

# City of Jacksonville Addendum to the Jackson County NHMP



*Photos courtesy of Oregon State Archives*

Effective

December XX, 2023 through December XX, 2028

Prepared for  
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# Introduction

## Purpose

This is an update to the Jacksonville addendum to the Jackson County Multi-Jurisdictional Natural Hazard Mitigation Plan (MNHMP, NHMP). This addendum supplements information contained in Volume I (Basic Plan), which serves as the NHMP foundation, and Volume II (Appendices), which provide additional information. This addendum meets the following requirements:

- Multi-Jurisdictional **Plan Adoption** §201.6(c)(5),
- Multi-Jurisdictional **Participation** §201.6(a)(3),
- Multi-Jurisdictional **Mitigation Strategy** §201.6(c)(3)(iv) and
- Multi-Jurisdictional **Risk Assessment** §201.6(c)(2)(iii).

Updates to Jacksonville's addendum are further discussed throughout the NHMP and within Volume II, Appendix B, which provides an overview of alterations to the document that took place during the update process.

Jacksonville adopted their addendum to the Jackson County Multi-jurisdictional NHMP on [date], 2023. FEMA Region X approved the Jackson County NHMP on [date], 2023 and the City's addendum on [date], 2023. With approval of this NHMP, the City is now eligible for non-disaster and disaster mitigation project grants through [date-1], 2028.

## NHMP Process, Participation, and Adoption

This section of the NHMP addendum addresses 44 CFR 201.6(c)(5), *Plan Adoption* and 44 CFR 201.6(a)(3), *Participation*.

In addition to establishing a comprehensive, city-level mitigation strategy, the Disaster Mitigation Act of 2000 (DMA2K) and the regulations contained in Title 44 CFR Part 201 require that jurisdictions maintain an approved NHMP to receive federal funds for mitigation projects. Local adoption and federal approval of this NHMP ensures that the city will remain eligible for non-disaster and disaster mitigation project grants. Jacksonville was included as an addendum in the 2018 Jackson County NHMP update process.

The Oregon Partnership for Disaster Resilience (OPDR) at the University of Oregon's Institute for Policy Research and Engagement (IPRE) partnered with the Oregon Department of Emergency Management (OEM), Jackson County, and Jacksonville to update their NHMP. This project is funded through the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program. Members of the Jacksonville NHMP steering committee also participated in the County NHMP update process (Volume II, Appendix B).

The Jackson County NHMP and Jacksonville addendum are the result of a collaborative effort between residents, public agencies, non-profit organizations, the private sector, and regional organizations. A project steering committee guided the process of developing the NHMP.

### **Convener and Committee**

The Jacksonville Fire Chief served as the designated convener of the NHMP update and will take the lead in implementing, maintaining, and updating the addendum to the Jackson County NHMP in collaboration with the designated convener of the Jackson County NHMP (Emergency Manager).

Representatives from the City of Jacksonville steering committee met formally and informally, to discuss updates to their addendum (Volume II, Appendix B). The steering committee reviewed and revised the City's addendum, with particular focus on the NHMP's risk assessment and mitigation strategy (action items).

This addendum reflects decisions made at the designated meetings and during subsequent work and communication with Jackson County Emergency Management and the OPDR.

The Jacksonville Steering Committee was comprised of the following representatives:

- Convener, Wayne Painter, Fire Department Chief
- Jeff Alvis, City Administrator
- Jon Gallis, Fire Inspector
- Ian Foster, Planning Director

The steering committee was closely involved throughout the development of the NHMP and served as the local oversight body for the NHMP's development.

## **NHMP Implementation and Maintenance**

The City Council will be responsible for adopting the Jacksonville addendum to the Jackson County NHMP. This addendum designates a steering committee and a convener to oversee the development and implementation of action items. Because the City addendum is part of the County's multi-jurisdictional NHMP, the City will look for opportunities to partner with the County. The City's steering committee will convene after re-adoption of the Jacksonville NHMP addendum on an annual schedule. The County is meeting on a semi-annual basis and will provide opportunities for the cities to report on NHMP implementation and maintenance during their meetings. The City's convener will be responsible for assembling the steering committee.

The steering committee will be responsible for:

- Reviewing existing action items to determine suitability of funding;
- Reviewing existing and new risk assessment data to identify issues that may not have been identified at NHMP creation;
- Educating and training new steering committee members on the NHMP and mitigation actions in general;
- Assisting in the development of funding proposals for priority action items;
- Discussing methods for continued public involvement;
- Evaluating effectiveness of the NHMP at achieving its purpose and goals (use Table 4-1, Volume I, Section 4, as one tool to help measure effectiveness); and

- Documenting successes and lessons learned during the year.

The convener will also remain active in the County's implementation and maintenance process (Volume I, Section 4).

The steering committee will be responsible for activities outlined in Volume I, Section 4.

The City will utilize the same action item prioritization process as the County (Volume I, Section 4 and Volume II, Appendix D).

## Implementation through Existing Programs

Many of the Natural Hazard Mitigation Plan's recommendations are consistent with the goals and objectives of the City's existing plans and policies. Where possible, Jacksonville will implement the NHMP's recommended actions through existing plans and policies. Plans and policies already in existence have support from residents, businesses, and policy makers. Many land-use, comprehensive, and strategic plans get updated regularly, allowing them to adapt to changing conditions and needs. Implementing the NHMP's action items through such plans and policies increases their likelihood of being supported and implemented.

Jacksonville's acknowledged comprehensive plan is the City of Jacksonville Comprehensive Plan. The Oregon Land Conservation and Development Commission first acknowledged the plan in 1983. The City implements the plan through the Community Development Code.

Jacksonville currently has the following plans that relate to natural hazard mitigation. For a complete list visit the City's [website](#):

- [Comprehensive Plan](#)
- [Transportation System Plan](#) (2009)
- [Community Development Code](#)
- [Building Codes and Standards: Oregon Structural Specialty Code](#) (Commercial) and [Oregon Residential Specialty Code](#).
- [Urban Renewal Plan](#) (2014)
- [Emergency Operations Plan](#) (2012)
- [Water System Master Plan](#) (2016)
- [Fire Plan - Jackson County, OR Emergency MGT \(jacksoncountyor.org\)](#)

### Integration Since Last NHMP

Since the previous NHMP there have been no direct activities taken to integrate the NHMP into other planning mechanisms. However, the City maintains development codes and ordinances, which include a flood ordinance (last revised 3/1/2011 Ordinance 610). The City is currently revising its landscape ordinance to streamline tree removal standards to allow live resource trees to be removed if it is determined to be a fire hazard by the Fire Chief. Additional updates to the City's wildland interface code are expected in the next few years. Structural Building Codes are regulated by the Oregon Legislature and were last revised in 2021 (residential), 2022 (commercial). As such, Jackson County (and cities) benefit by adopting these minimum standard

building codes as established by the State to capture home hardening and building resilience during new construction and substantial improvement of existing construction. The Building Codes are based on the 2021 version of the International Building Code, International Fire Code, and International Existing Building Code. As such new and existing residential and commercial structures are required to building according to the latest seismic and wind standards. Additionally, the codes require fire resistant building materials for those structures constructed near or within the WUI.

During the update of this NHMP City plans including the comprehensive land use, transportation/roads, water, and stormwater plans were reviewed to identify possible natural hazard mitigation strategies (action items).

### **Expand and Improve Capabilities and Integration Process**

Funding and staff resource availability is the primary constraint to achieving natural hazard mitigation priorities. As such the City has identified actions ([Table JA-1](#)) that seek to expand and improve capabilities to achieve natural hazard mitigation.

In addition, the City will seek opportunities to integrate the plan's data, information, and hazard mitigation goals and actions into other planning mechanisms (e.g., budgets, ordinances, comprehensive plan, water, wastewater, and transportation system plans). See Volume I, Section 4 for additional information.

# Mitigation Strategy

This section of the NHMP addendum addresses 44 CFR 201.6(c)(3)(iv), *Mitigation Strategy*.

The City's mitigation strategy (action items) was developed during the 2017 NHMP planning process and reviewed and updated during the 2023 update. During these processes, the steering committee assessed the City's risk, identified potential issues, and developed a mitigation strategy (action items). The City developed actions specific to their community after first reviewing a list of recommended actions developed by the County or recommended by OPDR.

## Mitigation Successes

Jacksonville has several examples of hazard mitigation including the following projects funded through FEMA [Hazard Mitigation Assistance](#) and the Oregon Infrastructure Finance Authority's [Seismic Rehabilitation Grant Program](#)<sup>1</sup>.

### FEMA Funded Mitigation Successes

- None to date

### Seismic Rehabilitation Grant Program Mitigation Successes

- 2022: Jacksonville Elementary School (\$2,500,000)
- 2020: Jacksonville Fire Station (\$1,346,620).

### Other Mitigation Successes

- Seismic retrofit of former County Courthouse, now Jacksonville City Hall
- Wildlands Fuels Reduction: West Bear Project (2023-Present)
- Wildlands Fuels Reduction: Jacksonville Forest Park (2023-Present)
- Wildlands Fuels Reduction: various 5 to 10-acre projects throughout the city

## Actions Items

Table JA-1 documents the title of each action along with, the lead organization, partners, timeline, cost, and potential funding resources.

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<sup>1</sup> The Seismic Rehabilitation Grant Program (SRGP) is a state of Oregon competitive grant program that provides funding for the seismic rehabilitation of critical public buildings, particularly public schools, and emergency services facilities.

**Table JA-1 Action Items**

Action Item #	Mitigation Actions	Potential Funding Resources	Lead	Partners	Timeline	Cost
<b>Multi-Hazard</b>						
1.1	Work with utility provider partners to convert existing overhead lines to underground lines.	Local funding, staff resources, utility providers, FEMA, HMGP, PDM	Public Works, City Planning	Planning, Administration, Legal Counsel, Water Districts, Irrigation and Watershed Councils, Medford Water Commission	O	H
1.2	Use hazard information from the updated Jackson County Multijurisdictional Natural Hazard Mitigation Plan and the upcoming update to the City's Comprehensive Plan Natural Hazards section as a basis for City ordinances and regulations that govern site-specific land use decisions.	General Fund, DLCD Technical Assistance Grant	City Planning	Rogue Valley COG, DLCD, FEMA	M	L
1.3	Continue to sustain the city's public awareness and education campaign about natural hazards.	General Fund, DLCD, FEMA	City Administration, Emergency Management Agencies	County Emergency Management, FEMA, OEM, NWS, ODOT, CERT, RV COG, Utilities	O	L
<b>Air Quality</b>						
2.0	See multi-hazard actions for applicable mitigation strategies.					
<b>Drought</b>						
3.0	See multi-hazard actions for applicable mitigation strategies.					



Action Item #	Mitigation Actions	Potential Funding Resources	Lead	Partners	Timeline	Cost
<b>Earthquake</b>						
4.1	Implement structural and non-structural retrofits to critical and essential facilities.	General Fund, SRGP, PDM	City Planning	Building officials, Planning, Public Works	M	H
<b>Emerging Infectious Disease</b>						
5.0	See multi-hazard actions for applicable mitigation strategies.					
<b>Flood</b>						
6.1	Encourage private property owners to restore natural systems within the floodplain, and to manage riparian areas and wetlands for flood abatement.	General Fund	City Planning	RV COG, FEMA, Watershed Councils, neighboring cities	L	L
6.2	Use federal grant funds to acquire or elevate, or otherwise mitigate, individual repetitive loss or severe repetitive loss properties, within 100-year floodplain as opportunities arise.	FEMA FMA	City Planning	FEMA, DLCD	L	H
<b>Landslide</b>						
7.1	Investigate the development and implementation of a city ordinance that restricts development on steep slopes.	Local funding resources, DLCD Technical Assistance Grant	City Planning	DLCD, DOGAMI	L	L
<b>Severe Weather (Extreme Heat, Windstorm, Winter Storm)</b>						
8.1	Promote the benefits of tree-trimming and tree replacement programs and help coordinate local efforts by public and private agencies.	Local funding resources, ODF	City Public Works	Utility Commission, ODOT, Public Works, ODF, USFS, BLM, ODF, Fire	O	M

Action Item #	Mitigation Actions	Potential Funding Resources	Lead	Partners	Timeline	Cost
8.2	Identify facilities to open to the public during extreme heat and cold conditions.	Local funding resources, DLCD Technical Assistance Grant	City Planning	Public Works	S	L
<b>Volcanic Event</b>						
9.0	See multi-hazard actions for applicable mitigation strategies.					
<b>Wildfire</b>						
<b>10.1</b>	<b>Coordinate fire mitigation action items through the Rogue Valley Integrated Community Wildfire Protection Plan.</b>	<b>Local funding resources, PDM, HMGPWF</b>	<b>City Emergency Management</b>	<b>Public Works, Administration, Jackson County, Fire District, BLM - Medford District, ODF, State Fire Marshal</b>	<b>O</b>	<b>H</b>
<b>10.2</b>	<b>Implement a fuel reduction program to address fuel loads in close proximity to the City's limits. Continue to support FireWise and other community and City-led fuel reduction efforts.</b>	<b>Local funding resources, ODF</b>	<b>Public Works</b>	<b>FireWise, Fire Districts</b>	<b>O</b>	<b>H</b>

Source: Jacksonville NHMP Steering Committee, updated 2023

Cost: L – Low (less than \$50,000), M - Medium (\$50,000-\$100,000), H - High (more than \$100,000)

Timing: O-Ongoing (continuous), S-Short (1-2 years), M-Medium (3-5 years), L-Long (5 or more years)

Priority Actions: Identified with **bold** text and **orange** highlight

# Risk Assessment

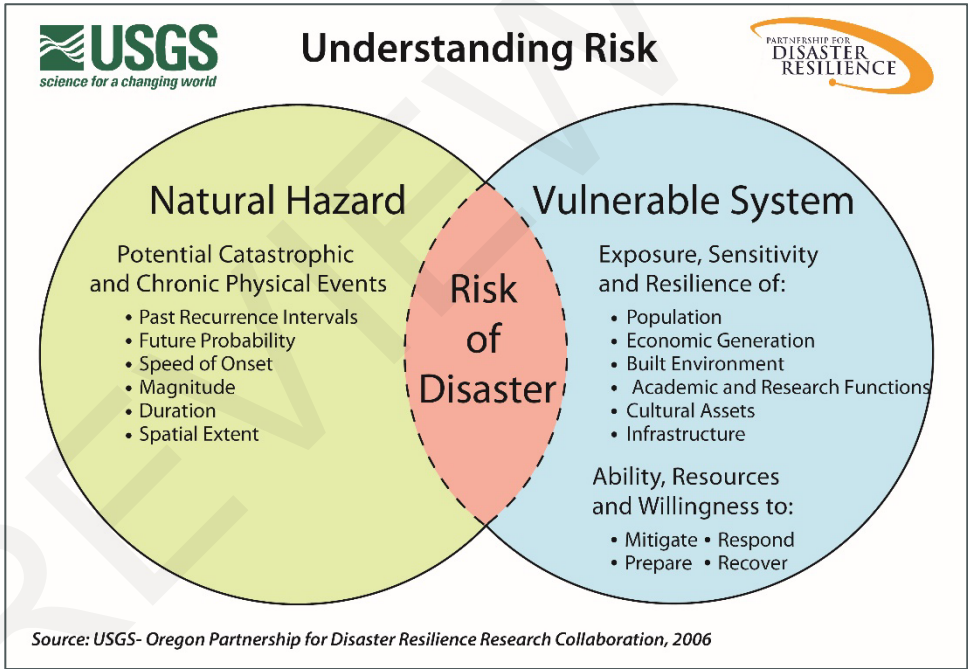
This section of the NHMP addendum addresses 44 CFR 201.6(b)(2) - Risk Assessment. In addition, this chapter can serve as the factual basis for addressing Oregon Statewide Planning Goal 7 – Areas Subject to Natural Hazards.

Assessing natural hazard risk has three phases:

- **Phase 1:** Identify hazards that can impact the jurisdiction. This includes an evaluation of potential hazard impacts – type, location, extent, etc.
- **Phase 2:** Identify important community assets and system vulnerabilities. Example vulnerabilities include people, businesses, homes, roads, historic places, and drinking water sources.
- **Phase 3:** Evaluate the extent to which the identified hazards overlap with, or have an impact on, the important assets identified by the community.

The local level rationale for the identified mitigation strategies (action items) is presented herein and within Volume I, Sections 2 and 3. The risk assessment process is graphically depicted in Figure JA-1 below. Ultimately, the goal of hazard mitigation is to reduce the area of risk, where hazards overlap vulnerable systems.

Figure JA-1 Understanding Risk



## Hazard Analysis

The Jacksonville steering committee developed their hazard vulnerability assessment (HVA), using the County’s HVA (Volume II, Appendix C) as a reference. Changes from the County’s

HVA were made where appropriate to reflect distinctions in vulnerability and risk from natural hazards unique to Jacksonville, which are discussed throughout this addendum.

Table JA-2 shows the HVA matrix for Jacksonville, listing each hazard in order of rank from high to low. For local governments, conducting the hazard analysis is a useful step in planning for hazard mitigation, response, and recovery. The method provides the jurisdiction with a sense of hazard priorities but does not predict the occurrence of a particular hazard.

One catastrophic hazard (Cascadia Subduction Zone earthquake) and two chronic hazards (emerging infectious disease and wildfire) rank as the top hazard threats to the City (Top Tier). Extreme heat, air quality, winter storm, drought, and windstorm comprise the next highest ranked hazards (Middle Tier), while landslide, flood, crustal earthquake, and volcano comprise the lowest ranked hazards (Bottom Tier).

**Table JA-2 Hazard Analysis Matrix – Jacksonville**

Hazard	History	Vulnerability	Maximum Threat	Probability	Total Threat Score	Hazard Rank	Hazard Tiers
Wildfire	20	40	80	70	210	#1	Top Tier
Earthquake - Cascadia	2	50	100	49	201	#2	
Emerging Infectious Disease	16	25	100	49	190	#3	
Extreme Heat Event	20	25	70	70	185	#4	Middle Tier
Air Quality	18	40	60	63	181	#5	
Winter Storm	20	20	70	70	180	#6	
Drought	20	25	60	70	175	#7	
Windstorm	20	20	60	70	170	#8	
Landslide	14	25	60	56	155	#9	Bottom Tier
Flood	16	10	70	49	145	#10	
Earthquake - Crustal	2	25	50	21	98	#11	
Volcanic Event	2	5	50	7	64	#12	

Source: Jacksonville NHMP Steering Committee, 2023.

## Community Characteristics

Table JA-3, Volume III, Appendix C, and the following section provide information on City specific demographics and characteristics. Many of these community characteristics can affect how natural hazards impact communities and how communities choose to plan for natural hazard mitigation. Considering the City specific assets during the planning process can assist in identifying appropriate measures for natural hazard mitigation.

Jacksonville is in Jackson County in southwestern Oregon. It is in the central region of the county, located about 5 miles west of Medford. The City and most of Jackson County are within the Rogue watershed.

Jacksonville experiences a relatively mild climate with four distinct seasons that comes from its position on the west coast of North America and within the mountains of the region. The town is at the northeastern edge of the Siskiyou Mountains at approximately 1,600 feet above sea level. Because of its location Jacksonville has a climate somewhat intermediate to central California and northern Oregon. Jacksonville averages only 26 inches of rain per year

due to being inland from the coast and in the rain shadow of the nearby mountains. Most of that rain, 24 inches, occurs between October-May.<sup>2</sup>

The City has grown steadily since its incorporation in 1860 and has an area today of 1.82 square miles. Between 2016 and 2023, the City grew by 160 people (5%) and median household income increased by about 49% (see Table JA-3 below). According to the State's official coordinated population forecast, between 2021 and 2040 the City's population is forecast to increase by 7%. Most of the population is White/Caucasian (91%) and about 3% of the population is Hispanic or Latino. The poverty rate is 11% (16% for Seniors), 11% do not have health insurance, and 42% of renters pay more than 30% of their household income on rent (38% for owners). The City has a very well educated population, with 97% of residents with high school degrees or higher, and 49% with bachelor's degrees or higher. Approximately 15% of the population lives with a disability, and 57% are either below 18 (12%) or over 65 (45%) years of age. About 23% of the population are 65 or older and living alone and 4% are single parents.

### **Transportation, Housing, and Infrastructure**

In the City of Jacksonville, transportation has played a major role in shaping the community. Jacksonville was founded in 1852 after gold was found in the nearby hills. It grew quite rapidly in its first year and became the county seat of Jackson County when that county was organized in 1853. It became the principal financial and commercial center in the mining country of southwestern Oregon and flourished until the 1870s. In 1873, a significant portion of the city was destroyed by fire. Although much was rebuilt afterward, the city's decline in importance was cemented when the railroad bypassed it, and the county seat was relocated to Medford in 1927.

Today, the City of Jacksonville includes a diversity of land uses but is zoned primarily residential. The city's Comprehensive Plan identifies land use needs within the city and its urban growth boundary ([link to zoning map](#)). Three-quarters of residents live in single family homes (73%); mobile homes make up 10% of the housing stock. Eighty-one percent (81%) of residences were built after 1989. Almost half (49%) are owner occupied, with rental properties exceeding 40%. Six percent (6%) of housing units are vacant. New development has complied with the standards of the [Oregon Building Code](#) and the city's development code including their floodplain ordinance.

The Jacksonville Historic District, which was designated as a National Historic Landmark in 1966, encompasses the historic core of Jacksonville. Over 100 brick and timber-framed buildings make up this "magnificent group of surviving unaltered commercial and residential buildings." The historic district includes the city's central commercial district, on East California Street, and extends mainly northward to include adjacent residential areas. Modifications to properties within the district are reviewed by the Historic and Architectural Review Commission and the Planning Commission.

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<sup>2</sup> NOAA. National Centers for Environmental Information. Summary of Monthly Normals (1991-2010). Station: JACKSONVILLE 10 S, OR US US1ORJC0011 <https://www.ncei.noaa.gov/access/services/data/v1?dataset=normals-monthly-1991-2020&startDate=0001-01-01&endDate=9996-12-31&stations=US1ORJC0011&format=pdf>

Today, mobility plays an important role in Jacksonville and the daily experience of its residents and businesses as they move from point A to point B. The existing transportation system is complemented by the established Rogue Valley Transportation District (RVTD) and the transit stop located within Jacksonville. In addition, the City has formed the Jacksonville Woodlands Association to operate several recreational trails within a series of protected parcels surrounding 70% of the city's historic district.<sup>3</sup>

By far, motor vehicles represent the dominant mode of travel through and within Jacksonville. Just under 60% of renters and owners have two or more vehicles (15% of renters do not have access to a car). Most workers commute alone in private vehicles (90%), while 9% work from home, and 1% carpool.

## Economy

A diverse range of businesses have chosen to locate in Jacksonville. Traditionally, Jacksonville has built its economy as a gold rush town with favorable climate, attractive landscape, and cultural attractions, including the Jacksonville Historic District and the Britt Festival, a seasonal music festival that takes place in an open-air amphitheater near the commercial downtown. In addition, Jacksonville's proximity to the Medford gives it market access that is more favorable than usual for a rural town. According to the economic profile of the City's Comprehensive Plan, Jacksonville finds their main economic drivers in the sectors of: Construction; Health Care and Social Assistance; and Agriculture, Forestry, Fishing and Hunting.<sup>4</sup>

About 56% of the resident population 16 and over is in the labor force (1,667 people) and are employed in a variety of occupations including professional and related (32%), management, business, and financial (21%), office and administrative (13%), food preparation and serving (11%), and sales and related (9%) occupations.

Most workers residing in the city (95%, 905 people) travel outside of the city for work primarily to Medford and surrounding areas.<sup>5</sup> A significant population of people travel to the city for work, (94% of the workforce, 780 people) primarily from Medford and surrounding areas.<sup>6</sup>

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<sup>3</sup> Jacksonville Woodlands Association, <http://www.jvwoodlands.org/>

<sup>4</sup> Jacksonville Comprehensive Plan, Economic Element (Chapter 6). <http://www.jacksonvilleor.us/wp-content/uploads/2011/01/Chapter-Six-Economic-Element.pdf>

<sup>5</sup> U.S. Census Bureau. LEHD Origin-Destination Employment Statistics (2002-2020). Longitudinal-Employer Household Dynamics Program, accessed on August 17, 2023 at <https://onthemap.ces.census.gov>.

<sup>6</sup> Ibid.

**Table JA-3 Community Characteristics**

Population Characteristics		
<b>2016 Population Estimate</b>	2,920	
<b>2021 Population Estimate</b>	3,080	
<b>2040 Population Forecast*</b>	3,283	
<b>Race</b>		
American Indian and Alaska Native	1%	
Asian	2%	
Black/ African American	< 1%	
Native Hawaiian and Other Pacific Islander	4%	
White	91%	
Some Other Race	0%	
Two or More Races	3%	
<b>Hispanic or Latino/a (of any race)</b>	3%	
<b>Limited or No English Spoken</b>	0	0
<b>Vulnerable Age Groups</b>		
Less than 5 Years	77	3%
Less than 18 Years	231	8%
65 Years and Older	1,036	35%
85 Years and Older	290	10%
Age Dependency Ratio		73.8
<b>Disability Status (Percent age cohort)</b>		
Total Disabled Population	452	15%
Children (Under 18)	0	0%
Working Age (18 to 64)	120	7%
Seniors (65 and older)	332	32%

Household Characteristics		
<b>Housing Units</b>		
Single-Family (includes duplexes)	1,227	73%
Multi-Family	303	18%
Mobile Homes (includes RV, Van, etc.)	161	10%
<b>Household Type</b>		
Family Household	825	54%
Married couple (w/ children)	56	4%
Single (w/ children)	68	4%
Living Alone 65+	356	23%
<b>Year Structure Built</b>		
Pre-1970	320	19%
1970-1989	311	18%
1990-2009	760	63%
2010 or later	300	18%
<b>Housing Tenure and Vacancy</b>		
Owner-occupied	833	49%
Renter-occupied	699	41%
Seasonal	53	3%
Vacant	106	6%
<b>Vehicles Available (Occupied Units)</b>		
No Vehicle (owner occupied)	64	8%
Two+ vehicles (owner occupied)	489	59%
No Vehicle (renter occupied)	106	15%
Two+ vehicles (renter occupied)	405	58%

Income Characteristics		
<b>Households by Income Category</b>		
Less than \$15,000	116	8%
\$15,000-\$29,999	247	16%
\$30,000-\$44,999	37	2%
\$45,000-\$59,999	151	10%
\$60,000-\$74,999	133	9%
\$75,000-\$99,999	153	10%
\$100,000-\$199,999	502	33%
\$200,000 or more	193	13%
<b>Median Household Income</b>	\$91,094	
<b>Gini Index of Income Inequality</b>	0.43	
<b>Poverty Rates (Percent age cohort)</b>		
Total Population	326	11%
Children (Under 18)	60	26%
Working Age (18 to 64)	103	6%
Seniors (65 and older)	163	16%
<b>Housing Cost Burden (Cost &gt; 30% of household income)</b>		
Owners with a Mortgage	142	17%
Owners without a Mortgage	178	21%
Renters	296	42%

Employment Characteristics		
<b>Labor Force (Population 16+)</b>		
In labor Force (% Total Population)	1,667	56%
Unemployed (% Labor Force)	93	6%
<b>Occupation (Top 5) (Employed 16+)</b>		
Professional & Related	503	32%
Management, Business, & Financial	336	21%
Office & Administrative	201	13%
Food Preparation & Serving	175	11%
Sales & Related	144	9%
<b>Health Insurance</b>		
No Health Insurance	319	11%
Public Health Insurance	1,161	39%
Private Health Insurance	2,222	75%
<b>Transportation to Work (Workers 16+)</b>		
Drove Alone	1,379	90%
Carpooled	14	1%
Public Transit	0	0%
Motorcycle	0	0%
Bicycle/Walk	0	0%
Work at Home	144	9%

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates; Portland State University, Population Research Center, "Annual Population Estimates, Table 4", 2016 and 2021; and "Population Forecasts, Summary Tab", 2022.

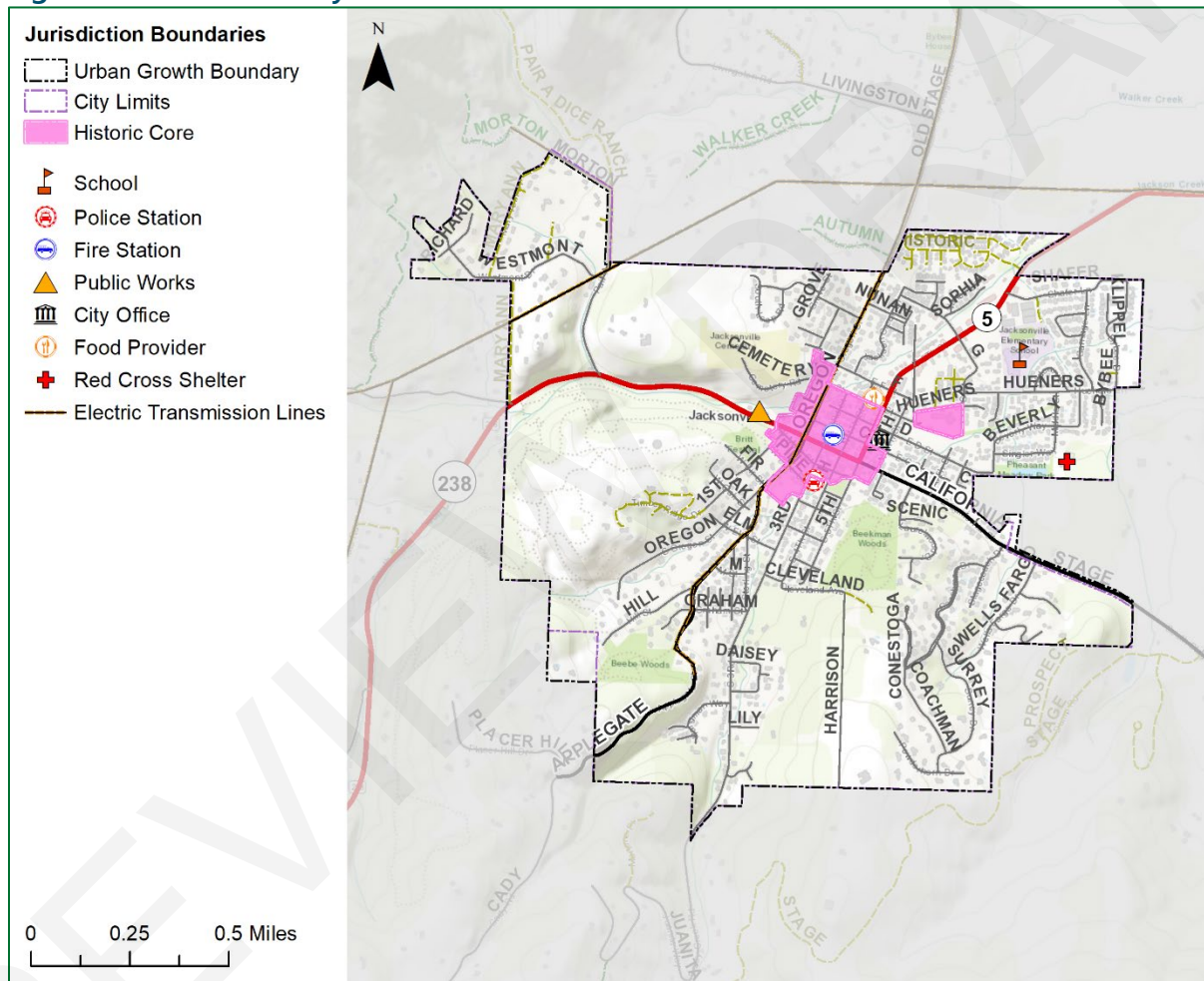
Note 1: \* = Population forecast within UGB

Note 2: ACS 5-year estimates represent average characteristics from 2017-2021. Sampling error may result in low reliability of data. This information or data is provided with the understanding that conclusions drawn from such information are the responsibility of the user. Refer to the original [source](#) documentation to better understand the data sources, results, methodologies and limitations of each dataset presented.

# Community Assets

This section outlines the resources, facilities, and infrastructure that, if damaged, could significantly impact the public safety, economic conditions, and environmental integrity of Jacksonville. Community lifelines and historic structures in Jacksonville are shown in Figure JA-2, Figure JA-3, and Table JA-4. Community Lifelines are fundamental services that enable all other aspects of society to function. FEMA developed the Community Lifelines construct for objective-based response to prioritize the rapid stabilization of these facilities after a disaster. Mitigating these facilities will increase the community’s resilience.

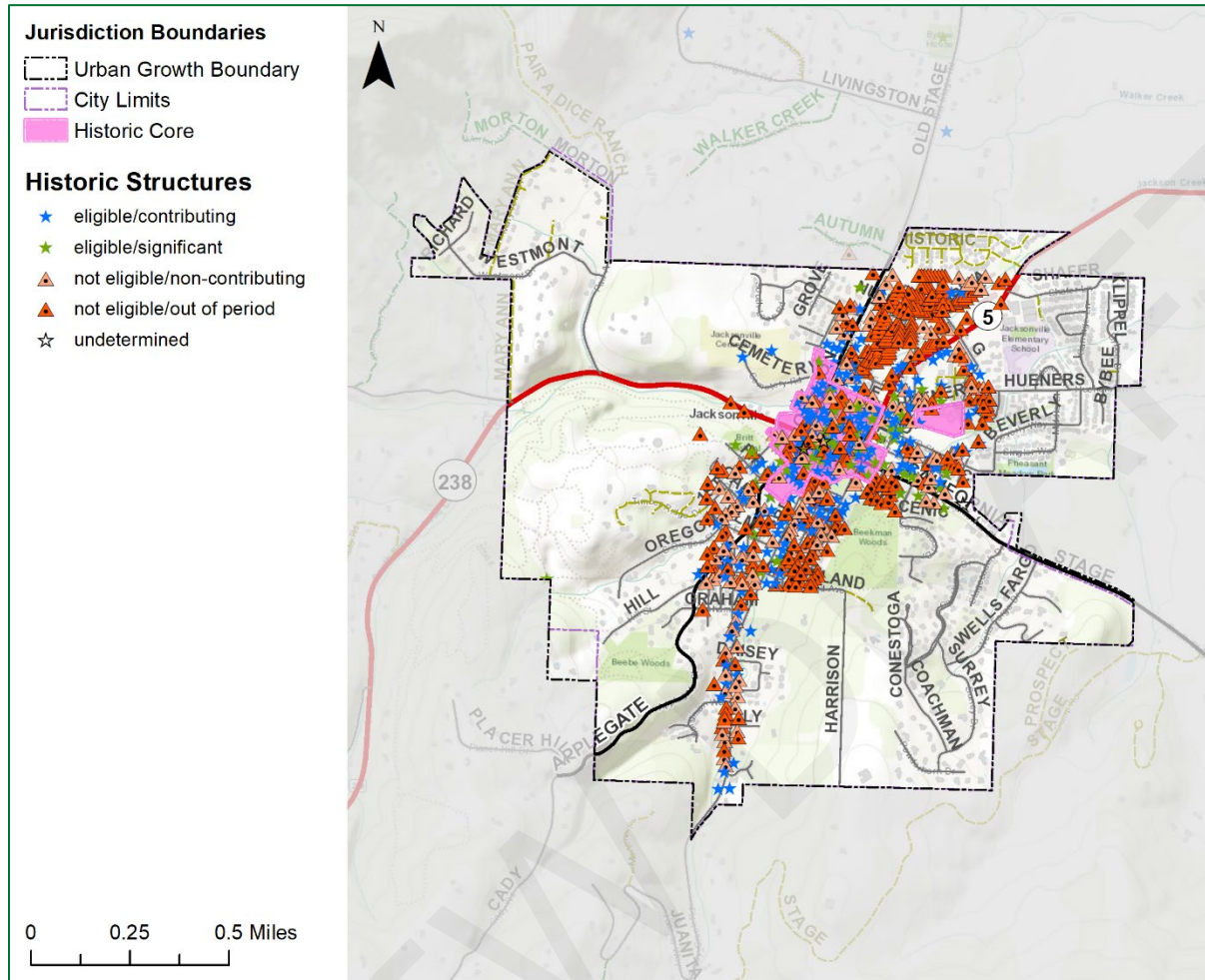
**Figure JA-2 Community Lifelines and Historic Structures**



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries



Figure JA-3 Historic Structures



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.

**Table JA-4 Jacksonville Community Lifelines**

Facility Name	Community Lifeline Category	Lifeline Type	Earthquake-Liquefaction Hazard	Flood Hazard	Landslide Hazard	Wildfire Hazard
Jacksonville Presbyterian Church	food, water, and shelter	red cross shelter	low	minimal	low	low
Ray's Food Place	food, water, and shelter	food provider	low	500-Year	low	low
Jacksonville Elementary School	safety and security	school	low	500-Year	low	low
Jacksonville Fire Department	safety and security	fire station	low	500-Year	low	low
Jacksonville Police Department	safety and security	police station	low	500-Year	low	low
Jacksonville City Hall	safety and security	city office	low	500-Year	low	low
Jacksonville Public Works	transportation	public works	low	minimal	moderate	moderate

Source: Oregon Department of Geology and Mineral Industries, Jacksonville NHMP Steering Committee

## Essential Facilities

Facilities that are essential to the continued delivery of key government services and/or that may significantly impact the public’s ability to recover from the emergency. These facilities may include City buildings such as the Public Services Building, the City Hall, and other public facilities such as schools.

### Hospitals/Immediate Medical Care Facilities:

- Jacksonville Physical Therapy
- Jacksonville Vision Clinic
- Jacksonville Veterinary Hospital

### Public Schools:

- Jacksonville Elementary School

### City/County/Other:

- Jacksonville Library (County)

### Potential Shelter Sites:

- Elementary School
- Calvary Church Assembly of God (First Aid Shelter)
- First Presbyterian Church (Shelter)

## Essential Facilities

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### Hospitals/Immediate Medical Care

#### Facilities:

- Active Medical
- Jacksonville Physical Therapy
- Jacksonville Vision Clinic
- Jacksonville Veterinary Hospital

#### Public Schools:

- Jacksonville Elementary School

#### City/County/Other:

- Jacksonville Library (County)

#### Potential Shelter Sites:

- Elementary School
- Calvary Church Assembly of God (First Aid Shelter)
- First Presbyterian Church (Shelter)

## Infrastructure

Infrastructure that provides services for the City includes:

#### Transportation Networks:

- Highway 238
- California St
- Oregon St
- Cady Rd
- N 5<sup>th</sup> St
- S 3<sup>rd</sup> St
- Stage Rd

#### Water Facilities:

- Water Reservoirs (4); 3.45 million gallons total

#### Special Service Districts:

- Southern Oregon Education Service District
- Medford Water Commission
- Medford Irrigation District
- Rogue Valley Sewer

#### Private Utilities:

- Pacific Power
- Avista Natural Gas
- Telecommunications

# Hazard Characteristics

The following sections briefly describe relevant information for each profiled hazard. More information on Jackson County hazards can be found in Volume 1, Section 2 *Risk Assessment* and in the [Risk Assessment for Region 4, Southwest Oregon, Oregon SNHMP \(2020\)](#).

## Air Quality

The steering committee determined that the City’s probability for poor air quality is **high** (which is the same as the County’s Rating) and that their vulnerability to poor air quality is also **high** (which is the same as the County’s Rating). *This hazard was not assessed in the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of air quality hazards, their history, and how they relate to future climate projections, as well as the location, extent, and probability of a potential event. Increases in wildfire conditions have shown an increasing potential for air quality hazards.

Additional information on poor air quality can be found in Volume I, Section 2.

## Drought

The steering committee determined that the City’s probability for drought is **high** (which is the same as the County’s rating) and that their vulnerability to drought is **moderate** (which is the same as the County’s rating). *The probability rating stayed the same and the vulnerability rating increased since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of drought hazards, history, how they relate to future climate projections, as well as the location, extent, and probability of a potential event. Due to the climate of Jackson County, past and present weather conditions have shown an increasing potential for drought.

The City receives its main water supply from Big Butte Springs through the Medford Water supplemented by the Rogue River in the summer months. For more information on the future of Jacksonville’s water supply visit their [website](#).

Please review Volume I, Section 2 for additional information on this hazard.

### **Future Climate Projection:**

According to the Oregon Climate Change Research Institute (OCCRI report) “*Fifth Oregon Climate Assessment*,”<sup>7</sup> the probability of future drought conditions (low summer soil moisture, low spring snowpack, low summer runoff, low summer precipitation, and high summer evaporation) is likely to increase.

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<sup>7</sup> Oregon Climate Change Research Institute, *Fifth Oregon Climate Assessment*. 2021.

## Earthquake (Cascadia)

The steering committee determined that the City's probability for a Cascadia Subduction Zone (CSZ) earthquake is **moderate** (which is the same as the County's rating) and that their vulnerability to a CSZ earthquake is **high** (which is the same as the County's rating). *The probability rating decreased and the vulnerability rating stayed the same since the previous version of this NHMP.*

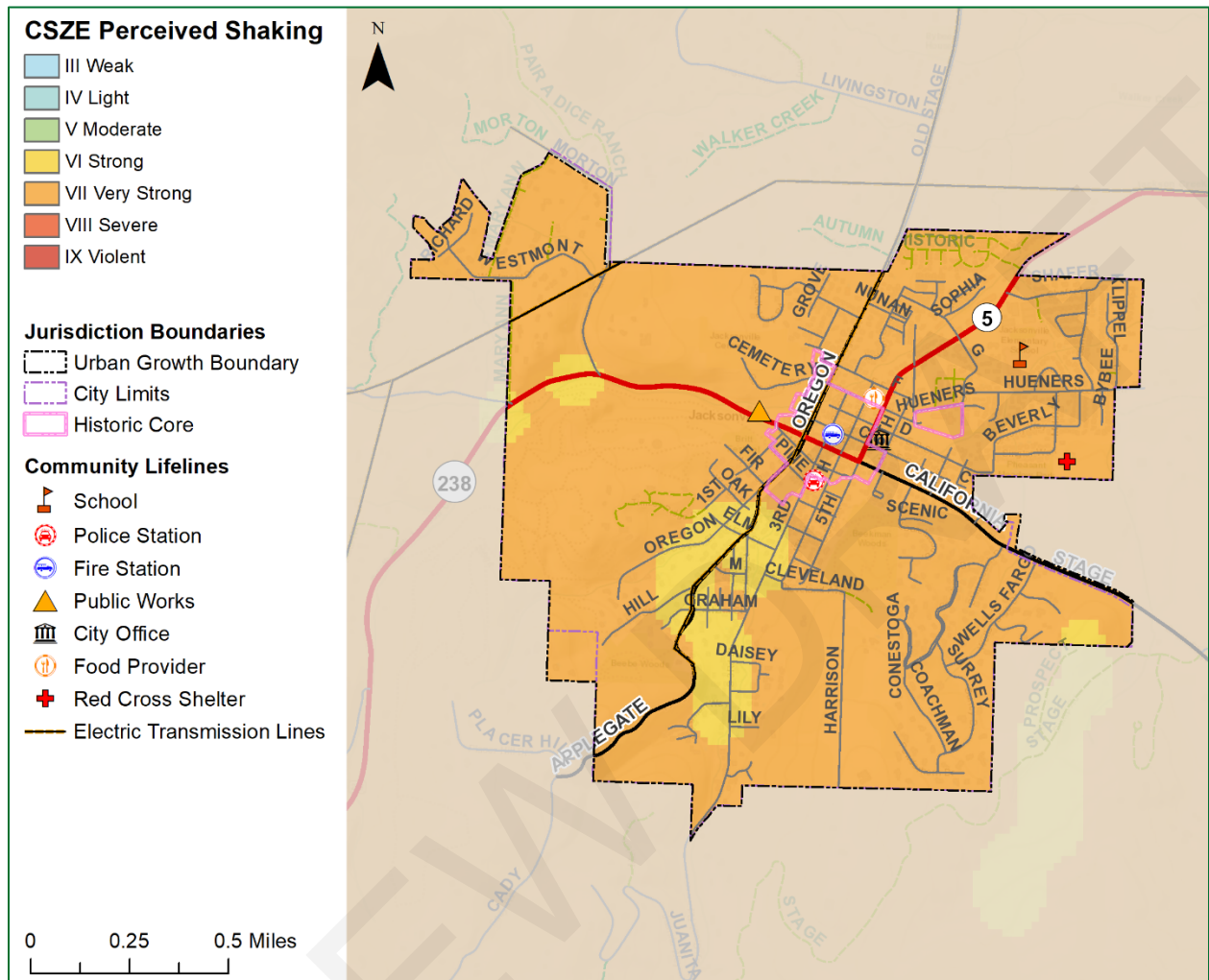
Volume I, Section 2 describes the characteristics of earthquake hazards and their history, as well as the location, extent, and probability of a potential event. Generally, an event that affects the County is likely to affect Jacksonville as well. The causes and characteristics of an earthquake event are appropriately described within Volume I, Section 2, as well as the location and extent of potential hazards. Previous occurrences are well documented within Volume I, Section 2 and the community impacts described by the County would generally be the same for Jacksonville as well.

The local faults, the county's proximity to the Cascadia Subduction Zone, potential slope instability, and the prevalence of certain soils subject to liquefaction and amplification combine to give the county a high-risk profile. Due to the expected pattern of damage resulting from a CSZ event, the Oregon Resilience Plan divides the State into four distinct zones and places Jackson County predominately within the "Valley Zone" (Valley Zone, from the summit of the Coast Range to the summit of the Cascades). Within the Southwest Oregon region, damage and shaking is expected to be strong and widespread - an event will be disruptive to daily life and commerce and the main priority is expected to be restoring services to business and residents.<sup>8</sup> Figure JA-4 and Figure JA-5 display perceived shaking hazards from a Cascadia Subduction Zone earthquake event. Much of the city is expected to experience Very Strong Shaking (darker areas).

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<sup>8</sup> Ibid.

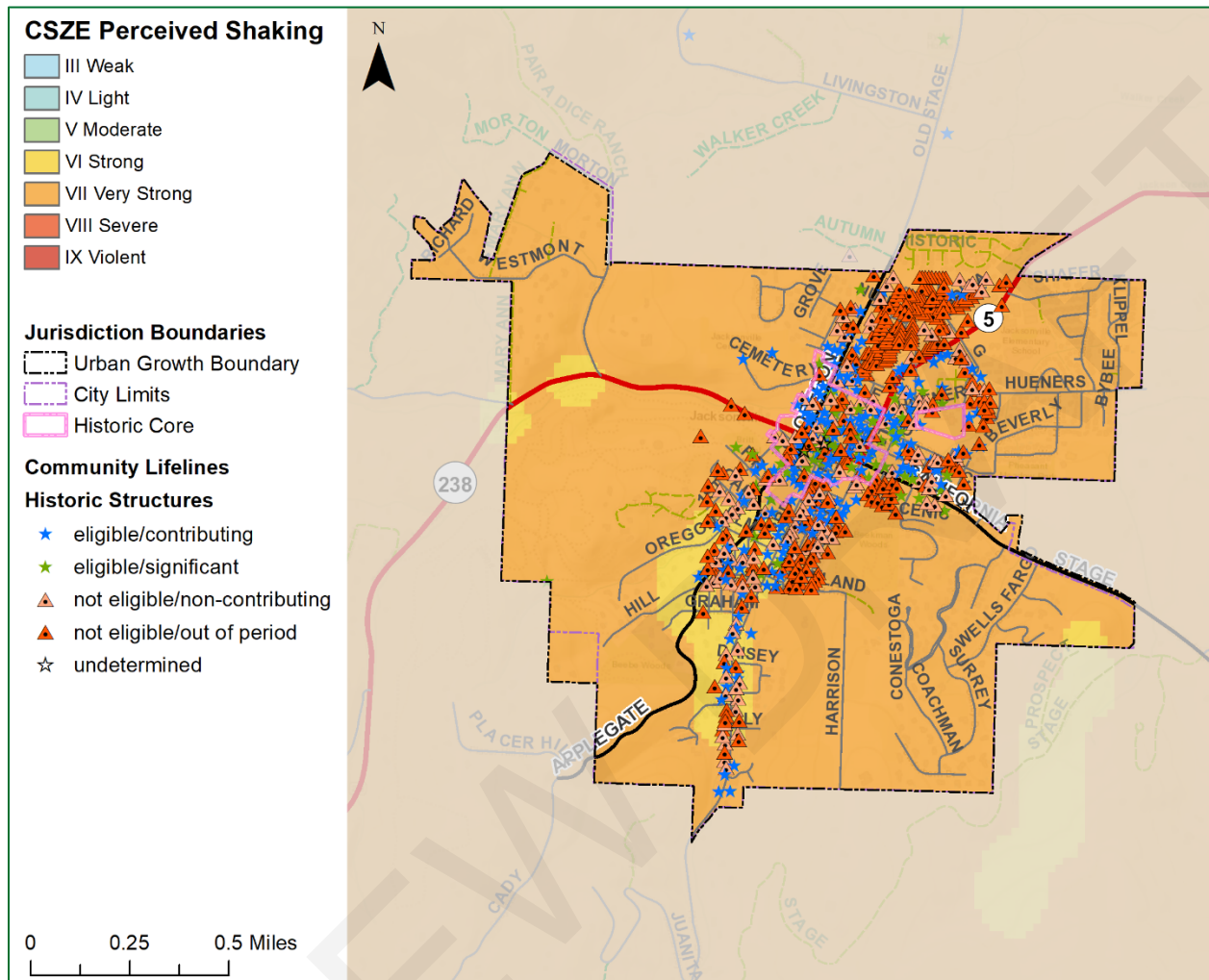
Figure JA-4 Cascadia Subduction Zone Perceived Shaking and Community Lifelines



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.

Note: To view detail click this [link](#) to access Oregon HazVu.

**Figure JA-5 Cascadia Subduction Zone Perceived Shaking and Historic Structures**



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.  
 Note: To view detail click this [link](#) to access Oregon HazVu.

As noted in the community profile, approximately 37% of residential buildings were built prior to 1990, which increases the City’s vulnerability to the earthquake hazard. Information on specific public buildings’ (schools and public safety) estimated seismic resistance, determined by DOGAMI in 2007, is shown in Table JA-5; each “X” represents one building within that ranking category. Of the facilities evaluated by DOGAMI using a Rapid Visual Survey (RVS), no buildings have a very high (100% chance) collapse potential; however, three (3) buildings have a high (greater than 10% chance) collapse potential.

In addition to building damages, utility (electric power, water, wastewater, natural gas) and transportation systems (bridges, pipelines) are also likely to experience significant damage. There is a low probability that a major earthquake will result in failure of upstream dams.

Utility systems will be significantly damaged, including damaged buildings and damage to utility infrastructure, including water and wastewater treatment plants and equipment at high voltage substations (especially 230 kV or higher which are more vulnerable than lower voltage

substations). Buried pipe systems will suffer extensive damage with approximately one break per mile in soft soil areas. There would be a much lower rate of pipe breaks in other areas. Restoration of utility services will require substantial mutual aid from utilities outside of the affected area.

**Table JA-5 Rapid Visual Survey Scores**

Facility	Site ID*	Level of Collapse Potential			
		Low (< 1%)	Moderate (>1%)	High (>10%)	Very High (100%)
<b>Schools</b>					
Jacksonville Elementary School (Medford SD 549C) (655 Hueners Ln) - <b>See Mitigation Successes</b>	Jack_sch27	X		X,X,X	
<b>Public Safety</b>					
Jacksonville Fire Department (180 N 3rd St) - <b>See Mitigation Successes</b>	Jack_fir16	X			

Source: DOGAMI 2007. Open File Report 0-07-02. Statewide Seismic Needs Assessment Using Rapid Visual Assessment.  
 "\*" – Site ID is referenced on the [RVS Jackson County Map](#)

### Earthquake (Crustal)

The steering committee determined that the City’s probability for a crustal earthquake is **low** (which is the same as the County’s rating) and that their vulnerability to crustal earthquake is **moderate** (which is higher than the County’s rating). *These ratings have not changed since the previous version of this NHMP.*

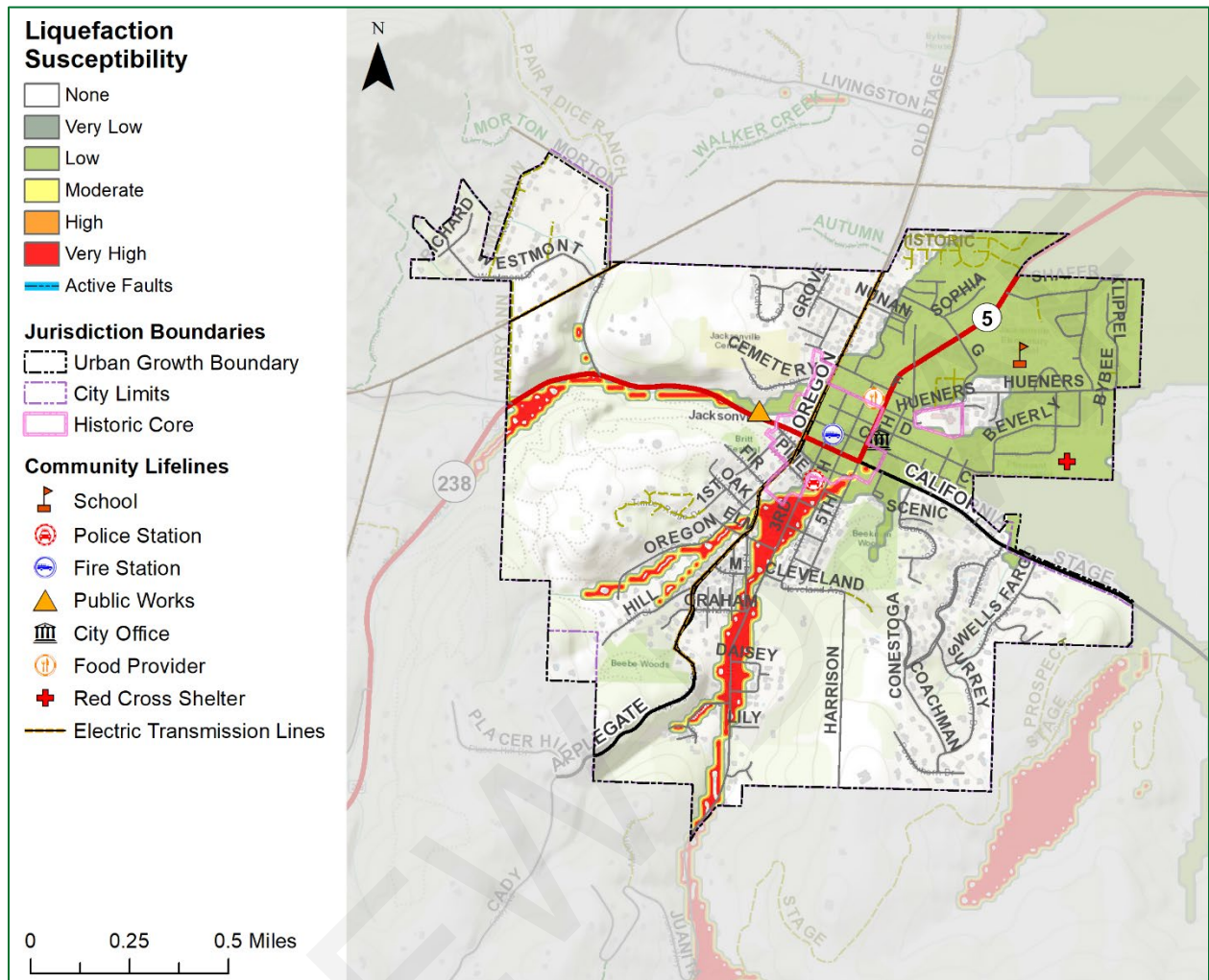
Volume I, Section 2 describes the characteristics of earthquake hazards and their history, as well as the location, extent, and probability of a potential event. Generally, an event that affects the county is likely to affect Jacksonville as well. The causes and characteristics of an earthquake event are appropriately described within Volume I, Section 2, as well as the location and extent of potential hazards. Previous occurrences are well-documented within Volume I, Section 2 and the community impacts described by the County would generally be the same for Jacksonville as well.

Earthquake-induced damages are difficult to predict and depend on the size, type, and location of the earthquake, as well as site-specific building and soil characteristics. Presently, it is not possible to accurately forecast the location or size of earthquakes, but it is possible to predict the behavior of soil at any site. In many major earthquakes, damages have primarily been caused by the behavior of the soil.

Figure JA-6 and Figure JA-7 show the liquefaction risk to community lifelines that were identified in Table JA-4 as well as the state historic building inventory buildings.



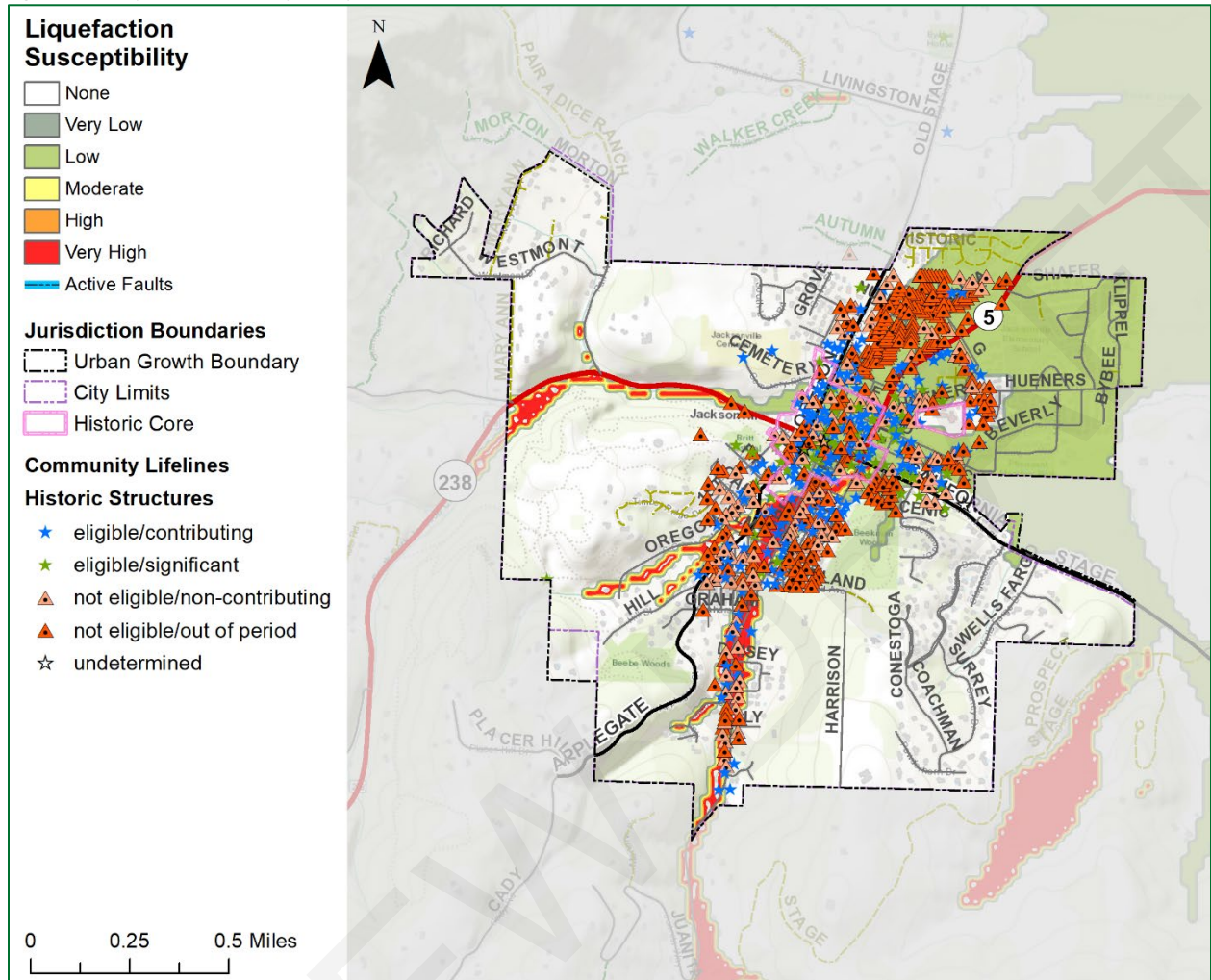
Figure JA-6 Liquefaction Susceptibility and Community Lifelines



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.

Note: To view detail click this [link](#) to access Oregon HazVu.

Figure JA-7 Liquefaction Susceptibility and Historic Structures



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.

Note: To view detail click this [link](#) to access Oregon HazVu.

### Vulnerability Assessment

Due to insufficient data and resources, Jacksonville is currently unable to perform a quantitative risk assessment for this hazard, however an exposure assessment was conducted. Identified community lifelines that are exposed to this hazard are shown in Table JA-4. Note that even if a facility has exposure, *it does not mean there is a high risk (vulnerability)*. No development changes affected the jurisdiction’s overall vulnerability to this hazard.

Please review Volume I, Section 2 for additional information on this hazard.

## Emerging Infectious Disease

The steering committee determined that the City's probability for emerging infectious disease is **moderate** (which is the same as the County's rating) and that their vulnerability is **moderate** (which is lower than the County's rating). *The probability rating stayed the same and the vulnerability rating increased since the previous version of this NHMP.*

Emerging infectious diseases are those that have recently appeared in a population or those whose incidence or geographic range is rapidly increasing or threatens to increase. Emerging infections may be caused by biological pathogens (e.g., virus, parasite, fungus, or bacterium) and may be: previously unknown or undetected biological pathogens; biological pathogens that have spread to new geographic areas or populations; previously known biological pathogens whose role in specific diseases was previously undetected; and biological pathogens whose incidence of disease was previously declining but whose incidence of disease has reappeared (re-emerging infectious disease).<sup>9</sup>

Volume I, Section 2 describes the characteristics of emerging infectious disease and their history in Jackson County, as well as the location, extent, and probability of a potential event within the region. Generally, an event that affects the County is likely to affect the City similarly.

Please review Volume I, Section 2 for additional information on this hazard.

## Flood

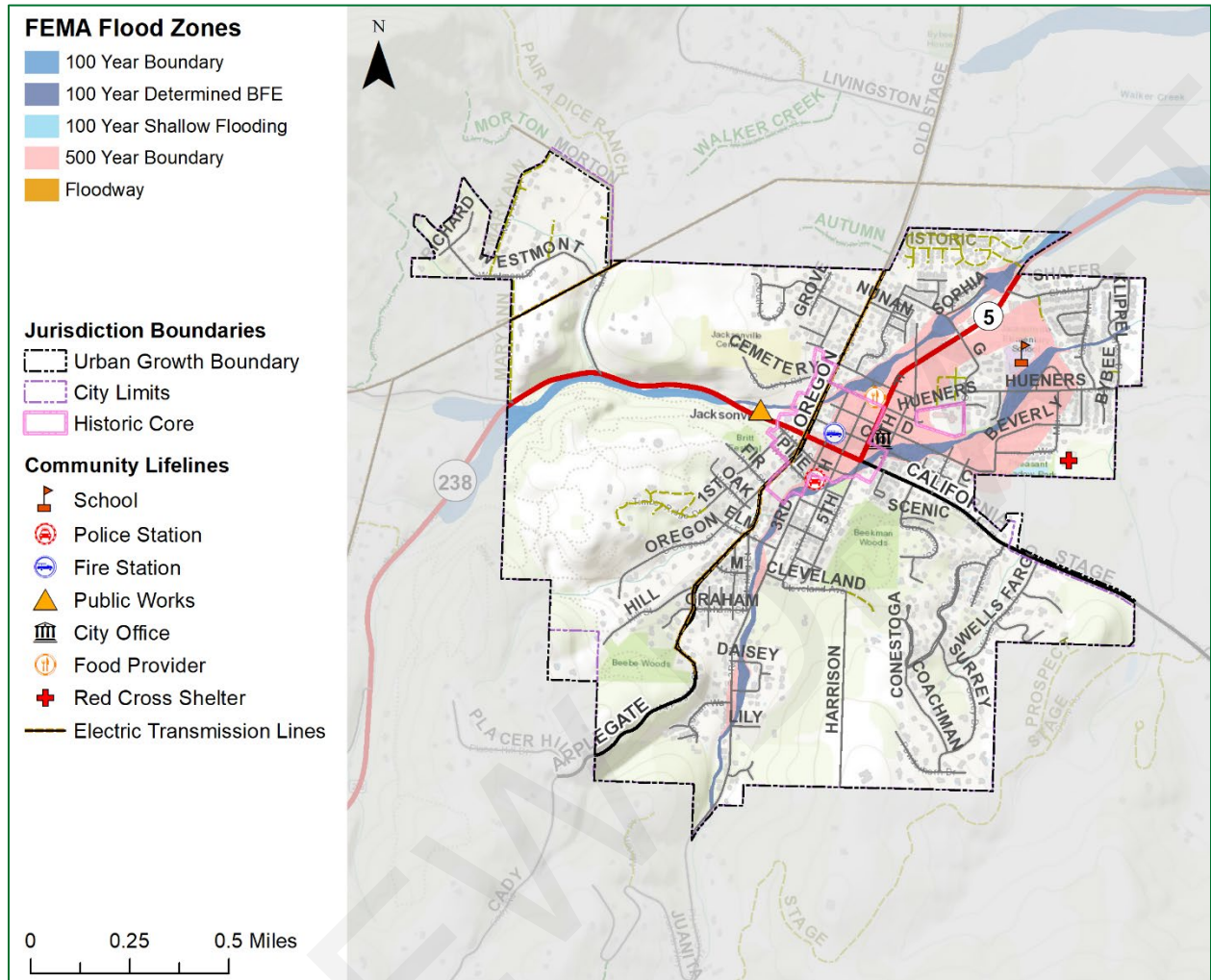
The steering committee determined that the City's probability for flood is **moderate** (which is lower than the County's rating) and that their vulnerability to flood is **low** (which is lower than the County's rating). *These ratings have not changed since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of flood hazards, history, and how they relate to future climate projections, as well as the location, extent, and probability of a potential event. Portions of Jacksonville have mapped FEMA flood zones (Figure JA-8 and Figure JA-9). According to the [Jackson County Flood Insurance Study](#) (2018) the South Fork Jackson Creek and Daisy Creek are the main sources of flooding. Furthermore, other portions of Jacksonville, outside of the mapped floodplains, are also subject to flooding from local storm water drainage.

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<sup>9</sup> Baylor College of Medicine, *Emerging Infectious Disease*, URL: <https://www.bcm.edu/departments/molecular-virology-and-microbiology/emerging-infections-and-biodefense/emerging-infectious-diseases>, accessed September 17, 2017.

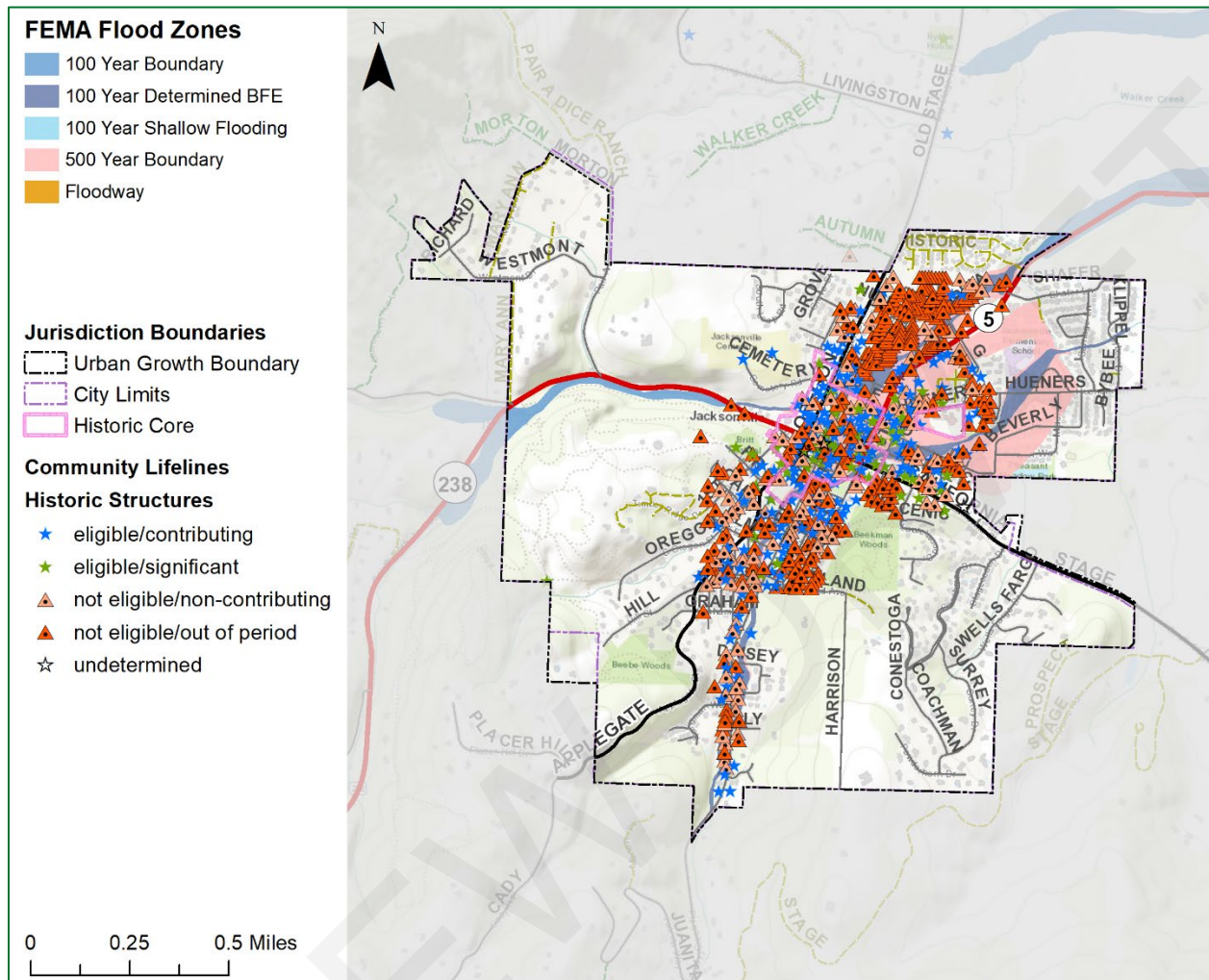
Figure JA-8 FEMA Flood Zones and Community Lifelines



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.

Note: To view detail click this [link](#) to access Oregon HazVu.

Figure JA-9 FEMA Flood Zones and Historic Structures



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.  
 Note: To view detail click this [link](#) to access Oregon HazVu.

### Vulnerability Assessment

Due to insufficient data and resources, Jacksonville is currently unable to perform a quantitative risk assessment for this hazard, however an exposure assessment was conducted. Identified Community Lifelines that are exposed to this hazard are shown in Table JA-4. Note that even if a facility has exposure, *it does not mean there is a high risk (vulnerability)*. No development changes affected the jurisdiction’s overall vulnerability to this hazard.

The [Jackson County Flood Insurance Study](#) (January 19, 2018) has a brief history of flooding in Jackson County (Volume I, Section 2). Currently, no critical or essential facilities in Jacksonville are in a special flood hazard area (Table JA-4).

Jackson Creek is the chief source of flooding in Jacksonville. The creek, which has its origins in the Bear Creek tributary of the Rogue River, is relatively even in terrain and is projected to flood only within a very narrow corridor.

The City is at risk from two types of flooding: riverine and urban. Riverine flooding occurs when streams overflow their banks and inundate low-lying areas. This is a natural process that adds sediment and nutrients to fertile floodplain areas. It usually results from prolonged periods of precipitation over a wide geographic area. Low velocity sheets of water generally flood most areas that are prone to flooding. Urban flooding occurs as land is converted to impervious surfaces and hydrologic systems are changed. Precipitation is collected and transmitted to streams at a much faster rate, causing floodwaters that rise rapidly and peak with violent force. During urban flooding, storm drains can back up and cause localized flooding of streets and basements.

Floods can have a devastating impact on almost every aspect of the community, including private property damage, public infrastructure damage, and economic loss from business interruption. It is important for the City to be aware of flooding impacts and assess its level of risk. The City has been proactive in mitigating flood hazards by purchasing floodplain property.

The economic losses due to business closures often total more than the initial property losses that result from flood events. Flood events significantly impact business owners and their employees. Direct damages from flooding are the most common impacts, but indirect damages, such as diminished clientele, can be just as debilitating to a business. No critical or essential facilities are in the floodplain. Currently, there is no financial impact data available of this infrastructure.

Highway 238 is the main connector between Jacksonville and the services and amenities found in Medford and other urban centers. If major flooding affected all of the main transportation routes in Jacksonville, traffic flow in and out of the City would be significantly affected, but would not cut all off all avenues. The amount of property in the floodplain is not a large area but damage could be significant as it would affect residential, commercial, and public property. Floodwaters can affect building foundations, seep into basements or cause damage to the interior, exterior, and contents of buildings, dependent upon the velocity and depth of the water and by the presence of floating debris. The City sewer system can overflow during flood events and cause further property damage.

For mitigation planning purposes, it is important to recognize that flood risk for a community is not limited only to areas of mapped floodplains. Other portions of Jacksonville outside of the mapped floodplains may also be at relatively high risk from over bank flooding from streams too small to be mapped by FEMA or from local storm water drainage.

### **National Flood Insurance Program (NFIP)**

FEMA updated the Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs) in 2018 (effective January 19, 2018). The City complies with the NFIP through enforcement of their flood damage prevention ordinance and their floodplain management program.

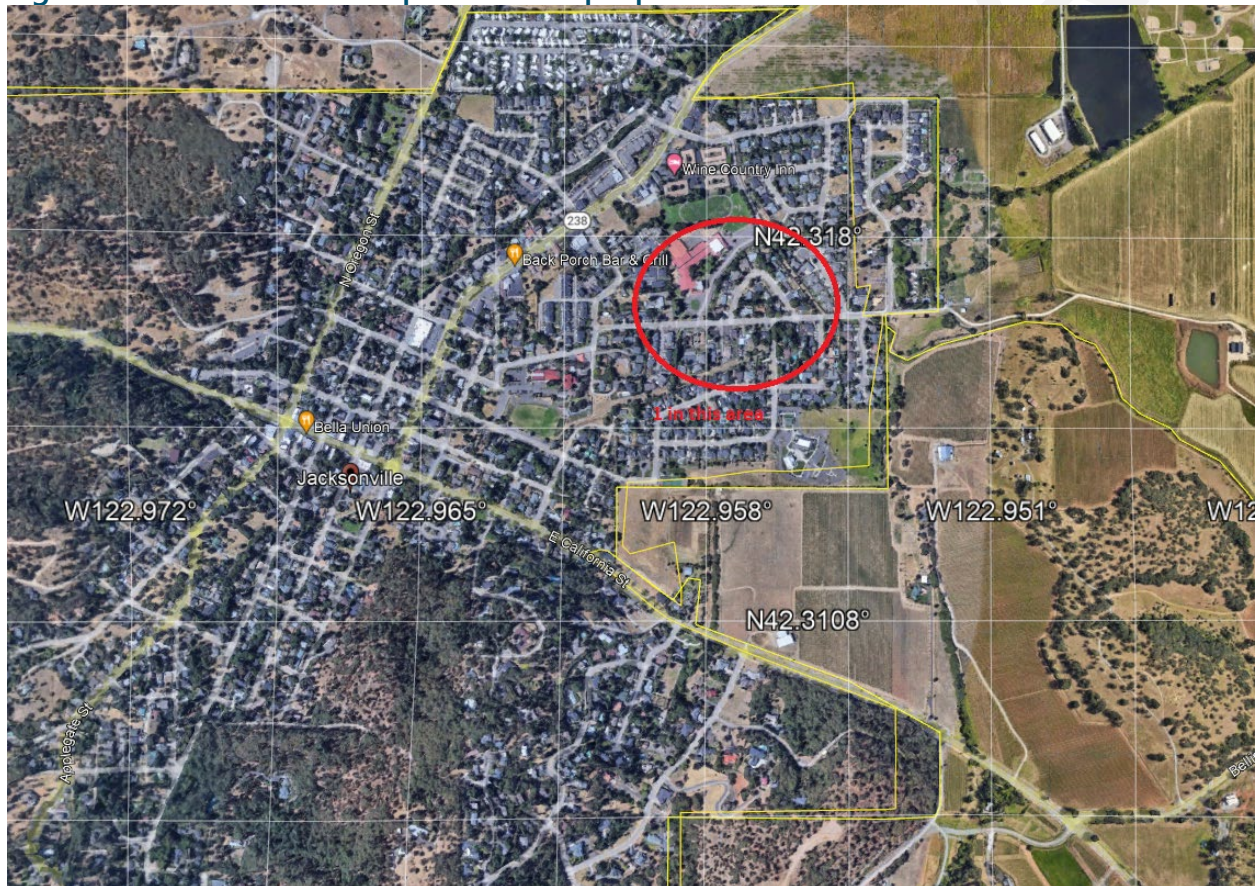
The Community Repetitive Loss record for Jacksonville identifies one (1) Repetitive Loss Properties<sup>10</sup> (a single-family residence) and zero (0) Severe Repetitive Loss Properties.<sup>11</sup> Table JA-6 gives details for these properties. Figure JA-10 gives the general location of this property.

**Table JA-6 Jacksonville repetitive loss properties**

RL or SRL Property	Jurisdiction Name	Insured?	Flood Zone	Occupancy	Total Paid Claims	Total Paid Amount
RL	Jacksonville	NO	AO6	Single-Family	2	\$2,941.45
<b>Total</b>					<b>2</b>	<b>\$2,941.45</b>

Source: FEMA

**Figure JA-10 Jacksonville repetitive loss properties**



Source: FEMA Region X, Regional Flood Insurance Liaison, email February 13, 2023.

<sup>10</sup> A Repetitive Loss (RL) property is any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978. A RL property may or may not be currently insured by the NFIP.

<sup>11</sup> A Severe Repetitive Loss (SRL) property is a single family property (consisting of 1 to 4 residences) that is covered under flood insurance by the NFIP and has incurred flood-related damage for which 4 or more separate claims payments have been paid under flood insurance coverage, with the amount of each claim payment exceeding \$5,000 and with cumulative amount of such claims payments exceeding \$20,000; or for which at least 2 separate claims payments have been made with the cumulative amount of such claims exceeding the reported value of the property.

Please review Volume I, Section 2 for additional information on this hazard.

## Landslide

The steering committee determined that the City's probability for landslide is **high** (which is the same as the County's rating) and that their vulnerability to landslide is **moderate** (which is higher than the County's rating). *These ratings have not changed since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of landslide hazards, their history within Jackson County, and how they relate to future climate projections, as well as the location, extent, and probability of a potential event within the region. The potential for landslide in Jacksonville is almost negligible except for very small areas immediately adjacent to stream channels. However, such areas have little or no development or infrastructure.

Landslide susceptibility exposure for Jacksonville is shown in Figure JA-11 and Figure JA-12. Jacksonville demonstrates a mix of low, moderate and high susceptibility to landslide exposure, with corridors of high and moderate susceptibility concentrated around the outer western and southwestern edges of the City. Approximately 18% of Jacksonville has high and approximately 32% moderate, landslide susceptibility exposure.<sup>12</sup>

*Note that even if an area has a high percentage of land in a high or very high landslide exposure susceptibility zone, this does not mean there is a high risk (vulnerability), because risk is the intersection of a hazard and assets.*

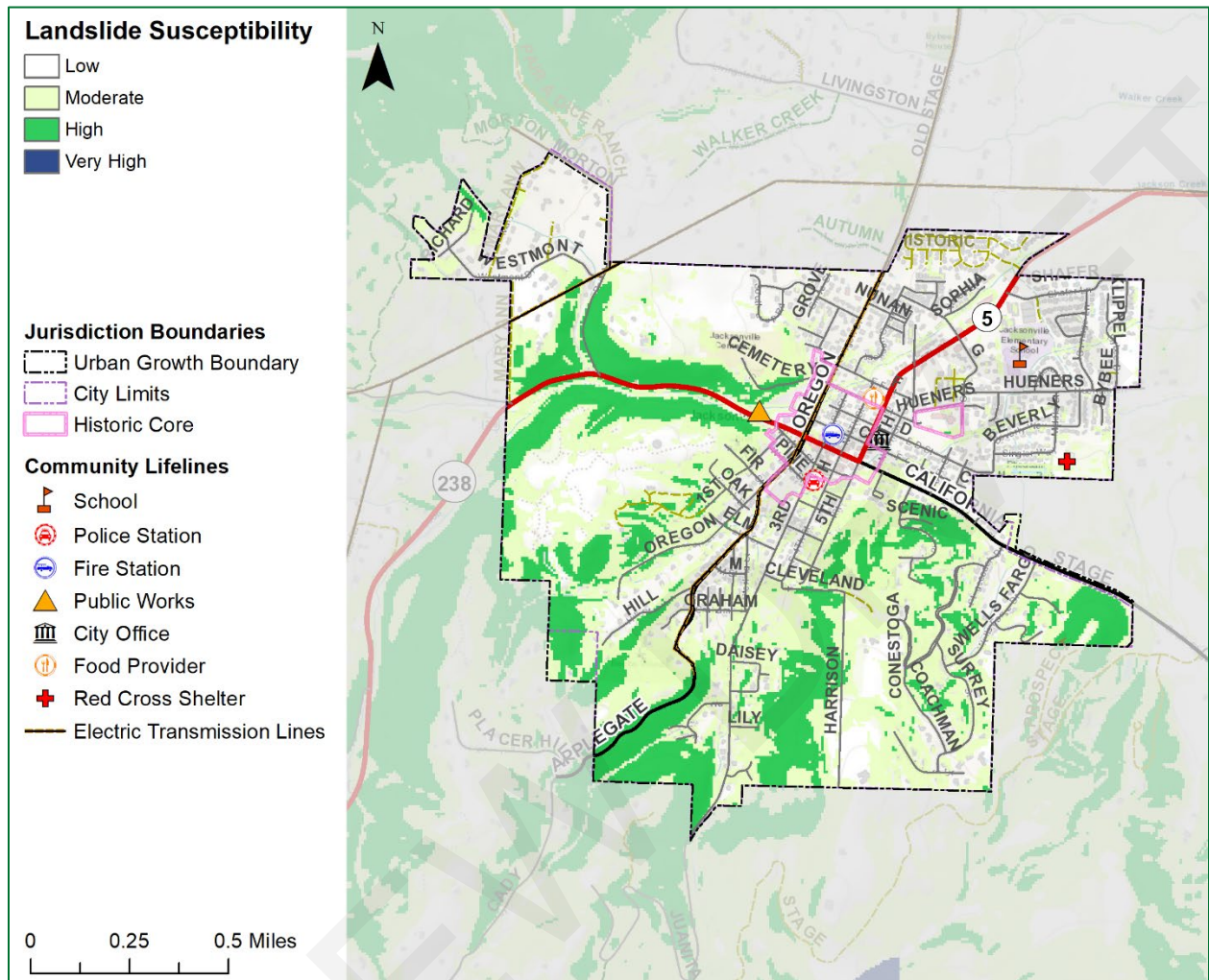
There is little history of landslide activity in Jacksonville; however, development pressure is encroaching upon areas that are more susceptible to landslide activity particularly during heavy rain events.

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<sup>12</sup> DOGAMI Open-File Report, O-16-02, Landslide Susceptibility Overview Map of Oregon (2016)



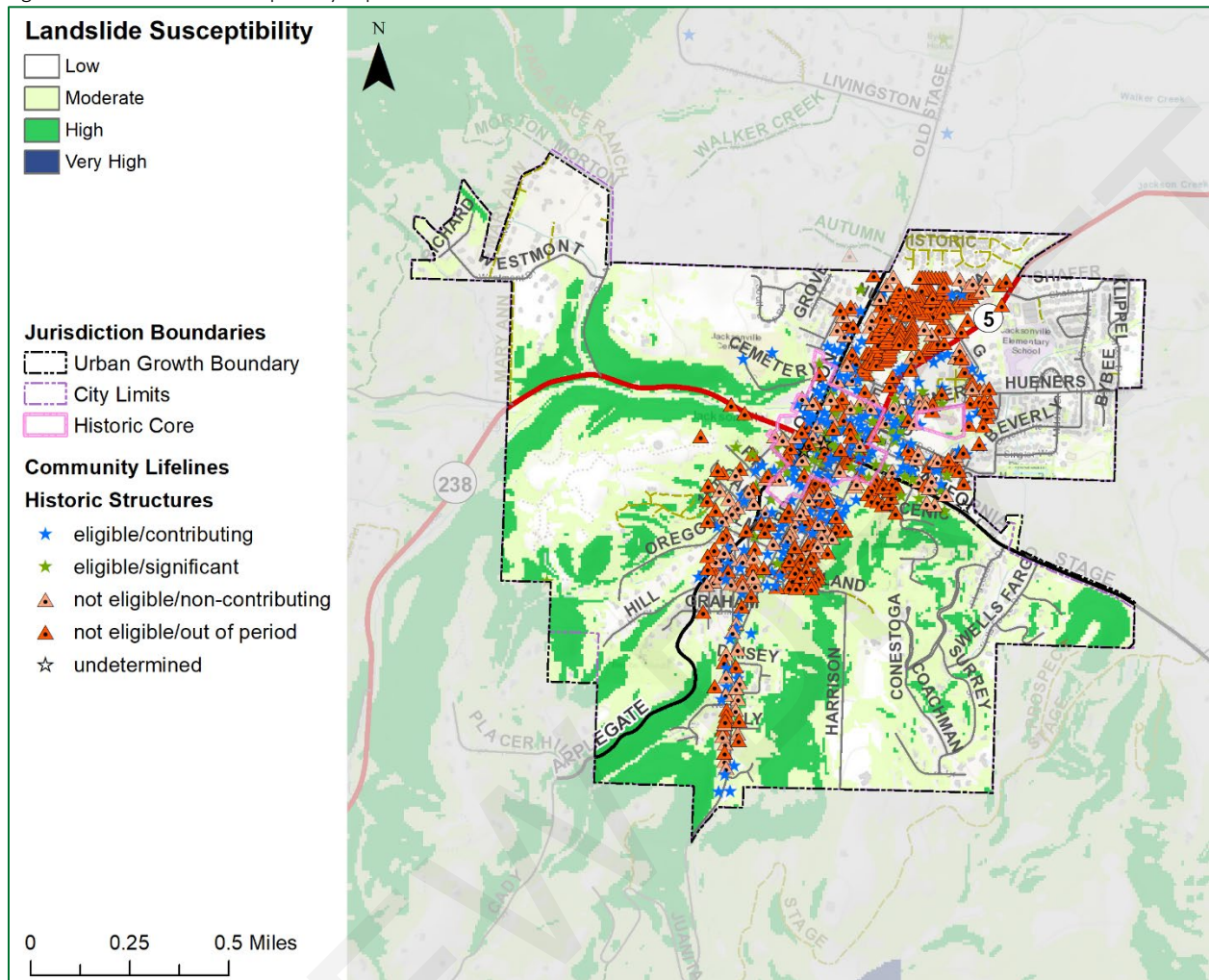
Figure JA-11 Landslide Susceptibility Exposure and Community Lifelines



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.

Note: To view detail click this [link](#) to access Oregon HazVu.

Figure JA-12 Landslide Susceptibility Exposure and Historic Structures



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.

Note: To view detail click this [link](#) to access Oregon HazVu.

## Vulnerability Assessment

Due to insufficient data and resources, Jacksonville is currently unable to perform a quantitative risk assessment for this hazard, however an exposure assessment was conducted. Identified community lifelines that are exposed to this hazard are shown in Table JA-4. Note that even if a facility has exposure, *it does not mean there is a high risk (vulnerability)*. No development changes affected the jurisdiction's overall vulnerability to this hazard.

Potential landslide-related impacts are adequately described within Volume I, Section 2 and include infrastructural damages, economic impacts (due to isolation and/or arterial road closures), property damages, and obstruction to evacuation routes. Rain-induced landslides and debris flows can potentially occur during any winter in Jackson County and thoroughfares beyond City limits are susceptible to obstruction as well.

The most common type of landslides in Jackson County are slides caused by erosion. Slides move in contact with the underlying surface, are generally slow moving and can be deep. Rainfall-

initiated landslides tend to be smaller; while earthquake induced landslides may be quite large. All soil types can be affected by natural landslide triggering conditions.

Please review Volume I, Section 2 for additional information on this hazard.

## Severe Weather

Severe weather can account for a variety of intense and potentially damaging weather events. These events include extreme heat, windstorms, and winter storms. The following section describes the unique probability and vulnerability of each identified weather hazard. Other more abrupt or irregular events such as hail are also described in this section.

### Extreme Heat Event

The steering committee determined that the City's probability for extreme heat event is **high** (which is the same as the County's Rating) and that their vulnerability to an extreme heat event is **moderate** (which is the same as the County's Rating). *This hazard was not assessed in the previous version of this NHMP.*

Jackson County's NHMP Volume I, Section 2, adequately describes the causes and characteristics of extreme heat, as well as the history, location, extent, and probability of a potential event and how it relates to future climate projections. Generally, an event that affects the County is likely to affect the City as well. A severe heat episode or "heat wave" occurs about every two to three years, and typically lasts two to three days but can last as many as five days. A severe heat episode can be defined as consecutive days of temperatures in the high 90s and above 100. Severe heat hazard in Southern Oregon can be described as the average number of days with temperatures greater than or equal to 90-degrees Fahrenheit.<sup>13</sup>

Extreme heat events can and have occurred in the city. While they typically do not cause loss of life, they are becoming more frequent and have the potential to impact economic activity as well as quality of life and have caused threat to life in some cases.

See the Risk Assessment (Volume I, Section 2) for additional information on this hazard.

### Windstorm

The steering committee determined that the City's probability for windstorm is **high** (which is the same as the County's rating) and that their vulnerability to windstorm is **moderate** (which is the same as the County's rating). *The probability rating stayed the same and the vulnerability rating increased since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of windstorm hazards, history, and how they relate to future climate projections, as well as the location, extent, and probability of a potential event within the region. Because windstorms typically occur during winter months, they are sometimes accompanied by ice, freezing rain, flooding, and very rarely, snow. Other severe

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<sup>13</sup> DLCD. *Oregon State Natural Hazard Mitigation Plan*. 2020.

weather events that may accompany windstorms, including thunderstorms, hail, lightning strikes, and tornadoes are generally negligible for Jacksonville.

Volume I, Section 2 describes the impacts caused by windstorms, including power outages, downed trees, heavy precipitation, building damages, and storm-related debris. Additionally, transportation and economic disruptions result as well. Microbursts also occur in Jacksonville creating strong winds, particularly from the northeast.

Damage from high winds generally has resulted in downed utility lines and trees. Electrical power can be out anywhere from a few hours to several days. Outdoor signs have also suffered damage. If the high winds are accompanied by rain (which they often are), blowing leaves and debris clog drainage-ways, which in turn causes localized urban flooding.

Please review Volume I, Section 2 for additional information on this hazard.

## Winter Storm (Snow/Ice)

The steering committee determined that the City's probability for winter storm is **high** (which is the same as the County's rating) and that their vulnerability to winter storm is **moderate** (which is the same as the County's rating). *The probability rating stayed the same and the vulnerability rating increased since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of winter storm hazards, history, and how they relate to future climate projections, as well as the location, extent, and probability of a potential event within the region. Severe winter storms can consist of rain, freezing rain, ice, snow, cold temperatures, and wind. They originate from troughs of low pressure offshore that ride along the jet stream during fall, winter, and early spring months. Severe winter storms affecting the City typically originate in the Gulf of Alaska or in the central Pacific Ocean. These storms are most common from November through March.

Major winter storms can and have occurred in the Jacksonville area and while they typically do not cause significant damage, they are frequent and have the potential to impact economic activity. Road closures due to winter weather are a common occurrence (particularly along 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> streets) and can interrupt commuter and commercial traffic. Jacksonville maintains roads with a John Deere tractor with a plow hookup and sanding equipment.

Please review Volume I, Section 2 for additional information on this hazard.

## Volcanic Event

The steering committee determined that the City's probability for a volcanic event is **low** (which is the same as the County's rating) and that their vulnerability to a volcanic event is **low** (which is the same as the County's rating). *These ratings have not changed since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of volcanic hazards and their history, as well as the location, extent, and probability of a potential event within the region. Generally, an event

that affects the County is likely to affect Jacksonville as well. Jacksonville is very unlikely to experience anything more than volcanic ash during a volcanic event.

Please review Volume I, Section 2 for additional information on this hazard.

## Wildfire

The steering committee determined that the City's probability for wildfire is **high** (which is the same as the County's rating) and that their vulnerability to wildfire is **high** (which is higher than the County's rating). *These ratings have not changed since the previous version of this NHMP.*

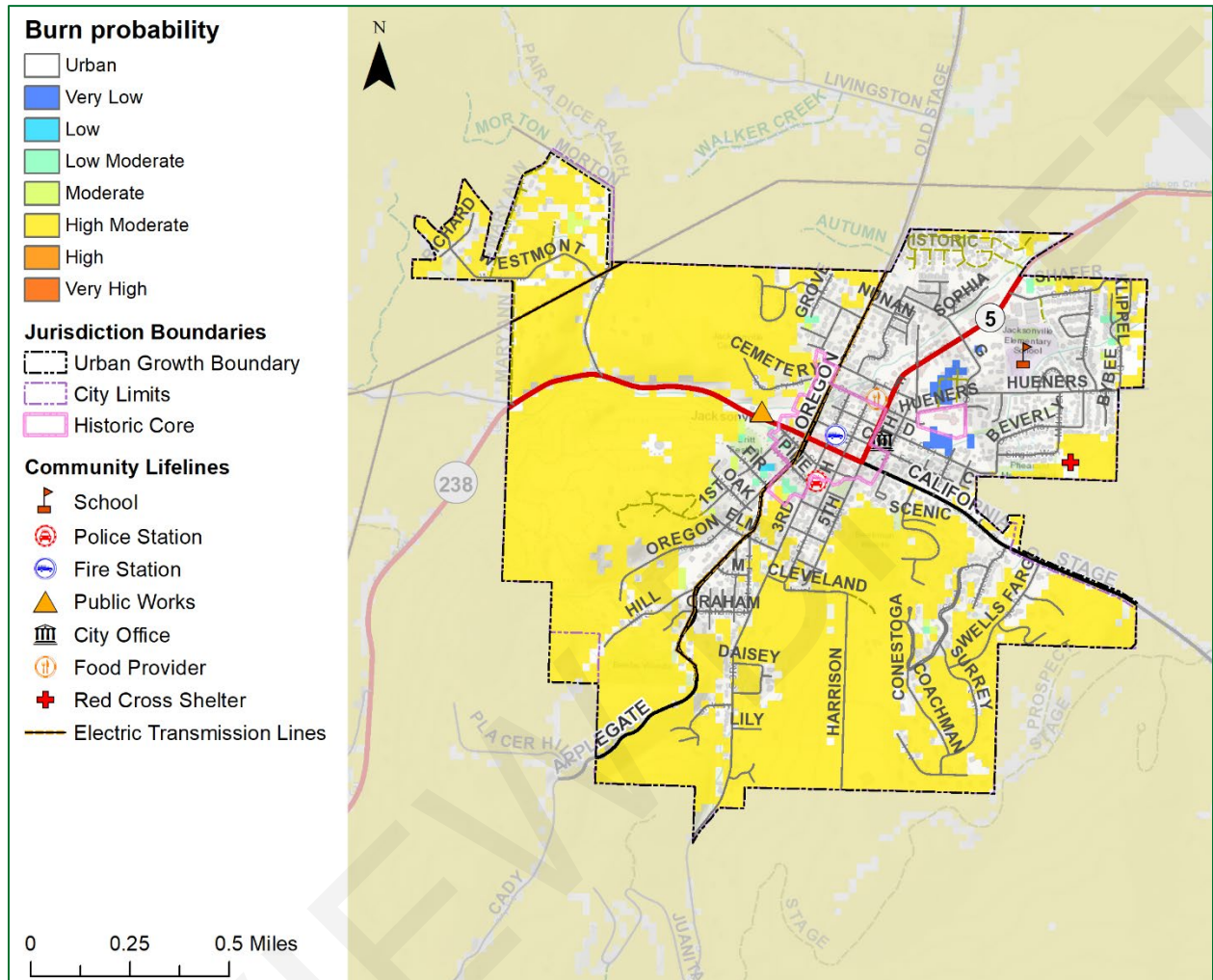
Volume I, Section 2 describes the characteristics of wildfire hazards, history, and how they relate to future climate projections, as well as the location, extent, and probability of a potential event within the region. The location and extent of a potential wildfire vary depending on fuel, topography, and weather conditions. Weather and urbanization conditions are primarily at cause for the hazard level. Wildfires near Jacksonville are common.

The potential community impacts and vulnerabilities described in Volume I, Section 2 are generally accurate for the City as well. The [Rogue Valley Integrated Fire Protection Plan](#) (RVIFP, updated 2019) assesses wildfire risk, maps wildland urban interface areas, and includes actions to mitigate wildfire risk. The City is included in the RVIFP and will update the City's wildfire risk assessment if the fire plan presents better data during future updates (an action item is included within Volume I, Section 3 to participate in updates to the integrated fire plan and to continue to maintain and update their RVIFP). Jacksonville is within an area of high wildfire prone urban landscape. The City hereby incorporates the RVIFP into this addendum by reference to provide greater detail to sensitivity and exposure to the wildfire hazard. The City participates in Firewise and has a defensible space (fuel break) ordinance per the Jacksonville Code.

Property can be damaged or destroyed with one fire as structures, vegetation, and other flammables easily merge to become unpredictable and hard to manage. Other factors that affect ability to effectively respond to a wildfire include access to the location and to water, response time from the fire station, availability of personnel and equipment, and weather (e.g., heat, low humidity, high winds, and drought).

Figure JA-13 and Figure JA-14 show burn probability in Jacksonville for community lifelines and historic buildings.

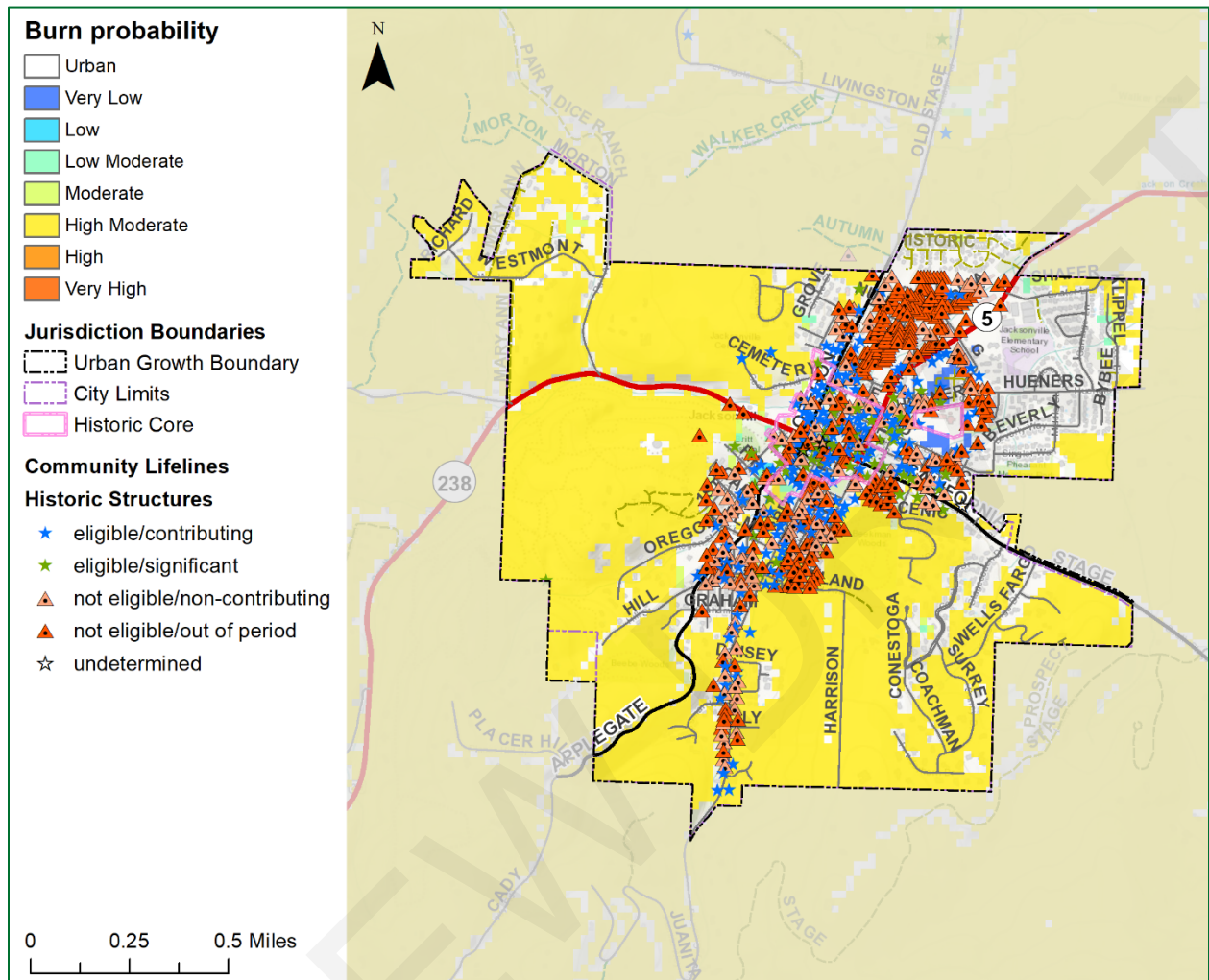
Figure JA-13 Burn Probability in Jacksonville and Community Lifelines



Source: Oregon Partnership for Disaster Resilience. USFS Pacific Northwest Region Wildfire Risk Assessment (PNRA)

Note: To view detail click this [link](#) to access Oregon Explorer's CWPP Planning Tool.

**Figure JA-14 Burn Probability in Jacksonville and Historic Structures**



Source: Oregon Partnership for Disaster Resilience. USFS Pacific Northwest Region Wildfire Risk Assessment (PNRA)  
 Note: To view detail click this [link](#) to access Oregon Explorer’s CWPP Planning Tool.

**Vulnerability Assessment**

Due to insufficient data and resources, Jacksonville is currently unable to perform a quantitative risk assessment for this hazard, however an exposure assessment was conducted. Identified Community Lifelines that are exposed to this hazard are shown in Table JA-4 **Table JA-4**. Note that even if a facility has exposure, it does not mean there is a high risk (vulnerability). No development changes affected the jurisdiction’s overall vulnerability to this hazard.

Please review Volume I, Section 2 for additional information on this hazard.

# Attachment A: Public Involvement Summary

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Members of the steering committee provided edits and updates to the NHMP prior to the public review period as reflected in the final document. In addition, a survey was distributed that included responses from residents of Jacksonville (Volume III, Appendix F).

To provide the public information regarding the draft NHMP addendum, and provide an opportunity for comment, an announcement (see below) was provided from **Month Day through Month Day** on the County's website. There were **XX [to be updated following public comment period]** comments provided. Additional opportunities for stakeholders and the public to be involved in the planning process are addressed in Volume III, Appendix B.

## Website Posting

Posting to be inserted

## Jacksonville Steering Committee

Steering committee members possessed familiarity with Jacksonville's community and how it is affected by natural hazard events. The steering committee guided the update process through several steps including goal confirmation and prioritization, action item review and development, and information sharing, to update the NHMP and to make the NHMP as comprehensive as possible. The steering committee met formally on the following date:

### **Meeting #1: Jacksonville steering committee, February 16, 2022 (via Zoom)**

During this meeting, a representative from the steering committee reviewed the previous NHMP, and was provided updates on hazard mitigation planning, the NHMP update process, and project timeline. The steering committee:

- Updated recent history of hazard events in the city.
- Reviewed and confirmed the County NHMP's mission and goals.
- Discussed the NHMP public outreach strategy.
- Reviewed and provided feedback on the draft risk assessment update including community vulnerabilities and hazard information.
- Reviewed and updated their existing mitigation strategy (actions).
- Reviewed and updated their implementation and maintenance program.

### **Meeting Attendees:**

Tony Thompson (City of Jacksonville)



# Attachment B: Action Item Changes

Volume I, Section 3 provides a summary list of actions for the County. Below is an accounting of the major changes to actions since the previous NHMP.

## Renumbered 2018 Actions:

2018 Action Item	2023 Action Item
Multi-Hazard #1	Multi-Hazard 1.2
Multi-Hazard #2	Multi-Hazard 1.3
Multi-Hazard #3	Multi-Hazard 1.1
Earthquake #1	Earthquake 4.1
Flood #1	Flood 6.1
Flood #2	Flood 6.2
Landslide #1	Landslide 7.1
Severe Weather #1	Severe Weather 8.1
Wildfire #1	Wildfire 10.1

Action items were reviewed, revised, and prioritized (indicated in **bold** text). Major changes are indicated below (2018 action number listed unless action is new, see list above for 2023 action number):

- MH #1: This action is ongoing and was moved from the priority actions.
- MH #2: This action is ongoing. Wording was changed to reflect that the program has been established and the goal is to continue to sustain it.
- **MH #3**: This action was reworded to focus on working with utility partners to underground power lines, moved to the priority actions, and renumbered as 1.1. The funding sources was changed to local funding resources.
- **EQ#1**: This action is ongoing. The elementary school, fire station, and county courthouse have received seismic retrofits.
- FL #1: This action is ongoing.
- FL #2: This action is ongoing. There are two repetitive flood loss properties.
- LS #1: This action is ongoing and was removed from the priority actions.
- **SW #1**: This action was moved to the priority actions.
- 8.2: This action is new.
- **WF #1**: This action is ongoing.
- **10.2**: This action is new. Fuel reduction projects are provided in the Mitigation Successes section.