DESCRIPTION | Conduct improvement of drainage system in southeast portion of village due to basement flooding |
| HAZARD(S) | Flooding, Severe Thunderstorms |
| ESTIMATED COST | \$100,000 |
| FUNDING | Local Taxes |
| TIMELINE | 5+ years |
| PRIORITY | Low |
| LEAD AGENCY | Maintenance and Village Engineer |
| STATUS | The village is in the process of replacing culverts and digging out ditches to help with drainage of standing water. |

| MITIGATION ACTION | PUBLIC EDUCATION AND OUTREACH |
|-------------------|---|
| DESCRIPTION | Mosquito education and reduce standing water in the village |
| HAZARD(S) | Flooding, Severe Thunderstorms |
| ESTIMATED COST | N/A |
| FUNDING | General Funds |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Maintenance, Village Clerk |
| STATUS | This would focus on areas near the city hall and library. The village would like to print education information for this program. |

| MITIGATION ACTION | SAFE ROOMS/STORM SHELTERS |
|-------------------|--|
| DESCRIPTION | Install an emergency shelter at the Exeter School. |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$300,000 |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 5+ years |
| PRIORITY | Medium |
| LEAD AGENCY | Fire Dept. Village Clerk, Exeter Schools |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | BACKUP GENERATOR – SCHOOL/SHELTERS |
|-------------------|--|
| DESCRIPTION | Install a back-up power generator in school (shelter) |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| ESTIMATED COST | \$50,000 |
| FUNDING | Bonds, HMGP, BRIC |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Exeter Milligan Schools |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | POND FILLING |
|-------------------|--|
| DESCRIPTION | Conduct a filling of a pond on west side of village due to basement flooding |
| HAZARD(S) | Flooding, Severe Thunderstorms |
| ESTIMATED COST | \$50,000 |

SECTION SEVEN: VILLAGE OF EXETER COMMUNITY PROFILE

| | |
|--------------------|---|
| FUNDING | Taxes, Landowner cost share, HMGP, BRIC |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Maintenance and Village Engineer |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | IMPROVE AND REVISE SNOW/ICE REMOVAL PROGRAM OR RESOURCES |
|--------------------------|---|
| DESCRIPTION | Improve capabilities to rescue those stranded in blizzards and increase the capacity to which snow can be removed from roadways after an event. |
| HAZARD(S) | Severe Winter Storms |
| ESTIMATED COST | \$100,000 |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 5+ years |
| PRIORITY | Low |
| LEAD AGENCY | Village Maintenance, Fire Dept |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | SHELTER SUPPLIES |
|--------------------------|---|
| DESCRIPTION | Purchase supplies for the emergency shelter. This may include provisions, health care supplies, or short term residency supplies. |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$10,000 |
| FUNDING | Taxes, HMGP, BRIC |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Fire, Maintenance, Clerk, Police. |
| STATUS | A generator has been placed at the fire hall. Some wool blankets were also purchased. The village needs blankets, pillows, cots, etc. |

| MITIGATION ACTION | TRAIN DERAILMENT RESPONSE TRAINING |
|--------------------------|--|
| DESCRIPTION | Provide training for first responders in the event of a train derailment and related Haz. Mat. Incidents. Train first responders to properly secure and size up an incident site before railroad responders can arrive on scene. |
| HAZARD(S) | Hazardous Materials |
| ESTIMATED COST | \$1,000 |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | Medium |
| LEAD AGENCY | Fire Dept. |
| STATUS | Training is an ongoing process. An exercise should be conducted in the future. |

New Mitigation Actions – 2021 Plan

| MITIGATION ACTION | PANDEMIC RESPONSE PLAN |
|--------------------------|--|
| DESCRIPTION | Develop and implement a pandemic response plan for the village in response to pandemics, such as COVID-19. |

| | |
|-----------------------|----------------------------------|
| HAZARD(S) | Public Health Emergency |
| ESTIMATED COST | Unknown |
| FUNDING | General funds |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Clerk, Rescue Culture |
| STATUS | This is a new mitigation action. |

Removed Mitigation Actions

| MITIGATION ACTION | NFIP CONTINUATION AND ENFORCEMENT |
|---------------------------|---|
| DESCRIPTION | Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs). |
| REASON FOR REMOVAL | While the village will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA. |

COMMUNITY PROFILE

VILLAGE OF FAIRMONT

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table FAI.1: Village of Fairmont Local Planning Team

| Name | Title | Jurisdiction |
|----------------|------------------|---------------------|
| Tyler Salmon | Village Marshall | Village of Fairmont |
| Linda Zuerlein | Village Clerk | Village of Fairmont |
| Don Moses | Board Chair | Village of Fairmont |

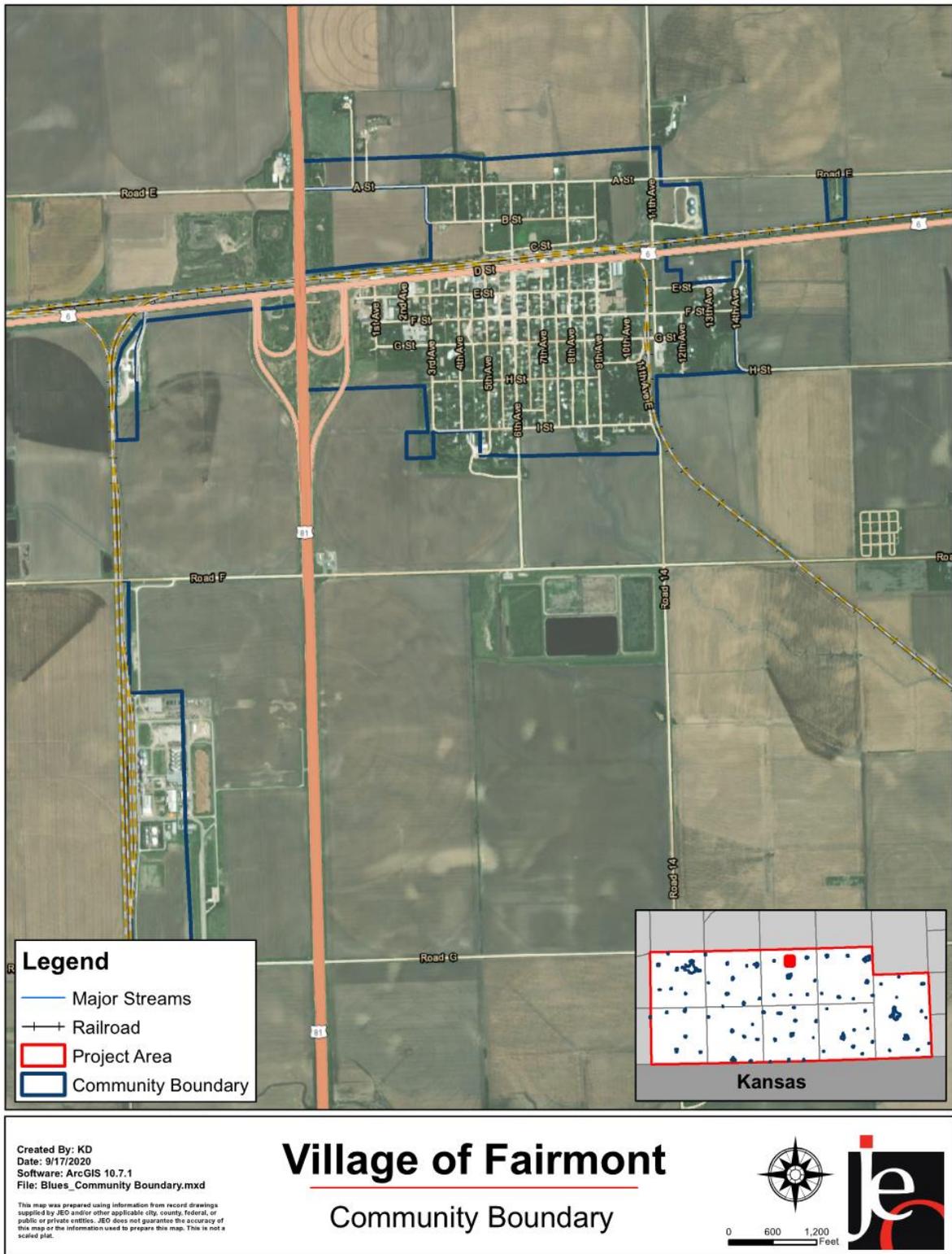
Location and Geography

The Village of Fairmont is located in the north central portion of Fillmore County. The Village of Fairmont covers an area of 0.82 square miles. There are no major waterways within the area. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. The village lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Fairmont's major transportation corridors include State Highway 6, which runs east-west through Fairmont and Highway 81 which runs north-south on the west side of the village. NE-6 accommodates on average 2,060 per day, 330 of which are heavy commercial vehicles. Fairmont has two rail lines, Burlington Northern Santa Fe line, and Amtrak, which runs on the same line. At Fairmont, the BNSF runs east-west headed into Lincoln and west to Hastings. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

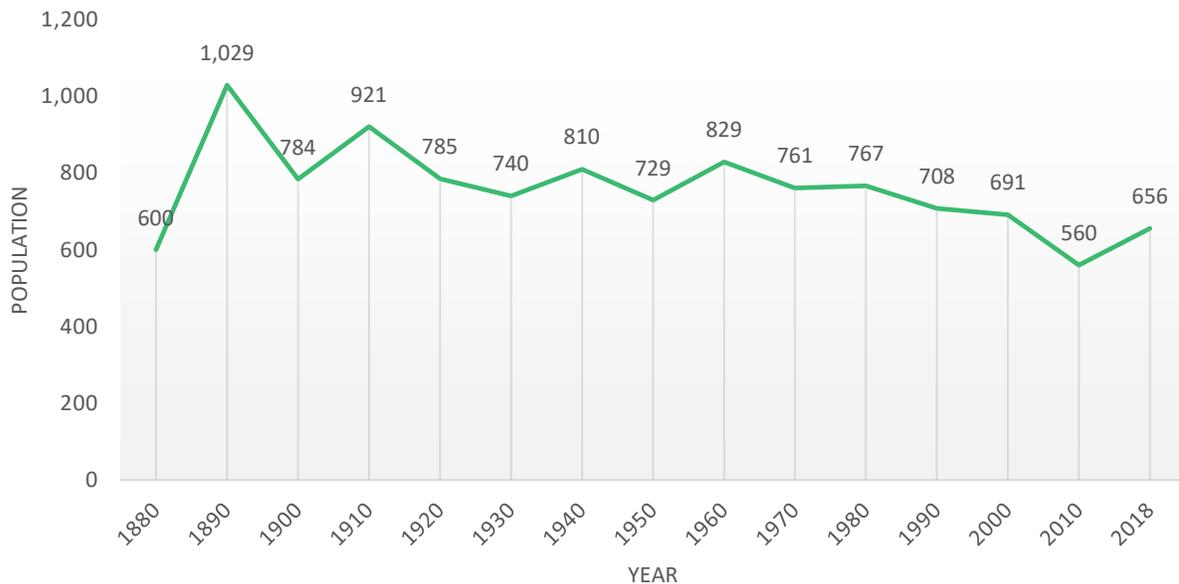
Figure FAI.1: Village of Fairmont Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1880 to 2018 (estimated). This figure indicates that the population of Fairmont has declined between 1960 and 2010 but has seen an increase since 2010. This is relevant to hazard mitigation because communities with a growing population may be more prone to developing additional land and building new structures while communities with declining populations may have larger shares of unoccupied housing or decreasing tax revenues. The village's population accounted for 12% of Fillmore County's Population in 2018.

Figure FAI.2: Fairmont Population 1880-2018



Source: U.S. Census Bureau²¹

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Fairmont's population was:

- **Younger.** The median age of Fairmont was 44.6 years old in 2018, compared with the County average of 47.7 years. Fairmont's population has younger older since 2010, when the median age was 49.5 years old. Fairmont had a similar proportion of people under 20 years old (21.0%) as the County (21.3%).²²
- **Less ethnically diverse.** Since 2010, Fairmont declined in diversity. In 2010, 1% of Fairmont's population was American Indian, 1% was other races, and 1% was two or more races. By 2018 only 1% of Fairmont's population was American Indian. During that time, Fillmore County had: 1% Black, 0% to 1% American Indian, 1% other races and 1% two or more races from 2010 to 2018 respectively.²³
- **More likely to be at the federal poverty line.** The poverty rate of all persons in Fairmont (14.5%) was higher than the County (10.0%) in 2018.²⁴

²¹ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

²² United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

²³ United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

²⁴ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

Employment and Economics

The community's economic base is a mixture of industries. In comparison to Fillmore County, Fairmont's economy had:

- **Similar mix of industries.** Employment sectors accounting for 10% or more of employment in Fairmont included Construction, Transportation, Education, and Public Administration. In comparison Fillmore County's included Agriculture and Education in 2018.²⁵
- **Higher household income.** Fairmont's median household income in 2018 (\$56,667) was about \$1,000 greater than the County (\$55,625).²⁶
- **More long-distance commuters.** About 21% percent of workers in Fairmont commuted for fewer than 15 minutes, compared with about 55.6% of workers in Fillmore County. About 33.3% of workers in Fairmont commute 30 minutes or more to work, compared to about 20.8% of the County workers.²⁷

Major Employers

Major employers in Fairmont include Fairview Manor, Fillmore Central Middle School, and Flint-Hills Resources.

Housing

In comparison to Fillmore County, Fairmont's housing stock was:²⁸

- **More owner occupied.** About 82.7% of occupied housing units in Fairmont are owner occupied compared with 75.6% of occupied housing in Fillmore County in 2018.
- **Greater share of aged housing stock.** Fairmont has more houses built prior to 1970 than the county (77.9% compared to 69.9%).
- **More multi-family homes.** The predominant housing type in the village is single family detached and Fairmont contains more multifamily housing with five or more units per structure than the County (5.4% compared to 5.2%). About 86.7% of housing in Fairmont was single-family detached, compared with 90.6% of the County's housing. Fairmont has a larger share of mobile and manufactured housing (1.5%) compared to the County (1.1%). However, the local planning team noted the village does not have any mobile home parks or manufactured homes.

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

²⁵ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

²⁶ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

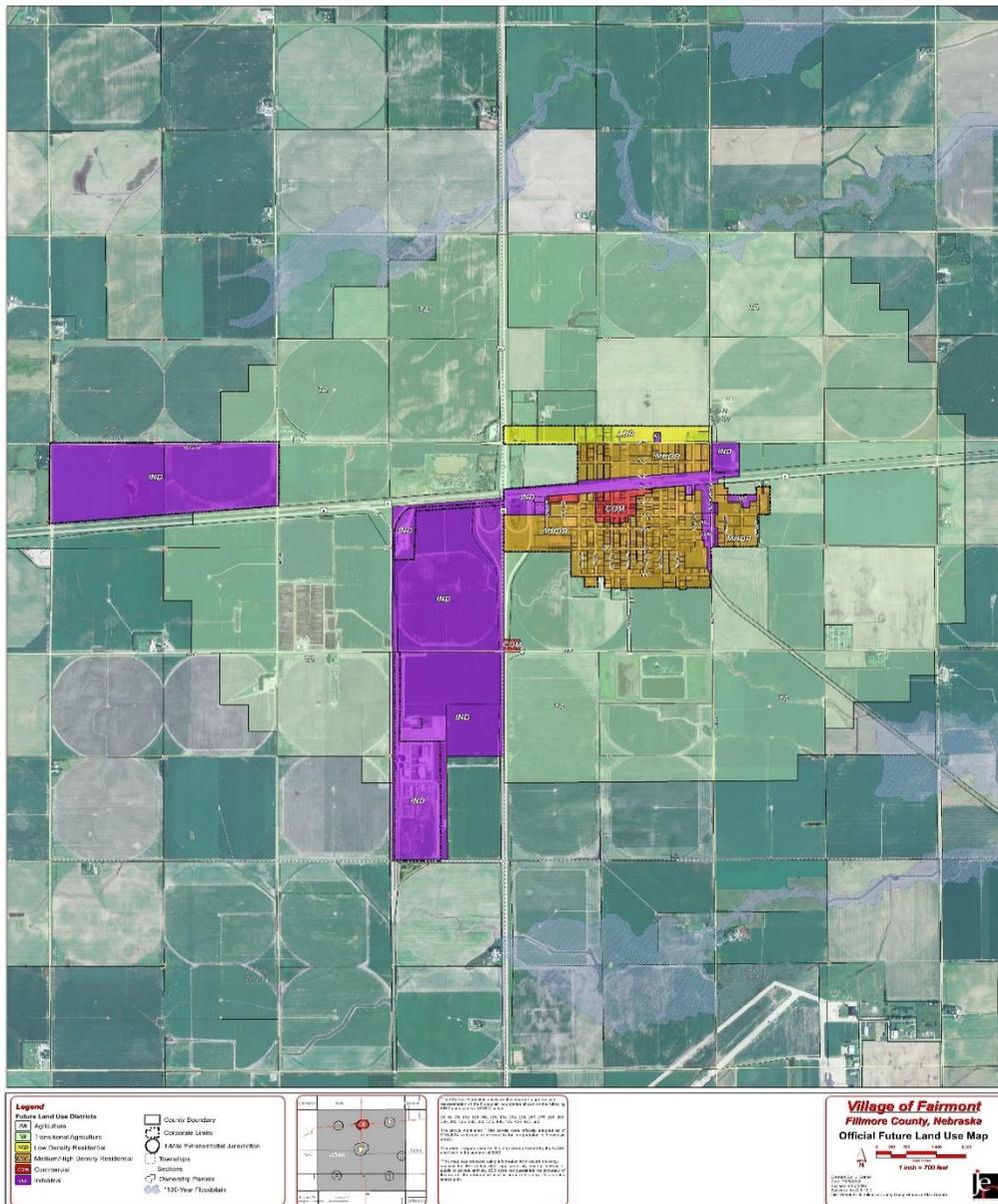
²⁷ United States Census Bureau. "2018 American Fact Finder: s0802: Means of Transportation to Work by Selected Characteristics." [database file]

²⁸ United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

In the past five years, a grain loading rail car shuttle facility, associated with the CPI Lansing joint venture construction, was built along the north side of Highway 6. Also, a new facility for Bill's repair shop, located at 1101 G St, Fairmont, NE, was constructed. Some other people are putting up metal buildings to store RVs. New storage facilities are also currently being constructed, along 11th avenue between F and G St. The village has installed backup generators on well house, fire bard, rescue unit building, and lift stations. The population in Fairmont has declined in the past which the local planning team attributed to an aging population and lack of available housing.

Figure FAI.3: Fairmont Future Land Use Map



Parcel Improvements and Valuation

GIS parcel data as of December 2019 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements 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. No LOMAs were identified in the Village of Fairmont.

Table FAI.2: Fairmont Parcel Valuation

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|-------------------|------------------------|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| 441 | 280 | \$27,361 | 0 | 0% | \$0 |

Source: County Assessor, GIS Workshop

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are four chemical storage sites throughout Fairmont which house hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Table FAI.3: Chemical Storage Fixed Sites

| Facility Name | Address | Located in Floodplain? |
|--------------------------------|--------------|------------------------|
| Wynne Transport Service Shop | Road I | N |
| Farmers Cooperative East | Highway 6 E | N |
| Nutrien Ag Solutions | 2010 Road 11 | N |
| Flint Hills Resources Fairmont | 1214 Road G | N |

Source: Nebraska Department of Environment and Energy²⁹

Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table FAI.4: Fairmont Critical Facilities

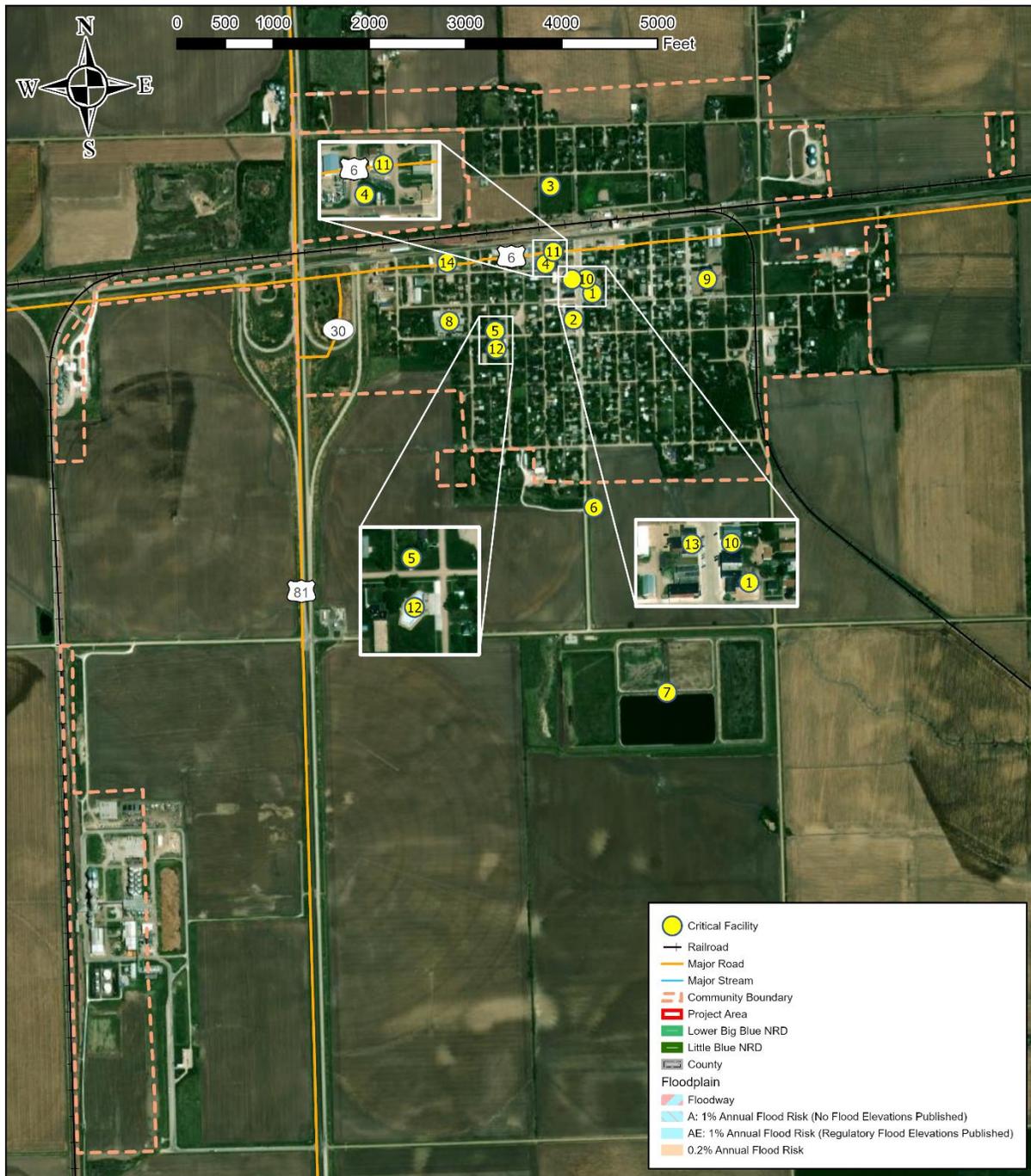
| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|---------------------|-----------|---------------|-----------------|-----------------------------|
| 1 | Safety and Security | Fire Barn | Y | Y | N |

²⁹ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

SECTION SEVEN: VILLAGE OF FAIRMONT COMMUNITY PROFILE

| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|--------------------------|--------------------------------|---------------|-----------------|-----------------------------|
| 2 | Safety and Security | Village Hall | N | N | N |
| 3 | Food, Water, and Shelter | Water Tower | N | N | N |
| 4 | Food, Water, and Shelter | North Well | N | N | N |
| 5 | Food, Water, and Shelter | South Well | N | Y | N |
| 6 | Health and Medical | Sewer Lift Station | N | Y | N |
| 7 | Health and Medical | Sewage Lagoons | N | N | N |
| 8 | Health and Medical | Fairview Manor | N | Y | N |
| 9 | Food, Water, and Shelter | Fillmore Central Middle School | Y | Y | N |
| 10 | Safety and Security | Fire/Rescue Unit | N | Y | N |
| 11 | Safety and Security | Village Maintenance | N | N | N |
| 12 | Other | Swimming Pool | N | N | N |
| 13 | Food, Water, and Shelter | Fairmont Senior Center | Y | N | N |
| 14 | Transportation | Maintenance Shed | N | N | N |

Figure FAI.3: Fairmont Critical Facilities

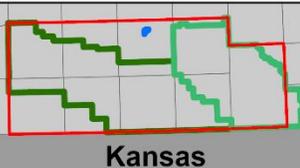




Created By: NL
Date: 5/21/2021
Software: ArcGIS Pro 2.8.0
File: Blues Critical Facilities.aprx
This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plat.

Village of Fairmont

Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021



Kansas

Historical Occurrences

See the Fillmore County community profile for historical hazard events.

Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

Severe Thunderstorms

Fairmont has experienced several incidences of powerful thunderstorm in the past decades. Severe thunderstorms include impacts from hail, heavy rain, strong winds, and lightning. Notable events include an August 22, 2007 storm with 75 mph winds that tore the roof off of a car wash and damaged many trees, and produced \$250,000 in damage; a March 23, 2009 storm with 70 mph winds that snapped power poles, overturned a semi-truck, and caused \$25,000 in damage; and a 71 mph gust on June 14, 2014, that was reported by a storm chaser, along with power flashes.

Loss of power is the primary concern for this hazard, including power outages for loss of water pressure. NPPD provides power to the community. The nursing home has indicated a strong desire to purchase a generator in case of a power outage event. The village contracts tree removal services. There are backup generators at the lift station, water well, mobile generator, tractor generator, and fire barn. One well in the village has a generator and one does not. The village is also in the process of burying power lines north of the railroad tracks.

Severe Winter Storms

Fairmont is prone to severe winter weather. Severe winter storms include impacts from heavy snow, ice accumulation, extreme cold, blizzards, and winter storms. The blizzard of February 1, 2015 that produced whiteout conditions and six to nine inches of snow in Fillmore County affected Fairmont, and the region experiences periodic ice storms.

Fairmont currently clears its own streets and has excellent snow removal resources. They have a skid loader, a road grader, a pay loader and a tractor with a blade. The village is concerned about power outages with this hazard. In 1976, a storm caused outages for over a week, and in some places for a month. The Village did note that because it is a small community, neighbors take care of one another during hazardous events.

Tornadoes and High Winds

Tornadoes and high winds are a risk in Fairmont, as illustrated by the May 11, 2014, 90 mph EF-1 tornado that caused \$150,000 in damage in the village, and a brief F-0 touchdown on June 13, 2001. Going back to 1998, an F-2 on May 15 caused \$750,000 in damage.

Loss of power is the greatest concern for this hazard. Community members can use the basement of the senior center as a safe room which holds approximately 60 people. The school would send

students to the hallway, as no better alternative is available. The village has identified the need for a more handicap accessible building as a storm shelter. Fairmont has three sirens on the east side of town, at the fire hall, and at the school. There are no weather radios in town. The Village office mostly relies of the public radio out of York for weather alerts. There are no mobile homes any more in Fairmont. Fairmont regularly budgets to demolish vacant housing and to remove dilapidated structures.

Flooding

Flooding was not identified as a hazard of top concern and there are floodplain areas adjacent to the village. Fairmont participates in the NFIP but does not have any policies in force as of November 2020.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Fairmont has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a five-member council and the following offices: clerk/treasurer, attorney, utilities superintendent, chief of police, fire chief, sewage plant operator, and Fillmore County Civil Defense.

Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

Table FAI.5: Capability Assessment

| Survey Components | | Yes/No |
|---|----------------------------------|--------|
| Planning Regulatory Capability | Comprehensive Plan | Yes |
| | Capital Improvements Plan | No |
| | Economic Development Plan | No |
| | Local Emergency Operational Plan | County |
| | Floodplain Ordinance | Yes |
| | Zoning Ordinance | Yes |
| | Subdivision Regulation/Ordinance | Yes |
| | Building Codes | No |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | No |
| | National Flood Insurance Program | Yes |
| | Community Rating System | No |
| Other (if any) | Strategic Plan | |
| Administrative & Technical Capability | Planning Commission | County |
| | Floodplain Administration | Yes |
| | GIS Capabilities | Yes |
| | Chief Building Official | No |
| | Civil Engineering | No |

| Survey Components | | Yes/No |
|------------------------|---|--------|
| | Local Staff Who Can Assess Community's Vulnerability to Hazards | Yes |
| | Grant Manager | Yes |
| | Mutual Aid Agreement | Yes |
| | Other (if any) | |
| Fiscal Capability | 1 & 6 Year Plan | No |
| | 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 and | 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 Village USA | No |
| | Other (if any) | |

Table FAI.6: Overall Capability

| Overall Capability | Limited/Moderate/High |
|---|-----------------------|
| Financial Resources Needed to Implement Mitigation Projects | Limited |
| Staff/Expertise to Implement Projects | Limited |
| Community Support to Implement Projects | Limited |
| Time to Devote to Hazard Mitigation | Limited |

Plan Integration

In the past the Village has applied for grants in the past including CDBG housing rehabilitation grants and CCCFF grants. The local planning team noted the annual municipal budget's funds have increased over the past few years; however, funds are currently being used to improve capital improvements and water/sewer system.

The village's comprehensive plan was developed in 2013 but did not take into consideration hazard mitigation principles. Future updates of the comprehensive plan should reference HMP principles. The village has developed a 5-year electric distribution plan and conducted a water study. Both of these plans seek to reduce the impact of power outages and flooding in the area. The village has a zoning ordinance which discourages development in the floodplain or other hazardous areas.

The Local Emergency Operations Plan (LEOP) for Fairmont, which was last updated in 2017, is an annex of Fillmore County's LEOP. The plan addresses hazards such as chemical releases, severe winter storms, severe thunderstorms, and tornadoes. This plan delegates responsibilities in the post-disaster environment but contains little discussion of hazard mitigation. The plan provides a clear assignment of responsibility in case of an emergency, shelter locations, and evacuation routes but does not identify any gaps related to a particular hazard.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. 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 local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the Board Chairperson, Village Marshal, Utility Superintendent, and Village Clerk. The local planning team will review the plan no less than annually and will include the public in the review and revision process by sharing information on the community connections quarterly newsletter, updating the website, and social media posts.

Mitigation Strategy

Continued Mitigation Actions

| MITIGATION ACTION | BACKUP GENERATOR – VILLAGE HALL |
|-------------------|--|
| DESCRIPTION | Obtain a backup power generator for Village Hall |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$50,000 |
| FUNDING | Tax revenue, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | Medium |
| LEAD AGENCY | Village Clerk |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | BACKUP GENERATOR – NURSING HOME |
|-------------------|---|
| DESCRIPTION | Obtain a backup power generator for Fairview Manor nursing home |
| HAZARD(S) | All hazards |

SECTION SEVEN: VILLAGE OF FAIRMONT COMMUNITY PROFILE

| | |
|-----------------------|---|
| ESTIMATED COST | \$550,000 |
| FUNDING | Nursing Home funds, USDA, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Nursing Home, Village Clerk, Treasurer |
| STATUS | The village is currently exploring funding options. |

| MITIGATION ACTION | BURY POWER AND SERVICE LINES |
|--------------------------|---|
| DESCRIPTION | Require powerlines installed as a part of new construction to be buried |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| ESTIMATED COST | \$1M per mile |
| FUNDING | Tax revenue, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Village Board, Maintenance |
| STATUS | The village has ordered inventory and is currently waiting on contractor to begin work on north side of town. |

| MITIGATION ACTION | PUBLIC EDUCATION AND OUTREACH |
|--------------------------|---|
| DESCRIPTION | Develop an education program to inform residents of risks related to chemical releases. This could include direct outreach to residents living in the immediate vicinity of chemical storage sites. |
| HAZARD(S) | Hazardous Materials |
| ESTIMATED COST | \$500+ |
| FUNDING | Tax revenue, General Funds |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Village Board |
| STATUS | The village shares information on social media and local newspaper for residential information. |

| MITIGATION ACTION | PROVIDE BACKUP POWER SYSTEMS AND REDUNDANCIES |
|--------------------------|---|
| DESCRIPTION | Provide looped distribution service and other redundancies in the electrical system as a backup power supply in the event the primary system is destroyed or fails. |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| ESTIMATED COST | Varies |
| FUNDING | Tax revenue, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Village Board, PPD |
| STATUS | This project is in process and waiting on contractor to begin. |

| MITIGATION ACTION | SAFE ROOM/STORM SHELTERS |
|--------------------------|---|
| DESCRIPTION | Construct a handicap accessible emergency shelter |

SECTION SEVEN: VILLAGE OF FAIRMONT COMMUNITY PROFILE

| | |
|-----------------------|---|
| HAZARD(S) | Severe Thunderstorms, Sever Winter Storms, Tornadoes and High Winds |
| ESTIMATED COST | \$250/sq ft |
| FUNDING | Tax revenue, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Village Board |
| STATUS | The village noted this activity is currently cost prohibitive but a more handicap accessible shelter is needed. |

| MITIGATION ACTION | INSTALL VEHICULAR BARRIERS |
|-----------------------|--|
| DESCRIPTION | Install vehicular barriers to protect critical facilities and key infrastructure where possible. |
| HAZARD(S) | Hazardous Materials |
| ESTIMATED COST | Varies by facility |
| FUNDING | Tax revenue, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Village Board |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | PUBLIC EDUCATION AND OUTREACH |
|-----------------------|--|
| DESCRIPTION | Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural 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. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops. |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$500+ |
| FUNDING | Tax revenue, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Village Board |
| STATUS | The village needs to update available information on village website. |

| MITIGATION ACTION | SHELTER IN PLACE TRAINING |
|-----------------------|--|
| DESCRIPTION | Provide shelter in place training to facilities housing vulnerable populations (nursing homes, childcare facilities, schools, etc.). |
| HAZARD(S) | Hazardous Materials |
| ESTIMATED COST | \$1,000 |
| FUNDING | Tax revenue, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Village Board |
| STATUS | The village is currently working on this in conjunction with the nursing home, housing authority, and school. |

Removed Mitigation Actions

| MITIGATION ACTION | NFIP CONTINUATION AND ENFORCEMENT |
|---------------------------|---|
| DESCRIPTION | Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs). |
| REASON FOR REMOVAL | While the village will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA. |

COMMUNITY PROFILE

CITY OF GENEVA

Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021

Local Planning Team

Table GEN.1: City of Geneva Local Planning Team

| Name | Title | Jurisdiction |
|-----------|--------------------|----------------|
| Kyle Svec | City Administrator | City of Geneva |

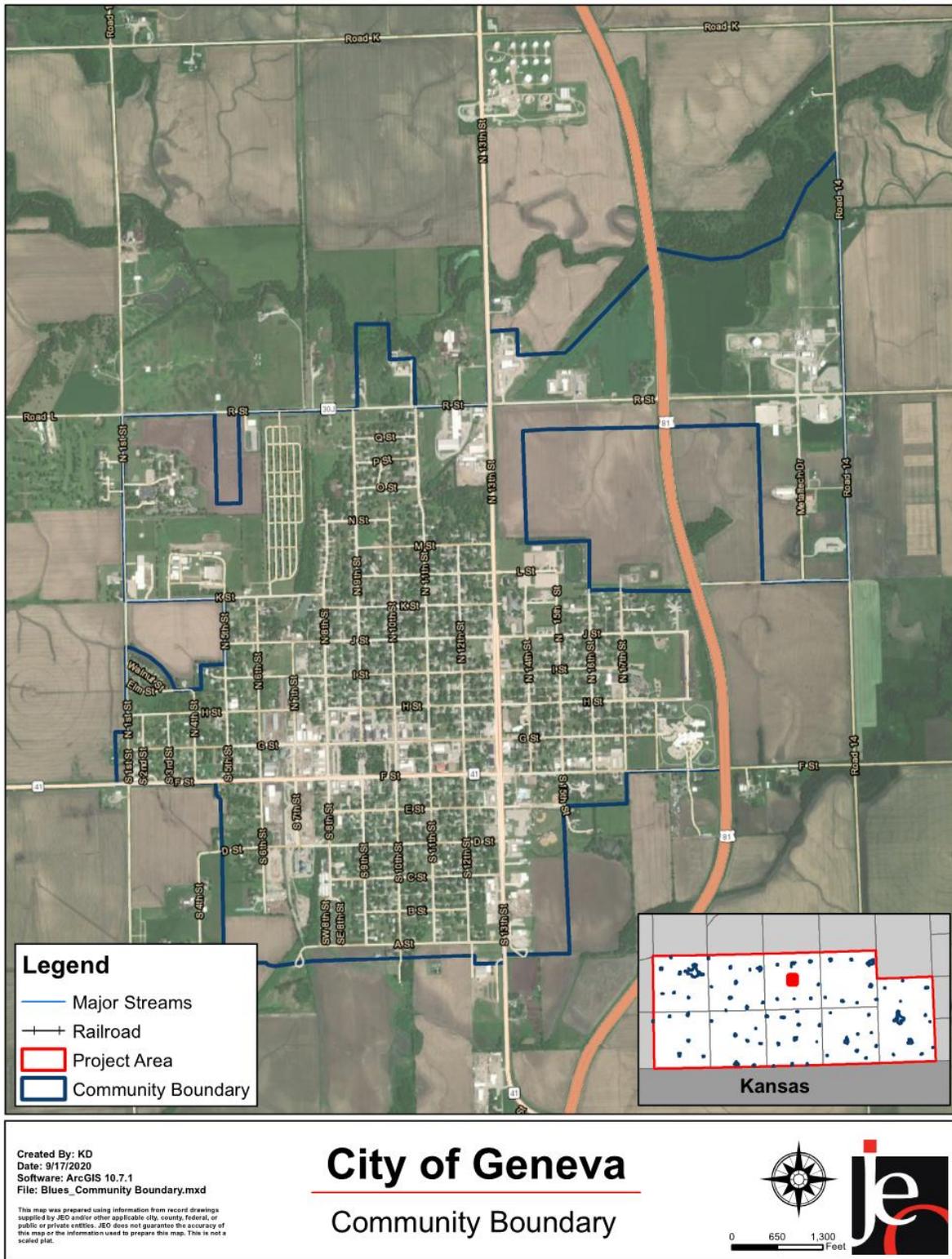
Location and Geography

The City of Geneva is located in the central portion of Fillmore County. The City of Geneva covers an area of 2.04 square miles. Major waterways within the area include Turkey Creek, which runs east to west just north of the city. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. The city lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Geneva's major transportation corridors include County Road 41, which runs east-west through the center of Geneva. CR-41 accommodates on average 855 vehicles per day, 75 of which are heavy commercial vehicles. State Highway 81 runs north-south just east of Geneva. NE-81 accommodates on average 4,900 vehicles per day, 1,030 of which are heavy commercial vehicles. There are no railroads in Geneva, however hazardous chemicals are commonly transported through Geneva via highway. Critical facilities including the hospital and fire and rescue hall sit along major highways. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

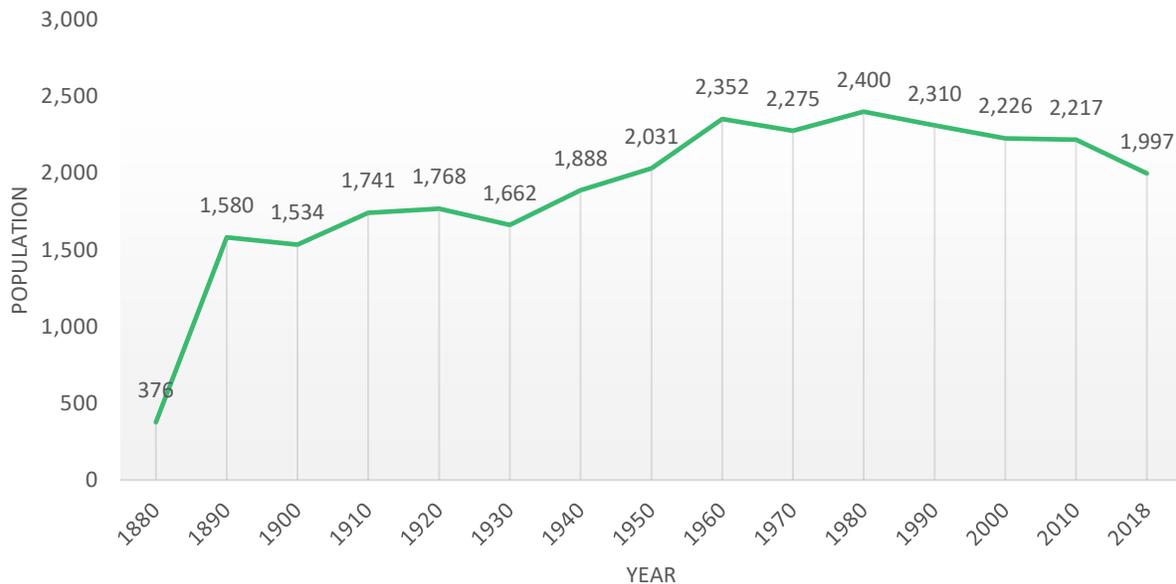
Figure GEN.1: City of Geneva Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1880 to 2018 (estimated). This figure indicates that the population of Geneva has grown between 1880 to 1980 but has declined slowly since that point. This is relevant to hazard mitigation because communities with a growing population may be more prone to developing additional land and building new structures while communities with declining populations may have larger shares of unoccupied housing or decreasing tax revenues. The city's population accounted for 36% of Fillmore County's Population in 2018.

Figure GEN.2: Geneva Population 1880-2018



Source: U.S. Census Bureau³⁰

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Geneva's population was:

- **Younger.** The median age of Geneva was 46.5 years old in 2018, compared with the County average of 47.7 years. Geneva's population has grown older since 2010, when the median age was 45.7 years old. Geneva had a larger proportion of people under 20 years old (24.5%) as the County (21.3%).³¹
- **More ethnically diverse.** Since 2010, Geneva grew in diversity. In 2010, 1% of Geneva's population was Black, 1% was American Indian, 1% other races, and 1% two or more races. By 2018 1% of Geneva's population was Black, 1% was American Indian, 1% was Asian, 1% was other races, and 2% two or more races. During that time, Fillmore County had: 1% Black, 0% to 1% American Indian, 1% other races and 1% two or more races from 2010 to 2018 respectively.³²
- **Less likely to be at the federal poverty line.** The poverty rate of all persons in Geneva (8.2%) was higher than the County (10.0%) in 2018.³³

30 United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

31 United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

32 United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

33 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

Employment and Economics

The community's economic base is a mixture of industries. In comparison to Fillmore County, Geneva's economy had:

- **Similar mix of industries.** Employment sectors accounting for 10% or more of employment in Geneva included Agriculture, Retail, and Education. In comparison Fillmore County's included Agriculture and Education in 2018.³⁴
- **Lower household income.** Geneva's median household income in 2018 (\$52,292) was about \$3,000 less than the County (\$55,625).³⁵
- **More long-distance commuters.** About 40% percent of workers in Geneva commuted for fewer than 15 minutes, compared with about 55.6% of workers in Fillmore County. About 25% of workers in Geneva commute 30 minutes or more to work, compared to about 20.8% of the County workers.³⁶

Major Employers

Major employers in the City of Geneva include the local school district and the hospital. The local planning team noted approximately 25-30% of residents commute to York, Fairmont, Shickly, Milligan, and Bruning for work.

Housing

In comparison to Fillmore County, Geneva's housing stock was:³⁷

- **More owner occupied.** About 70.5% of occupied housing units in Geneva are owner occupied compared with 75.6% of occupied housing in Fillmore County in 2018.
- **Similar share of aged housing stock.** Geneva had a similar share of houses built prior to 1970 as the county (68.8% compared to 69.9%).
- **More multi-family homes.** The predominant housing type in the city is single family detached and Geneva contains more multifamily housing with five or more units per structure than the County (12% compared to 5.2%). About 84.7% of housing in Geneva was single-family detached, compared with 90.6% of the County's housing. Geneva has a smaller share of mobile and manufactured housing (0%) compared to the County (1.1%).

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

Future Development Trends

In the past five years the city has built two new housing developments and some industrial growth has taken place in the city. In the next five years the city is exploring options to include more residential development areas. The city regularly reviews building codes to make them up to date and a future land use map update is currently under development. The population in Geneva has

34 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

35 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

36 United States Census Bureau. "2018 American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]

37 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

declined in recent years which the local planning team attributed to low economic opportunities in the area.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements 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. One structure in Geneva has been removed from the SFHA via LOMA. A summary of LOMAs can be found in the table below.

Table GEN.2: Geneva Parcel Valuation

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|-------------------|------------------------|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| 1,349 | 1,068 | \$111,742,155 | 8 | 1% | \$4,828,960 |

Source: County Assessor, GIS Workshop

Table GEN.3: Geneva Flood Map Products

| Type of Product | Product ID | Effective Date | Details |
|-----------------|--------------------|----------------|---------------------------------------|
| LOMA | 08-07-0315A-310370 | 12/31/2007 | Portion of property removed from SFHA |

Source: FEMA Flood Map Service Center

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are 11 chemical storage sites throughout Geneva which house hazardous materials. The local planning team also noted Chaney Chemical houses hazardous chemicals. Concerns for fixed chemical sites pertain primarily to blocked transportation routes for emergency services in case of spills. The local fire barn and some residential homes are located near the anhydrous ammonia tank storage. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Table GEN.4: Chemical Storage Fixed Sites

| Facility Name | Address | Located in Floodplain? |
|-------------------------------|-----------------|------------------------|
| Bioiberica Nebraska Inc | 1660 R St | N |
| Plains Equipment Group | 736 S 13th St | N |
| Geneva Terminal | 1479 N 13th St | N |
| Aurora Co-op Elevator Company | 703 G St | N |
| NDOT Geneva Yard | 535 S 13th St | N |
| IPSCO Tubulars Inc | 1201 R St | N |
| Aurora Co-op Elevator Company | Jct 7th & D Sts | N |
| Lichti Bros Oil Co Inc | 723 S 13th St | N |
| Lichti Bros Oil Co Inc | Highway 41 W | N |
| Metal-Tech Partners | 2103 R St | N |
| Fortigen Geneva LLC | 2240 R St | N |

Source: Nebraska Department of Environment and Energy³⁸

Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table GEN.5: Geneva Critical Facilities

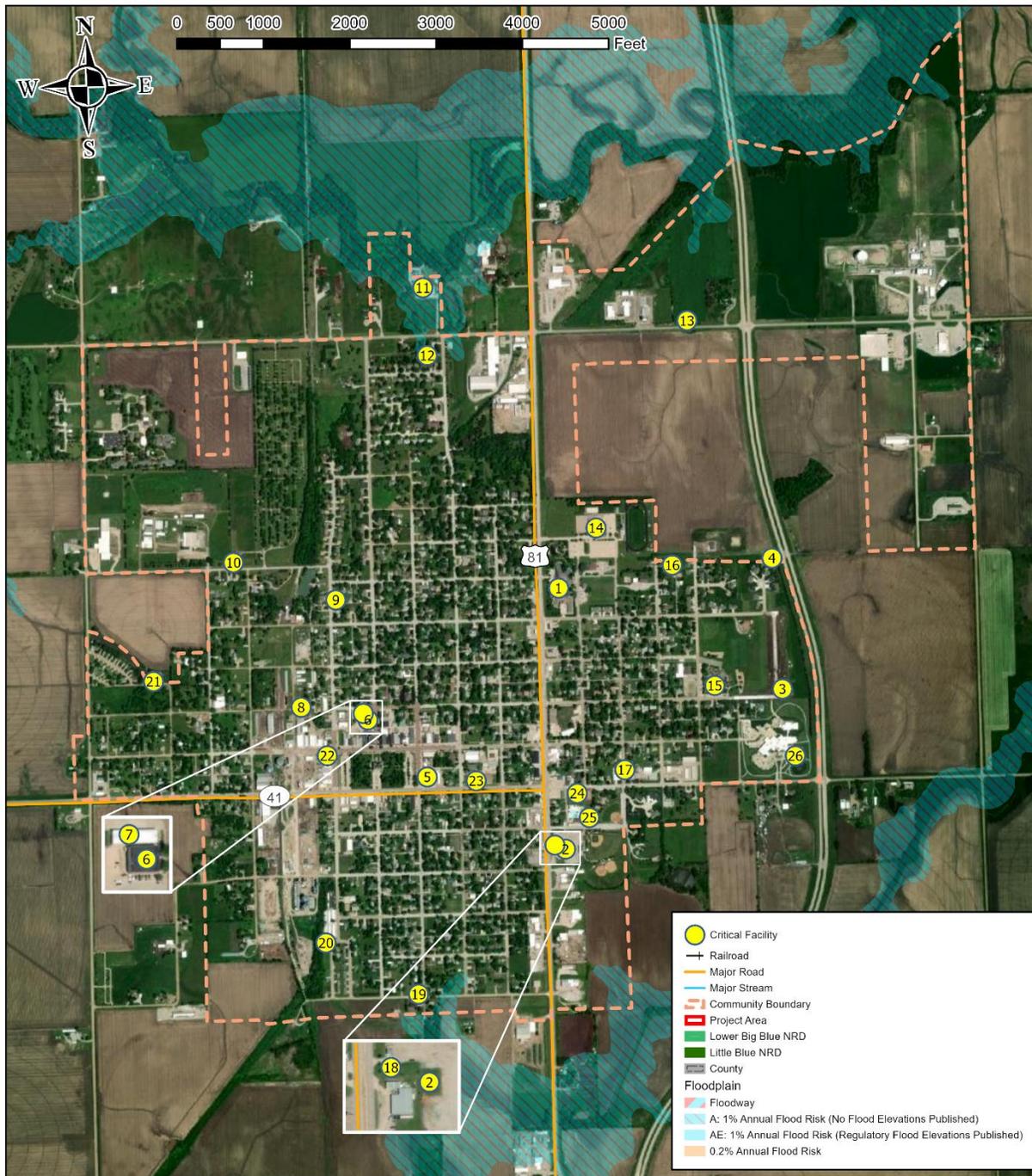
| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|--------------------------|--------------------------------|---------------|-----------------|-----------------------------|
| 1 | Health and Medical | Heritage Crossing Nursing Home | Y | N | N |
| 2 | Food, Water, and Shelter | Well 1 | N | N | N |
| 3 | Food, Water, and Shelter | Well 4 | N | N | N |
| 4 | Food, Water, and Shelter | Well 5 | N | Y | N |
| 5 | Safety and Security | City Office | Y | Y | N |
| 6 | Other | City Theater & Rec Center | Y | N | N |
| 7 | Safety and Security | Emergency and Fire Dept. | Y | Y | N |
| 8 | Other | Over Head Building | N | N | N |
| 9 | Food, Water, and Shelter | Well 2 | N | Y | N |
| 10 | Other | Cemetery Maintenance Building | N | N | N |
| 11 | Health and Medical | Waste Water Treatment Facility | Y | Y | Y |
| 12 | Food, Water, and Shelter | North Lift Station | N | Y | N |
| 13 | Health and Medical | Metal-Tech Lift Station | N | Y | N |
| 14 | Food, Water, and Shelter | High School | Y | N | N |
| 15 | Food, Water, and Shelter | Elementary School | Y | N | N |
| 16 | Food, Water, and Shelter | Water Tower | N | N | N |

³⁸ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

SECTION SEVEN: CITY OF GENEVA COMMUNITY PROFILE

| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|--------------------------|----------------------------|---------------|-----------------|-----------------------------|
| 17 | Health and Medical | Love Grove Lift Station | N | Y | N |
| 18 | Other | Park Maintenance Building | Y | N | N |
| 19 | Health and Medical | South Lift Station | N | Y | N |
| 20 | Food, Water, and Shelter | Old Well House | N | N | N |
| 21 | Health and Medical | Lift Station | N | Y | N |
| 22 | Safety and Security | Eddy's Chamber of Commerce | N | N | N |
| 23 | Health and Medical | Senior Center of Nebraska | Y | N | N |
| 24 | Other | Lions Club | Y | N | N |
| 25 | Other | Log Cabin | Y | N | N |
| 26 | Health and Medical | Hospital | Y | Y | N |

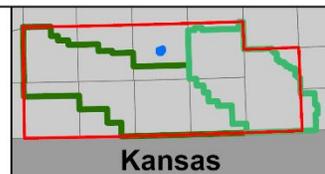
Figure GEN.3: Geneva Critical Facilities




 Created By: NL
 Date: 5/21/2021
 Software: ArcGIS Pro 2.8.0
 File: Blues Critical Facilities.aprx
 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.

City of Geneva

 Little Blue NRD and Lower Big Blue NRD
 Hazard Mitigation Plan 2021



Historical Occurrences

See the Fillmore County community profile for historical hazard events.

Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

Flooding

Geneva identified flash and riverine flooding as a hazard of concern, particularly at the wastewater treatment plant; however, impacts are limited and typically short lived. The city has never experienced interrupted service due to flooding. The city has identified the possibility to install a berm around the facility to reduce future flood impacts. The city participates in the NFIP and has two policies in force for \$377,000. There are no reported repetitive loss properties in the city.

Severe Thunderstorms

Geneva has experienced minor property damage from severe thunderstorms in the past including from lightning, hail, heavy rain, and strong winds. The main concern for future events is primarily related to property damages. Geneva has had a history of damaging hail events which have damaged many roofs and caused tree damage. Most of Geneva's buildings are metal with some metal roofs; however others are brick with asphalt shingles. A major hail storm in 2005 caused an estimated \$1,500,000 in property damages, one injury, and reported hail stones up to 2.75 inches in diameter.

Geneva's uses surge protectors for critical municipal records on electronic devices. The city office, wastewater treatment facility, and well #1 all have backup generators. Most power lines are on poles above ground. Geneva does not currently have a tree board. The city removes and trims trees as identified as hazardous. The city has weather radios at critical facilities. Residents do not currently receive information regarding hail resistant building materials when they are issued building permits. Residents can use the fire station and senior center/gym as shelter locations. The fire station recently included a generator and safe room.

Tornadoes and High Winds

The main concern for high winds and tornadoes revolves around property damage and tree damage from fallen trees. There have been no specific tornado events which have impacted the city directly. Many residents have basements which can be used for shelter. The fire station has also recently been updated to include a storm shelter. Alert sirens are located through the city and the county provides emergency text alerts during hazardous events.

The city does have mutual aid agreements with surrounding governments, which could provide support if a tornado were to occur. Geneva currently has a data backup system for their municipal records. Geneva's lower level of the old school gym is the best available option for community members to shelter from high wind events. The city has also completed a project to build a shower

at the fairground which functions as a shelter. Fairgrounds have showers which can be used for a shelter, fire station has generators and safe room. City has also added more sirens

Governance

A community’s governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Geneva has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The city has a mayor and a six-member council and the following offices: city administrator, a clerk/treasurer, attorney, utilities superintendent, fire chief, wastewater treatment operator, sewer/street/water commissioner, personnel director, planning commissioner, and purchasing officer. The County Sheriff and County Emergency Management can also assist with mitigation projects.

Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction’s planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

Table GEN.6: Capability Assessment

| Survey Components | | Yes/No |
|---------------------------------------|---|--------|
| Planning & Regulatory Capability | Comprehensive Plan | Yes |
| | Capital Improvements Plan | No |
| | Economic Development Plan | Yes |
| | Local Emergency Operational Plan | County |
| | Floodplain Ordinance | Yes |
| | Zoning Ordinance | Yes |
| | Subdivision Regulation/Ordinance | Yes |
| | Building Codes | Yes |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | Yes |
| | National Flood Insurance Program | Yes |
| | Community Rating System | No |
| Other (if any) | | |
| 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 | Yes |
| | Grant Manager | Yes |
| | 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 |

| Survey Components | | Yes/No |
|------------------------|---|--------|
| | 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 | Yes |
| | Development Impact Fees | No |
| | General Obligation Revenue or Special Tax Bonds | Yes |
| | Other (if any) | |
| Education Outreach and | 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 GEN.7: Overall Capability

| Overall Capability | Limited/Moderate/High |
|---|-----------------------|
| Financial Resources Needed to Implement Mitigation Projects | Limited |
| Staff/Expertise to Implement Projects | Moderate |
| Community Support to Implement Projects | Limited |
| Time to Devote to Hazard Mitigation | Limited |

Plan Integration

In the past the city has applied for grants to update and add tornado sirens across the city, update fire equipment, and replace fire department radios. The local planning team noted the annual municipal budget's funds have decreased over the past few years and any new capital projects would require additional bonds or grant funding.

The city's comprehensive plan was completed in 2018. The plan does discuss the steep slopes of the Turkey Creek environment as posing a hazard to the community. The plan contains future and current land use maps. This plan does not discourage development in the floodplain. No potential adverse effects to the natural environment are expected due to the implementation of the future land use plan. The city has adopted the 2018 international building codes.

The city's zoning ordinances are updated regularly. The ordinances do contain natural hazard layers and also generally discourages development in hazardous areas. This development is not

prohibited in the floodway, although there is warning and disclaimer of liability within the ordinance. Other limitations on floodplain development are not present. The floodplain ordinance was last updated in 2020. The ordinance meets state and federal standards. The city's subdivision regulations were last updated in 1998. The regulations encourage cluster or conservation subdivisions and allow for density transfers.

The city's stormwater management plan was last updated in 2008. The plan included education and outreach activities. The plan includes polices to regulate development in upland areas to reduce stormwater runoff. The city's economic development plan was last updated in 2008. The plan considers how economic develop may be impacted by hazards and promotes economic develop away from known hazard prone areas.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. 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 local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the City Administrator, Emergency Manager, City Council, and the private consultant. The local planning team will review the plan no less than annually and will include the public in the review and revision process by: updating the city website, social media posts, and sharing information at city council meetings open to the public.

Mitigation Strategy

Completed Mitigation Actions

| MITIGATION ACTION | GENERATOR FOR FIRE STATION |
|-------------------|--|
| DESCRIPTION | Obtain a back-up power generator for fire station. |
| HAZARD(S) | All hazards |
| STATUS | A generator was purchased in the last five years for the fire station. |
| FUNDING | Local taxes, HMGP, BRIC |

Continued Mitigation Actions

| MITIGATION ACTION | COMMUNICATION CENTER DEVELOPMENT |
|-------------------|--|
| DESCRIPTION | Build a Communication Center for City and County |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$3-\$4 million |
| FUNDING | Local taxes, HMA, CDBC, NCCP |
| TIMELINE | 5+ years |
| PRIORITY | High |
| LEAD AGENCY | City Administration |

SECTION SEVEN: CITY OF GENEVA COMMUNITY PROFILE

| | |
|---------------|---|
| STATUS | The action will go to a public vote in February 2021 to determine construction. |
|---------------|---|

| MITIGATION ACTION | INFRASTRUCTURE PROTECTION |
|--------------------------|---|
| DESCRIPTION | Construct a Flood Control Berm to Protect Wastewater Treatment Plan |
| HAZARD(S) | Flooding |
| ESTIMATED COST | \$200,000 |
| FUNDING | General Fund, HMGP, BRIC |
| TIMELINE | 5+ years |
| PRIORITY | Low |
| LEAD AGENCY | City Council |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | BACKUP GENERATOR - FAIRGROUNDS |
|--------------------------|---|
| DESCRIPTION | Obtain a back-up generator for fairgrounds and shower inside for shelter |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$70,000 |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 5+ years |
| PRIORITY | High |
| LEAD AGENCY | City Council, County Agricultural Society |
| STATUS | Showers have been added to the fairgrounds but a generator is still needed. |

| MITIGATION ACTION | BACKUP GENERATOR – SENIOR CENTER |
|--------------------------|---|
| DESCRIPTION | Obtain a back-up generator for senior center/gym (shelter) |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$70,000 |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 5+ years |
| PRIORITY | High |
| LEAD AGENCY | City Council, School |
| STATUS | This project is in process of a public vote for a new community center and gym. Once center is approved the city will evaluate generator needs. |

| MITIGATION ACTION | STORMWATER SYSTEM AND DRAINAGE IMPROVEMENTS |
|--------------------------|---|
| DESCRIPTION | Conduct Improvements of drainage in select locations |
| HAZARD(S) | Flooding |
| ESTIMATED COST | \$300,000 |
| FUNDING | Local taxes |
| TIMELINE | 5+ years |
| PRIORITY | Low |
| LEAD AGENCY | City Council |
| STATUS | This project has not yet been started. There are numerous locations over town that this would impact, most notably the area near the wastewater treatment plan. |

Removed Mitigation Actions

| MITIGATION ACTION | | NFIP CONTINUATION AND ENFORCEMENT | |
|---------------------------|---|-----------------------------------|--|
| DESCRIPTION | Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs). | | |
| REASON FOR REMOVAL | While the city will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA. | | |

| MITIGATION ACTION | | STORM SHELTER | |
|---------------------------|---|---------------|--|
| DESCRIPTION | Construct a storm shelter | | |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds | | |
| REASON FOR REMOVAL | This project was identified as no longer needed due to new showers at the fairgrounds and a new community center going to vote in 2021. | | |

COMMUNITY PROFILE

VILLAGE OF GRAFTON

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table GRA.1: Village of Grafton Local Planning Team

| Name | Title | Jurisdiction |
|-----------------|----------------|--------------------|
| Jim Baumann | Board Chairman | Village of Grafton |
| Don Schaldecker | Board Member | Village of Grafton |
| Suzanne Keenan | Clerk | Village of Grafton |
| Dick Fessler | Board Member | Village of Grafton |
| Eric Schmer | Board Member | Village of Grafton |

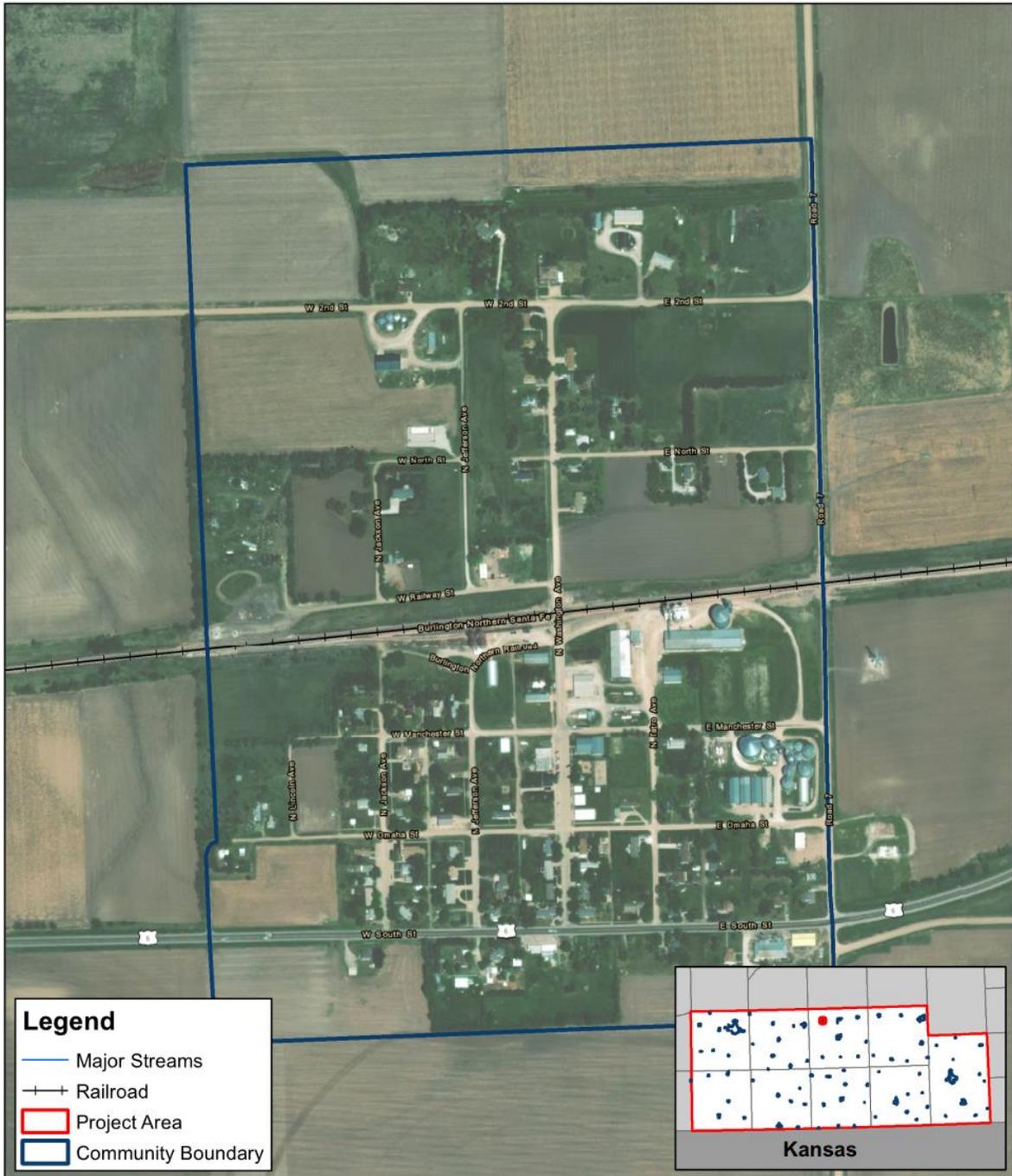
Location and Geography

The Village of Grafton is located in the north western portion of Fillmore County. The Village of Grafton covers an area of 0.35 square miles. There are no major waterways within the area, although the Marsh Hawk wetlands are located just northwest of the city. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. The village lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Grafton's major transportation corridors include State Highway 6, which runs east-west to the south of Grafton. NE-6 accommodates on average 1,535 vehicles per day, 305 of which are heavy commercial vehicles. Grafton has two rail lines, Burlington Northern Santa Fe line, and Amtrak, which runs on the same line. At Grafton, the BNSF runs east-west headed into Lincoln and west to Hastings. Hazardous materials are transported along rail and highway routes, but no major events have occurred. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

Figure GRA.1: Village of Grafton Jurisdictional Boundary



Created By: KD
 Date: 9/17/2020
 Software: ArcGIS 10.7.1
 File: Blues_Community Boundary.mxd

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Village of Grafton

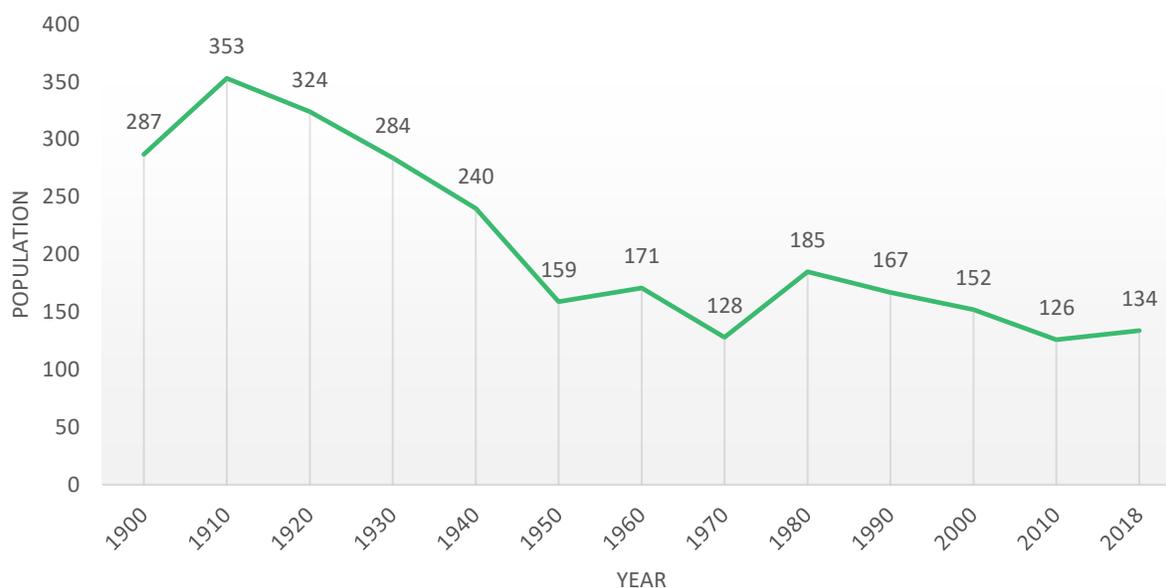
Community Boundary



Demographics

The following figure displays the historical population trend from 1990 to 2018 (estimated). This figure indicates that the population of Grafton has declined between 1910 and 1950, grew until 1980 but has experienced an additional decline since then. This is relevant to hazard mitigation because communities with a growing population may be more prone to developing additional land and building new structures while communities with declining populations may have larger shares of unoccupied housing or decreasing tax revenues. The village's population accounted for 2% of Fillmore County's Population in 2018.

Figure GRA.2: Grafton Population 1900-2018



Source: U.S. Census Bureau³⁹

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Grafton's population was:

- **Younger.** The median age of Grafton was 38.7 years old in 2018, compared with the County average of 47.7 years. Grafton's population has grown younger since 2010, when the median age was 45.3 years old. Grafton had a smaller proportion of people under 20 years old (20.9%) as the County (21.3%).⁴⁰
- **Less ethnically diverse.** Since 2010, Grafton grew in diversity. In 2010, 1% of Grafton's population was Black. By 2018 3% of Grafton's population was Black and 1% was two or more races. During that time, Fillmore County had: 1% Black, 0% to 1% American Indian, 1% other races and 1% two or more races from 2010 to 2018 respectively.⁴¹
- **More likely to be at the federal poverty line.** The poverty rate of all persons in Grafton (12.7%) was higher than the County (10.0%) in 2018.⁴²

39 United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

40 United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

41 United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

42 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

Employment and Economics

The community's economic base is a mixture of industries. In comparison to Fillmore County, Grafton's economy had:

- **Varied mix of industries.** Employment sectors accounting for 10% or more of employment in Grafton included Manufacturing, Retail, Education, and Arts and entertainment. In comparison Fillmore County's included Agriculture and Education in 2018.⁴³
- **Lower household income.** Grafton's median household income in 2018 (\$51,250) was about \$4,000 less than the County (\$55,625).⁴⁴
- **More long-distance commuters.** About 27.2% percent of workers in Grafton commuted for fewer than 15 minutes, compared with about 55.6% of workers in Fillmore County. About 41.8% of workers in Grafton commute 30 minutes or more to work, compared to about 20.8% of the County workers.⁴⁵

Major Employers

Major employers in Geneva include CPI and Heartland Bank; however, majority of working residents commute to surrounding communities for employment.

Housing

In comparison to Fillmore County, Grafton's housing stock was:⁴⁶

- **More owner occupied.** About 95.3% of occupied housing units in Grafton are owner occupied compared with 75.6% of occupied housing in Fillmore County in 2018.
- **Smaller share of aged housing stock.** Grafton has fewer houses built prior to 1970 than the county (61.1% compared to 69.9%).
- **Fewer multi-family homes.** The predominant housing type in the village is single family detached and Grafton contains few multifamily housing with five or more units per structure than the County (0% compared to 5.2%). About 88.9% of housing in Grafton was single-family detached, compared with 90.6% of the County's housing. Grafton has a larger share of mobile and manufactured housing (8.3%) compared to the County (1.1%). Mobile and manufactured homes are located primarily along north Washington Avenue.

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

⁴³ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

⁴⁴ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

⁴⁵ United States Census Bureau. "2018 American Fact Finder: s0802: Means of Transportation to Work by Selected Characteristics." [database file]

⁴⁶ United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

In the past five years one new business opened in Grafton, an automotive repair shop off of Highway 6. No other changes have occurred in the village. The population in Grafton has declined in recent years which the local planning team has attributed to an aging population; however, current census information suggests this population may be stabilizing. No new developments are planned for the next five years.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements 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. No LOMAs were identified for the Village of Grafton.

Table GRA.2: Grafton Parcel Valuation

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|-------------------|------------------------|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| 170 | 86 | \$3,612,920 | 0 | 0% | \$0 |

Source: County Assessor, GIS Workshop

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there is one chemical storage site in Grafton which houses hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Table GRA.3: Chemical Storage Fixed Sites

| Facility Name | Address | Located in Floodplain? |
|------------------------|------------|------------------------|
| Grafton Oil Bulk Plant | E South St | N |

Source: Nebraska Department of Environment and Energy⁴⁷

⁴⁷ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

Critical Facilities

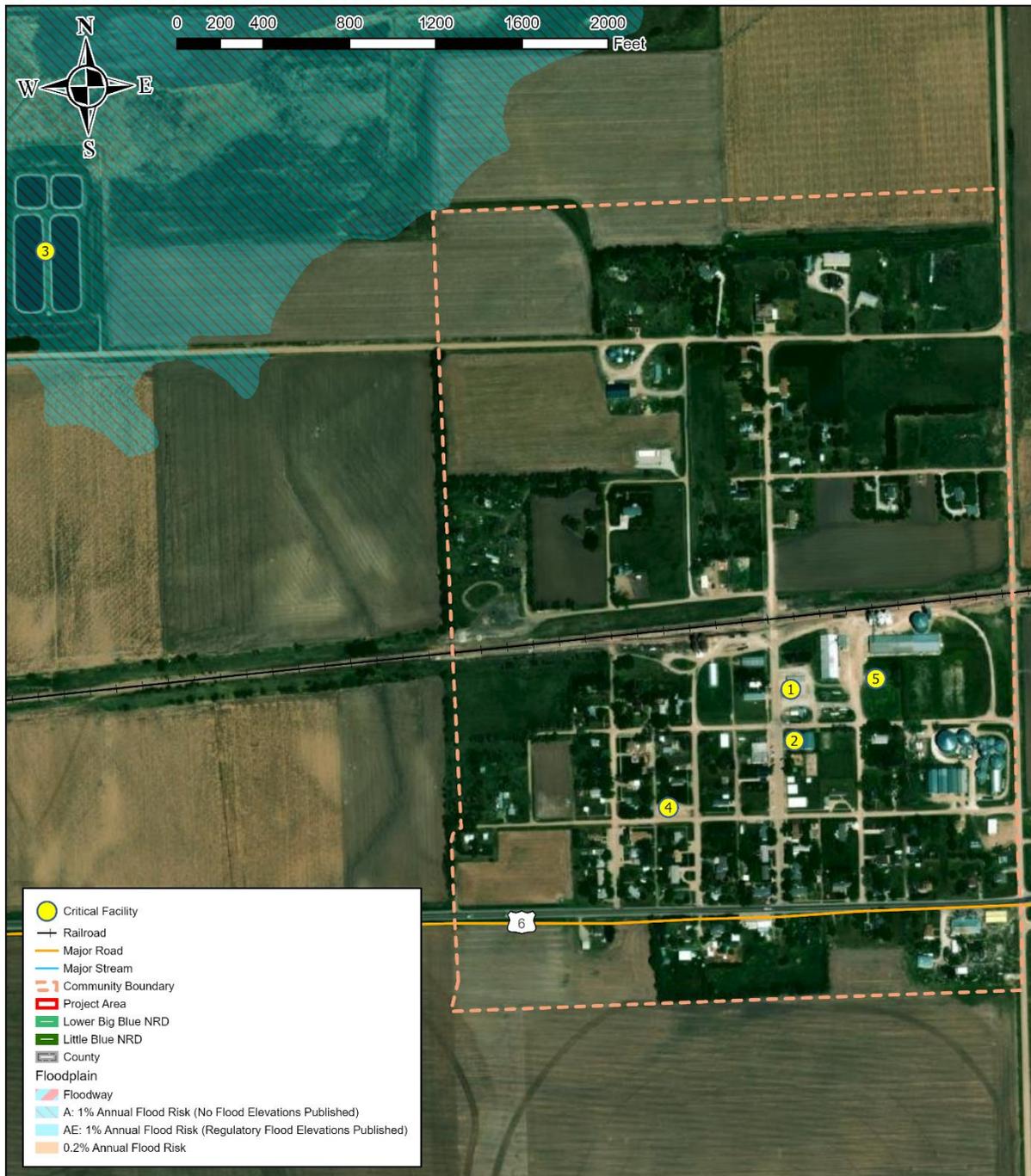
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table GRA.4: Grafton Critical Facilities

| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|--------------------------|----------------------------------|---------------|-----------------|-----------------------------|
| 1 | Safety and Security | Fire Hall/ Barn | Y | N | N |
| 2 | Food, Water, and Shelter | Community Center/ Village Office | Y | N | N |
| 3 | Health and Medical | Sewage Lagoons | N | N | Y |
| 4 | Food, Water, and Shelter | Water Storage - Pressure System | N | Y | N |
| 5 | Hazardous Materials | Fuel Storage | N | N | N |

Figure GRA.3: Grafton Critical Facilities



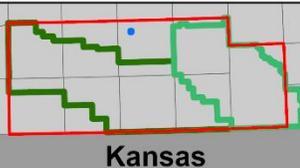


Created By: NL
Date: 5/21/2021
Software: ArcGIS Pro 2.8.0
File: Blues Critical Facilities.aprx

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.

Village of Grafton

Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021



Kansas

Historical Occurrences

See the Fillmore County community profile for historical hazard events.

Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

Hazardous Materials

While no significant chemical spills have occurred in recent years, the village is primarily concerned about transportation spills. The anhydrous ammonia tank of concern has been removed from the village. No major transportation incidents or rail derailments with chemicals transported along the BNSF railroad have occurred. There are no critical sites located near this facility or route, nor are there other storage facilities of concern.

Residents are not believed to be educated about this risk, or the appropriate response. The local fire department would be responsible for any response to such an incident and has protective gear and training. However, the local planning team noted the fire department is located ½ block from the BNSF track and additional volunteers to respond to the local incidents.

Severe Thunderstorms

Severe thunderstorms can produce severe-criteria wind (50 knots or 58 mph), heavy rain, lighting, and hail. The NCEI officially reported 14 hail events and eight thunderstorm wind events which have impacted the Village of Grafton. Altogether these storms caused over \$603,000 in property damages. The village experienced significant hail of 2.75 inches in diameter in 2004. The NCEI reported this event as: *“One of the worst severe weather outbreaks in recent years struck south-central Nebraska the afternoon and evening of May 22. No less than 17 different tornadoes rolled across south-central Nebraska. Dozens of homes were damaged and a few completely destroyed. Over 250 center irrigation pivots were damaged or destroyed in south-central Nebraska alone. Large hail and strong straight-line winds of up to 80 mph also wreaked havoc on the region. Several million dollars in property damage was reported. Hundreds of power poles were snapped resulting in dozens of miles of downed electrical line.”*

The village is concerned about structural damage, downed trees, and power outages caused by these storms. A backup generator has been installed on one community well. The village needs a backup generator for the fire hall, village office, one well, and community center. Additionally the village noted poor stormwater drainage at the city park contributes to localized flooding on community roads. The village identified the need to evaluate and improve drainage in this area.

Severe Winter Storms

Fillmore County and the village have experienced many severe winter storms in recent years. Severe winter storms include impacts from heavy snow, ice accumulation, extreme cold, winter storms, and blizzards. Past events have caused whiteout conditions in the village and blocked

major transportation routes. Primary concerns for severe winter storms include loss of power and blocked roads. There are no designated snow routes in town. The village owns a tractor and village pickup which each have snow blades. The tractor also has a bucket to move large amounts of snow. The local planning team noted the village needs a new blade.

Tornadoes and High Winds

The Grafton area has experienced damaging tornados, most recently and significantly on May 11, 2014, when a series of three tornados, rated EF-3, EF-2, and EF-0, caused at least \$5 million in property damage within a few miles of town. Property damage is the village's main worry from this hazard. Critical facilities within the village have not been damaged by a tornado in recent years.

The city does not have a community safe room, so residents must rely on their own or a neighbor's basement or storm shelter for safety. The village does not backup its electronic municipal records. Fillmore County does offer text alerts for severe weather. The village does not offer emergency preparedness outreach in the community. The village has mutual aid agreements in place with Fillmore County, Fairmont, and Sutton.

Flooding

While flooding was not identified as a hazard of top concern, a floodplain area is identified to the northwest of town at the Marsh Hawk Wildlife Management Area. Flooding here would not likely impact community facilities. The village does not participate in the NFIP and there are no reported repetitive loss properties in the village.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Grafton has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a five member council and the following offices: clerk/treasurer, attorney, fire chief, sewage plant operator, water commissioner, and street superintendent. Fillmore County Emergency Management may also provide assistance when pursuing hazard mitigation actions.

Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

Table GRA.5: Capability Assessment

| Survey Components | | Yes/No |
|--------------------------------------|----------------------------------|--------|
| Planning Regulatory Capability | Comprehensive Plan | No |
| | Capital Improvements Plan | No |
| | Economic Development Plan | No |
| | Local Emergency Operational Plan | County |

SECTION SEVEN: VILLAGE OF GRAFTON COMMUNITY PROFILE

| Survey Components | | Yes/No |
|---------------------------------------|---|--------|
| | Floodplain Ordinance | No |
| | Zoning Ordinance | No |
| | Subdivision Regulation/Ordinance | No |
| | Building Codes | No |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | No |
| | National Flood Insurance Program | No |
| | Community Rating System | No |
| | Other (if any) | |
| Administrative & Technical Capability | Planning Commission | No |
| | Floodplain Administration | No |
| | 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 | 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 and | 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 GRA.6: Overall Capability

| Overall Capability | Limited/Moderate/High |
|---|-----------------------|
| Financial Resources Needed to Implement Mitigation Projects | Limited |
| Staff/Expertise to Implement Projects | Moderate |
| Community Support to Implement Projects | Limited |
| Time to Devote to Hazard Mitigation | Moderate |

Plan Integration

The LEOP for the village is an annex to the Fillmore County plan. The LEOP was last updated in 2016, and addresses flooding, mass vaccinations, agricultural disease, terrorism, debris management, and hazardous materials release. Debris management and terrorism are the hazards of highest concern in the plan. The plan provides a clear assignment of responsibility in case of an emergency and does not identify any gaps related to a particular hazard.

The local planning team noted the annual municipal budget's funds have decreased in the past few years. At this time, there is little room in the budget for additional projects. The village follows all County or State required building codes and zoning requirements. No other planning mechanisms were identified which incorporate hazard mitigation goals and objectives.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. 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 local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the Village Board, Village Maintenance Supervisor, and the Village Clerk. The local planning team will review the plan no less than annually and will include the public in the review and revision process by: sharing information at board meetings open to the public.

Mitigation Strategy

Continued Mitigation Actions

| MITIGATION ACTION | BACKUP GENERATORS |
|-------------------|--|
| DESCRIPTION | Obtain backup power generators for fire department, shelter location, and the two community wells. |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$50,000 each |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | High |

SECTION SEVEN: VILLAGE OF GRAFTON COMMUNITY PROFILE

| | |
|--------------------|--|
| LEAD AGENCY | Village Board |
| STATUS | Generator has been installed on one well. One additional generator is needed for the other well, fire hall, and shelter. |

| MITIGATION ACTION | STORMWATER SYSTEM AND DRAINAGE IMPROVEMENTS |
|--------------------------|---|
| DESCRIPTION | Conduct drainage evaluation at the City Park. Improve drainage at City Park |
| HAZARD(S) | Flooding, Severe Thunderstorms |
| ESTIMATED COST | \$100,000 |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 2-5 years |
| PRIORITY | High |
| LEAD AGENCY | Village Maintenance |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | PUBLIC EDUCATION AND OUTREACH |
|--------------------------|--|
| DESCRIPTION | Through activities such as outreach projects, distribution of maps and environmental education increase public awareness of natural 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. Also, educate citizens on water conservation methods, evacuation plans, etc. In addition, purchasing equipment such as overhead projectors and laptops. |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$500 |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 5+ years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | SAFE ROOMS/STORM SHELTERS |
|--------------------------|--|
| DESCRIPTION | Install a safe room at the village offices |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$200-\$250/sq ft |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 2-5 years |
| PRIORITY | High |
| LEAD AGENCY | Village Maintenance |
| STATUS | This project has not yet been started. |

COMMUNITY PROFILE

VILLAGE OF MILLIGAN

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table MIL.1: Village of Milligan Local Planning Team

| Name | Title | Jurisdiction |
|----------------|-------------------------|---------------------|
| Eric W. Milton | Chairman of the Board | Village of Milligan |
| Vicky Thompson | Village Clerk/Treasurer | Village of Milligan |
| John Zelenka | Maintenance Personnel | Village of Milligan |

Location and Geography

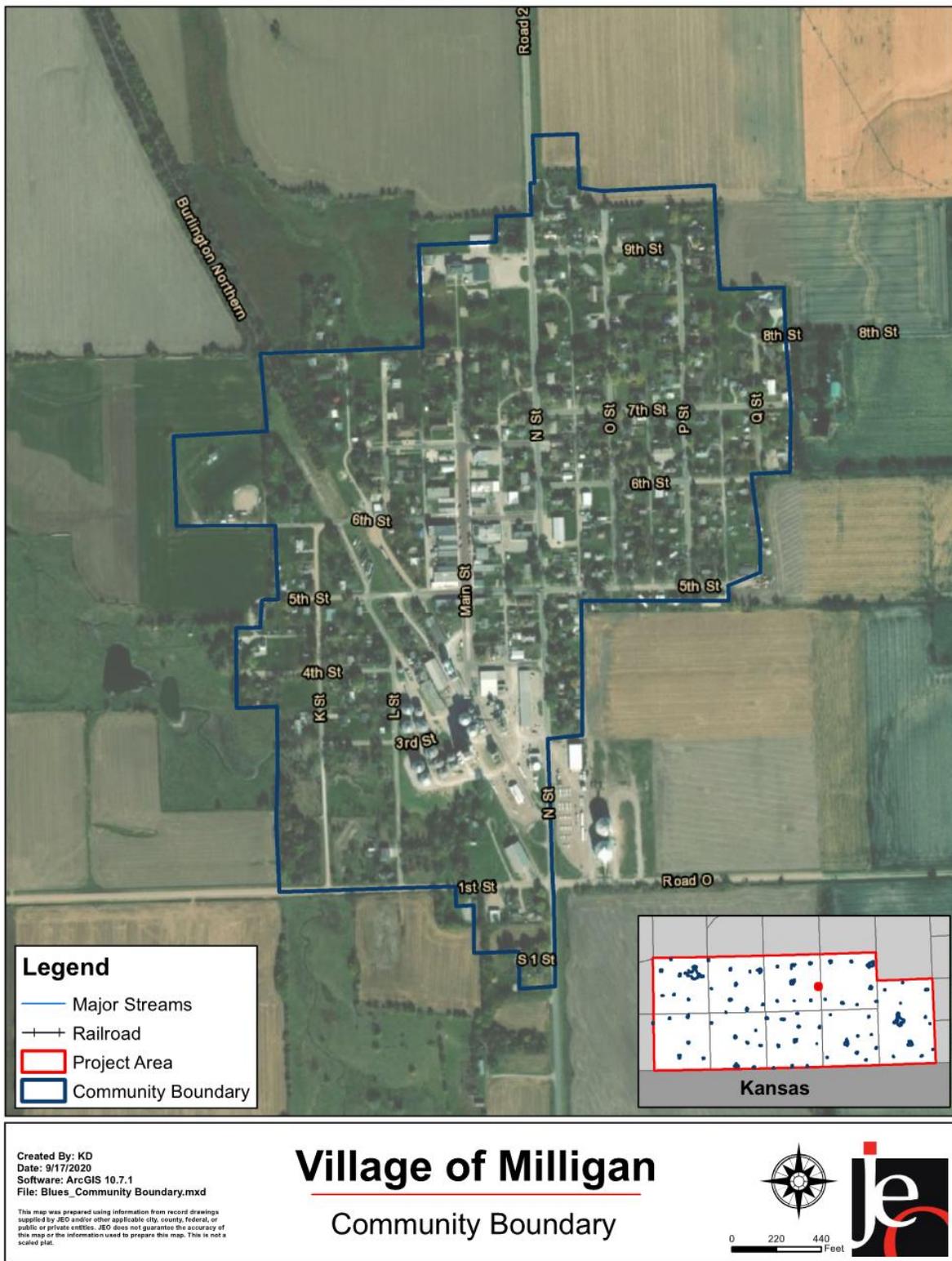
The Village of Milligan is located in the east central portion of Fillmore County and covers an area of 0.25 square miles. There are no major waterways within the area. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. The village lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Milligan's major transportation corridors include Nebraska Highway Spur 30H/County Road 24 which runs north-south through the village, and County Road O which runs along the southern border. Milligan does not have any rail lines. Farmer's Cooperative transports chemicals using N Street (Road 24) and Road O. They transport common chemicals used for spraying and fertilizing fields, fuel, and other unknown substances. No significant transportation events or spills have occurred locally that the planning team is aware of.

Some critical facilities are located along main transportation routes. Water wells are located a quarter mile north of the village on County Road 24. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

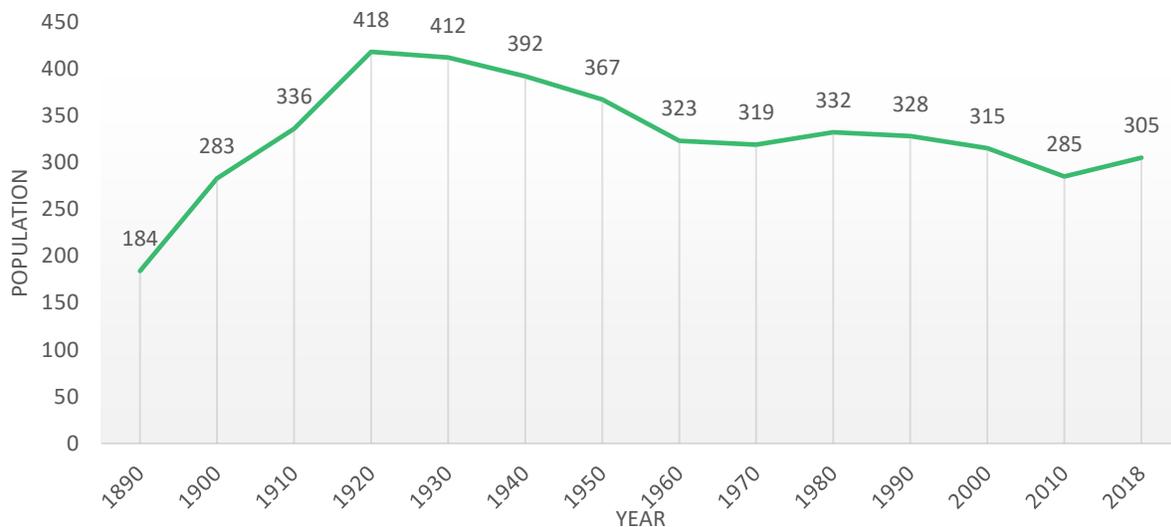
Figure MIL.1: Village of Milligan Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1890 to 2018 (estimated). This figure indicates that the population of Milligan increased dramatically until 1920. It experienced a gradual decline between 1920 and 1970, then again from 1980-2010. However, the census estimates indicate that population may have stabilized or increased slightly since then. This is relevant to hazard mitigation because communities with a growing population may be more prone to developing additional land and building new structures, while communities with declining populations may have larger shares of unoccupied housing or decreasing tax revenues. The village's estimated population accounted for 5 percent of Fillmore County's total population in 2018.

Figure MIL.2: Milligan Population 1890-2018



Source: U.S. Census Bureau⁴⁸

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the county, Milligan's population was:

- Older.** The median age of Milligan was 48.8 years old in 2018, compared with the county average of 47.7 years. Milligan's population has grown younger since 2010, when the median age was 50.7 years old. Milligan had a greater proportion of people under 20 years old (23.9%) than the county (21.3%).⁴⁹
- Less ethnically diverse.** Since 2010, Milligan declined in diversity. In 2010, 2% of Milligan's population was two or more races. By 2018 1% of the population was two or more races and 99% was White, non-Hispanic. During that time, Fillmore County had: 1% Black, 0% to 1% American Indian, 1% other races and 1% two or more races from 2010 to 2018 respectively.⁵⁰
- More likely to be at the federal poverty line.** The poverty rate of all persons in Milligan (24.9%) was higher than the county (10.0%) in 2018.⁵¹

48 United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

49 United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

50 United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

51 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

Employment and Economics

The community's economic base is a mixture of industries. In comparison to Fillmore County, Milligan's economy had:

- **Different mix of industries.** Employment sectors accounting for 10% or more of employment in Milligan included Manufacturing, Education, and Agriculture. In comparison Fillmore County's included Agriculture and Education in 2018.⁵²
- **Lower household income.** Milligan's median household income in 2018 (\$33,750) was about \$22,000 less than the county (\$55,625).⁵³
- **More long-distance commuters.** About 50% percent of workers in Milligan commuted for fewer than 15 minutes, compared with about 55.6% of workers in Fillmore County. About 22.4% of workers in Milligan commute 30 minutes or more to work, compared to about 20.8% of the county workers.⁵⁴

Major Employers

Major employers in the community include Farmer's Cooperative, Kassik Milling Company, Exeter-Milligan School District, Farmer's and Merchant's Bank, and Milligan Insurance Agency. While many residents work within the community, some residents commute to Geneva, York, Exeter, Lincoln, Crete, and Hebron.

Housing

In comparison to Fillmore County, Milligan's housing stock was:⁵⁵

- **More owner occupied.** About 77.3% of occupied housing units in Milligan are owner occupied compared with 75.6% of occupied housing in Fillmore County in 2018.
- **Greater share of aged housing stock.** Milligan has more houses built prior to 1970 than the county (71.8% compared to 69.9%).
- **More multi-family homes.** The predominant housing type in the village is single family detached and Milligan contains more multifamily housing with five or more units per structure than the county (6.9% compared to 5.2%). About 85.1% of housing in Milligan was single-family detached, compared with 90.6% of the county's housing. Milligan has a larger share of mobile and manufactured housing (8.0%) compared to the county (1.1%). The local planning team notes there is one mobile home currently in Milligan.

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

⁵² United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

⁵³ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

⁵⁴ United States Census Bureau. "2018 American Fact Finder: s0802: Means of Transportation to Work by Selected Characteristics." [database file]

⁵⁵ United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

Over the past five years, one new home was built while two older homes were destroyed during a fire and ultimately demolished. No new structures developed in the floodplain or other hazardous areas. As noted in the demographics section, Milligan's population has stabilized or increased slightly. There are no new housing, businesses or industry developments planned for the next five years.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements 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. No LOMAs were identified for the Village of Milligan.

Table MIL.2: Milligan Parcel Valuation

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|-------------------|------------------------|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| 241 | 166 | \$7,732,140 | 1 | 1% | \$65,830 |

Source: County Assessor, GIS Workshop

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there is one chemical storage site in Milligan which houses hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident. Road 24 is at risk if spills occurred. Primary concerns exist for highways and neighboring businesses which would be impacted in case of chemical spill. No critical facilities or vulnerable populations are located near fixed chemical sites and no chemical spill events have occurred locally.

Table MIL.3: Chemical Storage Fixed Sites

| Facility Name | Address | Located in Floodplain? |
|----------------------|----------|------------------------|
| Farmer's Cooperative | 307 N St | N |

Source: Nebraska Department of Environment and Energy⁵⁶

⁵⁶ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update.

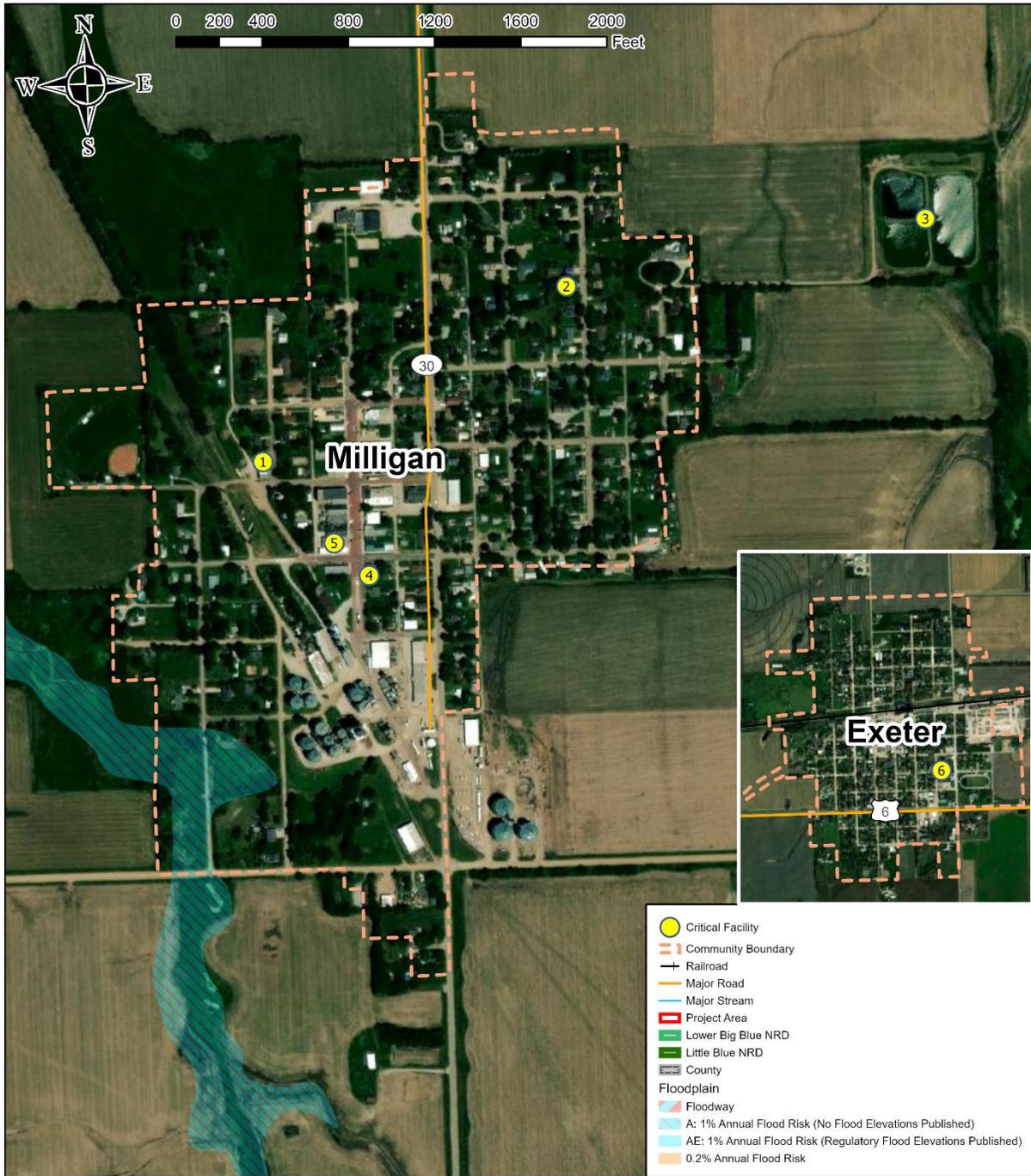
The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table MIL.4: Milligan Critical Facilities

| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|--------------------------|-------------------------|---------------|-----------------|-----------------------------|
| 1 | Food, Water, and Shelter | Water Tower | N | N | N |
| 2 | Health and Medical | North East Lift Station | N | Y | N |
| 3 | Health and Medical | Lagoon | N | N | N |
| 4 | Safety and Security | Village Office | N | N | N |
| 5 | Food, Water, and Shelter | Exeter-Milligan School | Y | N | N |
| 6 | Food, Water, and Shelter | Milligan Auditorium | Y | N | N |
| 7 | Food, Water, and Shelter | North & South Wells* | N | Y | N |

*Note the north and south wells are not mapped.

Figure MIL.3: Milligan Critical Facilities



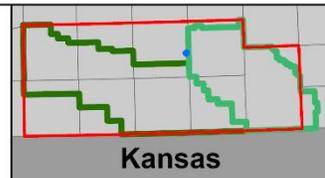
- Critical Facility
- Community Boundary
- Railroad
- Major Road
- Major Stream
- Project Area
- Lower Big Blue NRD
- Little Blue NRD
- County
- Floodplain**
- Floodway
- A: 1% Annual Flood Risk (No Flood Elevations Published)
- AE: 1% Annual Flood Risk (Regulatory Flood Elevations Published)
- 0.2% Annual Flood Risk



Created By: NL
 Date: 5/21/2021
 Software: ArcGIS Pro 2.8.0
 File: Blues Critical Facilities.aprx
 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.

Village of Milligan Critical Facilities

Little Blue NRD and Lower Big Blue NRD
 Hazard Mitigation Plan 2021



Historical Occurrences

See the Fillmore County community profile for historical hazard events.

Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

Drought and Extreme Heat

Per the National Centers for Environmental Information, the planning area spent about one third of years 1895 to 2020 in drought, with 11 percent in severe or extreme drought. Fillmore County has experienced one extreme heat event since 2016. According to the U.S. Drought Monitor, July 2013 ended 14 months of moderate to extreme drought in South Central Nebraska, the most notable drought since the 1950s. The main concerns for Milligan in drought are ensuring economic stability for the local agriculture industry, as well as drinking water quality and availability. The village obtains water from municipal wells, which pump water into a water tower; however well supplies have not experienced low levels which have impacted the village. . Extreme heat is a concern because of public health and safety in addition to decreased agricultural yield. The village can impose watering restrictions if needed but additional water supplies would need to be trucked in if water supplies were depleted. The village does not have a separate drought monitoring board.

Severe Thunderstorms

Severe thunderstorms are frequent occurrences in Fillmore County, and Milligan is prone to these storms. The village's main concerns about severe thunderstorms are power outages and structural damage. Storms of this magnitude also damage crops for local farmers. According to the National Centers for Environmental Information, the last documented severe thunderstorm in Milligan occurred on June 30, 2018, causing a large tree to fall on a home and resulting in \$35,000 of property damage. On May 11, 2018, a group of severe storms with winds up to 70 mph but did not result in any losses in Milligan. Additionally, while a hailstorm in October 2013 did not result in property damage to Milligan, the caused \$65,000 in damage throughout the county. Local municipal records are protected by surge protectors and backed up off site daily.

Severe Winter Storms

Milligan is prone to severe winter weather and the region also experiences periodic ice storms. Severe winter storms can include impacts from heavy snow, extreme cold, blizzards, ice accumulation and winter storms. The village's main concern from this hazard is road blockages, which could impede the provision of emergency services, and utility damage. No critical facilities in the village have been damaged by a severe winter storm. The village does utilize snow fences in town. To mitigate this hazard, the village plans to obtain backup power generators for critical facilities.

Tornadoes and High Winds

Tornadoes and high winds commonly occur across the planning area. While a storm shelter at the local school is available to staff and students there are no other community shelters in the village. The Milligan Auditorium may be available as a shelter location in the case of storm events. Sirens in town are sufficient to reach all residents. High winds are a concern to utilities and community structures. The county does have mutual aid agreement with all neighboring jurisdictions, should additional disaster response personnel be necessary. While there haven't been damages in the past, climatology indicates that the region is at risk of property damages, downed power lines and power failure, among other disruptions caused by tornadoes.

Flooding

Flooding was not identified as a hazard of top concern for the village. Floodplain areas are located west of the community and overlap some parcels on the southwest part of town. The village does not participate in the NFIP.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Milligan has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a five member board and the following offices: clerk/treasurer, attorney, fire chief, utility superintendent, and sewer/street/water commissioner.

Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

Table MIL.5: Capability Assessment

| Survey Components | | Yes/No |
|---------------------------------------|----------------------------------|--------------|
| Planning & Regulatory Capability | Comprehensive Plan | Yes (County) |
| | Capital Improvements Plan | No |
| | Economic Development Plan | No |
| | Local Emergency Operational Plan | Yes |
| | Floodplain Ordinance | No |
| | Zoning Ordinance | Yes |
| | Subdivision Regulation/Ordinance | No |
| | Building Codes | Yes |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | No |
| | National Flood Insurance Program | No |
| Community Rating System | No | |
| Administrative & Technical Capability | Planning Commission | No |
| | Floodplain Administration | No |
| | GIS Capabilities | No |

| Survey Components | | Yes/No |
|------------------------|---|--------|
| | Chief Building Official | No |
| | Civil Engineering | No |
| | Local Staff Who Can Assess Community's Vulnerability to Hazards | Yes |
| | Grant Manager | Yes |
| | Mutual Aid Agreement | Yes |
| 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 |
| Education and Outreach | 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 |

Table MIL.6: Overall Capability

| Overall Capability | Limited/Moderate/High |
|---|-----------------------|
| Financial Resources Needed to Implement Mitigation Projects | Limited |
| Staff/Expertise to Implement Projects | Moderate |
| Community Support to Implement Projects | Moderate |
| Time to Devote to Hazard Mitigation | Limited |

Plan Integration

Over the last five years, the village has applied for security grants, and was awarded a grant for well controls and generators at both wells. Municipal funds are limited to maintaining current facilities and systems. Funds have mostly stayed the same but will likely increase after the sales tax initiative was passed in October 2020. A large portion of funds are dedicated to street improvement on N St and repainting the interior of the water tower in the next four years.

The Village has a Comprehensive Plan and Zoning Ordinance which were last updated in 2013. The Comprehensive Plan address floodplains, wetlands, severe storms, and first responders reaching developed areas. The Comprehensive Plan is aimed at safe growth principles and is anticipated to be updated every ten years. The village uses the county and state building codes.

The Local Emergency Operations Plan (LEOP) for Fairmont, which was last updated in 2017, is an annex of Fillmore County's LEOP. The plan addresses hazards such as chemical releases, severe winter storms, severe thunderstorms, and tornadoes. This plan delegates responsibilities in the post-disaster environment but contains little discussion of hazard mitigation. The plan provides a clear assignment of responsibility in case of an emergency, shelter locations, and evacuation routes but does not identify any gaps related to a particular hazard.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. 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 local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the village clerk and village board. The local planning team will review the plan no less than annually and will include the public in the review and revision process by sharing information at board meetings open to the public and on the village website.

Mitigation Strategy

New Mitigation Actions – 2021 Plan

| MITIGATION ACTION | WATER TOWER IMPROVEMENTS |
|-------------------|--|
| DESCRIPTION | Recoat the interior of the water tower |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$40,000 |
| FUNDING | Sales tax |
| TIMELINE | 2-5 years |
| PRIORITY | High |
| LEAD AGENCY | Village Board |
| STATUS | This is a new mitigation action. |

COMMUNITY PROFILE

VILLAGE OF OHIOVA

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table OHI.1: Village of Ohiova Local Planning Team

| Name | Title | Jurisdiction |
|------------|----------------|-------------------|
| Gary Bulin | Board Chairman | Village of Ohiova |

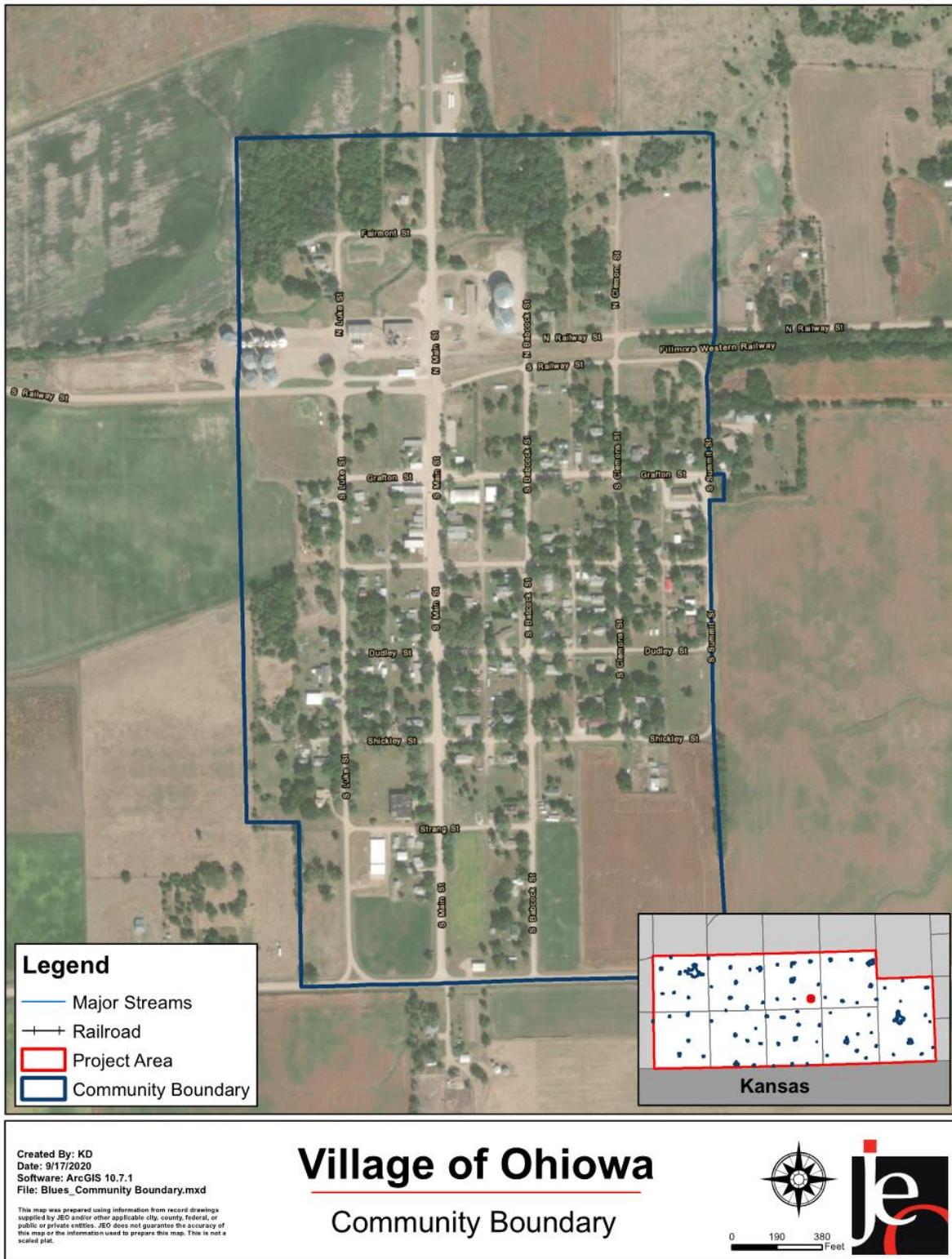
Location and Geography

The Village of Ohiova is located in the south eastern portion of Fillmore County. The Village of Ohiova covers an area of 0.25 square miles. There are no major waterways within the area. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. The village lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Ohiova's major transportation corridors include spur 30C runs north-south and connects Ohiova to CR-74 to the north. S30C accommodates on average 385 vehicles per day, 40 of which are heavy commercial vehicles. Ohiova does not have any rail lines. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

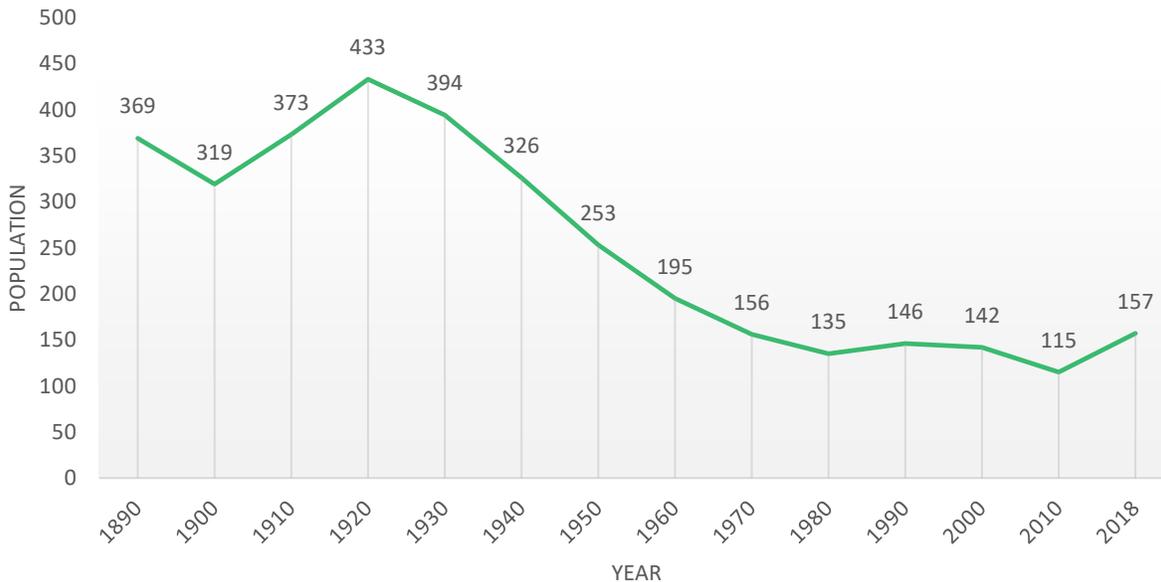
Figure OHI.1: Village of Ohioa Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1890 to 2018 (estimated). This figure indicates that the population of Ohiowa has declined between 1920 and 2010, with an increase since 2010. This is relevant to hazard mitigation because communities with a growing population may be more prone to developing additional land and building new structures while communities with declining populations may have larger shares of unoccupied housing or decreasing tax revenues. The village's population accounted for approximately 3% of Fillmore County's population in 2018.

Figure OHI.2: Ohiowa Population 1890-2018



Source: U.S. Census Bureau⁵⁷

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Ohiowa's population was:

- **Younger.** The median age of Ohiowa was 35.5 years old in 2018, compared with the County average of 47.7 years. Ohiowa's population has younger older since 2010, when the median age was 39.5 years old. Ohiowa had a smaller proportion of people under 20 years old (20.4%) as the County (21.3%).⁵⁸
- **Less ethnically diverse.** Since 2010, Ohiowa declined in diversity. In 2010, 1% of Ohiowa's population was American Indian, 1% was other races, and 1% two or more races. By 2018 5% of Ohiowa's population was American Indian. During that time, Fillmore County had: 1% Black, 0% to 1% American Indian, 1% other races and 1% two or more races from 2010 to 2018 respectively.⁵⁹
- **Less likely to be at the federal poverty line.** The poverty rate of all persons in Ohiowa (7.6%) was lower than the County (10.0%) in 2018.⁶⁰

57 United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

58 United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

59 United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

60 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

Employment and Economics

The community's economic base is a mixture of industries. In comparison to Fillmore County, Ohiova's economy had:

- **Similar mix of industries.** Employment sectors accounting for 10% or more of employment in Ohiova included Agriculture, Retail, and Education. In comparison Fillmore County's included Agriculture and Education in 2018.⁶¹
- **Lower household income.** Ohiova's median household income in 2018 (\$34,000) was about \$22,000 less than the County (\$55,625).⁶²
- **Fewer long-distance commuters.** About 18.2% percent of workers in Ohiova commuted for fewer than 15 minutes, compared with about 55.6% of workers in Fillmore County. About 13.6% of workers in Ohiova commute 30 minutes or more to work, compared to about 20.8% of the County workers.⁶³

Major Employers

The Farmers Co-op is the largest employer in the village; however, the majority of residents commute to the surrounding communities for work.

Housing

In comparison to Fillmore County, Ohiova's housing stock was:⁶⁴

- **More owner occupied.** About 87.5% of occupied housing units in Ohiova are owner occupied compared with 75.6% of occupied housing in Fillmore County in 2018.
- **Larger share of aged housing stock.** Ohiova has more houses built prior to 1970 than the county (87.2% compared to 69.9%).
- **Fewer multi-family homes.** The predominant housing type in the village is single family detached and Ohiova contains few multifamily housing with five or more units per structure than the County (0% compared to 5.2%). About 99% of housing in Ohiova was single-family detached, compared with 90.6% of the County's housing. Ohiova has a smaller share of mobile and manufactured housing (0%) compared to the County (1.1%).

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

Future Development Trends

The local planning team noted no changes occurred in the past five years in the village. No new developments are planned in the next five years. The population in Ohiova has declined in past decades which the local planning team attributed to an aging population and lack of young families in town.

61 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

62 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

63 United States Census Bureau. "2018 American Fact Finder: s0802: Means of Transportation to Work by Selected Characteristics." [database file]

64 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Parcel Improvements and Valuation

GIS parcel data as of December 2019 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements 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. No LOMAs were identified in the Village of Ohiowa.

Table OHI.2: Ohiowa Parcel Valuation

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|-------------------|------------------------|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| 172 | 72 | \$1,184,705 | 0 | 0% | \$0 |

Source: County Assessor, GIS Workshop

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there is one chemical storage sites throughout Ohiowa which houses hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Table OHI.3: Chemical Storage Fixed Sites

| Facility Name | Address | Located in Floodplain? |
|-------------------------------|-----------|------------------------|
| Farmers Cooperative Anhydrous | N Main St | |

Source: Nebraska Department of Environment and Energy⁶⁵

Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update.

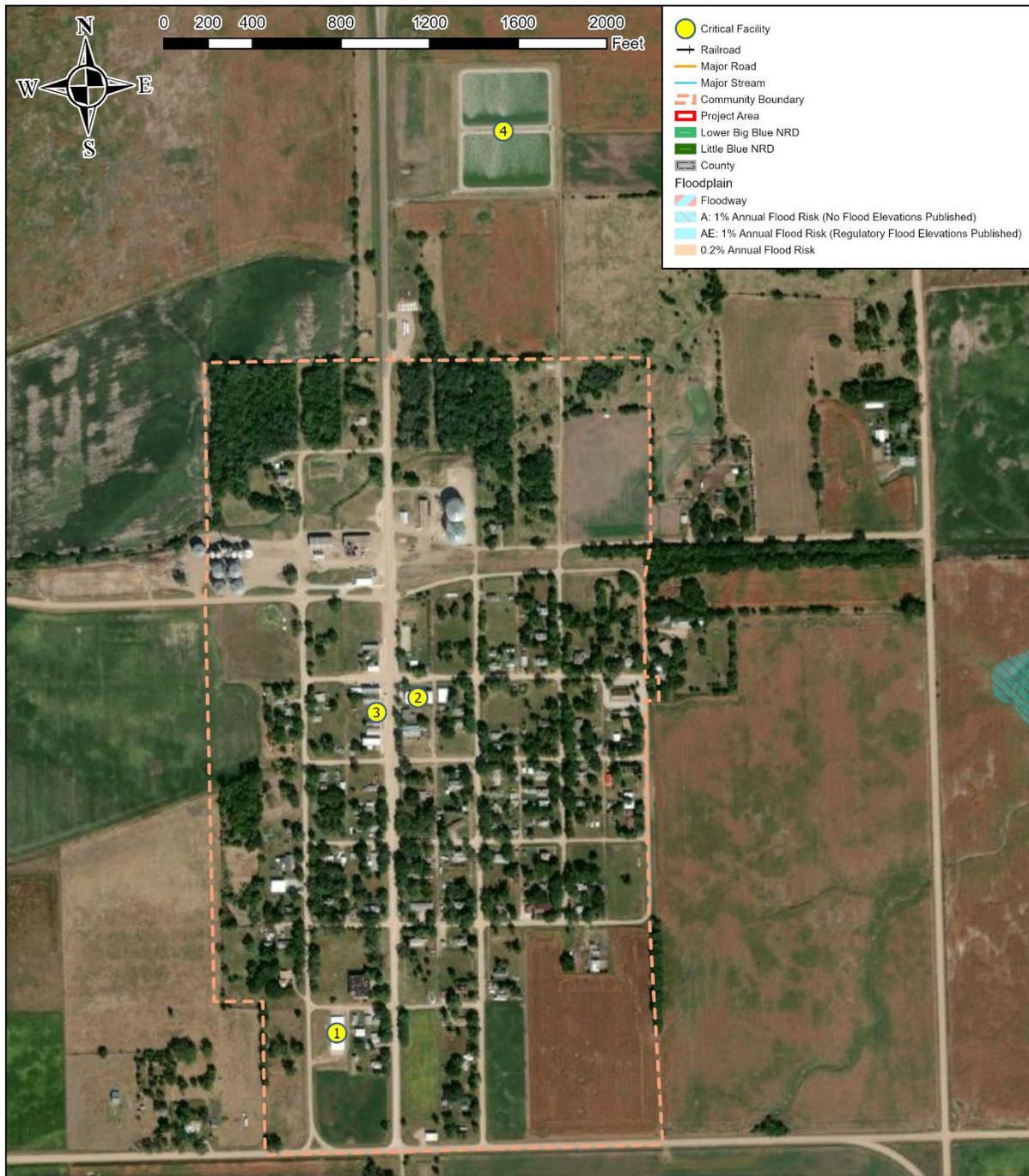
The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table OHI.4: Ohiowa Critical Facilities

| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|--------------------------|----------------------|---------------|-----------------|-----------------------------|
| 1 | Safety and Security | Fire Hall | N | N | N |
| 2 | Food, Water, and Shelter | Community Auditorium | Y | N | N |
| 3 | Safety and Security | Village Office | N | N | N |
| 4 | Health and Medical | Village Lagoon | N | N | N |

⁶⁵ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

Figure OHI.3: Ohiowa Critical Facilities



| | | | |
|--|--|---|--|
| | <p>Created By: NL Date: 5/24/2021 Software: ArcGIS Pro 2.8.0 File: Blues Critical Facilities.aprx 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.</p> | <h2>Village of Ohiowa</h2> <hr/> <p>Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021</p> | <p style="text-align: center;">Kansas</p> |
|--|--|---|--|

Historical Occurrences

See the Fillmore County community profile for historical hazard events.

Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

Flooding

In 1983 11 inches of rain fell in the southern part of the county. In Ohiova, the water overtopped the northern part of Main St, and carried out a pickup truck 50 yards downstream. Since then, lesser rains have also overtopped the road. The community is most concerned about flash flooding, especially in the northern section of the community. Ohiova currently does not have an identified special flood hazard area, thus they have opted to not participate in the NFIP to date. New flood mapping efforts should be considered through NeDNR.

Tornadoes and High Winds

Ohiova indicated that high winds and tornadoes have impacted the village. A tornado struck just north of town in 1968 and in 1984 a tornado did major damage to farms just south of town. As part of the May 22, 2004 tornado complex, a pair of F-1 tornadoes were reported near Ohiova. The two-mile tract included a pair of tornadoes which were reported just northeast of the old Bruning Airfield. The first tornado traveled north and struck one farmstead and dislodged the house from its foundation. The owner of the property withstood the first tornado, only to see the second tornado pass just southeast of his house. The second tornado hit another farmstead just to the east and damaged several outbuildings.

The only location for community members seeking shelter is the town auditorium. Numerous homes also have basement available. The community indicated that the current siren can only be activated by switch at the fire hall and that a newer model which would allow county activation is needed.

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Ohiova has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a five member council and the following offices: clerk/treasurer, attorney, and fire chief.

Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction's

planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

Table OHI.5: Capability Assessment

| Survey Components | | Yes/No |
|---|---|--------|
| Planning Regulatory Capability | & | |
| | Comprehensive Plan | No |
| | Capital Improvements Plan | No |
| | Economic Development Plan | No |
| | Local Emergency Operational Plan | County |
| | Floodplain Ordinance | No |
| | Zoning Ordinance | No |
| | Subdivision Regulation/Ordinance | No |
| | Building Codes | No |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | No |
| | National Flood Insurance Program | No |
| | Community Rating System | No |
| Other (if any) | | |
| Administrative Technical Capability | & | |
| | Planning Commission | No |
| | Floodplain Administration | No |
| | 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 | No |
| Other (if any) | | |
| Fiscal Capability | | |
| | 1 & 6 Year Plan | No |
| | Applied for grants in the past | No |
| | Awarded a grant in the past | No |
| | 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 | No |
| Other (if any) | | |
| Education Outreach | and | |
| | 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 |

| Survey Components | | Yes/No |
|-------------------|--|--------|
| | Natural Disaster or Safety related school programs | No |
| | StormReady Certification | No |
| | Firewise Communities Certification | No |
| | Tree City USA | No |
| | Other (if any) | |

Table OHI.6: Overall Capability

| Overall Capability | Limited/Moderate/High |
|---|-----------------------|
| Financial Resources Needed to Implement Mitigation Projects | Moderate |
| Staff/Expertise to Implement Projects | Moderate |
| Community Support to Implement Projects | Moderate |
| Time to Devote to Hazard Mitigation | Moderate |

Plan Integration

The local planning team noted the annual municipal budget's are limited to maintaining current facilities and systems and have remained relatively the same over the past several years. Any new projects would require additional grant funding to implement.

The Local Emergency Operations Plan (LEOP) for Ohiowa, which was last updated in 2019, is an annex of Fillmore County's LEOP. The plan addresses hazards such as chemical releases, severe winter storms, severe thunderstorms, and tornadoes. The plan provides a clear assignment of responsibility in case of an emergency, shelter locations, and evacuation routes but does not identify any gaps related to a particular hazard.

The village follows all county and state required building codes and zoning requirements. No other planning mechanisms were identified for the Village of Ohiowa which integrate hazard mitigation goals and objectives.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. 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 local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the Clerk and the village board. The local planning team will review the plan no less than annually and will include the public in the review and revision process by sending letters to all residents.

Mitigation Strategy

Completed Mitigation Actions

| MITIGATION ACTION | DIG NEW WELL |
|-------------------|---|
| DESCRIPTION | Dig a new well south of town |
| HAZARD(S) | Drought and Extreme Heat, Grass/Wildfire |
| STATUS | A new well was dug to supply water for the village. |

| MITIGATION ACTION | ELECTRICAL SYSTEM LOOPED DISTRIBUTION / REDUNDANCIES |
|-------------------|---|
| DESCRIPTION | Provide looped distribution service and other redundancies in the electrical system as a backup power supply in the event the primary system is destroyed or fails. |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| STATUS | Electrical equipment was updated. |

| MITIGATION ACTION | GENERATOR FOR AUDITORIUM (SHELTER) |
|-------------------|---|
| DESCRIPTION | Obtain a back-up generator for auditorium (shelter) |
| HAZARD(S) | All hazards |
| STATUS | A new generator was purchased for the auditorium. |

| MITIGATION ACTION | GENERATOR AT CITY WATER WELL |
|-------------------|--|
| DESCRIPTION | Replace current back-up power generator at City Water Well |
| HAZARD(S) | All hazards |
| STATUS | A generator was installed at one village well. |

| MITIGATION ACTION | RURAL WATER DISTRICT AND WATER SYSTEM UPDATES |
|-------------------|--|
| DESCRIPTION | Upgrade water district infrastructure to decrease likelihood of damages and improve water system for emergency uses. |
| HAZARD(S) | Drought and Extreme Heat |
| STATUS | Improvements have been made to local well. |

| MITIGATION ACTION | WATER SYSTEM IMPROVEMENTS |
|-------------------|--|
| DESCRIPTION | Water system improvements to include additional fire hydrants/increase supply and pressure. High pressure is needed in the event of an emergency to effectively fight fires and also to meet increasing demands. |
| HAZARD(S) | Drought and Extreme Heat, Flooding, Severe Thunderstorms |
| STATUS | Water system equipment was upgraded. |

Continued Mitigation Actions

| MITIGATION ACTION | ALERT SIRENS |
|-------------------|--|
| DESCRIPTION | Perform an evaluation of existing alert sirens in order to determine sirens which should be replaced or the placement of new sirens. |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$15,000+ |
| FUNDING | General funds, HMGP, BRIC |

SECTION SEVEN: VILLAGE OF OHIOWA COMMUNITY PROFILE

| | |
|--------------------|--|
| TIMELINE | 2-5 years |
| PRIORITY | High |
| LEAD AGENCY | Village Board |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | PROTECT AND IMPROVE ROADS AND BRIDGES |
|--------------------------|---|
| DESCRIPTION | Replace the bridge (culvert) on the north end of Main St |
| HAZARD(S) | Flooding |
| ESTIMATED COST | \$500,000 |
| FUNDING | General Funds, HMGP |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This would apply to the bridge (culvert) on the north end of Main St. |

| MITIGATION ACTION | INTERIOR DITCHES AND CULVERT IMPROVEMENTS |
|--------------------------|---|
| DESCRIPTION | Renovate main street culvert and improve the drainage system for the village. |
| HAZARD(S) | Flooding, Severe Thunderstorms |
| ESTIMATED COST | \$250,000 |
| FUNDING | General funds, HMA |
| TIMELINE | 5+ years |
| PRIORITY | Low |
| LEAD AGENCY | Village Board |
| STATUS | This project has not yet been started. |

| 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) | All hazards |
| ESTIMATED COST | \$1,000+, Staff Time |
| FUNDING | General funds, HMGP, BRIC |
| TIMELINE | 2-5 years |
| PRIORITY | High |
| LEAD AGENCY | Village Board |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | SAFE ROOMS/STORM SHELTERS |
|--------------------------|--|
| DESCRIPTION | Design and construct storm shelters and safe rooms in highly vulnerable areas such as mobile home parks, campgrounds, school, and other areas. |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| ESTIMATED COST | \$200-\$250/sq ft |
| FUNDING | General Funds, HMGP, BRIC |
| TIMELINE | 2-5 years |
| PRIORITY | High |
| LEAD AGENCY | Village Board |

| | |
|---------------|--|
| STATUS | This project has not yet been started. |
|---------------|--|

Removed Mitigation Actions

| MITIGATION ACTION | GROUNDWATER / IRRIGATION / WATER CONSERVATION MANAGEMENT PLAN AND PRACTICES |
|---------------------------|---|
| DESCRIPTION | Develop and implement a plan/ best management practices to conserve water use and reduce total use (high water use to low water use) and consumption of groundwater resources by citizens and irrigators of agricultural land during elongated periods of drought. Identify water saving irrigation projects, such as sprinkler systems with soil moisture sensors. Potential restrictions on water could include limitation on lawn watering, car washing, farm irrigation restrictions, or water sold to outside sources. Implement BMPs through water conservation practices such as changes in irrigation management, education on no-till agriculture and use of xeriscaping in communities. |
| HAZARD(S) | Drought and Extreme Heat |
| REASON FOR REMOVAL | This project was identified as no longer a priority for the village. |

| MITIGATION ACTION | MUNICIPAL WATER SUPPLY |
|---------------------------|---|
| DESCRIPTION | Establish a system/process for monitoring municipal water supplies. This could include, but is not limited to: establishing timeframes for measuring well depths and increasing stream flow monitoring. |
| HAZARD(S) | Drought and Extreme Heat |
| REASON FOR REMOVAL | This project was identified as no longer a priority for the village. |

| MITIGATION ACTION | WATER CONSERVATION AWARENESS PROGRAM |
|--------------------|---|
| DESCRIPTION | Improve and/or develop a program to conserve water use by citizens during elongated periods of drought. Potential restrictions on water could include limitations on lawn watering, car washing, or water sold to outside sources. Work with DNR on farm irrigation restrictions. |
| HAZARD(S) | Drought and Extreme Heat |
| STATUS | This project was identified as no longer a priority for the village. |

| MITIGATION ACTION | WEATHER RADIOS |
|---------------------------|---|
| DESCRIPTION | Conduct an inventory of weather radios at schools and other critical facilities and provide new radios as needed. |
| HAZARD(S) | All hazards |
| REASON FOR REMOVAL | This was identified as no longer a need for the village as most residents have cell phones. |

COMMUNITY PROFILE

VILLAGE OF SHICKLEY

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table SHI.1: Village of Shickley Local Planning Team

| Name | Title | Jurisdiction |
|-------------------|-----------------|---------------------|
| Brock Domeier | Board Chairman | Village of Shickley |
| Merle Erb | Board Trustee | Village of Shickley |
| Wade Walters | Board Treasurer | Village of Shickley |
| Bart Brinkman | Board Trustee | Village of Shickley |
| Jennifer Griffith | Clerk | Village of Shickley |
| Jessica Bruguera | Board Trustee | Village of Shickley |

Location and Geography

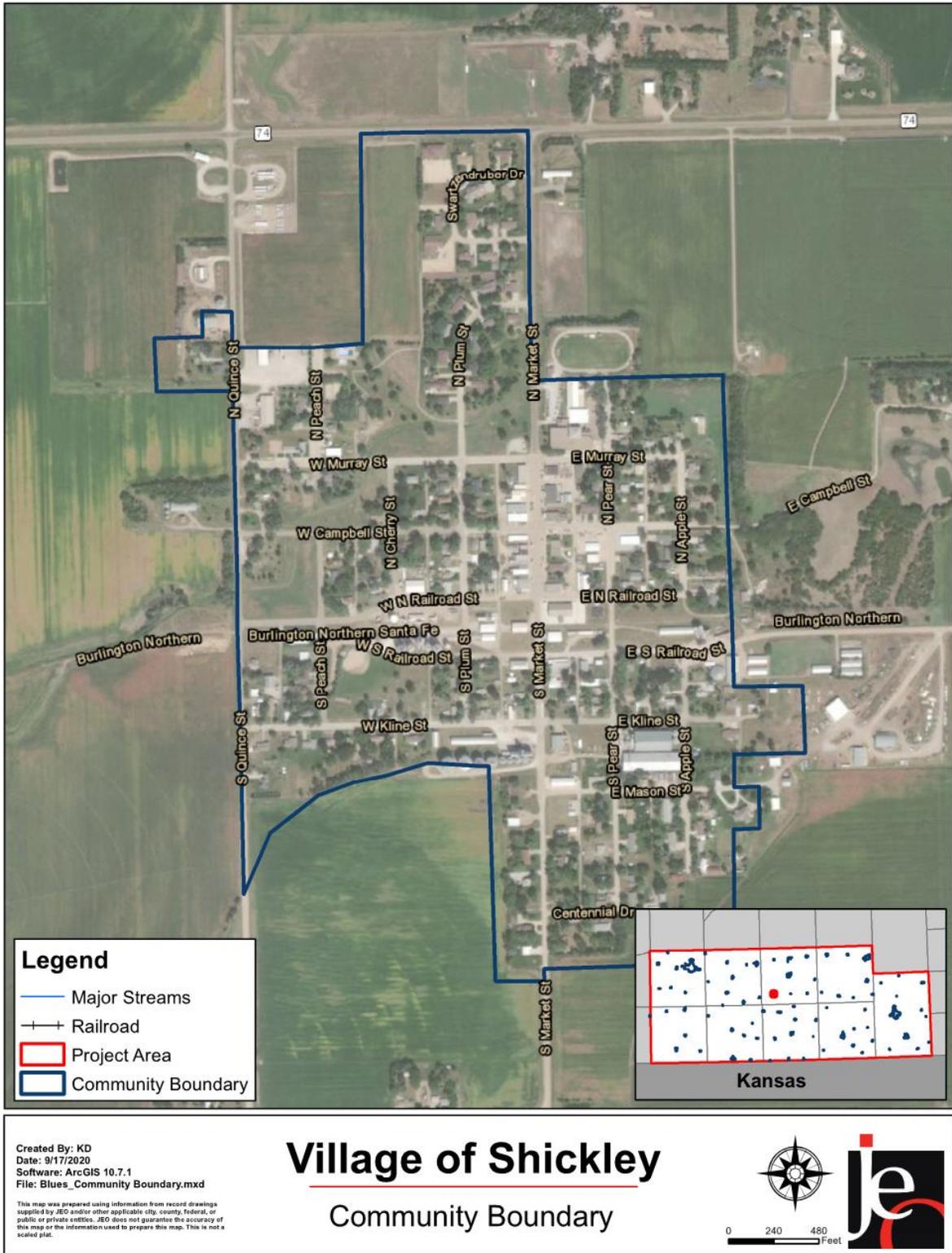
The Village of Shickley is located in the southwestern portion of Fillmore County and covers an area of 0.3 square miles. Dry Sandy Creek is located to the southeast, putting the north half of the village in the floodplain. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. The village lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Shickley's major transportation corridors include County Road 74 runs east-west, just north of Shickley. CR-74 accommodates on average 650 vehicles per day, 125 of which are heavy commercial vehicles. Spur 30B runs north-south and connects Shickley to CR-75. S30B accommodates on average 810 vehicles per day, 80 of which are heavy commercial vehicles. Another road of concern is Quince Street or Road 6, which runs north and south out of town.

Fuel and agricultural chemicals are regularly transported on all routes, but it is unknown what type and amount. Shickley does not have any rail lines. No significant transportation spills have occurred locally, but all critical facilities are along at least one of these routes. This information is important to hazard mitigation plans insofar as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

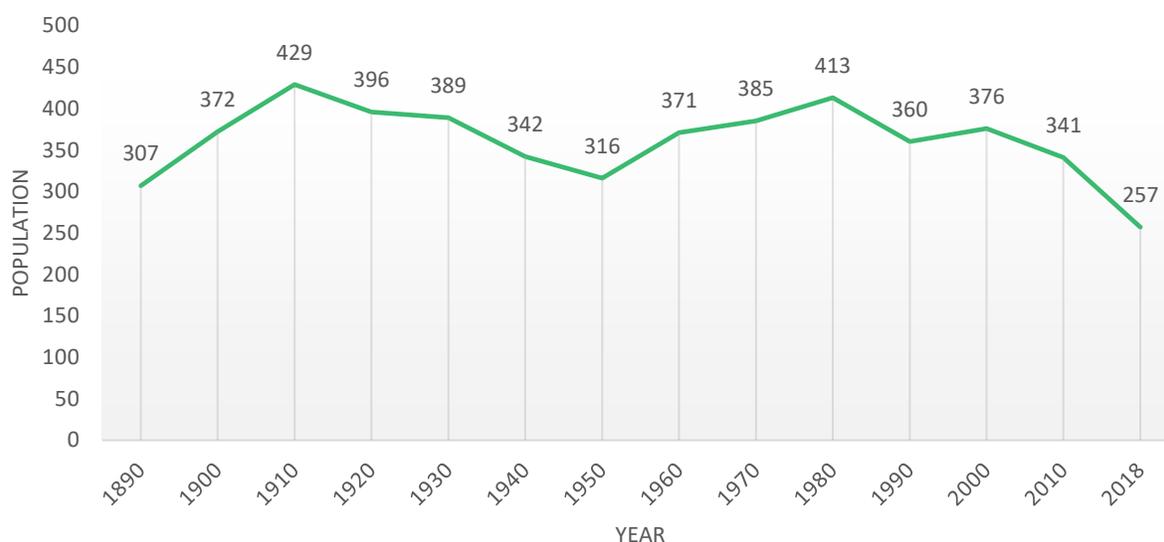
Figure SHI.1: Village of Shickley Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1890 to 2018 (estimated). This figure indicates that the population of Shickley has declined between 2000 to 2018. This is notable for hazard mitigation because communities with a declining population may also have a higher level of unoccupied housing not being up kept. Furthermore, areas with declining population may be less prone to pursuing residential/commercial development in their areas, which may reduce the number of structures vulnerable to hazards in the future. Decreasing populations can also represent decreasing tax revenue for the community which could make implementation of mitigation actions more fiscally challenging. The village's population accounted for approximately 5% of Fillmore County's Population in 2018.

Figure SHI.2: Shickley Population 1890-2018



Source: U.S. Census Bureau⁶⁶

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Shickley's population was:

- **Older.** The median age of Shickley was 48.8 years old in 2018, compared with the County average of 47.7 years. Shickley's population has grown older since 2010, when the median age was 45.9 years old. Shickley had a smaller proportion of people under 20 years old (17.1%) as the County (21.3%).⁶⁷
- **Less ethnically diverse.** Since 2010, Shickley grew in diversity. In 2010, 1% of Shickley's population was two or more races. By 2018 4% of Shickley's population was other races. During that time, Fillmore County had: 1% Black, 0% to 1% American Indian, 1% other races and 1% two or more races from 2010 to 2018 respectively.⁶⁸
- **More likely to be at the federal poverty line.** The poverty rate of all persons in Shickley (17.5%) was higher than the County (10.0%) in 2018.⁶⁹

⁶⁶ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁶⁷ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁶⁸ United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

⁶⁹ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

Employment and Economics

The community's economic base is a mixture of industries. In comparison to Fillmore County, Shickley's economy had:

- **Similar mix of industries.** Employment sectors accounting for 10% or more of employment in Shickley included Agriculture, Retail, Finance, and Education. In comparison Fillmore County's included Agriculture and Education in 2018.⁷⁰
- **Lower household income.** Shickley's median household income in 2018 (\$50,750) was about \$5,000 less than the County (\$55,625).⁷¹
- **More long-distance commuters.** About 51.4% percent of workers in Shickley commuted for fewer than 15 minutes, compared with about 55.6% of workers in Fillmore County. About 34.8% of workers in Shickley commute 30 minutes or more to work, compared to about 20.8% of the County workers.⁷²

Major Employers

Shickley's major employers are Shickley School, Lichti Oil, Norder Ag, Alf's Well Drilling, Carlson Irrigation, and Shickley Grain. Approximately 50 percent of residents commute to nearby Geneva and Hebron for work.

Housing

In comparison to Fillmore County, Shickley's housing stock was:⁷³

- **More owner occupied.** About 81.0% of occupied housing units in Shickley are owner occupied compared with 75.6% of occupied housing in Fillmore County in 2018.
- **Smaller share of aged housing stock.** Shickley has fewer houses built prior to 1970 than the county (60.7% compared to 69.9%).
- **Fewer multi-family homes.** The predominant housing type in the village is single family detached and Shickley contains few multifamily housing with five or more units per structure than the County (0% compared to 5.2%). About 87.3% of housing in Shickley was single-family detached, compared with 90.6% of the County's housing. Shickley has a smaller share of mobile and manufactured housing (~0%) compared to the County (1.1%). There is one mobile home within the community as noted by the local planning team.

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

70 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

71 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

72 United States Census Bureau. "2018 American Fact Finder: s0802: Means of Transportation to Work by Selected Characteristics." [database file]

73 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

Future Development Trends

No new structures have been built in Shickley since 2016. The population in Shickley has declined in recent years, which was attributed to an aging population. The planning team indicated there were no planned road improvement projects or new housing and business development. A portion of the north side of Shickley is located within the floodplain, and while no additional development is planned at this time, any future development planning efforts will take this into consideration by following the community's floodplain ordinance.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements 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. No LOMAs were identified for the Village of Shickley.

Table SHI.2: Shickley Parcel Valuation

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|-------------------|------------------------|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| 299 | 196 | \$14,239,500 | 12 | 6% | \$951,420 |

Source: County Assessor, GIS Workshop

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are four chemical storage sites throughout Shickley which house hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident. The planning team indicated no critical facilities were located near chemical fixed sites, with no vulnerable populations nearby. No spills from chemical fixed sites have occurred locally.

Table SHI.3: Chemical Storage Fixed Sites

| Facility Name | Address | Located in Floodplain? |
|-----------------------------|-------------------------|------------------------|
| HT Chemical | 512 Quince | N |
| Norder Supply Inc | 511 NE-74 | N |
| Shickley Grain Co Inc | N Quince St | N |
| Lichti Bros Oil Co Inc Bulk | Jct Road 6 & Highway 74 | N |

Source: Nebraska Department of Environment and Energy⁷⁴

⁷⁴ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

Critical Facilities

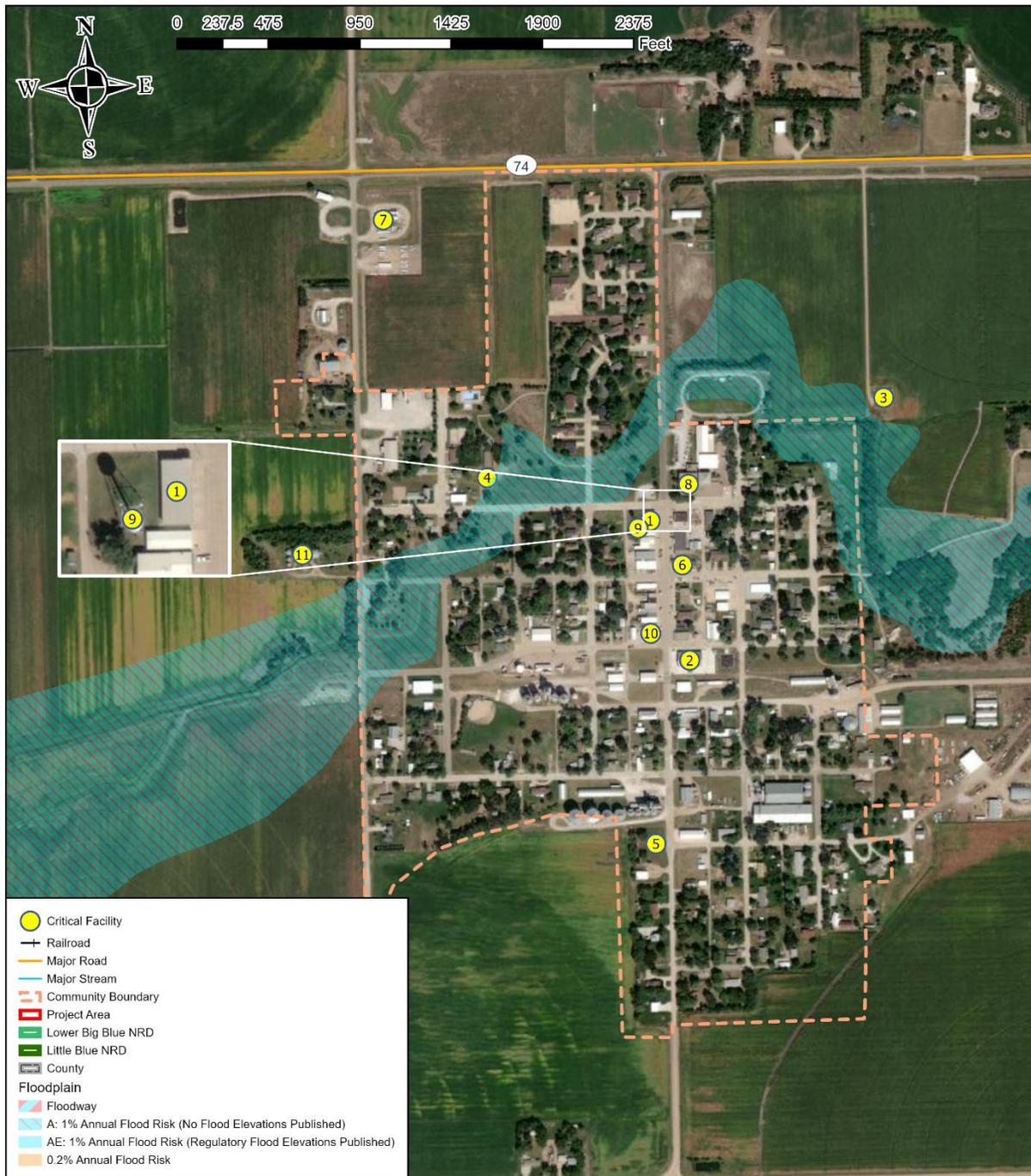
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table SHI.4: Shickley Critical Facilities

| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|--------------------------|-------------------------|---------------|-----------------|-----------------------------|
| 1 | Safety and Security | Fire Department | Y | N | N |
| 2 | Food, Water, and Shelter | Community Building 2013 | Y | N | N |
| 3 | Health and Medical | Sewer Treatment Plant | N | Y | Y |
| 4 | Food, Water, and Shelter | Well – Westside Park | N | N | Y |
| 5 | Food, Water, and Shelter | Well – South | N | N | N |
| 6 | Hazardous Materials | Gas Station Fuel Tanks | N | N | N |
| 7 | Hazardous Materials | Fuel Storage | N | N | N |
| 8 | Food, Water, and Shelter | Shickley Public School | Y | N | N |
| 9 | Food, Water, and Shelter | Water Tower | N | N | N |
| 10 | Food, Water, and Shelter | Grocery Store | N | N | N |
| 11 | Food, Water, and Shelter | Well – Quince St | N | Y | N |

Figure SHI.3: Shickley Critical Facilities



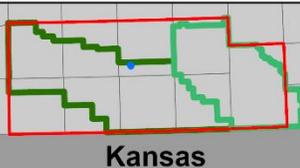


Created By: NL
Date: 5/24/2021
Software: ArcGIS Pro 2.8.0
File: Blues Critical Facilities.aprx

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.

Village of Shickley

Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021



Kansas

Historical Occurrences

See the Fillmore County community profile for historical hazard events.

Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

Drought and Extreme Heat

Per the National Centers for Environmental Information, the planning area spent about one third of years 1895 to 2020 in drought, with 11 percent in severe or extreme drought. Fillmore County has experienced one extreme heat event since 2016. The main concerns for Shickley in drought are ensuring economic stability for the local agriculture industry, as well as drinking water quality and availability. The village obtains water from municipal wells, which pump water into a water tower. Extreme heat is a concern because of public health and safety in addition to decreased agricultural yield.

To mitigate a drought, the village board can impose watering restrictions, if needed. The village does not have a separate drought monitoring board and the local planning team noted the current water supplies are sufficient. The mitigation strategy for drought includes the establishment of monitoring drought conditions and corresponding drought response protocols.

Flooding

Southeast Nebraska saw heavy rains and flooding in May 2020, damaging roads nearby and requiring a family to be rescued by airboat. Shickley also reported flooding in May 2013 and June 2015. No roads or critical facilities were damaged in any of these events. The village is primarily concerned with flash flooding. A rainfall rate of about two inches an hour, or five inches within several hours is sufficient to precipitate such flooding. Areas most prone to flooding are an area within a block of the creek that enters the village from the west, passes through a football field, and exits through the east end of the village. Homes are generally not impacted by flooding in Shickley, though 10 to 12 inches of rain could possibly reach them.

The planning team indicated the potential risk for property damage and infrastructure were the main reasons flooding is a top concern. Currently, the village is working on a creek bed drainage project to reduce risk. Shickley is a member of the NFIP, and as of November 2020, there are two policies-in-force. Two loss claims have been submitted for a total amount paid of \$25,000. It is not known when these claims were submitted.

Severe Winter Storms

Shickley is prone to severe winter weather and the region also experiences periodic ice storms. The village's main concern from this hazard is road blockages, which could impede the provision of emergency services, and utility damage. No critical facilities in the village have been damaged by a severe winter storm.

In terms of mitigation, about 10 percent of the village’s power lines are buried. There is no designated snow route in the village, but a loader/dozer, skid loader, and snowplow on a pickup are used to clear the street as soon as possible. The village contracts with Erb Plumbing for snow removal services, and these resources are reported to be sufficient. Snow fences are used at the water treatment plant, well houses, and by streets that experience issues with blowing snow, such as by the ball field. Currently, the village plans to rebuild utilities to improve response to this hazard.

Tornadoes and High Winds

The Shickley area has experienced four tornadoes in the past 15 years, including a 105 mph, EF-1 event on May 2, 2012, that caused \$100,000 in damage just outside of town; F-0 and F-3 tornadoes on September 22, 2001 the stronger of which caused extensive crop damage near town; and a brief F-0 touchdown on June 11, 2000 that caused no substantial damage. No tornadoes have occurred since the 2016 update. Concerns about tornadoes in the village include possible housing damage, damage to the municipal water supply, and damage to ambulances, utilities and fire trucks. No critical facilities within the village itself have been damaged by high winds or tornadoes in recent years.

The city has a backup system to protect municipal records. There is a community center with a safe room, and the public school also serves as a shelter. Fillmore County emergency management provides the village with text alerts via the Code Red system, and the school undergoes periodic tornado drills. Shickley maintains mutual aid agreements with fire departments in neighboring towns, and with the county fire department. Currently, the city is rebuilding utilities to reduce risk to this hazard.

Governance

A community’s governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Shickley has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a five member trustee board and the following offices: clerk, treasurer, attorney, fire chief, water operator, sewage plant operator, two sewage commissioners, two street commissioners, two water commissioners, two electric commissioners, and two park & burn site commissioners.

Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction’s planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

Table SHI.5: Capability Assessment

| Survey Components | | Yes/No |
|----------------------------------|---------------------------|--------|
| Planning & Regulatory Capability | Comprehensive Plan | No |
| | Capital Improvements Plan | No |
| | Economic Development Plan | Yes |

SECTION SEVEN: VILLAGE OF SHICKLEY COMMUNITY PROFILE

| Survey Components | | Yes/No |
|---------------------------------------|---|--------|
| | Local Emergency Operational Plan | County |
| | Floodplain Ordinance | Yes |
| | Zoning Ordinance | Yes |
| | Subdivision Regulation/Ordinance | No |
| | Building Codes | No |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | No |
| | National Flood Insurance Program | Yes |
| | Community Rating System | No |
| Administrative & Technical Capability | Planning Commission | No |
| | Floodplain Administration | Yes |
| | GIS Capabilities | Yes |
| | Chief Building Official | No |
| | Civil Engineering | Yes |
| | Local Staff Who Can Assess Community's Vulnerability to Hazards | No |
| | Grant Manager | No |
| | Mutual Aid Agreement | Yes |
| Fiscal Capability | 1 & 6 Year Plan | No |
| | Applied for grants in the past | Yes |
| | Awarded a grant in the past | No |
| | Authority to Levy Taxes for Specific Purposes such as Mitigation Projects | Yes |
| | Gas/Electric Service Fees | Yes |
| | Storm Water Service Fees | Yes |
| | Water/Sewer Service Fees | Yes |
| | Development Impact Fees | No |
| | General Obligation Revenue or Special Tax Bonds | No |
| Education and Outreach | 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 |

Table SHI.6: Overall Capability

| Overall Capability | Limited/Moderate/High |
|--|-----------------------|
| Financial Resources Needed to Implement Mitigation Projects | Limited |
| Staff/Expertise to Implement Projects | Limited |
| Community Support to Implement Projects | Moderate |
| Time to Devote to Hazard Mitigation | Limited |

Plan Integration

In the last five years, the village has applied for grants from the Little Blue NRD, LARM Safety Grant, and the Shickley Community Foundation. Municipal funds are limited to maintaining current facilities and systems. A large portion of funds are currently dedicated to rebuilding electric utility infrastructure. The amount of municipal funds has increased over recent years.

The Zoning Ordinance was last updated in 2013. The ordinance does not discourage development in hazard areas. It does not contain natural hazard layers, nor prohibit development within, or filling of wetlands, floodways, or floodplains. (The village reports that it has a couple of floodplain areas.) The ordinance does not discourage development in the wildland-urban interface, which is a zone of transition between unoccupied land and human development that is most susceptible to wildfire impacts. The ordinance does account for population changes when considering future land uses and does not have zones that limit the density of developments in the floodplain. There are no requirements that floodplains be kept as open space, and there are no rezoning procedures that limit changes that allow greater intensity or density in natural hazard impact areas.

The Floodplain Ordinance has not been updated in many years, the village reports. The regulations meet minimum federal and state requirements. The village has not adopted more stringent ordinances to reduce risk further. The ordinance does not prohibit development within, or filling of wetlands, floodways, and floodplains.

The LEOP, which was last updated in 2016, addresses flooding, mass vaccinations, agricultural disease, terrorism, debris management, and hazardous materials release. Debris management and terrorism are the hazards of highest concern in the plan. The plan provides a clear assignment of responsibility in case of an emergency and does not identify any gaps related to a particular hazard. The village board members, village clerk, and local emergency responders (fire departments and EMTs) are familiar with the EOP.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. 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 community profile was last reviewed by the local planning team in 2016. This planning team is made of the Village Clerk, Board of Trustees, Chairman, and Treasurer, who will review the profile annually in board meetings. The public will be notified of the plan review and revision process through sharing of information at board meetings open to the public.

Mitigation Strategy

Completed Mitigation Actions

| MITIGATION ACTION | FLOODPLAIN REGULATIONS |
|-------------------|---|
| DESCRIPTION | Continue to enforce local floodplain regulations for structures located in the 1-percent floodplain. Strict enforcement of the type of development and elevations of structures should be considered through issuance of building permits by any community or county. Continue education of building inspectors or Certified Floodplain Managers. |
| HAZARD(S) | Flooding |
| STATUS | These regulations are established by the county and followed by the village. |

| MITIGATION ACTION | SNOW FENCES |
|-------------------|--|
| DESCRIPTION | Construct snow fences to protect main transportation routes and critical facilities from excessive snow drifting and road closure. |
| HAZARD(S) | Severe Winter Storms |
| STATUS | Snow fences have been installed at the water treatment plant, well houses, and local streets at risk. |

Continued Mitigation Actions

| MITIGATION ACTION | BURY POWER AND SERVICE LINES |
|-------------------|--|
| DESCRIPTION | Require powerlines installed as a part of new construction to be buried. |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| ESTIMATED COST | \$2M per mile |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Village Board |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | CIVIL SERVICE IMPROVEMENTS |
|-------------------|---|
| DESCRIPTION | Improve emergency rescue and response equipment and facilities by providing additional, or updating existing emergency response equipment. This can include fire trucks, ATV's, water tanks/trucks, snow removal equipment, etc. This would also include developing backup systems for emergency vehicles and identifying and training additional personnel for emergency response. |
| HAZARD(S) | All hazards |

SECTION SEVEN: VILLAGE OF SHICKLEY COMMUNITY PROFILE

| | |
|-----------------------|--|
| ESTIMATED COST | Varies by need |
| FUNDING | Local taxes, General Fund, HMGP |
| TIMELINE | 5+ years |
| PRIORITY | Low |
| LEAD AGENCY | Fire Department |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | ASSESS VULNERABILITY AND DEVELOP DROUGHT RESPONSE PROTOCOLS |
|-----------------------|--|
| DESCRIPTION | Establish a response protocol for times of drought. This may include, but is not limited to: lawn watering restrictions, requirements for water intensive businesses (i.e. car washes, golf courses, etc.), responses for local facilities (swimming pools, public fountains, etc.). |
| HAZARD(S) | Drought and Extreme Heat |
| ESTIMATED COST | \$2,500+ |
| FUNDING | Taxes, HMGP, BRIC |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | PROVIDE BACKUP POWER SYSTEMS AND REDUNDANCIES |
|-----------------------|--|
| DESCRIPTION | Provide looped distribution service and other redundancies in the electrical system as a backup power supply in the event the primary system is destroyed or fails. Rebuild or make improvements to the existing downtown electric line. |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| ESTIMATED COST | \$70,000 |
| FUNDING | Electric rates and taxes, HMGP, BRIC |
| TIMELINE | 2-5 years |
| PRIORITY | High |
| LEAD AGENCY | Electric Commissioners |
| STATUS | This project has not yet been started. This is needed in the downtown business district. |

| MITIGATION ACTION | FLOODPLAIN EARLY ALERT SYSTEM |
|-----------------------|--|
| DESCRIPTION | Update equipment, ensure equipment is in a secure location, and install additional gauges. |
| HAZARD(S) | Flooding |
| ESTIMATED COST | Varies |
| FUNDING | Local taxes, HMGP, BRIC, FMA |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Village Board, EMA |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | DAM/LEVEE/FLOODWALL CONSTRUCTION AND IMPROVEMENTS |
|-------------------|---|
|-------------------|---|

| | |
|-----------------------|--|
| DESCRIPTION | Levees and floodwalls serve to provide flood protection to businesses and residents during large storm events. Improvements to existing levees and floodwalls will increase flood protection. If possible, the structure should be designed to FEMA standards to provide 1-percent flood protection providing additional flood insurance benefits. |
| HAZARD(S) | Flooding |
| ESTIMATED COST | Varies |
| FUNDING | Local taxes, HMGP, BRIC, FMA |
| TIMELINE | 2-5 years |
| PRIORITY | High |
| LEAD AGENCY | Village Board, Landowners |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | STORM SHELTER IDENTIFICATION |
|-----------------------|--|
| DESCRIPTION | Identify any existing private or public storm shelters. |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| ESTIMATED COST | \$0, Staff Time |
| FUNDING | Local taxes, HMGP |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Village Board |
| STATUS | This project has not yet been started. |

| MITIGATION ACTION | WEATHER RADIOS |
|-----------------------|---|
| DESCRIPTION | Conduct an inventory of weather radios at schools and other critical facilities and provide new radios as needed. |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| ESTIMATED COST | \$50 per unit |
| FUNDING | Local taxes, HMGP, BRIC |
| TIMELINE | 1 year |
| PRIORITY | High |
| LEAD AGENCY | Fire Department |
| STATUS | This project has not yet been started. |

Removed Mitigation Actions

| MITIGATION ACTION | NFIP CONTINUATION AND ENFORCEMENT |
|---------------------------|---|
| DESCRIPTION | Enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs). |
| REASON FOR REMOVAL | While the village will continue to participate in the NFIP, this is no longer considered a mitigation action by FEMA. |

| MITIGATION ACTION | ESTABLISH DROUGHT MONITOR CONDITIONS |
|--------------------|---|
| DESCRIPTION | Jurisdiction can establish specific drought monitoring protocols. These protocols will serve as triggers for implementing drought response actions. |

SECTION SEVEN: VILLAGE OF SHICKLEY COMMUNITY PROFILE

| | |
|---------------------------|---|
| HAZARD(S) | Drought and Extreme Heat |
| REASON FOR REMOVAL | This project was identified as redundant and is covered under "Drought Response Protocols". |

COMMUNITY PROFILE

VILLAGE OF STRANG

**Little Blue NRD and Lower Big Blue NRD
Hazard Mitigation Plan 2021**

Local Planning Team

Table STG.1: Village of Strang Local Planning Team

| Name | Title | Jurisdiction |
|-------------|-------|-------------------|
| LoNeal Beck | Mayor | Village of Strang |

Location and Geography

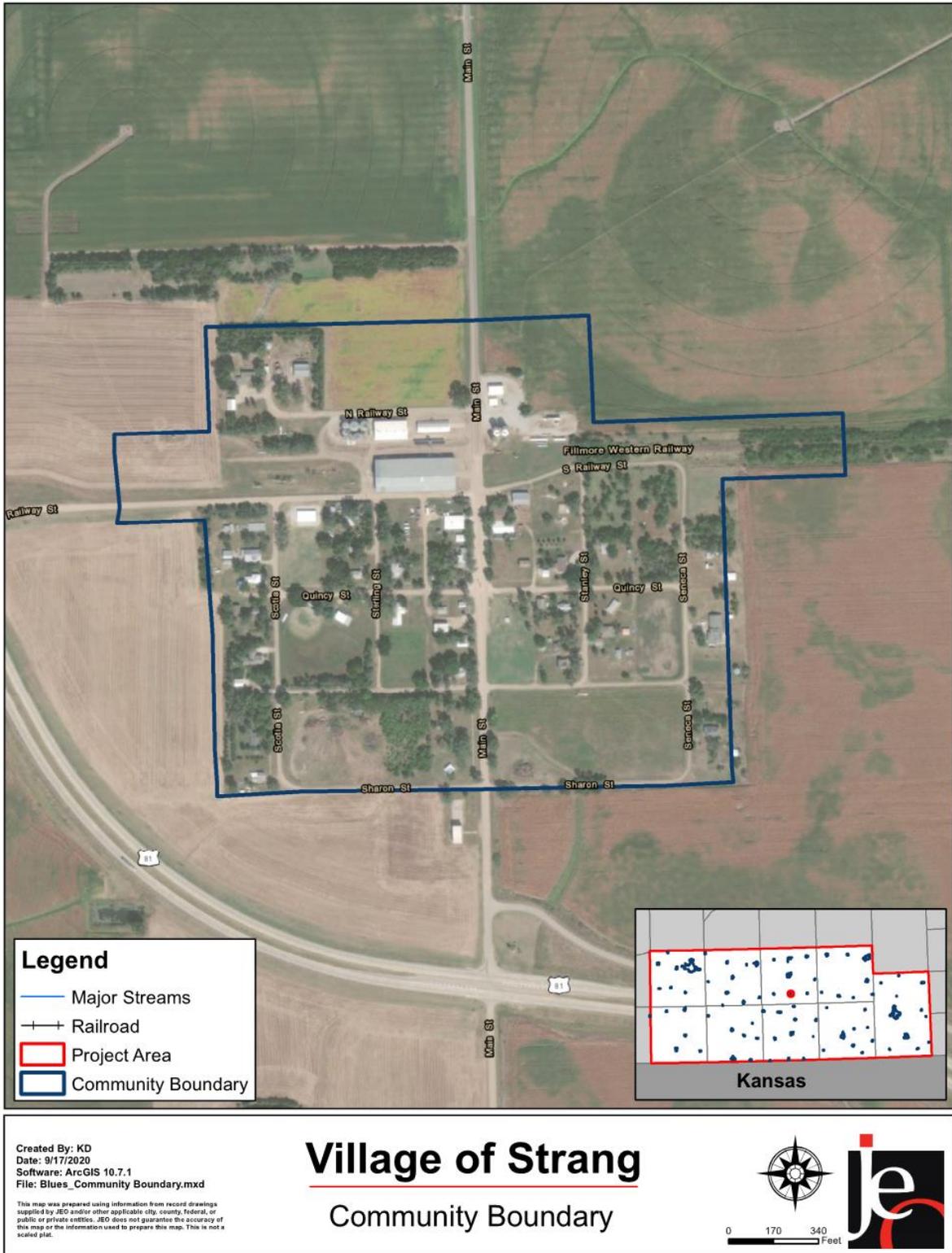
The Village of Strang is located in the south central portion of Fillmore County. The Village of Strang covers an area of 0.1 square miles. There are no major waterways within the area. The area is not heavily forested, nor is it located in a geographic area of the state prone to landslides. The village lies in the plains topographic region and is surrounded by agricultural fields.

Transportation

Strang's major transportation corridors include County Road 30D which runs north-south through the village and connects to Highway 81 to the south. Highway 81 runs along the west side of the village and accommodates 5,670 vehicles annually, 1,480 of which are heavy vehicles. Strang does not have any rail lines. This information is important to hazard mitigation plans as it suggests possible evacuation corridors in the community, as well as areas more at risk to transportation incidents.

Chemicals are regularly transported along Highway 81. The most recent spill was on January 16, 2006 where a Conoco truck and trailer fell over, puncturing a tank of isohexenes and resulting in a spillage. No details were reported about if this impacted the village. No critical facilities are located along transportation routes.

Figure STG.1: Village of Strang Jurisdictional Boundary



Demographics

The following figure displays the historical population trend from 1890 to 2018 (estimated). This figure indicates that the population of Strang has declined since the 1910s. This is relevant to hazard mitigation because communities with declining populations may have larger shares of unoccupied housing or decreasing tax revenues. The village's population accounted for 1% of Fillmore County's Population in 2018.

Figure STG.2: Strang Population 1890-2018



Source: U.S. Census Bureau⁷⁵

The young, elderly, minorities, and poor may be more vulnerable to certain hazards than other groups. In comparison to the County, Strang's population was:

- **Younger.** The median age of Strang was 29.8 years old in 2018, compared with the County average of 47.7 years. Strang's population has grown older since 2010, when the median age was 30.9 years old. Strang had a larger proportion of people under 20 years old (32.1%) as the County (21.3%).⁷⁶
- **Less ethnically diverse.** Between 2010 and 2018 Strang's population was 100% White, non-Hispanic. During that time, Fillmore County had: 1% Black, 0% to 1% American Indian, 1% other races and 1% two or more races from 2010 to 2018 respectively.⁷⁷
- **Less likely to be at the federal poverty line.** The poverty rate of all persons in Strang (0%) was lower than the County (10.0%) in 2018.⁷⁸

⁷⁵ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁷⁶ United States Census Bureau. "2018 American Fact Finder: S0101: Age and Sex." [database file]

⁷⁷ United States Census Bureau. "2018 American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]

⁷⁸ United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

Employment and Economics

The community's economic base is a mixture of industries. In comparison to Fillmore County, Strang's economy had:

- **Varying mix of industries.** Employment sectors accounting for 10% or more of employment in Strang included Retail, Education, and Arts. In comparison Fillmore County's included Agriculture and Education in 2018.⁷⁹
- **Lower household income.** Strang's median household income in 2018 (\$43,750) was about \$8,000 less than the County (\$55,625).⁸⁰
- **Fewer long-distance commuters.** About 76.2% percent of workers in Strang commuted for fewer than 15 minutes, compared with about 55.6% of workers in Fillmore County. About 16% of workers in Strang commute 30 minutes or more to work, compared to about 20.8% of the County workers.⁸¹

Major Employers

Major employers in the community include Bubba's Anytime, Precision Ag, and Gibson Construction. Approximately 33 percent of residents (10 of 30) commute to other communities for work such as Geneva.

Housing

In comparison to Fillmore County, Strang's housing stock was:⁸²

- **Less owner occupied.** About 63.6% of occupied housing units in Strang are owner occupied compared with 75.6% of occupied housing in Fillmore County in 2018.
- **Larger share of aged housing stock.** Strang has more houses built prior to 1970 than the county (84.6% compared to 69.9%).
- **Fewer multi-family homes.** The predominant housing type in the village is single family detached and Strang contains few multifamily housing with five or more units per structure than the County (0% compared to 5.2%). About 100% of housing in Strang was single-family detached, compared with 90.6% of the County's housing. Strang has a smaller share of mobile and manufactured housing (0%) compared to the County (1.1%). There are only two mobile homes in the community.

This housing information is relevant to hazard mitigation insofar as the age of housing may indicate which housing units were built prior to state building codes being developed. Further, unoccupied housing may suggest that future development may be less likely to occur. Finally, communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms.

Future Development Trends

No housing or business development has begun over the past five years. According to the census data, Strang's population is declining. The planning team indicated this was due to an aging

79 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

80 United States Census Bureau. "2018 American Fact Finder: DP03: Selected Economic Characteristics." [database file]

81 United States Census Bureau. "2018 American Fact Finder: s0802: Means of Transportation to Work by Selected Characteristics." [database file]

82 United States Census Bureau. "2018 American Fact Finder: DP04: Selected Housing Characteristics." [database file]

population. No new housing, new businesses or industry developments are planned for the next five years.

Parcel Improvements and Valuation

GIS parcel data as of December 2019 was requested from GIS Workshop, which the county hires to manage the County Assessor data. This data was analyzed for the location, number, and value of property improvements 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. No LOMAs were identified for the Village of Strang.

Table STG.2: Strang Parcel Valuation

| Number of Parcels | Number of Improvements | Total Improvement Value | Number of Improvements in Floodplain | Percent of Improvements in Floodplain | Value of Improvements in Floodplain |
|-------------------|------------------------|-------------------------|--------------------------------------|---------------------------------------|-------------------------------------|
| 78 | 23 | \$717,015 | 0 | 0% | \$0 |

Source: County Assessor, GIS Workshop

Community Lifelines

Hazardous Materials – Chemical Storage Fixed Sites

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are four chemical storage sites throughout Strang which house hazardous materials. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident. There have not been any spills from fixed chemical sites since 1996, so few concerns exist for the village.

Table STG.3: Chemical Storage Fixed Sites

| Facility Name | Address | Located in Floodplain? |
|-------------------------------|---------------------------|------------------------|
| Norder Supply Inc | 401 Main St | N |
| NDOT Strang Yard | Jct Highways 81 & 74 | N |
| Overland Ready Mixed Concrete | 46 S Railway St | N |
| Precision Ag Products | 736 S 13 th St | N |

Source: Nebraska Department of Environment and Energy⁸³

⁸³ Nebraska Department of Environment and Energy. "Search Tier II Data." August 2020.

Critical Facilities

Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as a part of this plan update.

The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table STG.4: Strang Critical Facilities

| CF # | Type of Lifeline | Name | Shelter (Y/N) | Generator (Y/N) | Located in Floodplain (Y/N) |
|------|---------------------|----------------------------|---------------|-----------------|-----------------------------|
| 1 | Safety and Security | Village Office (4H Hall) | N | N | N |
| 2 | Safety and Security | Town Outdoor Warning Siren | N | N | N |
| 3 | Other | Strang Museum | N | N | N |

SECTION SEVEN: VILLAGE OF STRANG COMMUNITY PROFILE

Figure STG.3: Strang Critical Facilities



| | | | |
|--|---|---|--|
| | <p>Created By: NL Date: 5/24/2021 Software: ArcGIS Pro 2.8.0 File: Blues Critical Facilities.aprx</p> <p><small>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.</small></p> | <h2>Village of Strang</h2> <hr/> <p>Little Blue NRD and Lower Big Blue NRD Hazard Mitigation Plan 2021</p> | <p style="text-align: center;">Kansas</p> |
|--|---|---|--|

Historical Occurrences

See the Fillmore County community profile for historical hazard events.

Hazard Prioritization

For additional discussion regarding area-wide hazards, please see *Section Four: Risk Assessment*. The hazards discussed in detail below were selected by the local planning team from the regional hazard list as the relevant hazards for the jurisdiction. The selected hazards were prioritized by the local planning team based on historical hazard occurrences, potential impacts, and the community's capabilities.

Severe Thunderstorms

Severe thunderstorms were identified as a top concern for the village. The combination of heavy rain, high winds, lightning, and hail can often cause significant impacts to the community. While no NCEI documented severe thunderstorm events have occurred in Strang from 1996 to September 2019, heavy rainfall and flash flooding is a concern. The village has experienced severe thunderstorm impacts in the past including significant hail damage to the 4H hall and city office roof. High winds also damaged the outdoor electrical connects at the office. All community buildings have lightning rods but do not have backup generators. The county provides emergency alerts through AlertSense for the village. The village has identified the need to install a remote operated outdoor siren warning system.

Severe Winter Storms

Severe winter storms are a natural and regular occurrence for the region, which can cause significant impacts, and were identified as a top concern for the community. Severe winter storms While NCEI data did not show any severe winter storm events in Strang from 1996 to September 2019, heavy ice and snow is a regional concern. The local planning team noted past severe winter storms, specifically blizzards and high winds have closed all village streets in the past and knocked out power. Surrounding farmers have volunteer their time and services to help remove snow in town and two local residents have skid loaders for snow removal. The village identified the need to purchase a road maintainer/grader or tractor with loader and rear blade.

Tornadoes and High Winds

Tornadoes and high wind events have impacted the village in the past. According to NCEI data, there have been 19 high wind events in Fillmore County from 1996 to September 2019. The most recent tornado event was on June 24, 2018 in which a weak tornado occurred with a maximum wind speed of 65 mph and caused damages throughout Fillmore County. The tornado was a land spout in nature and was one of four to occur within a few miles of Fairmont, which is 16 miles away from Strang. The highest rated tornado since 1996 occurred in Grafton, 22 miles away from Strang, and was an EF-3 on May 11, 2014. Peak winds were estimated to be 150 mph and crossed over to multiple counties, causing \$1,500,000 in property damage.

The local planning team noted hazardous trees are located north of the museum which should be removed. The village has experienced high winds in the past which have caused tree damage

and electrical service disruptions. Most residents do not have basements to use as shelter locations and there are no designated shelter locations in town.

Flooding

Flooding was not identified as a hazard of top concern for the village. Floodplain areas are only located east of town but no buildings or parcels within the village are located in the floodplain. The village does not participate in the NFIP.

Governance

A community’s governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Strang has a number of offices or departments that may be involved in implementing hazard mitigation initiatives. The village has a 5 member council.

Capabilities

The capability assessment consisted of a review of local existing policies, regulations, plans, and programs with hazard mitigation capabilities. The following tables summarize the jurisdiction’s planning and regulatory capability; administrative and technical capability; fiscal capability; educational and outreach capability; and overall capability to implement mitigation projects.

Table STG.5: Capability Assessment

| Survey Components | | Yes/No |
|---------------------------------------|---|--------------|
| Planning & Regulatory Capability | Comprehensive Plan | No |
| | Capital Improvements Plan | No |
| | Economic Development Plan | No |
| | Local Emergency Operational Plan | Yes (County) |
| | Floodplain Ordinance | No |
| | Zoning Ordinance | No |
| | Subdivision Regulation/Ordinance | No |
| | Building Codes | No |
| | Floodplain Management Plan | No |
| | Storm Water Management Plan | No |
| | National Flood Insurance Program | No |
| | Community Rating System | No |
| Administrative & Technical Capability | Planning Commission | No |
| | Floodplain Administration | No |
| | GIS Capabilities | No |
| | Chief Building Official | No |
| | Civil Engineering | No |
| | Local Staff Who Can Assess Community’s Vulnerability to Hazards | No |
| | Grant Manager | No |
| Fiscal Capability | Mutual Aid Agreement | No |
| | 1 & 6 Year Plan | Yes |
| | Applied for grants in the past | No |
| | Awarded a grant in the past | No |

| Survey Components | | Yes/No |
|------------------------|---|--------|
| | 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 | No |
| | Development Impact Fees | No |
| | General Obligation Revenue or Special Tax Bonds | No |
| Education and Outreach | 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 |

Table STG.6: Overall Capability

| Overall Capability | Limited/Moderate/High |
|---|-----------------------|
| Financial Resources Needed to Implement Mitigation Projects | Limited |
| Staff/Expertise to Implement Projects | Limited |
| Community Support to Implement Projects | Moderate |
| Time to Devote to Hazard Mitigation | Limited |

Plan Integration

The planning team indicated the village has not applied for any grants in the past five years and that municipal funds are limited to maintaining current facilities and systems. No specific projects were included. No planning mechanisms were identified for the village which employed hazard mitigation principals.

The Local Emergency Operations Plan (LEOP) for Strang, which was last updated in 2017, is an annex of Fillmore County's LEOP. The plan addresses hazards such as chemical releases, severe winter storms, severe thunderstorms, and tornadoes. This plan delegates responsibilities in the post-disaster environment but contains little discussion of hazard mitigation. The plan provides a clear assignment of responsibility in case of an emergency, shelter locations, and evacuation routes but does not identify any gaps related to a particular hazard.

The village follows all county and state required building codes and zoning requirements. No other planning mechanisms were identified for the Village of Strang which integrate hazard mitigation goals and objectives.

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (i.e. 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 of Strang is a new participant in the HMP planning process. The local planning team is responsible for reviewing and updating this community profile as changes occur or after a major event. The local planning team will include the village board and village clerk. The team will review the plan annually and share information with the public by sending letters.

Mitigation Strategy

New Mitigation Actions – 2021 Plan

| MITIGATION ACTION | CIVIL SERVICE IMPROVEMENTS |
|-------------------|---|
| DESCRIPTION | Purchase a road maintainer/grader or tractor with loader and rear blade |
| HAZARD(S) | Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds |
| ESTIMATED COST | Varies |
| FUNDING | Tax funds |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This is a new mitigation action. |

| MITIGATION ACTION | INTERIOR DITCH AND CULVERT IMPROVEMENTS |
|-------------------|--|
| DESCRIPTION | Clear out, deepen, and improve drainage ditches and culverts throughout town. Ditches need to be regraded and culverts need cleaned out. |
| HAZARD(S) | Flooding |
| ESTIMATED COST | \$15,000 |
| FUNDING | Tax funds |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This is a new mitigation action. |

| MITIGATION ACTION | HAZARDOUS TREE REMOVAL |
|-------------------|------------------------|
|-------------------|------------------------|

SECTION SEVEN: VILLAGE OF STRANG COMMUNITY PROFILE

| | |
|-----------------------|--|
| DESCRIPTION | Remove hazardous trees in town, specifically spreading Eastern Red Cedar trees |
| HAZARD(S) | All hazards |
| ESTIMATED COST | \$2,500 |
| FUNDING | Tax funds |
| TIMELINE | 2-5 years |
| PRIORITY | Medium |
| LEAD AGENCY | Village Board |
| STATUS | This is a new mitigation action. |