

Community Profile

City of Linden

**Dallas County
Hazard Mitigation Plan 2023**

Local Planning Team

Table LIN.1: Linden Local Planning Team

Name	Title	Jurisdiction
City Council	N/A	City of Linden

Location and Geography

The City of Linden is located in west central Dallas County and covers an area of 0.78 square miles. Major waterways in the area include Middle Racoon River and Mosquito Creek.

Demographics

Linden’s population in 2020 was 200. The following figure displays the historical population trend from 1900 to 2020. This figure indicates that the population of Linden has fluctuated since 1900 but has trended downward in population size. The population remained stable over the past decade. Communities with a growing population may be more prone to developing additional land and building new structures, while communities with declining populations may lack adequate funds to pursue mitigation projects. Net population growth may increase the number of people and properties vulnerable to hazards. Linden’s population accounted for 0.2% of Dallas County’s population in 2020.¹

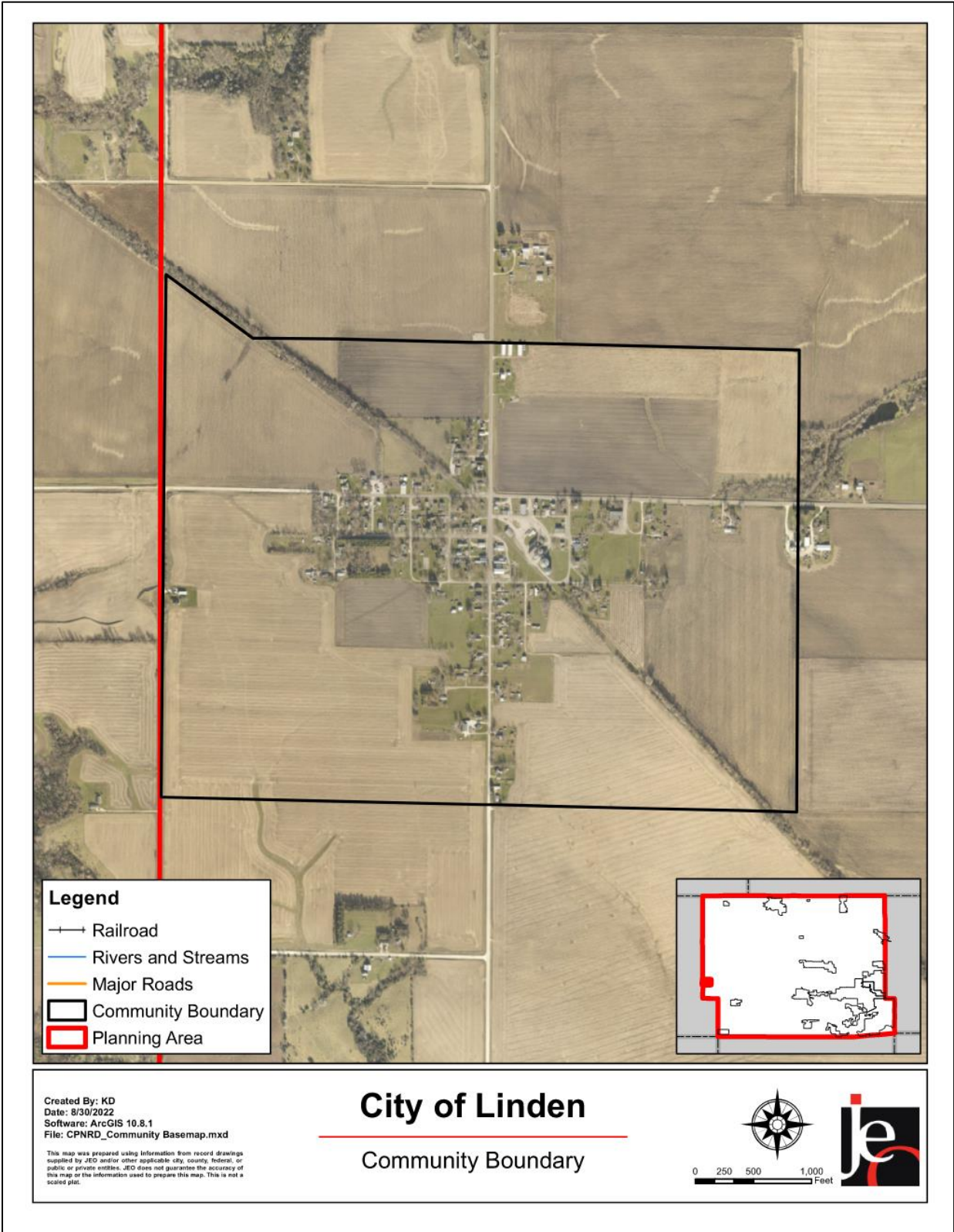
Figure LIN.1: Population 1900 - 2020



Source: U.S. Census Bureau

¹ United States Census Bureau. “2020 Census Redistricting Data (Public Law 94-171): P1: Race.” <https://data.census.gov>.

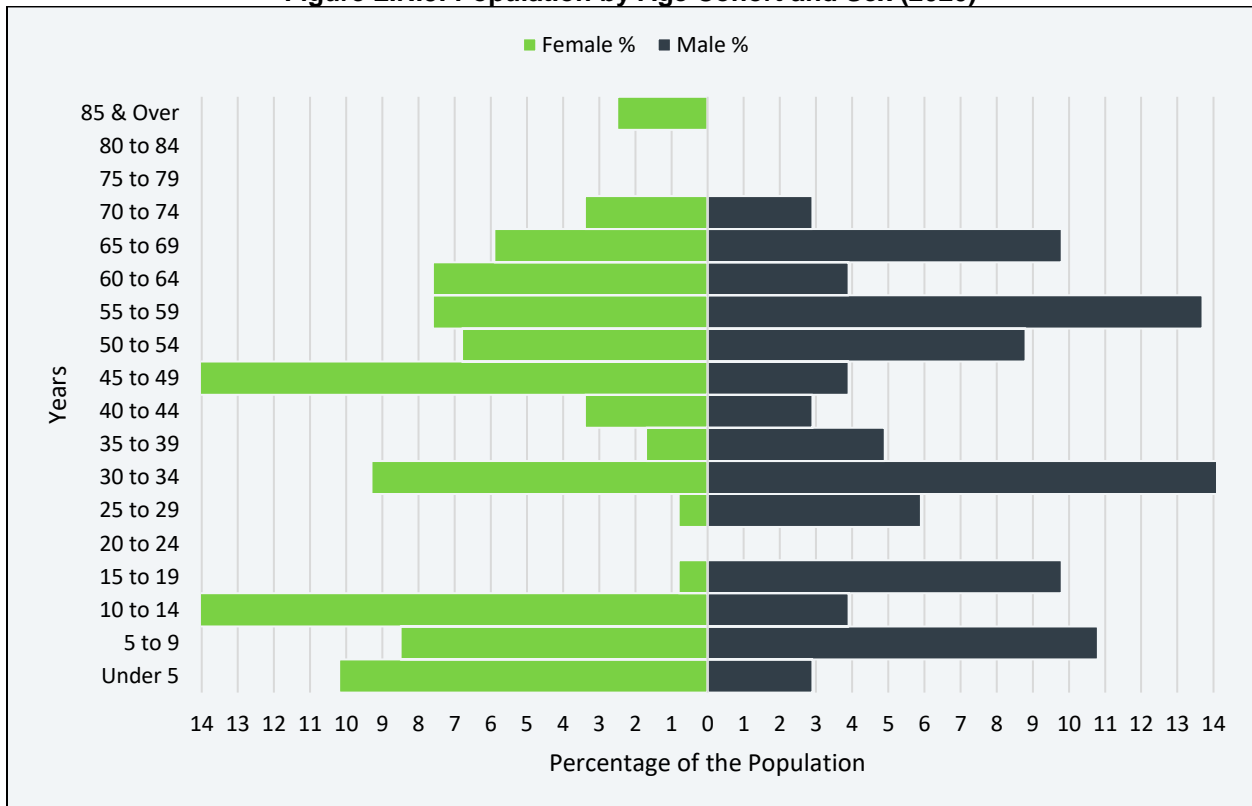
Figure LIN.2: City of Linden



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

- **6.5% is non-white.** Since 2010, Linden became more racially diverse. In 2010, 1% of the Linden’s population was non-white. By 2020, 6.5% was non-white.^{2 3}
- **39 median age.** The median age of Linden was 39 years old in 2020. The population became younger since 2010, when the median age was 44.3.^{4 5}

Figure LIN.3: Population by Age Cohort and Sex (2020)



Source: U.S. Census Bureau⁴

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

Employment and Economics

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

² United States Census Bureau. “2020 Census Redistricting Data (Public Law 94-171): P1: Race.” <https://data.census.gov>.

³ United States Census Bureau. “2010 Census Redistricting Data (Public Law 94-171): P1: Race.” <https://data.census.gov>.

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

⁵ United States Census Bureau. “2010 Census Bureau American Community Survey: S0101: Age and Sex.” <https://data.census.gov>.

- **7.7% of people living below the poverty line.** The poverty rate (7.7%) in Linden was lower than the state's poverty rate (11.1%) in 2020.⁶
- **\$76,667 median household income.** Linden's median household income in 2020 (\$76,667) was about \$14,800 higher than the state (\$61,836).⁷
- **9% unemployment rate.** In 2020 Linden had a higher unemployment rate (9%) compared to the state (3.9%).⁸
- **62.7% of workers commuted 30 minutes or more to work.** More workers in Linden commuted 30 minutes or more to work than workers commuting less than 15 minutes (62.7% compared to 2%).⁹

Major Employers

Major employers for the city include the city Library, Maintenance Shop, and the City Clerk's Office. A large percentage of residents commute to other communities for work.

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. 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.

- **78.6% of housing built prior to 1970.** Linden has a greater share of housing built prior to 1970 than the state (78.6% compared to 50.4%).¹⁰
- **5.4% of housing units vacant.** Since 2010, Linden's vacancy rate decreased. In 2010 the vacancy rate was 6.8%. By 2020, 5.4% of housing units were vacant.^{11 12}
- **12.9% mobile and manufactured housing.** The City of Linden had a greater share of mobile and manufactured housing (12.9%) compared to the state (3.6%).¹³

⁶ United States Census Bureau. "2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics." <https://data.census.gov>.

⁷ United States Census Bureau. "2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics." <https://data.census.gov>.

⁸ United States Census Bureau. "2020 Census Bureau American Community Survey: DP03: Selected Economic Characteristics." <https://data.census.gov>.

⁹ United States Census Bureau. "2020 Census Bureau American Community Survey: S0802: Means of Transportation to Work by Selected Characteristics." <https://data.census.gov>.

¹⁰ United States Census Bureau. "2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." <https://data.census.gov>.

¹¹ United States Census Bureau. "2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." <https://data.census.gov>.

¹² United States Census Bureau. "2010 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." <https://data.census.gov>.

¹³ United States Census Bureau. "2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics." <https://data.census.gov>.

- **21.6% renter-occupied.** The rental rate of Linden was 21.6% in 2020. The percentage increased since 2010, when renter occupied housing was at 5.6%.^{14 15}

Governance

A community’s governance indicates the number of boards or offices that may be available to help implement hazard mitigation actions. Linden has a mayor, a five-member city council, and the following offices.

- Clerk/Treasurer
- Attorney
- Library Board Chairperson

Capability Assessment

The capability assessment consisted of a Capability Assessment Survey completed by the jurisdiction and a review of local existing policies, regulations, plans, and the programs. The survey is used to gather information regarding the jurisdiction’s planning and regulatory capability; administrative and technical capability; fiscal capability; and educational and outreach capability.

Table LIN.2: Capability Assessment

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

¹⁴ United States Census Bureau. “2020 Census Bureau American Community Survey: DP04: Selected Housing Characteristics.” <https://data.census.gov>.

¹⁵ United States Census Bureau. “2010 Census Bureau American Community Survey: DP04: Selected Housing Characteristics.” <https://data.census.gov>.

Section Seven: City of Linden Community Profile

	Grant Manager	No
	Mutual Aid Agreement	Yes
	Other (if any)	
Fiscal Capability	Capital Improvement Plan/ 1 & 6 Year Plan	No
	Applied for grants in the past	No
	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	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 LIN.3: Overall Capability

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

Plan Integration

The City of Linden does not have its own building codes, zoning ordinances, or a comprehensive plan in place. Should any planning documents be prepared, hazard mitigation will be considered in their development, where applicable. City funds are limited to maintaining current facilities and municipal systems.

Future Development Trends

In the last five years, limited development has occurred within the city with the only new development being a new bar established in town. No new housing developments or businesses are planned for the next five years.

Community Lifelines

Transportation

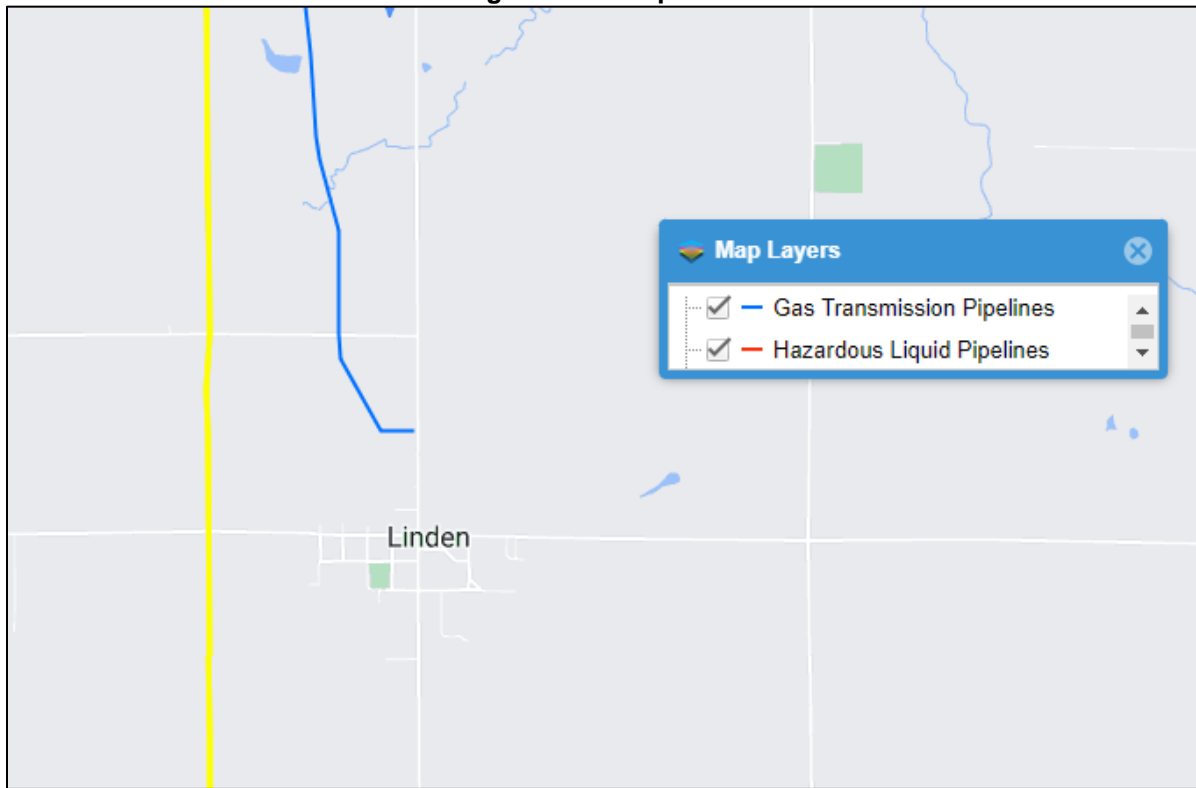
Linden’s major transportation corridors include County Highway F51 and County Highway P30. The most traveled route is Highway P30, with an average of 350 vehicles daily.¹⁶ An additional route of concern is 270th Street that is easily damaged. According to the planning team, no chemicals are regularly transported along the local routes and no chemical spills or other significant transportation events have occurred locally. The nearest airport, Guthrie Center Municipal Airport, is located about nine miles northwest of Linden. Transportation information is important to hazard mitigation plans because it suggests possible evacuation corridors in the community, as well as areas more at risk of transportation incidents.

Hazardous Materials

A gas transmission pipeline travels near the city and can be seen as a blue line in the figure below.

¹⁶ Iowa Department of Transportation. 2016. "Iowa Traffic Data". Accessed May 2022.
<https://iowadot.maps.arcgis.com/apps/MapSeries/index.html?appid=0cce99afb78e4d3b9b24f8263717f910>.

Figure LIN.4: Pipelines



Source: National Pipeline Mapping System¹⁷

According to the Tier II System reports submitted to the Iowa Department of Natural Resources, there are no chemical storage sites in Linden that contain hazardous chemicals. In the event of a chemical spill, the local fire department and emergency response may be the first to respond to the incident.

Health and Medical Facilities

According to the Iowa Department of Inspection and Appeals, there are no medical and health facilities located within the community.

Critical Facilities

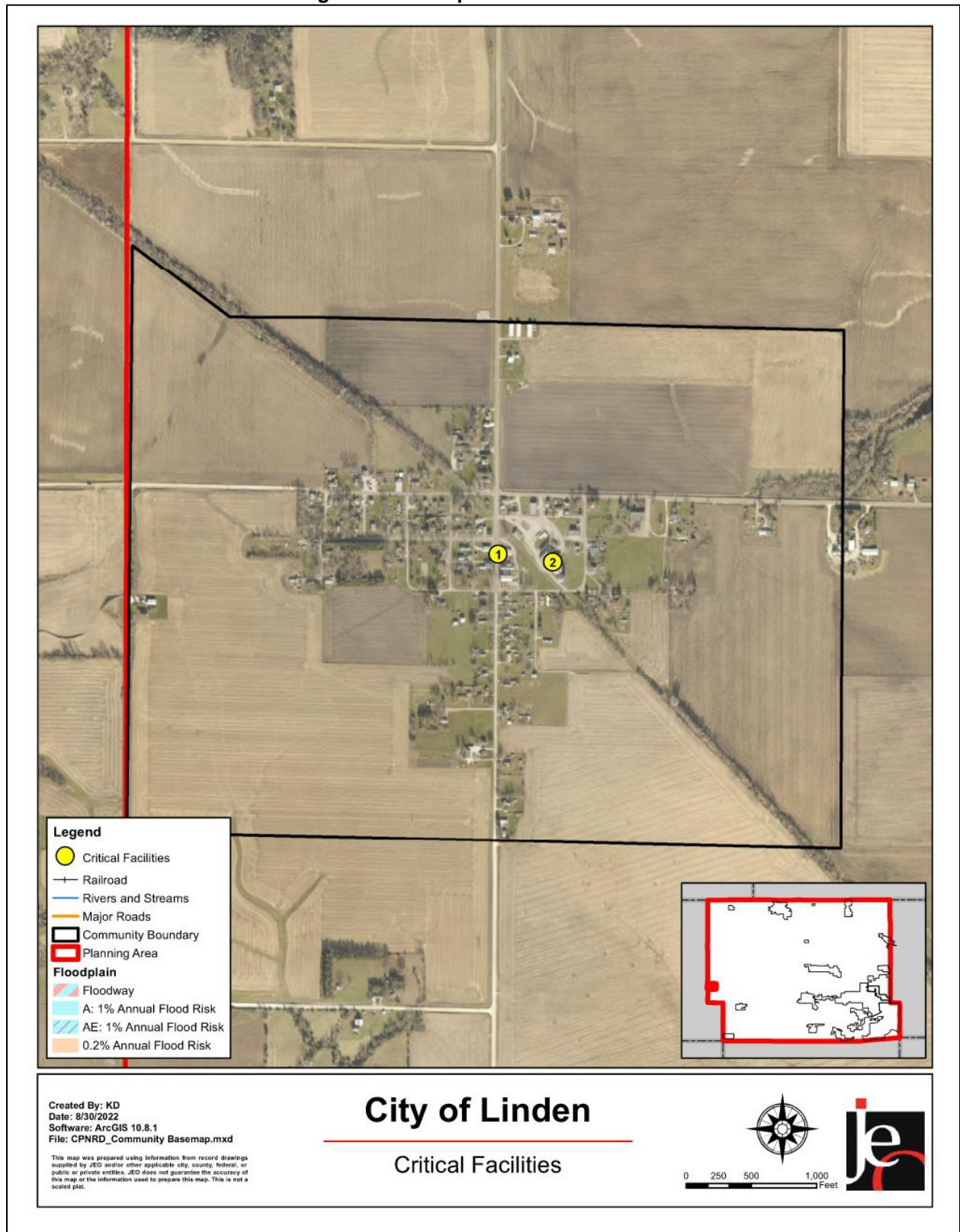
The local planning team identified critical facilities that are vital for disaster response, public shelter, and essential for returning the jurisdiction’s functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original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

Table LIN.4: Critical Facilities

CF #	Name	Mass Care (Y/N)	Generator (Y/N)	Floodplain (Y/N)
1	Linden City Hall and Public Library	N	N	N
2	Farmers Cooperative Co - Linden	N	N	N

¹⁷ National Pipeline Mapping System. 2022. “Public Viewer.” Accessed April 2022. <https://pvnpm.s.phmsa.dot.gov/PublicViewer/>.

Figure LIN.5: Map of Critical Facilities



Parcel Improvements and Valuation

The planning team requested GIS parcel data from the County Assessor as of July 2022. This data allowed the planning team to analyze the location, number, and value of property improvements at the parcel level. The data did not contain the number of structures on each parcel. A summary of the results of this analysis is provided in the following table.

Table LIN.5: Linden Parcel Improvements and Value in the 1% Annual Flood Risk Area

Total Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	% of Improvements in Floodplain
165	\$6,085,400	0	-	-

Source: County Assessor, 2022

Table LIN.6: Linden Parcel Improvements and Value in the 0.2% Annual Flood Risk Area

Total Number of Improvements	Total Improvement Value	Number of Improvements in Floodplain	Value of Improvements in Floodplain	% of Improvements in Floodplain
165	\$6,085,400	0	-	-

Source: County Assessor, 2022

Table LIN.7: Linden Flood Map Products

Type of Product	Product ID	Effective Date	Details
FIS Report	19049CV000B	12/7/2018	Flood Insurance Study

Source: FEMA Flood Map Service Center¹⁸

¹⁸ Federal Emergency Management Agency. 2022. "FEMA Flood Map Service Center." Accessed July 2022. <https://msc.fema.gov/portal/advanceSearch>.

Hazard Prioritization

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

Animal and Plant Disease

The local planning team has identified plants and animal disease as a top concern due to an excessive number of cats and raccoons located at a property recently acquired by the city. To reduce the number of these animals, traps were set in June 2022. According to the local planning team the top concerns is that other animals such as domestic pets could get bitten and hurt or catch a sickness and that mice and rats will tear into buildings and destroy wires or other important components. To reduce the risk of animal diseases the city has sold two city properties with expectations of the new owners cleaning them up. Future actions the city would like to take to reduce risk includes a Trap, Neuter, Release program for the feral cat population within the town.

Severe Thunderstorms (Includes Hail and Lightning)

Severe thunderstorms are a regular part of the climate and weather for Linden. These storms can cause damage through lightning strikes, hail, and high winds. The NCEI reports 4 instances of severe thunderstorms occurring in Linden from 1998 to 2021. The damages seen caused by these severe thunderstorms included fallen tree limbs and a semi-truck blown over into a ditch. These storms caused a total of \$60,000 worth of damage across Dallas County.

Significant concerns identified by the local planning team is the lack of funds within the community to completely repair damages. To reduce risk and impacts to this hazard, the city has removed four damaged trees within the city park. In the future, to reduce risk to the community, the local planning team hopes to continue with tree removal and promote the repair of structures instead of abandoning them.

Severe Winter Storms

Severe winter storms are a regular part of the climate and weather for Linden. Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. According to the NCEI, there were 79 winter storm events in Dallas County from 1996 to 2021. These events resulted in \$6,613,680 in property damages, with no injuries or deaths reported. Additionally, the USDA Risk Management Agency reported almost \$375,000 in crop damages from severe winter storm events from 2000 to 2021. The local planning team reports past occurrences of excess snowfall resulted in downed tree limbs and power lines due to excessive weight of the snow.

The top concern identified by the local planning team was the possibility of falling branches, impassible roads, and ice falls. To reduce risk and impacts to this hazard, the city has spoken to the maintenance department regarding areas of concern along road where ice is frequently found. The city plans to continue with tree removal to reduce falling branches and ensure roads are salted or sanded.

Tornado and Windstorm

The local planning team identified tornado and windstorm as a top hazard due to their prevalence in the area and potential for damage and loss of life. Windstorms are common across the county and can cause property and tree damage and brief power outages. Tornadoes are much less common, but the impacts can be far greater. Between 1996 and 2021, the NCEI recorded 31 high wind events in Dallas County and no tornadoes in Linden. Additionally, the local planning team reported the August 2020 and December 2021 derechos damaged trees, houses, and fences within the community. Shingles were blown off houses and trees fell in yards and roads.

Significant concerns identified by the local planning team is the lack of funds within the community to completely repair damages. To reduce risk and impacts to this hazard, the city has removed four damaged trees within the city park. In the future, to reduce risk to the community, the local planning team hopes to continue with tree removal.

Mitigation Strategy

Continued Mitigation and Strategic Actions

Mitigation Action	Construct New City Hall/Fire Station/Library as a Community Saferoom
Description	Construct a facility to provide shelter to citizens and city/fire department and library staff in the event of a tornado.
Hazard(s)	Tornado and Windstorms
Estimated Cost	\$500,000 to \$1,000,000
Funding	City General Funds, HMA
Timeline	5 years
Priority	Medium
Lead Agency	City Hall and Library
Status	The library has started fundraising for a new building.

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.

The local planning team is responsible for reviewing and updating this profile as changes occur or after a major event. The planning team will include the City Council, Mayor, and Maintenance. The plan will be reviewed and updated annually. The public will be involved in the review and revision process through the City Council meetings.