

COMMUNITY PROFILE

VILLAGE OF LINDSAY

LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

2020

Section Seven: Village of Lindsay Community Profile

LOCAL PLANNING TEAM

Table LSY.1: Village of Lindsay Local Planning Team

NAME	TITLE	JURISDICTION
Terry Schoecher	Village Board Member	Village of Lindsay
Ken Kurtenbach	Village Board Chair	Village of Lindsay

LOCATION AND GEOGRAPHY

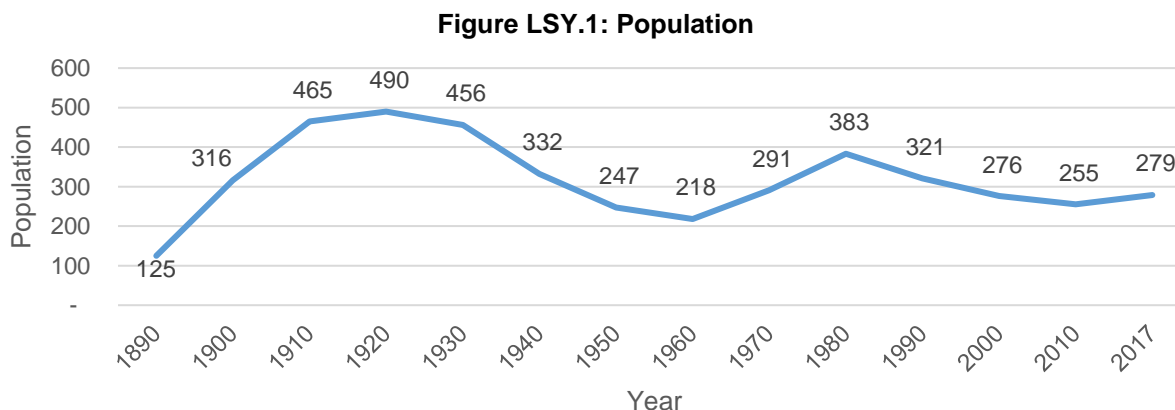
The Village of Lindsay is in the northwestern portion of Platte County and covers an area of 0.5 square miles. It is in the dissected plains region of Nebraska, surrounded by agricultural land used primarily for row crop production and pasturing. Shell Creek runs from northwest to southwest along Lindsay's western and southern borders.

TRANSPORTATION

Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community and areas more at risk of transportation incidents. Lindsay's major transportation corridor is Nebraska State Highway 91. It is traveled by a total annual average of 2,240 vehicles daily, 315 of which are trucks.¹ This is the transportation route of most concern because of its importance for transportation in and out of the community, along with 445th Avenue and 541st Avenue. Agricultural chemicals and manufacturing chemicals are regularly transported along these routes.

DEMOGRAPHICS

Lindsay's population grew slightly from 255 people in 2010 to about 279 people in 2017, though the overall trend suggests a decline in population. A population declines suggests a decreasing tax base to fund mitigation projects. The village's population accounted for 0.8% of Platte County's population in 2017.²



Source: U.S. Census Bureau, 1890 - 2017

1 Nebraska Department of Roads. 2018. "Interactive Statewide Traffic Counts Map." [map].

<https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

2 United States Census Bureau. "American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]. <https://factfinder.census.gov/>.

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Figure LSY.2: Village of Lindsay



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

- **Older.** The median age of Lindsay was 54.1 years old in 2017, compared with Platte County's median of 38.3 years. Lindsay's population grew slightly older since 2010, when the median age was 50.6 years old. Lindsay had a smaller proportion of people under 18 years old (14.0%) than the county (26.0%) and a larger proportion of people over 65 years old (28.3%) than the county (16.3%).²
- **Less ethnically diverse.** Since 2010, Lindsay grew less ethnically diverse. In 2010, 7.3% of Lindsay's population was Hispanic or Latino. By 2017, about 0.7% was Hispanic or Latino. During that time, the Hispanic population in the county grew from 12.0% in 2010 to 17.6% in 2017.²
- **More likely to be below the federal poverty line.** The poverty rate in Lindsay (13.6% of people living below the federal poverty line) was higher than the county's poverty rate (8.6%) in 2017.³

EMPLOYMENT AND ECONOMICS

The Village of Lindsay's economic base is primarily educational services, and agriculture. In comparison to Platte County, Lindsay's economy had:

- **Smaller mix of industries.** Two major employment sectors, accounting for 10% or more of employment each, were: educational services, manufacturing, and agriculture.³
- **Higher per capita income.** Lindsay's per capita income in 2017 (\$37,752) was about \$9,565 higher than the county (\$28,187).³
- **More long-distance commuters.** About 30% of workers in Lindsay commuted for fewer than 15 minutes, compared with about 63.6% of workers in Platte County. About 70% of workers in Lindsay commuted 30 minutes or more to work, compared to about 10.0% of county workers.⁴

MAJOR EMPLOYERS

The Lindsay Corporation (irrigation, transportation, and industrial solutions) and coop employ most residents of the village.

HOUSING

In comparison to Platte County, Lindsay's housing stock was:⁵

- **Similarly aged.** Lindsay had a similar share of housing built prior to 1970 than the county (48.5% compared to 50.9%).
- **Less mobile and manufactured housing.** Lindsay had 3.0% mobile or manufactured housing, compared to the county's housing stock which was 4.4% mobile or manufactured

3 United States Census Bureau. "American Fact Finder: DP03: Selected Economic Characteristics." [database file]. <https://factfinder.census.gov/>.

4 United States Census Bureau. "American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]. <https://factfinder.census.gov/>.

5 United States Census Bureau. "American Fact Finder: DP04: Selected Housing Characteristics." [database file]. <https://factfinder.census.gov/>.

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housing. Mobile homes are located on the northeast corner of the 4th Street and Elm Street intersection, and along both sides of Cherri-O Road.

- **Less renter-occupied.** About 9.3% of occupied housing units in Lindsay were renter-occupied compared with 28.8% of occupied housing in Platte County.
- **Occupied.** Approximately 2.3% of Lindsay’s housing units were vacant compared to 5.7% of units in Platte County.

The age of housing may indicate which housing units were built prior to the development of state building codes. Homes built within a flood hazard area before the adoption of their community’s Flood Rate Insurance Map (FIRM) are not likely to be built above the 1% annual chance floodplain. Older and vacant housing stock may also be more vulnerable to hazard events if it is poorly maintained. Communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms if those homes are not anchored correctly. Renter occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. They are less likely than homeowners to have renter’s insurance or flood insurance, or to know their risks to flooding and other hazards. A significant number of unoccupied housing suggests that future development may be unlikely to occur in the area.

FUTURE DEVELOPMENT TRENDS

The most recent developments in the village have been a new well and an expansion of the local co-op. One homeowner is planning to build a home in the northwestern portion of Lindsay. Two new businesses are planning to open in the village, two businesses are expanding, and two new office spaces and apartment building are being constructed. A new home is also being constructed in the community. The village has been widening roads throughout the community and plans to continue to wide roads in 2020. Water and sewer system upgrades included a new 100,000-gallon water storage tank and seven blocks of increased capacity water main pipes.

PARCEL IMPROVEMENTS AND VALUATION

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, paved lots, roads, etc.) at the parcel level. The data did not contain the number of structures on each parcel. The parcel data was analyzed to determine the number and valuation of property improvements located in the 1% annual chance floodplain. A summary of the results of this analysis is provided in the following table.

Table LSY.2: Parcel Improvements and Value in the Floodplain

NUMBER OF IMPROVEMENTS	TOTAL IMPROVEMENT VALUE	NUMBER OF IMPROVEMENTS IN FLOODPLAIN	PERCENTAGE OF IMPROVEMENTS IN FLOODPLAIN	VALUE OF IMPROVEMENTS IN FLOODPLAIN
148	\$15,875,445	22	14.9%	\$2,763,180

Source: GIS Workshop/Platte County Assessor, 2019⁶

⁶ GIS Workshop/Platte County Assessor. 2019. [Personal correspondence].

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CRITICAL INFRASTRUCTURE

CHEMICAL STORAGE FIXED SITES

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are a total of two fixed hazardous chemical storage sites within two miles of Lindsay. The following table lists these sites. The Lindsay Oil Company fuel station also located in the community, across the street from the clerk's office, town hall, and fire station. Chemical releases in the water or atmosphere are a concern for the community. Residents living near chemical storage sites have not received any formal information on the threat and appropriate response to chemical spills. The Lindsay Volunteer Fire and Rescue and the Hazardous Response Team from the Lindsay Manufacturing Company have the appropriate gear and training to respond to chemical spills within village limits and the Platte River.

Table LSY.3: Chemical Storage Fixed Sites

FACILITY NAME	ADDRESS	IN FLOODPLAIN (YES/NO)
Farmers Co-op Assn	106 S Pine St	Yes
Lindsay Manufacturing Company	214 E 2nd St	No

Source: Nebraska Department of Environment and Energy, 2019⁷

CRITICAL FACILITIES

The planning team identified critical facilities necessary for the Village of Lindsay's disaster response and continuity of operations per the FEMA Community Lifelines guidance. Critical facilities were identified during the 2015 planning process and revised for this plan update. The following table and figure provide a summary of the critical facilities for the community.

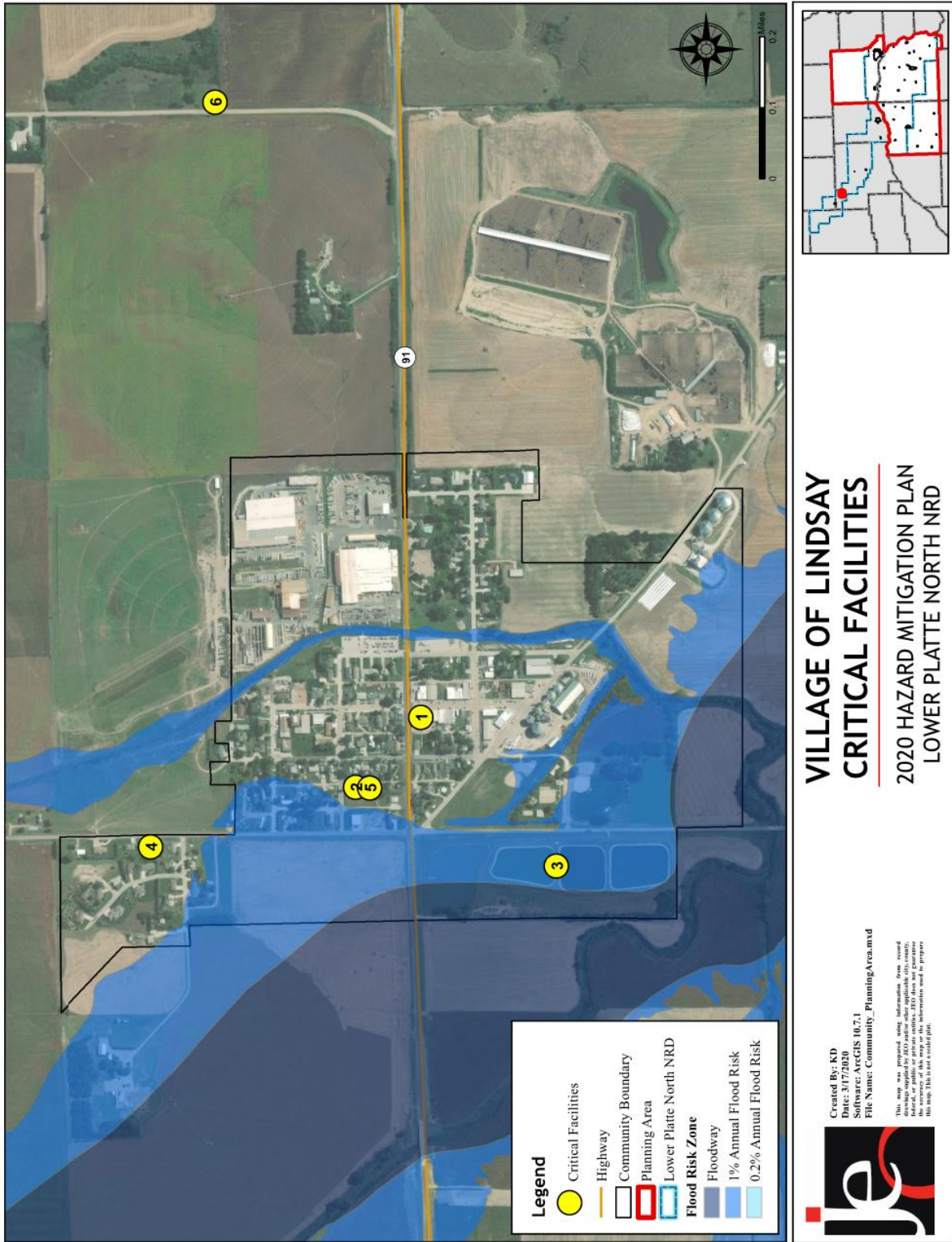
Table LSY.4: Critical Facilities

CF NUMBER	NAME	COMMUNITY SHELTER (YES/NO)	GENERATOR (YES/NO)	IN FLOODPLAIN (YES/NO)
1	Town Hall	Yes	No	No
2	Water Tower	No	No	No
3	Wastewater Treatment Facility	No	No	Yes
4	Well 83-1	No	No	No
5	Well 89-1	No	No	No
6	Well 2013-1	No	No	No

⁷ Nebraska Department of Environmental Quality. 2019. "Nebraska DEQ Tier 2 Data Download: 2018." <https://deq-iis.ne.gov/tier2/>.

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Figure LSY.3: Critical Facilities



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HISTORICAL OCCURRENCES

See the Platte County Hazard Loss History table in Appendix E for a hazard matrix and historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

HAZARD PRIORITIZATION

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

FLOODING

The March 2019 floods had significant effects on Lindsay. Flooding of the Shell Creek left roads and park equipment damaged and left debris throughout the village. The southwest corner of Lindsay is most prone to flooding because of its vicinity to these two water ways. The dry creek that runs through Lindsay also has the potential to flood during heavy rain. The entire village has poor stormwater drainage, but no critical facilities have been damaged by flooding to this point.

HIGH WINDS

High wind cause damage to trees, power lines, and property yearly in Lindsay. The lagoon and lift station have been damaged by wind in the past. In case of a power failure, data backup systems are in place for municipal records. There are no FEMA certified safe rooms in the community in case of a severe storm, but community members can seek shelter in their basements. Platte County Emergency Management will soon offer emergency text alerts to the county.

SEVERE THUNDERSTORMS

The Village of Lindsay experiences two to three severe thunderstorms every year, resulting in downed trees and lost shingles. Lightning, high winds, and loss of power are all concerns regarding this hazard. Critical facilities have been impacted in the past. In case of a power surge, municipal records are protected with surge protectors on electronic devices. The lagoon lift station, fire hall, and town hall all have backup generators. Approximately 25% of power lines are buried, making most of the power infrastructure vulnerable. The town hall has a weather radio to alert occupants of a severe storm.

SEVERE WINTER STORMS

Blizzards are a yearly occurrence in Lindsay, making transportation difficult, especially in emergency situations. About 25% of power lines in the village are buried. Snow removal is done by village maintenance with a skid loader, a dump truck with a blade, and a tractor with a loader and rear blade. These resources are usually sufficient for the village's snow removal needs.

TORNADOES

In 2012 and farmhouse was destroyed by an EF2 tornado near Lindsay. The roof of the house was lifted from the structure, causing the walls to collapse. The family had taken cover in the basement and were unharmed. No critical facilities have been damaged by tornadoes in the past. Backup systems prevent harm to municipal records in case of a disaster. Lindsay has two warning

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sires, activated either by Platte County dispatch or locally. Platte County Emergency Management will soon offer emergency text alerts. The town can be used as shelter location or basements can be used in the event of a tornado. In case of a disaster, Mutual Aid Agreements are in place with the neighboring communities of Newman Grove, Humphrey, Madison, and St. Edward (all comprising the Mid-Nebraska Fire Protection Area).

GOVERNANCE

The Village of Lindsay is governed by a five-member board of supervisors; other governmental offices and departments are listed below. The community government will oversee the implementation of hazard mitigation projects.

- Clerk/Treasurer
- Attorney
- Fire Department
- Water/Wastewater Superintendent
- Parks & Recreation Department
- Engineer

CAPABILITY ASSESSMENT

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

Table LSY.5: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning & Regulatory Capability	Comprehensive Plan	No
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operational Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	No
	Building Codes	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No
Other (if any)		
Administrative & Technical Capability	Planning Commission	No
	Floodplain Administration	Yes
	GIS Capabilities	Yes
	Chief Building Official	No
	Civil Engineering	Yes

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SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
	Local Staff Who Can Assess Community's Vulnerability to Hazards	No
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	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	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
Other (if any)		
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	No
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	No
	Natural Disaster or Safety related school programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Table LSY.6: Overall Capability Assessment

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

Lindsay has an emergency operations plan, building codes, and wellhead protection plan. The village is an annex to Platte County's emergency operation plan which is updated every three years. The plan addresses hazards of greatest concern, assigns specific responsibilities, identifies scenarios that would require an evacuation, and identifies sheltering locations. Both the

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water operator and village board are familiar with the plan. The building code was last updated in 2012 and requires elevation of structures in the floodplain, elevation of mechanical systems in the floodplain, outlines proper sump pump installation, encourages the use of permeable surfaces, encourages the use fire resistant building materials, and requires defensible space around structures. No other examples of plan integration were identified. However, the community will seek out and evaluate any opportunities to integrate the results of the current HMP into other planning mechanisms and updates.

MITIGATION STRATEGY

COMPLETED MITIGATION ACTIONS

MITIGATION ACTION		NEW WATER WELL AND TRANSMISSION MAIN
Hazard(s) Addressed		Drought
Status		A new well was constructed northeast of the water tower using \$701,017 in NDEQ SRF funding in the summer of 2015

MITIGATION ACTION		LAGOON IMPROVEMENTS
Hazard(s) Addressed		Flooding
Status		A new lagoon was added in 2003 by cell 1 and 2

MITIGATION ACTION		LIFT STATION AND COLLECTION SYSTEM IMPROVEMENTS
Hazard(s) Addressed		Flooding
Status		The village used \$602,481 dollars of NDEQ SRF funding to complete this project in the spring of 2013

ONGOING AND NEW MITIGATION ACTIONS

MITIGATION ACTION		BACKUP AND EMERGENCY GENERATORS
Description		Provide a portable or stationary source of backup power to shelters, and other critical facilities, particularly at the lift station, wells, pump station, town hall, and fire hall
Hazard(s) Addressed		All hazards
Estimated Cost		Unknown
Funding		Village funds
Timeline		2-5 years
Priority		Medium
Lead Agency		Board of Trustees, Maintenance Department
Status		The lift station; wells 2013-1, 89-1, and 83-1; and the town hall have been identified as top priority to be provided backup generators

MITIGATION ACTION		FLOOD DAMAGE REPAIR
Description		Replace or repair the entrance bridge to the lagoons that was damaged during the 2019 flood event
Hazard(s) Addressed		Flooding
Estimated Cost		Varies
Funding		General budget
Timeline		2-5 years
Priority		Medium
Lead Agency		Maintenance Department, Board of Trustees

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Status	New action. Planning stage, an engineering study is currently being conducted
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MITIGATION ACTION	LEVEE/FLOODWALL CONSTRUCTION AND/OR IMPROVEMENTS
Description	Raise the berm around the fishing pond in order to reduce the change of floodwaters impacting the community
Hazard(s) Addressed	Flooding
Estimated Cost	Varies
Funding	General budget
Timeline	2-5 years
Priority	Medium
Lead Agency	Maintenance Department
Status	New action. Not started

MITIGATION ACTION	STORMWATER SYSTEM IMPROVEMENTS
Description	Stormwater system improvements may include pipe upsizing and additional inlets. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other storm water system improvements
Hazard(s) Addressed	Flooding
Estimated Cost	Unknown
Funding	Village funds
Timeline	2-5 years
Priority	Medium
Lead Agency	Board of Trustees, Maintenance Department
Status	Stormwater system improvements are being planned for Oak Street, 3 rd Street, and Elm Street

MITIGATION ACTION	STREAM BANK STABILIZATION/GRADE CONTROL STRUCTURES/CHANNEL IMPROVEMENTS
Description	Stabilization improvements including rip rap, vegetative cover, j-hooks, boulder vanes, etc. can be implemented to reestablish the channel banks. Channel stabilization can protect structures, increase conveyance, and provide flooding benefits
Hazard(s) Addressed	Flooding
Estimated Cost	Unknown
Funding	Village funds
Timeline	2-5 years
Priority	Low
Lead Agency	Board of Trustees, Maintenance Department
Status	This project has not been started but will take place north of the village, partially on private property

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MITIGATION ACTION	TREE CITY USA
Description	Work to become a Tree City by establishing a tree board, enacting a tree care ordinance, establishing a forestry care program, and enacting an Arbor Day observance and proclamation
Hazard(s) Addressed	All hazards
Estimated Cost	Unknown
Funding	Village funds
Timeline	5+ years
Priority	Low
Lead Agency	Board of Trustees, Maintenance Department
Status	No progress has yet been made toward becoming a Tree City

REMOVED MITIGATION ACTIONS

MITIGATION ACTION	MAINTAIN GOOD STADING WITH THE NATIONAL FLOOD INSURANCE PROGRAM
Hazard(s) Addressed	Flooding
Reason for Removal	While this community will continue to participate and maintain compliance in the NFIP, this project is no longer considered a mitigation action by FEMA

COMMUNITY PROFILE

CITY OF NEWMAN GROVE

LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

2020

LOCAL PLANNING TEAM

Table NGV.1: City of Newman Grove Local Planning Team

NAME	TITLE	JURISDICTION
David Schroeter	Utility Superintendent	City of Newman Grove

LOCATION AND GEOGRAPHY

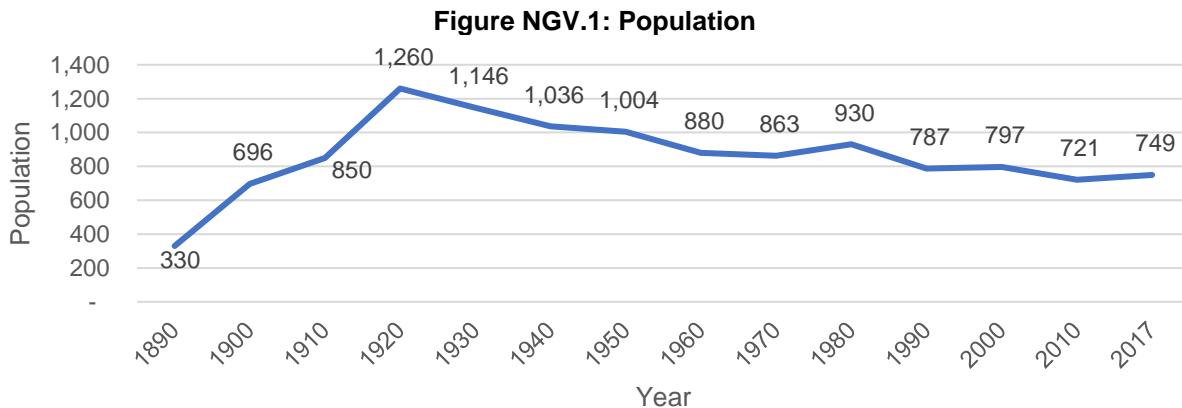
The City of Newman Grove straddles Madison and Platte Counties and covers an area of 0.55 square miles. It is in the dissected plains topographic region of Nebraska, surrounded by agricultural land used primarily for row-crop production and pasturing. Shell Creek defines the northern border of the city.

TRANSPORTATION

Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community and areas more at risk of transportation incidents. Newman Grove’s major transportation corridor is Nebraska State Highway 45. It is traveled by a total annual average of 1,035 vehicles daily, x of which are trucks.⁸ This transportation route is of most concern for the community, especially to the north where it passes over Shell Creek because of flooding. Farm chemicals, (herbicides, insecticides, and fertilizers,) are regularly transported on this route. A truck carrying anhydrous ammonia tipped on Highway 45 to the south of Newman Grove, but caused no spills, damage, or injuries.

DEMOGRAPHICS

Newman Grove’s population has remained stable since 1990, though it grew from 721 people in 2010 to about 749 people in 2017. A stable population will provide a reliable tax base to fund mitigation projects. The city’s population accounted for 2.1% of Madison County’s population in 2017.⁹



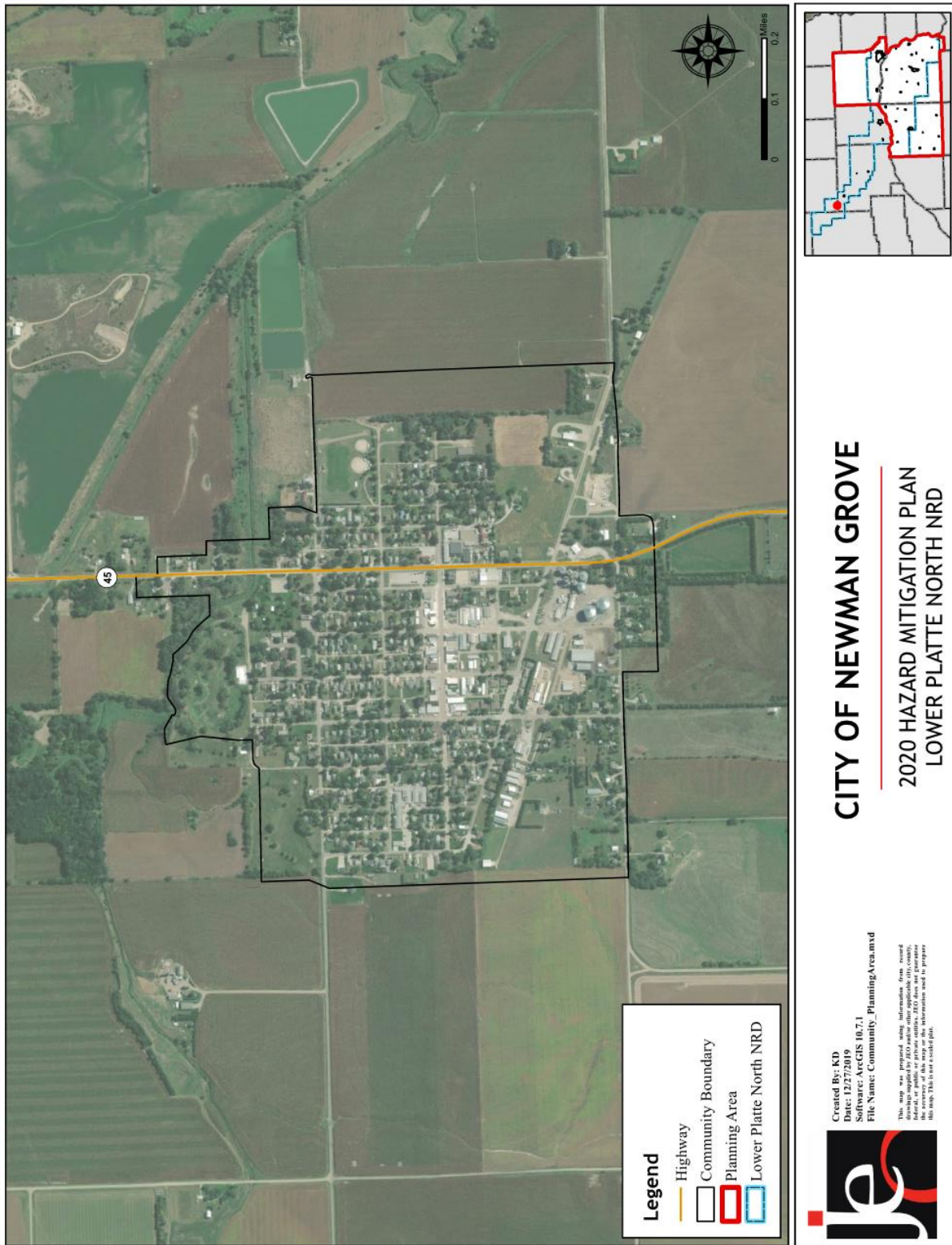
Source: U.S. Census Bureau, 1890 - 2017

8 Nebraska Department of Roads. 2018. "Interactive Statewide Traffic Counts Map." [map]. <https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

9 United States Census Bureau. "American Fact Finder: DP05: ACS Demographic and Housing Estimates." [database file]. <https://factfinder.census.gov/>.

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Figure NGV.2: City of Newman Grove



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

- **Older.** The median age of Newman Grove was 47.9 years old in 2017, compared with Madison County's median of 36.9 years. The city's population grew younger since 2010, when the median age was 54.4 years old. Newman Grove had a larger proportion of people over 65 years old (25.9%) than the county (15.2%).²
- **Less ethnically diverse.** Since 2010, Newman Grove grew more ethnically diverse. In 2010, 4.3% of the population was Hispanic or Latino. By 2017, about 7.2% was Hispanic or Latino. During that time, the Hispanic population in the county grew from 12.2% in 2010 to 14.5% in 2017.²
- **More likely to be below the federal poverty line.** The poverty rate in Newman Grove (22.5% of people living below the federal poverty line) was higher than the county's poverty rate (16.0%) in 2017.¹⁰

EMPLOYMENT AND ECONOMICS

The City of Newman Grove's economic base is a mixture of industries. In comparison to Madison County, Newman Grove's economy had:

- **Smaller mix of industries.** Two major employment sectors, accounting for 10% or more of employment each, were: manufacturing and educational services, and health care and social assistance.³
- **Lower per capita income.** Newman Grove's per capita income in 2017 (\$23,658) was about \$2,408 lower than the county (\$26,093).³
- **More commuters.** About 40.4% of workers in Newman Grove commuted for fewer than 15 minutes, compared with about 65.2% of workers in Madison County. About 31.8% of workers in the city commuted 30 minutes or more to work, compared to about 10.9% of county workers.¹¹

MAJOR EMPLOYERS

Newman Grove's major employer is the Mid-Nebraska Lutheran Home assisted living facility, the Newman Grove Public Schools, and a local grain elevator. Many residents commute to the nearby Village of Lindsay to work at Lindsay Manufacturing making center-pivot irrigation systems.

HOUSING

In comparison to Madison County, Newman Grove's housing stock was:¹²

- **Older/newer.** Newman Grove had a larger share of housing built prior to 1970 than the county (77.8% compared to 48.1%).

10 United States Census Bureau. "American Fact Finder: DP03: Selected Economic Characteristics." [database file]. <https://factfinder.census.gov/>.

11 United States Census Bureau. "American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]. <https://factfinder.census.gov/>.

12 United States Census Bureau. "American Fact Finder: DP04: Selected Housing Characteristics." [database file]. <https://factfinder.census.gov/>.

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- **More mobile and manufactured housing.** Newman Grove had a larger share of mobile and manufactured housing (4.2%) compared to the county (3.1%). All mobile homes are located outside of the Newman Grove city limits.
- **Less renter-occupied.** About 25.2% of occupied housing units in Newman Grove were renter-occupied compared with 34.6% of occupied housing in Madison County.
- **Unoccupied.** Approximately 23.3% of Newman Grove’s housing units were vacant compared to 6.3% of units in Madison County.

The age of housing may indicate which housing units were built prior to the development of state building codes. Homes built within a flood hazard area before the adoption of their community’s Flood Rate Insurance Map (FIRM) are not likely to be built above the 1% annual chance floodplain. Older and vacant housing stock may also be more vulnerable to hazard events if it is poorly maintained. Communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornados, and severe winter storms if those homes are not anchored correctly. Renter occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. They are less likely than homeowners to have renter’s insurance or flood insurance, or to know their risks to flooding and other hazards. A significant number of unoccupied housing suggests that future development may be unlikely to occur in the area.

FUTURE DEVELOPMENT TRENDS

In the past ten years, several homes have been abandoned within the city. Some of these homes have been purchased by neighbors for use of their garages. There are no plans for new businesses or housing in the community. Newman Grove’s population is relatively stable but has been declining slightly since 1920. There has been a slight increase in the number of elementary school aged children in the last five years, but the population of the community will likely to continue to fall slowly as high school graduates leave the area to look for more employment opportunity.

PARCEL IMPROVEMENTS AND VALUATION

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, paved lots, roads, etc.) at the parcel level. The data did not contain the number of structures on each parcel. The parcel data was analyzed to determine the number and valuation of property improvements located in the 1% annual chance floodplain. A summary of the results of this analysis is provided in the following table.

Table NGV.2: Parcel Improvements and Value in the Floodplain

NUMBER OF IMPROVEMENTS	TOTAL IMPROVEMENT VALUE	NUMBER OF IMPROVEMENTS IN FLOODPLAIN	PERCENTAGE OF IMPROVEMENTS IN FLOODPLAIN	VALUE OF IMPROVEMENTS IN FLOODPLAIN
403	\$19,199,611	26	6.5%	\$636,532

Source: GIS Workshop/Madison & Platte County Assessors, 2019¹³

¹³ GIS Workshop/Madison & Platte County Assessors. 2019. [Personal correspondence].

CRITICAL INFRASTRUCTURE

CHEMICAL STORAGE FIXED SITES

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are a total of four fixed hazardous chemical storage sites within two miles of Newman Grove. The following table lists these sites.

Table NGV.3: Chemical Storage Fixed Sites

FACILITY NAME	ADDRESS	IN FLOODPLAIN (YES/NO)
Battle Creek Farmers Co-op	Jct S 6th St & Logan Ave	No
Farmers Pride Anhydrous & Bulk	Jct 9th St & County Line Ave	No
Farmers Pride Station	604 Broadwell St	No
Newman Grove Water & Street	606 Hale Ave	No

Source: Nebraska Department of Environment and Energy, 2019¹⁴

No spills have occurred in the last five years. Access to the chemical storage sites around Newman Grove is nearly unrestricted because none of the sites have perimeter fencing, increasing the chance of a spill or accident. City Well #1 is particularly at risk, as it is near an anhydrous ammonia fill site and supply yard. Residents are educated on the threat and appropriate response to spills, and the local fire department has the appropriate training and gear to respond.

CRITICAL FACILITIES

The planning team identified critical facilities necessary for the City of Newman Grove’s disaster response and continuity of operations per the FEMA Community Lifelines guidance. Critical facilities were identified during the 2015 planning process and revised for this plan update. The following table and figure provide a summary of the critical facilities for the community.

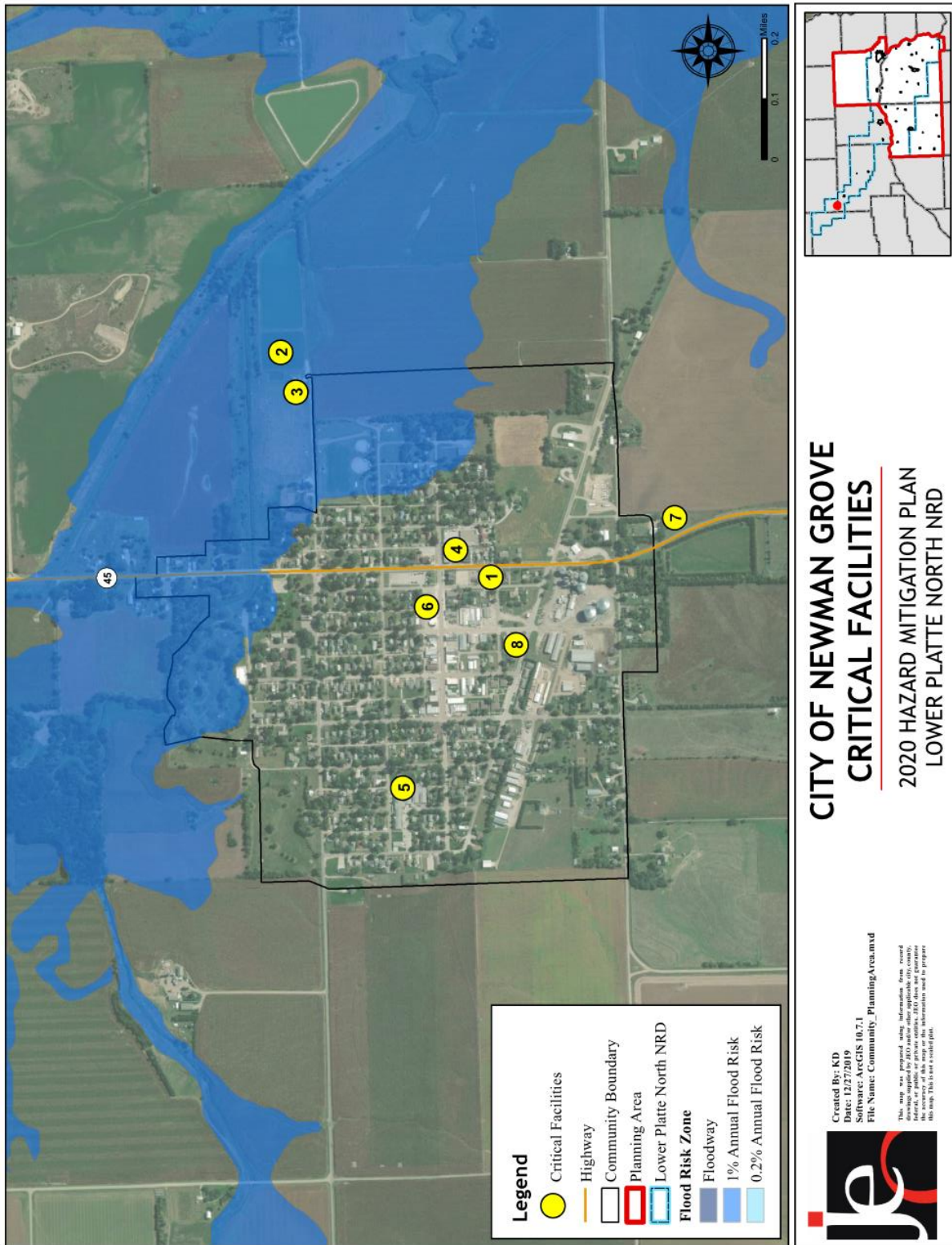
Table NGV.4: Critical Facilities

CF NUMBER	NAME	COMMUNITY SHELTER (YES/NO)	GENERATOR (YES/NO)	IN FLOODPLAIN (YES/NO)
1	Fire Hall	No	Yes	No
2	Lagoon	No	No	Yes
3	Lift Station/Warning Siren	No	Yes	Yes
4	School	No	No	No
5	Warning Siren	No	No	No
6	Warning Siren	No	No	No
7	Well #1	No	Yes	No
8	Well #2	No	No	No

¹⁴ Nebraska Department of Environmental Quality. 2019. "Nebraska DEQ Tier 2 Data Download: 2018." <https://deq-iis.ne.gov/tier2/>.

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Figure NGV.4: Critical Facilities



HISTORICAL OCCURRENCES

See the Madison County Hazard Loss History table in Appendix E for a hazard matrix and historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

HAZARD PRIORITIZATION

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

FLOODING

The March 2019 floods left debris and mud throughout Newman Grove after the water receded. The gravel on road surfaces and the baseball field was displaced. Water overtopped the lagoon dikes, though there was minimal damage as the lagoons were frozen over, so the water passed harmlessly over the top. In a normal season Shell Creek is prone to flooding after heavy rain, though the damage is generally minimal. The stormwater drainage throughout Newman Grove is poor because of the aging, antiquated stormwater system.

SEVERE THUNDERSTORMS

Thunderstorm winds have been a source of tree damage in the past, necessitating costly unanticipated maintenance. Straight-line winds have damaged trees lining entire streets. The town has recently formed a tree board to mitigate some hazardous trees. Lightning from thunderstorms has also had large impacts on the city. In April 2017 lightning struck a football field light, causing a surge that destroyed the field's entire electrical system. Replacing the system cost \$85,000 and took two years to raise the funding. The city's municipal records are protected from severe thunderstorms with surge protectors and a backup protocol. About 10% of the city's power lines are buried, making them vulnerable during severe storms. Power loss from tree damage is not a concern because electricity is provided by a private company that maintains the trees surrounding power lines.

SEVERE WINTER STORMS

About 12 to 18 inches of snow fell in one evening in 2017, along with high winds that created 48-inch-deep drifts throughout Newman Grove. Eight days passed before the entire city was dug out. In 2018 severe cold caused water line breaks in residential households. Severe winter storms are an annual event. Snow removal is done by the utility superintendent and a varying amount of temporary staff with a motor grader, payload, dump truck with a plow, bobcat with a snow blade, and two dump trucks. These resources are sufficient at this time.

TORNADOS

In June 2000 an EF0 tornado touched down in the rural area just outside of Newman Grove. This small tornado did not cause damage, but a future occurrence could be catastrophic. The city's municipal records are protected from severe storms with surge protectors and a backup protocol. The County Emergency Manager maintains three warning sirens in the city, activated by County Dispatch. The village does not offer education on tornado preparedness and response. There are

Section Seven: City of Newman Grove Community Profile

currently no FEMA certified safe rooms in the community so in case of a severe weather event community members can seek shelter in their basements. The school is building two safe rooms as a part of their new construction. In case of a disaster there are Mutual Aid Agreements in place with the nearby communities of Albion, Lindsay, and Madison.

GOVERNANCE

The City of Newman Grove is governed by a mayor and a four-member city council; other governmental offices and departments are listed below. The community government will oversee the implementation of hazard mitigation projects.

- Clerk/Treasurer
- Attorney
- Public Works Department
- Police Department
- Fire Department
- City Accountant
- Planning Commissioner
- Library Director
- Engineer

CAPABILITY ASSESSMENT

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

Table NGV.5: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning & Regulatory Capability	Comprehensive Plan	No
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operational Plan	No
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	National Flood Insurance Program	Yes
	Community Rating System	Yes
Other (if any)		
Administrative & Technical	Planning Commission	Yes
	Floodplain Administration	No
	GIS Capabilities	No

Section Seven: City of Newman Grove Community Profile

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Capability	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	Applied for grants in the past	Yes
	Awarded a grant in the past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric Service Fees	Yes
	Storm Water Service Fees	No
	Water/Sewer Service Fees	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	Yes
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes
	Natural Disaster or Safety related school programs	Yes
	StormReady Certification	Yes
	Firewise Communities Certification	No
	Tree City USA	Yes
Other (if any)		

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

Newman Grove has floodplain regulations, zoning ordinance, and subdivision ordinance. Due to the age of these documents, they have not been integrated with the hazard mitigation plan.

Section Seven: City of Newman Grove Community Profile

However, the community will seek out and evaluate any opportunities to integrate the results of the current HMP into planning mechanisms and updates.

MITIGATION STRATEGY

ONGOING AND NEW MITIGATION ACTIONS

MITIGATION ACTION	HAZARDOUS TREE REMOVAL
Description	Remove hazardous trees
Hazard(s) Addressed	High wind, severe thunderstorms, severe winter storms
Estimated Cost	Varies
Funding	City funds
Timeline	5+ years
Priority	Medium
Lead Agency	Tree Board
Status	There is a tree board in place that completed a tree inventory in 2019 to identify vulnerable trees.

MITIGATION ACTION	IMPROVE EMERGENCY TEXT WARNING SYSTEM
Description	Improve city cable TV interrupt warning system and implement telephone interrupt system such as reverse 911, emergency text messaging warning system, etc.
Hazard(s) Addressed	All hazards
Estimated Cost	Unknown
Funding	City funds
Timeline	2-5 years
Priority	Medium
Lead Agency	City Council
Status	Statewide police radios are being purchased.

REMOVED MITIGATION ACTIONS

MITIGATION ACTION	MAINTAIN GOOD STANDING IN THE NATIONAL FLOOD INSURANCE PROGRAM
Hazard(s) Addressed	Flooding
Reason for Removal	While the community will continue to participate and maintain compliance in the NFIP, this project is no longer considered a mitigation action by FEMA.

COMMUNITY PROFILE

VILLAGE OF PLATTE CENTER

LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

2020

Section Seven: Village of Platte Center Community Profile

LOCAL PLANNING TEAM

Table PLT.1: Village of Platte Center Local Planning Team

NAME	TITLE	JURISDICTION
Mark Borchers	Village Board Chairperson / Floodplain Administrator	Village of Platte Center

LOCATION AND GEOGRAPHY

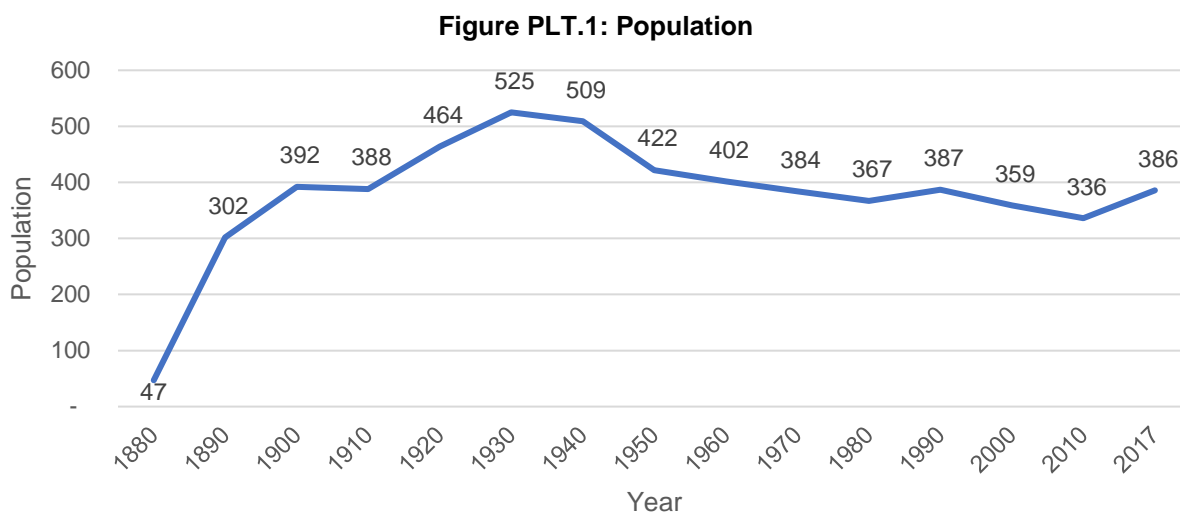
The Village of Platte Center is in the central portion of Platte County and covers an area of 0.30 square miles. It is located in the dissected plains region of Nebraska, surrounded by agricultural land used primarily for row crop production and pasturing. Elm Creek bisects Platte Center, running north to south until it empties into Shell Creek just south of the village.

TRANSPORTATION

Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community and areas more at risk of transportation incidents. Platte Center’s major transportation corridor is US Highway 81, located just east of the community. It is traveled by a total annual average of 7,875 vehicles daily, 1,415 of which are trucks.¹⁵ A Nebraska Central Railroad Company rail line runs through the center of the village, along Elm Creek. Highway 81 is the transportation route of most concern for the community.

DEMOGRAPHICS

Platte Center’s population grew from 336 people in 2010 to about 386 people in 2017, though the overall trend suggests a population decline. The village’s population accounted for 1.2% of Platte County’s population in 2017.¹⁶



Source: U.S. Census Bureau, 1880 - 2017

15 Nebraska Department of Roads. 2018. "Interactive Statewide Traffic Counts Map." [map].

<https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

16 United States Census Bureau. "American Fact Finder: S0101: Age and Sex." [database file]. <https://factfinder.census.gov/>.

Section Seven: Village of Platte Center Community Profile

Figure PLT.2: Village of Platte Center



Section Seven: Village of Platte Center Community Profile

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

- **Similarly aged.** The median age of Platte Center was 40.4 years old in 2017, compared with Platte County's median of 38.3 years. Platte Center's population grew older since 2010, when the median age was 31.8 years old.²
- **Less ethnically diverse.** Since 2010, Platte Center grew less ethnically diverse. In 2010, 1.8% of Platte Center's population was Hispanic or Latino. By 2017, about 0.5% was Hispanic or Latino. During that time, the Hispanic population in the county grew from 12.0% in 2010 to 17.6% in 2017.²
- **More likely to be below the federal poverty line.** The poverty rate in Platte Center (11.2% of people living below the federal poverty line) was higher than the county's poverty rate (8.6%) in 2017.¹⁷

EMPLOYMENT AND ECONOMICS

The Village of Platte Center's economic base is primarily manufacturing. In comparison to Platte County, Platte Center's economy had:

- **Larger mix of industries.** Four major employment sectors, accounting for 10% or more of employment each, were: manufacturing; wholesale; retail trade; and educational services, and health care and social assistance.³
- **Lower per capita income.** Platte Center's per capita income in 2017 (\$23,814) was about \$4,373 lower than the county (\$28,187).³
- **More commuters.** About 37.0% of workers in Platte Center commuted for fewer than 15 minutes, compared with about 63.6% of workers in Platte County. About 13.8% of workers in Platte Center commuted 30 minutes or more to work, compared to about 10.0% of county workers.¹⁸

MAJOR EMPLOYERS

The Pillen Family Farms, Schumacker Irrigation, and the Lakeview Community Schools are the largest employers in Platte Center. Most residents commute to the nearby City of Columbus for work.

HOUSING

In comparison to Platte County, Platte Center's housing stock was:¹⁹

- **Older.** Platte Center had a larger share of housing built prior to 1970 than the county (61.9% compared to 50.9%).
- **Less mobile and manufactured housing.** Platte Center had a slightly smaller share of mobile and manufactured housing (3.6%) compared to the county (4.4%). One mobile

17 United States Census Bureau. "American Fact Finder: DP03: Selected Economic Characteristics." [database file]. <https://factfinder.census.gov/>.

18 United States Census Bureau. "American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]. <https://factfinder.census.gov/>.

19 United States Census Bureau. "American Fact Finder: DP04: Selected Housing Characteristics." [database file]. <https://factfinder.census.gov/>.

Section Seven: Village of Platte Center Community Profile

home is located in the northwest corner, one is located in the southwest corner, and one is located by the post office.

- **Less renter-occupied.** About 9.5% of occupied housing units in Platte Center were renter-occupied compared with 28.8% of occupied housing in Platte County.
- **Occupied.** Approximately 4.2% of Platte Center's housing units were vacant compared to 5.7% of units in Platte County.

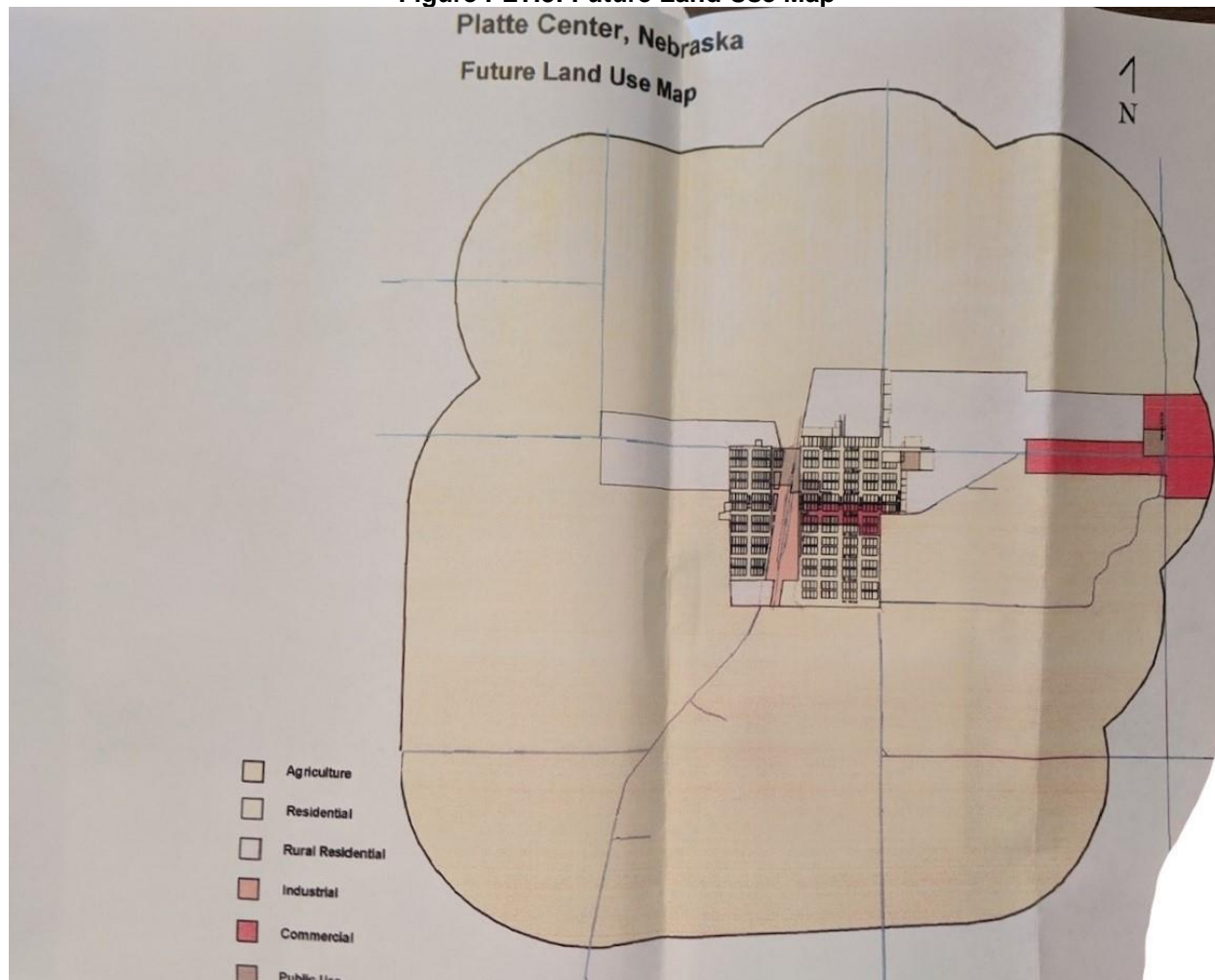
The age of housing may indicate which housing units were built prior to the development of state building codes. Homes built within a flood hazard area before the adoption of their community's Flood Rate Insurance Map (FIRM) are not likely to be built above the 1% annual chance floodplain. Older and vacant housing stock may also be more vulnerable to hazard events if it is poorly maintained. Communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms if those homes are not anchored correctly. Renter occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. They are less likely than homeowners to have renter's insurance or flood insurance, or to know their risks to flooding and other hazards. A significant number of unoccupied housing suggests that future development may be unlikely to occur in the area.

FUTURE DEVELOPMENT TRENDS

Over the last ten years, Platte Center demolished three buildings and removed one mobile home from the community. Vergus Repair plans to double in size. The village intends to prevent future development in the floodplain, restricting future development to the north of the community. According to the most recent American Community Survey estimates Platte Center's population is declining. The local planning team attributed the decline to a lack of stores, entertainment, and childcare.

Section Seven: Village of Platte Center Community Profile

Figure PLT.3: Future Land Use Map



PARCEL IMPROVEMENTS AND VALUATION

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, paved lots, roads, etc.) at the parcel level. The data did not contain the number of structures on each parcel. The parcel data was analyzed to determine the number and valuation of property improvements located in the 1% annual chance floodplain. A summary of the results of this analysis is provided in the following table.

Table PLT.2: Parcel Improvements and Value in the Floodplain

NUMBER OF IMPROVEMENTS	TOTAL IMPROVEMENT VALUE	NUMBER OF IMPROVEMENTS IN FLOODPLAIN	PERCENTAGE OF IMPROVEMENTS IN FLOODPLAIN	VALUE OF IMPROVEMENTS IN FLOODPLAIN
168	\$11,631,290	67	4.0%	\$3,483,720

Source: GIS Workshop/Platte County Assessor, 2019²⁰

²⁰ GIS Workshop/Platte County Assessor. 2019. [Personal correspondence].

CRITICAL INFRASTRUCTURE

CHEMICAL STORAGE FIXED SITES

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are no fixed hazardous chemical storage sites within two miles of Platte Center.²¹

CRITICAL FACILITIES

The planning team identified critical facilities necessary for the Village of Platte Center’s disaster response and continuity of operations per the FEMA Community Lifelines guidance. Critical facilities were identified during the 2015 planning process and revised for this plan update. The following table and figure provide a summary of the critical facilities for the community.

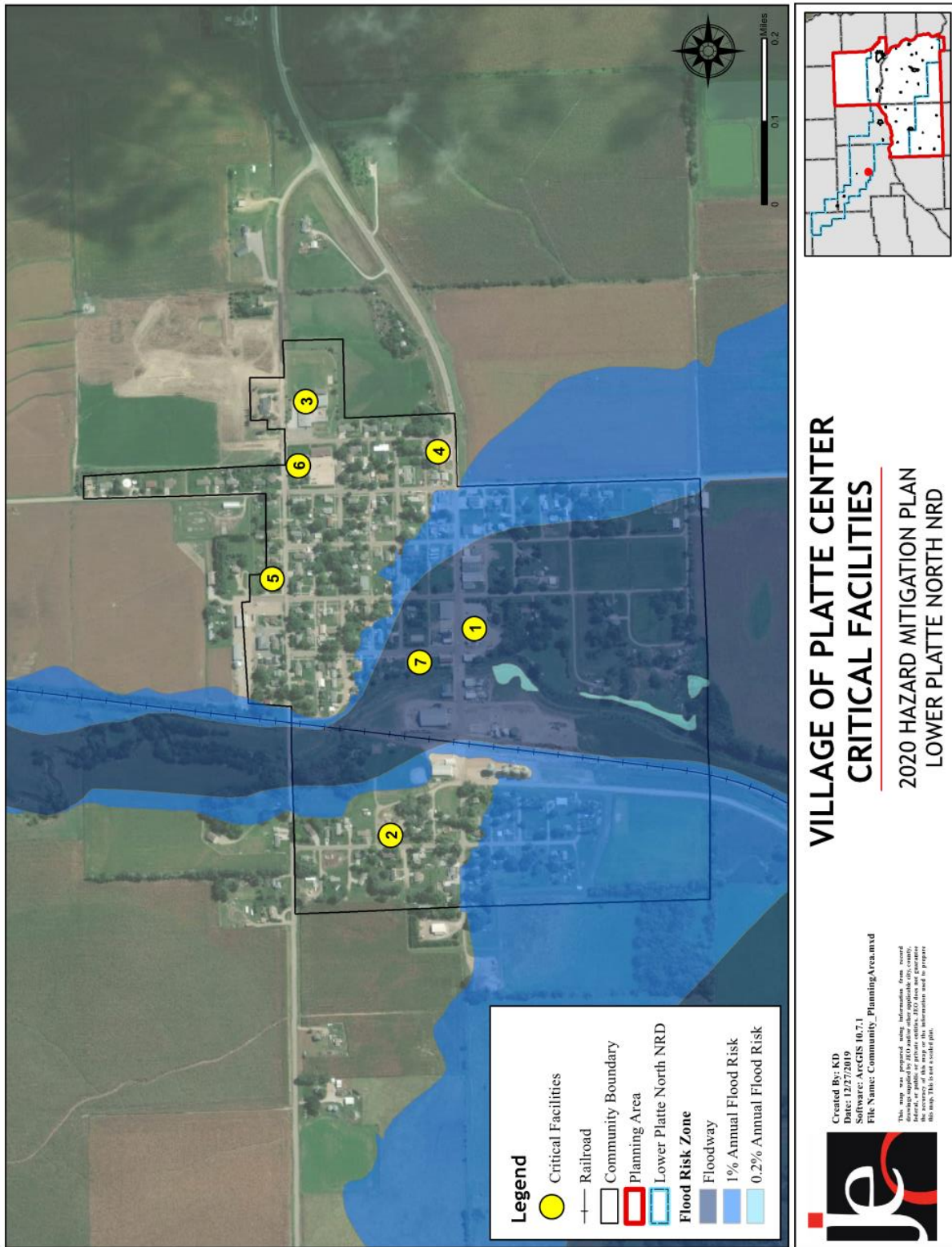
Table PLT.4: Critical Facilities

CF NUMBER	NAME	COMMUNITY SHELTER (YES/NO)	GENERATOR (YES/NO)	IN FLOODPLAIN (YES/NO)
1	City Auditorium/Office	No	No	Yes
2	City Equipment Storage	No	No	No
3	District 24 School	Yes	No	No
4	Fire Department	Yes	No	No
5	Grace Lutheran Church	Yes	No	No
6	St. Joseph Church	Yes	No	No
7	Village Main Building	No	Yes (Portable)	Yes

21 Nebraska Department of Environment and Energy. 2019. "Nebraska DEQ Tier 2 Data Download: 2019." <https://deq-iis.ne.gov/tier2/tier2Download.html>.

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Figure PLT.4: Critical Facilities



HISTORICAL OCCURRENCES

See the Platte County Hazard Loss History table in Appendix E for a hazard matrix and historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

HAZARD PRIORITIZATION

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

FLOODING

Major flooding in the village occurred in 1990 and 2008. In 1990 water was six feet deep on main street and caused businesses and homes to have water damage. The flood in 2008 did not have water as deep but damage to businesses and homes also occurred. During the March 2019 flood, a levee downstream breached causing water to drop in Elm Creek and stopped the village from having any flooding. Riverine flooding is the primary concern for the village. Elm Creek runs through the village and drains into Shell Creek three quarters of a mile south of town. If the water level in Shell Creek is high, then Elm Creek backs up causing flooding to occur in the community. Every year there is a risk of a flood that would affect 30% of the village and the entire business district. Areas of the village most likely to flood are located in the floodway in figure above. The village hall building is located in the floodway, but the office is located on the second floor so damage to contents is minimal. The lift station is also located in the floodway but was raised out of the floodplain over five years ago. The village is currently working on cleaning out ditches and improving drainage help mitigate flooding issues.

SEVERE THUNDERSTORMS

Primary concerns regarding severe thunderstorms are damage to buildings, fallen power lines, and damaged trees. Severe thunderstorms are an annual occurrence in the village but no one major event sticks out. Power loss occurs a couple of times a year but does not typically last very long. In the event of power loss or power surge, records are backed up on a flash drive and electronic devices have surge protectors. Critical facilities have not been impacted by past events. Village owned buildings are protected by hail resistant building materials and are insured against hail damage. The fire department uses storm spotters and weather radios to alert the community of incoming storms.

SEVERE WINTER STORMS

No major winter storm events have occurred in the village, but small snowstorms occur on an annual basis. Past impacts include snow removal on streets and power loss. The village works closely with the rural fire department to plow roads when rescue calls come in. Platte Center handles all snow removal in the community. The village leases a John Deere tractor and blade for snow removal, and a motor grader can be used during larger snow events. These have been sufficient during past events. Salt and gravel are also used on roads after ice storms to help melt ice and increase traction.

Section Seven: Village of Platte Center Community Profile

TORNADOES AND HIGH WINDS

No tornadoes have impacted the village, but the risk still exists. If a large tornado were to hit the village, the likelihood of major damages is high. The village has two warning sirens which are activated by 911 dispatch in Columbus. Nobody in the village is able to activate the sirens. The village also utilizes reverse 911 and offers mass text alerts for residents. There are no certified safe rooms in the community and residents must use basements. Most houses have basements and businesses without basements have plans in place for staff to seek shelter.

GOVERNANCE

The Village of Platte Center is governed by a five-member village board; other governmental offices and departments are listed below. The community government will oversee the implementation of hazard mitigation projects.

- Clerk/Treasurer
- Attorney
- County Sheriff
- Fire Department
- Sewage Plant Operator
- Street Commissioner
- Engineer
- Floodplain Administrator
- Floodplain Manager
- Emergency Manager
- Street Superintendent

CAPABILITY ASSESSMENT

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

Table PLT.5: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operational Plan	Yes
	Floodplain Management Plan	No
	Stormwater Management Plan	Yes
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No

Section Seven: Village of Platte Center Community Profile

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Administrative & Technical Capability	Other (if any)	
	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 (Rural Fire Department)
	Other (if any)	
Fiscal Capability	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	Yes
Other (if any)		
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	No
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes
	Natural Disaster or Safety related school programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Table PLT.6: Overall Capability Assessment

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	Moderate

Section Seven: Village of Platte Center Community Profile

PLAN INTEGRATION

Platte Center has a comprehensive plan (2006), emergency operations plan (2016), zoning ordinance (2017), building code (2017), floodplain regulations (2017), stormwater management plan (2020), wellhead protection plan (2002), and subdivision regulations (2018). The comprehensive plan, zoning ordinance, floodplain regulations, stormwater management plan, and subdivision regulations discourage development in the floodplain, prohibit development in the floodway, prohibit filling of wetlands, discourage development near chemical storage sites, encourage open space within the floodplain, and restrict subdivision of land in the floodplain. The village is an annex to Platte County's emergency operations plan. It includes information on communications, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. Platte Center's building code requires mechanical systems to be elevated if in the floodplain, allows for rain gardens, encourages the use of permeable surfaces, and encourages the use of fire resistant and hail resistant building materials. The municipal budget has increased over recent years. Projects included in the budget are a new well and Main Street repairs. No other examples of plan integration were identified. However, the community will seek out and evaluate any opportunities to integrate the results of the current HMP into other planning mechanisms and updates.

MITIGATION STRATEGY

ONGOING AND NEW MITIGATION ACTIONS

MITIGATION ACTION	NEW WELL
Description	The village may require a new well as a result of continuous nitrate contamination. The village will only require a new well if the nitrate contamination trend continues.
Hazard(s) Addressed	Drought
Estimated Cost	\$420,000
Funding	Sales Tax, CDBG
Timeline	1 year
Priority	High
Lead Agency	Village Board, Engineer
Status	In progress, designs are currently under construction. Well will be located north of the public school

Section Seven: Village of Platte Center Community Profile

MITIGATION ACTION		SEWER SYSTEM REPAIRS	
Description	Wastewater sludge has accumulated in the Platte Center Municipal Wastewater Lagoons over the decades. The community would like to remove the built-up sludge to improve storage and treatment abilities. Sanitary Sewer Collection System Repairs- the community would like to televise their sewer system and repair those areas that are in the poorest condition		
Hazard(s) Addressed	Flooding		
Estimated Cost	Varies		
Funding	General Fund		
Timeline	Ongoing		
Priority	Medium		
Lead Agency	Village Board		
Status	Ongoing, the sewer system was scoped March 2019, and everything looked normal		

MITIGATION ACTION		STREAM BANK STABILIZATION / GRADE CONTROL STRUCTURES / CHANNEL IMPROVEMENTS	
Description	Stabilization improvements including rock rip rap, vegetative cover, j-hooks, boulder vanes, etc. can be implemented to reestablish the channel banks. Channel stabilization can protect structures, increase conveyance and provide flooding benefits. Stabilization is needed along Elm Creek		
Hazard(s) Addressed	Flooding		
Estimated Cost	Varies		
Funding	Sales Tax, General Fund		
Timeline	2-5 years		
Priority	Medium		
Lead Agency	Village Board		
Status	Ongoing, as issues are identified they are fixed.		

REMOVED MITIGATION ACTIONS

MITIGATION ACTION		FLOODPLAIN REGULATION ENFORCEMENT AND UPDATES	
Hazard(s) Addressed	Flooding		
Reason for Removal	This is not a true mitigation action. The village will continue enforce all local floodplain regulations		

MITIGATION ACTION		MAINTAIN GOOD STANDING IN THE NATIONAL FLOOD INSURANCE PROGRAM	
Hazard(s) Addressed	Flooding		
Reason for Removal	While the community will continue to participate and maintain compliance in the NFIP, this is not a true mitigation action. The village will maintain good standing with NFIP		

COMMUNITY PROFILE

VILLAGE OF RICHLAND

LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

2020

LOCAL PLANNING TEAM

Table RCH.1: Village of Richland Local Planning Team

NAME	TITLE	JURISDICTION
Michelle Evert	Village Clerk	Village of Richland

LOCATION AND GEOGRAPHY

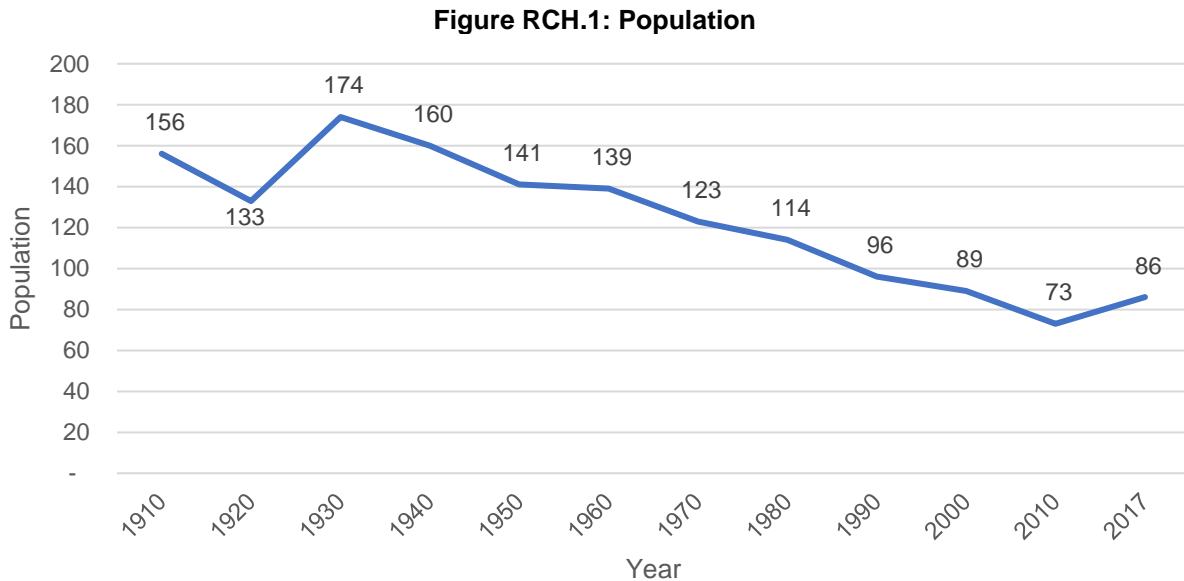
The Village of Richland is in the southwest portion of Colfax County and covers an area of 0.21 square miles. It is located in the Platte River Valley, about three miles north of the Platte River. Richland is surrounded by agricultural land used primarily for row crop production and pasturing.

TRANSPORTATION

Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community and areas more at risk of transportation incidents. Richland’s major transportation corridor is US Highway 30. It is traveled by a total annual average of 11,620 vehicles daily, 1,530 of which are trucks.²² A Union Pacific Railroad rail line cuts through the northern edge of the village.

DEMOGRAPHICS

Richland’s population grew from 73 people in 2010 to about 86 people in 2017, though the overall trend suggests that the population is declining. The village’s population accounted for 0.8% of Colfax County’s population in 2017.²³



Source: U.S. Census Bureau, 1910 - 2017

22 Nebraska Department of Roads. 2018. "Interactive Statewide Traffic Counts Map." [map].

<https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

23 United States Census Bureau. "American Fact Finder: S0101: Age and Sex." [database file]. <https://factfinder.census.gov/>.

Section Seven: Village of Richland Community Profile

Figure RCH.2: Village of Richland



Section Seven: Village of Richland Community Profile

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

- **Similarly aged.** The median age of Richland was 30.4 years old in 2017, compared with Colfax County's median of 33.7 years. Richland's population grew younger since 2010, when the median age was 49.5 years old.²
- **Less ethnically diverse.** Since 2010, Richland grew more ethnically diverse. In 2010, none of Richland's population was Hispanic or Latino. By 2017, about 11.6% was Hispanic or Latino. During that time, the Hispanic population in the county grew from 36.2% in 2010 to 44.8% in 2017.²
- **More likely to be below the federal poverty line.** The poverty rate in Richland (23.3% of people living below the federal poverty line) was higher than the county's poverty rate (8.2%) in 2017.²⁴

EMPLOYMENT AND ECONOMICS

The Village of Richland's economic base is primarily manufacturing. In comparison to Colfax County, the village's economy had:

- **Larger mix of industries.** Four major employment sectors, accounting for 10% or more of employment each, were: manufacturing; information; educational services, and health care and social assistance; and public administration.³
- **Lower per capita income.** Richland's per capita income in 2017 (\$20,194) was about \$3,199 lower than the county (\$23,393).³
- **Fewer long-distance commuters.** About 66.7% of workers in Richland commuted for fewer than 15 minutes, compared with about 55.0% of workers in Colfax County. About 5.1% of workers in the village commuted 30 minutes or more to work, compared to about 19.1% of county workers.²⁵

MAJOR EMPLOYERS

Major employers in Richland include Papa Mikes, the co-op, and Nu Star Energy. A large percentage of works commute to Schuyler and Columbus for employment.

HOUSING

In comparison to Colfax County, Richland's housing stock was:²⁶

- **Older.** Richland had a larger share of housing built prior to 1970 than the county (72.9% compared to 53.4%).
- **More mobile and manufactured housing.** Richland had a larger share of mobile and manufactured housing (13.6%) compared to the county (9.1%).

24 United States Census Bureau. "American Fact Finder: DP03: Selected Economic Characteristics." [database file]. <https://factfinder.census.gov/>.

25 United States Census Bureau. "American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]. <https://factfinder.census.gov/>.

26 United States Census Bureau. "American Fact Finder: DP04: Selected Housing Characteristics." [database file]. <https://factfinder.census.gov/>.

Section Seven: Village of Richland Community Profile

- **Slightly less renter-occupied.** About 29.8% of occupied housing units in Richland were renter-occupied compared with 31.6% of occupied housing in Colfax County.
- **Unoccupied.** Approximately 20.3% of Richland’s housing units were vacant compared to 11.8% of units in Colfax County.

The age of housing may indicate which housing units were built prior to the development of state building codes. Homes built within a flood hazard area before the adoption of their community’s Flood Rate Insurance Map (FIRM) are not likely to be built above the 1% annual chance floodplain. Older and vacant housing stock may also be more vulnerable to hazard events if it is poorly maintained. Communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms if those homes are not anchored correctly. Renter occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. They are less likely than homeowners to have renter’s insurance or flood insurance, or to know their risks to flooding and other hazards. A significant number of unoccupied housing suggests that future development may be unlikely to occur in the area.

FUTURE DEVELOPMENT TRENDS

In the past five years no new housing or commercial developments have occurred. According to the most recent American Community Survey estimates, Richland’s population is declining. The local planning team attributed this decline to lack of housing and employment options. In the next five years there are no plans for housing or commercial developments.

PARCEL IMPROVEMENTS AND VALUATION

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, paved lots, roads, etc.) at the parcel level. The data did not contain the number of structures on each parcel. The parcel data was analyzed to determine the number and valuation of property improvements located in the 1% annual chance floodplain. A summary of the results of this analysis is provided in the following table.

Table RCH.2: Parcel Improvements and Value in the Floodplain

NUMBER OF IMPROVEMENTS	TOTAL IMPROVEMENT VALUE	NUMBER OF IMPROVEMENTS IN FLOODPLAIN	PERCENTAGE OF IMPROVEMENTS IN FLOODPLAIN	VALUE OF IMPROVEMENTS IN FLOODPLAIN
48	\$1,740,070	0	0%	\$0

Source: GIS Workshop/Colfax County Assessor, 2019²⁷

²⁷ GIS Workshop/Colfax County Assessor. 2019. [Personal correspondence].

CRITICAL INFRASTRUCTURE

CHEMICAL STORAGE FIXED SITES

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are a total of three fixed hazardous chemical storage sites within two miles of Richland. The following table lists these sites.

Table RCH.3: Chemical Storage Fixed Sites

FACILITY NAME	ADDRESS	IN FLOODPLAIN (YES/NO)
Bluebird Nursery Inc	519 Cherry St	No
Columbus Terminal	147 Road D	No
Schuyler Co-op Assn	Jct W Hwy 30 & Gold St	Yes

Source: Nebraska Department of Environment and Energy, 2019²⁸

CRITICAL FACILITIES

The planning team identified critical facilities necessary for the Village of Richland’s disaster response and continuity of operations per the FEMA Community Lifelines guidance. The following table and figure provide a summary of the critical facilities for the community.

Table RCH.4: Critical Facilities

CF NUMBER	NAME	COMMUNITY SHELTER (YES/NO)	GENERATOR (YES/NO)	IN FLOODPLAIN (YES/NO)
1	Village Hall	No	No	No
2	Lagoons	No	No	No
3	Siren	No	No	No

28 Nebraska Department of Environment and Energy. 2019. "Nebraska DEQ Tier 2 Data Download: 2019." <https://deq-iis.ne.gov/tier2/tier2Download.html>.

Section Seven: Village of Richland Community Profile

Figure RCH.3: Critical Facilities



HISTORICAL OCCURRENCES

See the Colfax County Hazard Loss History table in Appendix E for a hazard matrix and historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

HAZARD PRIORITIZATION

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

CHEMICAL SPILLS (FIXED SITES)

There are three chemical storage facilities located within two miles of Richland. The site of most concern for the village is the co-op which is located on the north side of the community. All residences and the village hall are located within three or four blocks of the co-op. If a major spill were to occur, entire village may need to be evacuated south on Road 3. No fixed site spills have occurred in Richland. The fire department would be the first to respond and is trained on small spill containment and clean-up.

CHEMICAL SPILLS (TRANSPORTATION)

Transportation routes of most concern include Highway 30, Road 3, Front Street, and the railroad as they all carry a wide variety of farm and other chemicals. The co-op is located on Front Street and Road 3 is used to leave the village onto Highway 30. No transportation chemical spills have been reported. If a chemical spill were to occur the fire department would be the first to respond. Depending on the size of the spill, additional mutual aid may need to be called in.

SEVERE THUNDERSTORMS

Severe thunderstorms are an annual occurrence for the community. No damages from events have been reported. Primary concerns include loss of power and damage to structures from large hail, wind, or falling tree limbs. No power lines in the community are buried making the village more susceptible to power loss. No critical facilities in the community have backup power generators.

SEVERE WINTER STORMS

Primary concern related to severe winter storms are road closures, loss of power, and heating issues. Severe winter storms are an annual occurrence across the planning area and the community. The local planning team did not recall any specific events which caused damages in the village. Snow removal is handled by the village is resources are adequate for most snow events that occur.

TORNADOES AND HIGH WINDS

There have been no reported tornadoes which have impacted the community; however, the potential still exists. If a large tornado were to hit the village, it would likely cause massive amounts of damage. There are no safe rooms in the community so residents must use basements or interior spaces for shelter. There is one tornado siren in the village, and it reaches all areas of the community. Mutual aid agreements are in place with surrounding communities and the county.

Section Seven: Village of Richland Community Profile

GOVERNANCE

The Village of Richland is governed by a five-member board of supervisors; other governmental offices and departments are listed below. The community government will oversee the implementation of hazard mitigation projects.

- Clerk/Treasurer
- Attorney
- Superintendent
- Street Engineers
- Parks & Recreation Department

CAPABILITY ASSESSMENT

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

Table RCH.5: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning & Regulatory Capability	Comprehensive Plan	No
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operational Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	Yes
	Building Codes	No
	National Flood Insurance Program	Yes
	Community Rating System	No
	Other (if any)	
Administrative & Technical Capability	Planning Commission	No
	Floodplain Administration	Yes
	GIS Capabilities	No
	Chief Building Official	No
	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	Applied for grants in the past	No
	Awarded a grant in the past	No

Section Seven: Village of Richland Community Profile

SURVEY COMPONENTS/SUBCOMPONENTS		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 Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	No
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	No
	Natural Disaster or Safety related school programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Table RCH.6: Overall Capability Assessment

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

Richland has floodplain regulations which provide rules on what can and cannot be built in the floodplain. The village is also an annex to the Colfax County’s 2015 emergency operations plan. It provides information on communications, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. No other examples of plan integration were identified. However, the community will seek out and evaluate any opportunities to integrate the results of the current HMP into other planning mechanisms and updates.

Section Seven: Village of Richland Community Profile

MITIGATION STRATEGY

NEW MITIGATION ACTIONS

MITIGATION ACTION	ALERT/WARNING SIRENS
Description	Perform an evaluation of existing alert sirens in order to determine sirens which should be replaced or upgraded. Install new sirens where lacking with remote activation options
Hazard(s) Addressed	Tornadoes and high winds, severe thunderstorms
Estimated Cost	\$5,000+
Funding	General Fund
Timeline	5+ years
Priority	Medium
Lead Agency	Village Board
Status	New action. Not started

MITIGATION ACTION	BACKUP AND EMERGENCY GENERATORS
Description	Identify and evaluate current backup and emergency generators. Obtain additional generators based on identification and evaluation. Provide portable or stationary source of backup power to redundant power supplies, municipal wells, lift stations and other critical facilities and shelters
Hazard(s) Addressed	All hazards
Estimated Cost	Varies by size
Funding	General Fund
Timeline	5+ years
Priority	Medium
Lead Agency	Village Board
Status	New action. Not started

COMMUNITY PROFILE

VILLAGE OF ROGERS

LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

2020

Section Seven: Village of Rogers Community Profile

LOCAL PLANNING TEAM

Table RGR.1: Village of Rogers Local Planning Team

NAME	TITLE	JURISDICTION
Darlene Divis	Village Clerk	Village of Rogers
Joyce Noyd	Village Trustee	Village of Rogers

LOCATION AND GEOGRAPHY

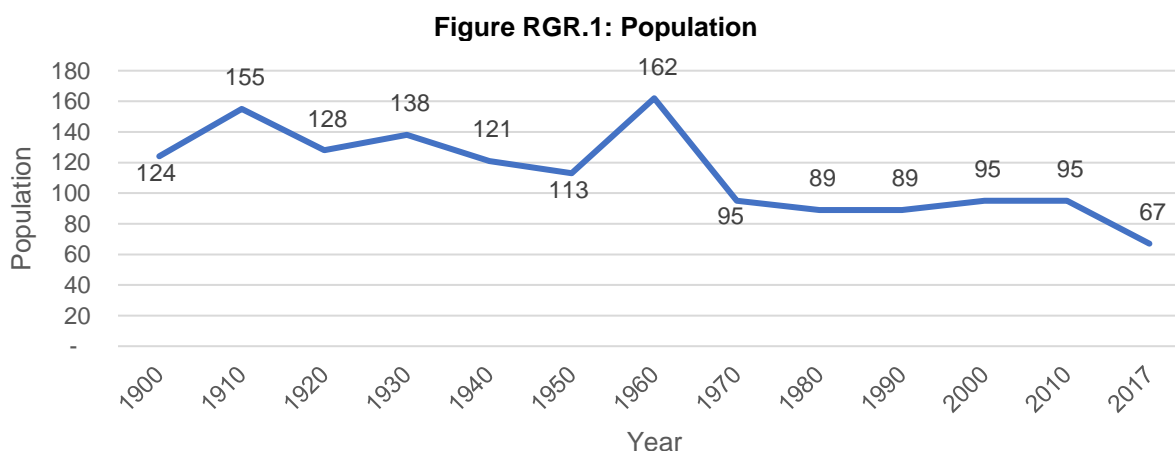
The Village of Rogers is in the southeast corner of Colfax County and covers an area of 0.17 square miles. It is in the Platte River Valley, less than a mile from the Platte River. The land around the village is used primarily for row crop production.

TRANSPORTATION

Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community and areas more at risk of transportation incidents. Rogers' major transportation corridor is US Highway 30. It is traveled by a total annual average of 7,480 vehicles daily, 980 of which are trucks.²⁹ A Union Pacific Railroad rail line travels along the southern edge of the village. The railroad and highway are the transportation routes of most concern for the community because they are the most heavily traveled. Propane, radioactive waste, and farm chemicals including anhydrous ammonia are regularly transported on these routes.

DEMOGRAPHICS

Rogers' population declined from 95 people in 2010 to about 67 people in 2017. A decreasing population could make funding mitigation projects difficult because of a decreasing tax base. The village's population accounted for 0.6% of Colfax County's population in 2017.³⁰



Source: U.S. Census Bureau, 1900 - 2017

29 Nebraska Department of Roads. 2018. "Interactive Statewide Traffic Counts Map." [map].

<https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

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

<https://factfinder.census.gov/>.

Section Seven: Village of Rogers Community Profile

Figure RGR.2: Village of Rogers



Section Seven: Village of Rogers Community Profile

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

- **Similarly aged.** The median age of Rogers was 39.3 years old in 2017, compared with Colfax County's median of 33.7 years. Rogers' population grew younger since 2010, when the median age was 48.5 years old. Rogers had a smaller proportion of people under 18 years old (16.4%) than the county (30.2%).²
- **Less ethnically diverse.** Since 2010, Rogers grew less ethnically diverse. In 2010, 45.6% of the population was Hispanic or Latino. By 2017, about 17.9% was Hispanic or Latino. During that time, the Hispanic population in the county grew from 36.2% in 2010 to 44.8% in 2017.²
- **Less likely to be below the federal poverty line.** The poverty rate in Rogers (no people living below the federal poverty line) was lower than the county's poverty rate (8.2%) in 2017.³¹

EMPLOYMENT AND ECONOMICS

The Village of Rogers' economic base is a mixture of industries. In comparison to Colfax County, the village's economy had:

- **Larger mix of industries.** Four major employment sectors, accounting for 10% or more of employment each, were: manufacturing; retail trade; educational services, and health care and social assistance; and public administration.³
- **Similar per capita income.** Rogers' per capita income in 2017 (\$25,664) was about \$2,271 higher than the county (\$23,393).³
- **More commuters.** About 20.0% of workers in Rogers commuted for fewer than 15 minutes, compared with about 55.0% of workers in Colfax County. About 32.5% of workers in Rogers commuted 30 minutes or more to work, compared to about 19.1% of county workers.³²

MAJOR EMPLOYERS

Most employers commute to the Cargill plant in Schuyler for work, as there are limited employment opportunities within the community. Some residents also commute for work to Methodist Fremont Health in the City of Fremont.

HOUSING

In comparison to Colfax County, Rogers' housing stock was:³³

- **Similarly aged.** Rogers had a similar share of housing built prior to 1970 than the county (59.0% compared to 53.4%).

31 United States Census Bureau. "American Fact Finder: DP03: Selected Economic Characteristics." [database file]. <https://factfinder.census.gov/>.

32 United States Census Bureau. "American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]. <https://factfinder.census.gov/>.

33 United States Census Bureau. "American Fact Finder: DP04: Selected Housing Characteristics." [database file]. <https://factfinder.census.gov/>.

Section Seven: Village of Rogers Community Profile

- **More mobile and manufactured housing.** Rogers had a larger share of mobile and manufactured housing (28.2%) compared to the county (9.1%). There are four mobile homes in the center of the village and one on the southeast side.
- **Less renter-occupied.** About 23.3% of occupied housing units in Rogers were renter-occupied compared with 31.6% of occupied housing in Colfax County.
- **Unoccupied.** Approximately 23.1% of the village’s housing units were vacant compared to 11.8% of units in Colfax County.

The age of housing may indicate which housing units were built prior to the development of state building codes. Homes built within a flood hazard area before the adoption of their community’s Flood Rate Insurance Map (FIRM) are not likely to be built above the 1% annual chance floodplain. Older and vacant housing stock may also be more vulnerable to hazard events if it is poorly maintained. Communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms if those homes are not anchored correctly. Renter occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. They are less likely than homeowners to have renter’s insurance or flood insurance, or to know their risks to flooding and other hazards. A significant number of unoccupied housing suggests that future development may be unlikely to occur in the area.

FUTURE DEVELOPMENT TRENDS

In the last ten years, one new single-family home and a new garage have been built in Rogers. There are no new housing or business developments planned. The population of the village is generally declining because of limited work opportunities and few schools in the area.

PARCEL IMPROVEMENTS AND VALUATION

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, paved lots, roads, etc.) at the parcel level. The data did not contain the number of structures on each parcel. The parcel data was analyzed to determine the number and valuation of property improvements located in the 1% annual chance floodplain. A summary of the results of this analysis is provided in the following table.

Table RGR.2: Parcel Improvements and Value in the Floodplain

NUMBER OF IMPROVEMENTS	TOTAL IMPROVEMENT VALUE	NUMBER OF IMPROVEMENTS IN FLOODPLAIN	PERCENTAGE OF IMPROVEMENTS IN FLOODPLAIN	VALUE OF IMPROVEMENTS IN FLOODPLAIN
38	\$1,375,070	38	100%	\$1,375,070

Source: GIS Workshop/Colfax County Assessor, 2019³⁴

34 GIS Workshop/Colfax County Assessor. 2019. [Personal correspondence].

Section Seven: Village of Rogers Community Profile

CRITICAL INFRASTRUCTURE

CHEMICAL STORAGE FIXED SITES

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there is one fixed hazardous chemical storage site within two miles of Rogers. The following table lists this site. The community does not have any concerns regarding chemical fixed sites. Nearby fire departments in the cities of Schuyler and North Bend have the training and equipment to respond to chemical spills.

Table RGR.3: Chemical Storage Fixed Sites

FACILITY NAME	ADDRESS	IN FLOODPLAIN (YES/NO)
Verizon Wireless	1166 Road W	No

Source: Nebraska Department of Environment and Energy, 2019³⁵

CRITICAL FACILITIES

The planning team identified critical facilities necessary for the Village of Rogers' disaster response and continuity of operations per the FEMA Community Lifelines guidance. Critical facilities were identified during the 2015 planning process and revised for this plan update. The following table and figure provide a summary of the critical facilities for the community.

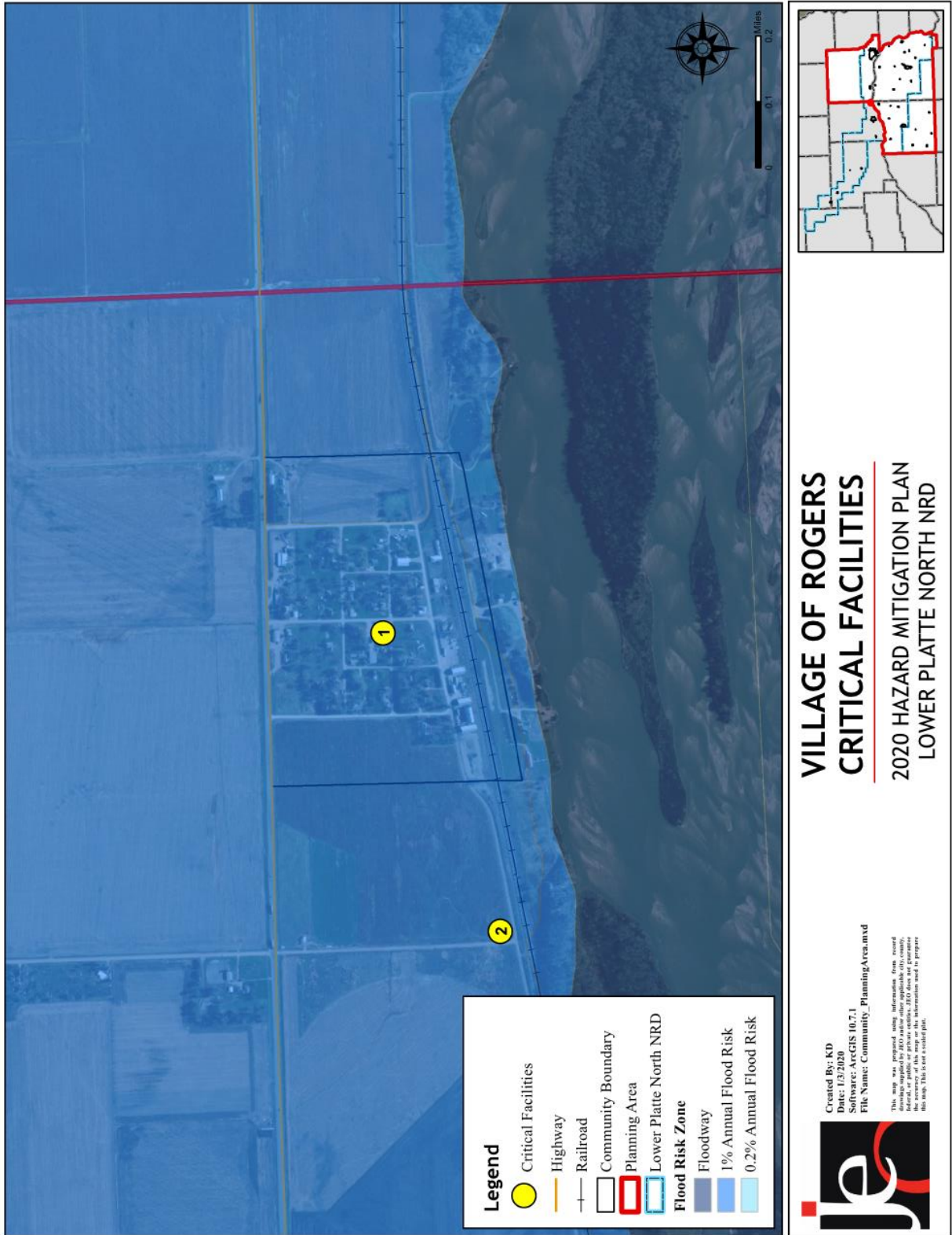
Table RGR.4: Critical Facilities

CF NUMBER	NAME	COMMUNITY SHELTER (YES/NO)	GENERATOR (YES/NO)	IN FLOODPLAIN (YES/NO)
1	Water Tower & Emergency Well	No	No	Yes
2	Old Well - Standby	No	No	Yes

35 Nebraska Department of Environmental Quality. 2019. "Nebraska DEQ Tier 2 Data Download: 2018." <https://deq-iis.ne.gov/tier2/>.

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Figure RGR.4: Critical Facilities



Section Seven: Village of Rogers Community Profile

HISTORICAL OCCURRENCES

See the Colfax County Hazard Loss History table in Appendix E for a hazard matrix and historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

HAZARD PRIORITIZATION

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

CHEMICAL TRANSPORTATION SPILLS

A Union Pacific Railroad line runs along the south side of Rogers, making the entire south side vulnerable to chemical spills during transportation. The village does not communicate with Union Pacific to plan for and mitigate spills. There is a new highway along the north side of the village that could also be vulnerable to chemical spills during transportation. The village well is located near the rail line and less than a mile south of the highway.

FLOODING

Most homes in Rogers were affected in the March 2019 floods. Many basements were filled with water, with the water rising as high as a few inches in the first floor of homes at lower elevations. Two homes were destroyed, and the community hall was severely damaged. The old pump house was inundated with about eight inches of water and took several months to clean up. The old District 56 school and community hall also had water damage. Evacuations were done before and during the flood. This flooding was due to flooding of the Shell Creek, in turn caused by flooding of the Platte River. The Shell Creek runs from the City of Schuyler to about three miles west of Rogers where it turns to pass under the Union Pacific Railroad line to reach the Platte River. A village also experienced flood damage in 1990 when the municipal well was inundated with water so a new well had to be constructed. The entire community is prone to flooding but the northern portion of the town sits at the lowest elevation. In the 2019 floods the north and middle portion of the village received two or more feet of water while the southern portion received one foot. The stormwater ditches are kept clean of debris, but the community is only served by one low capacity culvert. As indicated in Table RGR.2 and Figure RGR.4, the entire community of Rogers is located within the 1 percent annual chance flood risk.

LEVEE FAILURE

A farm levee three miles west of the village along Shell Creek protects the village from flooding. When this levee fails water is stuck between the rail lines and the highway. It was damaged in 2016 by high water on the creek and not repaired, exacerbating the flooding in 2019. More flood reduction infrastructure is needed on Shell Creek to reduce the impacts of future floods.

SEVERE WINTER STORMS

A severe winter storm in February 2016 produced blizzard conditions with heavy snow and high winds, causing power outages in areas of eastern Rogers. This was a three-day event with no passable routes for the electrical company to make repairs on the power system so that home generators were the only source of power for this part of the village. Winter storms are a concern

Section Seven: Village of Rogers Community Profile

because they can cause power outages, interrupt the heat in residents’ homes, and block travel in and out of the village. No power lines in the community are buried, making the entire system vulnerable to severe storms. Snow removal is done by a contracted company – the village has no snow removal equipment and does not use snow fences or snow routes to aid snow removal. Snow removal services by the contracted company have been sufficient to this point.

TORNADOES

Rogers has not had a tornado, but a future event could be catastrophic particularly because there are no storm shelters in the village and the emergency response time and communication with Colfax County Emergency Management could be improved. Municipal records are not backed up in case of a disaster. Mutual Aid Agreements are in place with Colfax County and the City of North Bend. The village’s siren can be activated either by the village or by county dispatch. County Emergency Management offers emergency text alerts. The Village Board and Clerk offer tornado preparedness and response information door-to-door.

GOVERNANCE

The Village of Rogers is governed by a five-member board of supervisors; other governmental offices and departments are listed below. The community government will oversee the implementation of hazard mitigation projects.

- Clerk/Treasurer
- Attorney
- Street Superintendent
- Water Commissioner

CAPABILITY ASSESSMENT

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

Table RGR.5: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS	YES/NO	
Planning & Regulatory Capability	Comprehensive Plan	No
	Capital Improvements Plan	No
	Economic Development Plan	No
	Emergency Operational Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	No
	Subdivision Regulation/Ordinance	No
	Floodplain Ordinance	Yes
	Building Codes	Yes
	National Flood Insurance Program	Yes
Community Rating System	No	

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SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Administrative & Technical Capability	Other (if any)	
	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	No
	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	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	
	Gas/Electric Service Fees	No
	Storm Water Service Fees	No
	Water/Sewer Service Fees	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	No
Other (if any)		
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	No
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes
	Natural Disaster or Safety related school programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	No
	Other (if any)	

Table RGR.6: Overall Capability Assessment

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	Moderate

PLAN INTEGRATION

Rogers has an emergency operations plan (2015), building code (1993), floodplain regulations (1993), and a wellhead protection plan. The village is an annex to Colfax County’s emergency operations plan. It contains information regarding; communications, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. Rogers municipal budget has slightly increased over recent years but is limited to maintaining current facilities. No other examples of plan integration were identified. However, the community will seek out and evaluate any opportunities to integrate the results of the current HMP into other planning mechanisms and updates.

MITIGATION STRATEGY

COMPLETED MITIGATION ACTIONS

MITIGATION ACTION		FLOODPLAIN REGULATION ENFORCEMENTS AND UPDATES
Hazard(s) Addressed		Flooding
Status		Floodplain regulations enforcements and updates by the Village Board and Clerk and ongoing, paid for with Village funds

MITIGATION ACTION		PUBLIC AWARENESS/EDUCATION
Hazard(s) Addressed		All hazards
Status		Public awareness and education are an ongoing project for the Village Board, Clerk, and Colfax County using village and county funds

ONGOING AND NEW MITIGATION ACTIONS

MITIGATION ACTION		STORMWATER SYSTEM IMPROVEMENTS
Description		Stormwater system improvements may include pipe upsizing and additional inlets. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements
Hazard(s) Addressed		Flooding
Estimated Cost		\$75,000+
Funding		Village funds
Timeline		5+ years
Priority		Medium
Lead Agency		Village Board, Streets Superintendent
Status		Some cost evaluation has been done to improve storm pipes throughout Rogers

REMOVED MITIGATION ACTIONS

MITIGATION ACTION		MAINTAIN GOOD STANDING WITH THE NATIONAL FLOOD INSURANCE PROGRAM
Hazard(s) Addressed		Flooding
Reason for Removal		While the community will continue to participate and maintain compliance in the NFIP, this project is no longer considered a mitigation action by FEMA.

COMMUNITY PROFILE

CITY OF SCHUYLER

LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

2020

LOCAL PLANNING TEAM

Table SLR.1: City of Schuyler Local Planning Team

NAME	TITLE	JURISDICTION
Daryl Holmberg	Council President	City of Schuyler
Jim McGowen	Utilities Superintendent	City of Schuyler
Jon Knutson	Mayor	City of Schuyler
Lora Johnson	Clerk/Treasurer	City of Schuyler
William De Roos	City Administrator	City of Schuyler
Cheryl Brandenburgh	Economic Development Director	Schuyler Community Development
Don Glodaswski	Floodplain Administrator	City of Schuyler

LOCATION AND GEOGRAPHY

The City of Schuyler is in the southern portion of Colfax County and covers an area of 2.81 square miles. It is located in the Platte River Valley, about one mile north of the Platte River. Lost Creek runs through the southern part of the city and Shell Creek passes by the north east side of town.

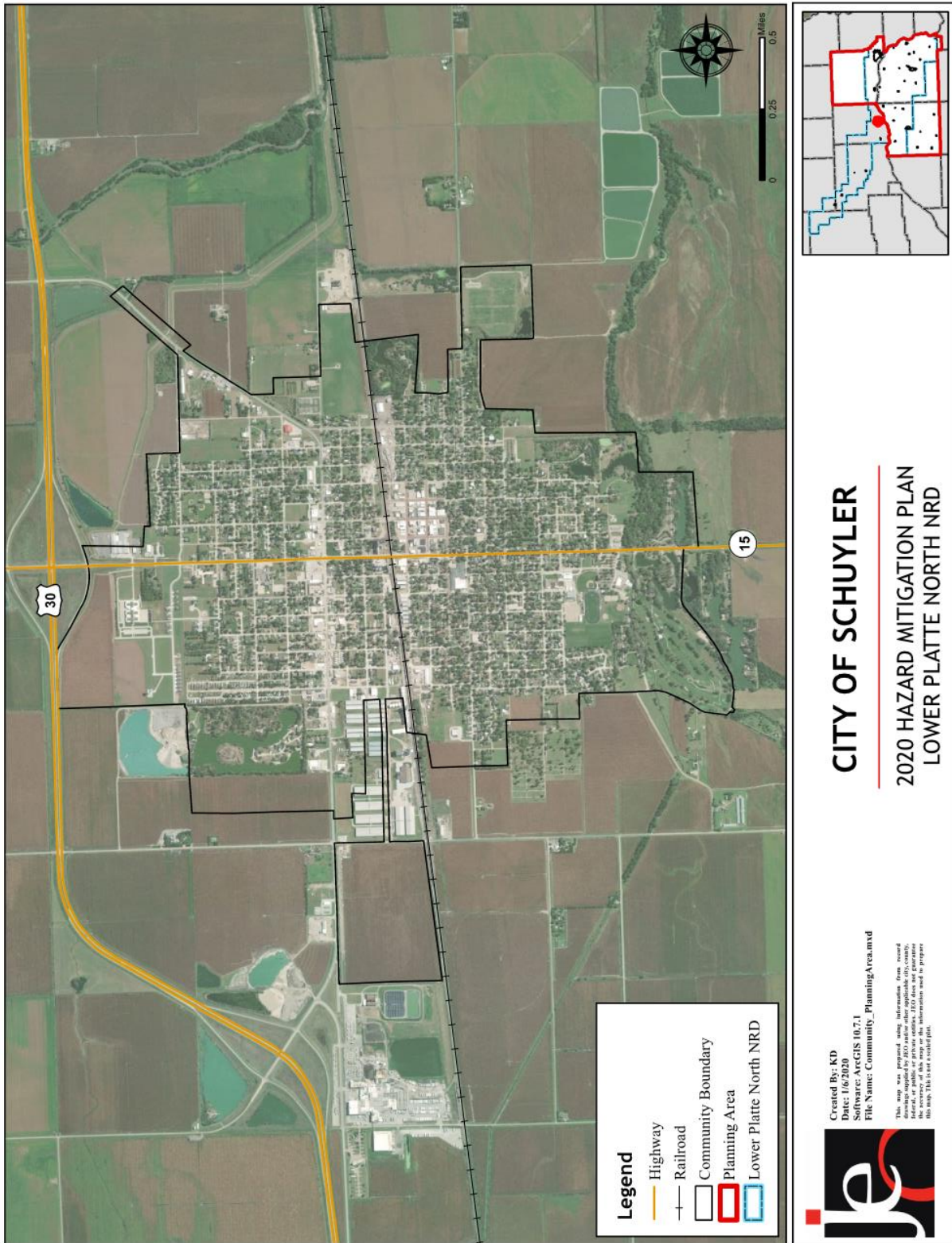
TRANSPORTATION

Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community and areas more at risk of transportation incidents. Schuyler’s major transportation corridors include US Highway 30 and Nebraska State Highway 15. US Highway 30 is traveled by a total annual average of 8,945 vehicles daily, 1,140 of which are trucks. Nebraska State Highway 15 is traveled by a total annual average of 7,740 vehicles daily, 400 of which are trucks.³⁶ A Union Pacific Railroad rail line bisects the city, traveling east to west. The railroad is the transportation route of most concern because of its heavy traffic.

36 Nebraska Department of Roads. 2018. “Interactive Statewide Traffic Counts Map.” [map]. <https://gis.ne.gov/portal/apps/webappviewer/index.html?id=bb00781d6653474d945d51f49e1e7c34>.

Section Seven: City of Schuyler Community Profile

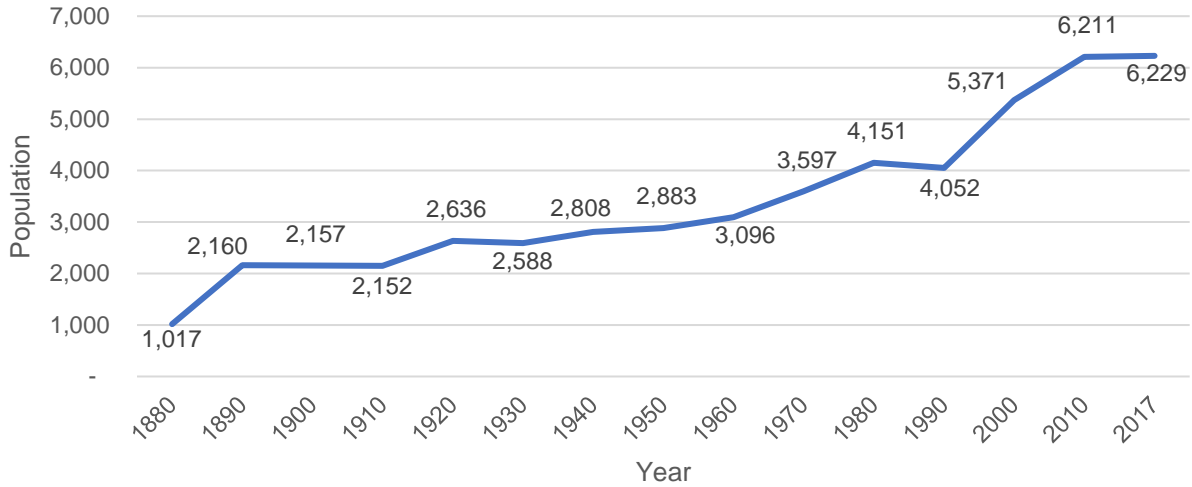
Figure SLR.1: City of Schuyler



DEMOGRAPHICS

Schuyler’s population grew from 6,211 people in 2010 to about 6,229 people in 2017. A growing population indicates a stable tax base to fund mitigation projects. The city’s population accounted for 58.7% of Colfax County’s population in 2017.³⁷

Figure SLR.2: Population



Source: U.S. Census Bureau, 1880 - 2017

The young, elderly, minority populations and poor may be more vulnerable to certain hazards than other groups. In comparison to the county, Schuyler’s population was:

- **Similarly aged.** The median age of Schuyler was 29.8 years old in 2017, compared with Colfax County’s median of 33.7 years. Schuyler’s 2017 population is comparable to its 2010 population, when the median age was 28.7 years old.²
- **More ethnically diverse.** Since 2010, Schuyler grew more ethnically diverse. In 2010, 59.7% of Schuyler population was Hispanic or Latino. By 2017, about 72.7% was Hispanic or Latino. During that time, the Hispanic population in the county grew from 36.2% in 2010 to 44.8% in 2017.²
- **As likely to be below the federal poverty line.** The poverty rate in Schuyler (8.8% of people living below the federal poverty line) was similar to the county’s poverty rate (8.2%) in 2017.³⁸

EMPLOYMENT AND ECONOMICS

The City of Schuyler economic base is primarily manufacturing. In comparison to Colfax County, Schuyler’s economy had:

37 United States Census Bureau. “American Fact Finder: DP05: ACS Demographic and Housing Estimates.” [database file]. <https://factfinder.census.gov/>.

38 United States Census Bureau. “American Fact Finder: DP03: Selected Economic Characteristics.” [database file]. <https://factfinder.census.gov/>.

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- **Similar mix of industries.** Two major employment sectors, accounting for 10% or more of employment each, were: manufacturing and retail t.³
- **Lower per capita income.** The city's per capita income in 2017 (\$17,281) was about \$6,112 lower than the county (\$23,393).³
- **Similar amount of commuters.** About 59.7% of workers in Schuyler commuted for fewer than 15 minutes, compared with about 55.0% of workers in Colfax County. About 14.3% of workers in the city commuted 30 minutes or more to work, compared to about 19.1% of county workers.³⁹

MAJOR EMPLOYERS

Most residents of Schuyler work within the city. Major employers include Cargill, Schuyler Public Schools, CHI Health - Schuyler, and a farm supply store called QC Supply.

HOUSING

In comparison to Colfax County, Schuyler's housing stock was:⁴⁰

- **Newer.** Schuyler had a smaller share of housing built prior to 1970 than the county (42.4% compared to 53.4%).
- **Similar amount of mobile and manufactured housing.** Schuyler had a similar share of mobile and manufactured housing (7.4%) compared to the county (9.1%). There are three mobile home parks located in the community. One on the northwest side of town, one west of the packing plant, and one on the west side of town. The mobile home park located on the northwest side of town has a storm shelter.
- **More renter-occupied.** About 40.7% of occupied housing units in Schuyler were renter-occupied compared with 31.6% of occupied housing in Colfax County.
- **Occupied.** Approximately 7.5% of Schuyler's housing units were vacant compared to 11.8% of units in Colfax County.

The age of housing may indicate which housing units were built prior to the development of state building codes. Homes built within a flood hazard area before the adoption of their community's Flood Rate Insurance Map (FIRM) are not likely to be built above the 1% annual chance floodplain. Older and vacant housing stock may also be more vulnerable to hazard events if it is poorly maintained. Communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe winter storms if those homes are not anchored correctly. Renter occupied housing depends on the initiative of landlords for proper maintenance and retrofitting to be resilient to disasters. They are less likely than homeowners to have renter's insurance or flood insurance, or to know their risks to flooding and other hazards. A significant number of unoccupied housing suggests that future development may be unlikely to occur in the area.

39 United States Census Bureau. "American Fact Finder: S0802: Means of Transportation to Work by Selected Characteristics." [database file]. <https://factfinder.census.gov/>.

40 United States Census Bureau. "American Fact Finder: DP04: Selected Housing Characteristics." [database file]. <https://factfinder.census.gov/>.

FUTURE DEVELOPMENT TRENDS

In the past five years, Schuyler has added a new solar panel field, a Love’s gas station, O’Reilly Auto Parts, and a new library. An addition was also added to the high school and the old library was converted to an event center. New housing was constructed on the on the north and east sides of the city. Two businesses were demolished. According to the American Community Survey, Schuyler’s population is growing. This growth was attributed to having available jobs, a diverse population, and a younger population. In the next five years, new housing is planned along the east, north, and west sides of the community. Denver Street will be extended to the north. The elementary school will likely redevelop a building that was purchased and the building downtown that caught fire will be redeveloped.

PARCEL IMPROVEMENTS AND VALUATION

The planning team acquired GIS parcel data from the County Assessor to analyze the location, number, and value of property improvements (e.g. buildings, paved lots, roads, etc.) at the parcel level. The data did not contain the number of structures on each parcel. The parcel data was analyzed to determine the number and valuation of property improvements located in the 1% annual chance floodplain. A summary of the results of this analysis is provided in the following table.

Table SLR.2: Parcel Improvements and Value in the Floodplain

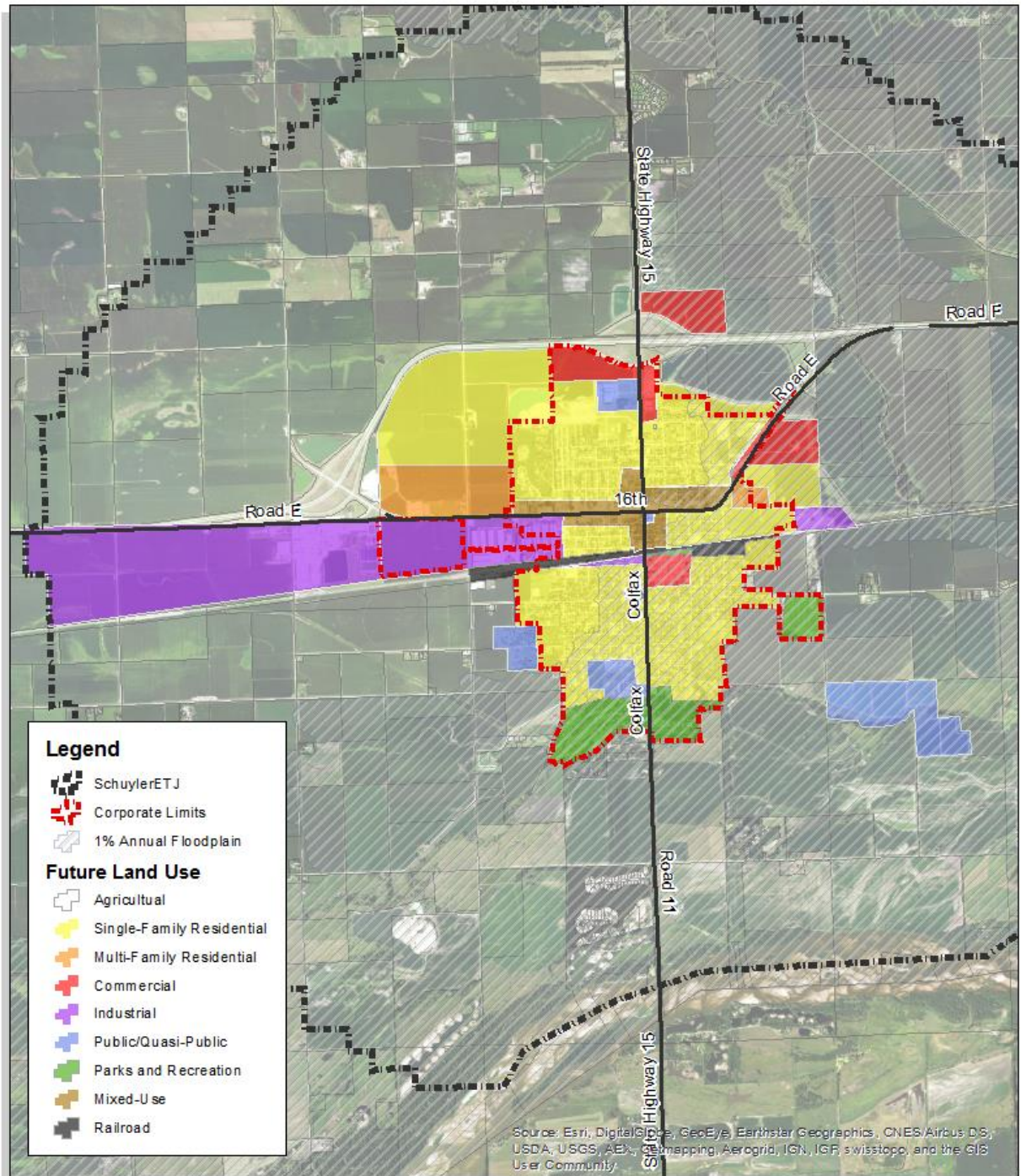
NUMBER OF IMPROVEMENTS	TOTAL IMPROVEMENT VALUE	NUMBER OF IMPROVEMENTS IN FLOODPLAIN	PERCENTAGE OF IMPROVEMENTS IN FLOODPLAIN	VALUE OF IMPROVEMENTS IN FLOODPLAIN
1,737	\$151,826,690	831	47.8%	\$65,125,960

Source: GIS Workshop/Colfax County Assessor, 2019⁴¹

⁴¹ GIS Workshop/Colfax County Assessor. 2019. [Personal correspondence].

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Figure SLR.3: Future Land Use Map



Schuyler, NE
Preliminary Future Land Use

0 0.25 0.5 1 Miles

Created By: K. Andersen
 Date: February 2017
 Revised: NA
 Software: ArcGIS 10.2
 File: 140574.00

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

CRITICAL INFRASTRUCTURE

CHEMICAL STORAGE FIXED SITES

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are a total of 12 fixed hazardous chemical storage sites within two miles of Schuyler. The following table lists these sites. Of these sites, the anhydrous ammonia storage tanks are a concern because of the health risks associated with anhydrous ammonia. Dry fertilizer storage sites are also a concern because of the health and fire risks associated with spill. Fixed chemical storage spills are also concern for the city because of the possibility of water contamination. The fire department has adequate training and gear to respond to chemical spills. Residents are not educated on the risk and appropriate response to spills.

Table SLR.3: Chemical Storage Fixed Sites

FACILITY NAME	ADDRESS	IN FLOODPLAIN (YES/NO)
Arps Gravel & Concrete Inc	1080 Lake Socorro Rd	Yes
Arps Red-E-Mix Inc	1304 D St	No
Cargill Meat Solutions Corp	490 Road 9	No
Frontier Co-op Company	840 W 13th St	No
Frontier Co-op Company	1199 Road E	No
NDOT Salt Brine Storage Yard	E 22nd St	No
NOR-AM Cold Storage	481 Road 9	No
Schuyler Co-op Assn	1303 G St	Yes
Schuyler Co-op Assn	Road 3	No
Schuyler Co-op Assn	Jct 13th & Gold Sts	No
Schwan's Home Service Inc	570 Road 11	No
TriCounty Ag Service Inc	1073 Road 13	No

Source: Nebraska Department of Environment and Energy, 2019⁴²

CRITICAL FACILITIES

The planning team identified critical facilities necessary for the City of Schuyler’s disaster response and continuity of operations per the FEMA Community Lifelines guidance. Critical facilities were identified during the 2015 planning process and revised for this plan update. The following table and figure provide a summary of the critical facilities for the community.

Table SLR.4: Critical Facilities

CF NUMBER	NAME	RED CROSS SHELTER (YES/NO)	GENERATOR (YES/NO)	IN FLOODPLAIN (YES/NO)
1	Colfax County Courthouse	No	No	Yes (1%)
2	Fire Station	No	Yes	No
3	Sanitary Sewer Lift Station – Elementary School	No	Yes	No
4	Municipal Building	No	No	Yes (1%)
5	Police Department	No	Yes	Yes (1%)
6	Pump House #21	No	Yes	Yes (1%)
7	Pump House & Well #14	No	Yes	No

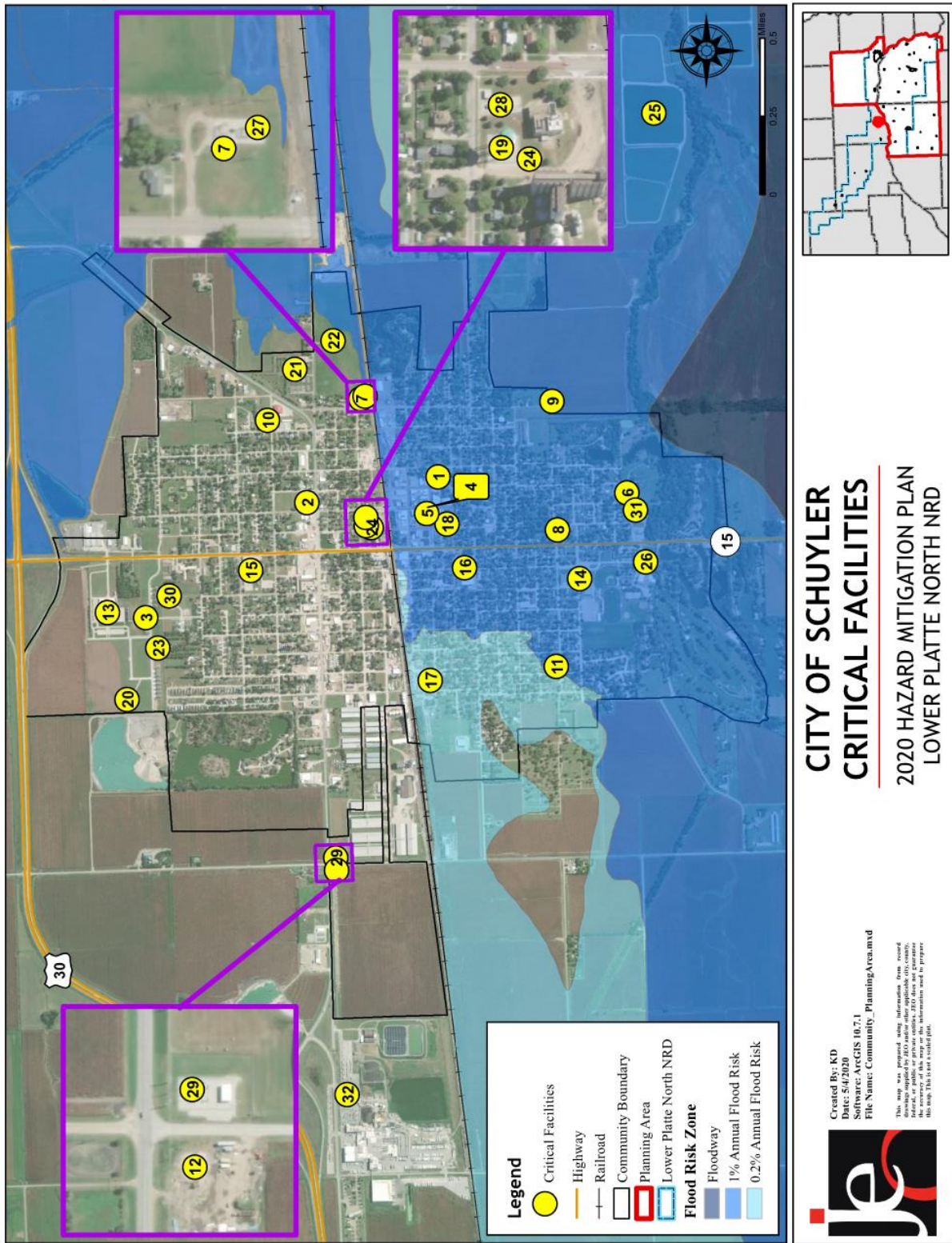
42 Nebraska Department of Environmental Quality. 2019. "Nebraska DEQ Tier 2 Data Download: 2018." <https://deq-iis.ne.gov/tier2/>.

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CF NUMBER	NAME	RED CROSS SHELTER (YES/NO)	GENERATOR (YES/NO)	IN FLOODPLAIN (YES/NO)
8	Sanitary Sewer Lift Station- Southeast	No	Yes	Yes (1%)
9	Sanitary Sewer Lift Station- Main	No	Yes	Yes (1%)
10	Sanitary Sewer Lift Station- North	No	Yes	No
11	Sanitary Sewer Lift Station- West	No	Yes	Yes (1%)
12	Sanitary Sewer Lift Station- Cargill	No	Yes	No
13	Schuyler Elementary School	Yes	No	No
14	Schuyler High School	Yes	No	Yes (1%)
15	Schuyler Memorial Hospital/Clinic	No	Yes	No
16	Schuyler Middle School	Yes	No	Yes (1%)
17	Street Shop & Utilities Garage	No	No	Yes (0.2%)
18	Utilities Office & Truck Garage	No	Yes	Yes (1%)
19	Water Tower	No	No	No
20	Water Tower	No	No	No
21	Well #22	No	Yes	No
22	Well #23	No	Yes	No
23	Well #24	No	Yes	No
24	Well Controls/Fill Station	No	Yes	No
25	Lagoons	No	No	Yes (1%)
26	Oak Ballroom	No	No	Yes (1%)
27	Switchgear/transformer (East)	No	No	No
28	Switchgear/transformer (Downtown)	No	No	No
29	Switchgear/transformer at Frontier Coop	No	No	No
30	Switchgear/transformer (North)	No	No	No
31	Switchgear/transformer (South)	No	No	Yes (1%)
32	Switchgear/transformer at Cargill	No	No	No

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Figure SLR.4: Critical Facilities



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HISTORICAL OCCURRENCES

See the Colfax County Hazard Loss History table in Appendix E for a hazard matrix and historical hazard events, including the number of events, damage estimates, and any fatalities or injuries.

HAZARD PRIORITIZATION

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

CHEMICAL TRANSPORTATION SPILLS

There have been no large chemical spills on transportation routes but the possibility of one occurring in the future is high. Two railroad tracks utilized by Union Pacific Railroad transport materials through the center of town several times a day. Nearly 150 trucks per day transport fertilizer and anhydrous ammonia by Schuyler on Highways 30 and 15. Underground pipelines transport natural gas between Schuyler and Richland, and liquid fertilizer is pumped under the highway to Richland. Local first responders are trained to respond to chemical spills.

FLOODING

The majority of flooding in Schuyler occurs in the south side of the city because of Lost Creek, including pooling water south of the train tracks. It has repeatedly flooded the historic Oak Ballroom's basement and once broke the water heater. Golf and recreation were regularly impeded by flooding at City Park. The municipal building had repeated flooding, so a sump pump was installed for \$10,000. Flash flooding will occasionally backup storm sewers and street. Before the upstream levees were built in 2013, Shell Creek flooded in 2008 and in 2011. The lift station was damaged in the 2008 flood.

In the 2019 floods, both the high school and middle school were surrounded by water. The Emergency Operations Center had to be moved to the elementary school. Most of the flooding in the city was caused by a backup of the stormwater system so that basements along F Street flooded and the doorways of buildings downtown needed to be sandbagged. About 18 people were sheltered the first night of the flood, most from the area south of Lost Creek. The homes south of the city were evacuated but many stayed. Power was shut down there during the flood. The nursing home was evacuated in the middle of the night though in the end it did not flood. County Road 5 was washed out and repair funds are limited. The area around the wastewater facility was washed out including roads and the bridge at the golf course was washed away. It was two days before the water receded in the south part of Schuyler and four to five days before the water receded in Lost Creek. They left silt in the storm sewers and streets, especially around City Park.

The city continues to be proactive in implementing flood risk reduction projects. Some of the projects that the city has pursued or ongoing are storm sewer improvements; interior drainage evaluation; Platte River flow evaluation. A parcel-level flood risk assessment and flood risk reduction plan were completed as a part of this HMP update (*Appendix F*). The city will be deciding which actions to implement based on the recommendations found within the report.

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outside of Schuyler damaged ten farmstead and a historic church causing \$540,000 in property damage. In June of 1998 an EF2 tornado outside of Schuyler left debris on the highway. In the event of a disaster, Mutual Aid Agreements are in place with surrounding communities.

GOVERNANCE

The City of Schuyler is governed by a mayor and a six-member city council; other governmental offices and departments are listed below. The community government will oversee the implementation of hazard mitigation projects.

- Administrator
- Clerk/Treasurer
- Floodplain Administrator
- Attorney
- Utility Superintendent
- Police Department
- Volunteer Fire Department
- Sewer/Water Commissioner
- Street Superintendent
- Parks & Recreation Department
- Library Director
- Economic Development Director
- Engineer
- Board of Public Works

CAPABILITY ASSESSMENT

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

Table SLR.5: Capability Assessment

SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	Yes
	Emergency Operational Plan	Yes
	Floodplain Management Plan	No
	Storm Water Management Plan	No
	Zoning Ordinance	Yes
	Subdivision Regulation/Ordinance	Yes
	Floodplain Ordinance	Yes
	Building Codes	Yes
	National Flood Insurance Program	Yes
	Community Rating System	No

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SURVEY COMPONENTS/SUBCOMPONENTS		YES/NO
	Other (if any)	Yes – Housing Study
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administration	Yes
	GIS Capabilities	No
	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)	No
	Applied for grants in the past	Yes
Fiscal Capability	Awarded a grant in the past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric Service Fees	Yes
	Storm Water Service Fees	No
	Water/Sewer Service Fees	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	No
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	No
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	No
	Natural Disaster or Safety related school programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	Yes
	Other (if any)	No

Table SLR.6: Overall Capability Assessment

OVERALL CAPABILITY	LIMITED/MODERATE/HIGH
Financial resources needed to implement mitigation projects	Limited/Moderate
Staff/expertise to implement projects	High
Community support to implement projects	High
Time to devote to hazard mitigation	High

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PLAN INTEGRATION

Schuyler has a comprehensive plan (2018), emergency operations plan (2015), zoning ordinance (2018), building code (2016), capital improvements plan (annually), floodplain regulations (2018), subdivision regulations (2018), housing study (2018), economic development plan (2017), and a blight and substandard plan (2018). The city is also in the process of creating a wellhead protection plan that will be completed by the end of 2020. The comprehensive plan, zoning ordinance, floodplain regulations, and subdivision regulations, contain goals aimed at safe growth, direct development away from the floodplain, encourage infill, direct development away from chemical storage sites, limit density in hazardous areas, direct development away from major transportation routes, encourage strengthening of historic structures, preserve open space, identify floodplain areas as parks, and restrict subdivision of land in the floodplain. Schuyler is an annex in the Colfax County emergency operations plan. It contains information on communications, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. The building code for the city is based off of the 2016 International Building Code. Schuyler's capital improvement program includes projects on stormwater, upgrading the storm sewer system, improving transportation routes for drainage, installing water meters, updating the electrical distribution system, burying power lines, installing emergency generators, and extending Denver Street. Municipal funds have slightly increased over recent years but is limited to maintaining current facilities. No other examples of plan integration were identified. However, the community will seek out and evaluate any opportunities to integrate the results of the current HMP into other planning mechanisms and updates.

MITIGATION STRATEGY

COMPLETED MITIGATION ACTIONS

MITIGATION ACTION	CARGILL LIFT STATION
Hazard(s) Addressed	Flooding
Status	A lift station was added near Cargill in 2019 costing \$800,000 using cash reserves revenue

MITIGATION ACTION	WATER TOWER SUBDIVISION LIFT STATION
Hazard(s) Addressed	Flooding
Status	A lift station was added near the water tower in 2017 costing \$750,000 using cash reserves revenue

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ONGOING AND NEW MITIGATION ACTIONS

MITIGATION ACTION	ACQUIRE HIGH RISK FLOODING PROPERTY
Description	Voluntary elevation or acquisition and demolition of flood-prone properties
Hazard(s) Addressed	Flooding
Estimated Cost	Varies
Funding	General Funds
Timeline	5+ years
Priority	Medium
Lead Agency	City Administrator
Status	An initial assessment of selected properties for possible mitigation alternatives is underway. No property owners are currently interested at this time but may be in the future.

MITIGATION ACTION	BACKUP AND EMERGENCY GENERATORS
Description	Provide portable or stationary backup generators to municipal wells, lift stations, shelters, pumps on levees, and other critical facilities
Hazard(s) Addressed	All hazards
Estimated Cost	\$3,500+ depending on site requirements
Funding	General funds
Timeline	Ongoing
Priority	High
Lead Agency	City Administrator
Status	Any added pumps along the levee will need backup generators.

MITIGATION ACTION	COMMUNITY EDUCATION AND AWARENESS
Description	Hand out literature regarding hail resistant building materials
Hazard(s) Addressed	Hail
Estimated Cost	\$100/year
Funding	General funds
Timeline	Ongoing
Priority	Medium
Lead Agency	City Administrator
Status	Materials under development

MITIGATION ACTION	DRAINAGE STUDY/STORMWATER MASTER PLAN
Description	Conduct a stormwater master plan to identify problem areas and mitigation projects
Hazard(s) Addressed	Flooding
Estimated Cost	\$20,000+
Funding	CDBG, General funds
Timeline	1 year
Priority	High
Lead Agency	City Administrator
Status	Planning stage. Grant was submitted for CDBG funding.

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MITIGATION ACTION	EMERGENCY EXERCISE
Description	Conduct tabletop exercises to determine the response scenarios for different hazard events
Hazard(s) Addressed	All hazards
Estimated Cost	\$8,000+
Funding	General funds
Timeline	Ongoing
Priority	Medium
Lead Agency	City Administrator, Emergency Management
Status	New action

MITIGATION ACTION	IMPROVE SNOW AND ICE REMOVAL PROGRAM
Description	Improve snow routes and the snow and ice removal procedures for streets. Improvements should address plowing snow, ice removal, parking during snow and ice removal, and the removal of associated storm debris
Hazard(s) Addressed	Severe winter storms
Estimated Cost	\$1,000
Funding	General funds
Timeline	5+ years
Priority	Low
Lead Agency	Mayor, Streets Foreman
Status	Snow routes have been added to the city, but ice removal still needs to be addressed

MITIGATION ACTION	NEW MUNICIPAL WELL
Description	Construct a new community well to expand water supply
Hazard(s) Addressed	Drought
Estimated Cost	TBD
Funding	Cash reserves
Timeline	1-2 years
Priority	High
Lead Agency	Utilities
Status	New action

MITIGATION ACTION	NIMS TRAINING
Description	Provide National Incident Management System (NIMS) training for staff and elected officials
Hazard(s) Addressed	All hazards
Estimated Cost	Staff time
Funding	General funds
Timeline	Ongoing
Priority	Medium
Lead Agency	City Administrator, Department heads, Emergency Management
Status	New action

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MITIGATION ACTION		SAFE ROOMS AND STORM SHELTERS
Description	Construct storm shelters and safe rooms in highly vulnerable areas such as churches, schools, apartments, and others	
Hazard(s) Addressed	All hazards	
Estimated Cost	\$200-250 per sq ft	
Funding	General funds	
Timeline	5+ years	
Priority	Low	
Lead Agency	City Administrator	
Status	Not started	

MITIGATION ACTION		STORMWATER SYSTEM IMPROVEMENTS
Description	Stormwater systems comprising of pipes and inlets can be used to convey runoff. Undersized systems can contribute to localized flooding. Stormwater system improvements may include pipe upsizing and additional inlets. Retention and detention facilities may also be implemented to decrease runoff rates while also decreasing the need for other stormwater system improvements.	
Hazard(s) Addressed	Flooding	
Estimated Cost	Varies	
Funding	General funds	
Timeline	Ongoing	
Priority	Medium	
Lead Agency	Sewer/Water Commissioner	
Status	Ongoing	

MITIGATION ACTION		UPDATE LAGOON
Description	Add secondary lagoon cells in anticipation of future growth in the city	
Hazard(s) Addressed	Flooding	
Estimated Cost	\$1,200,000	
Funding	State revolving fund	
Timeline	1-2 years	
Priority	High	
Lead Agency	Utilities Superintendent	
Status	Seven lagoons will be added southeast of Schuyler near the existing lagoons. Acquisition of the property and planning/design by 2022	

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MITIGATION ACTION	WINDBREAKS/LIVING SNOW FENCE
Description	Install windbreaks and/or living snow fences to increase water storage capacity of soil and reduce blowing snow, particularly along Highway 15 and along 22 nd Street from Colfax Street to Fort Street
Hazard(s) Addressed	Severe winter storms
Estimated Cost	\$50 per 100 linear feet
Funding	General funds
Timeline	2-5 years
Priority	Medium
Lead Agency	Streets Foreman
Status	Not started

REMOVED MITIGATION ACTIONS

MITIGATION ACTION	MAINTAIN PARTICIPATION IN THE NATIONAL FLOOD INSURANCE PROGRAM
Hazard(s) Addressed	Flooding
Reason for Removal	While the community will continue to participate and maintain compliance in the NFIP, this project is no longer considered a mitigation action by FEMA