

TOWN OF EASTVILLE

TOWN PROFILE

Eastville is located near the central spine of the Eastern Shore in the central region of Northampton County and encompasses approximately 160 acres. Approximately 60% drains into the Chesapeake Bay and 40% drains into the Atlantic Ocean. The Town has a rich history dating back to its establishment in 1677 when the community was known as “the Hornes” and was the site for colonial court. Eastville was incorporated in 1897 and has a wealth of 18th century buildings in Town. Eastville is the Northampton County seat and the Courthouse houses the oldest continuously documented court records in the nation. The Town has developed and changed modestly over time with the construction of the railroad and U.S. Route 13, which bisect the Town. The Town’s predominant land-use is residential with a relatively smaller commercial district (*Eastville Comprehensive Town Plan, 2005*).



Figure 1: Town of Eastville Aerial Map

SOCIO-ECONOMIC

Part of assessing hazards in relation to their risk is understanding the people affected. Not all people are affected equally. Some are affected by the factors that relating to their ability to understand risks posed by hazards, and some by their ability to remove themselves from harm’s way. Those factors include age, mobility, income and the languages individuals speak and the languages in which individuals are able to access information.

DEMOGRAPHICS

The 2010 Census indicated that the Town had a population of 305, which is a 33.4% increase from the 203 people that lived in the Town during the 2000 Census. Since then, there is an estimated 236 people residing in the town in 2014 (American Community Survey, 2010 – 2014). This is a 22% decrease from the population in 2010. The median age for residents in Eastville is currently 39.1 and signified a population similar to that of the national average and younger than the Northampton County average. Almost all residents speak English, so hazard mitigation materials and outreach in other languages is not necessary for Eastville.

Table 1: Eastville Demographic Information

| | 2014*** | 2013** | 2010* | 2000**** |
|-------------------------|---------|--------|--------|----------|
| Population | 236 | 252 | 305 | 203 |
| Median Age | 39.1 | 48.8 | 37.4 | 40.8 |
| Disability | 0 | 8 | NA | NA |
| Income | | | | |
| Median Household Income | 73,333 | 50,000 | 55,179 | 36,250 |
| Poverty Level | 11.0% | NA | NA | NA |
| Language | | | | |
| Only English | 100% | 100% | NA | 98.9% |
| Other | | | | 1.1% |
| Ind-Euro | | | | 1.1% |

* U.S. Census 2010, ** American Community Survey 2009 – 2013, *** Annual Estimates of the Residential Population: 2010 – 2014, **** U.S. Census 2000

WORK FORCE

Employment patterns are important to examine for two reasons. It can help to identify concentrations of people for hazard information dissemination or hazard rescue and evacuation. It can also identify where disruptions in employment and income might occur in the aftermath of a disaster.

The Eastville workforce is largely professional or educational. The highest civilian employed population can be seen in 2014 when compared with 2010, with almost a 25% increase in employed civilians (American Community Survey 2010 – 2014; U.S. Census, 2010)

Table 2: Eastville Local Workforce

| Industry | Civilian Employed Population | | | | | | | |
|---|------------------------------|---------|-------|---------|-------|---------|--------|---------|
| | 2014* | | 2012* | | 2010* | | 2000** | |
| | Count | Percent | Count | Percent | Count | Percent | Count | Percent |
| Agriculture, forestry, fishing/hunting, or mining | 10 | 9.4% | 10 | 10.1% | 7 | 8.8% | 9 | 11.4% |
| Construction | 16 | 15.1% | 7 | 7.1% | 5 | 6.3% | 4 | 5.1% |

Eastern Shore of Virginia Hazard Mitigation Plan

| | | | | | | | | |
|---|-----|-------|----|-------|----|-------|----|-------|
| Manufacturing | 4 | 3.8% | 0 | 0.0% | 2 | 2.5% | 7 | 8.9% |
| Wholesale trade | 1 | 0.9% | 2 | 2.0% | 0 | 0.0% | 4 | 5.1% |
| Retail trade | 13 | 12.3% | 21 | 21.2% | 15 | 18.8% | 5 | 6.3% |
| Transportation and warehousing, and utilities | 7 | 6.6% | 5 | 5.1% | 7 | 8.8% | 2 | 2.5% |
| Information | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Finance, insurance, real estate, and rentals | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 3 | 3.8% |
| Professional, scientific, waste management | 21 | 19.8% | 23 | 23.2% | 16 | 20.0% | 8 | 10.1% |
| Educational, health care, social services | 20 | 18.9% | 27 | 27.3% | 8 | 10.0% | 22 | 27.8% |
| Arts, entertainment, recreation, food | 6 | 5.7% | 0 | 0.0% | 0 | 0.0% | 7 | 8.9% |
| Public Administration | 8 | 7.5% | 4 | 4.0% | 20 | 25.0% | 1 | 1.3% |
| Other | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 7 | 8.9% |
| TOTAL CIVILIAN EMPLOYED POPULATION | 106 | - | 99 | - | 80 | - | 79 | - |

Source: *ACS, 2009 – 2013, ** U.S. Census 2000

BUSINESSES

As the site of Northampton County Seat, the primary activity in Eastville is government, justice, and government services (*Eastville Comprehensive Plan, 2000*). The number of businesses in Eastville has stayed relatively stable, between 40 and 45. The number of employees, however, has declined between 2009 and 2013 by 47.8%.

Table 3: Eastville Business Types

| Industry Code Description | Total Establishments | | |
|--|----------------------|------------|------------|
| | 2013 | 2011 | 2009 |
| Agriculture, Forestry, Fishing, and Hunting | 1 | 1 | 1 |
| Construction | 3 | 3 | 4 |
| Manufacturing | 1 | 1 | 1 |
| Wholesale Trade | 1 | 0 | 1 |
| Retail Trade | 7 | 9 | 8 |
| Transportation and Warehousing | 1 | 1 | 1 |
| Information | 1 | 1 | 1 |
| Finance and Insurance | 2 | 3 | 3 |
| Real Estate and Rental and Leasing | 3 | 1 | 1 |
| Professional, Scientific, and Technical Services | 9 | 9 | 7 |
| Administrative and Support and Waste Management and Remediation Services | 3 | 2 | 3 |
| Health Care and Social Assistance | 1 | 2 | 4 |
| Accommodation and Food Services | 2 | 3 | 3 |
| Other Services (Except Public Admin) | 6 | 6 | 6 |
| Industries not classified | 1 | 0 | 0 |
| Total, All Establishments | 43 | 42 | 44 |
| Total Employees | 117 | 176 | 224 |

Source: Census Zip Code Business Patterns, 2009, 2011, 2013

Source: Census Zip Code Business Patterns, 2013

BUILT INFRASTRUCTURE

Housing units, community facilities, and transportation are all important factors when considering hazard resiliency. They provide the social services necessary during hazardous scenarios, safe cover for those wanting to stay, and a way to evacuate.

HOUSING UNITS

The housing stock in Eastville is primarily occupied and non-rental. According to the American Community Survey, there has been a significant increase in the number of housing units since 2010. Eastville’s housing is in relatively good condition (*Eastville Comprehensive Plan, 2000*), which is important during high wind events.

Table 4: Eastville Housing

| | 2014* | 2010* | 2000*** |
|-----------------------------|---------|-------|---------|
| Total Housing Units | 104 | 79 | 75 |
| Occupied | 92 | 69 | 69 |
| Vacant | 12 | 10 | 6 |
| Owner-Occupied | 65 | 49 | 50 |
| Renter-Occupied | 27 | 20 | 19 |
| Median Housing Value | 267,900 | NA | NA |

Source: * ACS, 2009 – 2013, ** U.S. Census 2010, *** U.S. Census 2000

TRANSPORTATION

U.S. Route 13 provides regional access and directs major traffic flow away from the town, while Business Route 13 provides safe access into and out of the Town. Public transportation is provided by STAR Transit which provides daily bus service along Route 13, as well as a good connector route across the Chesapeake Bay Bridge Tunnel. The streets and sidewalks are generally in good condition. The Town employs a person to clean the streets, curbs, and gutters on a regular basis (*Eastville Comprehensive Plan, 2000*).

According to the American Community Survey, there are very few households that without a vehicle, which indicates a capability for almost all residents to readily evacuate if needed.

Table 5: Eastville Resident Vehicles

| Vehicles Available | 2014* | 2010* | 2000** |
|--------------------|-------|-------|--------|
| None | 2 | 0 | 5 |
| One | 28 | 36 | 19 |
| Two | 52 | 26 | 28 |
| Three or more | 10 | 33 | 14 |

Source: * ACS, 2009 – 2013, ** U.S. Census 2000

COMMUNITY SERVICES AND FACILITIES

Community facilities are facilities required to support the services and functions provided by the Town government or in coordination with other public and private entities. These facilities enhance the overall quality of life for the Town and its citizens. It’s important to note what facilities are available in case of a hazard, and it’s important to make an inventory of facilities that could be affected by a hazard.

COMMERCIAL AREAS

There is little commercial activity in the center of Town. Commercial activity consists of a number of law offices, a funeral home, an insurance company, and a thrift shop. Other commercial establishments within the Town include a bank and a convenience store located on Route 13, as well as a restaurant and day care center located east of Route 13 (*Eastville Comprehensive Plan, 2000*).

PUBLIC SAFETY

Fire protection for the Town is provided by the Eastville Volunteer Fire Department. Police protection is provided by the Northampton County Sheriff's Department, and the Virginia State Police also provide additional services. Ambulance service is provided by the Cape Charles Rescue Squad, located in Bayview (*Town of Eastville Comprehensive Plan, 2000*).

WATER AND SEWER

The Town of Eastville relies on two wells, the primary well is located in the vicinity of Northampton County Sheriff's Department, at the intersection of Route 13 and Route 631. The backup well is located just outside the town's corporate limits, situated near the Town's water tank which is located east of the northern section of Courthouse Road. The water supply is good in both quantity and quality. The Town has a generator to serve as a backup source for electricity for the water pump (*Town of Eastville Comprehensive Plan, 2000*).

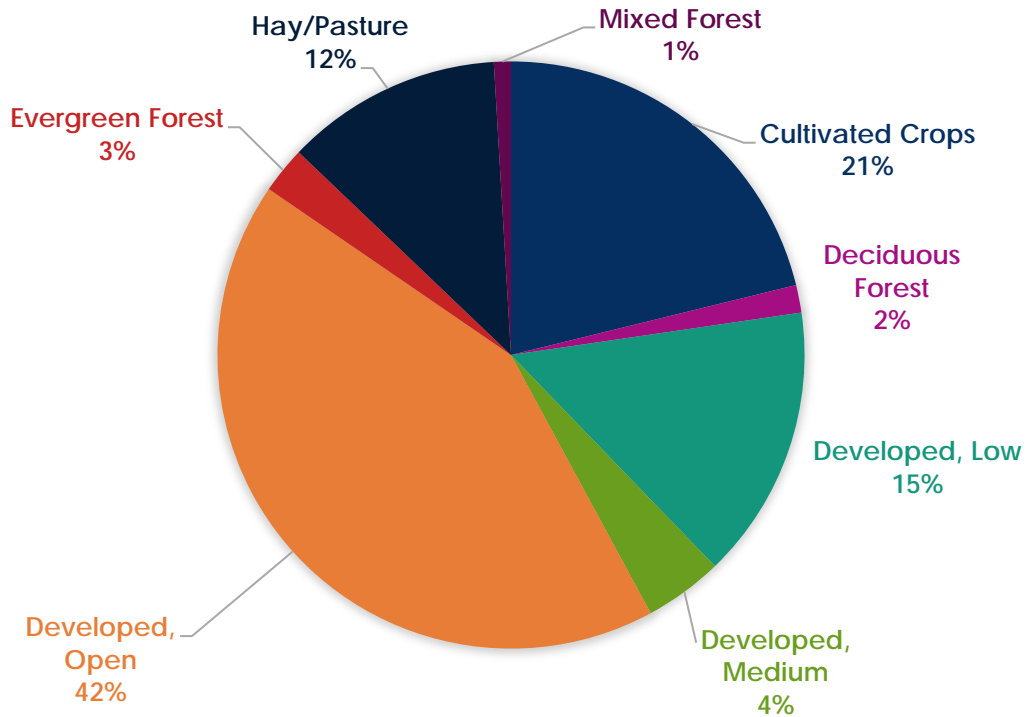
NATURAL ENVIRONMENT

Elevations in Eastville range from approximately 22 feet above mean sea level in the westernmost part of Town to 40 feet above mean sea level in the eastern portion. There are no perennially flowing surface water bodies in the Town. Drainage ditches on the eastern half of Town drain towards Indiantown and Taylor Creeks and ultimately to the Atlantic Ocean. Drainage ditches on the western side of Town drain towards the Gulf and ultimately to the Chesapeake Bay.

LAND USE LAND COVER

The Town of Eastville is comprised of 160 acres of land, most of which is developed. The developed land is primarily residential with single-family housing situated on large lots. The Town contains a limited amount of undeveloped land that is used of agriculture. These percentages are easily seen in Figure 2.

Town of Eastville



Source: USGS, National Land Cover Dataset, 2011

Figure 2: Eastville Land Use Land Cover Percentages

GROUND WATER

The Town of Eastville provides public water through a well which withdraws water from ground water aquifers. The Town's water supply is mostly withdrawn from the upper Yorktown aquifer. The majority of the Town lies within the Eastern Shore's spine recharge area. Limiting impervious surfaces in the spine recharge will allow rainfall to recharge the aquifers. The Town's water supply is protected by public well lots surrounding the Town's well, which offers wellhead protection, and there are state-mandated regulations restricting potential sources of contamination in the well lots.

HAZARD PREPAREDNESS & COMMUNITY CAPABILITIES

PREVIOUS HAZARD MITIGATION PLANS

Eastville has participated in the hazard mitigation planning process since 2011. During the 2006 Hazard Mitigation Plan the Town defaulted to the County. The Town’s primary hazard relates to storm water flooding.

Table 6: Town of Eastville Hazard Mitigation Resources

| | Ordinances, Plans, & Publications | | | | | | | | | | | | | Resources, Committees | | | | | | |
|-----------|-----------------------------------|--------------------|------|------------------------|--------------------|-----------|-------------------------|---|--------------------------|----------------------------|------------|----------------------|-----------------------------|------------------------------|---|------------------------|-------------------------------|----------------------------------|------------------------------------|--|
| Authority | Building Code | Chesapeake Bay Act | SWMP | Hazard Mitigation Plan | Comprehensive Plan | Ordinance | Storm Water Regulations | Transportation Infrastructure Inundation Vulnerability Report | All Hazards Preparedness | Emergency Operations Plans | Mutual Aid | Agreements/Documents | Neighborhood Emergency Help | Viginia Hurricane Evacuation | Oil & HazMat Response Plan; HazMat Commodity Flow | Ground Water Committee | Navigable Waterways Committee | Climage Adaptation Working Group | ES Disaster Preparedness Coalition | |
| Local | | | | | * | * | | | | | | | | | | | | | | |
| County | | | * | | | | | | | | | | | | | | | | | |
| Regional | | | | * | | | | * | * | * | | | | * | | * | * | * | * | |
| State | * | * | | | | | * | | | | | | | * | | | | | | |
| Federal | | * | | | | | | | | | | | | | | | | | | |

The Town’s comprehensive plan has not been updated since 2000, and their zoning ordinance is from 1995. They don’t emphasize many hazards other than the threat of ground water contamination.

NATIONAL FLOOD INSURANCE PROGRAM & HAZARD MITIGATION GRANT PROGRAM

The town does not participate in the NFIP and has not participated in the HMGP.

HAZARD PROFILE

Storm water flooding poses the greatest risk to the town and has the most frequent impact.

WIND

No parts of Town lie in the wind borne debris hazard area. This area extends 1-mile inland from the coast. The Town lies in the 110 mph design wind zone (Northampton County Building Code).

The vast majority of homes were constructed prior to the 1970s and are now over 40 years old. The Town’s aging building stock is at greater risk to damage from high wind events. Most of the residential areas are older and have mature trees around the homes. During a high wind event falling branches or trees may damage some structures and damage power lines. Town Staff indicated that hurricane-force winds will be extremely damaging to residences, Town facilities, trees and electrical infrastructure.

Hurricane Gloria in 1985, Hurricane Isabel in 2003, and Tropical Storm Ernesto in 2006 all impacted the Town with high winds and saturated soils resulting in damaged and up-rooted trees. Downed trees are very hazardous to power lines and can cause extensive power outages. The Town’s power grid serves Northampton County’s Emergency Services including the regional jail, Northampton County Sheriff’s Office, and Emergency Operations Center. In August 2011, power was lost during Hurricane Irene for nearly a day and many County facilities were impacted.

COASTAL EROSION

No structures are at immediate risk for coastal erosion.

COASTAL FLOODING

No portions of the Town lie within a Special Flood Hazard Area. The entire Town is located within the X zone, which is the 500-year floodplain. The threat of coastal flooding within the Town is considered to be minimal.

STORM WATER FLOODING

Storm water flooding poses the greatest risk to the town and has the most frequent impact. The Town relies on the Virginia Department of Transportation to perform maintenance on the main drainage ditches within the Town limits. Drainage issues are commonly experienced along Courthouse Road, Willow Oak Road east of Route 13, and at the northwestern side of the intersection of Route 13 and Willow Oak Road where the ditches aren’t maintained as regularly. Willow Oak Road receives flood waters from the Holland Court area and the Town has needed to fund the maintenance of drainage ditches here in the past.

HAZARDS OF LOCAL SIGNIFICANCE

GROUND WATER CONTAMINATION

The Town faces a threat of ground water contamination from several sources including failed septic systems within Town and leaks and spills of petroleum based products from underground and aboveground storage tanks. In Eastville, residents and commercial businesses rely on on-site septic systems for waste disposal. The Town has a public water supply that is protected according to state-mandated wellhead protection regulations. The Town’s water supply serves 169 hook-ups, 98 of which were within Town limits in 2005. The Town purchased a generator to serve as a backup power supply for the water pump serving the public water supply wells (Eastville Comprehensive Town Plan, 2005). No ground water problems currently exist in the vicinity of the Town, but increased water supply demand within the region could pose a future threat to ground water supply quantity and quality.

SNOW AND ICE

Winter snow and ice storms impacted the Town in the late 1990s and in 2010. These storms downed tree limbs and power lines and also forced local businesses to close for several days. Residents also had no electricity for several days. Emergency energy generation filled the needs for drinking water during the time of outage. Extreme cold weather events have historically caused damages to the Town’s water distribution system. During these events, pipes froze and burst and the Town’s water supply was at risk of contamination.

DROUGHT

The Town has significant agricultural lands that are impacted during droughts.

TORNADOES

Tornadoes have not historically hit within Town limits, but they have occurred on the outskirts of Town.

CRITICAL FACILITIES

The following table lists the critical facilities and their relative importance to the Town.

Table 7: Eastville Critical Facilities

| Facility | HMP '06 | HMP '11 | HMP '16 | Hazards | No of People Affected | Loss potential | Relocation Potential | Retrofit Potential |
|---|---------|---------|---------|-----------|-----------------------|------------------|----------------------|--------------------|
| Town-Owned Facilities | | | | | | | | |
| Eastville Town Office/Police Department | - | X | X | Wind | 13,000 | Major Disruption | No | Yes |
| Eastville Water Tower | - | X | X | Wind, Ice | 500 | Devastating | No | Yes |
| Eastville Water Distribution System | - | X | X | Wind | 500 | Devastating | Yes | Yes |

Town of Eastville

| | | | | | | | | |
|-------------------------------------|---|---|---|--|--------|---------------------|-----|-----|
| Eastville Municipal Wells | - | X | X | Contamination Storm water flooding | 500 | Major Disruption | Yes | No |
| Other Facilities (not Town-owned) | | | | | | | | |
| Eastville Volunteer Fire Department | - | X | X | Flooding Wind | 13,000 | Devastating | No | Yes |

FINDINGS

1. The hazards expected to have the greatest impact on the Town are stormwater flooding and high wind events, which have been experienced throughout the Town’s history. Other hazards facing the Town are groundwater contamination, ice storms and drought.
2. Residential areas have older construction and many mature trees. During a wind event, branches and trees may come down causing secondary wind damage and power outages.
3. The Town has no Special Flood Hazard Areas, but does experience significant stormwater flooding. The Town has expressed interest in joining the National Flood Insurance Program so that residents can purchase flood insurance. Currently there is only one policy in force in the Town.
4. The Town is interested in continuing to cooperate with VDOT to maintain drainage ditches in and around the Town. In the past and currently the Town has needed to provide funding and perform maintenance on state ditches.
5. The Town’s water distribution system is aging and becoming increasingly fragile and vulnerable to stormwater flooding events and extreme cold weather events.