CPNRD

CENTRAL PLATTE
NATURAL RESOURCES DISTRICT

HAZARD MITIGATION PLAN 2022

JEO CONSULTING GROUP

Community Profile

City of Lexington

Central Platte NRD
Hazard Mitigation Plan

2022

Local Planning Team

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

Table LEX.1: Lexington Local Planning Team

Name	Title	Jurisdiction	R1 Meeting	R2 Meeting
Bill Brecks	Development Services Director / Floodplain Administrator	City of Lexington	-	-
Dennis Burnside	Assistant City Manager	City of Lexington	Lexington	Lexington
Joe Pepplitsch	City Manager	City of Lexington	Lexington - Virtually	Lexington

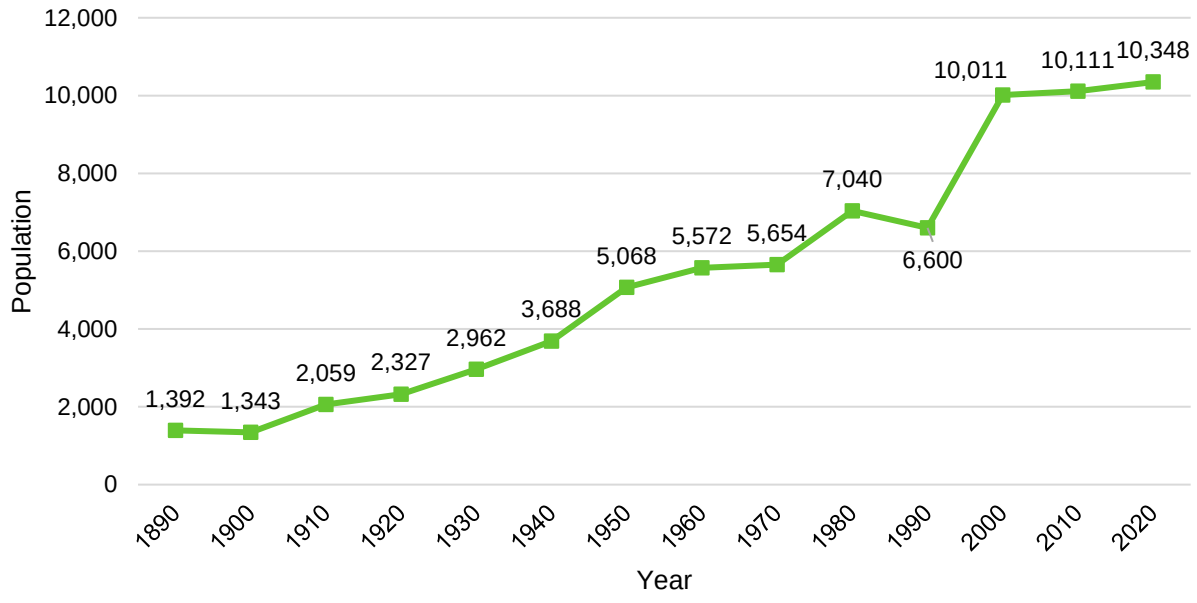
Location and Geography

The City of Lexington is in south central Dawson County and covers an area of 4.51 square miles. Major waterways in the area include the Platte River, Spring Creek, and Buffalo Creek. The City of Lexington is the county seat and largest community in Dawson County.

Demographics

The following figure displays the historical population trend for the City of Lexington. This figure indicates that the population of Lexington has been increasing since 1990 to 10,348 people in 2020. Increasing populations are associated with increased hazard mitigation and emergency planning requirements for development. Increasing populations can also contribute to increasing tax revenues, allowing communities to pursue additional mitigation projects. Lexington's population accounted for 43% of Dawson County's population in 2020.[47]

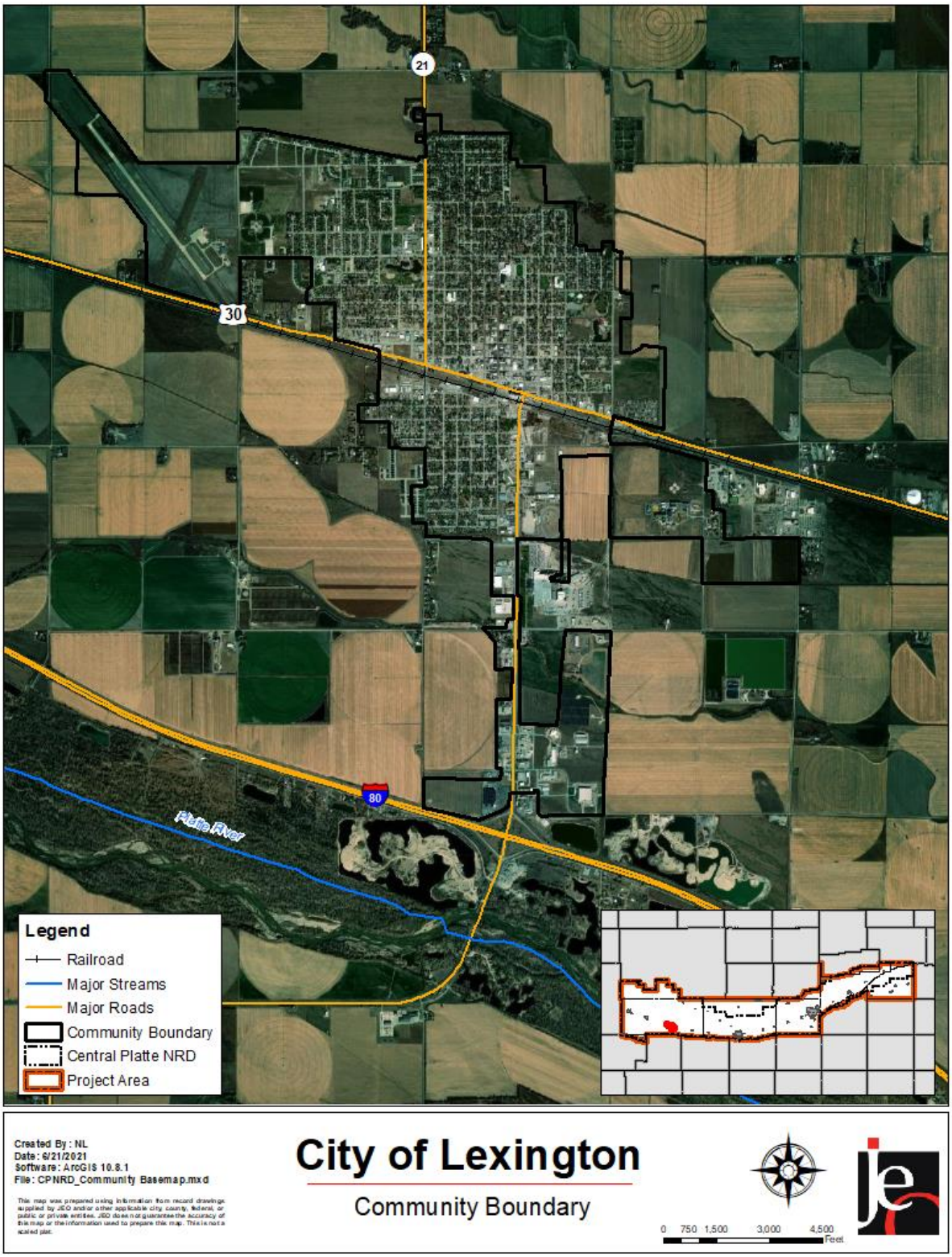
Figure LEX.1: Population 1890 - 2020



Source: U.S. Census Bureau

47 United States Census Bureau. "2020 Decennial Census: P1: DEC Redistricting Data." https://data.census.gov/cedsci/.

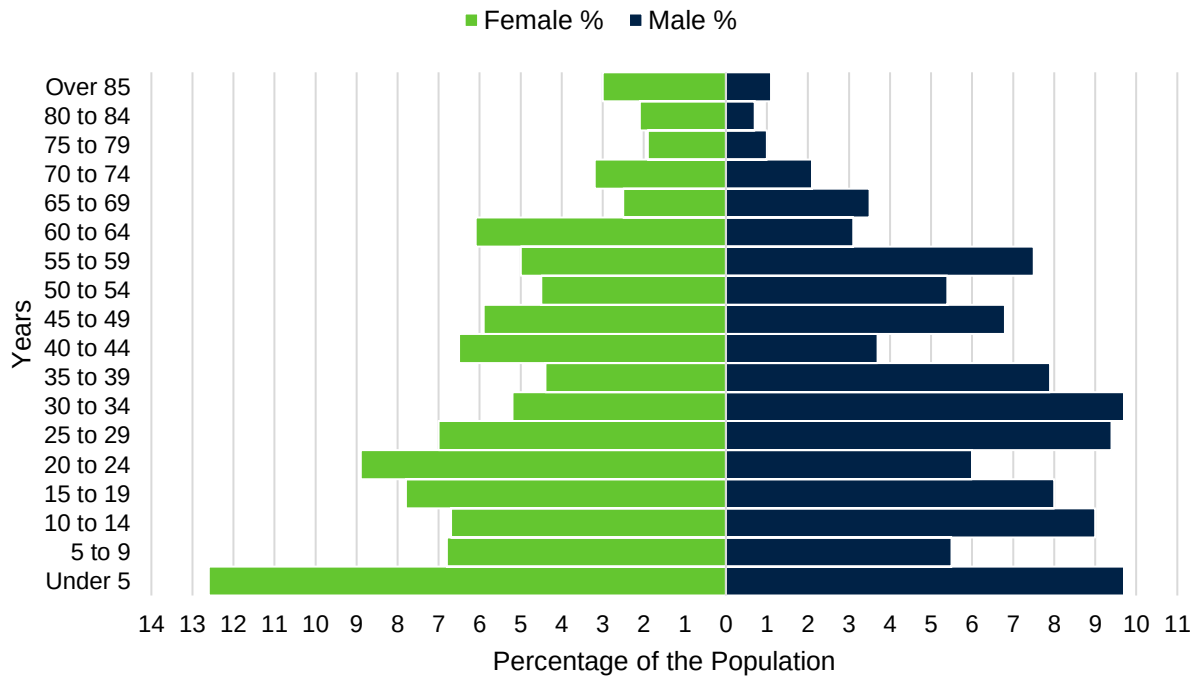
Figure LEX.2: City of Lexington



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

- **22.8% is non-white.** Since 2010, Lexington grew less ethnically diverse. In 2010, 44.7% of the Lexington's population was non-white. By 2019, 22.8% was non-white.[48]
- **30.8 median age.** The median age of Lexington was 30.8 years in old 2019. The population grew older since 2010, when the median age was 29.4.[49]

Figure LEX.3: Lexington's Population Pyramid



The figure above shows Lexington's population percentage broken down by sex and five-year age groups. Lexington's population is younger with a much higher percentage of the population below 55 years of age. This likely indicates a growing population in the years to come.

Employment and Economics

Low-income populations, long distance commuters, and the unemployed may be more vulnerable to certain hazards than other groups. Lexington's population has:

- **10.6% of people living below the poverty line.** The poverty rate (10.6%) in the City of Lexington was higher than the state's poverty rate (7.2%) in 2019.[50]
- **$52,885 median household income.** Lexington's median household income in 2019 ($52,885) was $8,000 lower than the state ($61,439).[50]
- **4% unemployment rate.** In 2019 Lexington had a higher unemployment rate (4%) when compared to the state (2.3%).[50]

48 United States Census Bureau. "2019 Census Bureau American Community Survey: DP05: ACS Demographic and Housing Estimates." https://data.census.gov/cedsci/.
49 United States Census Bureau. "2019 Census Bureau American Community Survey: S0101: Age and Sex." https://data.census.gov/cedsci/.
50 United States Census Bureau. "2019 Census Bureau American Community Survey: DP03: Selected Economic Characteristics." https://data.census.gov/cedsci/.

- **14.9% of workers commuted 30 minutes or more to work.** Fewer workers in Lexington commuted 30 minutes or more to work than compared to workers commuting less than 15 minutes (14.9% compared to 75.3%).[51]

Major Employers

Major employers in the City of Lexington include Tyson Fresh Meats, Lexington Public Schools, Orthman Manufacturing, Walmart Super Store, and Lexington Regional Health Center. Most of the residents work in the City of Lexington, and do not commute outside the community.

Housing

The age of housing may indicate which housing units were built prior to the development of state building codes. Vacant housing stock may also be more vulnerable to hazard events if it is poorly maintained. Unoccupied housing may also suggest that future development may be less likely to occur. Communities with a substantial number of mobile homes may be more vulnerable to the impacts of high winds, tornadoes, and severe thunderstorms if those homes are not anchored correctly. According to the local planning team, there are approximately 400 mobile homes located on the east and west edges of the community. 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 flood insurance, or to know their risks to flooding and other hazards.

- **90.2% of housing built prior to 1970.** Lexington has a larger share of housing built prior to 1970 than the state (90.2% compared to 46%).[52]
- **5.8% of housing units vacant.** Since 2010, Lexington's vacancy rate decreased. In 2010 the vacancy rate was .9%. By 2019, 5.8% of housing units were vacant.[52]
- **8.3% mobile and manufacture housing.** The City of Lexington had a larger share of mobile and manufactured housing (8.3%) compared to the state (3.3%).[52]
- **41.5% renter-occupied.** The rental rate of Lexington was 41.5% in 2019. The percentage went up since 2010, when renter occupied housing was at 36%.[52]

Governance

A community's governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. The City of Lexington is governed by a five-member city council; other governmental offices and departments that may be involved in implementing hazard mitigation initiatives are listed below.

- Clerk/Treasurer
- City Manager
- Floodplain Administrator
- Community Development Agency
- Development Services Department
- Housing Authority
- Planning Commission
- Public Library
- Senior Center

51 United States Census Bureau. "2019 Census Bureau American Community Survey: S0802: Means of Transportation to Work by Selected Characteristics." https://data.census.gov/cedsci/.

52 United States Census Bureau. "2019 Bureau American Community Survey: DP04: Selected Housing Characteristics." https://data.census.gov/cedsci/.

- Streets Department
- Parks Department
- Tree Board
- Volunteer Fire Department
- Water and Sewer Department
- Electric Department
- Building Department
- Public Works 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.

Municipal funds are sufficient to pursue new capital projects and a large portion are already dedicated to a wastewater treatment facility expansion. Funds have increased over recent years.

Table LEX.2: Capability Assessment

Survey Components/Subcomponents		Yes/No
Planning & Regulatory Capability	Comprehensive Plan	Yes
	Capital Improvements Plan	Yes
	Economic Development Plan	Yes
	Local Emergency Operations Plan	Yes
	Floodplain Management Plan	No
	Storm Water 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
	Other (if any)	Spring and Buffalo Creeks Watershed Flood Risk Reduction Plan. Tree Ordinance
Administrative & Technical Capability	Planning Commission	Yes
	Floodplain Administration	Yes
	GIS Capabilities	Yes
	Chief Building Official	Yes
	Civil Engineering	Yes – Contractor
	Local Staff Who Can Assess Community's Vulnerability to Hazards	Yes
	Grant Manager	Yes
	Mutual Aid Agreement	Yes
	Other (if any)	-

Survey Components/Subcomponents		Yes/No
Fiscal Capability	Capital Improvement Plan/ 1- & 6-Year plan	Yes
	Applied for grants in the past	Yes
	Awarded a grant in the past	Yes
	Authority to Levy Taxes for Specific Purposes such as Mitigation Projects	Yes
	Gas/Electric Service Fees	Yes
	Storm Water Service Fees	No
	Water/Sewer Service Fees	Yes
	Development Impact Fees	No
	General Obligation Revenue or Special Tax Bonds	Yes
	Other (if any)	-
Education & Outreach Capability	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc. Ex. CERT Teams, Red Cross, etc.	Yes – Red Cross
	Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes
	Natural Disaster or Safety related school programs	No
	StormReady Certification	No
	Firewise Communities Certification	No
	Tree City USA	Yes
	Other (if any)	-

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

Plan Integration

Lexington has several planning documents that discuss or relate to hazard mitigation. Each plan is listed below along with a short description of how it is integrated with the hazard mitigation plan. The city will seek out and evaluate any opportunities to integrate the results of the current hazard mitigation plan into other planning mechanisms and updates.

Building Code (2015)
The building code sets standards for constructed buildings and structures. The city's building codes were updated in 2016, and they mention several hazards including fire, flood, chemical, electrical, and environmental. The codes require mechanical systems to be elevated for structures in the floodplain, requires sewer backflow valves for structures in the floodplain, and outlines proper sump pump installation. They also allow for raingardens in residential areas, encourage the use of permeable surfaces, encourage the use of hail resistant building materials, and require hurricane clips during construction.

Capital Improvements Plan (Annually)
The capital improvements plan annually outlines projects the city would like to pursue and provides a planning schedule and financing options. Projects include stormwater system improvements, improving transportation routes for drainage, bridge improvements, installing new municipal wells, installation of water meters for residential structures, upsizing water distribution pipes, updating electrical distribution system, and constructing a new water treatment facility, and lift station improvements. Projects identified in the hazard mitigation plan are identified for inclusion into the capital improvements plan.

Comprehensive Plan (2013)
The comprehensive plan is designed to guide the future actions and growth of the city. Flooding, water quality, and continuity of electric service are hazards discussed in the comprehensive plan. The plan directs developments away from the floodplain, chemical storage facilities, and major transportation routes. The plan also encourages infill development, elevation of structures located in the floodplain, and preservation of open space in hazard-prone areas. The city anticipates updating the comprehensive plan every five to ten years and will integrate additional hazard mitigation actions and goals into future updates.

Dawson County Local Emergency Operations Plan (2020)
Lexington is an annex in the Dawson County Local Emergency Operations Plan (LEOP). The LEOP establishes standardized policies, plans, guidelines, and procedures for emergency resources and governmental entities to respond and recover when a disaster event occurs. It contains information regarding direction and control, communications and warning, damage assessment, emergency public information, evacuation, fire services, health and human services, law enforcement, mass care, protective shelters, and resource management. This plan is updated every five years.

Floodplain Ordinance (2009), Zoning Ordinance (2009), and Subdivision Regulations (2009)
The city's floodplain ordinance, zoning ordinance, and subdivision regulations outline where and how development should occur in the future. These documents discourage development, limit population density, and require more than one foot of elevation above Base Flood Elevation in the floodplain. The documents also discourage development and housing near chemical sites and major transportation routes, include well setback requirements, restrict subdivision of land within or adjacent to the floodplain, and outline water restriction implementation. There are currently no plans to update these documents.

Spring and Buffalo Creeks Watershed Flood Risk Reduction Plan (Under Development)

The primary purpose of the Spring and Buffalo Creeks Flood Risk Reduction Plan is flood risk reduction within and near the community of Lexington and Dawson County. It will identify projects within the watershed to help reduce flood risk and damages to agricultural property, homes, and businesses, as well as opportunities for groundwater recharge, threatened and endangered species habitat improvements, and recreation. This plan is being funded by the Central Platte NRD and NRCS through the Watershed and Flood Prevention Operations (WFPO) Program. Projects identified in the plan with a positive benefit-cost ratio will be reviewed for inclusion in the HMP.

Stormwater Management Plan (2017)

The stormwater management plan documents commitments by the City of Lexington to implement stormwater management procedures and practices. This plan helps the city maintain compliance with the National Pollution Discharge Elimination System permit issued by NDEE. The plan outlines procedures to comply with six minimum control measures which are: public education and outreach, public involvement, illicit discharge detection and elimination, construction stormwater management, post-construction stormwater management, and good housekeeping and pollution prevention.

Future Development Trends

In the past five years, Lexington has had multiple new businesses come to the community, as well as a few businesses that closed. Construction and maintenance of streets has been done to accommodate new development of residential homes, duplexes, townhomes, and apartments. No new structures were developed in the floodplain. In the next five years, new housing will be concentrated in the northwest and southwest portions of the community away from the floodplain. In addition, the city will install several new well backup generators, install two new siren warning systems, update the Comprehensive Plan, update the city's Tree Ordinance, and will work with partners to evaluate and improve drainage in the Spring Creek watershed.

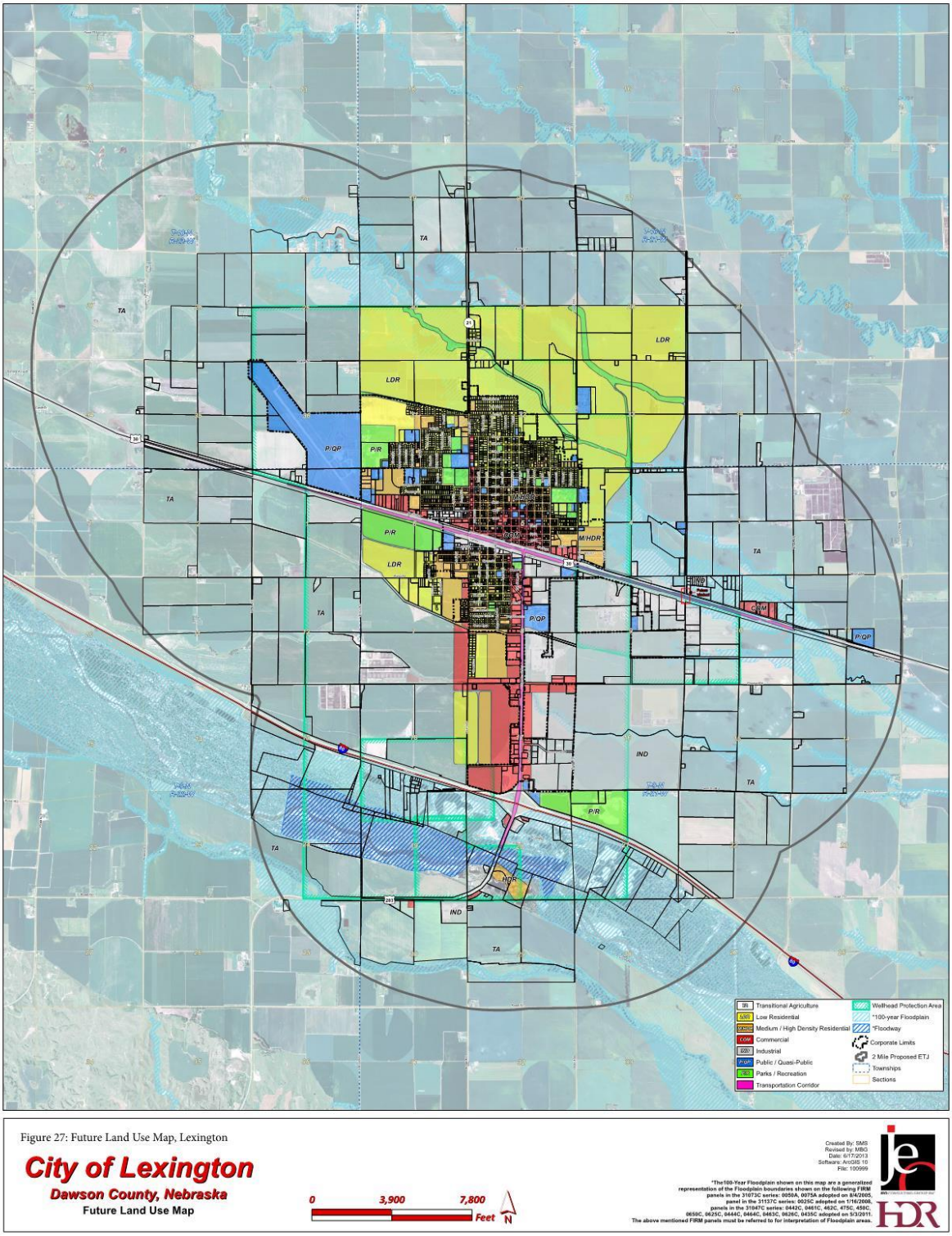
Community Lifelines

Transportation

Lexington's major transportation corridors include Interstate 80, State Highway 21, US Highway 30, and US Highway 283. The most traveled route is Interstate 80 with an average of 18,345 vehicles daily, 6,935 of which are trucks.[53] The city has one Union Pacific line that splits into three different tracks traveling southeast to northwest through the central portion of the community. The local planning team noted that there are designated truck routes in the less populated portions of the city. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk of transportation incidents.

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

Figure LEX.4: Future Land Use Map



Hazardous Materials

According to the Tier II System reports submitted to the Nebraska Department of Environment and Energy, there are 18 chemical storage sites within or near Lexington which house hazardous materials (listed below). In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Table LEX.3: Chemical Storage Sites

Name	Address	Floodplain (Y/N)
Orthman Manufacturing Inc	75765 Road 435	N
Titan Machinery Inc	75481 Road 435	Y (0.2%)
Country Partners Cooperative	707 E Pacific St	N
NebraskaLand Truck Center	3002 Plum Creek Pkwy	N
NDOT Lexington Yard	2812 Plum Creek Pkwy	N
Dawson County Shop	710 W 8th St	Y (0.2%)
TIGT Lexington Compressor Sta	75780 Road 435	N
Tyson Fresh Meats Inc	1500 Plum Creek Pkwy	N
Darling Ingredients Inc	1208 E Walnut St	N
Country Partners Cooperative	43571 Highway 30	Y (1%)
Country Partners Cooperative	1306 E Walnut St	N
CenturyLink	112 E 7th St	Y (0.2)
Davis Energy Inc	925 W Pacific Ave	N
Paulsen Inc	43434 Heartland Rd	N
Chief Ethanol Fuels Inc	1111 E Industry Dr	N
Midwest PMS LLC	408 W Ivan St	N
AT&T NEA041/NE9154	77048 Drive 428	N
Orthman Manufacturing Inc	620 Frontier St	N

Source: Nebraska Department of Environment and Energy[54]

Health and Medical Facilities

The following medical and health facilities are located within the community.

Table LEX.4: Health and Medical Facilities

Name	Type of Facility	Address	Number of Beds
Lexington Regional Health Center	Hospital	1201 North Erie St	25
Avamere at Lexington	Assisted Living Facility	1811 Ridgeway	59
Wel-Life at Plum Creek	Assisted Living Facility	1505 North Adams St	29
Plum Creek Care Center	Long Term Care Facility	1505 North Adams St	66

Source: Nebraska Department of Health and Human Services[55,56,57,58]

54 Nebraska Department of Environment and Energy. "Search Tier II Data." Accessed June 2021.
55 Department of Health and Human Services. 2021. "State of Nebraska: Assisted Living Facilities." https://dhhs.ne.gov/licensure/Documents/ALF%20Roster.pdf.
56 Department of Health and Human Services. 2021. "State of Nebraska Roster: Hospitals." https://dhhs.ne.gov/licensure/Documents/Hospital%20Roster.pdf.
57 Department of Health and Human Services. 2021. "State of Nebraska Roster: Long Term Care Facilities." https://dhhs.ne.gov/licensure/Documents/LTCRoster.pdf.
58 Department of Health and Human Services. 2021. "State of Nebraska Roster: Rural Health Clinic." https://dhhs.ne.gov/licensure/Documents/RHC_Roster.pdf.

Critical Facilities

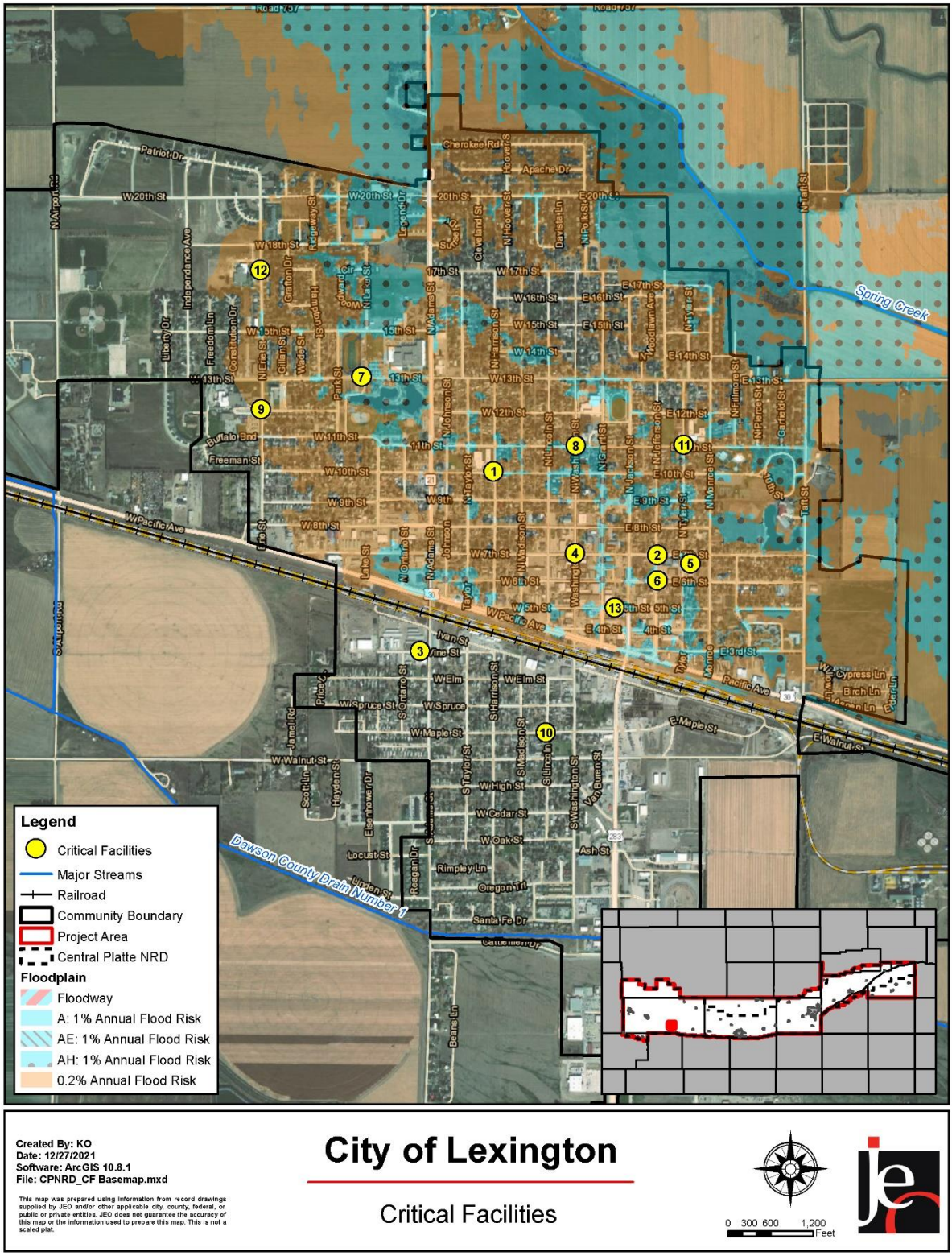
Each participating jurisdiction identified critical facilities vital for disaster response, providing shelter to the public, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during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

Although they may not be listed in the table below, critical infrastructure also includes power infrastructure, cell towers, alert sirens, water infrastructure, wastewater infrastructure, and roadways.

Table LEX.5: Critical Facilities

CF Number	Name	Mass Care (Y/N)	Generator (Y/N)	Floodplain (Y/N)
1	Bryan Elementary School	Y	N	Y (0.2%)
2	City Hall/Police	N	Y	Y (0.2%)
3	City Service Building	N	Y	N
4	County Building/Sheriff	N	Y	Y (0.2%)
5	Fire Hall	N	Y	Y (0.2%)
6	Grand Generation Center	Y	N	Y (0.2%)
7	Lexington High School	Y	N	Y (0.2%)
8	Lexington Middle School	Y	Y	Y (1%)
9	Lexington Regional Health Center	N	Y	Y (0.2%)
10	Morton Elementary School	Y	N	N
11	Pershing Elementary School	Y	N	Y (0.2%)
12	Sandoz Elementary School	Y	N	Y (0.2%)
13	Wastewater Treatment Plant	N	Y	Y (0.2%)

Figure LEX.5: Critical Facilities



Parcel Improvements and Valuation

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

Table LEX.6: Parcel Improvements and Value in the 1% Annual Flood Risk Area

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
2,803	$341,990,076	551	$64,618,134	19.7%

Source: County Assessor, 2021

Table LEX.7: Parcel Improvements and Value in the 0.2% Annual Flood Risk Area

Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	Percentage of Improvements in Floodplain
2,803	$341,990,076	1,972	$203,700,244	70.4%

Source: County Assessor, 2021

Historical Occurrences

See the Dawson County profile for historical hazard events, including the number of events, damage estimates, and any fatalities or injuries. Larger scale and more damaging events that impacted the community are discussed under Hazard Prioritization.

Hazard Prioritization

The hazards discussed in detail below were either identified in the previous HMP and determined to still be of top concern or were selected by the local planning team from the regional list as relevant hazards for the community. The local planning team prioritized the selected hazards based on historical hazard occurrences, potential impacts, and the community's capabilities. For more information regarding regional hazards, please see *Section Four: Risk Assessment*.

Extreme Heat

The community is concerned about the health and safety of at-risk populations, the potential strain on the power grid, the safety of livestock, the increased chance for fire and drought, and the earth generally warming. Lexington has most recently experienced extreme heat in the summer of 2016. The community does not have official cooling centers, but Lexington has parks with shelters and shade, and the city plans to add one new splash pad in the summer of 2022. Event cancelation notification is through various social and traditional media outlets. Lexington is working to continually improve their power system and has made progress improving the electrical grid. Current hazard mitigation plans include creating a redundant electrical system and providing backup generators for critical facilities. Currently some faith-based organizations might attempt to aid vulnerable populations, but nothing is in effect yet. Lexington also plans to educate its residents on mitigation and response procedures for extreme heat.

Flooding

The City of Lexington is flanked by floodplain on its north and east sides, and down Highway 30 mostly east of the city's corporate limits. One of the most significant flood events occurred in May of 2008 as a result of heavy spring rains. This flood event caused water to enter homes, inundate streets, and impacted an electrical substation resulting in a reported $100,000 in property damages. Lexington was also affected by the flooding event in May of 2005 that caused

$3,000,000 in property damages throughout central Nebraska. Flooding during this event left nearly 60 percent of Lexington without power. In July 2019, flooding cause cars to be stalled in flood waters and 23 people were evacuated from an apartment building. The city issued a disaster declaration due to the disruption of utility services.

Stormwater drainage effectiveness varies within the community. One of the larger drainage issues is related to water discharged by an adjacent irrigation canal later near the northwest corner of the city. Currently the city is having a drainage improvements feasibility study done on the area to identify solutions to improving the drainage. Spring Creek is a body of water of concern to the planning team. Several culverts have been renovated to improve flow, but downstream flow of Spring Creek remains a concern. In 2016 the city completed a project of dredging and bank stabilization at Plum Creek Park. In 2019 the same was completed at the city's other lake at Kirkpatrick Memorial Park. Future mitigation plans include raising building codes, updating the city's comprehensive plan, stabilizing banks, deepening drainage ditches, a drainage improvements study, and engineering Spring Creek and Buffalo Creek to improve stormwater disbursement.

The city falls under the Spring and Buffalo Creeks Watershed Flood Risk Reduction Plan, which is currently under development. The plan will identify projects within the watershed to help reduce flood risk and damages to agricultural property, homes, and businesses. Projects deemed feasible in the plan will be added to this HMP once the planning process has concluded.

Lexington is a member of the NFIP, and the city's Floodplain Administrator (William Brecks) will oversee the commitments and requirements of the NFIP. The initial FIRM for the city was delineated in 5/15/1984 and the current effective map date is 5/3/2011. Nearly 19% of parcel improvements in the city are located in the 1% annual flood risk area and over 70% of parcel improvements are located in the 0.2% annual flood risk area (see tables in the Parcel Improvements and Valuation section). As of October 31, 2021, there are 130 NFIP policies in-force covering $25,329,200. Lexington does not currently have any repetitive loss or severe repetitive loss structures.

Severe Thunderstorms

The NCEI reports 29 severe thunderstorms and one lightning event since 1996, causing $2,105,000 dollars in damage. Of these, the most damage was caused in July of 2014 when severe thunderstorms, accompanied by hail and strong winds, caused $1,000,000 in property damage. The community experiences thunderstorms often in the summer, and Lexington is concerned with potential power outages, lightning strikes, and the potential loss of life or property. In September of 2009, lightning struck a dry-cleaning business in Lexington, igniting a fire that burned the business to the ground. Approximately 5% of powerlines are buried in the community, which increased the risk of power outage. Critical municipal records are backed up, and most critical facilities have backup generators and weather radios. To mitigate damage caused by severe thunderstorms, Lexington plans to update and improve their tree maintenance programs by maintaining their Tree City USA membership, removing hazardous trees, and educating citizens about tree maintenance. Lexington has worked with the Nebraska Forest Service to complete a comprehensive tree inventory. The local tree board is also participating in monthly online tree board training and plans to update the tree ordinance.

Severe Winter Storms

Half an inch of ice from a storm in December of 2007 was heavy enough to down power lines and trees, precipitating concerns about future losses of power and disabling heating. The community is concerned with the potential impact various industries, depending on the severity of the storm and conditions of roads. The planning team is also concerned about the delay in emergency response time due to poor road conditions. The city publishes emergency snow routes online and on local media outlets and there are a few snow fences along main transportation routes. The city owns several sander/plows, pickup trucks with blades, front end loaders, and a new snow blower to use for snow removal. The city has erected a salt building so inventory of street salt is sheltered from the elements that may prematurely deplete the supply.

Tornadoes and High Winds

Lexington is concerned with the potential damage to trees, property, and power lines. NCEI reported 11 high wind events nearing wind speeds of 60 mph since 1996. A high wind event in April of 2010 brought down tree branches that caused power outages throughout the city. The planning team reports that Lexington experiences high winds perennially that down tree limbs. The city's municipal records are backed up, text alerts are available, and the community has safe rooms in the senior center and in the local hospital. The community has warning sirens, with a couple of upgrades and add additions planned for in 2022. The sirens are activated by the County Emergency Management Department. To mitigate the hazards associated with high winds, Lexington has maintained membership with Tree City USA for 20 years and plans to continue tree maintenance with hazardous tree removal, a tree assistance program, a tree care ordinance, and a tree planting program. Electric linemen regularly identify potential tree/line hazards, and have those trees trimmed or removed.

Mitigation Strategy

New Mitigation Actions

Mitigation Action	Drainage Study
Description	In collaboration with JEO, review the feasibility of improving the drainage in the northwest corner of the city, with several potential solutions being investigated: conversion of irrigated acres from surface water to groundwater, canal operation adjustments, and/or diversion of flow. It is anticipated that if the project is feasible, then additional efforts will be required to fully develop the solution.
Hazard(s) Addressed	Flooding
Estimated Cost	$16,000
Local Funding	General Fund
Timeline	1 Year
Priority	High
Lead Agency	City Manager, JEO Consulting Group
Status	This study is currently underway.

Mitigation Action	Project Scoping
Description	Evaluate potential flood risk reduction alternatives as identified through the NRCS WFPO including project scoping and implementation.
Hazard(s) Addressed	Flooding
Estimated Cost	Varies by Project
Local Funding	General Fund
Timeline	2-5 Years
Priority	High
Lead Agency	City Manager, CPNRD
Status	Spring and Buffalo Creeks Watershed Flood Risk Reduction Plan is currently under development. No formal alternatives have yet been determined; however, several alternatives are under further review for each program with communities in the district. This must remain a multi-jurisdictional effort, requiring improvements in the downstream Spring Creek watershed.

Kept Mitigation Actions

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	$100,000+
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	City Administration, Water and Sewer Department
Status	Evaluation of wells in underway and the city is making plans to install several new backup generators in 2022-2023.

Mitigation Action	Construction Standards and Building Survivability
Description	Evaluate building standards/codes/requirements; implement new or improved building standards/codes/requirements; educate construction companies on building standards; promote use of higher codes and standards, such as fortified for Safer Living Standard, to provide greater protection for any new construction or building retrofits.
Hazard(s) Addressed	All Hazards
Estimated Cost	Staff Time
Local Funding	General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	Building Department
Status	The city has the most up to date code version and will update the building code as soon as the State of Nebraska moves to the newest code.

Mitigation Action	Develop Emergency Snow/Evacuation Routes
Description	Develop or improve snow and evacuation routes and programs to include parking, snow/ice/debris removal, etc.; obtain and install snow emergency route and evacuation signs; provide information on emergency routes to the public; construct snow fences where possible on main routes to prevent snow from disrupting transportation.
Hazard(s) Addressed	Severe Winter Storms
Estimated Cost	$1,000, Staff Time
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	City Administration, Public Works Department, Streets Department
Status	The city has established firm emergency snow routes and snow removal procedures. This action is being kept as growth in the city may necessitate updates.

Mitigation Action	Hail Resistant Roofing
Description	Use roofing materials that are resistant to hail impacts for new buildings; retrofit existing buildings with hail resistant roofing; encourage the use of hail resistant roofing for any new constructions.
Hazard(s) Addressed	Severe Thunderstorms
Estimated Cost	$2 per square foot
Local Funding	General Fund
Timeline	Ongoing
Priority	Low
Lead Agency	Building Department
Status	This is an ongoing action. The city requires and plans to continue to enforce what is required by code, which is hail resistant roofing, both new and retrofit.

Mitigation Action	Improve and Revise Snow/Ice Removal Program
Description	Revise and improve snow and ice removal program for streets; address situations such as plowing snow, ice removal, parking during snow and ice removal, and removal of associated storm debris; improve capabilities to rescue those stranded in blizzards and increase the capacity to which snow can be removed from roadways after an event.
Hazard(s) Addressed	Severe Winter Storms
Estimated Cost	Varies
Local Funding	General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	City Administration, Streets Department
Status	This is done and in place but is kept as updates may be necessary as community growth occurs.

Mitigation Action	Improve Drainage
Description	Improve storm sewers and drainage patterns in and around the community; deepen drainage ditches and clean out culverts.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000+
Local Funding	General Fund
Timeline	Ongoing
Priority	Medium
Lead Agency	City Administration, Streets Department, Water and Sewer Department
Status	This is an ongoing action due to erosion and litter that will eventually accumulate. Several drainage ditches have been cleaned, smoothed, and even added flow liners to expedite drainage flow. More will be tended to incrementally.

Mitigation Action	Improve Electrical Service
Description	Evaluate hardening, retrofitting, looping and/or burying of power lines and related infrastructure and/or comparable protection measures; provide looped distribution service and other redundancies in the electrical system as a backup power supply in the event the primary system is destroyed or fails; implement measures to improve electrical service; bury power lines for future construction.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$50,000+
Local Funding	Enterprise Funds
Timeline	2-5 Years
Priority	High
Lead Agency	City Administration, Electric Department
Status	The city is in the final stages of a multi-year effort to update everything to a uniform standard. The city will continue to evaluate the grid and make improvements when called for.

Mitigation Action	Improve Warning Systems
Description	Evaluate current warning systems (defined as alert sirens, weather radios, and television, telephone, and radio warning systems, etc.); improve warning systems/develop new warning system; obtain/upgrade warning system equipment and methods; conduct evaluation of existing alert sirens for replacement or placement of new sirens; identify location of weather warning radios; improve weather radio system; obtain/upgrade weather radios.
Hazard(s) Addressed	All Hazards
Estimated Cost	$30,000+
Local Funding	General Fund
Timeline	5+ Years
Priority	Medium
Lead Agency	City Administration, Streets Department
Status	The city replaces and upgrades warning systems incrementally. As new neighborhoods are developed, the city will plan to appropriately augment the warning siren network. There are plans for one or two additional sirens in 2022. At least one siren has been replaced since the last HMP.

Mitigation Action	Public Awareness / Education
Description	Obtain or develop hazard education materials; conduct multi-faceted public education; distribute fact sheets or maps at community events, public schools, other venues and to public and private communication systems; conduct scheduled siren/warning system tests; prepare educational materials listing safe rooms and shelters and evacuation plans; distribute educational materials listing safe rooms and shelters; purchase equipment such as overhead projectors and laptops to facilitate presentation of information.
Hazard(s) Addressed	All Hazards
Estimated Cost	$5,000+
Local Funding	General Fund
Timeline	Ongoing
Priority	Medium
Lead Agency	City Administration
Status	This is an ongoing action. The city plans to continue issuing periodic educational pieces and also posting on the city's website.

Mitigation Action	Reduce Tree Damage and Damage from Trees
Description	Conduct tree inventory; develop tree maintenance/trimming program; implement tree maintenance/trimming program; remove hazardous limbs and/or trees.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$20,000 per year
Local Funding	General Fund
Timeline	Ongoing
Priority	Low
Lead Agency	Streets Department, Parks Department
Status	The city completed a tree inventory in 2021. The city's main trimming efforts are in response to power lines. Parks personnel also evaluate tree health and prune dead branches as necessary.

Mitigation Action	Stream Channelization / Bank Stabilization
Description	Evaluate current stream bed and bank stabilization needs; implement stream bed and bank stabilization improvements including grade control structures, rock rip rap, vegetative cover, etc.
Hazard(s) Addressed	Flooding
Estimated Cost	$10,000+
Local Funding	General Fund
Timeline	2-5 Years
Priority	Medium
Lead Agency	Public Works Department
Status	In 2016 the city completed a project of dredging and bank stabilization at Plum Creek Park. In 2019 the same was completed at the city's other lake at Kirkpatrick Memorial Park. Some streams and drainage ditches remain a concern. Since the main areas of concern are outside the city's jurisdiction, they are partnering with other stakeholders, including CPNRD. The stakeholders are making an evaluation of the Spring Creek watershed, with an end goal of pursuing improvements identified in the study.

Mitigation Action	Tree Care Ordinance
Description	Pass and enforce a tree care ordinance to improve tree health and to remove dangerous trees and limbs.
Hazard(s) Addressed	Tornadoes and High Winds, Severe Winter Storms, Severe Thunderstorms
Estimated Cost	Staff Time
Local Funding	Staff Time
Timeline	1 Year
Priority	High
Lead Agency	Streets Department, Parks Department, Tree Board
Status	The Lexington Tree Board plans to forward a tree ordinance update to the City Council in 2022. The previous ordinance is heavily specific towards Dutch Elm Disease and a more flexible ordinance will help address unforeseen issues that may appear.

Mitigation Action	Tree Planting / Assistance for Tree Planting
Description	Educate public on appropriate tree planting and establish an annual tree trimming program to assist low income and elderly residents; develop tree planting and maintenance guidelines.
Hazard(s) Addressed	Severe Thunderstorms, Severe Winter Storms, Tornadoes and High Winds
Estimated Cost	$3,000, Staff Time
Local Funding	Streets Funds, Parks Funds
Timeline	5+ Years
Priority	Medium
Lead Agency	City Administration, Parks Department, Tree Board
Status	This is an ongoing action. The city's website now has a section on trees that will be providing much of the educational information.

Mitigation Action	Update Comprehensive Plan
Description	Update Comprehensive Plan; integrate plan with Hazard Mitigation Plan components.
Hazard(s) Addressed	All Hazards
Estimated Cost	$50,000+
Local Funding	General Fund
Timeline	1 Year
Priority	Medium
Lead Agency	City Administration
Status	An updated Comprehensive Plan is planned for late 2022.

Plan Maintenance

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

Lexington last reviewed their section of the HMP in 2017 during the plan update. The City Manager, Assistant City Manager, and Development Services Director / Floodplain Administrator will be responsible for reviewing and updating the plan in the future. These individuals will review the plan bi-annually during city council meetings. The public will be notified through the city's website and Facebook page.