



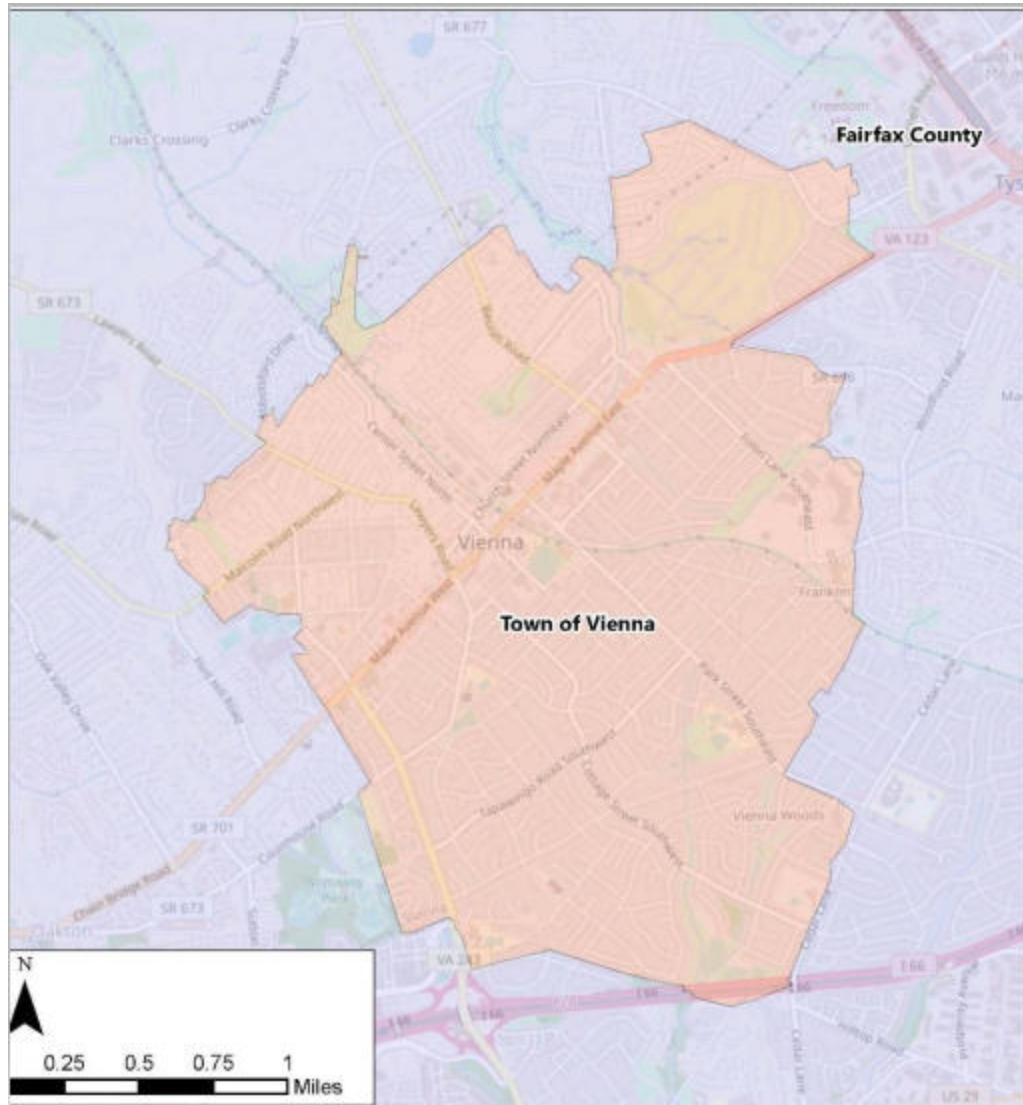
Northern Virginia Hazard Mitigation Plan

## **Annex 7-C: Town of Vienna**







November 2022



## Town of Vienna Overview



**Table 1: Specific Jurisdictional Data**

					
ESTABLISHED	LAND AREA	2020 POPULATION	GOVERNMENT ADDRESS	HOUSEHOLDS	MITIGATION FOCUS
1890	4.4 sq. mi.	17,004	127 Center St. South, Vienna, VA 22180	5,607	Winter Weather, Flood/Flash Flood, High Wind/Severe Weather

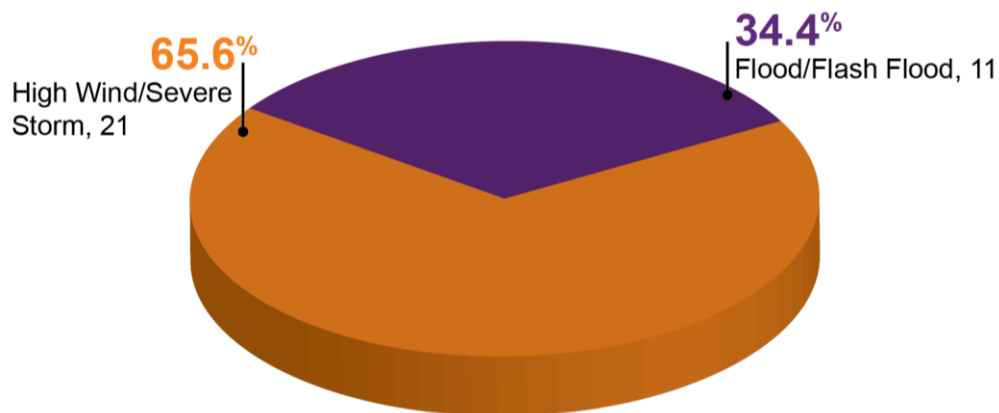


## Town of Vienna Risk Environment

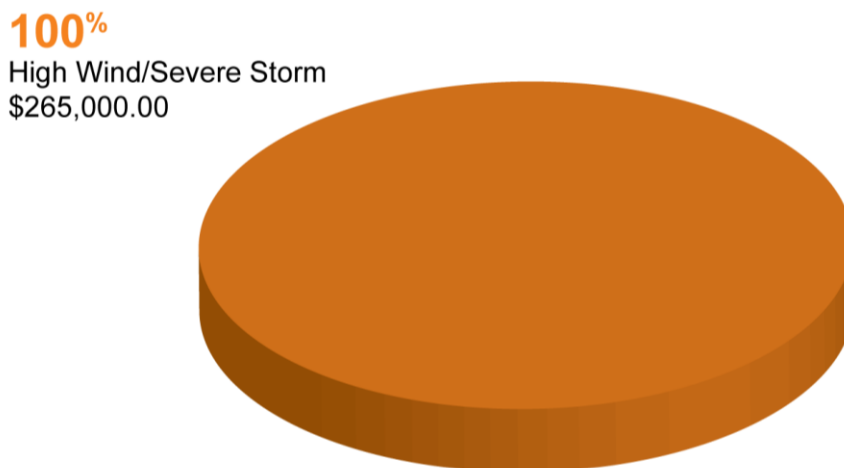
The following is a snapshot of the details in this annex. The well-researched details form the basis of effective mitigation strategies to improve community resilience.

### *Hazard Event History*

National Centers for Environmental Information (NCEI), 1950–June 2021



**Figure 1: Number and Percentages of Hazard Events**



**Figure 2: Property Damage Costs from Natural Hazard Events**

### *Natural Hazard Risk Ranking*

**Table 2: Ranking of Natural Hazards by Risk**

Hazard	Hazard Ranking
Winter Weather	High
Flood/Flash Flood	High
High Wind/Severe Storm	High
Dam Failure	High
Tornado	Medium
Drought	Medium
Extreme Temperatures	Medium
Earthquake	Medium
Wildfire	Low
Karst/Sinkhole/Land Subsidence	Low
Landslide	Low

### *Community Lifelines/Critical Assets and Mitigation Capabilities*

**Table 3: Number of Critical Assets for Community Lifelines/Sectors**

Lifelines/Sectors	Number of Assets
Safety and Security	3
Food, Water, Shelter	-
Health and Medical	-
Energy	2
Communications	-
Transportation	-
Hazardous Materials	-
Education	30
Cultural/Historical	14
High Hazard Dams	-

A lifeline enables the continuous operation of government and business functions which are critical for human health, safety, or economic security. Lifelines are the most fundamental services for a community that, when stabilized, enable all other aspects of society to function. These lifelines are assets that may be a facility, infrastructure, operation, or entity.



**Figure 3: Community Lifeline Components**

### *Community Lifelines Outlined*

- **Safety and Security:** Law Enforcement/Security, Fire Service, Search and Rescue, Government Service, Community Safety
- **Food, Water, Shelter:** Food, Water, Shelter, Agriculture
- **Health and Medical:** Medical Care, Public Health, Patient Movement, Medical Supply Chain, Fatality Management
- **Energy:** Power Grid, Fuel
- **Communications:** Infrastructure, Responder Communications, Alerts Warnings and Messages, Finance, 911 and Dispatch
- **Transportation:** Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime
- **Hazardous Materials:** Facilities, HAZMAT, Pollutants, Contaminants

## Mitigation Capabilities Summary

**Table 4: Capability Assessment Summary Ranking**

Capability	Ranking
Planning and Regulatory	Moderate
Administrative and Technical	Moderate
Safe Growth	Moderate
Financial	Moderate
Education and Outreach	Moderate

## Hazard Mitigation Plan Point of Contact

**Table 5: Point of Contact Information**

Contact Type	Contact Information
Primary Point of Contact	Daniel Janickey, Deputy Chief Town of Vienna Police Department 703-255-6397 <a href="mailto:Dan.Janickey@viennava.gov">Dan.Janickey@viennava.gov</a> 215 Center Street S Vienna, VA 22180

## Town of Vienna

This annex presents the following jurisdiction-specific information provided by the Town of Vienna for the 2022 update to the *Northern Virginia Hazard Mitigation Plan (NOVA HMP)*.

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# 1. Jurisdiction Profile

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<b>Geographic Region</b>	Piedmont/Coastal Plain
<b>Persons Per Household</b>	2.91
<b>Median Age</b>	41.3
<b>Elevation</b>	358 feet

## 1.1. Location

Located in the north-central area of Fairfax County, the Town of Vienna is surrounded by unincorporated land. It is located approximately 5 miles south of the Potomac River and 12 miles west of Washington, D.C.

## 1.2. History

The area that later became the Town of Vienna was first settled in the 1740s. The Town was named after a doctor, William Hendrick, who agreed to settle there in 1850 if the Town was renamed after his hometown, originally called Vienna (now known as Phelps), in New York State. One of the first armed clashes of the Civil War occurred in the Town on June 17, 1861.

## 1.3. Demographics, Economy, and Governance

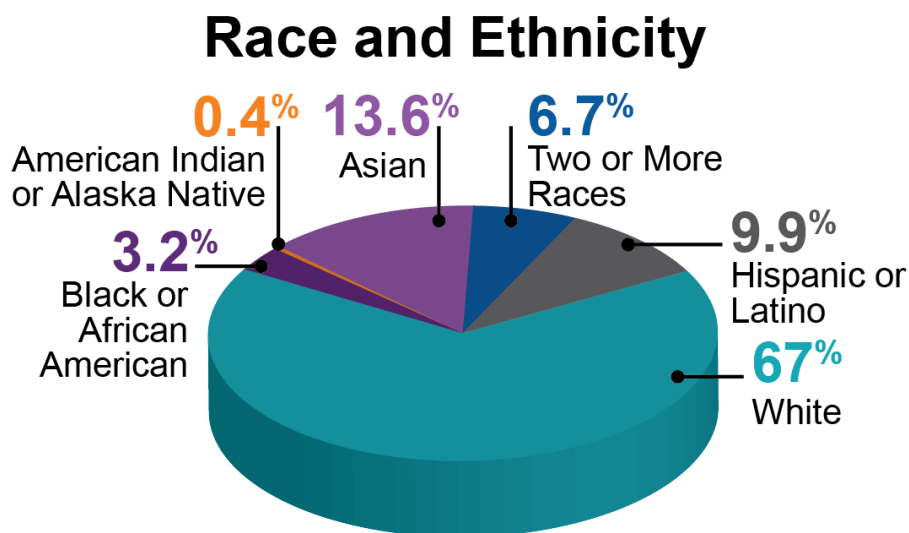
The Northern Virginia regional profile is presented in [Section 1, Base Plan](#) as context for the entire Plan.

**Table 6: Population and Growth Rate<sup>1</sup>**

<b>Year</b>	<b>Population</b>	<b>Annual Percent Increase</b>
1990	14,852	
2000	14,453	-2.69%
2010	15,687	8.54%
2020	17,004	8.40%

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<sup>1</sup> United States Census, 1970 – 2020. Town of Vienna, Virginia website. Data USA.



**Figure 4: Race and Ethnicity Demographics from 2020 Census\***

\*Due to how people view Race and Ethnicity and answer the questions in the Census, there is overlapping of responses and results equal greater than 100% of the population.

**Table 7: Economic Data**

Economy	Data
Median Household Income (2019)	\$168,269
Unemployment Rate (June 2021)	2.1%
Per Capital Income (2020)	\$76,538
Percentage Below Poverty (2021)	4%

Approximately 74% of Vienna residents speak English as their primary language and 6% speak Spanish. Approximately 78.5% of town residents have attended university, with 39% and 29.5% attaining a bachelor's and graduate degree, respectively, thus indicating a highly-educated workforce.<sup>2</sup> The area has become a hub for telecom and other high-tech companies focused on the internet/online services. Top employers in the area include Navy Federal Credit Union, Fairfax County Public Schools, several major food companies, local government offices, and service industries.<sup>3</sup>

## 1.4. Built Environment and Community Lifelines

The information presented in this section related to Community Lifelines and critical assets in the Town of Vienna has been collected from multiple sources, including Hazus (Version 4.2), Town participants in the NOVA HMP 2022 update planning process, and government websites. During the planning process, the Town submitted a list of 29 sites or structures that are considered critical assets.

<sup>2</sup> World Population Review, September 2021.

<sup>3</sup> Serfass, Marion. Town of Vienna, 2020 Comprehensive Annual Financial Report, Fiscal Year Ending June 30, 2020. Retrieved November 24, 2021. Retrieved at: <https://www.viennava.gov/home/showdocument?id=2819>

**Table 8: Town of Vienna Critical Assets by Type<sup>4</sup>**

Asset Type, by Use	Number of Assets	Value of Assets (Building and Contents)
Cemeteries	3	Not identified
Funeral Home	1	Not identified
Government Buildings	2	\$15,750,000
Halls	1	Not identified
Historic Homes	2	Not identified
Maintenance Facilities	2	\$8,750,000
Museums	5	\$595,000 (value identified for 3 facilities)
Police Station	1	\$7,500,000
Storage Facilities	11	\$2,900,000
TOTAL	28	\$35,445,000

Critical facility data extracted from the Hazus Level 1 assessment (Table 9) indicates that the Town has an estimated 49 critical and historic assets. Due to the time lag in collecting and verifying data and the method of documenting location and jurisdiction used in Hazus, this data does not fully reflect the current inventory maintained by the Town.

**Table 9: Number of Community Lifelines and Critical Assets in the Town of Vienna<sup>5</sup>**

Sector	Number of Assets
Safety and Security	3
Food, Water, Shelter	-
Health and Medical	-
Energy	2
Communications	-
Transportation	-
Hazardous Materials	-
Education	30
Cultural/ Historical	14
High Hazard Dams	-

### 1.4.1. Safety and Security

The Town has one Emergency Operations Center and one Fairfax County Fire Station that serves residents. The Town has built a police station which is currently valued at approximately \$18 million; they will begin using the new station in the summer of 2022 and have demolished the old station.

<sup>4</sup> Town of Vienna,

<sup>5</sup> Fairfax County, Hazus Data Inventory, August 3, 2021.

### *1.4.2. Food, Water, Shelter*

Food commodities are available throughout the Town from public retail providers, wholesalers, and contracted services for specific institutions and facilities. Additional contracts may be entered into for post-disaster needs.

The Town of Vienna provides water and sewer services for its residents.

The Hazus database does not identify schools that might be designated as public shelters.

### *1.4.3. Health and Medical*

The Hazus database does not identify any town-level health and medical facilities for Vienna. The Town of Vienna is served by health and medical facilities offering patient care, urgent care, emergency rooms, and other healthcare services located elsewhere in Fairfax County.

### *1.4.4. Energy*

The Town of Vienna is served by Dominion Energy and Columbia Gas of Virginia.

### *1.4.5. Communications*

The Hazus database does not identify town-level communication/broadcast facilities for the Town of Vienna.

Most communications and information systems and infrastructure in the United States are privately owned; however, the Town of Vienna Police Department has its own dispatch. Fairfax County 911 calls within the Town are diverted to the Town. All non-emergency calls go directly to Vienna Police Department. In recent years, the federal government has assumed a stronger role in protecting information and communications infrastructure, which may also present a challenge in relation to disaster impacts. Increasing reliance on this infrastructure by individuals, businesses, and government could cause vulnerabilities that emergency managers should take into consideration in pre- and post-incident planning and operations.

### *1.4.6. Transportation*

The Town of Vienna is served by the following major highways and commuter rail lines:

- Interstate 66
- State Routes 123 and 243
- Washington Metropolitan Area Transit Authority (WMATA) Metrorail – Orange Line

Maintenance of transportation facilities and systems is the responsibility of the owner or entity with authority, including municipal, county, state, and federal highway departments and agencies; toll and rail authorities; and the military. The Virginia Department of Transportation maintains most primary and secondary roads in Fairfax County.

The Hazus database does not identify any transportation assets for the Town of Vienna.



### *1.4.7. Hazardous Materials*

The Hazus database identifies one oil refinery, one natural gas facility, and 13 natural gas pipeline locations within Fairfax County; however, these are not identified at the town level.

### *1.4.8. Education*

The Town is served by Fairfax County Public Schools and a number of private institutions. The Hazus inventory documents 30 facilities with a town address.

### *1.4.9. Recreational, Cultural and Historic Sites, and Assets*

The Town of Vienna maintains the community's park system to provide recreational facilities and services that support the preservation of environmentally-sensitive land and resources as well as areas of historic and cultural significance.

The Town of Vienna recognizes 14 historic properties<sup>6</sup>. Historic Vienna, Inc., a not-for-profit organization, oversees the historic properties in the Town and provides guidance to property owners on appropriate measures for preserving and protecting historic properties and buildings. These sites serve as an asset by providing significant context as to the Town's development over time and contributing to the community's tourism economy.

## **1.5. Growth and Development Trends**

The Town's population has maintained steady growth in the past few decades. Future growth and development are managed by the Planning and Zoning Department.

The Town's 2015 Comprehensive Plan, amended on February 2, 2020<sup>7</sup>, describes the jurisdiction's approach to preserving and enhancing its small-town character, which focuses on single-family detached housing supported by adequate retail and services. The plan highlights development pressures for high-density development that surround the Town, primarily in Tysons, MetroWest, and Merrifield, and voices concerns about adverse impacts on traffic and public service facilities. The plan commits the Town to continue monitoring and informing the Fairfax County government of the effects of this type of development on the Town, including potential hazard impacts.

The Town of Vienna controls the land use policies and practices within its jurisdiction and will continue to partner with the county and regional entities to identify hazard mitigation opportunities related to growth and development that reduce risk.

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<sup>6</sup> Town of Vienna website. Retrieved at: <https://www.viennava.gov/getting-to-know-vienna/history/historic-properties>

<sup>7</sup> Town of Vienna 2015 Comprehensive Plan. Retrieved at: [637433006019870000 \(viennava.gov\)](https://www.viennava.gov/637433006019870000)

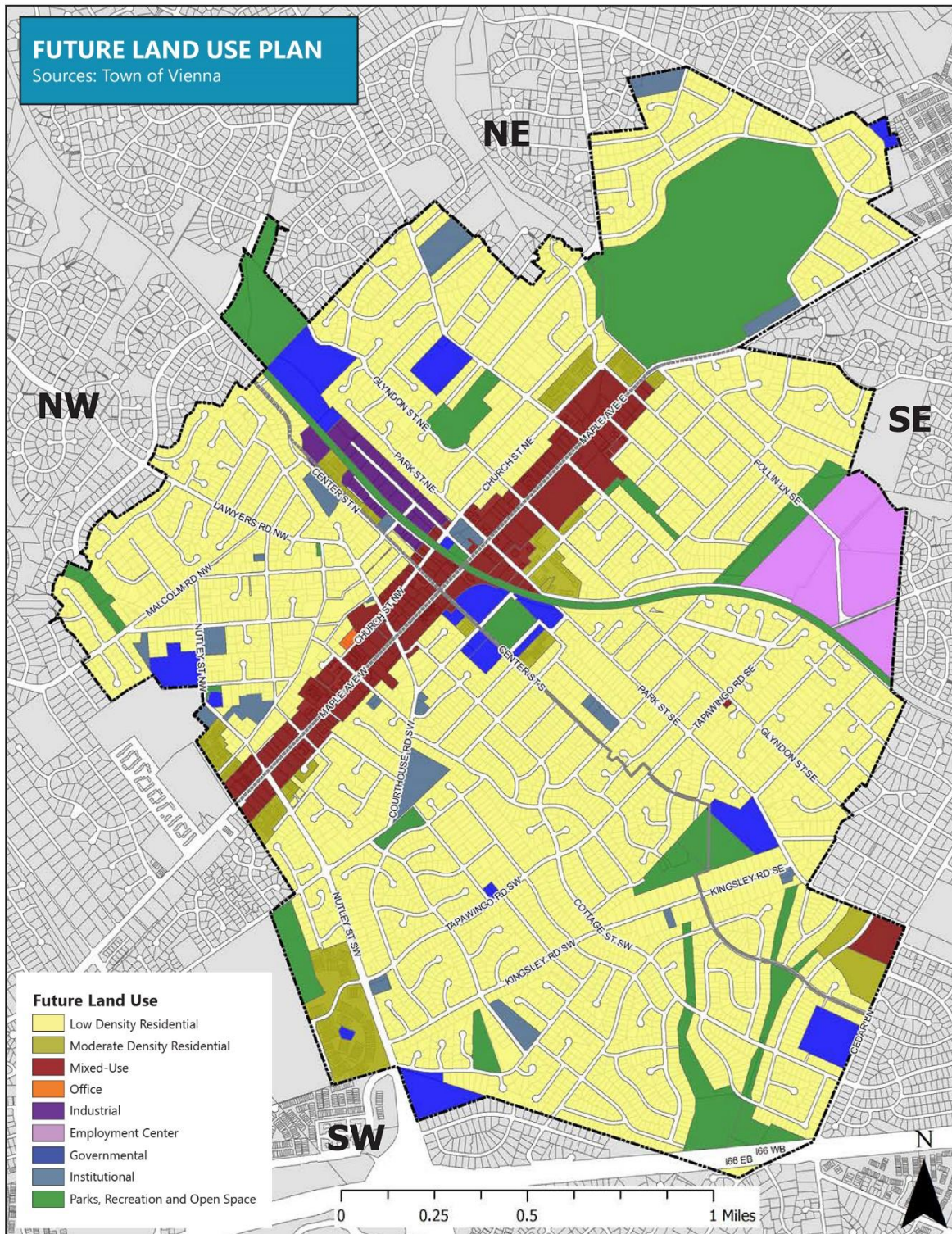


Figure 5: Future Land Use Plan, Town of Vienna<sup>8</sup>

<sup>8</sup> 2015 Town of Vienna Comprehensive Plan, p. 38. Retrieved at: [637433006019870000 \(viennava.gov\)](https://viennava.gov/637433006019870000)



The Town of Vienna Planning and Zoning Department is responsible for reviewing and approving all construction projects through a comprehensive process. The Department's website includes a Development Activity Map that identifies specific projects and sites by their status. As of January 2022, there were five projects under review, three approved, eight under construction, and 36 completed.



**Figure 6: Town of Vienna Development Activity Map – Completed Projects<sup>9</sup>**

The plan review process involves multiple levels of review that include consideration of appropriate land use, such as floodplains, ecological systems, and stormwater impacts.

<sup>9</sup> Town of Vienna Development Authority Website. Retrieved January 8, 2022.

## 2. Jurisdiction Planning Process

For the 2022 NOVA HMP update, the Town of Vienna followed the planning process described in [Section 2 in the Base Plan](#). In addition to providing representation to the Northern Virginia Hazard Mitigation Planning Team, the Town supported the local planning process requirements by coordinating with Fairfax County and representatives from other Town departments and agencies.

**Table 10: Local Planning Group Participants**

Name	Position/Title	Department/Agency
Daniel Janickey	Deputy Chief of Police	Town of Vienna Police Department
John Jay Sergent	Floodplain/NFIP Administrator	Town of Vienna Planning and Zoning

The chief hazard mitigation planning responsibility is representing the Town in coordination with the Fairfax County representative to the Emergency Managers Group. The Town also identified the following tasks as part of its mitigation planning responsibilities:

- Conduct hazard risk and vulnerability assessment
- Provide technical data and hazard information
- Conduct capabilities assessment
- Develop mitigation strategy
- Sponsor mitigation actions
- Review Plan drafts and provide input
- Conduct public outreach activities
- Implement the Plan
- Maintain the Plan

The Town of Vienna planning participants coordinated primarily by means of virtual meetings with Fairfax County during the planning process, and as needed, independently, to carry out planning activities completed through a series of worksheets that provided background information on the history of hazard events, hazard risks and vulnerabilities, capabilities, and past mitigation efforts. Additional planning process documentation of the Planning Group meetings is included in the [Base Plan, Appendix A](#).

### 2.1. Public Participation

Several opportunities for public involvement were provided during the planning process, including a Public Hazard Survey, which was posted and advertised on the Town's Twitter and Facebook pages. In addition to the survey, the public was offered the opportunity to review and provide input on the Draft 2022 Plan update. Notification of the Draft Plan release was made on social media pages. Documentation of the public survey and draft plan review is included in [Attachment 2 of Annex 7, Fairfax County](#).

The survey was opened on August 8<sup>th</sup>, 2021, and closed on November 3<sup>rd</sup>, 2021, with over 1,000 responses coming in over that period of time. The Town of Vienna had 28 responses from residents that took the survey, and those responses identified the natural hazard of climate change and the non-natural hazard of the pandemic to be the most concerning hazards for those who resided in the Northern Virginia Area.

### 3. Jurisdiction-Specific Hazard Event History

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The Town of Vienna's comprehensive hazard history is combined with that of Fairfax County and described in [Sections 4 and 5, Base Plan](#).

The National Oceanic and Atmospheric Administration (NOAA) National Center for Environmental Information (NCEI) Storm Events Database includes 1,478 recorded natural meteorological events that took place in Fairfax County between January 1, 1950 and May 2021. The county and its municipalities have been included in three Federal Disaster Declarations and emergencies between May 2017 and May 2021.

**Table 11: Federal Disaster and Emergency Declarations (2017–2021), Fairfax County<sup>10</sup>**

Declaration	Date	Hazard	Assistance Type
DR-4512-VA	4/2/2020 (continuing)	COVID-19 Pandemic	Individual Assistance, Public Assistance
EM-3448-VA	3/13/2020 (continuing)	COVID-19 Pandemic	Public Assistance (Category B)
EM-3403-VA	9/11/2018	Hurricane Florence	Public Assistance (Category B)

The Town of Vienna's Planning Team highlighted winter weather, floods/flash floods, and high winds/severe storms as significant hazards that have occurred since the 2017 plan. Data related to these hazard events is included in [Section 5, Base Plan](#), and [Annex 7, Fairfax County](#).

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<sup>10</sup> FEMA



## 4. Hazard Risk Ranking

After developing hazard profiles, the Town of Vienna conducted a two-step quantitative risk assessment for each hazard that considered population vulnerability, geographic extent/location, probability of future occurrences, and potential impacts and consequences. The numerical scores for each category were totaled to obtain an Overall Risk Score, which is summarized as one of these risk and vulnerability classifications:

- **Low:** Two or more criteria fall in lower classifications or the event has a minimal impact on the planning area. This rating is sometimes used for hazards with a minimal or unknown record of occurrences or for hazards with minimal mitigation potential.
- **Medium:** The criteria fall mostly in the middle ranges of classifications and the event's impacts on the planning area are noticeable but not devastating. This rating is sometimes used for hazards with a high extent rating but very low probability rating. The potential damage is more isolated and less costly than a widespread disaster.
- **High:** The criteria consistently fall in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.

The two-step hazard risk ranking methodology is detailed in [Section 4, Base Plan](#).

The Overall Risk Score for each hazard served as the basis for determining whether a vulnerability assessment should be conducted. Natural hazard profiles are presented in the hazard subsections in [Section 5, Base Plan](#), and local details are provided in the Jurisdiction Annexes. Non-natural hazard profiles are presented in [Volume II](#) of this Plan.

**Table 12: Town of Vienna - Hazard Risk Ranking Summary: Natural Hazards**

Hazard	Total Probability Score	Total Consequence Score	Overall Risk Score	Hazard Ranking
Winter Weather	3.7	3.5	7.2	High
Flood/Flash Flood	1.7	4.2	5.9	High
High Wind/Severe Storm	2.7	3.2	5.8	High
Dam Failure	1.0	4.5	5.5	High
Tornado	1.0	4.2	5.2	Medium
Drought	2.0	3.2	5.2	Medium
Extreme Temperatures	2.7	2.5	5.2	Medium
Earthquake	1.7	3.2	4.9	Medium
Wildfire	1.0	3.0	4.0	Low
Karst/Sinkhole/Land Subsidence	1.0	2.5	3.5	Low
Landslide	1.0	2.5	3.5	Low

**Table 13: Town of Vienna - Hazard Risk Ranking Summary: Non-Natural Hazards**

Hazard	Total Probability Score	Total Consequence Score	Overall Risk Score	Hazard Ranking
Infectious disease/public health	3.0	5.8	8.8	High
Terrorism	1.0	6.4	7.4	High
Cyber Attack	2.0	4.7	6.7	High
Civil Unrest	1.3	5.0	6.3	Medium
Communication Disruption	1.3	3.7	5.0	Medium
Hazardous Materials	1.0	3.9	4.9	Low
Active Violence	1.0	3.6	4.6	Low

Based on the hazard risk scores, the Town of Vienna evaluated the level of risk for 18 hazards: 11 natural and 7 non-natural.

Eight natural hazards were identified as high or medium risk hazards to which the jurisdiction is vulnerable:

- **High:** Winter Weather, Flood/Flash Flood, High Wind/Severe Storm, and Dam Failure
- **Medium:** Tornado, Drought, Extreme Temperatures, and Earthquake

Five non-natural hazards were ranked as high or medium risk:

- **High:** Infectious Disease/Public Health, Terrorism, and Cyber Attack
- **Medium:** Civil Unrest and Communication Disruption

All other hazards are ranked as “low,” signifying a minimal risk to the Town of Vienna.

## 4.1. Additional Hazard Risk Considerations

### 4.1.1. Non-Natural Hazards

**Volume II** of the *2022 Northern Virginia Hazard Mitigation Plan* addresses non-natural hazards identified by the jurisdiction.

## 5. Vulnerability Assessment

The methodology for calculating loss estimates presented in this annex is the same as that described in [Section 4 in the Base Plan](#). Quantitative loss estimates are provided when available. Qualitative measurement considers hazard data and characteristics, including the potential impacts and consequences based on past occurrences. Accompanying the data is a discussion of community assets potentially at risk during a hazard event.

[Annex 7, Fairfax County](#) includes a statistical compilation of the number of events and related impacts for the two highest-ranked hazards for the Town of Vienna: winter weather and floods/flash floods.

The assets at risk were identified during the planning process as potential assets vulnerable to one or more hazards.

### 5.1. National Flood Insurance Program

The Town of Vienna participates in the National Flood Insurance Program (NFIP).

**Table 14: Town of Vienna National Flood Insurance Program Status<sup>11</sup>**

Init FHB identified	8/2/1974
Init FIRM identified	2/3/1982
Current Effective Map Date	9/17/2010
Reg-Emer Date	2/3/1982

**Table 15: Town of Vienna NFIP Policy and Claims Statistics<sup>12</sup>**

Policies In-Force	120
Premiums Paid	\$82,120
Total Claims	19
Total Payment	\$222,630

**Table 16: NFIP Status, as of September 24, 2021**

Category	NFIP Topic	Source of Information	Comments
Insurance	How many NFIP policies are in the community? What is the total premium and coverage?	State NFIP Coordinator, FEMA NFIP Specialist, community records	Unknown
Insurance	How many claims have been paid in the community? What is the	EMA NFIP or Insurance Specialist	Unknown

<sup>11</sup> FEMA NFIP Community Status Report, September 9, 2021

<sup>12</sup> FEMA NFIP Community Status Report, September 9, 2021

Category	NFIP Topic	Source of Information	Comments
	total amount of paid claims? How many of the claims were for substantial damage?		
Insurance	How many structures are exposed to flood risk within the community?	Community Floodplain Administrator (FPA)	Unknown
Insurance	Describe any areas of flood risk with limited NFIP policy coverage	Community FPA and FEMA Insurance Specialist	Unknown
Staff Resources	Is the Community FPA or NFIP Coordinator certified?	Community FPA	Community FPA/NFIP Coordinator holds Professional Engineer (PE) and Certified Floodplain Manager (CFM) certifications.
Staff Resources	Is floodplain management an auxiliary function?	Community FPA	Floodplain management is a primary function of Risk Management.
Staff Resources	Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Community FPA	The full range of NFIP administrative services (permitting, inspections, outreach, GIS, and engineering analysis) is provided by Planning and Zoning.
Staff Resources	What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	There are currently no barriers.
Compliance History	Is the community in good standing with NFIP?	State NFIP Coordinator, FEMA NFIP Specialist, community records	Yes
Compliance History	Are there any outstanding compliance issues (i.e., current violations)?		No
Compliance History	When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?		July 1, 2020

Other hazard information for the Town of Vienna is presented in the [Base Plan](#).

## 5.2. Population

Estimates of the number of residents in the Town of Vienna vulnerable to each hazard are presented in the various hazard sections in the [Base Plan](#).

The Centers for Disease Control and Prevention's (CDC) Social Vulnerability Index (SVI) is a tool that can be used to identify specific vulnerable populations. The Overall CDC SVI for Fairfax County, including the Town of Vienna, is presented in [Annex 7, Fairfax County](#).

## 5.3. Built Environment and Community Lifelines and Assets

Using the best Hazus data available, scenarios were run at the county level for earthquakes, floods, and hurricane winds to determine potential exposure of buildings, infrastructure, and the economy. Information presented in [Annex 7; Fairfax County](#) includes the Town of Vienna.

Vulnerabilities include structures, systems, resources, and other assets defined by the community as susceptible to damage and loss from hazard events. The vulnerability of critical infrastructure is presented in the lifeline sector categories identified by FEMA.

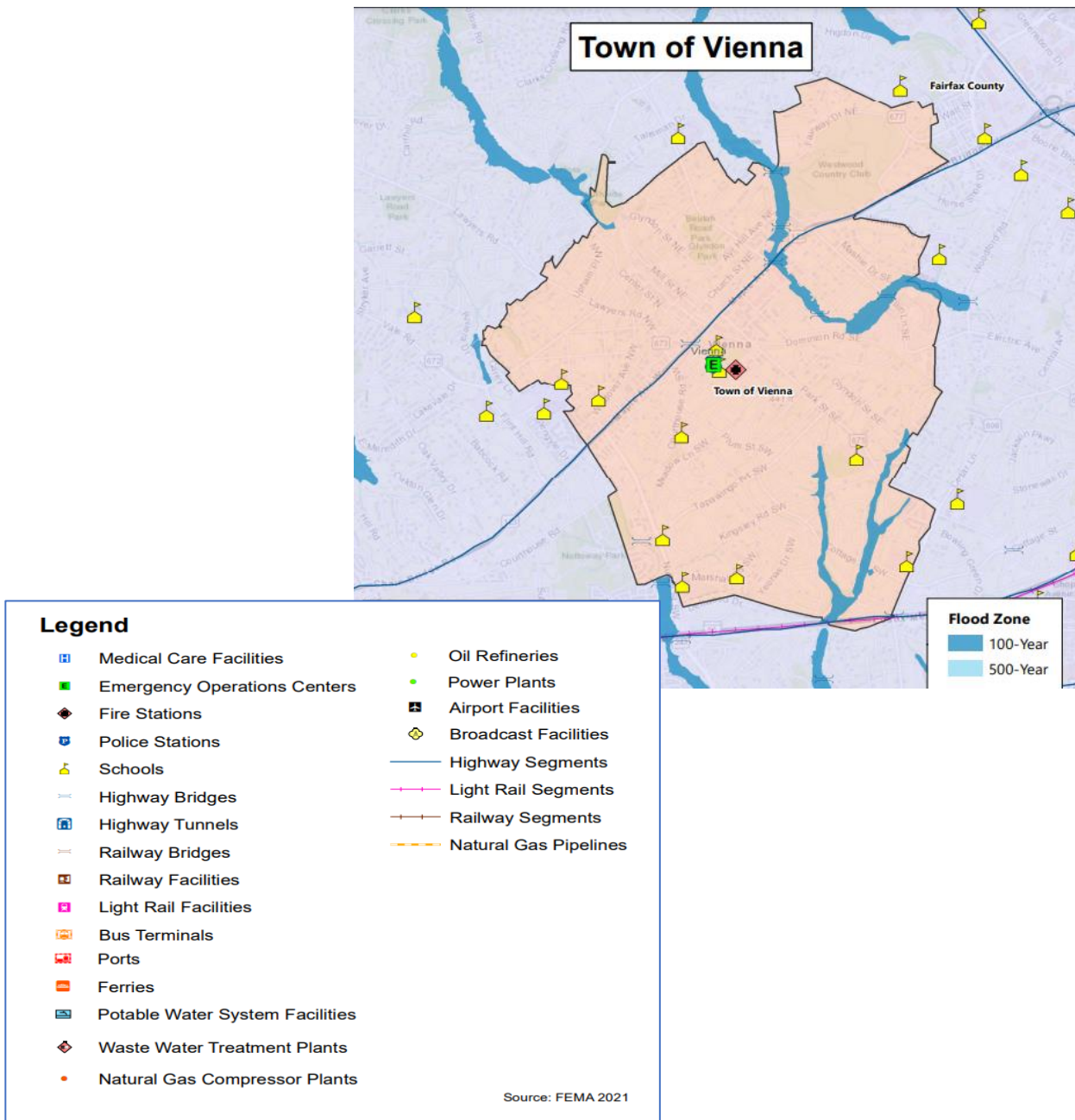
**Table 17: Community Lifelines/Critical Facilities Exposed to FEMA Floodplains, Town of Vienna<sup>13</sup>**

Facility Type	In 100-Year Floodplain	In 500-Year Floodplain	TOTAL
Highway Bridges	8	6	14
Highway Segments	1	1	2

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<sup>13</sup> Hazus



**Figure 7: Critical Facilities in 100- and 500-Year Floodplains, Town of Vienna<sup>14</sup>**<sup>14</sup> Hazus, Flood Scenarios, August 3, 2021.

## 5.4. Environment

Information related to environmental vulnerability is presented in the hazard-specific sections of the **Base Plan**.

## 5.5. Economy

Information related to economic vulnerability is presented in the hazard sections of the **Base Plan**.

## 5.6. Cultural/Historical

Information related to the vulnerability of cultural and historical assets is presented in the hazard-specific sections of the **Base Plan**.

Historic structures and sites are frequently more vulnerable to flood hazards due to the typical development of a city or town along a waterway. Because removing historic structures from their original site affects their historical value, there are challenges to protecting these fragile sites.

The Town's provisions for historic properties require oversight of the process for review and approval of applications for any plans related to construction, repair, alteration, or modification of buildings and structures in the Town to ensure that these plans are consistent with historic preservation principles and guidelines. The historic designation assists in making sure that appropriate measures are applied in post-disaster impact conditions to protect cultural and historical assets from inappropriate repair, demolition, or redevelopment.

## 6. Capability Assessment

The Town of Vienna reviewed its legislative and departmental capabilities to identify resources, strengths, and gaps for implementing hazard mitigation efforts. Using a Capabilities Assessment Worksheet, the community documented existing institutions, plans, policies, ordinances, programs, and resources that could be brought to bear on implementing the mitigation strategy. The capabilities in relation to hazard mitigation were assessed in the following categories:

- Planning and regulatory
- Administrative and technical
- Safe growth
- Financial
- Education and outreach

### 6.1. Capability Assessment Summary, Ranking, and Gap Analysis

The Town ranked the level of capability in relation to each assessment category as a means of identifying where elements could be strengthened or enhanced. Capabilities were ranked on a qualitative basis as demonstrated by the Town's authorities, programs, plans, and/or resources:

- **Limited:** The jurisdiction has limited capabilities within this category and is generally unable to implement most mitigation actions.
- **Low:** The jurisdiction has some capabilities within this category and can implement a few mitigation actions.
- **Moderate:** The jurisdiction has some capabilities within this category, but improvement is needed in order to implement some mitigation actions.
- **High:** The jurisdiction has significant capabilities within this category as demonstrated by its authorities, programs, plans and/or resources, and can implement most mitigation actions.

**Table 18: Capability Assessment Summary Ranking for Town of Vienna**

Capability	Ranking
Planning and Regulatory	Moderate
Administrative and Technical	Moderate
Safe Growth	Moderate
Financial	Moderate
Education and Outreach	Moderate

#### 6.1.1. Planning and Regulatory Capabilities Summary

Vienna utilizes the all-hazards approach when developing any jurisdictional plans, including emergency operations, continuity of operations, hazard-specific plans, and the hazard mitigation plan.

The following plans and studies have been developed or updated since the 2017 HMP:

- Town of Vienna Comprehensive Plan, 2015 Update, amended October 5, 2020.
- Town of Vienna Capital Improvement Plan.
- Town of Vienna 2019 Strategic Plan.
- Town Code, Chapter 17-Subdivision Ordinance, Chapter 18-Zoning Ordinance, and Chapter 18.1- Floodplain Ordinance.
- Multi-Modal Transportation and Land Use Study.
- Fairfax County Community-Wide Energy and Climate Action Plan (CECAP).
- Fairfax County Emergency Operations Plan dated June 2019.
- Fairfax County Pre-Disaster Recovery Plan dated April 2020.

In addition to the plans mentioned above, Vienna maintains a stormwater management plan and a historic preservation plan. The Town's comprehensive, capital improvement, and stormwater management plans address natural and non-natural hazards and mitigation projects. Examples include resiliency planning for extreme weather events and sewer and drainage capital improvements. They are currently in the process of developing an economic development plan.

### **Capability Analysis: Moderate**

The Town of Vienna maintains plans and regulations that support appropriate development and limit impacts in hazard-prone areas. The capability assessment confirmed that projects or actions can be incorporated into the Strategic Plan and Capital Improvement Plan to address priorities that should reduce the risk of specific hazards, such as a flood. The Town maintains a floodplain ordinance and stormwater management plan. The Town has a zoning compliance officer and enforces Chapter 18 of the Town Code, which prohibits construction on land subject to periodic or recurring flooding from stormwater or erosion. The Town is currently working with FEMA to update flood maps and is in the process of preparing an economic development plan. The Town notes the following areas for improvement: increased staffing, increased public education, and enhancement of code and plan enforcement.

#### ***6.1.2. Administrative and Technical Capabilities Summary***

- The engineer has an understanding of natural and manmade hazards and is trained in construction practices related to buildings and infrastructure.
- The Town has a Floodplain manager, a surveyor, and grant writers.
- The Town Clerk may assist with grant writing, but this is not defined as a specific job duty.
- The Police Department has an emergency manager and staff with the expertise to assess the community's vulnerability to hazards.
- Warnings are issued through the IT Department and Public Information Officer.

### **Capability Analysis: Moderate**

The Town of Vienna currently has limited emergency management staffing capabilities; however, the 2019 Strategic Plan describes establishing an emergency management division and creating an emergency management operations center in the new police facility as action steps with target dates of 2020 and 2022, respectively. The Town identified the following areas for improvement in its administrative and technical capabilities:

- Secure additional staff.
- Look for grant opportunities to expand capabilities.
- Conduct tabletop exercises with the Fairfax County Department of Emergency Management and Security to improve coordination and face time.
- Summary of Safe Growth Capabilities.
- Growth guidance instruments include land use and environmental policies that maintain and protect development in vulnerable areas.
- The capital improvement program provides funding for hazard mitigation projects identified in the NOVA HMP.

### **Capability Analysis: Moderate**

The Town of Vienna has significant safe growth regulatory and enforcement capabilities to limit or prevent inappropriate development in identified hazard areas and protect the natural environment.

#### ***6.1.3. Safe Growth Summary***

- Growth guidance instruments include the Town's zoning ordinance and site plan review requirements.
- The Capital Improvement Program currently does not provide funding for hazard mitigation projects identified in the NOVA HMP.

### **Capability Analysis: Moderate**

The Town of Vienna has a moderate capacity to address growth. The Town is currently undertaking a community intensive effort to clarify, simplify, reorganize, and update its zoning and subdivision ordinance. The current ordinance addresses the floodplain, flood damage prevention, and post-disaster. Additional staffing and enhanced enforcement of codes and plans are needed to increase the Town's capability.

#### ***6.1.4. Financial Capabilities Summary***

- Current capital improvement projects address roadways and storm drainage.
- The Town has the authority to levy taxes for specific purposes and incur debt through general obligation bonds, but it is unlikely to do so.

The Town imposes impact fees for new subdivisions and utilizes a stormwater utility fee.

- The Town participates in the Community Development Block Grant program and other federal and state funding programs.

### **Capability Analysis: Moderate**

The Town of Vienna has identified the need for funding and more staff positions to improve financial capabilities.



### 6.1.5. Education and Outreach Capabilities Summary

- The Town publicized the public survey for the NOVA HMP update process by sending out flyers, publishing e-newsletters, advertising at public works, and posting on social media.
- Historic Vienna, Inc. is a local non-profit organization focused on preserving the cultural and historical assets of the community. The organization is proactive in educating the public about the importance and protection of these assets.
- Fairfax County is designated as a StormReady community, which means that the Town is included in components of public education and training.
- The Fairfax County Park Authority promotes the concepts and actions of the FireWise program.
- The county partners with local schools to participate in the Student Tools for Emergency Planning (STEP) program curriculum, which includes teaching fifth-grade students how to pack an emergency preparedness bag.
- Community Rating System initiatives within the NFIP program can increase public awareness of and involvement in hazard mitigation.

#### Capability Analysis: Moderate

The Town has existing education and outreach mechanisms that can be utilized to increase awareness about mitigation. The Town relies significantly on Fairfax County to implement education and outreach related to hazard mitigation. This capability can be enhanced by having the Virginia Department of Emergency Management mitigation staff provide technical assistance to support increased jurisdictional involvement. Many hazard mitigation educational tools and materials are available from state agencies, as well as disaster preparedness and response organizations such as the American Red Cross, FEMA, and faith-based organizations with disaster response missions.

## 6.2. Capability Summary – Activities that Reduce Natural Hazard Risk or Impacts

As a component of the capability assessment, the Town of Vienna identified activities related to each natural hazard that support risk reduction.

**Table 19: Capability Summary - Activities that Reduce Natural Hazard Risk or Impacts**

Hazard	Activity
Drought	Public education and operational plans address preparedness and response to reduce risk. Land use and environmental policies acknowledge the importance of protecting the natural environment.
Earthquake	State and international building codes provide for seismic design regulations. Public education and operational plans address preparedness and response to reduce risk.
Extreme Temperature	Public education and operational plans address preparedness and response to reduce risk.

Hazard	Activity
Flood/Flash Flood	Floodplain administration and regulations ensure that inappropriate activities and future development in the floodplain are prohibited. Stormwater management program and projects address flood prevention and risk reduction.
High Wind/Severe Storm	State and international building codes provide for wind load design regulations.
Landslide	Land use and environmental policies acknowledge the importance of protecting the natural environment.
Winter weather	Public education and operational plans address preparedness and response to reduce risk.
Tornado	Public education and operational plans address preparedness and response to reduce risk.
Wildfire	Public education and operational plans address preparedness and response to reduce risk.
Non-Natural Hazards	Public education and operational plans address preparedness and response to reduce risk. Beginning with the 2022 NOVA HMP, hazard mitigation planning is being integrated into existing planning and risk reduction activities for technological and human-caused hazards.
Climate Change	Ongoing resilience planning and utilizing the <i>Community-wide Energy and Climate Action Plan</i> will allow for the identification and mitigation of climate change-related issues in future planning cycles.

## 7. Resilience to Hazards

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### 7.1. National Risk Index

The National Risk Index (NRI) provides an overview of hazard risk, vulnerability, and resilience. The designation of “low risk” is driven by lower loss due to natural hazards, lower social vulnerability, and higher community resilience. The NRI is a dataset and online tool developed by FEMA and other partners to help illustrate communities in the United States at risk for 18 natural hazards. Hazard risk is calculated on data for a single hazard type and reflects the relative risk for that hazard type and should be considered only as a baseline relative risk measurement for the purpose of a general comparison with the local hazard risk ranking in the Hazard Risk Ranking section of this annex. In addition, some hazards are defined differently from the hazards in this plan, so a direct hazard-to-hazard comparison of risk cannot be determined. The NRI is a county-level risk ranking, which includes towns and is presented in [Annex 7, Fairfax County, Section 7.4](#).

### 7.2. New Hazard Risk Challenges or Obstacles to be Monitored in the Next Planning Cycle

- Climate change

## 8. Mitigation Actions

### 8.1. Goals and Objectives

The Town of Vienna Planning Team adopted the regional goal statement presented in [Section 8, Base Plan](#).

### 8.2. Status of Previous Actions

The Town of Vienna reviewed the mitigation actions in the 2017 NOVA HMP to identify the current status. Some projects that contribute to risk reduction may have been completed or are currently in progress, but have not been included in this update for one of the following reasons:

- Project funding has been approved, received, or identified, and additional resources are not needed to complete the project.
- The project scope is inconsistent with the hazard mitigation planning goals defined in this plan.
- The responsible department, agency, or organization maintains an internal tracking system that documents progress and resulting risk reduction.

The Town decided to retain all 12 mitigation actions from previous plans for the 2022 NOVA HMP update.

### 8.3. New Mitigation Actions

The Town of Vienna Planning Team identified three new mitigation actions that, along with the 12 retained actions, will be implemented in the next planning cycle. Proposed actions address risks consistent with the jurisdiction's highest risk hazards, i.e., floods/flash floods and high winds/severe storms, in addition to actions that address hazard mitigation education programs for all hazards. [Attachment 3](#) of this annex includes a table that lists the new mitigation actions for the Town of Vienna.

### 8.4. Action Plan for Implementation and Integration

The Town of Vienna Emergency Management Coordinator in the Police Department is responsible for coordinating the implementation of the hazard mitigation activities. The designated Coordinator will monitor the implementation of the jurisdiction's actions and participate in the implementation of the multi-jurisdictional regional plan, as related to the Town of Vienna. Tasks to ensure that the Town's actions are implemented are integrated into the *Action Plan for Implementation and Integration* (which includes the prioritized list of Mitigation Actions) and plan maintenance procedures described in the next section. The Action Plan for Implementation and Integration describes how the Town's hazard mitigation risk assessment and goals will be incorporated into its existing plans and procedures.

**Table 20: Action Plan for Implementation and Integration, Town of Vienna**

Existing Plan or Procedure	Description of How Mitigation Will Be Incorporated or Integrated
Integrate goals into the local comprehensive plan.	Continue to coordinate with the Planning and Zoning Department and other applicable departments to incorporate current and emerging risks and actions into planning efforts.

Review/update land development regulations for consistency with mitigation goals.	Continue coordination with the Planning and Zoning Department regarding future land use projects.
Review/update building/zoning codes for consistency with mitigation goals.	Work with the Zoning Administrator regarding Town zoning ordinances and consistency with mitigation goals.
Maintain regulatory requirements of the floodplain management program (NFIP).	Support the Department of Planning and Zoning, which is responsible for floodplain management.
Continue public engagement in mitigation planning.	Continue to promote awareness of hazards and incorporate public feedback into planning processes.
Identify opportunities for mitigation education and outreach.	Identify opportunities to conduct community outreach to promote the importance of mitigation projects.
Review/update emergency plans to address evacuation and sheltering.	Evacuation has been identified as a priority incident annex to be developed as part of the 2021 update to the Town's EOP.
Maintain ongoing enforcement of existing policies.	Support the Department of Planning and Zoning with any applicable enforcement policies.
Monitor funding opportunities.	The Police Department will continue to monitor funding sources and coordinate with Departments on projects that support mitigation actions.
Incorporate goals and objectives into day-to-day government functions.	The Police Department will incorporate the concept of mitigation into day-to-day government functions, including continual monitoring of the action items identified in the 2022 update.
Incorporate goals into day-to-day development policies, reviews, and priorities.	Continue to work with the Departments of Public Works and Planning and Zoning to incorporate mitigation into day-to-day activities.

## 9. Annex Maintenance Procedures

### 9.1. Maintenance of the NOVA HMP, Base Plan

The point of contact for the Northern Virginia Mitigation Project Team is the facilitator for the process to monitor, evaluate, and update the **NOVA HMP, Base Plan**. This facilitator is responsible for initiating the annual activities, convening the NOVA Planning Team (made up of the Emergency Managers Group and Planning Group), and providing follow-up reports to designated entities defined in the method and schedule for the plan maintenance process, as outlined in **Section 3, Base Plan**.

**Table 21: Town of Vienna Plan Maintenance Responsibilities for the *Northern Virginia Hazard Mitigation Plan, Base Plan***

Activity	Responsibilities
Monitoring the Plan	Represent the jurisdiction during the monitoring process. Collect, analyze, and report data to the NOVA Planning Team. Maintain records and documentation of all jurisdictional monitoring activities. Assist in disseminating reports to stakeholders and the public. Promote the mitigation planning process with the public and solicit public input.
Evaluating the Plan	Represent the jurisdiction during the evaluation process. Collect and report data to the NOVA Planning Team. Maintain records and documentation of all jurisdictional evaluation activities. Assist in disseminating information and reports to stakeholders and the public.
Updating the Plan	Represent the jurisdiction during the planning cycle, including plan review, revision, and update process. Collect and report data to the NOVA Planning Team. Maintain records and documentation of all jurisdictional plan review and revision activities. Help disseminate reports to stakeholders and the public.

### 9.2. Maintenance of the Jurisdiction Annex

In addition to maintenance of the **NOVA HMP Base Plan**, the Town of Vienna Mitigation Planning Coordinator will facilitate the method and schedule for maintaining the **Jurisdiction Annex**. The Town's maintenance method and schedule may coincide with that of Fairfax County and be conducted simultaneously.

#### 9.2.1. Plan Maintenance Schedule

- **Monitor:** Annually and/or following major disaster(s)
- **Evaluate:** Annually and/or following a major disaster(s)
- **Update:** Annual tasks over the five-year planning cycle; planning process in the fifth year

**Table 22: Town of Vienna Jurisdiction Annex Maintenance Procedure**

Activity	Procedure and Schedule	Outcome
Monitoring the Annex	<ol style="list-style-type: none"> <li>1. Schedule the annual plan review with the jurisdiction planning team.</li> <li>2. Review the status of all mitigation actions, using the <i>Mitigation Action Implementation Worksheet</i> (<b>Section 3, Attachment A, NOVA HMP Base Plan</b>).</li> </ol>	<ul style="list-style-type: none"> <li>• Produce an annual report that includes the following: <ul style="list-style-type: none"> <li>▪ Status update of all mitigation actions</li> <li>▪ Summary of any changes in hazard risk or vulnerabilities and capabilities</li> <li>▪ Summary of activities conducted for the Action Plan for Implementation and Integration</li> </ul> </li> </ul>
Evaluating the Annex	<ol style="list-style-type: none"> <li>1. Schedule the annual plan evaluation with the jurisdiction planning team.</li> <li>2. Evaluate the current hazard risks and vulnerabilities, and hazard mitigation capabilities using the <i>Planning Considerations Worksheet</i> (<b>Section 3, Attachment C, NOVA HMP Base Plan</b>).</li> </ol>	<ul style="list-style-type: none"> <li>• Submit the annual report to the NOVA HMP Project Team Point of Contact</li> </ul>
Updating the Annex	<ol style="list-style-type: none"> <li>1. Coordinate with Fairfax County and the Northern Virginia jurisdictions to identify the method and schedule for the five-year update of the NOVA HMP.</li> <li>2. Participate in the planning process.</li> <li>3. Provide input related to the plan components.</li> <li>4. Following FEMA Approvable Pending Adoption (APA) designation, adopt the updated plan.</li> </ol>	<ul style="list-style-type: none"> <li>• Adoption of the FEMA-approved plan every five years will maintain the jurisdiction's eligibility for federal post-disaster funding.</li> </ul>

Mitigation actions presented in this Jurisdiction Annex may be reviewed, revised, and updated at any time.

The Town of Vienna will continue to partner with multiple jurisdictions and regional entities, including Fairfax County, to identify hazard mitigation opportunities that reduce the risk of the hazards identified in this plan.



## 10. Annex Adoption

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The Town of Vienna Jurisdiction Annex will be adopted simultaneously with the adoption of the *Northern Virginia Hazard Mitigation*.

## 11. Attachments

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- Attachment 1: Adoption Resolution
- Attachment 2: Documentation of Public Participation
- Attachment 3: Mitigation Action Worksheets

## 11.1. Attachment 1: Adoption Resolution

[This page is a placeholder for the Adoption Resolution for this Jurisdiction]

## 11.2. Attachment 2: Documentation of Public Participation



Figure 8: Public Survey Outreach

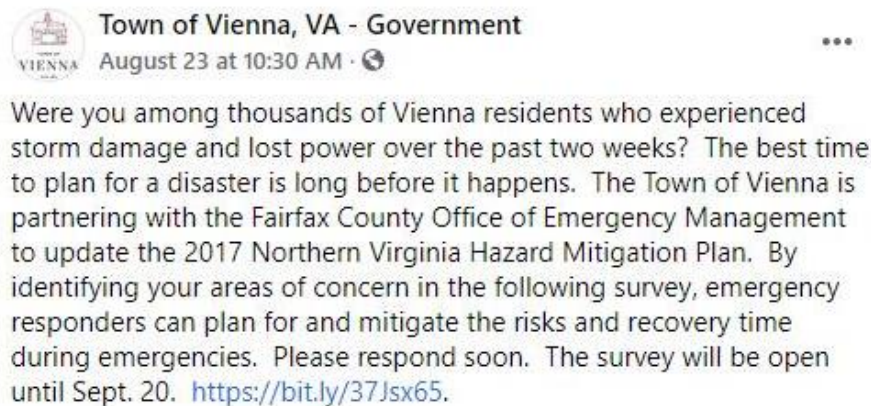
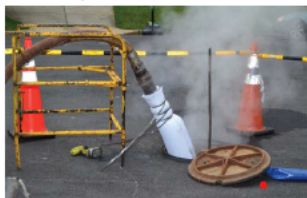


Figure 9: Public Survey Outreach social media

## Keeping it Moving Along the Pipeline



The next time you see Vienna public works staff huddled around a manhole, remember, there's usually no cause for alarm. Each year, the Department of Public Works assesses sanitary sewers, identifies those that are showing signs of deterioration and relines them as needed. The preventive maintenance helps assure trouble-free service to the town's homes and businesses.

"It's all about customer service in the end," said project engineer Frank Torre. "Relining the pipes only requires one day of work and can save weeks of construction impacts, traffic disruption, costs, and headaches if we were to dig and replace the pipes every time they needed repair."

Each sewer location and relining project is carefully planned and executed through a process known as the cured-in-place pipe-lining process (CIPP). CIPP creates a new interior surface inside existing sewer mains, with little noise and disruptions associated with traditional sewer line replacements.

Before any work is done, crews check for obstructions in the public portion of drain system. If there aren't any obstructions, a liner made of fabric and felt resin is inserted underground. As this happens, hot steam is pumped throughout the 8-inch sewer, which helps to unroll and then harden the liner inside the existing sewer pipe. The liner unrolls itself in the sewer pipe, much like putting on a sock. It takes three to four hours for the new liner to cure and cool, after which the crew uses a robotic cutter guided by a special camera to cut openings for private sewer lateral connections to homes or businesses. Residents are then free to use their sewer systems again.

Of course, if pipes are beyond repair, they are replaced. But with annual assessments, the Department of Public Works can often identify priorities before they become sewer emergencies and address problem areas with this cost-effective and efficient sewer lining process - CIPP. 📞

## Friendly Reminder: Mind your Manners

The Freeman Store and Museum is one of the most treasured historic landmarks in town. It's listed on the Virginia Landmarks Register and on the National Register of Historic Places.

But more and more these days, children left unsupervised have created front-step scenes like this, which is not only disrespectful, but it also creates unsafe conditions for visitors who may slip and fall on the unstable surface. The pebble-throwing happens so frequently, thinly stretched park crews are having a tough time keeping the steps clean. When visiting the Freeman Store with children, please be mindful of their activities and discourage throwing pebbles on the front steps of this 163-year-old treasure! 📞



## Public Meetings Move

Due to Town Hall elevator construction, all regular Town Council meetings, Planning Commission meetings and several other public meetings will be held at the Community Center beginning Oct. 11 through the end of 2022. Council conference sessions and some other public meetings will be held at the police department community room. For location details, visit the online Town Calendar: [www.viennava.gov/calendar](http://www.viennava.gov/calendar). 📞

## Help Mitigate Hazards!



The best time to plan for a disaster is before it happens. That's why the Town of Vienna Police Department is partnering with the Fairfax County Office of Emergency Management to update the Northern Virginia Hazard Mitigation Plan, and the planners need your help! The goal is to minimize or eliminate long-term risks to human life and property from known hazards such as droughts, floods, winter weather,

high winds and other major disasters. The final draft of the plan is done, and now the public safety officers want to know what you think! Please review the Vienna portion of the plan at this link: [www.nvers.org/hmp](http://www.nvers.org/hmp) and email feedback to [NOVA2022PublicComment@iem.com](mailto:NOVA2022PublicComment@iem.com) by 5 p.m. on Oct. 8. Your comments will help inform the plan for disaster mitigation and response for the next five years! 📞

Figure 10: Final Draft Public Comment Outreach

## 11.3. Attachment 3: Mitigation Actions

**Table 23: Previous Mitigation Actions**

Project No.	Agency/Department Mitigation Action	Lead Agency/ Department/ Organization	Hazard	Funding Source	Target Completion Date	Interim Measure of Success	Priority	Current Status
2010-1	Assess the roadway structure at various intersections throughout the Town of Vienna to avoid repeated flooding.	Public Works Department	<ul style="list-style-type: none"> <li>Flood</li> <li>High Winds</li> <li>Severe Storm</li> </ul>	Hazard Mitigation Assistance grant funding, County Funding	Ongoing	Identify funding sources by January 2025.	High	Retain
2010-2	Continue to identify and employ a broad range of warning systems throughout the Town of Vienna.	Police Department	<ul style="list-style-type: none"> <li>All Hazards</li> </ul>	UASI funding, DHS grants, Town/County funding	Ongoing	Identify one new warning system to utilize by December 2025.	High	Retain
2010-3	Conduct annual outreach to FEMA-listed repetitive loss and severe repetitive loss property owners, providing information on mitigation programs (grant assistance, mitigation measures, flood insurance) that can assist them in reducing their flood risk.	Police Department	<ul style="list-style-type: none"> <li>Flood</li> <li>High Winds</li> <li>Severe Storm</li> </ul>	FEMA Unified Hazard Mitigation Assistance funding for qualified structures	Ongoing	Develop outreach materials or identify appropriate outreach materials for dissemination by June 2025.	Medium	Retain
2010-4	Support mitigation of priority flood-prone	Police Department	<ul style="list-style-type: none"> <li>Flood</li> </ul>	FEMA Unified Hazard	Ongoing	Identify all priority flood-	Medium	Retain



Project No.	Agency/Department Mitigation Action	Lead Agency/ Department/ Organization	Hazard	Funding Source	Target Completion Date	Interim Measure of Success	Priority	Current Status
	structures through the promotion of acquisition/demolition, elevation, flood-proofing, minor localized flood control projects, and mitigation reconstruction where feasible. Use FEMA HMA programs where appropriate.		<ul style="list-style-type: none"> <li>• High Winds</li> <li>• Severe Storm</li> </ul>	Mitigation Assistance funding for qualified structures		prone structures by December 2025.		
2010-5	Promote structural mitigation to assure redundancy of critical facilities, including but not limited to roof structure improvement, meeting or exceeding building code standards, upgrading of electrical panels to accept generators, etc.	Police Department	<ul style="list-style-type: none"> <li>• Flood</li> <li>• High Winds</li> <li>• Severe Storm</li> </ul>	FEMA Unified Hazard Mitigation Assistance funding for qualified structures	Ongoing	Query local government building services staff as to the effectiveness of provided information regarding the structural review.	Medium	Retain
2010-6	Review locality's compliance with the National Flood Insurance Program with an annual review of the Floodplain ordinances and any newly permitted activities in the 100-year floodplain. Additionally, conduct an annual	Police Department	<ul style="list-style-type: none"> <li>• Flood</li> <li>• High Winds</li> <li>• Severe Storm</li> </ul>	General Funds	Ongoing		Medium	Retain

Project No.	Agency/Department Mitigation Action	Lead Agency/ Department/ Organization	Hazard	Funding Source	Target Completion Date	Interim Measure of Success	Priority	Current Status
	review of repetitive loss and severe repetitive loss property list requested of VDEM to ensure accuracy. Review will include verification of the geographic location of each repetitive loss property, a determination on whether that property has been mitigated, and if so by what means. Provide corrections if needed by filing form FEMA AW-501.							
2017-1	Assess the roadway structure at various intersections throughout the Town of Vienna to avoid repeated flooding.	Public Works Department	<ul style="list-style-type: none"> <li>Flood</li> <li>High Winds</li> <li>Severe Storm</li> </ul>	Hazard Mitigation Assistance grant funding, County Funding	Ongoing	Identify funding sources by January 2022.	High	Retain
2017-2	Continue to identify and employ a broad range of warning systems throughout the Town of Vienna.	Police Department	<ul style="list-style-type: none"> <li>All Hazards</li> </ul>	UASI funding, DHS grants, Town/ County funding	Ongoing	Identify one new warning system to utilize by December 2022.	High	Retain
2017-3	Conduct annual outreach to FEMA-listed repetitive loss and	Police Department	<ul style="list-style-type: none"> <li>Flood</li> <li>High Winds</li> </ul>	FEMA Unified Hazard Mitigation	Ongoing	In partnership with Fairfax County, seek	Medium	Retain

Project No.	Agency/Department Mitigation Action	Lead Agency/ Department/ Organization	Hazard	Funding Source	Target Completion Date	Interim Measure of Success	Priority	Current Status
	severe repetitive loss property owners, providing information on mitigation programs (grant assistance, mitigation measures, flood insurance information) that can assist them in reducing their flood risk.		<ul style="list-style-type: none"> <li>Severe Storm</li> </ul>	Assistance funding for qualified structures		to develop outreach materials or identify appropriate outreach materials for dissemination by June 2022.		
2017-4	Support mitigation of priority flood-prone structures through the promotion of acquisition/demolition, elevation, floodproofing, minor localized flood control projects, mitigation reconstruction where feasible. Use FEMA HMA programs where appropriate.	Police Department	<ul style="list-style-type: none"> <li>Flood</li> <li>High Winds</li> <li>Severe Storm</li> </ul>	FEMA Unified Hazard Mitigation Assistance funding for qualified structures	Ongoing	Identify all priority flood-prone structures by December 2022.	Medium	Retain
2017-5	Promote structural mitigation to assure redundancy of critical facilities, including but not limited to roof structure improvement, meeting or exceeding building code standards, upgrading of electrical	Public Works Department	<ul style="list-style-type: none"> <li>Flood</li> <li>High Winds</li> <li>Severe Storm</li> </ul>	FEMA Unified Hazard Mitigation Assistance funding for qualified structures	Ongoing	Query local government building services staff as to the effectiveness of provided information regarding the	Medium	Retain

Project No.	Agency/Department Mitigation Action	Lead Agency/ Department/ Organization	Hazard	Funding Source	Target Completion Date	Interim Measure of Success	Priority	Current Status
	panels to accept generators, etc.					structural review.		
2017-6	Review locality's compliance with the National Flood Insurance Program with an annual review of the Floodplain ordinances and any newly permitted activities in the 100-year floodplain. Additionally, conduct an annual review of repetitive loss and severe repetitive loss property list requested of VDEM to ensure accuracy. The review will include verification of the geographic location of each repetitive loss property, a determination on whether that property has been mitigated, and if so, by what means. Provide corrections if needed by filing form FEMA AW-501.	Police Department	<ul style="list-style-type: none"> <li>• Flood</li> <li>• High Winds</li> <li>• Severe Storm</li> </ul>	General Funds	Ongoing	In partnership with Fairfax County, establish a schedule of review and review committee (if necessary) by June 2025.	Medium	Retain

Table 24 New Mitigation Actions

Project No.	Agency/ Department Mitigation Action	Lead Agency/ Department/ Organization	Hazard(s)	Funding Source	Target Completion Date	Interim Measures of Success	Priority	Comments
2022-1	Work with FEMA to reexamine flood zones and update FIRMS. Use this information to reevaluate NFIP activities.	Public Works Department	<ul style="list-style-type: none"> <li>Flood</li> <li>High Winds</li> <li>Severe Storm</li> </ul>	FEMA Unified Hazard Mitigation Assistance Funding, Town's capital budget	Ongoing	Multiyear project; meet FEMA deadlines throughout project.	Medium	Use this information to reevaluate NFIP activities.
2022-2	Continue to implement building and development standards as required under the NFIP.	Planning and Zoning Department	<ul style="list-style-type: none"> <li>All Hazards</li> </ul>	Hazard Mitigation Assistance grant funding, U.S. Army Corps of Engineers, Town funding, VDEM		Implement one new standard every year.	Medium	When updates are made to building and development standards, they are reviewed and incorporated as appropriate. All new policies and procedures are in accordance with the NFIP.
2022-3	Develop an outreach/ education program aimed at promoting hazard mitigation for the residents of Vienna.	Police Department and Planning and Zoning Department	<ul style="list-style-type: none"> <li>All Hazards</li> </ul>	Town funding			High	This program will be completed when funding becomes available.