

Town of Hampton, NH
DRAFT EXISTING
CONDITIONS ANALYSIS

August 2021



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Placework

RKG

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INTRODUCTION

The purpose of this existing conditions report is to provide a baseline understanding of Hampton as a community in 2021. This information will inform and guide the work of the Master Plan Committee, Town Staff, Consultant Team, and the public over the next year. The first section of this report includes short profiles of each of the traditional master planning topic areas. In each of these profiles we have presented data to better understand how Hampton has changed since the last master plan, and to identify key findings and emerging issues the Town should address. Each of these profiles is based on a longer document included in the Appendix. The files included in the Appendix provide a longer explanation of the data collected, some context related to the issues identified, and in some cases, recommendations that should be discussed later on in the process.

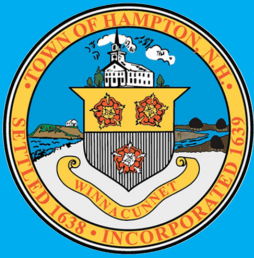
This report, and the profiles and resource documents included, will be used to guide and inform the planning team, and to engage the public during the various outreach activities planned over the coming year. Our hope is that this information will inform these conversations so that the participants can help the Town of Hampton identify what actions must be taken as a community during the next decade.



KEY FINDINGS ON TOPICS

- The town's population has plateaued over the past 20 years, and yet it is generally understood that Hampton's population still fluctuates dramatically over the course of a given year. The seasonal nature of the economy and strong presence of second homes in the town play a major role in this seasonal population change and impacts housing supply and demand, pricing, and affordability.
- Over the last nine years, Hampton has experienced a historically low amount of housing development. Fewer housing units in Hampton were built in the 2010s than in any decade going back to at least the 1940s.
- Over the past decade many rental housing units have transitioned to owner occupied units.
- There is a lack of consistency in town wide planning for natural resources, even though it is identified as an important planning priority.
- Critical facilities, town infrastructure, private property, and natural resources are all threatened by coastal hazards, which include coastal flooding, sea-level rise, and storm surges and sea-level rise related groundwater impacts.
- Hampton has the most miles of roadway at risk in the region. By the year 2100, during non-storm conditions, a range of 3 to 21 miles of road is predicted to be inundated, depending on the sea level rise scenario investigated.
- The Hampton-Seabrook estuary is an incredibly unique natural resource along the NH coastline. The 2009 designation of this area by the Town as a "prime wetland" was a necessary step to protect this resource.
- Hampton is already the largest repetitive loss community in the State of New Hampshire, with 40 repetitive losses related to natural hazards within the town.
- Hampton's history and cultural characteristics contribute to its identity and unique sense of place.
- Limited land remains for conservation or new development. Higher density development projects may take place on previously developed parcels, but no new open spaces or natural resource will be available to protect and enjoy if they are not protected in the near future.
- Many of Hampton's municipal resources and buildings are outgrowing their spaces or are outdated and in need of repair. Often, improvement projects are hampered by town voters' reluctance to approve spending.





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EXISTING LAND USE

How a community decides to use its land, and the resulting land use pattern that emerges over time, has a direct impact on natural resources, community character, transportation infrastructure, access to housing, the tax base, and the cost of providing services.

FACTS AND FIGURES



40% of Hampton is currently developed



9% of Hampton is conserved land



32% of Hampton is wetlands



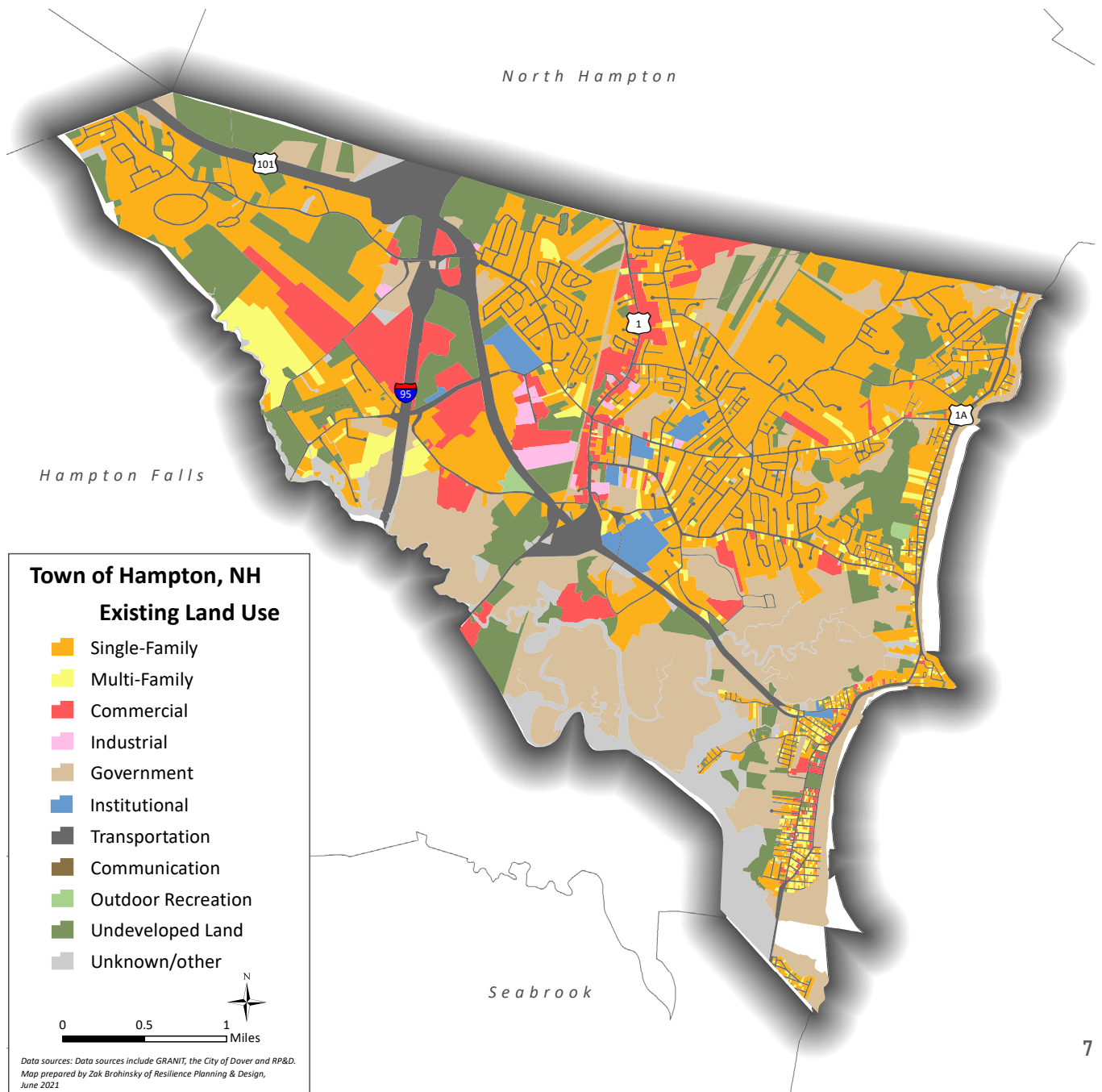
33% of Hampton's overall land area contains single family homes



80% of the taxable valuation in Hampton is from residential properties.

KEY FINDINGS AND EMERGING ISSUES

- Hampton's land use pattern has changed dramatically over time as the community has transitioned from primarily being an *agricultural community* to becoming more of an *urban and suburban community*.
- Hampton is approaching (or has reached) build-out *earlier than expected* given the development activity experienced in the past decade.
- *Limited land* remains for conservation or development.
- Higher density development and redevelopment projects may take place on previously developed parcels, but *no new* open spaces and natural resources will be created.





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POPULATION

How a community's population grows over time and throughout the seasons impacts the planning of social and municipal services, the quality and potential expansion of public infrastructure, transportation patterns, and character of development.

FACTS AND FIGURES



15,353 year-round residents live in the Town of Hampton



100,000 is the approximate seasonal population in Hampton



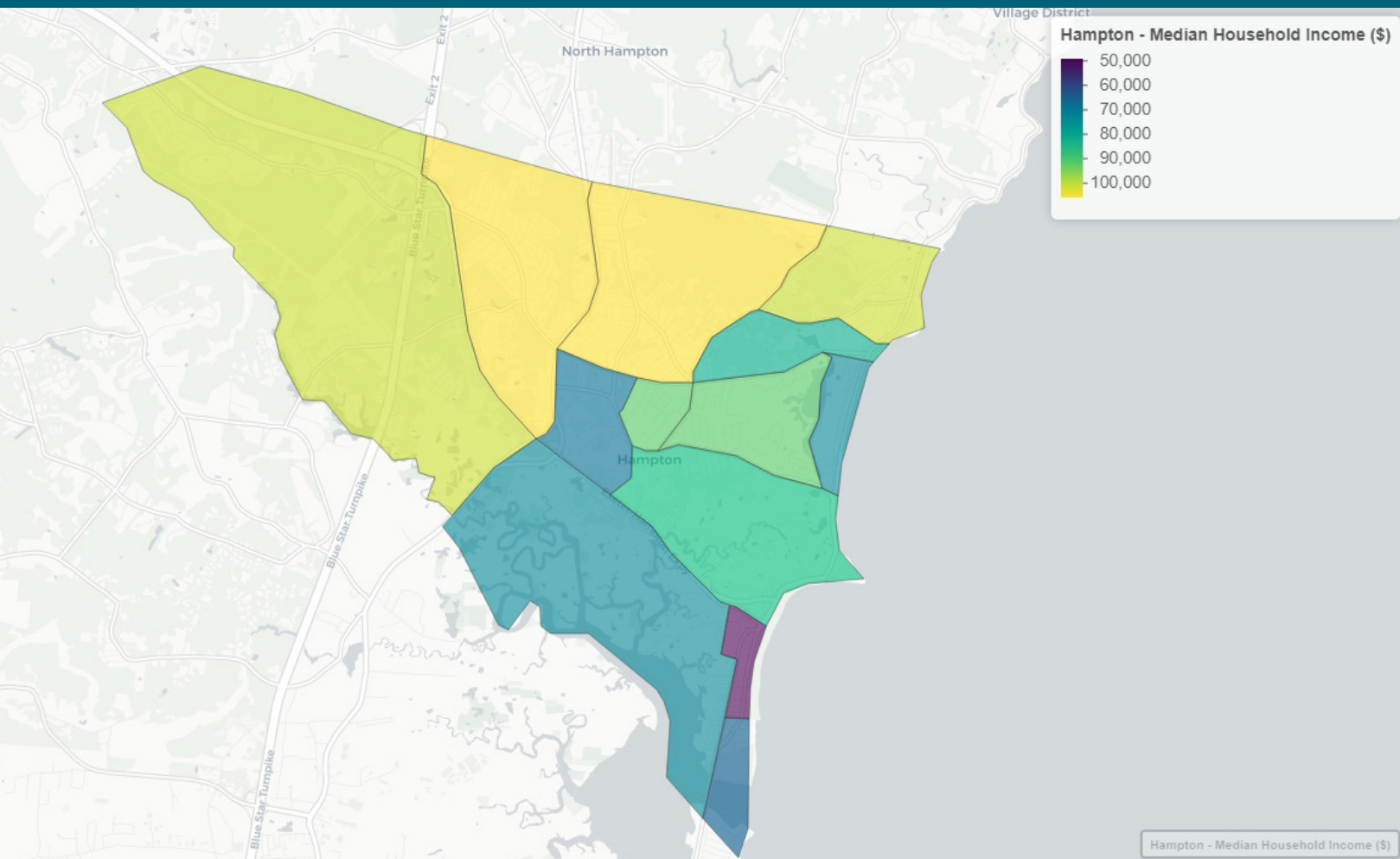
47.4 years old is the median age in Hampton.



31.6% of households consist of a single person.

KEY FINDINGS AND EMERGING ISSUES

- After half a century of solid and consistent growth following the second world war, the town's population has plateaued over the past 20 years.
- It is generally understood that Hampton's population fluctuates dramatically over the course of a given year, due to the seasonal nature of Hampton and strong presence of second homes in the town. This too plays a major role in seasonal population, housing supply and demand, pricing, and affordability.
- The current population of the town skews older compared to the rest of the state.
- Age groups that are considered "family-forming," in the 25-44 age range, account 17.7% of Hampton's population, whereas 23.2% of the New Hampshire population is within that range.
- The town's population is predominantly white; 96.2% of residents who identify as one race are white.
- At \$85,585, Hampton's Median Household Income is high compared to the rest of New Hampshire (\$76,768).
- The number of residents living below the poverty line in Hampton is low, with only 4.3% determined to be living below the poverty line compared to 7.6% of the population of the state. However, this still means that nearly 700 residents are living in poverty.





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HOUSING

A municipality's demographic and housing characteristics are deeply intertwined: the housing stock available can influence and affect who can or is interested in living in a town, and the existing demographics and demographic trends influence housing demand and the market response.

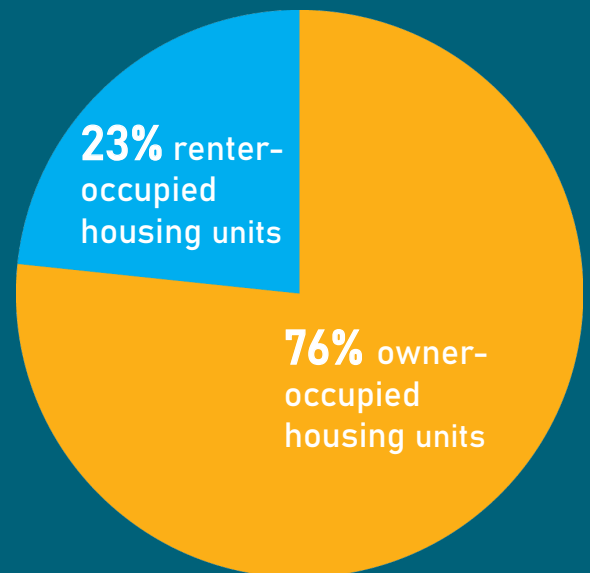
FACTS AND FIGURES

9,654 total housing units are located in Hampton.

73% of Hampton's housing units are occupied.

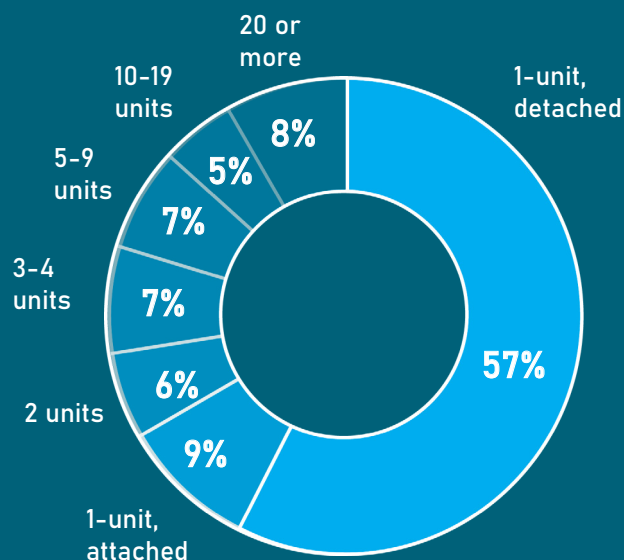
2,566 housing units in Hampton are seasonal or vacant.

85% of Hampton's vacant units are seasonal homes.



KEY FINDINGS AND EMERGING ISSUES

- Over the past decade, many rental housing units have transitioned to owner occupied units. Between 2010 and 2019, Hampton's occupied housing stock shifted substantially in its composition gaining 485 ownership units and losing 462 rental units. This equated to a loss of 21% for rental housing suggesting conversions of rental units to ownership units.
- The vacancy rate in Hampton in 2019 was 27% compared to only 16% statewide. Although the overall number of vacant units in Hampton has been declining since 2010, the number of seasonal vacant units has increased 15.9% (297 units) driven primarily by the tourism and vacation industry.
- The percentage of owner-occupied units that are vacant has hovered between 0% and 1% since 2010. This is an extremely low rate, and likely speaks to the demand for ownership units and the sharp increase seen in owner-occupied units over the last nine years. A healthy vacancy rate for owner-occupied housing is typically between 3% and 5%.
- As more rental units are converted to owner-occupied units and a lack of rental construction occurs in Hampton, it may be more difficult for renter households to find available or affordable units. Hampton's seasonal housing continues to comprise the largest share of vacant units at 84% in 2019.
- Over the last nine years Hampton has experienced a historically low amount of housing development. Fewer housing units in Hampton were built in the 2010s than in any decade going back to at least the 1940s – not even accounting for older units that were built and since demolished.
- Although recent years have seen a decrease in housing starts, Hampton has a relatively diverse distribution of housing units by structure type compared to New Hampshire as a whole. About 66% of all units are in 1-unit attached and detached structures (single-family and townhomes) with another 13% in structures with two to four units. Hampton does have some larger multi-family structures with 786 or 8% of all units in buildings with 20 or more units.
- Both ownership and rental housing continues to escalate in price in Hampton evidenced by the continued increase in owner-occupied home values and sales prices over the last nine years.
- Like ownership costs, rental housing costs are also on the rise in Hampton. Median gross rent increased 20% over the last nine years to \$1,173 per month, increasing from \$975 in 2010.
- The total number of households spending above the housing cost burdened threshold is 1,972, or 28% of households in Hampton.





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HISTORY AND CULTURE

Comprehensive planning can create a roadmap for communities to recognize, preserve, and protect sites or areas in Hampton that have historic and cultural significance. Hampton's history and cultural characteristics contribute to a unique sense of place.

FACTS AND FIGURES

Indigenous people of the Abenaki tribes are estimated to have arrived in what is now known as the Seacoast Region about **11,000 years ago**

Founded as a town in **1638** by a group from Massachusetts and initially remained under jurisdiction of Massachusetts Bay Colony.

Hampton was originally called **Winnacunnet** but was re-named Hampton the following year.

Hampton is one of New Hampshire's **4 original towns** (along with Exeter, Portsmouth, and Dover)

Earliest official town map made in **1806**

1 National Historic Register property remains in Hampton: the Reuben Lamprey Homestead at 416 Winnacunnet Rd.

2 State Historic Register Properties: Marelli's Market and the Hampton Beach Fire Station

4 different commercial centers have existed throughout Hampton's history

KEY FINDINGS AND EMERGING ISSUES

• ECONOMIC DEVELOPMENT

- Historically, commercial hubs and centers of economic development have emerged around changes in transportation, transitioning from taverns along a stagecoach route, to meat and animal product production with train travel, to tourism at Hampton Beach with the advent of the streetcar.
- In its early history, farming and fishing were a major part of the economy. Over time, tourism became increasingly important with development occurring along routes to and from beach areas. Today, Hampton is strongly identified with its beach culture and tourism on the coast.

• HAMPTON BEACH

- In 1897, the newly formed Hampton Beach Improvement Company (HBIC) signed a 99-year lease to take over development along Hampton Beach. This lease expired in 1997 and the Town of Hampton and related authorities, including the state, are now the stewards of the developed areas of the beach.
- The development of Hampton Beach post-1900 was plagued by storms and fires, causing businesses to build and rebuild.
- While Hampton Beach as it exists today may have its own distinct identity, master plan, and village district, it is impossible to separate the development and evolution of Hampton without recognizing the significance of its coastal areas. As has been the case throughout history and will continue to be, the economic and ecological well-being of the coast is inextricably tied to that of inland Hampton. Likewise, the historic and cultural places, artifacts, and trends that occurred at Hampton

Beach are no less significant to Hampton and should be recognized as such in this Master Plan.

- The practice of altering the natural landscape, at times significantly, for the benefit of Town interest and promotion of development, began early in the history of Hampton. Shifting lands were filled for developable parcels, bridges and roads were made as connectors, and more recently drainage was re-established to control flooding and insects. The future development and resilience of Hampton will require this type of comprehensive planning as well, especially in vulnerable areas.

• PRE-COLONIAL HISTORY

- The influence and activity of early and native settlers to Hampton is less evident in both the physical development of Hampton and in its written history. The current master plan should acknowledge the presence and impact of native cultures prior to the incorporation of the town.



Above: Hampton Beach Fire Station



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NATURAL RESOURCES

Hampton's natural resources, including its coastline, surface waters, groundwater, forests, and other natural features, provide a number of benefits to the community related to recreation, tourism, ecology, and coastal hazard mitigation.

FACTS AND FIGURES



45% of the town drains into the Hampton River-Frontal Atlantic Ocean Watershed.



46% of the town drains into the Taylor River Watershed.



61% of Hampton's Aquifer is within the Aquifer Protection Area.



32% of Hampton is wetlands.



17% of Hampton is forested, which is on the low end for abutting and coastal NH towns.

KEY FINDINGS AND EMERGING ISSUES

- There are a total of 5 active public water systems in the Town of Hampton, and 4 inactive systems. The aquifer protection district overlay is currently protecting the highest quality aquifers in Town.
- Two of NH's licensed oyster farm sites are located in the Hampton/Seabrook estuary.
- A study completed in coastal New Hampshire in 2018, noted that the sea-level rise related groundwater impacts are projected to occur approximately three times farther inland than the projected tidal flooding extent (Jayne et al. 2018). This can cause changes to flooding, water quality, and natural resource habitat in these areas.
- There is a lack of consistency in town wide planning for natural resources, even though it is identified as an important planning priority. However, the Town is starting to address this disconnect with natural resource related land use regulations through a PREPA grant they've recently received.
- There is a historic lack of climate change planning in all documents, although that topic is covered in the new Coastal Resiliency chapter. Most recently, the Hampton Coastal Hazards & Adaptation Team (CHAT) has developed a set of recommendations to increase flood resiliency for the Town of Hampton.
- The Town is home to a robust and diverse list of rare plants, animals, and natural habitat.
- The Town of Hampton is estimated at approximately 16% impervious cover as of data acquired in the spring of 2015 by the Piscataqua Regional Estuary Partnership (PREP). A 2003 report by the Center for Watershed Protection identifies 10-25% impervious cover as "impacting" aquatic life.
- Hampton Beach had a 99-year lease with a development company that expired in 1997. It is important to note that the Town has been working on establishing plans for development since this transition but the Hampton Beach Plan from 2001 does not provide a good roadmap for natural resource protection.
- Emerging issues in natural resources include:
 - Sea level rise.
 - New invasive species.
 - Sources of water pollution.
- Observed trends in natural resources include:
 - Marsh erosion and flooding from the marsh.
 - Flooding of coastal roads.
 - Limited focus on upland habitats and land protection.
- The Connect the Coast project is spearheaded by the Nature Conservancy and works to ensure that wildlife across the seacoast have habitat connectivity through the prioritization of habitat blocks. Combined, prioritized habitat blocks and the corridors connecting them make up 37% of the Town of Hampton. Of these, only 17% are listed as conserved.
- The new Master Plan Vision specifically calls out the Seabrook-Hampton Estuary, Meadow Pond, Harborside Dunes, Batchelder Park, and "other open space areas". However, it does not explicitly call out some of its biggest resources - Hampton Salt Marshes/Salt Marsh Conservation Area, Hampton Beach and North Beach, Hampton Beach State Park, or the smaller but significant Lamprey Pond which borders the Taylor River Reservoir.



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OPEN SPACE AND CONSERVATION

Hampton's open spaces include conservation land, trails, waterfronts, parks, and other recreation resources. Exploring ways to protect and create new open spaces will preserve Hampton's quality of life for community members and the town's natural landscape.

FACTS AND FIGURES



9% of Hampton's land area is currently conserved. This is significantly less than abutting communities have conserved (ex: Exeter has 32% conserved lands).



1,276 acres, or 14% of the Town, is undeveloped. That is a 3% decrease from the open space calculations in 2001 (1,504 acres or 17%).

The largest conservation parcels in Hampton include

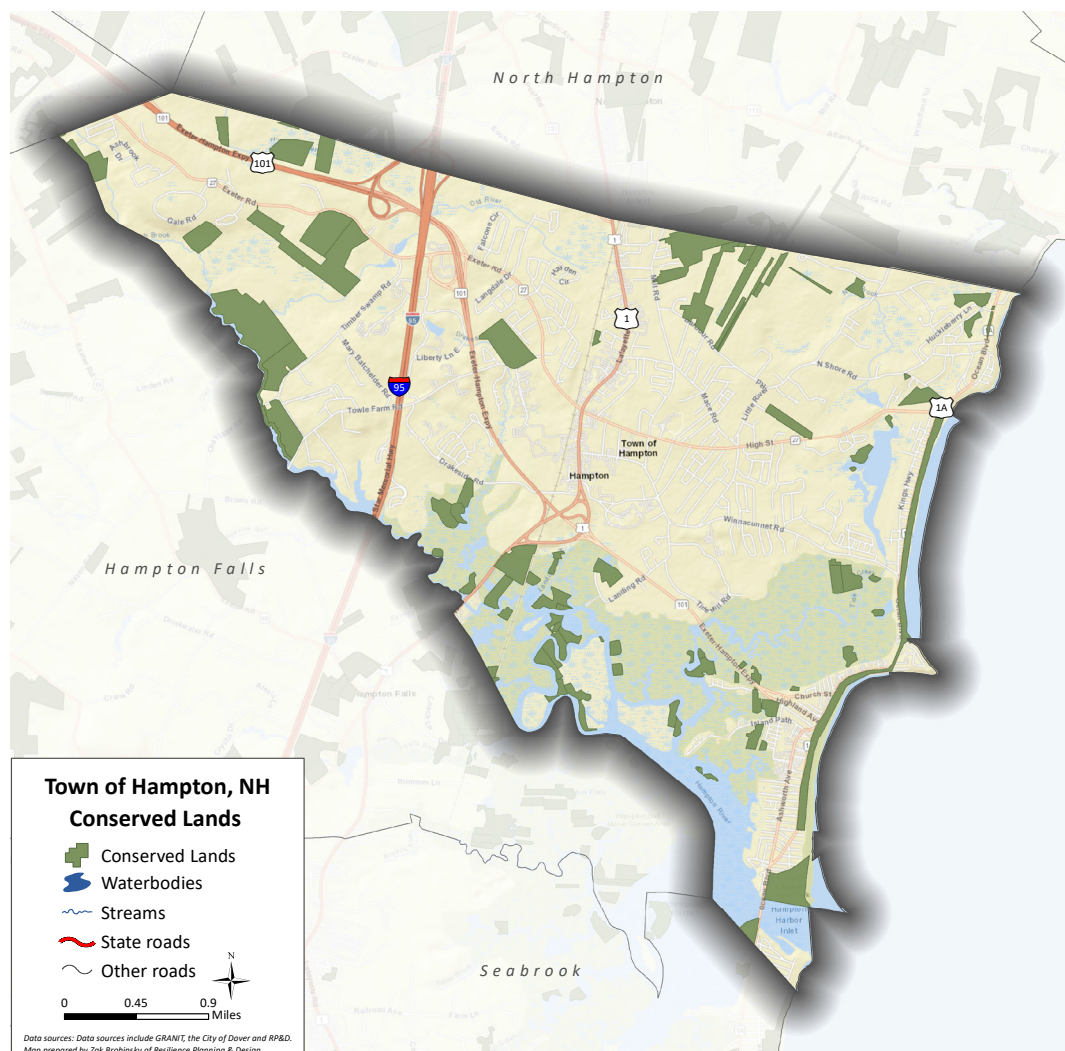
HAMPTON
MARSH

HAMPTON
BEACH
STATE
PARK

BATCH
ELDER
LAND

KEY FINDINGS AND EMERGING ISSUES

- Hampton has relatively *low conserved land and undeveloped land* and it should be a priority to protect additional parcels.
- The Connect the Coast project has great data to guide conservation to protect *critical habitat blocks and connectivity*. The Town should also consider conservation focused at *mitigating sea-level rise and flooding*.
- No Open Space Plan exists for the Town and there are no *protections* for undeveloped open spaces outside of conservation (i.e., zoning, ordinances, etc.).
- Multiple *regional land conservation* initiatives are underway and Hampton should collaborate with these programs for the development of land conservation programs and open space planning.
- In Hampton, the land surrounding the Hampton River and Hampton Harbor and associated wetland complex provide many benefits related to *pollutant attenuation and flood storage*.
- The area around Meadow Pond provides *flood storage and risk mitigation*.





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NATURAL HAZARDS

Natural hazards, especially coastal hazards including flooding, sea-level rise, and storm surges, threaten the coastal portions of Hampton that the town's tourism economy is centered around. This includes Route 1 and Route 1A, as well as numerous business and residential areas. This poses challenges to security, health, and the welfare of citizens, and to a stable and viable economic future.

FACTS AND FIGURES



471 acres (or 16% of Hampton's land area) is developed and within the 100-year floodplain. This includes 278 acres of residential development.



4% of all structures in the Town of Hampton are within "high flood risk" areas (zone AO and zone VE). Those areas are along the beach and account for a cumulative 2% of the towns area.



1,796 National Flood Insurance Program policies exist in the Town of Hampton, and there have been 513 claims to the National Flood Insurance Program in Hampton since 1975, totaling \$4,572,987 paid claims. This makes Hampton the largest repetitive loss community in New Hampshire.



1,479 acres of salt marsh are located within Hampton.

KEY FINDINGS AND EMERGING ISSUES

- Hampton is a low-lying town with extensive surface water and wetlands located on the coast, causing it to be at *severe risk of flooding*. Critical facilities, town infrastructure, private property, and natural resources are all threatened by coastal hazards, which include coastal flooding, sea-level rise, and storm surges.
- The area has a humid climate and a relatively uniform distribution of precipitation throughout the year totaling between 40-45 inches on average annually. The magnitude of daily extreme precipitation events has increased by 15 - 38% in New Hampshire's coastal watershed since the 1950s.
- Sea-Level Rise scenarios indicate the extent of inundation Hampton may experience above mean high water level due to rising sea levels, and range from an intermediate-low scenario at 1.7 feet to a high scenario at 6.3 feet by 2100. There are currently 1,497 acres of salt marsh within Hampton and at the 3.9 ft SLR scenario, there is potential for 310 acres of new marsh. At 6.6 ft SLR scenario, there is the potential for 344 acres of new marsh.
- Hampton is the largest repetitive loss community in the State of New Hampshire under the FEMA National Flood Insurance Program. A "repetitive loss" is a building covered under flood insurance that incurs flood related damage on 2 occasions during a 10-year period, in which the cost of repairing the flood damage exceeded 25% of the value of the building.
- Hampton is at severe risk for *severe winter weather*, including heavy snowstorms, ice storms, and Nor'easters. Hampton is also at *high risk for severe wind and lightning*, and moderate risk for hurricanes, extreme heat, and wildlife natural hazards.



- Multiple natural hazards, especially coastal hazards, will impair transportation. More specifically, the evacuation route for Hampton and most coastal New Hampshire towns rely partially or wholly on Route 1 and Route 1A, which are very sensitive to current coastal flooding, sea-level rise, and storm surges. Route 1A is a vital transportation link on the coast for access, safety, livability, recreation, and the coastal tourist economy.
- Near shore ecosystems that are in close proximity to infrastructure, such as roads, buildings, and utilities will not be able to migrate inland as sea levels rise. This means that ecosystems will be reduced in size and functional capacity, preventing habitat and species from migrating inland (NH Coastal Risk and Hazards Final Report 2016).
- Except for a 0.5 mile stretch of dunes and beach just north of the Hampton Harbor Inlet, the landward side of Hampton's beaches is characterized by a harden shoreline of sea wall, riprap, and revetments (Flooding in Hampton, NH Situation Assessment, 2019).



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TRANSPORTATION

Hampton's transportation system is impacted by the influx of seasonal visitors, its existing land use pattern, and the Town's commercial activity. Balancing transportation needs, investing in transportation infrastructure, and ensuring safety for all residents is critical to maintaining a functional and equitable system.

FACTS AND FIGURES



122 miles of road extend throughout Hampton. 16.2 miles of road have been added since 2002.



37.3 miles of roadway are located in the Urban Compact Area and cover 20% of the community by area.



25 bridges in Hampton are monitored by NHDOT for their structural conditions. Two of these bridges have been red-listed and will need replacement.



2 of the State's Scenic & Cultural Byways are in Hampton. This includes the Coastal Byway and the American Independence Byway.

KEY FINDINGS AND EMERGING ISSUES

- Hampton experiences large increases in traffic and congestion during the summer months. The volume of traffic on Interstate 95 has nearly tripled in the past forty years. Now with more than 70k vehicles per day on average, Route 101 is carrying nearly 50k cars per day as well.
 - Hampton has the most miles of roadway at risk in the region. By the year 2100, during non-storm conditions, a range of 3.4 to 20.6 miles of road will be inundated, depending on the sea level rise scenario investigated.
 - Hampton's transportation system is primarily composed of roadways, and some of this roadway network is under threat from sea-level rise and flooding. There is a lack of transit options in Hampton currently.
 - The expanding bicycle and pedestrian network needs further investment in order to reduce vehicular traffic in the community.
 - Other ways to decrease vehicular traffic include roadway planning and infrastructure upgrades aligned with complete street designs, parking management, and travel demand management strategies.
 - Opportunities exist to also calm traffic, clean stormwater, address localized inland flooding, and other impacts through the construction of complete green streets.
 - Land use planning and future development opportunities focused on inland areas of Hampton must be coordinated with transportation system upgrades.
- There is a need to showcase some case study examples of coastal communities with strong transit systems and interconnected pedestrian and bicycle networks.
 - There is a need to better engage the public in identifying and supporting the specific infrastructure upgrades needed to make the vision a reality.
 - Hampton should explore the role of technology – access and quality of broadband – in supporting telecommuting and reducing vehicular traffic.





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ECONOMIC DEVELOPMENT

Economic development relates to industry, employment, and opportunity and interacts closely with issues such as land use, transportation, and government services. Successful economic development outcomes in Hampton will help the town and its residents achieve a growing economy, diverse employment opportunities, and financial stability to address broader efforts across the town.

FACTS AND FIGURES

 **48%** of the population has attained a bachelor's degree or higher which is higher than the state average at 37%.

 **\$85,585** is the median household income in Hampton. In NH, its \$76,768.

 **8,530** residents in Hampton are currently employed as of March 2021. The unemployment rate is 3.8%.

 **15%** of all employed residents both live and work in Hampton while 85% work elsewhere (as of 2018).

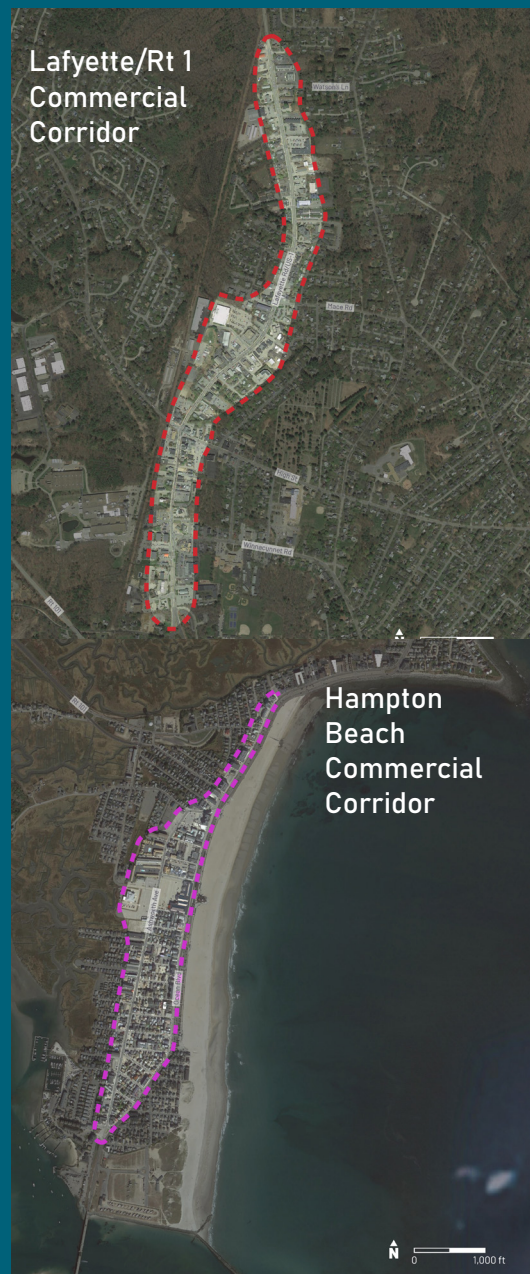
 **8,486** jobs exist in Hampton as of 2020.

KEY FINDINGS AND EMERGING ISSUES

- In 2020 there were 8,486 jobs in the town. 82.7% of jobs in Hampton are supported through private sector businesses, with the remaining 17.3% in federal, state, and local government. Accommodation & Food Services is the largest industry, employing 1,186 people or 14% of all workers
- Residents of Hampton who are participating in the labor force largely travel outside the town for work.
- The two largest employers are in manufacturing and the arts – Foss Performance Materials, a textile manufacturer, and the Hampton Beach Casino, an entertainment venue.
- There are currently two major commercial districts in Hampton. The first is focused around Hampton Beach along Ocean Boulevard and Ashworth Avenue, and the second major commercial district is along Lafayette Road/US-1.
- Hampton also hosts a small number of commercial/industrial parks closer to its regional transportation links, US-1 and I-95.
- As of May 2021, there were 14 commercial/industrial properties or office suites available for lease in Hampton. These spaces ranged in size from 180 sf to 4,212 sf, though half of the spaces were between 1,000 and 1,700 sf. There were only two commercial/industrial properties for sale at that time.
- Hampton has relatively high proportions of employment in a handful of industries, notably Finance & Insurance, Accommodation & Food Services, and Real Estate & Rental & Leasing.
- While annual average earnings per job in Finance & Insurance were high relative

to median incomes in Hampton, earnings were much lower in Accommodation & Food Services, and Real Estate & Rental & Leasing. This may create challenges for employees who work in Hampton but are forced to live elsewhere in order to find housing that is affordable to them based on their income.

- According to the 2020 NH Comprehensive Annual Financial Report Hampton as the 8th largest community in NH based on total property value.





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RECREATION

In 2018, approximately 72.7% of Americans (ages 6+) participated in some form of recreation activity – a percentage that has held steady since at least 2013. Hampton's coastline, forests, lakes, parks, and indoor facilities provide residents and visitors recreation opportunities that promote healthy lifestyles and well-being and foster connections between community members.

FACTS AND FIGURES



23 parks are managed by Hampton Parks and Recreation.



1.74 acres of park land per 1,000 residents, which is lower than the national recommended average.



30% increase in recreation program participation in 2018.



20% increase in the number of senior trip offerings in 2018 due to popularity.



2000 square feet of indoor recreation space at the Tuck Building.

KEY FINDINGS AND EMERGING ISSUES

- In addition to managing Hampton's outdoor recreation facilities, Hampton Parks and Recreation also controls ~2,000 square feet of indoor recreation space - *The Tuck Building*. The Tuck Building provides a home for a variety of indoor recreation programs, meetings, and summer camp activities. The Recreation Department partners with other entities such as the Hampton Academy, the Library, and local churches to provide additional indoor space for activities.
- In addition to facilities, the department provides diverse, multi-generational program offerings, including youth sports, senior programming, and adult programming.
- Hampton's outdoor recreation facilities suffer from *deferred maintenance and a lack of general upkeep* due to their high use and limited funding for fertilization and general maintenance.
- There is a need for *additional multi-generational, indoor recreation and community activity space*. Space available for *senior programs* is either non-existent or inadequate (e.g. accessibility issues, availability, lack of parking, etc.). Space for indoor recreation programming is at a premium given the space demands of schools and local youth sport organizations already using existing facilities.
- The Town of Hampton also has many *passive outdoor recreation opportunities* including hiking, fishing, swimming, bicycling, and others. Some notable destinations include:
 - **Hampton Beach** provides coastal waterfront and shoreline for a number of activities including swimming, fishing, walking, birding, and more.
 - **Hurd Farm Easement** is protected by an agricultural easement and is a mix of farmland, forests, wetlands and river frontage in Hampton. This land is available for public passive recreation including birding, cross-country skiing, fishing, hiking, hunting, and snowshoeing.
 - **White's Lane/Twelve Share Area** consists of White's Lane, which is a class VI road, and the surrounding land known as Twelve Share. "Twelve Share," is named after the original 12 shares of land granted by the King of England to the first settlers of the area. The Town is interested in expanding passive recreation options here.
 - The **Hampton-Seabrook Estuary** is 5000 acres in size and contains the largest amount of salt marsh in the state. Recreation activities available include swimming, boating, paddling, bird watching, fishing, walking, bicycling, running, etc.
 - **Meadow Pond** is 7-acres and commonly used for fishing and birding.
 - The historic **Batchelder Farm/Park** contains approximately 120 acres of scenic farmland, uplands, and wetlands on the west side of Hampton. The land is available to the public for passive recreation, such as birding, cross-country skiing, hiking, hunting, and snowshoeing. Residents and visitors use Batchelder Pond and Lamprey Pond for fishing.
 - The **Town of Hampton Ice Pond** is a 10-acre ice pond with 25.53 contiguous acres around it owned by the Town.
 - **The NH Seacoast Greenway (NHSG)** is a proposed 17 mile non-motorized trail that will connect Hampton and seven other coastal NH communities. This project is currently in the design and planning stage.



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COMMUNITY FACILITIES AND UTILITIES

Planning for high-quality community facilities, services, and utilities requires infrastructure investment, assessment of community and staff needs, and a strong commitment to maintenance.

FACTS AND FIGURES



426,600 square feet of Town-owned buildings.



70 years old is the average age of Hampton's municipal buildings.



5 public water supply wells in Hampton.



2.6 million gallons per day is the average sewage flow to Hampton's Wastewater Treatment Facility for the last five years.



26.7% of Hampton's solid waste stream is recyclables.

KEY FINDINGS AND EMERGING ISSUES

COMMUNITY FACILITIES

- Many of Hampton's town resources and buildings are outgrowing their spaces or are outdated and in need of repair. Often, improvement projects are hampered by town voters' reluctance to approve spending. Throughout the past thirty years, the Town periodically engaged third-party studies to both quantitatively and qualitatively identify the current status of community facilities, and assess their need for improvement, but there is no up-to-date comprehensive assessment or set of recommendations for all Town-owned facilities.
- State-wide infrastructure plans that involve Hampton – such as regional water upgrades and state roads projects – move forward more easily as a coordinated effort. The Hampton Beach State Park Redevelopment Plan was undertaken to revitalize local economy and is in the beginning stages of implementation.
- The west side of Hampton is relatively cut off from areas east of 95. This applies to services, infrastructure, access to Town programs, and most importantly transportation, especially for seniors and children.
- Throughout Hampton's history, the Town has made efforts to maintain public and private assets and protect against the effects of climate change. Community services and facilities must necessarily be prioritized, many as critical infrastructure, to ensure the functioning of governmental and community services as resources to residents and visitors.
- Due to changes in population, demographics, and development, combined with the growing understanding of climate impacts on this coastal community, capital improvement projects must be properly

documented and prioritized to ensure the ongoing community needs and vision of the Master Plan are achieved.

UTILITIES

- Hampton's water system is managed by Aquarion and is integrated across multiple towns (Hampton, North Hampton, Stratham, and Rye). Five out of sixteen wells are located in Hampton and service approximately 17,000 locations. Additional growth is anticipated and will result in needed expansion of the water system infrastructure.
- Consolidated Communications, one of Hampton's telecommunication providers, is anticipating to complete the fiber network build out by 2024. This should result in faster, high speed broadband internet services in Hampton.
- Hampton's sewer collection system consists of both newer and older systems and continued investment in the Town's aging infrastructure is critical. For example, in 2019, two new sewer pipes considered critical to Hampton Beach along Route 101 were installed, replacing two forced mains that were at risk of failing.
- The Town is currently in Phase 1 of a 3-Phase Wastewater Treatment Facility project. The focus is on replacing aging infrastructure and increasing capacity of the facility.
- The Town of Hampton's stormwater system is subject to compliance with the NPDES permit program which addresses water pollution by regulating point sources that discharge pollutants to surface waters. There is also a need to develop a comprehensive stormwater infrastructure plan that addresses aging infrastructure, flooding and maintenance.



2022 MASTER PLAN UPDATE

EXISTING CONDITIONS



ENERGY

Promoting energy conservation, energy efficiency, and renewable energy systems to homeowners, private land owners, and on public facilities and land has environmental and economic benefits for the Town. These include savings on energy costs, improved air quality, and reducing Hampton's carbon footprint.

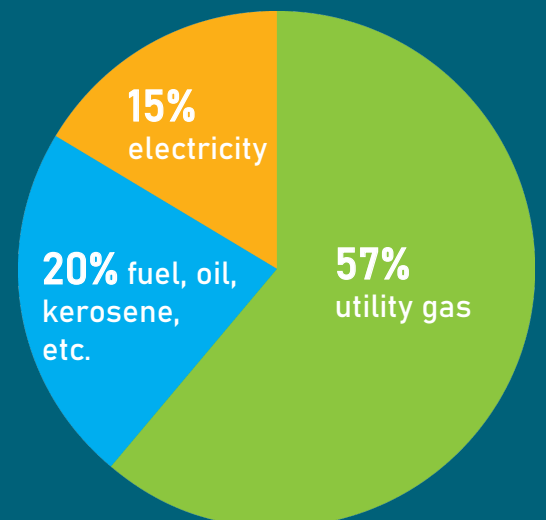
FACTS AND FIGURES

3rd highest electricity rates in the country are in New Hampshire.

61% of New Hampshire's electricity net generation in 2019 was produced by Seabrook's nuclear power reactor (the largest in New England).

60 properties in Hampton have solar electric installations and 3 properties utilities solar hot water technology.

In Hampton the top three fuel sources in 2019 for residential structures were:



KEY FINDINGS AND EMERGING ISSUES

- New Hampshire has the third highest electricity rates in the contiguous United States, impacting all NH residents, but especially low-income earners.
- More than two-fifths of all New Hampshire households rely on fuel oil as their primary heating fuel, but Hampton households rely more on natural gas.
- In 2016, New Hampshire generated more of the state's electricity from wind than from coal for the first time, and, with the exception of 2018, annual generation from wind has continued to exceed that from coal.
- An offshore wind project is in the planning process for a location 10-20 miles off the coast of NH.
- New Hampshire's renewable portfolio standard only requires 25% of electricity sold in the state come from renewable energy resources by 2025. As of 2019 more than 15% of New Hampshire's in-state electricity generation came from renewable resources.
- In 2019, 17% of New Hampshire's electricity generation came from renewable resources, including small-scale solar installations. Most of the state's renewable generation comes from biomass and hydroelectric power.
- According to the Hampton Assessor there are 60 properties with solar electric installations and 3 properties utilizing solar hot water technology.
- Energy has become a more common topic in municipal master plans in the last decade. While Hampton has not developed such a chapter previously there is an opportunity through this update to consider energy related implications.
- Many communities in the Seacoast region have established municipal energy committees. Hampton did have a Municipal Energy Committee composed of volunteers, but it has since been dissolved.
- The most effective actions to focus on at the municipal level are energy conservation, which reduces the amount of energy consumed, and energy production from renewable energy sources which reduces emissions and local energy sources.
- Identifying opportunities for greater building and vehicle efficiency, and efficient land use patterns supported by lower energy transportation alternatives should also be part of the conversation in Hampton.
- There is also a need to think about Hampton's resilience and the ability of municipal departments to respond during emergencies when the grid may be down. Some redundancies of energy systems can address this need.

LOOKING FORWARD

This Existing Conditions Analysis will be used to inform the implementation plan needed to meet the identified vision for the future of Hampton. The consulting team will use the information about present-day Hampton and the draft vision statement to work with Hampton residents and property owners to refine the draft vision and identify how to best achieve it.

DRAFT VISION

- The Town of Hampton will leverage its existing community strengths to foster economic development in a closely connected beach community and village-like town center, both populated by thriving small businesses, while preserving the rural character of the west side.
- Multi-modal transportation interconnections between the beach communities, town center, and west side will help form an overall sense of place despite the different characters of these neighborhoods.
- The Town will further strengthen its coastal neighborhoods by making existing housing and infrastructure more resilient to flooding and climate change while facilitating the gradual and equitable movement of some residents to areas of lower risk within Hampton, preserving the Town's economy and making it possible for families to remain in Hampton over the long term.

TO ACCOMPLISH THIS:

- A future Hampton will have grown and become more dense in some areas while preserving open space, protecting natural areas, maintaining existing low-density neighborhoods, retrofitting at-risk development to be resilient to coastal hazards, and returning some currently developed areas to open space to allow for the migration of coastal habitats.
- A future Hampton will continue to be home to a diverse, year-round economy supporting a similarly diverse and year-round local workforce.
- Preservation of existing landscapes, architectural styles, and unique neighborhood layouts will help maintain the town's beauty and identity.
- Continued municipal support of the Recreational Department, Lane Library, and school system, as well as expansion and improvement of community spaces, will help maintain the sense of a close-knit and friendly community.
- Hampton will achieve this future by choosing to proactively protect open space, preserve natural ecosystems, and expand outdoor recreation opportunities.
- One important aspect of this vision is connecting Hampton's beach areas, inland neighborhoods, and western corner through bike-paths, sidewalks, public transit, and way-stops.

APPENDIX

EXPANDED ANALYSES BY TOPIC

The following sections expand upon the summary profiles of existing conditions in Hampton and include a comprehensive review of data, relevant reports, and other resources.

DEMOGRAPHICS AND HOUSING

INTRODUCTION

A municipality's demographic and housing characteristics are deeply intertwined: the housing stock available can influence and effect who can or is interested in living in a town, and the existing demographics and demographic trends influence housing demand and the market response. Hampton's population and housing traits are no different; the evolution of the town's population over time in addition to local, state, and federal policy, have shaped the housing landscape, and likewise the housing stock has shaped the population. It is generally understood that Hampton's population fluctuates dramatically over the course of a given year, due to the seasonal nature of the economy and strong presence of second homes in the town. This too plays a major role in seasonal population, housing supply and demand, pricing, and affordability.

POPULATION PROFILE

In 2019, the Census Bureau's 5-year American Community Survey (ACS) estimated Hampton's population to be 15,353. This is the highest estimated population for the town in its history, though only slightly higher than the population in the 2010 and 2000 decennial censuses. After half a century of solid and consistent growth following the second world war, the town's population has plateaued over the past 20 years.

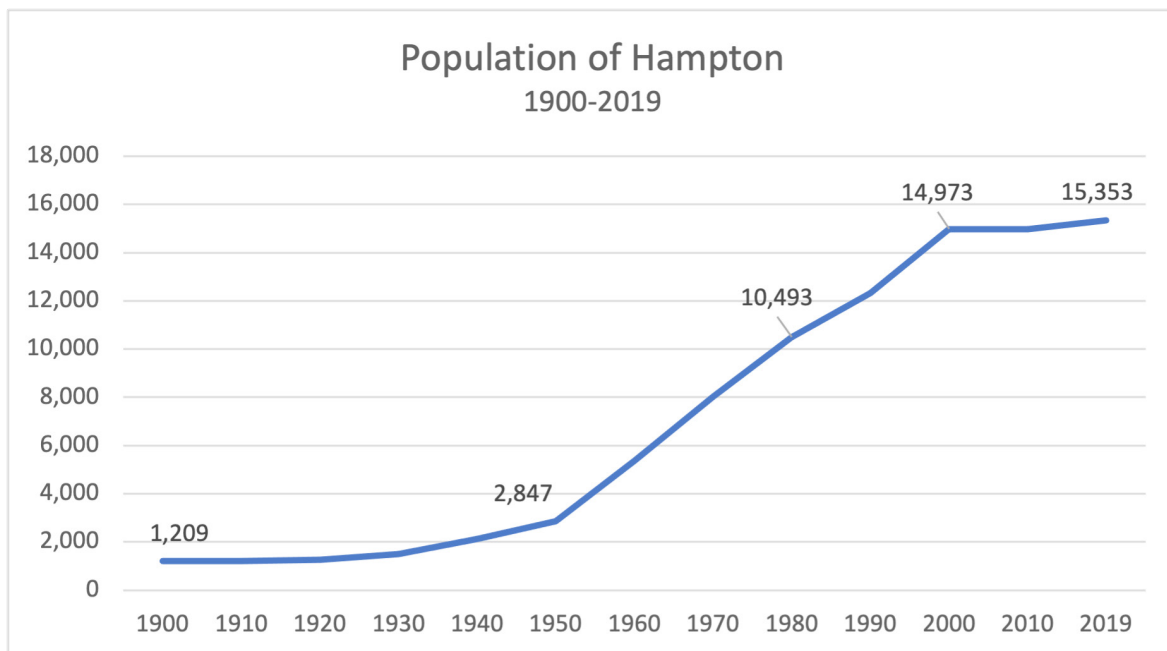


Figure 1: Population of Hampton, 1900-2019; Sources: US Census Bureau, Decennial Censuses and 2019 ACS 5-year

AGE

The current population of the town skews older compared to the rest of the state, with the two most populous age cohorts being 45-54 year olds and 65-74 year olds. The total proportion of the population that is 65 years or older in Hampton is 24.3%; statewide, that figure is 18.1%. Hampton has similar numbers of residents in younger cohorts compared to the state estimates, with 22.4% of the population under the age of 25 in Hampton compared to 23.8% statewide. However, larger differences emerge in age groups that are considered “family-forming”: 17.7% of the population of Hampton falls in the 25-44 age range, whereas 23.2% of the New Hampshire population is within that range. Currently there are approximately 4,200 family households residing in Hampton, and 83.3% of those are married-couple families. Overall, there are just under 1,300 family households in Hampton with children under the age of 18.

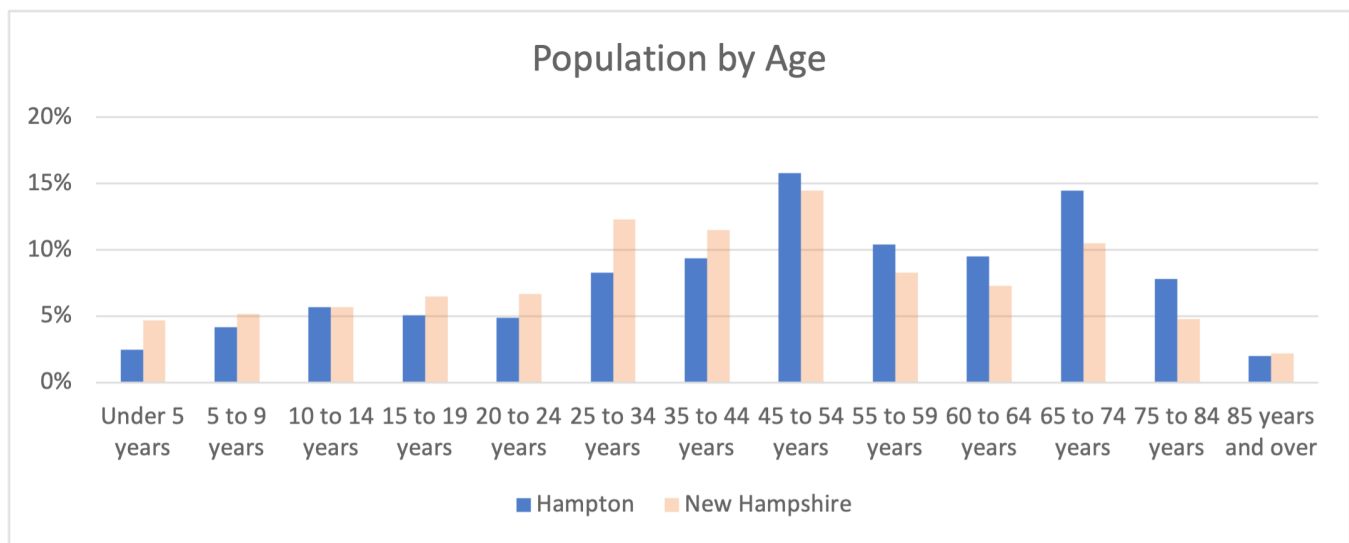


Figure 2: Age cohorts in Hampton; Source: US Census, 2019 ACS 5-year

RACE AND ETHNICITY

The town’s population is predominantly white; 96.2% of residents who identify as one race are white. The next largest group is Asian, with 1.0% of the population. Smaller numbers of Black or African American and American Indian or Alaska Native people also live in Hampton, and 2.2% of the population identifies with more than one

Race/Ethnicity	Hampton		New Hampshire	
	Population	Percentage	Population	Percentage
White	14,774	96.2%	1,252,128	92.9%
Black or African American	44	0.3%	21,546	1.6%
American Indian and Alaska Native	27	0.2%	2,036	0.2%
Asian	147	1.0%	36,180	2.7%
Native Hawaiian and Other Pacific Islander	0	0.0%	443	0.0%
Some other race	20	0.1%	7,510	0.6%
Two or more races	341	2.2%	28,281	2.1%
Hispanic or Latino (of any race)	191	1.2%	50,493	3.7%

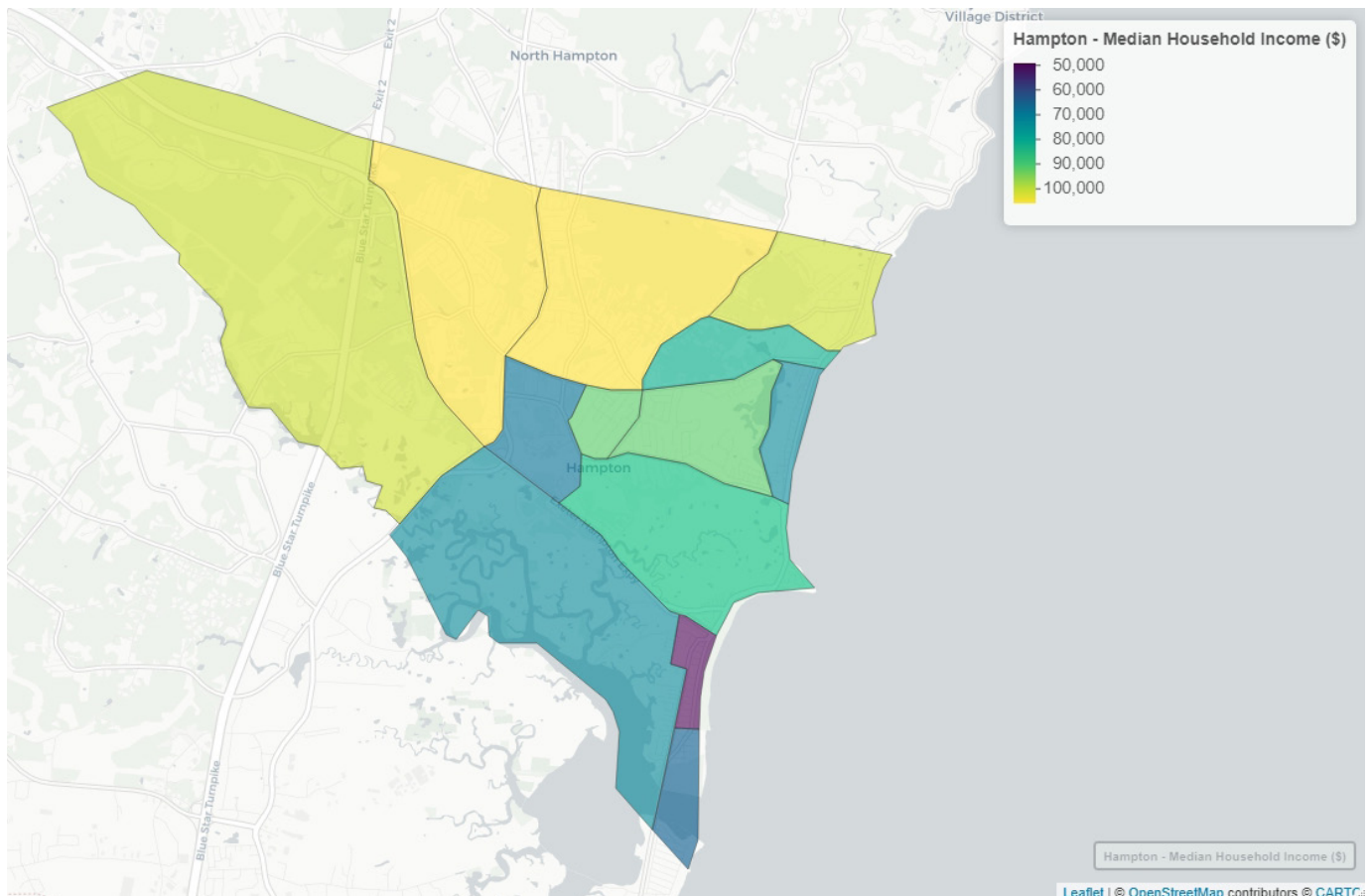
Table 1: Racial and ethnic composition of Hampton and New Hampshire; Source: US Census Bureau, 2019 ACS 5-year

race. Just over 1% of Hampton's population identified as Hispanic or Latino compared to 3.7% across New Hampshire.

INCOME, POVERTY, & PUBLIC ASSISTANCE

Median household income (MHI) and the proportions of the population below the federal poverty line are important factors for understanding the overall economic health of residents in the town. Lower median incomes are not inherently a problem, but if cost of living is high and employment is low, that may be an indication that residents are facing economic hardships. Similarly, high median incomes can be a benefit to a community, but if rates of poverty or public assistance are still high that can suggest a bifurcation in the social and economic fabric – a strong division between haves and have-nots within a town.

At \$85,585, Hampton's MHI is high compared to the rest of New Hampshire (\$76,768). However, there are disparities in MHI across race and ethnicity: households that identify as “white alone” have median incomes that are approximately \$20,000 more than households that identify as Hispanic or Latino. MHIs for those two groups are \$85,954 and \$65,972, respectively. The number of residents living below the poverty line in Hampton is low, with only 4.3% determined to be living below the poverty line compared to 7.6% of the population of the state. However, this still means that nearly 700 residents are living in poverty. As with MHI, there are significant racial and ethnic disparities among residents in poverty: while 4.4% of white residents live below the poverty line, 16.8% of Hispanic or Latino residents fall within that category. Poverty generally increases with age in Hampton, with 6.9% of the 65-and-over population below the poverty line, compared to 2.3% of the under-18 population. The one exception is very young children (under 5 years), who have the highest percent of any group, at 7.2%.



Of the 2,394 households in town, 5.8% have received federal assistance in the past 12 months, which includes Supplementary Security Income, cash public assistance, or Food Stamps/SNAP. That public assistance figure is far lower than the statewide percentage of households, which is 16.3%. Though the overall percentage of households receiving public assistance is not high, it is worth noting that all are family households with approximately 33% being single-parent households.

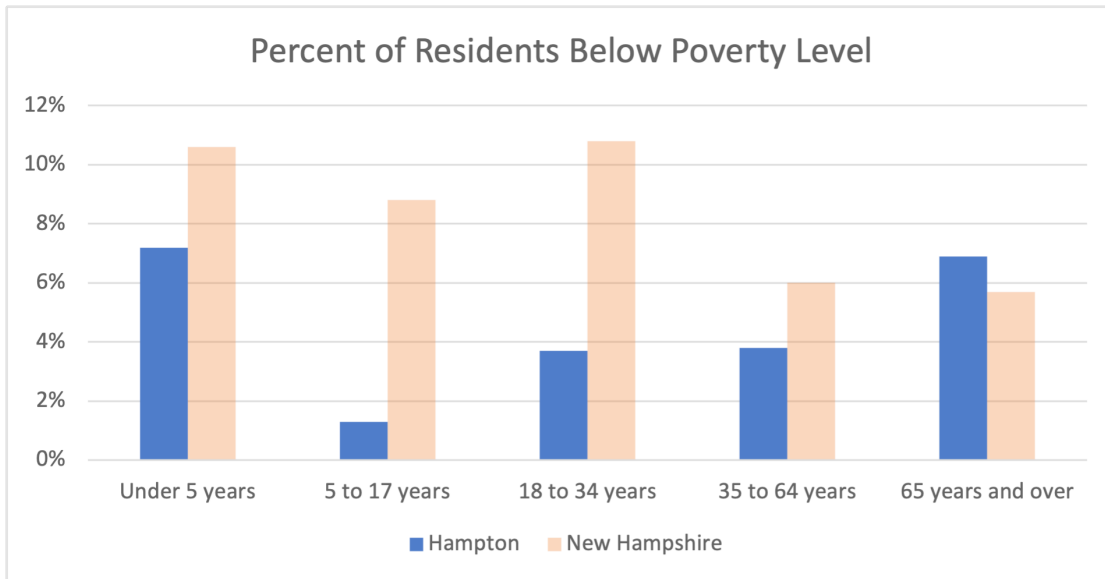


Figure 5: Poverty rates by age group in Hampton and New Hampshire; Source: US Census Bureau, 2019 ACS 5-year

HOUSEHOLD TRENDS

The number of households in Hampton has not changed dramatically since the 2010 decennial Census. There are currently 7,088 households in town, compared to a total of 7,065 in 2010. Slightly more than one half of the households in Hampton (50.7%) are married-couple families, while 31.6% of households consist of a single person.

The average household size in the town is 2.17, and average family size is 2.74 household members; both figures are somewhat lower than state the averages of 2.46 and 2.96, respectively. Household and family size in Hampton have not changed significantly since 2010, and average family size in Hampton has increased from 2.71 in 2010, whereas across the state that figure has slightly decreased.

In total, there are 2,183 children enrolled in school living in Hampton, with an additional 555 college or graduate students. The estimates for household composition and household size have been consistent over the preceding decade, but the number of children enrolled in school has decreased by 8.47% since 2011. Since 2010, though median household size has remained relatively unchanged, Hampton has seen increases in both single-person and four-plus-person households, and decreases in two-person households. New Hampshire as a whole has seen similar changes in one- and three-person household sizes, but Hampton's decline in two-person and increase in four-plus-person households are notable differences.

Households by Type	Hampton						New Hampshire		
	2010	2010 % of Total	2019	2019 % of Total	Change 2010-2019		2010% of Total	2019% of Total	Change 2010-2019
Total	7,065	7,065	7,088		0.3%		513,804	532,037	3.5%
Family Households	4,384	62.1%	4,032	56.9%	-8.0%		67.4%	60.3%	-10.5%
With own children under 18	1,616	22.9%	1,300	18.3%	-19.6%		30.1%	25.0%	-16.9%
Married-couple family	3,566	50.5%	3,594	50.7%	0.8%		54.2%	52.3%	-3.5%
Single householder with own children	818	11.6%	197	2.8%	-75.9%		7.9%	4.8%	39.2%
Nonfamily households	2,681	37.9%	3,056	43.1%	14%		32.6%	39.7%	21.8%
Living alone	2,157	30.5%	2,238	31.6%	3.8%		25.0%	26.3%	5.2%
Living alone, 65+	764	10.8%	967	13.6%	26.6%		8.9%	11.0%	23.6%
Average household size	2.18		2.17		-0.5%		2.48	2.46	0.8%
Average family size	2.71		2.74		1.1%		2.98	2.96	0.7%

Table 2: Household & Family Characteristics; Source: US Census Bureau, 2010 & 2019 ACS 5-year

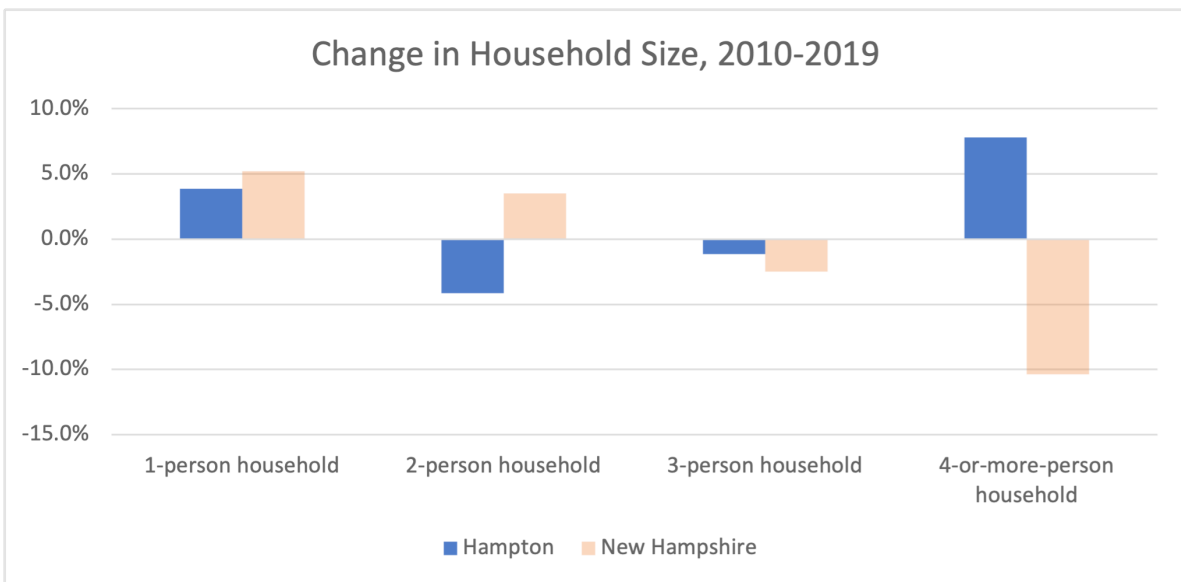


Figure 6: Change in Household Size; Source: US Census Bureau, 2010 & 2019 ACS 5-year:

HOUSING CHARACTERISTICS

Housing Stock & Occupancy

The Town of Hampton currently has 9,654 housing units of which 73%, or 7,088 are occupied. Owneroccupied units constitute 76% of those units, with the remaining 24% as renter-occupied. This compares to New Hampshire which has 71% of occupied units as owner-occupied and 29% as renter-occupied. Between 2010 and 2019, Hampton's occupied housing stock shifted substantially in its composition gaining 485 ownership units and losing 462 rental units. This equated to a loss of 21% for rental housing, possibly suggesting conversions of rental units to ownership units. Conversely, New Hampshire saw an increase in ownership units of 1.3% and an increase of 10% in renter-occupied units.

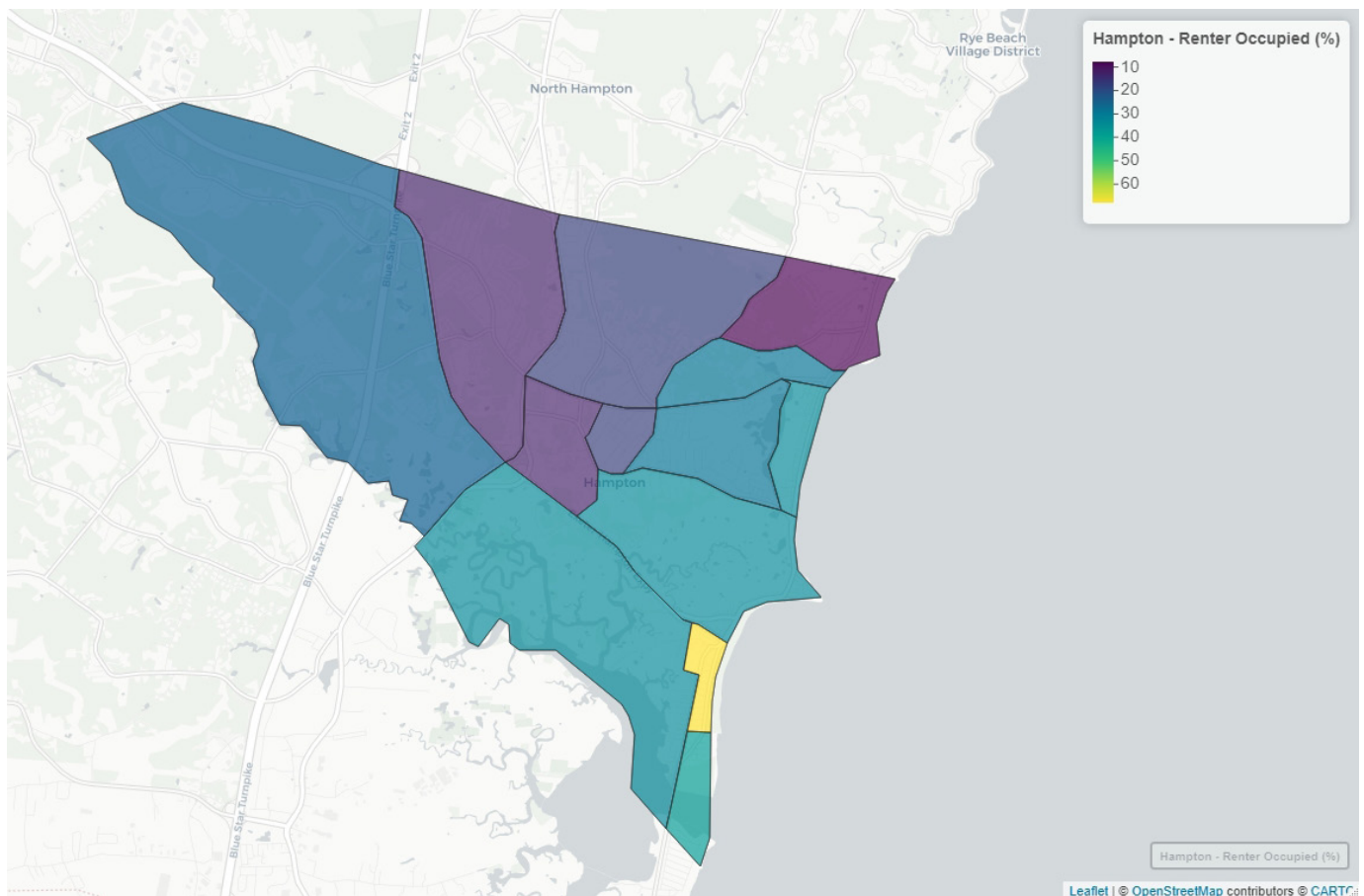


Figure 7: % of Units that are Renter-occupied by Block Group; Source: US Census, 2019 ACS 5-year

The vacancy rate in Hampton in 2019 was 27% compared to only 16% statewide. Although the overall number of vacant units in Hampton has been declining since 2010, the number of seasonal vacant units has increased 15.9% (297 units) driven primarily by the tourism and vacation industry. The percentage of owner-occupied units that are vacant has hovered between 0% and 1% since 2010. This is an extremely low rate, and likely speaks to the demand for ownership units and the sharp increase seen in owneroccupied units over the last nine years. A healthy vacancy rate for owner-occupied housing is typically between 3% and 5% allowing for turnover of units each year.

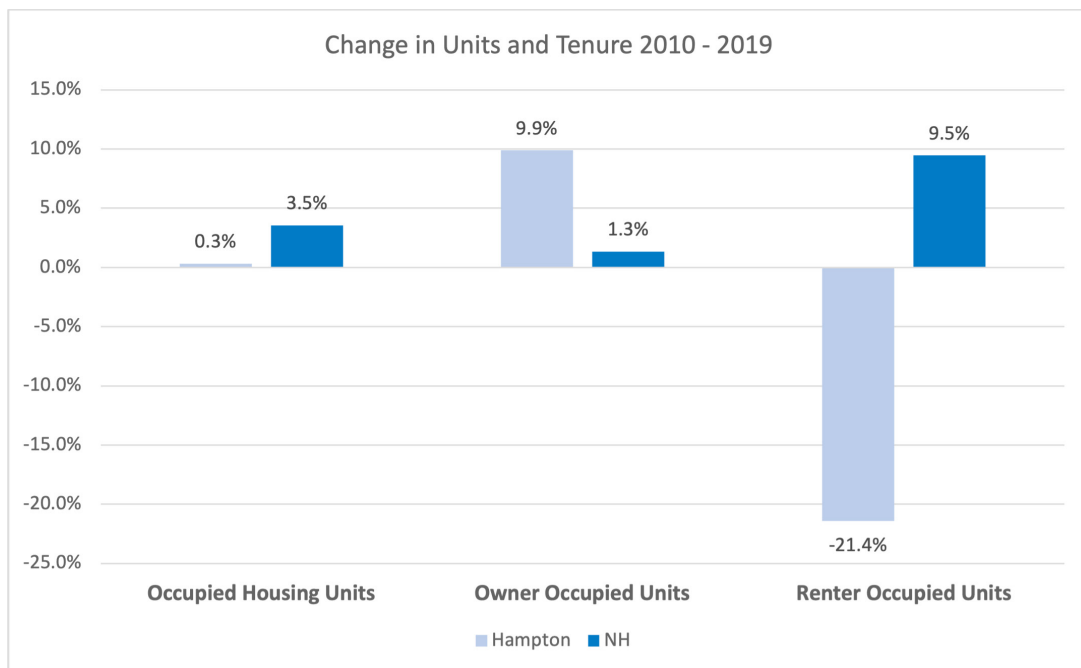
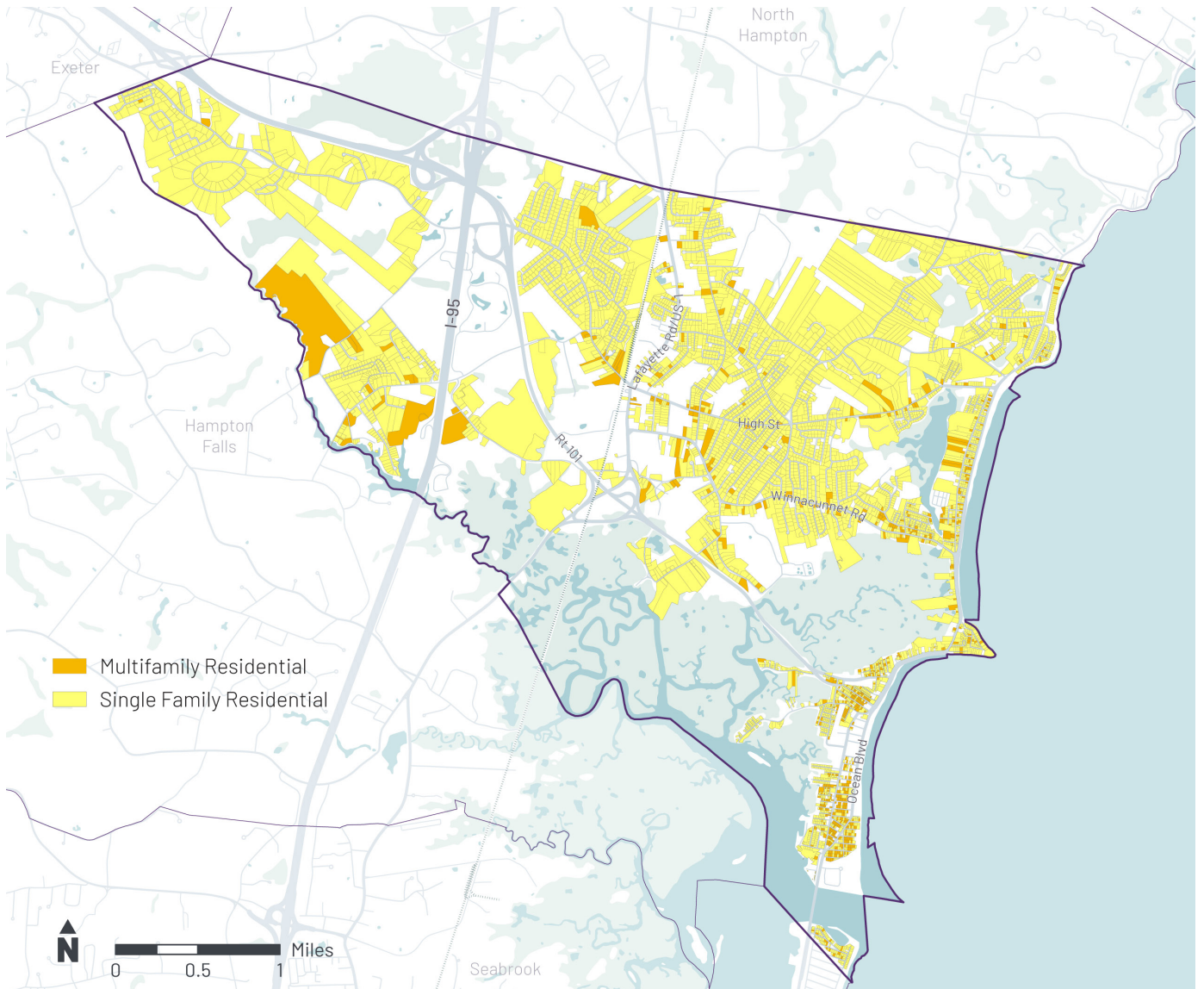


Figure 9: Change in Units and Tenure, 2010-2019; Source: US Census Bureau, 2010 and 2019 ACS 5-year

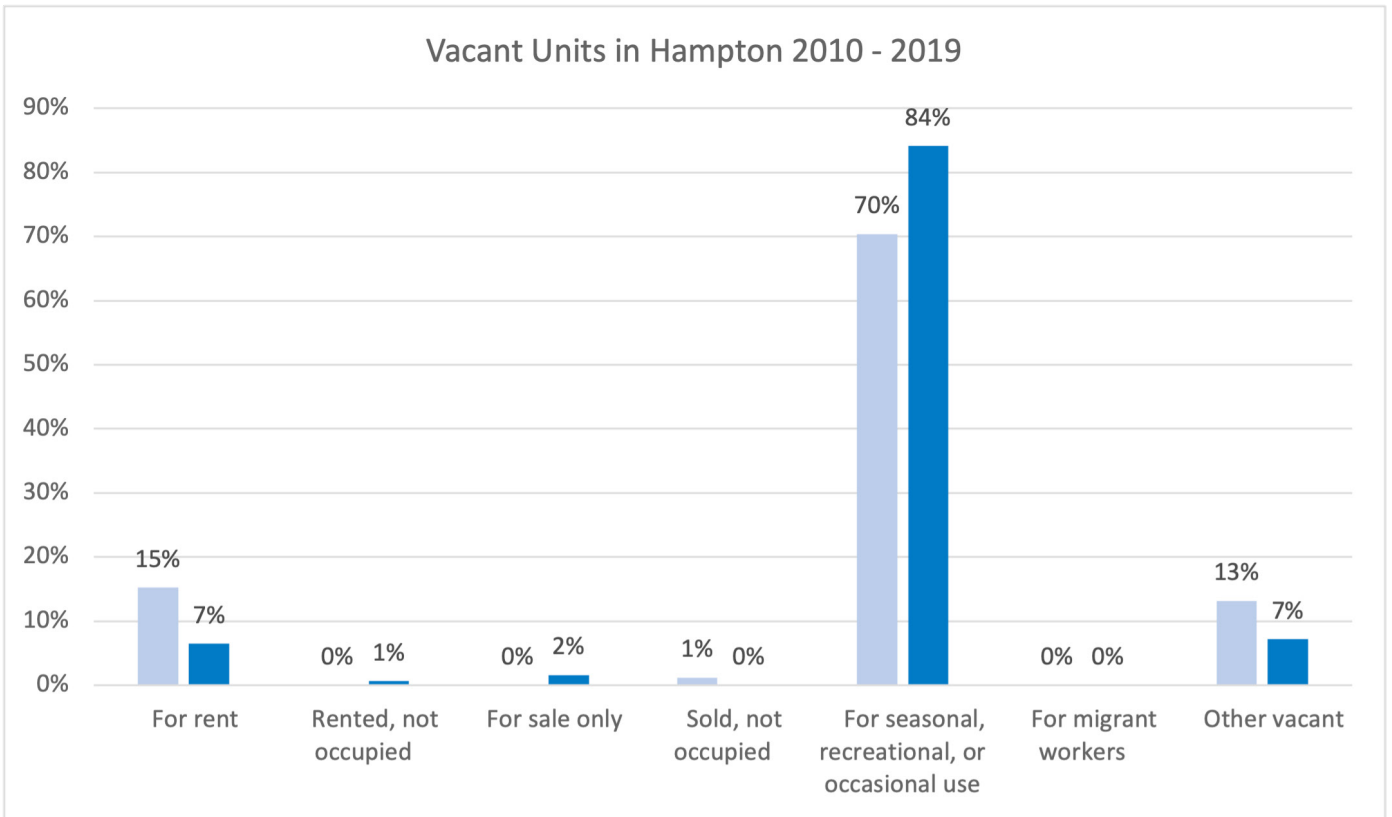


Figure 10: Vacant Units by Type; Source: US Census Bureau, 2010 & 2019 ACS 5-year

In 2010, the percentage of units actively for rent or rented but not yet occupied was 16% but decreased to 9% by 2019. This is now within what is considered a healthy range for the rental market of 7% to 9%. As more rental units are converted to ownership and a lack of rental construction occurs in Hampton, it may be more difficult for renter households to find available units or units priced to different segments of the market. Hampton's seasonal housing continues to comprise the largest share of vacant units at 84% in 2019.⁴ The Census considers a unit seasonally-vacant if the unit is only available during certain seasons during a given year.

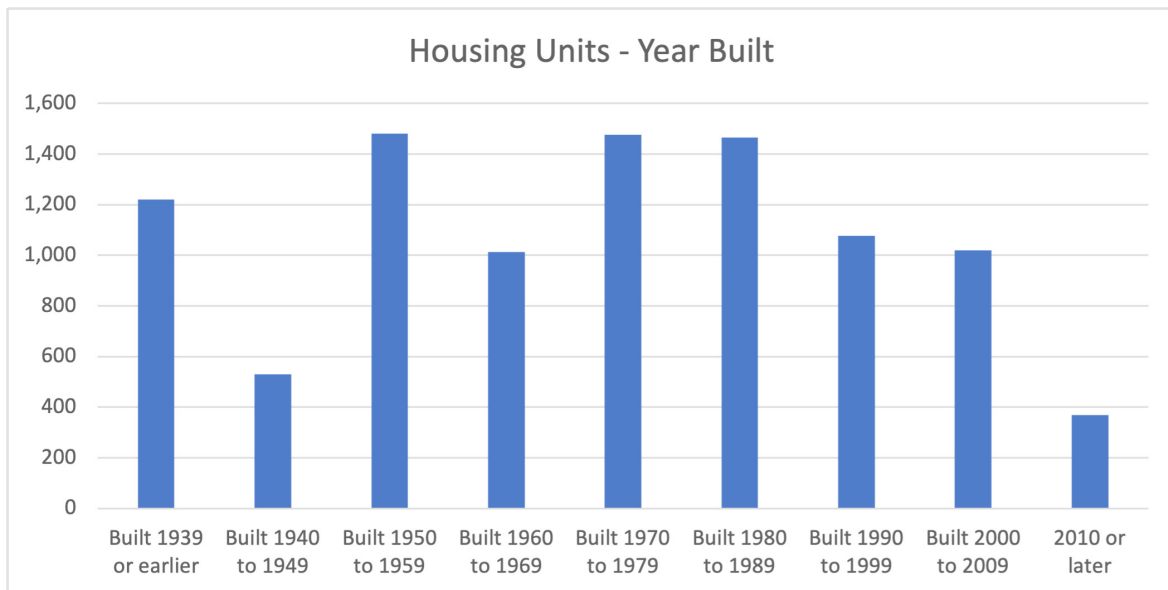


Figure 11: Housing Units by Year Built; Source: US Census Bureau, 2019 ACS 5-year

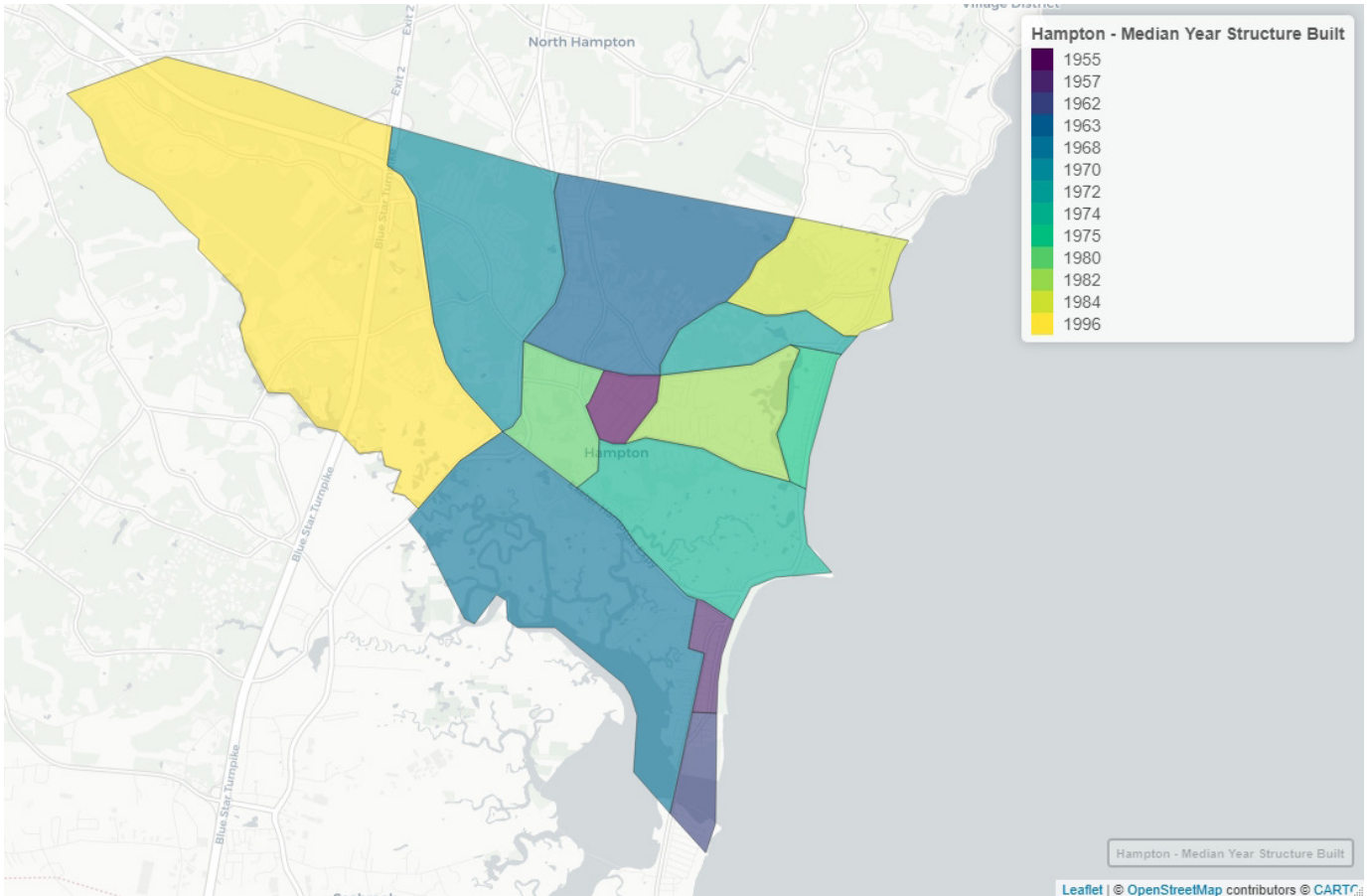
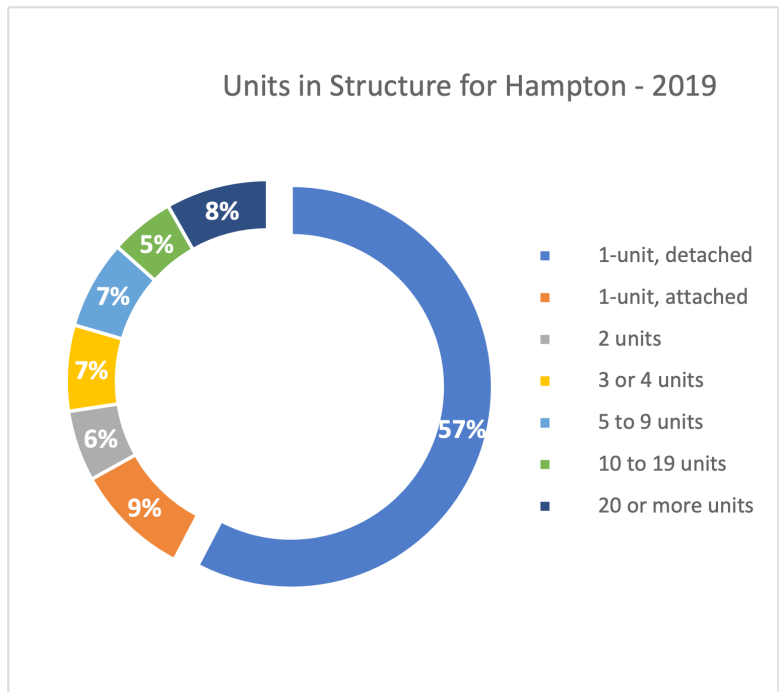


Figure 12: Median Year Built for Housing by Block Group; Source: US Census, 2019 ACS 5-year

Over the last nine years Hampton has experienced a historically low amount of housing development. Fewer housing units in Hampton were built in the 2010s than in any decade going back to at least the 1940s – not even accounting for older units that were built and since demolished. Much of the existing housing stock in Hampton was built during the second half of the 20th century, reflecting the more rapid population growth the town experienced during that period.

Although recent years have seen a decrease in housing starts, Hampton has a relatively diverse distribution of housing units by structure type compared to New Hampshire as a whole. About 66% of all units are in 1-unit attached and detached



structures (single-family and townhomes) with another 13% in structures with two to four units. Hampton does have some larger multi-family structures with 786 or 8% of all units in buildings with 20 or more units.

The most common unit size in Hampton is a 2-bedroom, which comprise 36% of the housing in town. Smaller units tend to be overrepresented in Hampton compared to the housing stock statewide. Singlefamily housing is by far the most common type in Hampton, with 66% of all units either single-family detached (57%) or attached

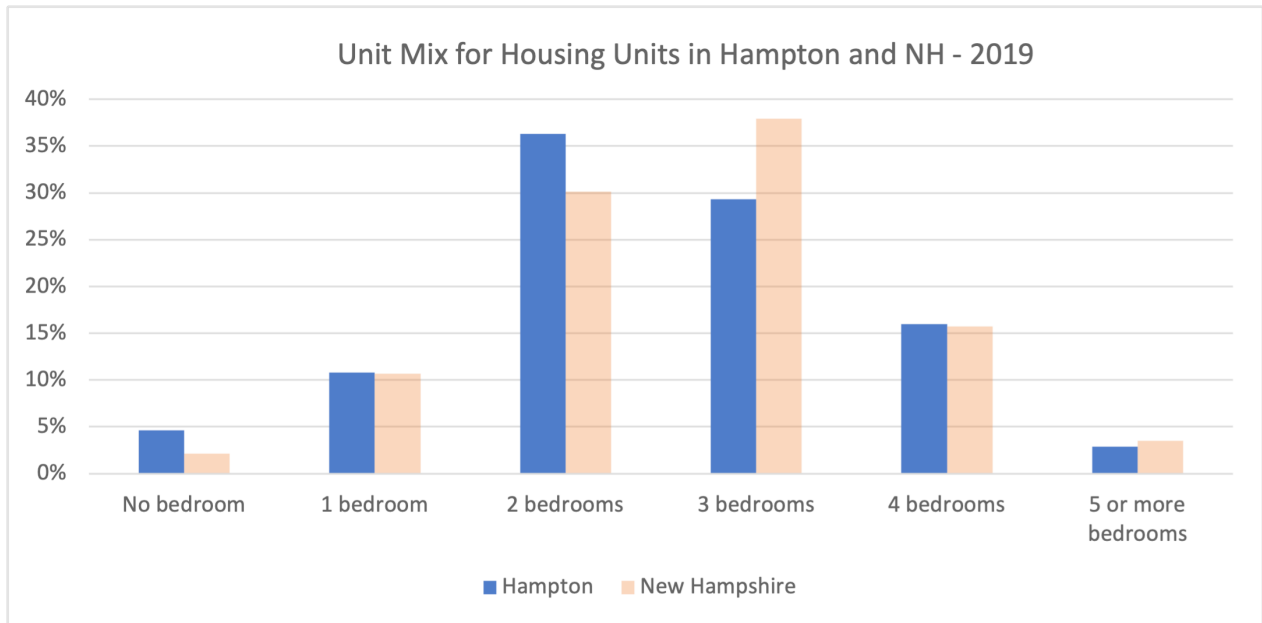


Figure 14: Unit Mix for Housing Units; Source: US Census Bureau, 2019 ACS 5-year

Home Prices and Rental Trends

Both ownership and rental housing continues to escalate in price in Hampton evidenced by the continued increase in owner-occupied home values and sales prices over the last nine years. Since 2010, the median value of a home in Hampton increased 8% going from \$346,400 to \$373,200. This compares to New Hampshire as a whole which saw a 3% increase in median home value from \$253,200 to \$261,700. In 2019, nearly 72% of all homes were valued at \$300,000 or above with 20% valued above \$500,000. The number of homes valued at over \$500,000 has increased 81% since 2010.

For all housing sales, prices have generally risen in both the Hampton and Hampton Beach markets since 2016. The average annual sales price of a single family home in Hampton has increased 39% since 2016 while home sale prices in Hampton Beach increased 31%. This equates to an increase in the average annual sales price of \$139,000 in Hampton and \$114,000 in Hampton Beach over the course of 4.5 years. Days on market, one indicator of market demand, has been slowly declining as well hitting lows in late 2020 and the early part of 2021.

The for-sale condominium market has also seen a substantial uptick in average sale price since 2016 with average condo sale prices up 20% in Hampton and 31% in Hampton Beach. This equates to an increase in average sale price of \$56,000 in Hampton and \$79,000 in Hampton Beach.

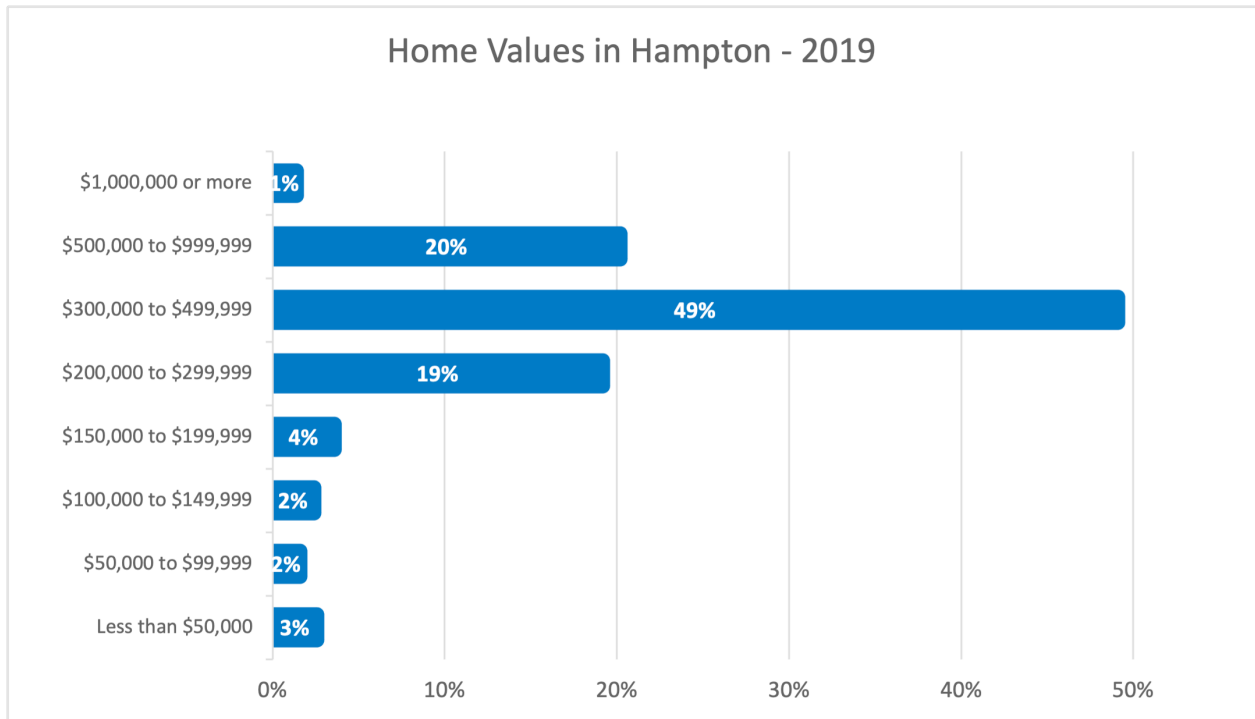


Figure 15: Home Values; Source: US Census Bureau, 2019 ACS 5-year

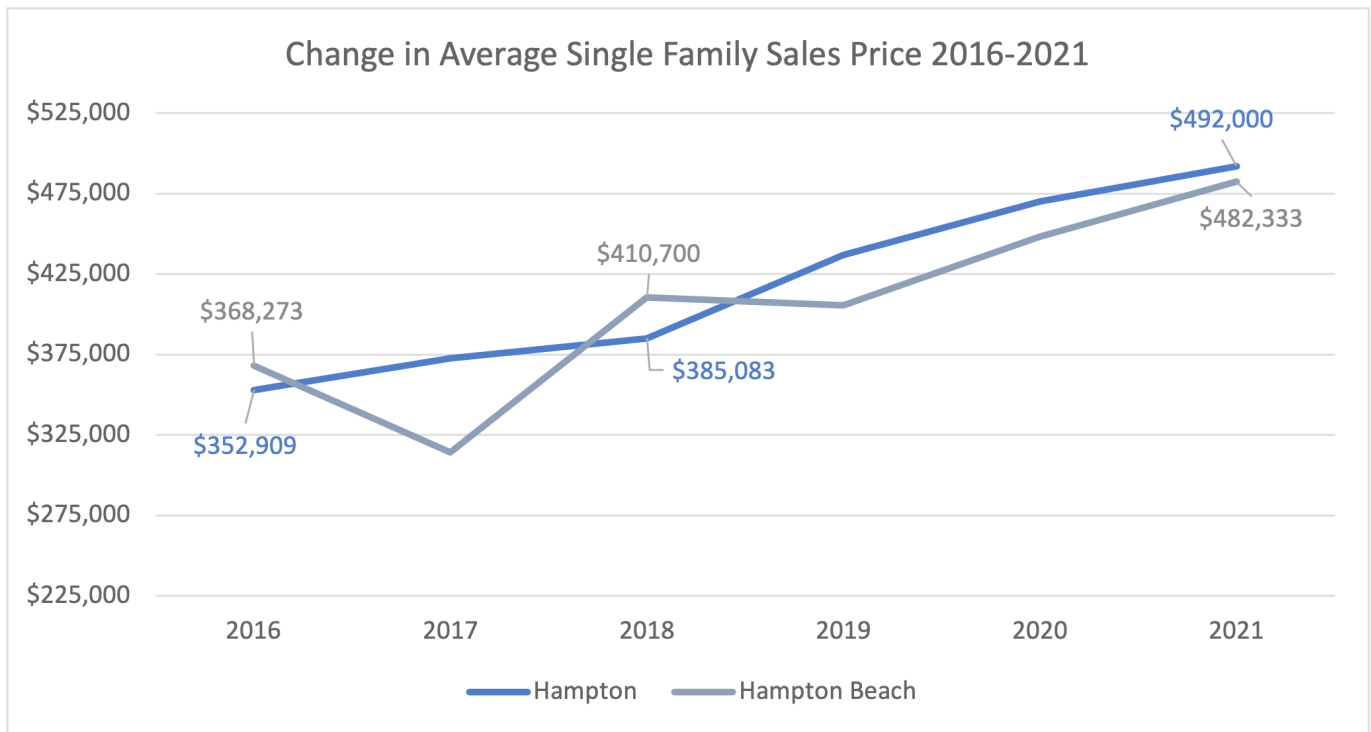


Figure 16: Average Single Family Home Sale Prices; Source: Redfin, 5/24/21

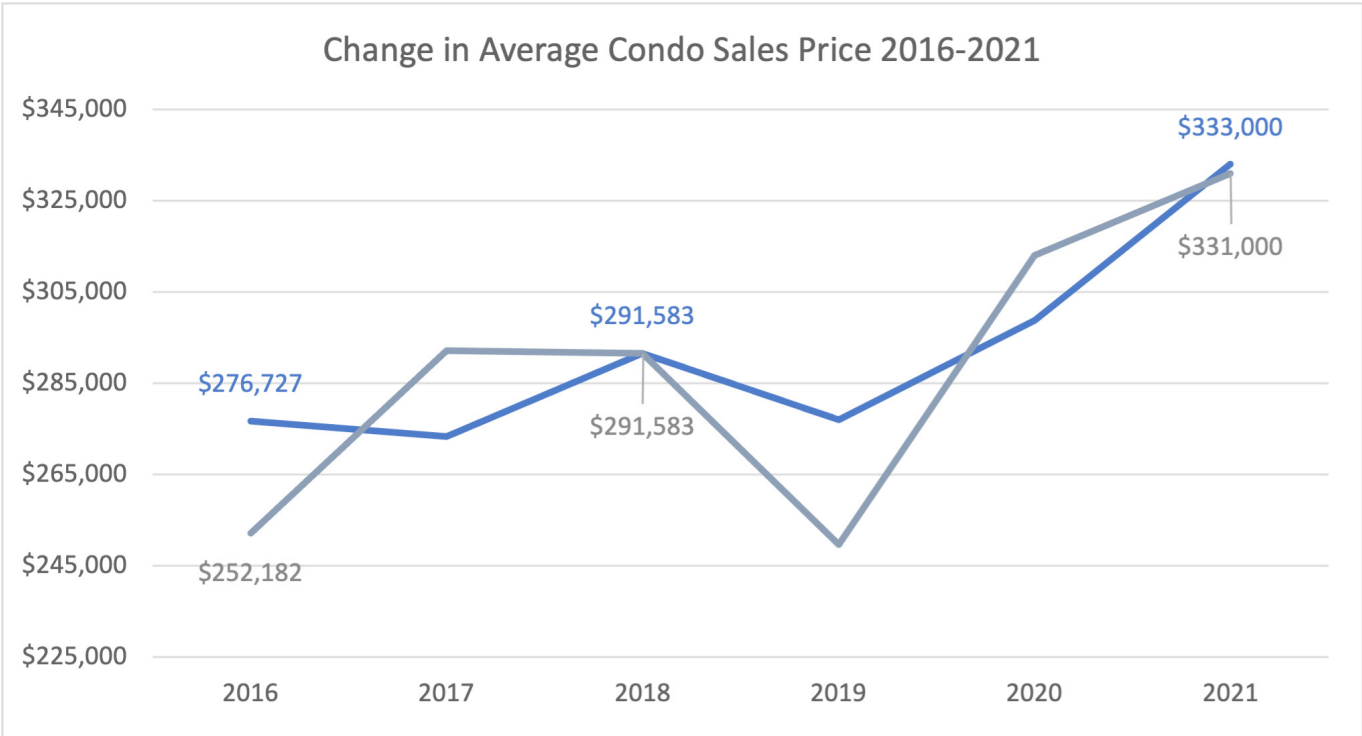


Figure 16: Average Single Family Home Sale Prices; Source: Redfin, 5/24/21

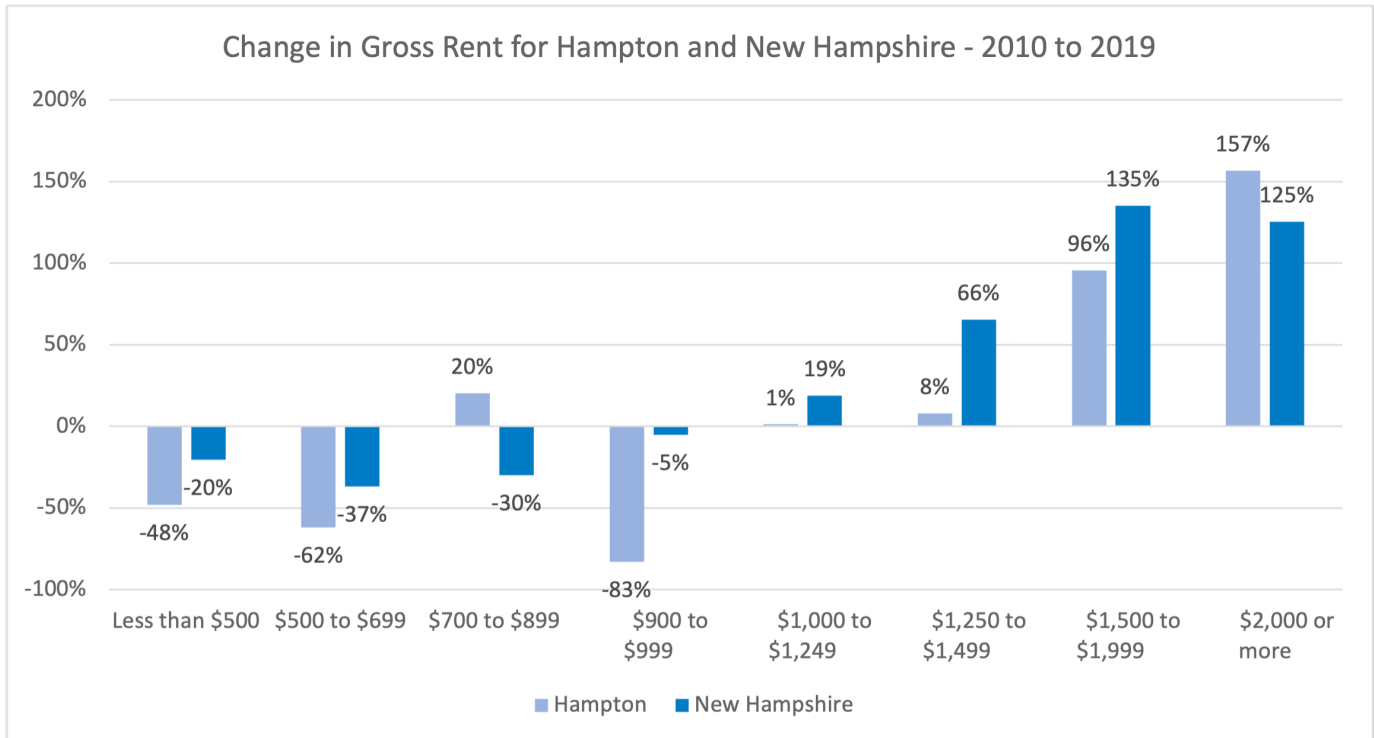


Figure 16: Average Single Family Home Sale Prices; Source: Redfin, 5/24/21

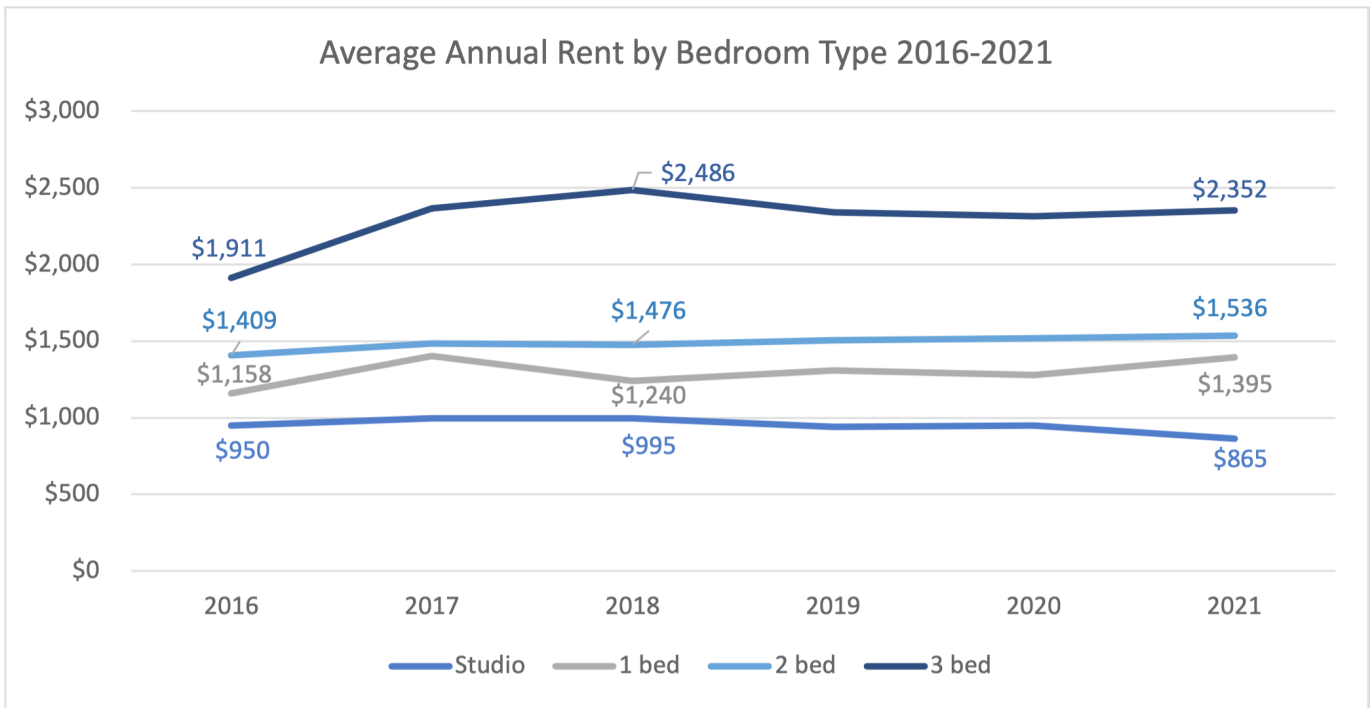


Figure 16: Average Single Family Home Sale Prices; Source: Redfin, 5/24/21

Rental Housing

Like ownership costs, rental housing costs are also on the rise in Hampton. Median gross rent increased 20% over the last nine years to \$1,173 per month, up from \$975 in 2010. Median gross rent also increased by 19% statewide, so Hampton in this instance is not unlike the state as a whole. Looking at gross rents by category, sharp increases are seen in both Hampton and across New Hampshire in units renting for over \$1,500 per month. In Hampton, the number of units renting at this price point increased by over 470 in nine years. This is happening at the same time as many rental units are being converted to owner-occupied units further squeezing rental availability while prices increase. As gross rents across Hampton have increased, so have the average rents for units made available in each year since 2016. According to rental data from the online aggregator Zumper, the average rent for 1, 2, and 3-bedroom rental units has increased significantly with 1-bedroom units seeing a 21% increase while 3-bedroom units saw a 23% increase. The pricing increase for 2-bedroom units was not as dramatic at 9% over the same five year period. The average rent of a 1-bedroom unit increased \$237 per month, while 3-bedroom units increased \$441 per month.

Housing Affordability - Cost Burdened Households

Hampton’s housing market is influenced by a number of factors, including its role as a summer tourism destination and proximity to the Boston metropolitan area – both of which provide upward pressure on prices and rents. Two measures of housing cost burden, Selected Monthly Owner Costs as a Percentage of Household Income and Gross Rent as a Percentage of Household Income, suggest that housing affordability is a concern for some Hampton residents. The share of owner-occupied households that spend greater than 30% of their gross income on housing costs (a common measure of housing cost burden) is 26.3%, while 34.9% of renters spend greater than 30% of their gross income on rent. Though both of these figures are lower than New Hampshire state estimates, the total number of households spending above the housing cost burdened threshold is 1,972, or 28% of households in Hampton.

ECONOMIC DEVELOPMENT

INTRODUCTION

Economic development encompasses a wide range of topics and influences many others described in the Master Plan. Economic development specifically relates to industry, employment, and opportunity, but interacts closely with issues such as land use, transportation, and government services, to name but a few. Successful economic development outcomes in Hampton will help the town and its residents achieve a growing economy, living wage jobs, and financial stability to address broader efforts across the town. The existing conditions in Hampton provide a starting point for understanding challenges, opportunities, and potential objectives for the next ten years.

LABOR FORCE

An examination of the labor force, employment base, industry intensity, and development patterns will help describe some of the key issues for the town and support planning for the future. Labor Force Hampton's residents are well-educated and high-earning compared to the rest of New Hampshire. Within the town, 48% of the population has attained a bachelor's degree or higher while median household income across the town has reached \$85,585. Statewide those figures are 37% and \$76,768, respectively.¹

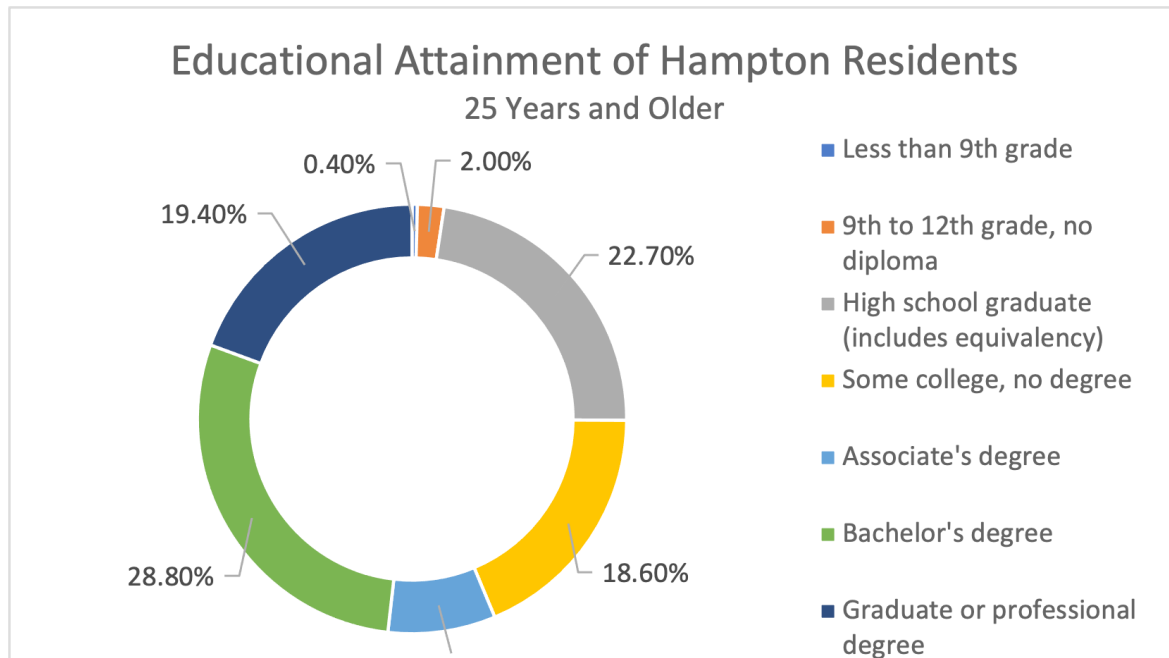


Figure 1: Education Attainment for Hampton Residents; Source: US Census, 2019 American Community Survey, 5-year

As of March 2021, Hampton had a total of 8,530 residents currently employed and an unemployment rate of 3.8%. The unemployment rate in Hampton has been falling rapidly since a high of 19.6% in April 2020 when the pandemic caused a nationwide shut down of the economy. This also coincided with Hampton's busiest time of year as residents, businesses, and visitors

were preparing for the opening of Hampton Beach for the season. The reliance of the Town's employment base on the Beach was certainly seen and felt in these high unemployment figures. The unemployment rate of 3.8% is nearly back to prepandemic levels where in March of 2020 the Town had a rate of 3.4%.

Residents of Hampton who are participating in the labor force largely travel outside the town for work. As of 2018, about 15% of all employed residents both live and work in Hampton while 85% work elsewhere.³ Approximately 77% of all employed residents travel less than 25 miles to get to their place of employment,

including 46% who travel less than 10 miles. Workers living in Hampton have a mean commute time of 27.4 minutes, which is very similar to the statewide average of 27.5 minutes. The map on the following page shows some of the largest employment destinations for Hampton residents where the darker the color, the higher the number of residents working there. Hampton and Hampton Beach account for the largest share of resident workers at just over 15%. Other employment clusters for Hampton resident workers are predominately to the north and west in places like Portsmouth (5%), Dover (4%), Exeter (3%), and Manchester (3%). The travel corridors of Interstate 95, Route 101, and Route 1 play important roles in getting residents to work and back.⁴

There are just over 4,700 employees commuting into Hampton each day for work and about 1,200 Hampton residents that remain in Hampton for work. Of those employees coming into Hampton from elsewhere, approximately 66% are coming from within 24 miles of Hampton and 43% are coming from within 10 miles of Hampton which is similar to commuting patterns of Hampton residents. The difference for non-resident workers is the direction they are traveling from. There is a stronger commuter flow coming from the south and southwest into Hampton from places like Seabrook, Plaistow, Salem, and Nashua in New Hampshire, as well as Newburyport, Haverhill, Lawrence, and even Boston, in Massachusetts. There are still very strong linkages to Portsmouth, Exeter, and Manchester which combined fill about 19.5% of all jobs in Hampton.⁵

EMPLOYMENT BASE

Though Hampton is undoubtedly best known as a summer tourism hub and its business and employment base reflects those influences, economic activity in the town also includes some industry sectors not typically associated with tourism activities. In 2020 there were 8,486 jobs in the town, compared to a workforce of 8,871 people, a ratio of 0.95. 82.7% of jobs in Hampton are supported through private sector businesses, with the remaining 17.3% in federal, state, and local government. Of that 17.3%, most jobs are in local government (13.1%).⁶

Inflow/Outflow of Workers in Hampton



Description	2010 jobs	2020 jobs	2010-2020 % change
Accommodation and Food Services	1,129	1,186	5%
Finance and Insurance	686	1,028	50%
Government	1,069	988	8%
Real Estate and Rental and Leasing	639	836	31%
Admin. Support and Waste Mgt. and Remediation Services	574	716	25%
Manufacturing	606	569	6%
Construction	331	520	57%
Retail Trade	505	513	2%
Professional, Scientific, and Technical Services	436	512	18%
Other Services (except Public Admin)	463	488	5%
Health Care and Social Assistance	449	430	4%
Wholesale Trade	275	350	27%
Arts, Entertainment, and Recreation	151	181	20%
Educational Services	45	69	55%
Transportation and Warehousing	30	30	1%
Information	22	26	18%
Utilities	33	24	27%
Mgt. of Companies and Enterprises	14	15	10%

Table 1: Employment by Industry, 10-year Change (2-digit NAICS code); Source: EMSI, 2020 Industry Report

Within the private sector, Accommodation & Food Services is the largest industry, employing 1,186 people or 14% of all workers; nearly all of those (1,132) work in Restaurants or Accommodations. However, Finance & Insurance employed nearly as many people, with 1,028 workers in that industry and there is a growing employment base in Professional and Technical Services, up 18% in ten years. Other growing private sector industries include several which are likely supporting the tourism economy including Real Estate, Administrative Support and Waste Management,

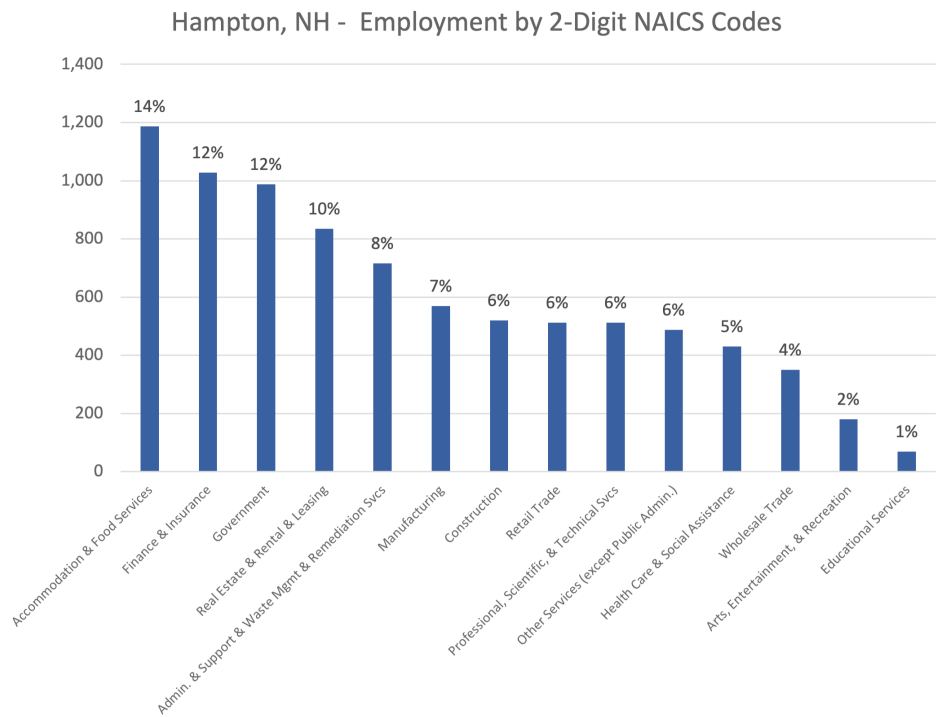


Figure 2: Proportion of Employment by Industry (2-digit NAICS code); Source: EMSI, 2020 Industry Report

Construction, and Retail Trade. The Construction and Real Estate & Rental & Leasing industries have seen significant percentage increases over the last ten years. The table below illustrates employment by 2-digit NAICS codes and describes changes since 2010.

MAJOR EMPLOYERS

The largest employers in Hampton reflect the diversity of industry in the town. Several of the largest employers are in the Accommodation & Food Services industry, with two restaurants and two hotels in the top 12. However, the two largest employers are in manufacturing and the arts – Foss Performance Materials, a textile manufacturer, and the Hampton Beach Casino, an entertainment venue.

Rank	Employer	Business Description	Employer Size
1	Foss Performance Materials	Textile Manufacturers	500-999
2	Hampton Beach Casino	Music and Live Entertainment	250-499
3	Planet Fitness Inc.	Management Services	100-249
4	Unitil Corp	Utilities - Holding Companies	100-249
5	Sea Ketch Restaurant	Full-service Restaurants	100-249
6	Hannaford Supermarket	Grocers - Retail	100-249
7	Oceanside Center	Nursing and Convalescent Homes	100-249
8	Ashworth by the Sea	Hotels and Motels	100-249
9	Old Salt Rstrnt and Lamie's Inn	Inns	100-249
10	Brazonics Inc.	Heat exchangers - Manufacturers	100-249
11	Galley Hatch Restaurant	Restaurants	100-249
12	Hampton Police Department	Police Departments	100-249

Table 2: Largest Employers in Hampton; Source: University of New Hampshire, GranitStats, 2021

LOCATION QUOTIENTS

Location quotients are important measures of relative concentration of employment in a particular industry across geographies. They capture, in this instance, the proportion of employment in Hampton in various industries compared to national proportions of industry employment. In the context of the Master Plan, location quotients can be useful in describing a town's reliance on a specific industry or identifying an opportunity for specialization or clustering.

Hampton has relatively high proportions of employment in a handful of industries, notably Finance & Insurance, Accommodation & Food Services, and Real Estate & Rental & Leasing. While annual average earnings per job in Finance & Insurance were high relative to median incomes in Hampton, they were much lower in Accommodation & Food Services, and Real Estate & Rental & Leasing. This may create challenges for employees who work in Hampton but are forced to live elsewhere in order to find housing that is affordable to them based on their income.

Description	Location Quotient	Earnings per job
Finance and Insurance	2.14	\$92,491
Accommodation and Food Services	2.13	\$30,146
Real Estate and Rental and Leasing	1.97	\$50,314
Admin. Support and Waste Mtmt. and Remediation Services	1.40	\$85,067
Wholesale Trade	1.30	\$105,434
Construction	1.09	\$85,433
Manufacturing	1.02	\$73,720
Utilities	0.99	\$82,640
Other Services (except Public Admin.)	0.98	\$32,054
Arts, Entertainment, and Recreation	0.96	\$28,900
Government	0.95	\$78,484
Professional, Scientific, and Technical Srvcs.	0.81	\$83,673
Retail Trade	0.66	\$33,093
Health Care and Social Assistance	0.45	\$64,008
Educational Services	0.34	\$34,566
Information	0.18	\$98,828
Management of Companies and Entprises	0.13	\$123,512
Transportation and Warehousing	0.07	\$61,905

Table 3: Location Quotients & Average Earnings by Industry (2-digit NAICS code); Source: EMSI, 2020 Occupation

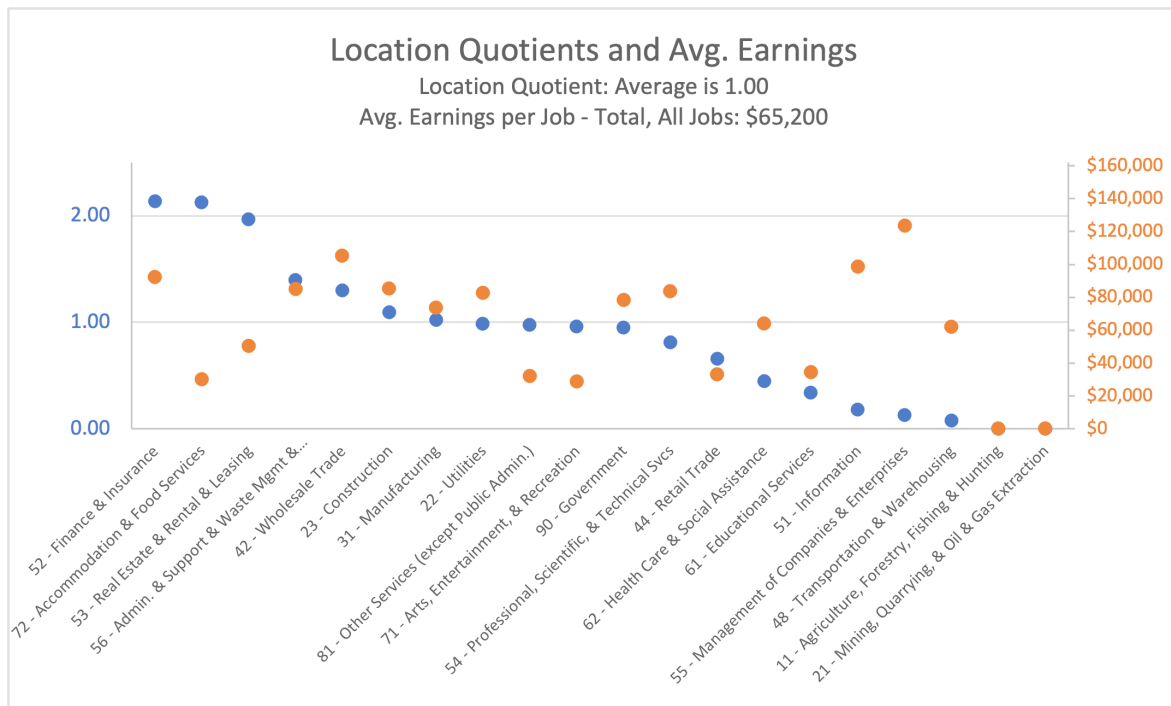


Figure 3: Location Quotients & Average Earnings by Industry (2-digit NAICS codes); Source: EMSI, 2020 Occupation Report

REAL ESTATE & DEVELOPMENT

Development Patterns

There are currently two major commercial districts in Hampton. The first is focused around Hampton Beach along Ocean Boulevard and Ashworth Avenue, where many retail and hospitality businesses tend to be more focused on serving beachgoers and visitors. These streets tend to follow traditional, pre-war development patterns with short blocks full of smaller properties and storefronts, though there are exceptions such as the Hampton Beach Casino. This district is notably mixed-use, with housing interspersed with commercial uses.

The second major commercial district is along Lafayette Road/US-1, where post-war, strip-style commercial development predominates and thus the area is more automobile-oriented. Larger building footprints on larger parcels here cater more to chain retail and office uses. Most of the major national chains are located along Lafayette Rd/US-1 south of Hampton in Seabrook, though some large retailers such as Dunkin', Walgreens, and Hannaford, and a

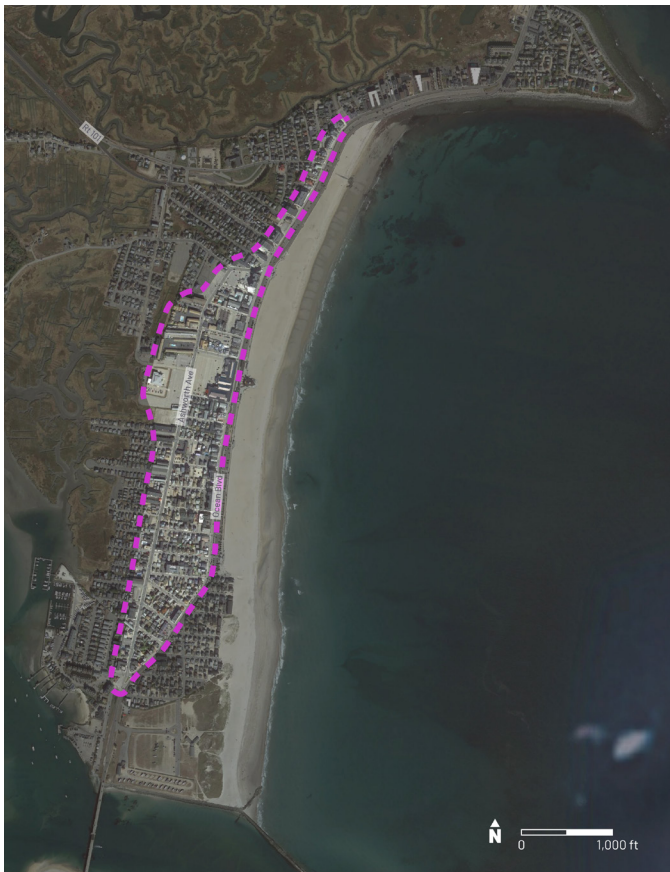


Figure 4: The Hampton Beach commercial district



Figure 5: The Lafayette Rd/US-1 commercial district

number of gas stations are located along the corridor in Hampton itself, alongside a number of restaurants and commercial offices. Hampton also hosts a small number of commercial/industrial parks closer to its regional transportation links, US-1 and I-95. Areas around Hampton that match these development typologies include portions of Lafayette Road/US-1, particularly at Scott Road closer to the former Hampton Branch of the Boston & Maine Railroad,

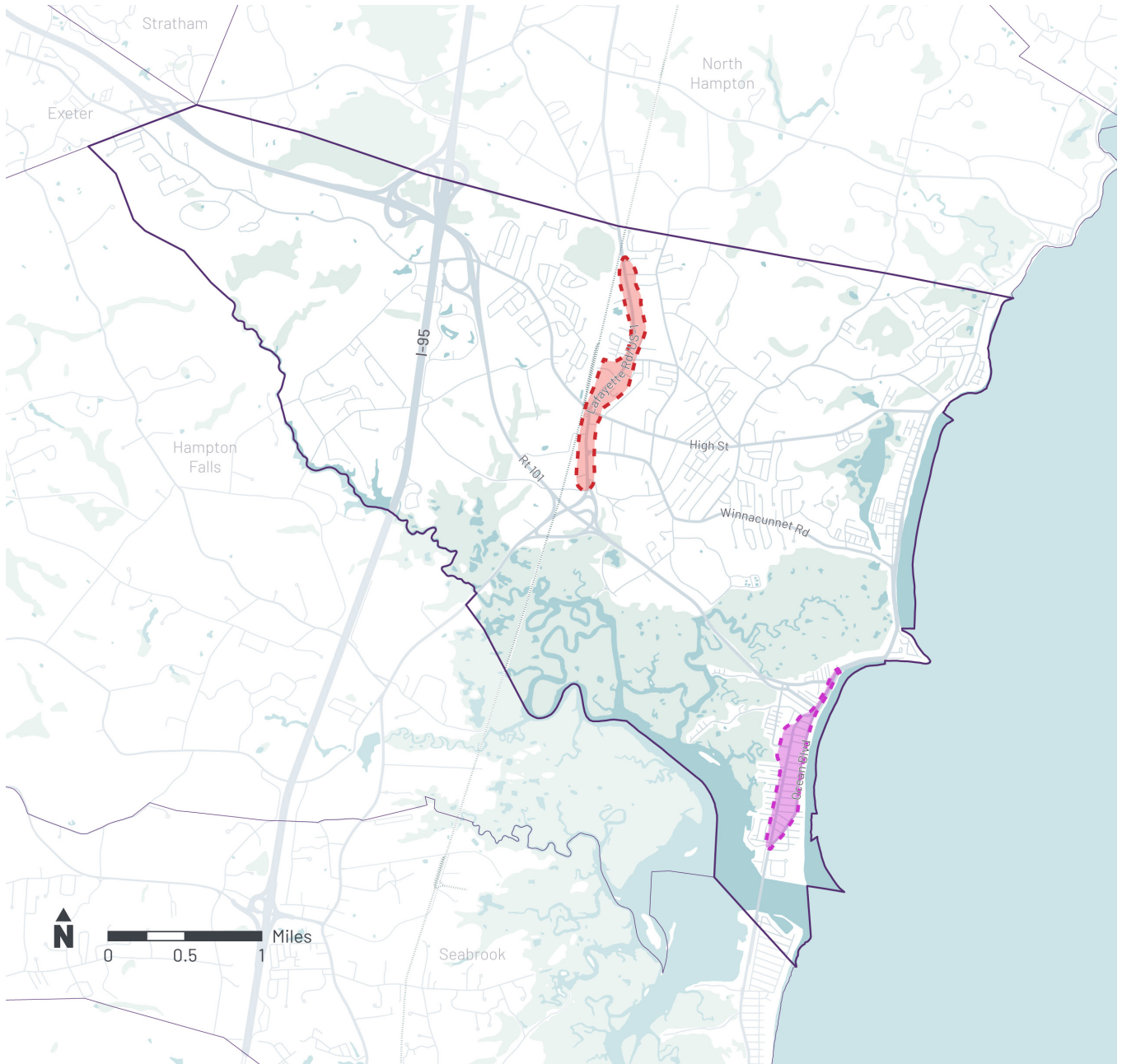


Figure 6: The two major commercial districts in the town of Hampton - Lafayette Rd/US-1 in red, and Hampton Beach in purple

which will be an extension of the NH Seacoast Greenway, as well as others along Merrill Industrial Drive and at Liberty Lane. On properties and particularly backlots along Lafayette Road and Scott Road, businesses include building supplies and construction, auto parts and repair, robotics, USPS distribution, and medical office buildings. Merrill Industrial Drive and nearby properties on Towle Farm Road are home to some of the largest commercial/industrial spaces in town.

Foss Performance Materials, the largest employer in Hampton, is located on Merrill Industrial Drive adjacent to the former Boston & Maine railbed, while other businesses in the district include enterprise software development, real estate services, device design, brewing, medical supply, and a range of other manufacturers.

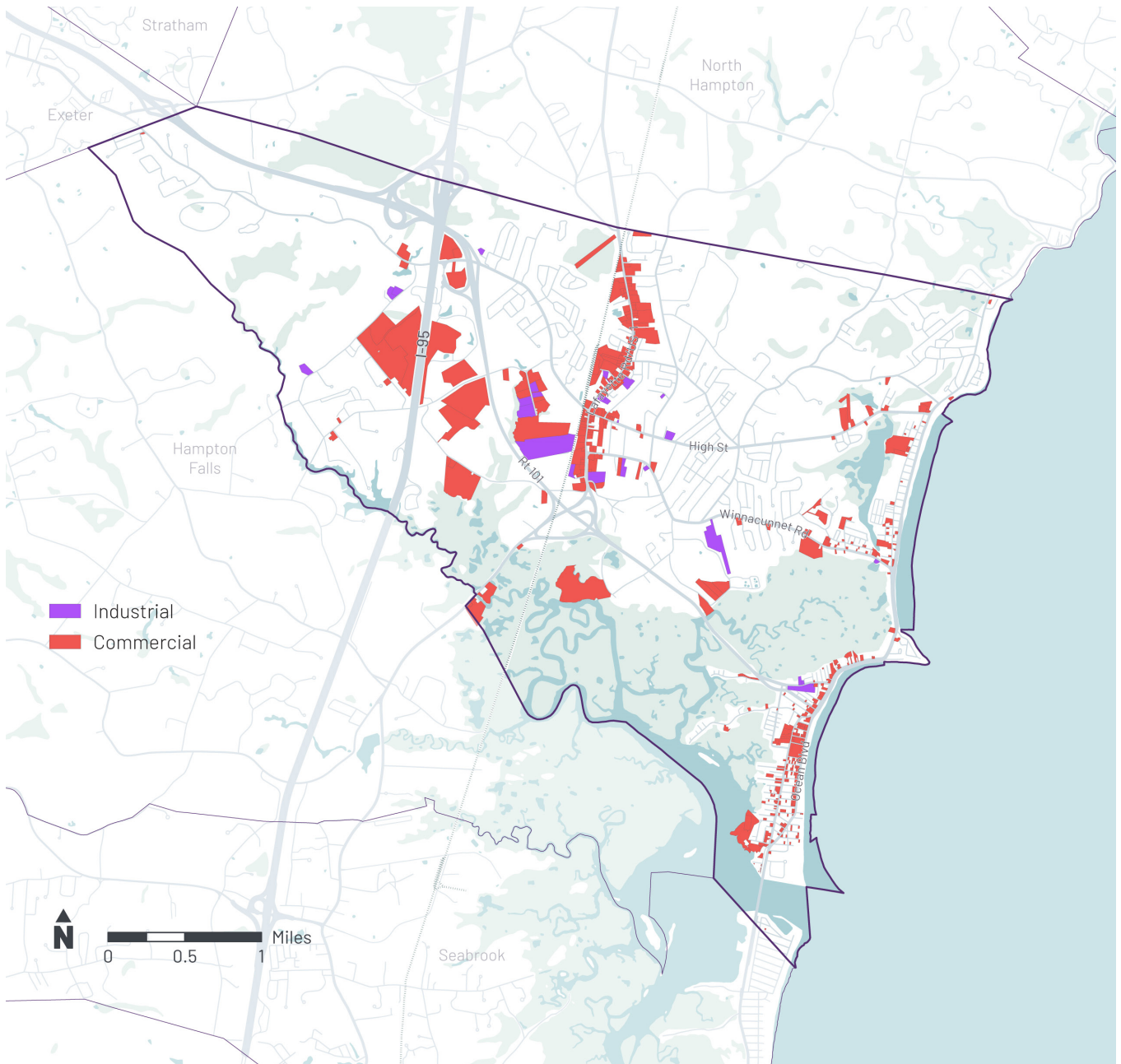


Figure 7: Industrial and commercial development in Hampton

Existing Market for Commercial/Industrial Properties

As of May 2021, there were 14 commercial/industrial properties or office suites available for lease in Hampton. These spaces ranged in size from 180 sf to 4,212 sf, though half of the spaces were between 1,000 and 1,700 sf. There were only two commercial/industrial properties for sale at that time; one was a commercial condo at 2,400 sf and the other approximately 30,000 sf of vacant land.



Figure 7: Examples of existing Commercial/Industrial properties on the for-sale market in May 2021; Source: Loopnet.com, 5/14/21

HISTORY AND CULTURE

STUDIES REVIEWED

- 1996 Historic Preservation Chapter of Master Plan
- Hampton Historical Society – website and correspondence: <http://www.hamptonhistoricalsociety.org/ginfo.htm>
- NH State Parks Hampton Beach: <https://www.nhstateparks.org/visit/seacoast-beaches/hampton-beach-history>
- Lane Memorial Library Native American Resources: <http://www.hampton.lib.nh.us/hampton/history/indians/index.htm>
- “Paths to New Hampshire’s Native Past”: <https://www.nhmagazine.com/paths-to-new-hampshires-native-past/>
- National and State Historic Register property searches
- History of Hampton, NH, Joseph Dow, 1893 <http://www.hampton.lib.nh.us/hampton/history/dow/index.htm>
- Hampton: A Century of Town and Beach, 1888-1988, Peter Evans Randall, 1989 <http://www.hampton.lib.nh.us/hampton/history/randall/index.htm>

FACTS AND FIGURES

- Founded in 1638 by a group from Massachusetts and initially remained under jurisdiction of Massachusetts Bay Colony. Originally called Winnacunnet but was re-named Hampton the following year.
- Being one of the first towns in the Royal Province of New Hampshire, refusal to pay “unjust taxation” was present from the town’s inception.
- Early town government, still under the jurisdiction of England, was fragile with many upheavals.
- Earliest official town map made in 1806
- One of New Hampshire’s four original towns (aside from Exeter, Dover and Portsmouth)
- Puritan religion was unthreatened until 1803
- Hampton has had four different commercial centers whose locations were brought about by changes in dominant modes of transportation.
- 17th/18th century: on Landing Road because of trade routes from Boston
- Second half of 18th century: relocated to be close to taverns after stagecoach lines popped up along Country Road (now Lafayette)
- Eastern Railroad in 1840: moved commercial center close to freight depot
- Present: east side of Lafayette Road at High Street, as a result of an additional train track through town
- Search of NHR listed properties yields only one in Hampton, the Reuben Lamprey Homestead at 416 Winnacunnet Rd.
- Hampton Beach: in 1897, the newly formed Hampton Beach Improvement Company signed a 99-year lease to take over development. “The HBIC land lease expired in 1997 and the Town of Hampton and related authorities, including the state, are now stewards of the developed areas of the Beach” – Community Services and Facilities Chapter, Hampton Master Plan, October 2009, p. CF-51.
- Providing breakwaters and other beach maintenance could not be supported by lease revenues, so in 1933 the Town deeded the beachfront to the State.

- State Historic Register Properties include 2 properties:

Hampton Beach Fire Station, Hampton. Built in 1923, this still-active fire station is the only building associated with the Hampton Beach Precinct, which formed in 1907 to provide municipal services to the beach-end community in Hampton.



Marelli's Market, Hampton

First constructed circa 1841 on Exeter Road, it was moved to its current location in 1900 when the commercial center of Hampton shifted to what is now Route 1. In 1914, Luigi and Celestina Marelli established a market selling primarily produce and candies. Over the years, Marelli's has been a purveyor of fine foods, produce, and candies, an institution in the business district and a rare survivor of the small village markets that were once so plentiful. It is the longest continually operating business in Hampton Center.

TIMELINE

Pre-Colonial and Early Settlement

- Early 17th century - a time of epidemic for the Native peoples.
- 1638 - inhabitants of Newbury petition the General Court of Massachusetts, who grants their wish to settle and call the town Winnacunnet.
- 1639: General Court decides that the name will be changed to Hampton, after the town of Hampton England
- 1656: Sargent's Island designated as a place for fishermen to cure fish.
- 1677: Towns of Portsmouth, Hampton, Exeter and Dover severed from Massachusetts to become towns in the Royal Province of New Hampshire. (this was of course processed and overseen by England).

19th Century: Shifting to the Shore, Regional Connections

- 1800: First Hampton Beach dwelling at Nut Island, in current vicinity of High Street and Cusack Road
- 1819: The first hotel at Boar's Head, and possibly the first seaside hotel north of Boston
- 1840 - 1940
- The advent of the railroad. Livestock/dairy became exports for Hampton
- Economic specialization: specialize and sell one product, buy other products from

elsewhere, made possible by the railroad

- Large-scale fishing efforts undertaken
- Ice cutting developed with the railroad
- Hampton at disadvantage for farming, as much of its land was coastal and couldn't compete w/ other towns' farm land
- Hampton at disadvantage for fishing, because their harbor was too shallow.
- 1860s: First cottages built along the shore, reflecting an increase in leisure activity
- 1887: Hampton, North Hampton and the State of NH funded construction of a shoreline road from the Hampton Causeway to North Hampton
- 1897: Hampton Beach Improvement Company bought the land and began recreational development in full force. Construction begins on streetcar, with ultimate goal of connecting to larger population centers in Merrimac Valley.
- 1898: Life-Saving Station construction begins, occupied 1899. Decommissioned 1946 by Coast Guard. Reopened briefly and finally closed in mid-1960s. 1969: property acquired by Town of Hampton
- 1899: Hampton Beach Casino Built as attraction along streetcar route.

20th Century: Prioritization and Conservation

- 1907: Fire District established for Hampton Beach
- 1910: 1950: "The Summer Playground for All New England". 20,000 people danced weekly at Hampton Beach Casino
- 1912 Memorial Day: Ashworth Hotel opening
- 1926: the last trolley cars ran, due to financial difficulties of maintaining the lines and ridership.
- 1934: State takeover of a portion of the beach area to create Hampton Beach State Reservation, and dredging of the shifting Hampton River to shore up properties and land at the beach. Significant construction project creates breakwater and jetty, and fills in about 50 acres of new land with dredged sand. Current location of Hampton Beach state bathhouse. +/- 45 acres of fill placed behind the north jetty of this project.
- 1964: 40 acres of Town-owned marsh set aside for conservation, and in total 143 donated and Town-owned set aside lands for conservation
- 1973: Life Saving Station demolished, eventually became Bicentennial Park dedicated 1975
- 1985: wetlands ordinance passed
- 2001: Hampton Beach Area Master Plan imagines development over next 50 years



Above: Hampton Fire Station



Above: Old Grist Mill

KEY FINDINGS AND EMERGING ISSUES

Historically, commercial hubs and centers of economic development have emerged around changes in transportation, transitioning from taverns along a stagecoach route, to meat and animal product production with train travel, to tourism at Hampton Beach with the advent of the streetcar. Notably, Hampton at times struggled to compete with surrounding towns' fish exports. In its early history, farming was a major part of the economy. Over time, tourism became increasingly important with development occurring along routes to and from beach areas. Today, Hampton is strongly identified with its beach culture and tourism on the coast.

While Hampton Beach as it exists today may have its own distinct identity, master plan, and village district, it is impossible to separate the development and evolution of Hampton without recognizing the significance of its coastal areas. As has been the case throughout history and will continue to be, the economic and ecological well-being of the coast is inextricably tied to that of inland Hampton. Likewise, the historic and cultural places, artifacts, and trends that occurred at Hampton Beach are no less significant to Hampton and should be recognized as such in this Master Plan.

In previous master plans, the historical chapter currently begins when settlers found Hampton. The current master plan should acknowledge the presence and impact of native cultures prior to the incorporation of the town.

While it is difficult to locate features of Hampton's native past, the Abenaki ancestors continue their culture by creating gatherings such as powwows and reenactments. Additionally, signs of native cultures can be found in natural environments where the existence of Abenaki-tended Trail Trees are present:

Trail Trees: Abenaki would bend young trees horizontally and stake them, then allow the tops to grow straight up from the bend, thus marking a trail.

Online resources such as Mountain Stewards' Trail Trees Project http://www.mountainstewards.org/project/internal_index.html track the locations of these native path markers

OBSERVABLE TRENDS

- “The two indigenous industries that sustained our town for centuries have almost disappeared, and with them has gone not just a measure of self-sufficiency of the town, but also a sense of interdependence with the land and sea that surround us.” – Hampton Historic Preservation Chapter, January 1996, p.6, referring to the industries of farming and fishing.
- The influence and activity of early and native settlers to Hampton is less evident in both the physical development of Hampton and in its written history.
- The Town's Properties and sites of significance tend to focus on inland areas, and 19th century sites and before. However, Hampton Beach is a huge piece of the town's cultural and historical identity and could receive more focus in the master plan update.
- The practice of altering the natural landscape, at times significantly, for the benefit of Town interest and promotion of development, began early in the history of Hampton. Shifting lands were filled for developable parcels, bridges and roads were made as connectors,

and more recently drainage was re-established to control flooding and insects. The future development and resilience of Hampton will require this type of comprehensive planning as well, especially in vulnerable areas.

- The development of Hampton Beach post-1900 was plagued by storms and fires, causing businesses to build and rebuild. This trend continues with significant fires in 1999 destroying a historic restaurant and other businesses <http://www.hampton.lib.nh.us/hampton/history/firedept/1999fire/1999fire.htm>, and in 2010, when a large prominent block in Hampton Beach containing a ground-level arcade and hotel was destroyed by fire. <http://www.hampton.lib.nh.us/hampton/history/firedept/2010surfhotelindex.htm>
- There does not appear to be any comprehensive effort to recognize, preserve, or protect sites or areas of Hampton due to their historic or cultural value. Placework has created an informational list of sites of particular significance (according to the Historical Society) to accompany and supplement the general list provided in the previous master plan. Highlighting these properties is intended to encourage more oversight.

QUESTIONS

- Are there any buildings, neighborhoods, or areas that the Town would like to pursue state or national historic status?
- Understanding the trend of changing ownership in shoreline areas is important to planning for its future. Might the “rebranding” of Hampton Beach as a cultural site require some coordination or alteration of ownership?
- Are any sites of particular significance (or any sites on the list of historical/cultural assets) vulnerable to sea level rise or other known climate-related vulnerabilities?
- Are any sites of significance vulnerable to other development plans?
- How can future development be influenced, aesthetically and otherwise, by the presence and contributions of historic and cultural properties in Hampton?

RECOMMENDATIONS

- Include a section preceding existing master plan historical text acknowledging the Abenaki people who had occupied Hampton as early as 9,000 years ago.
- Utilize list of historic sites compiled from 1996 Master Plan along with the Placework-provided table of sites of significance, to create a map of historical locations - See list provided. Addresses were not provided with this list, but they are organized by general area. A key map indicating those general areas could point to area maps where sites are identified
- Create an image-based directory of building typologies typical to Hampton, as a way of suggesting a vernacular for consideration in future development (see end of document for suggestions)
- Consider planning for interpretive markings of sites of significance, especially in tourist areas. Some of these could be sites that no longer exist, such as the first hotel, etc. Consider visually documenting the history of growth, fires, etc. at Hampton Beach.
- Consider an effort to identify sites or neighborhoods as historically or culturally significant, and explore benefits of doing so. Create signage, marketing, potential state or national register, etc. Include landmark sites and historic markers for places that were demolished or destroyed. For instance, the site of the 1977 demolition of the Ocean House motel for a McDonald's.

NATURAL RESOURCES

STUDIES AND REPORTS REVIEWED

- Hampton Beach Master Plan: <https://hamptonnh.gov/agendacenter>
- Existing Master Plan Chapter 6: Natural Resources (2009): <https://www.hamptonnh.gov/DocumentCenter/View/1380/10Chapter-6-NaturalResources-2009-PDF>
- Master Plan Vision (March 2021): <https://www.hamptonnh.gov/DocumentCenter/View/4147/20210331-Master-PlanVision> Master Plan Vision Public Engagement (Summer 2020); <https://www.hamptonnh.gov/DocumentCenter/View/3751/09-16-20-MandM-Workshop-Notes-PDF>
- NH Seacoast Greenway: <https://www.greenway.org/> and <https://www.facebook.com/nhseacoastgreenway>
- Experience Hampton: <https://www.experiencehampton.org/>
- The New Hampshire Climate Action Plan: A Plan for New Hampshire's Energy, Environmental and Economic Development Future: <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/r-ard-09-1.pdf>
- Piscataqua Region Estuaries Partnership (PREP): <https://prepestuaries.org/ourregion/our-watershed/>
- Seabrook-Hamptons Estuary Alliance: <http://shea4nh.org/wpcontent/uploads/2020/03/SHEA-Annual-Report-1.pdf>
- Audit of Existing Land Use Planning & Local Input on Developing a Management Plan for the Hampton Seabrook Estuary: http://shea4nh.org/wpcontent/uploads/2020/12/Audit_Final_Hampton-Seabrook-Estuary-Municipal-Planningand-Regs_10.23.20.pdf
- Town of Hampton Zoning Ordinance: (Sections reviewed include section 2.3, <https://hamptonnh.gov/DocumentCenter/View/455/2021-Zoning-OrdinancePDF?bidId=>
- Aquarion Water Company 2020 Annual Report: https://www.aquarionwater.com/docs/default-source/waterquality/nh/hampton_2020.pdf?sfvrsn=4f68d458_6
- Groundwater Rise Citation: Jayne F. Knott, Jennifer M. Jacobs, Jo S. Daniel, and Paul Kirshen "Modeling Groundwater Rise Caused by Sea-Level Rise in Coastal New Hampshire," *Journal of Coastal Research* 35(1), 143-157, (6 August 2018). <https://doi.org/10.2112/JCOASTRES-D-17-00153.1>
- Center for Watershed Protection Citation: Center for Watershed Protection. 2003. Impacts of Impervious Cover on Aquatic Systems: Watershed Protection Research Monograph. Center for Watershed Protection, Ellicott City, MD. Pages 1-158

KEY FINDINGS

- The aquifer protection district overlay is protecting the highest quality aquifers in Town. There is a lack of consistency in town wide planning for natural resources, even though it is identified as an important planning priority. There is a historic lack of climate change planning in all documents, although that is covered in the new climate update document.
- The Town is home to a robust and diverse list of rare plants, animals, and natural communities. Hampton Beach had a 99-year lease with a development company that expired in 1997. Important to note that the Town has been working on establishing plans for

development since this transition but the Hampton Beach Plan from 2001 does not provide a good roadmap for natural resource protection.

- The Hampton-Seabrook estuary is an incredibly unique natural resource along the NH coastline. The 2009 designation of this area by the Town as a “prime wetland” was a necessary step to protect this resource. This designation is filed with the state (NH Department of Environmental Services) and provides critical protection for the estuary and its inhabitants, including softshell clams and saltmarsh sparrow, among many others.
- Regardless of this protection, the estuary is dependent on good water quality from the freshwater resources entering it from upstream. A total of 23 assessment units (or portions of waterbodies) within the Town of Hampton are listed on the states 303(d) list as impaired and not meeting water quality standards. Thirteen (13) of these are on freshwaters upstream of the Hampton-Seabrook estuary. It is critical that these impairments are addressed to maintain the health of the freshwater and coastal resources.
- The most common water quality impairments in Hampton are for shellfish consumption as a result of mercury, dioxins, polychlorinated biphenyls (PCBs), and bacteria. As one of only three locations in New Hampshire to harvest shellfish (the others being the Great Bay estuary, the Hampton/Seabrook estuary, and Little Harbor/Back Channel), it is recommended that the Town work to address these impairments. The Hampton-Seabrook Harbor has existing seasonal shellfish closures that limit harvesting.

OVERVIEW OF HAMPTON'S NATURAL RESOURCES – ISSUES, OPPORTUNITIES AND VISION

Emerging issues in natural resources

- Sea level rise.
- New invasive species.
- Sources of water pollution.

Observed trends in natural resources

- Marsh erosion and flooding from the marsh.
- Flooding of coastal roads.
- Limited focus on upland habitats and land protection.

Threats to Natural Resources

- Climate change and sea level rise.
- Development pressures.

2020 Phase 1 Master Plan Public Input Related to Natural Resources

During the summer public workshop #1 (with 12 participants), 42% of participants rated climate change resilience as one of their top 3 issues and 25% rated natural resource protection

as one of their top 3 issues. In the second workshop, with 8 participants, 38% rated both climate change resilience and natural resource protection as one of their top 3 issues. The group was widely supportive of Natural Hazard Planning & Climate Resilience and Natural Resource Protection as Plan priorities, with 92% and 83% of participants rating 'strongly agree', respectively. That dropped to 63% and 75% in the second workshop.

Coastal management was introduced to the group as "efforts to balance a community's quality of life, economic prosperity, and the needs of the natural and built environments, within coastal areas" and coastal resilience was introduced as "the capacity of a coastal community to sustain achievement of community goals and social, economic, and environmental wellbeing over the long-term in a changing climate."

The top three items that the group wanted to see in the coastal management chapter were "Mitigating Coastal Hazards", "Regulating Development & Redevelopment", and "Protecting & Restoring Coastal Ecosystems". The second workshop identified both "Supporting a Coastal Economy" and "Protecting Water Quality" as important items to include. Primary concerns included protection of the estuary and erosion of land. The workshop participants identified the allocation of funds to response, recovery, and resilience to coastal events as one of the Town's greatest challenges.

Specific issues that were identified by the groups included (1) erosion along Eel Creek, where significant portions of the marsh are eroding, (2) flooding of the roadways near the marsh, especially during extreme tides, (3) flooding along Kings Highway near Ashworth. In general, the group observed that flooding from the marsh has been more problematic than the open ocean. Participants noted that seven state agencies share overlapping jurisdictions in Hampton and this should be considered a strength in propelling resilience and natural resource protection.

2021 Natural Resource-Related Vision

Open Space and Natural Resources: A future Hampton will continue to recognize the value that open spaces and natural areas provide with regards to recreation and tourism, environmental and ecological benefits, and coastal hazard mitigation. Hampton will be a community that continues to be identified by its extensive coastal wetlands, and that provides recreational opportunities to residents and visitors in its forests, lakes and other natural features.

Hampton will achieve this future by choosing to proactively protect open space, preserve natural ecosystems, and expand outdoor recreation opportunities. Hampton will also facilitate the inland migration of coastal habitats as sea levels rise. Specific aspects of the Town's conservation strategy will include:

- Continuing to support the Parks and Recreation Department.
- Continuing to support an effective Conservation Commission.
- Leveraging the town's existing natural areas.
- Considering the changing climate, rising sea level and groundwater levels, and changing water currents and salinity levels.
- Minimizing stormwater pollution to wetlands, lakes, and coastal ecosystems.
- Promoting the accessibility of open space and recreational assets to all of the town's residents

- Supporting development of the New Hampshire Seacoast Greenway.
- Setting aside new conservation land when appropriate, prioritizing areas in flood hazard zones and that can facilitate marsh migration.
- Utilizing green infrastructure and living shoreline approaches for capital improvement and hazard mitigation projects when possible.

Vision specifically calls out the Seabrook-Hampton Estuary, Meadow Pond, Harborside Dunes, Batchelder Park, and “other open space areas”.

FBE additions: Doesn't explicitly call out some of its biggest resources - Hampton Salt Marshes/Salt Marsh Conservation Area, Hampton Beach and North Beach, Hampton Beach State Park. Also smaller, but Lamprey Pond, borders the Taylor River Reservoir.

NATURAL RESOURCE DATA

Resource Type	Units	% Total Area in Town
Watersheds		
Hampton Harbor Inlet-Atlantic Ocean Watershed	256 acres	3%
Winnicut River Watershed	496 acres	5%
Hampton River-Frontal Atlantic Ocean Watershed	4,123 acres	45%
Taylor River Watershed	4,198 acres	46%
Surface Waters		
Aquifers	1,610*	18%
Rivers/Streams	417,987 ft (79 mi)	--
Wetlands	2,878 acres	32%
Prime Tidal Wetlands	1,937 acres	21%
Public Water Supply Wells+	20	--
Waterbodies	2,444 acres	27%
Groundwater Classification (GA2)	600 acres	7%
Wildlife and Habitat		
Exemplary Terrestrial Natural Communities	1	--
Exemplary Estuarine Natural Communities	6	--
Rare Plants	25	--
Rare Birds, Reptiles, and Fish	14	--
Land Use		
Conserved Land	830 acres	9%
Forested Land	1,554 acres	17%
Developed Open Space	894 acres	10%
High/Medium/Low Intensity Developed Land	2,692 acres	30%
Impervious Surfaces	1,407 acres	16%

*Includes aquifers across all transmissivities.

+Data valid through 2019.

Impervious Surface Coverage

The Town of Hampton is estimated at approximately 16% impervious cover as of data acquired in the spring of 2015 by the Piscataqua Regional Estuary Partnership (PREP). Features were delineated using 1-foot resolution, 4-band orthophotography and were compared against older orthophoto imagery from 2005 and 2010 as reference. The accuracy of this data file is much greater than the data used in the 2009 Natural Resources section of the comprehensive plan (30-m resolution vs 1-foot resolution) and as such, provides a greater accuracy of the impervious cover boundaries in the watershed. This accuracy reduces our estimate of impervious cover from the previously reported estimate of 20.7% in 2005 that was collected using Landsat 5 TM 30-m resolution data.

The relationship between impervious cover and stream quality is well established; a 2003 report by the Center for Watershed Protection identifies 10-25% impervious cover as “impacting” aquatic life in streams, and greater than 25% as “non-supporting” of aquatic life (Center for Watershed Protection, 2003). When broken down further by watershed, The Taylor River watershed area and Hampton River-Frontal Atlantic Ocean watershed contain the highest percentage of impervious cover (16% for both areas). These two watershed areas encompass the majority of the Town area with the Winnicut River occupying a small northern section of the Town and the Hampton Harbor Inlet-Atlantic Ocean watershed occupying the narrow strip of land that directly drains to the ocean.

Watershed	Watershed Area in Town of Hampton (acres)	Impervious Cover (acres)	% Total Area in Watershed
Hampton Harbor Inlet-Atlantic Ocean Watershed	256 acres	19	7%
Winnicut River Watershed	496 acres	43	9%
Hampton River-Frontal Atlantic Ocean Watershed	4,123 acres	660	16%
Taylor River Watershed	4,198 acres	685	16%
Total	9,073 acres	1,407	16%

**Watershed areas presented are only the portion of the watershed within the Town of Hampton.*

Physiography

- Hampton is entirely within Rockingham County
- Min elevation: sea level
- Max elevation: 154-feet (Based on a 2-foot smoothed contour dataset produced from LIDAR by the Earth Systems Research Center at UNH).

Climate

- Include existing information on general climate for New England.
- Enhance climate change focus. Climate change in New England includes warmer winters, reduced snowfall and snow-on-ground days, earlier spring runoff, sea level rise, increased

total rainfall, and more severe weather events resulting in increased risk of flooding. One of the six leading ways that climate is expected to change NH's economy is through increased coastal flooding, erosion, and property damage due to rising sea levels. (cite: NH Climate Action Plan).

Geology

- From CH6 Natural Resources: Geology of the seacoast consists of fractured metamorphic bedrock overlain by glacial materials deposited during the last glaciation, which ended between 12,000 and 5,000 years ago.
- From CH6 Natural Resources: Glacial stratified-drift aquifers cover about 18% of seacoast and 22 percent of Hampton.

Soil Types and Conditions

- All other soil types are <10% coverage.
- Ipswich mucky peat is all concentrated in the southeast corner (Salt Marsh) and along the beach.
- 35% of the total soils in the Town of Hampton are considered hydric. The USDA NRCS defines hydric soils as those that are sufficiently wet in the upper part to develop anaerobic conditions during the growing season. This typically means they are formed in flooded or ponded areas such as waterbodies, wetlands, and floodplains. 13% of hydric soils in Hampton are conserved.
- Only 1% of the town has highly erodible lands, but 46% of the Town has potentially highly erodible land.

General Soil Type	Acres	% Total Area of Town
Ipswich Mucky Peat	1,468	16%
Chatfield-Hollis-Canton Complex	1,173	13%
Hoosic gravelly fine sandy loam	1,110	12%

Farmland Soil Type	Acres	% Total Area of Town
Prime Farmland Soils	559	6%
Farmland Soils of Statewide and Local Importance	2,388	26%
Conserved Farmland Soils of Statewide and Local Importance	207	9%

SURFACE WATER RESOURCES

Watersheds

There are four HUC-12 subwatersheds that have area in the Town of Hampton. The table below breaks down the acreage of each watershed within the Town boundaries and also displays the total HUC-12 watershed area (regardless of Town boundaries). The Hampton Harbor Inlet, Hampton River, and Taylor River subwatersheds are all part of the regional "Hampton River-Frontal Atlantic Ocean" watershed. The Hampton River-Frontal Atlantic Ocean watershed drains 46 sq. mi. (29,440 acres) of land to the Hampton-Seabrook Estuary. This drainage area

includes six major rivers: the Taylor River, Hampton Falls River, Browns River, Cains Brook/Mill Creek, Hunts Island Creek, and Blackwater River. The full tidal shoreline of the estuary is 131 miles at high tide.

The Winnicut River watershed is part of the Great Bay watershed. The Great Bay watershed drains 1,023 sq. mi. (654,720 acres) of land

area to the Great Bay Estuary. This drainage area includes eight major rivers: the Winnicut, Squamscott, Lamprey, Oyster, Bellamy, Cocheco, Salmon Falls, and Piscataqua. Only a small portion of the Winnicut River watershed (496 acres) is located in the Town of Hampton.

Watershed*	Watershed Area in the Town of Hampton (acres)	Total HUC-12 Watershed Area (Across Town Boundaries)
Hampton Harbor Inlet-Atlantic Ocean watershed	256	Included in HUC-12 with Hampton River-Frontal Atlantic Ocean
Winnicut River watershed	496	11,112
Hampton River-Frontal Atlantic Ocean watershed	4,123	19,593
Taylor River watershed	4,198	14,606
Totals	9,073	45,311

Waterbodies

There are 2,444 acres of waterbodies in the Town of Hampton with 1,839 acres of freshwater waterbodies. This includes Car Bar Pond (2.7 acres), Coffin Pond (1 acre), Lamprey Pond (1.2 acres), Meadow Pond (51 acres), Old Millpond (5 acres), and the Taylor River Reservoir (29 acres).

The Hampton-Seabrook Estuary

A critical resource in the Town of Hampton is the Hampton-Seabrook Estuary, a 47 sq. mi. shallow, tidally dominated barrier beach system that includes the town of Hampton as well as six neighboring towns in NH and one in MA. This estuary includes approximately 4,045 acres of salt marsh and supports abundant salt marsh and aquatic habitat. In 2009, the Town of Hampton registered the Hampton Salt Marsh as a Prime Wetland.

Flowlines (Rivers, Streams, and Brooks)

No changes to the NHD flowlines for rivers streams, brooks from the 2009 plan. Still 79 miles in this file – this is from the National Hydrography Dataset but is an updated file that has been updated between 2012 and 2015. (The previous CAI NHD flowline was updated through 2005.) The majority of the flowlines are “unnamed” (54 miles) and this is because they run through the salt marsh complex.

River or Stream	Miles
Ash Brook	1.4
Blackwater River	0.1
Browns River	0.2
Clay Brook	0.0
Drakes River	2.5
Grapevine Run	0.0
Hampton Falls River	0.3
Hampton River	1.7
Landing Brook	0.4
Little River	0.0
Nilus Brook	1.5
Old River	3.1
Taylor River	4.2
Tide Mill Creek	3.6
Winnicut River	1.1
Unnamed	59.5
Total	79.7

SURFACE WATER QUALITY

Applicable Water Quality Standards and Criteria: The State of NH is required to follow federal regulations under the Clean Water Act (CWA) with some flexibility as to how those regulations are enacted. The main components of water quality regulations include designated uses, water quality criteria, and antidegradation provisions. The Federal CWA, the NH RSA 485-A Water Pollution and Waste Control, and the NH Surface Water Quality Regulations (Env-Wq 1700) are the regulatory bases for governing water quality protection in NH. These regulations form the basis for NH's regulatory and permitting programs related to surface waters. States are required to submit biennial water quality status reports to Congress via the USEPA. The reports provide an inventory of all waters assessed by the state and indicate which waterbodies exceed the state's water quality standards. These reports are commonly referred to as the "Section 303(d) list" and the "Section 305(b) report." And are summarized in the 2020 New Hampshire Consolidated Assessment and Listing Methodology (CALM) report. The 2020 CALM is in draft form and all data in this section was taken from the draft 2020 CALM.

Designated Uses & Water Quality Classification: The CWA requires states to determine designated uses for all surface waters within the state's jurisdiction. Designated uses are the desirable activities and services that surface waters should be able to support, and include uses for aquatic life, fish consumption, shellfish consumption, drinking water supply, primary contact recreation (swimming), secondary contact recreation (boating and fishing), and wildlife. Surface waters can have multiple designated uses. In NH, all surface waters are also legislatively classified as Class A or Class B, most of which are Class B (Env-Wq 1700). Water quality criteria are then developed to protect these designated uses. Depending on the designated use and type of waterbody, water quality criteria can become more or less strict if the waterbody is classified as either Class A or B.

Criteria: NH's water quality standards provide a baseline measure of water quality that surface waters must meet to support designated uses. Water quality standards are the "yardstick" for identifying water quality exceedances and for determining the effectiveness of state regulatory pollution control and prevention programs. Water quality criteria are designed to protect those designated uses. To determine if a waterbody is meeting its designated uses, water quality thresholds for various water quality parameters (e.g., chlorophyll-a, total phosphorus, dissolved oxygen, pH, and toxics) are applied to the water quality data. If a waterbody meets or is better than the water quality criteria, the designated use is supported. The waterbody is considered impaired for the designated use if it does not meet water quality criteria. Water quality criteria for each classification and designated use in NH can be found in RSA 485 A:8, IV and in the state's surface water quality regulations.

Antidegradation provisions: The Antidegradation Provision (Env-Wq 1708) in NH's water quality regulations serves to protect or improve the quality of the state's waters. The provision outlines limitations or reductions for future pollutant loading. Certain development projects (e.g., projects that require Alteration of Terrain Permit or 401 Water Quality Certification) may be subject to an Antidegradation Review to ensure compliance with the state's water quality regulations. The Antidegradation Provision is often invoked during the permit review process for projects adjacent to waters that are designated impaired, high quality, or outstanding resource waters. While NHDES has not formally designated high-quality waters, unimpaired waters are treated as high quality with respect to issuance of water quality certificates.

Antidegradation requires that a permitted activity cannot use more than 20% of the remaining assimilative capacity of a high-quality water. This is on a parameter-by-parameter basis. For impaired waters, antidegradation requires that permitted activities discharge no additional

Designated Use	NHDES Definition	Applicable Surface Waters
Aquatic Life Integrity	The surface water can support aquatic life, including a balanced, integrated, and adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of similar natural habitats of the region.	All surface waters
Fish Consumption	The surface water can support a population of fish free from toxicants and pathogens that could pose a human health risk to consumers.	All surface waters
Shellfish Consumption	The tidal surface water can support a population of shellfish free from toxicants and pathogens that could pose a human health risk to consumers.	All tidal surface waters
Potential Drinking Water Supply	The surface water could be suitable for human intake and meet state and federal drinking water requirements after adequate treatment.	All surface waters
Swimming and Other Recreation in and on the Water	The surface water is suitable for swimming, wading, boating of all types, fishing, surfing, and similar activities. Primary Contact Recreation (i.e., swimming) – Waters suitable for recreational uses that require or are likely to result in full body contact and/or incidental ingestion of water and Secondary Contact Recreation (i.e., boating) – Waters that support recreational uses that involve minor contact with the water	All surface waters
Wildlife	The surface water can provide habitat capable of supporting any life stage or activity of undomesticated fauna on a regular or periodic basis	All surface waters

Designated uses for NH surface waters. Descriptions taken directly from the 2018 NH Consolidated Assessment and Listing Methodology.

Classification	Description (RSA 485-A:8)
Class A	These are generally of the highest quality and are considered potentially usable for water supply after adequate treatment. Discharge of sewage or wastes is prohibited to waters of this classification.
Class B	Of the second highest quality, these waters are considered acceptable for fishing, swimming and other recreational purposes, and, after adequate treatment, for use as water supplies

NH surface water classifications. Descriptions taken directly from the 2018 NH Consolidated Assessment and Listing Methodology Report.

There are 23 assessment units within or partially within Hampton that are listed on the 303(d) Surface Water Quality List as impaired and needing a TMDL, meaning surface waters are impaired by a pollutant and do not meet water quality standards. The Atlantic Ocean in the vicinity of Hampton also is not meeting its designated uses to support fish and shellfish consumption. Seven of the assessment units within or partially within Hampton are located directly along the Atlantic Ocean, including Hampton Beach State Park Beach, North Beach, the North Beach Wrack Zone, Northside Park Beach, the Seabrook WWTP Outfall, Sun Valley Beach, and the Hampton Harbor Beach. These seven areas are all listed as impaired because they are not meeting their designated use for Fish Consumption and Shellfish Consumption, due to fish consumption advisories for mercury and Polychlorinated biphenyls (PCBs) and shellfish consumption advisories for mercury, PCBs, and dioxin. The Hampton Harbor Beach is also impaired for secondary contact recreation due to elevated *Enterococcus* (bacteria) and the North Beach Wrack Zone is also impaired for shellfish consumption due to elevated Fecal Coliform (bacteria).

The Hampton/Seabrook Harbor is also listed for fish and shellfish consumption advisories and is additionally listed for aquatic life integrity due to a variety of pollutants. Nudds Canal, which outlets into the Hampton/Seabrook Harbor, also has fish and shellfish consumption advisories. A small section of Blind Creek is impaired for fish and shellfish consumption around the wastewater treatment facility. Similarly, two segments of the Hampton Falls River, one segment of the Little River, and one segment of Tide Mill Creek have fish and shellfish consumption advisories, for mercury, PCBs, and dioxin (shellfish advisory only for dioxin). Three segments of the Hampton River are listed as impaired, primarily for both fish and shellfish consumption advisories, as explained above. The Boat Club area is also not meeting its designated use for aquatic life integrity because of low dissolved oxygen.

Two tributaries to the Winnicut River, an Unnamed Brook and Cornelius Brook, are impaired for Aquatic life Integrity. Cornelius Brook is also impaired for primary contact recreation. Four segments of the Taylor River are listed as impaired, including the Refuge Pond and Rice Dam Pond. The two ponds are impaired for Aquatic Life Use due to an extensive list of pollutants. The lower portion of the Taylor River is listed as impaired due to Aluminum. The Taylor River also has fish and shellfish consumption advisories for mercury, PCBs, and dioxin (shellfish only).

WETLANDS

Estuarine and marine wetlands, listed in the table below, are tidal or tidally influenced. These wetlands cover a total of 1,751 acres, or 19% of the total area in the Town. This is in large part a result of the Hampton Salt Marsh Complex. Of the total wetlands in the Town of Hampton, 11% (376 acres) are conserved. The Town has a total of 1,126 acres of freshwater wetlands. The Town contains 1,937 acres of prime tidal wetlands, with 214 acres of these listed as conserved (11%).

Hampton Wetland Conservation District (Zoning Ordinance Article H Section 2.3)

The Town of Hampton has a Wetland Conservation District (Zoning Ordinance Article H Section 2.3) to regulate development adjacent to wetlands. This district, hereafter referred to as WCD, includes tidal wetlands, freshwater wetlands, areas of very poorly drained soils and poorly drained soils, 1st through 4th order streams or rivers and their buffers. The ordinance specifically

defines 1st through 4th order streams or rivers as Ash Brook, Drakes River, Little River, Nilus Brook, Old River, Taylor River, and Winnicut River. The ordinance defines buffers as the areas extending (definitions are paraphrased and the full ordinance should be consulted):

1. Fifty feet (50 ft.) from the boundary line of any tidal or freshwater wetland, and/or areas of very poorly drained soils and poorly drained soils, and/or vernal pools or
2. One hundred feet (100 ft) from the edge of any of the identified 1st through 4th order streams (listed above).

The Wetland Conservation District (WCD) identifies the Hampton Salt Marsh Complex as a prime wetland (section 2.3.2(H)) for the purposes of RSA 482-A:15 to adhere to NH DES regulations.

Wetland Type	Acres	Percent Total Area in Town
Extuarine Intertidal	1,744	19%
Marine Intertidal	7	0%
Palustrine Emergent	99	1%
Palustrine Forested	798	9%
Palustrine Scrub-Shrub	190	2%
Palustrine Unconsolidated Bottom	38	0%
Palustrine Unconsolidated Shore	1	0%
Total	2,877	32%

GROUNDWATER RESOURCES AND SUPPLIES

Public Water Supply Wells

There are a total of 5 active public water systems in the Town of Hampton, and 4 inactive systems. A community water system is defined as one that serves at least 25 residents yearround, such as municipal water systems, mobile home parks, and condominiums. Nontransient, non-community systems include operations such as schools, hospitals, and businesses that serve non-transient populations. A transient non-community system represents systems serving at least 25 people for at least 60 days of the year, such

as restaurants, campgrounds, recreational areas, convenience stores, and hotels/motels.

Public Water Systems			
Public Water System Type	Total Systems	Status	Total Population Served
Community System	4	All active	34,352
Non-Transient Non-Community System	3	All inactive	370
Transient Non-Community System	2	One active, one inactive	514

Hampton is serviced by the Aquarion Water Company. They pump water from 16 stateapproved wells in

Aquifer Areas and Transmissivity			
Transmissivity	Total Acres	Within Protection Area	Percent within Aquifer Protection Area
Less than 2000 ft sq/day	1,571	941	60%
2000-4000 ft sq/day	30	30	100%
Greater than 4000 ft sq/day	9	9	100%
	1,610	980	61%

Hampton, North Hampton, Rye, and Stratham and serves about 23,000 residents across these three communities. In 2020, 2 million gallons of water per day were supplied to the system. Aquarion completed a new water treatment plan in 2020 that treats water from six of their wells. They also brought a new well into service, which has helped with the recent droughts.

Aquifer Protection Ordinance

The Town of Hampton has an Aquifer Protection District Ordinance, adopted in 1989 and amended most recently in 2019. It is pursuant to RSA 674:16-21 and its goal is to “protect, preserve and maintain existing and potential groundwater supplies and related groundwater recharge areas within known aquifer”. The Aquifer Protection District is defined as the direct recharge area of designated aquifers within the Town and is available as a mapped overlay district. Protections in this area include minimum lot sizes per dwelling, maximum lot coverage, site drainage requirements, use of deicing chemicals, and specified prohibited uses, conditional uses, permitted uses, and non-conforming uses.

Inundation and Groundwater Rise Caused by Sea-Level Rise Recommended new subject.

Sea-level rise often raises concern in coastal communities because of its impact on the immediate shoreline, including erosion of land and flooding. A lesser-known impact of sea-level rise is the associated rise in groundwater in coastal areas of high aquifer transmissivity, as well as saltwater intrusion of freshwater groundwater resources. A study completed in coastal New Hampshire in 2018, noted that the sea-level rise groundwater signal is projected to occur approximately three times farther inland than the projected tidal flooding extent (Jayne et al. 2018). This can cause changes to flooding, water quality, and natural resource habitat in these areas.

PFAS Contamination

Recommended new subject. Don't recommend pointing out any sources of contamination, but noting it is a rising concern. Added new language below.

Per- and polyfluoroalkyl substances, referred to as PFAS, represents a large class of chemical compounds that are used in domestic, commercial, institutional, and industrial settings. They are man-made chemicals that have been used extensively in non-stick products, such as nonstick cookware and stain-resistant carpets, as well as in firefighting foam. They have become an increasing water quality concern because they are toxic at low levels in the environment and once they enter the groundwater, they are persistent and do not breakdown easily. PFAS regulations are evolving, but as of this Plan, New Hampshire regulates four PFAS compounds (PFHxS, PFOA, PFOS, and PFNA), with average maximum contaminant levels (the highest level of a contaminant that is allowed in drinking water) set at 12, 15, 18, and 11, respectively.

WILDLIFE AND ECOLOGICAL RESOURCES

The most recent New Hampshire Wildlife Action Plan was revised in 2015 and builds off the first 10-year Wildlife Action Plan completed in 2005. The purpose of this Action Plan, written by the New Hampshire Fish and Game Department and collaborators, is to identify species in greatest

need of conservation, habitats that are at the greatest risk, and to identify land uses and activities that present the greatest threats to wildlife and habitat.

Habitat types listed in the NH Wildlife Action Plan and the acres present in the Town of Hampton:

Wildlife Action Plan Habitat				
WAP Habitat	Acres in Town	Percent of Town	Acres Conserved	Percent Conserved
Appalachia Oak Pine	1,658	18%	266	16%
Coastal Island	4	0%	0.1	4%
Developed Impervious	2,414	27%	59	2%
Developed or Barren Island	1,428	16%	53	4%
Dune	108	1%	46	42%
Grassland	190	2%	48	25%
Hemlock Hardwood Pine	71	1%	8	12%
Lowland Spruce Fir	0.1	0%		0%
Open Water	640	7%	23	4%
Peatland	68	1%	8	11%
Salt Marsh	1,604	18%	204	13%
Sand/Gravel	3	0%		0%
Temperate Swamp	401	4%	39	10%
Wet Meadow/Shrub Wetland	484	5%	76	16%
Total	9,073	100%	830	9%

Reference table for tier habitat listed for Hampton in next table:

2015 NH Wildlife Action Plan	Acres	% of NH	Acres in Cons	% in Cons
Tier 1 Highest Ranked Habitat in NH	1,398,525	23.5%	615,546	44%
Tier 2 Highest Ranked Habitat in Biological Region	1,033,451	17.4%	519,275	50.2%
Tier 3 Supporting Landscapes	1,975,162	33.2	650,865	33%

Acres of Tier 1, Tier 2, and Tier 3, habitat in Hampton NH (WAP = Wildlife Action Plan) and the percent of that area that is conserved:

Habitat Type	Acres in Town	% of WAP Total	% of Town	Acres Cons.	% Cons.
Tier 1 Highest Ranked Habitat in NH	1,876	65%	31%	267	14%
Tier 2 Highest Ranked Habitat in Biological Region	247	9%	3%	52	21%
Tier 3 Supporting Landscapes	775	27%	9%	145	19%
Total	1,898	100%	32%	464	16%

The Connect the Coast project is spearheaded by the Nature Conservancy and works to ensure that wildlife across the seacoast have habitat connectivity through the prioritization of habitat blocks. Combined, prioritized habitat blocks and the corridors connecting them make up 37% of the Town of Hampton. Of these, 17% of the land area is listed as conserved.

Connect the Coast - Prioritized Habitat Blocks				
Block Name	Acres in Town	% in Town	Acres Cons.	% Cons.
Taylor River and the Cove	553	6%	221	40%
Hampton Marsh	1,914	21%	211	11%
Total	2,467	27%	432	18%

Connect the Coast - Wildlife Corridors	Acres in Town	% in Town	Acres Cons.	% Cons.
	902	10%	139	15%

New Hampshire Natural Heritage Bureau

The NH Natural Heritage Bureau’s mission is to “find, track, and facilitate the protection of New Hampshire’s rare plants and exemplary natural communities”. This group tracks rare plant species, rare animal species, and exemplary natural communities. The latest town wide report was published in July of 2020 and includes the following list of rare plant and animal species, and exemplary natural communities.

Category	Count	Details
Natural Communities - Terrestrial	1	Beech grass grassland, listed as high importance
Estuarine Natural Communities	6	Brackish marsh, high salt marsh, intertida flat, low salt marsh, salt marsh system, subtitle system
Plants	25	21 endangered, 4 threatened. 2 listed as highest importance. 7 listed as very high importance. 2 listed as high importance.
Vertebrates - Birds	10	2 endangered, 2 threatened, 2 special concern
Vertebrates - Reptiles	1	Smooth green snake, listed as a species of special concern
Vertebrates - Fish	3	American Eel (very high importance), Banded Sunfish, and Redkin Pickerel - all listed as species of special concern

SHELLFISH RESOURCES

Shellfishing is becoming increasingly popular in New Hampshire along its coastline. Shellfishing is regulated by the NH Department of Environmental Service’s Shellfish program. Shellfishing includes both recreational and commercial harvesting. For recreational harvesting,

a recreational license is required for softshell clam and oyster harvest but not for mussel, surf clam, razor clam, and mahogany quahog harvest. Commercial shellfish harvesting has grown, particularly with oyster farming. 28 oyster farm sites were licensed as of 2019. Two of these are located in the Hampton/Seabrook estuary. Existing closures for the Hampton and Seabrook Harbor can be found on the Coastal Atlas: https://www4.des.state.nh.us/CoastalAtlas/Shellfish_Detail.html?id=HH.

FOREST RESOURCES

The Town of Hampton has 1,554 acres of forested land, which represents 17% of the Town. This is a greater percentage than the abutting town of Seabrook (12%) but significantly less than North Hampton (34%), Hampton Falls (37%), Stratham (38%) and Exeter (41%). The most predominant forest habitat type in Hampton is the Appalachian Oak-Pine forest, with 1,658 acres (18% of the Town).'

QUESTIONS

1. Farmland is listed first in the introduction of the Master Plan vision but appears to be a smaller portion of the Town. Does this reflect its significance to the committee?
2. Why are Merrill Drive and Liberty Lane Business Parks specifically called out in the vision?

RECOMMENDATIONS

1. I don't see anywhere that the build-out study recommended was completed. Check with the Town, but would be worth recommending, particular for the development pressures around the Hampton Beach area.
2. A lot of the documents reviewed point towards improved pedestrian and bicycle access and walkability as important for the communities. Consider weaving in stormwater management and low impact development/greenscapes into the plans for this vision (Hampton Beach Plan that is in progress, the 20/20 vision and Complete Streets projects through Experience Hampton).
3. Pursue studies on the extent of sea-level rise induced groundwater rise and well intrusion.

OPEN SPACE AND CONSERVATION

STUDIES AND REPORTS REVIEWED

- Land Conservation Priorities for the Protection of Coastal Water Resources: A Supplement to the Land Conservation Plan for New Hampshire's Coastal Waters - https://extension.unh.edu/resources/files/Resource006517_Rep9334.pdf
- Connect the Coast: Linking Wildlife Across New Hampshire's Seacoast and Beyond - <https://www.nature.org/content/dam/tnc/nature/en/documents/nh-connectthe-coast-report.pdf>
- 1995 Open Space Plan section: - <https://www.hamptonnh.gov/DocumentCenterView/1385/15Rec-Open-Space-1995-PDF>
- 1996 Open Space Land and Conservation Chapter - <https://www.hamptonnh.gov/DocumentCenter/View/1383/13Open-Space-and-LandConservation-Chapter-1996-PDF>

KEY FINDINGS

- Hampton has relatively low conserved land and undeveloped land and it should be an absolute priority to improve this. The Connect the Coast project has great data to guide conservation to protect critical habitat blocks and connectivity. The Town should also consider conservation focused at mitigating SLR and flooding.
- No Open Space Plan exists for the Town and there are no protections for undeveloped open spaces outside of conservation (i.e., zoning, ordinances, etc.)

ISSUES, OPPORTUNITIES, AND VISION FOR CONSERVATION AND OPEN SPACE

- Multiple regional land conservation initiatives are discussed below. Hampton should collaborate with these visioning programs for the development of land conservation programs and open space planning.

2021 PHASE 1 MASTER PLAN OPEN-SPACE RELATED VISION

- Under "Forward-Looking Development" the Plan immediately mentions focusing growth while preserving open space as well as returning some currently developed areas to open space to allow for the migration of coastal habitats. (Specifically, it says "enable and support property buyouts, managed retreat, and creation of open space when desired by, and appropriate for, property owners, residents, and local neighborhoods.")
- Open Space is included as part of the Natural Resources Vision. See that vision outlined in the Natural Resource chapter.

THREATS TO OPEN SPACE AND CONSERVATION:

- Development sprawl.
- Current lack of protections.
- Climate change and protection from SLR and flooding.

REGIONAL LAND CONSERVATION INITIATIVES

Land Conservation Priorities for the Protection of Coastal Water Resources: A Supplement to the Land Conservation Plan for New Hampshire's Coastal Waters

The coastal watershed of New Hampshire, including the densely settled seacoast communities such as the Town of Hampton, have experienced rapid development over the last few decades. This has threatened water resources by reducing land cover that provides ecosystem services such as water purification, flood water retention, and groundwater recharge. In addition, decreased natural cover causes an increase in pollutant loads to surface waters via stormwater runoff. Open space and conserved land are natural infrastructure that maintain and improve current water quality, as well as reducing risk to coastal communities. Protecting or restoring critical lands can provide great benefits to coastal water resources. The Land Conservation Priorities for the Protection of Coastal Water Resources identifies opportunities that:

1. Perform pollutant attenuation and removal with riparian buffers and riparian wetlands.
2. Perform flood storage and risk mitigation, which reduces risk to downstream
3. infrastructure, as well as accommodating sea level rise and salt marsh migration.
4. Protection of public water supplies.

In Hampton, the land surrounding the Hampton River and Hampton Harbor and associated wetland complex provide many of the identified benefits, including pollutant attenuation, and flood storage. The area around Meadow Pond provide flood storage and risk mitigation. More specifically, the report identified:

- Land critical to flood storage and risk mitigation extends along the entirety of the town's coastline behind Route 1A, especially into the Meadow Pond area and associated wetland complex, in the wetland complex and adjacent land to the south of Route 101E and towards Great Boards Head, and in the wetland complex associated with the Taylor River and Hampton Landing north to the New Hampshire turnpike.
- Land critical to pollutant attenuation was identified as the extension of the Hampton River wetland complex and adjacent land northeast towards Winnacunnet Rid and north into the Taylor River wetland complex towards the New Hampshire Turnpike. In addition, the tributaries and wetland complex in the Taylor River north of Coffins Mill were identified as land critical to pollutant attenuation.
- Areas of land on the northeastern border of the Town of Hampton adjacent to Route 1 were identified as land critical to protecting the public water supply.

Connect the Coast: Linking Wildlife Across New Hampshire's Seacoast and Beyond

In New Hampshire, rapid development and expanding road networks have fragmented wildlife habitat which threatens wildlife's ability to survive and move among suitable habitat. Many of New Hampshire's native species require multiple habitat types to complete their life history cycle. Climate change adds an additional complication, shifting habitat ranges of critical habitat to these native species. Connect the Coast is a program launched by the Nature Conservancy that is working to identify priority habitat blocks and connectivity corridors for land conservation. The project is centered around NH's coastal watershed, and includes the entire Town of Hampton.

This project used computer modeling to identify intact wildlife movement corridors across the project area for eleven focal species. The results for Hampton are displayed in the map here: <https://tnc.app.box.com/s/tzvbvhycnifjx514etm41f3pp3rt5ez7>. Prioritized habitat blocks extend throughout the Hampton Salt Marsh and extends north to encompass Meadow Pond. It also includes a significant section of the Town between Rte 27 and Rte 88, encompassing the Taylor River and its Headwater tributaries (Old River and Ash Brook). Four wildlife corridors are prioritized within the Town of Hampton: (1) Along the Taylor River, (2) Along the Grapevine Run River that flows into the Taylor River, (3) Drakes River along Route 101 that connects the two prioritized habitat blocks, and (4) Nilus Brook, north of Meadow Pond.

DATA RELATED TO OPEN SPACE AND CONSERVATION

- Hampton has 830 total acres of conserved land. Of the 830, 9% (219 acres) is managed by the Town of Hampton. This is significantly less than the majority of the abutting towns with the maximum conserved land located in Exeter at 32%.
- The largest conservation parcels include a series of parcels conserving the Hampton Marsh, Hurd Farm, Hampton Beach State Park, and Batchelder #1.
- Hampton does not have a zoning layer specific to open space or land conservation.
- A total of 1,276 acres, or 14% of the Town, is currently Undeveloped Land. That is a 3% decrease from the Open Space in 2001 (1,504 acres or 17%).

Conserved Lands in Hampton	acres
Town of Hampton	219
Other	611
Total	830
Percent Conserved	9%

Use	Acres (2021)	Percent of Town (2021)	Acres (2001)	Percent of Town (2001)	Acreage Change	Percent Change
Undeveloped Land	1,276	14%	1,504	17%	-228	-3%

RECOMMENDATIONS

- Write an Open Space Plan.
- Create a Fund for Open Space acquisitions.
- Include open space protections in zoning ordinances.
- Collaborate with the Southeast Land Trust of New Hampshire to create a strategic plan for land conservation in Hampton.

NATURAL HAZARDS

STUDIES AND REPORTS REVIEWED

- Tides to Storms Vulnerability Assessment
 - Reviewed regional plan (contains 7 NH Atlantic Coastal municipalities) and Hampton specific plan:
 - <https://www.therpc.org/regional-community-planning/climate-change/tides-storms>
 - https://www.therpc.org/application/files/6014/6920/2314/Hampton_Vulnerability_Assessment.pdf
- NH Coastal Risk and Hazards Final Report
 - <https://www.nhcrhc.org/>
- Hampton Coastal Hazards and Adaptation Team
 - <http://shea4nh.org/coastal-hazards-adaptation-team-chat/>
 - http://shea4nh.org/wp-content/uploads/2019/08/SHEA_SituationAssessment_Final.pdf
- NH Coastal Flood Risk Summary - Part I: Science, and Part II: Guidance for Using Scientific Projections
 - <https://scholars.unh.edu/cgi/viewcontent.cgi?article=1209&context=ersc>
 - <https://scholars.unh.edu/cgi/viewcontent.cgi?article=1210&context=ersc>
- Hazard Mitigation Plan
 - <https://hamptonnh.gov/DocumentCenter/View/1384/14Hazard-Mitigation-PlanUpdate-2017-PDF>
- Coastal Resilience Report for 2021 Master Plan Update
 - Reviewed to identify gaps between natural hazards, Hazard Mitigation Plan, and the Coastal Resilience Report
 - <https://www.hamptonnh.gov/DocumentCenter/View/4148/20210330-CoastalResilience-Report>
- Town of Hampton Master Plan Vision March 2021
 - <https://www.hamptonnh.gov/DocumentCenter/View/4147/20210331-Master-PlanVision>
- Hampton Harbor Flooding Evaluation, March 2021
 - https://hamptonnh.gov/DocumentCenter/View/4138/Final-Report-Harbor_HTA
- Hampton Flood Mitigation Analysis, April 2021
 - https://hamptonnh.gov/DocumentCenter/View/4137/Final-Report-Meadow-Pond_SLR
- 2015 Wildlife Action Plan; Appendix A: Birds
 - Reviewed for information on NH habitat ranges of saltmarsh sparrow and piping plover (two rare species affected by natural hazards).
 - <https://www.wildlife.state.nh.us/wildlife/documents/wap/appendixa-birds.pdf>

KEY FINDINGS

- Hampton is a low-lying town with extensive surface water and wetlands located on the coast, causing it to be at severe risk of flooding.
- Critical facilities, town infrastructure, private property, and natural resources are all threatened by coastal hazards, which include coastal flooding, sea-level rise, and storm surges.
- Hampton is the largest repetitive loss community in the State of New Hampshire under the FEMA National Flood Insurance Program. A “repetitive loss” is a building covered under flood insurance that incurs flood related damage on 2 occasions during a 10-year period, in which the cost of repairing the flood damage exceeded 25% of the value of the building”.
- Hampton is also at severe risk for severe winter weather, including heavy snowstorms, ice storms, and Nor’easters.
- Hampton is at high risk for severe wind and lightning, and moderate risk for hurricanes, extreme heat, and wildlife natural hazards

EMERGING ISSUES

- Multiple natural hazards, especially coastal hazards, will impair transportation. More specifically, the evacuation route for Hampton and most coastal New Hampshire towns rely partially or wholly on Route 1 and Route 1A, which are very sensitive to current coastal flooding, sea-level rise, and storm surges. Route 1A is a vital transportation link on the coast for access, safety, livability, recreation, and the coastal tourist economy.
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- Near shore ecosystems that are in close proximity to the built landscape, such as roads, drainage facilities, buildings, and utilities, will not be able to migrate inward and will be reduced in size and functional capacity because hardened structures to defend buildings will alter natural systems and prevent habitat and species from migrating inward (NH Coastal Risk and Hazards Final Report 2016).
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- Except for a 0.5 mile stretch of dunes and beach just north of the Hampton Harbor Inlet, the landward side of Hampton’s beaches is characterized by a harden shoreline of sea wall, riprap, and revetments (Flooding in Hampton, NH Situation Assessment, 2019).

OBSERVABLE TRENDS

- Natural hazards, especially coastal hazards including flooding, sea-level rise, and storm surges, threaten the coastal portions of Hampton that the town’s tourism economy is centered around.
 - This includes Route 1 and Route 1A, as well as numerous business and residential areas.
 - This poses challenges to security, health, and welfare of citizens, and to a stable and viable economic future.
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VISION – TOWN OF HAMPTON MASTER PLAN VISION

Guiding Principles and Priorities Related to Natural Hazards

- Incentivize retrofitting of the existing properties in coastal hazard zones to better withstand hazards such as flooding and high winds.
- Prioritize protection of critical facilities and infrastructure to support emergency evacuation and response.
- Redirect future development to inland locations at lower risk.
- Enable and support property buyouts, managed retreat, and creation of open space when desired by, and appropriate for, property owners, residents, and local neighborhoods.
- Setting aside new conservation land when appropriate, prioritizing areas in flood hazard zones and that can facilitate marsh migration.
- Utilizing green infrastructure and living shoreline approaches for capital improvement and hazard mitigation projects when possible.

OVERVIEW OF NATURAL HAZARDS FACED BY HAMPTON

Natural Hazards faced by Hampton are presented by hazard type in this section, and include (1) Coastal Hazards – includes flooding, sea-level rise, and storm surges, (2) Extreme Precipitation, (3) Freshwater Flooding, (4) Groundwater Rise, (5) Winter Weather, (6) Hurricane, (7) Severe Wind, (8) Lightning, (9) Drought, (10) Wildfire, (11) Dam Failure, (12) Earthquake, (13) Hail, (14) Extreme Heat.

(1) Coastal Hazards, including coastal flooding, sea-level rise (SLR), and storm surges:

Throughout the region, NH municipalities along the Atlantic Coast, including Hampton, face coastal hazards from coastal flooding from storm surge and sea-level rise (SLR). Hampton's coastal geography and hydrology cause it to be very vulnerable to flooding. The town is situated at sea level and is relatively flat. Except for a 0.5 mile stretch of dunes and beach just north of the Hampton Harbor Inlet, the landward side of Hampton's beaches is characterized by a harden shoreline of sea wall, riprap, and revetments. Approximately 19 percent of Hampton's tidal shoreline is armored. The town is characterized by low elevation and extensive surface water and wetlands. Properties located along the salt marsh are low in elevation with few natural or constructed protections from high tides and storm surges, and tides at ten feet or higher cause street and property flooding along salt marsh areas.

This poses challenges to security, health, and welfare of citizens, and to a stable and viable economic future. Flooding hazards pose a risk to roadways and supporting transportation infrastructure, critical facilities and infrastructure, and natural resources, and private property. Key areas of Hampton that are vulnerable to flooding, SLR, and storm surges include: Hampton state and local roadways, infrastructure, upland, freshwater & tidal wetlands (Tides to Storms Hampton Vulnerability Assessment, 2015).

A note on the sea level rise scenarios used in the Tides to Storms Hampton Vulnerability Assessment and presented throughout this existing conditions summary: The Tides to Storms coastal vulnerability assessment project produced maps and statistical data about the potential

impacts to New Hampshire's seven coastal municipalities from sea-level rise and storm surge. The sea-level rise projections used in this study are based on an earlier study completed in 2011 by Wake et al but are similar to a more recent report issued by the NH Coastal Risks and Hazards Commission's Science and Technical Advisory Panel in 2014. Three sea-level scenarios were evaluated accounting for a range from the intermediate-low to the highest projected sea-levels at the year 2100 (Refer to table below).

Figure 1. Sea-Level Rise and Storm Surge Scenarios

Sea-Level Rise (SLR) Scenarios	SLR 1.7 feet	SLR 4.0 feet	SLR 6.3 feet	SLR 1.7 feet + storm surge	SLR 4.0 feet + storm surge	SLR 6.3 feet + storm surge
Sea Level Rise	1.7 feet	4.0 feet	6.3 feet	--	--	--
Sea-level Rise + Storm Surge	--	--	--	1.7 feet + Storm Surge	4.0 feet + Storm Surge	6.3 feet + Storm Surge

Note: Storm surge is the area flooded by the 100-year/1% chance storm event.

(Tides to Storms Hampton Vulnerability Assessment, 2015)

COASTAL HAZARDS IMPACT ON INFRASTRUCTURE AND CRITICAL FACILITIES

The most frequently impacted infrastructure type in Hampton is culverts, from both SLR and coastal storm surge flooding. A table of infrastructure impacted by SLR and coastal storm surge flooding follows this subsection. The most concerning culverts are those that serve as freshwater conveyance systems that may be impacted by tidal flooding in future, because freshwater culverts are not designed for bidirection flow or to accommodate tidal flooding water volumes (Tides to Storms Hampton Vulnerability Assessment, 2015).

Hampton has flapper tide gates at 7 locations that are closed during storm events to prevent flooding of adjacent residential areas, roads, parking lots, stormwater management systems, and wetlands (Tides to Storms Hampton Vulnerability Assessment, 2015).

The Police Station and Fire Station are located on Brown Avenue in low lying areas and are already impacted by tidal and storm flooding events, and the nearby roads and parking areas are impacted by seasonal flooding and storm events. The police and fire stations are impacted by 4.0 ft SLR scenario and storm surge (Tides to Storms Hampton Vulnerability Assessment, 2015).

Additional critical facilities impacted by SLR and storm surge include (Tides to Storms Hampton Vulnerability Assessment, 2015):

- The wastewater treatment plant, where the operations and management offices and contact chlorination tanks are impacted by a 1.7 ft SLR scenario, however the main structures of the treatment plant are not impacted.
- The high school supporting facilities and recreational fields are impacted by SLR, though the school buildings are not.

- The landfill is capped and no longer active, but there are concerns about water quality impact from saturation and rising groundwater levels from SLR.
- The transfer station access road is susceptible at 6.3 ft SLR scenario plus storm surge.

TABLE 3. INFRASTRUCTURE

Sea-Level Rise (SLR) Scenarios	SLR 1.7 feet	SLR 4.0 feet	SLR 6.3 feet	SLR 1.7 feet + storm surge	SLR 4.0 feet + storm surge	SLR 6.3 feet + storm surge
State and Municipal Infrastructure (# of facilities)						
Culverts (state and municipal)	7	24	42	46	53	66
Dams	2	4	4	4	5	7
NH Historic Register	0	1	1	1	1	1
Power stations and Substations	0	1	1	1	1	1
Public Water Supply, Pump Houses, Wells	4	4	6	6	6	8
Bridges	3	3	5	5	6	7
Harbor/Marina	0	1	1	1	1	1
Signs, Lights, Signals, Beacons	0	2	8	7	10	11
Ten Year and Long Range Plan Projects	2	3	3	3	4	4
Total # of Sites	18	43	71	76	87	107

(Tides to Storms Hampton Vulnerability Assessment, 2015)

COASTAL HAZARDS IMPACT ON TRANSPORTATION AND ROADWAYS

Roadway flooding is very vulnerable in Hampton. Pavement systems have shorter service life with groundwater rises and sea-level rise, and the flooding magnified by tidal or storm-related flooding and freshwater flooding. Storms in connection with high tides in Hampton can cause water to flow at a depth of 3 feet or more in areas of Hampton, especially west of Ashworth Avenue where multiple residences have been built on filled marshland (Hampton Hazard Mitigation Plan, 2016).

There are certain segments of state roads Route 1A, Route 101, and Route 1, and municipal roadway network that are particularly sensitive to flooding, with increased vulnerability at the 4.0 ft sea level rise scenario. More specifically, there are local roadways and lands behind Route 1A at Hampton Beach and North Beach are highly vulnerable to flooding at 4.0 ft SLR scenario. Most of the local roadway network landward of Route 1A at Hampton Beach, North Beach and the near the North Hampton border and Route 1 south of the Route 101 interchange will be impacted at 6.3 feet of sea-level rise (Tides to Storms Hampton Vulnerability Assessment, 2015). Overall, the miles of roadway affected in 6 SLR scenarios ranges from 3.4 miles at the 1.7 ft SLR scenario to 31.3 miles at the 6.3 ft SLR + storm surge.

Route 1A is a vital transportation link on the coast for access, safety, livability, recreation, and the coastal tourist economy (NH Coastal Risk and Hazards Final Report 2016). There is observed flooding of multiple segments of the roadway network that are designated as

evacuation routes (Tides to Storms Hampton Vulnerability Assessment, 2015). Local response on municipal roads will depend on State plans for improving the resiliency of Route 1A and Route 1, and will require some regional coordination (NH Coastal Risk and Hazards Final Report 2016). Culverts located at stream crossings and drainages will be impacted. Tidal culverts may become submerged and freshwater culverts may be influenced by tidal flooding (Tides to Storms Hampton Vulnerability Assessment, 2015).

COASTAL HAZARD IMPACT ON NATURAL RESOURCES

Natural resources in Hampton provide a myriad of services, including drawing tourism, residents, and businesses to the area, provided areas for recreation, and performing ecosystem services. Natural resources are also depended on for clean drinking water. Salt marsh, sand dunes, sand beaches provide natural protection against floods and storm surges. Wetlands and floodplains provide storage for flood waters. Oyster reefs and dunes provide physical barriers to coastal storms (NH Coastal Risk and Hazards Final Report 2016). Salt marshes and eelgrass beds provide critical habitat for commercial and recreational fisheries. A table of Natural Resources affected by SLR and storm surge from the Tides to Storms 2015 report follows this subsection.

Wetland Systems

Tidal wetland systems and freshwater wetlands will be heavily impacted by flooding from sea level rise. Estuarine wetlands, marine wetlands, and adjacent freshwater wetlands will be impacted by coastal flooding as there is increased daily tidal flooding of tidal marsh systems. Increased flooding reduces a wetland's flood storage capacity during storm events (this may be partially offset by inundation of freshwater wetlands), and models indicate that there will be potential tidal marsh system migration in Hampton (Tides to Storms Hampton Vulnerability Assessment, 2015).

Changes in daily tidal condition and seasonal high tides will affect stability of marsh systems and their ability to sustain surface elevations that keep pace with rising water levels. Marsh systems can either disappear under rising sea levels or migrate inland, or both. In developed areas where there is no space for natural habitat to retreat or migrate inland, marshes may disappear.

Recent modeling suggests that 95% of salt marshes in New Hampshire could disappear by 2100 under the highest sea level scenario. For this reason, protecting land where salt marshes can potentially migrate is a good strategy to enhance coastal resiliency (Reference SLAMM map on page 14 of Hampton Tides to Storms Report). In addition, removing or modifying barriers to tidal flow will aid in allowing water to restore or improve tidal marsh connections (Reference SLAMM map on page 14 of Hampton Tides to Storms Report).

There are currently 1,497 acres of salt marsh within Hampton and at the 3.9 ft SLR scenario, there is potential for 310 acres of new marsh. At 6.6 ft SLR scenario, there is the potential for 344 acres of new marsh (Sea Level Affecting Marshes Model (SLAMM), via Tides to Storms Hampton Vulnerability Assessment, 2015).

Habitat

Habitat and species loss due to coastal flooding hazards will likely be greater in developed areas where there is no space for natural habitat to retreat or migrate inland. Near shore

ecosystems that are in close proximity to the build landscape, such as roads, drainage facilities, buildings, and utilities, will be affected, as hardened structures to defend buildings will alter natural systems and prevent habitat and species from migrating inward (NH Coastal Risk and Hazards Final Report 2016). Except for a 0.5 mile stretch of dunes and beach just north of the Hampton Harbor Inlet, the landward side of Hampton’s beaches is characterized by a harden shoreline of sea wall, riprap, and revetments (Flooding in Hampton, NH Situation Assessment, 2019). For example, dunes will disappear when they do not have a natural path to retreat, and rare species such as the Saltmarsh Sparrow and Piping Plover may be affected by habitat loss. In New Hampshire, the Saltmarsh Sparrow’s habitat is located in salt marshes of sufficient size along the immediate coast and the Great Bay. The Piping Plover nests on sandy beaches and dunes where vegetation is sparse (2015 Wildlife Action Plan). Sea level rise will alter the function of coastal habitats such as salt marshes and estuaries, habitat availability, and timing of nesting and migration for seabirds (2015 Wildlife Action Plan, via the NH Coastal Risk and Hazards Final Report 2016).

High water levels will drown salt marshes, convert salt marshes into mudflats, and convert mudflats into subtidal zones. Deeper estuarine waters will deplete eelgrass beds [MK1] where light will no longer be enough for eelgrass growth and survival, and sedimentation from storms may affect habitat that lies behind beaches and smother eelgrass and shellfish beds. Saltwater intrusion may change freshwater wetlands to brackish wetlands, which may impact the habitat surrounding the Taylor River in Hampton because changes in salinity will affect coastal plants and animals. Furthermore, changing water levels may impact where fish and waterfowl breed. Both saltwater intrusion and rising groundwater levels will also impact water resources (NH Coastal Risk and Hazards Final Report 2016).

TABLE 6. NATURAL RESOURCES (acres)

Sea-Level Rise (SLR) Scenarios	SLR 1.7 feet	SLR 4.0 feet	SLR 6.3 feet	SLR 1.7 feet + storm surge	SLR 4.0 feet + storm surge	SLR 6.3 feet + storm surge
Surface Water		32.6	33.7	33.0	34.5	35.0
Stratified Drift Aquifers	6.9	20.0	49.4	42.2	77.0	108.0
Freshwater Wetlands	56.8	79.8	102.7	97.6	121.4	135.5
Tidal Wetlands	181.7	202.9	223.8	235.6	236.9	237.3
Wildlife Action Plan – Tier 1 and Tier 2 habitat	795.3	916.3	995.1	995.6	1,064.3	1,109.1
Coastal Conservation Plan Focus Areas	179.0	281.6	349.1	340.7	391.2	417.9
Conserved and Public Lands	39.5	59.9	87.9	107.9	123.9	150.3
Ag Soils (All Types)	26.0	83.3	153.3	135.4	214.3	286.3

(Tides to Storms Hampton Vulnerability Assessment, 2015)

COASTAL HAZARDS IMPACT ON LAND USE

Residential developments and wetland systems will be most impacted by coastal flooding, including the residential development at North Beach and Hampton, the low-lying upland areas behind Route 1A, and interior fringe around Hampton and the Seabrook Estuary. These areas are susceptible to moderate flooding in the 1.7 ft SLR scenario and very susceptible at 4.0 ft SLR scenario. Much of these areas are filled wetlands, so the underlying marsh sediments and material are subsiding to lower elevation. In addition, the commercial development at North Beach and Hampton Beach are susceptible to flooding at 4.0 ft SLR scenario and by coastal storms (Tides to Storms Hampton Vulnerability Assessment, 2015).

Note: See below section on coastal hazards impact within FEMA Flood zones for details on losses within residential areas.

COASTAL HAZARDS IMPACT ON PRIVATE PROPERTY (ASSESSED BY PARCEL AND ZONING)

Flood impacts in existing zoning districts are highest in single-family and high-density residential and commercial areas, which show sensitivity to flooding impacts at the 1.7 ft SLR scenario. The largest increase in the number of affected parcels in the extent of flooding is from the 1.7 ft SLR scenario to the 4.0 ft SLR scenario, where there is a 76.5 percent increase in the number of affected parcels and nearly a \$288 million increase in assessed value. Additional SLR scenario increases from 4.0 ft SLR to 6.3 ft SLR show a 31 percent increase in the number of affected parcels and approximately a \$300 million increase in assessed value (Tides to Storms Hampton Vulnerability Assessment, 2015).

In Hampton, sea-level rise is causing many owners to consider structural landscaping options to make properties more flood resilient and seeking municipal action to reduce flood impacts (Flooding in Hampton, NH Situation Assessment 2019). However, these measures will not offer sufficient protection long-term. Hampton and Hampton Beach Village Precinct governing boards and commissions have heard public input on intensifying flooding, however have had limited time and resources to address the topic in detail and limited opportunity to coordinate between boards and commissions. The concepts of managed retreat and voluntary property buyout programs are daunting and challenging topics to municipal officials and property owners (Flooding in Hampton, NH Situation Assessment 2019).

Note: See below section on coastal hazards impact within FEMA Flood zones for details on losses within residential areas.

COASTAL HAZARDS IMPACT WITHIN FEMA FLOOD HAZARD AREAS

Approximately 471 acres (16%) of land within the 1% annual change (100-year) floodplain are developed, including 278 acres of residential development (Flooding in Hampton, NH Situation Assessment 2019). 4% of all structures in Hampton are within a high flood risk area (Zones AO and VE). The three sea-level rise scenarios generally fall within the current 100-year floodplain, extending beyond into the 500-year floodplain in certain areas. The 100-yr floodplain is highly sensitive to flooding from SLR, including 75% inundation at the 1.7 ft SLR scenario, 86% inundation at 4.0 ft SLR scenario, and 87% inundation at the 6.3 ft SLR scenario. From a floodplain management perspective, creating more resilient development within the current 100-year floodplain will provide protection against flood impacts from long-term sea-level rise (Tides to Storms Hampton Vulnerability Assessment, 2015).

Note: The section below titled “Floodplains and Flood Hazard Areas” gives more information on floodplain characterization within Hampton, as well as an update to the existing conditions on floodplains found in the current Natural Resources Chapter from the 2009 Hampton Master Plan.

Extreme Precipitation

Coastal New Hampshire is regularly impacted by coastal storms, which in addition to storm surge, often produce heavy precipitation in the form of rain or snow depending on the time of year. The area is a humid climate and a relatively uniform distribution of precipitation throughout the year totaling between 40-45 inches on average annually. The magnitude of daily extreme precipitation events has increased by 15 - 38% in New Hampshire’s coastal watershed since the 1950s. The frequency of extreme precipitation events is projected to increase over the course of the next several decades, especially in the springtime. This increase will likely result in an increased risk of flooding. The magnitude of future flooding will depend in part on how much the effective impervious surface changes in the coastal watershed due to development both inland and along the coast (New Hampshire Coastal Flood Risk Summary, 2019). Hampton is currently approximately 40% developed (National Land Cover Database).

Extreme precipitation will change temporal distribution of freshwater to river and estuarine systems, and freshwater pulses may affect timing and abundance of algal blooms (NH Coastal Risk and Hazards Final Report, 2016). Furthermore, extreme precipitation and its effects may cause changes in ecosystems for southern New Hampshire birds and amphibians. For example, fish are sensitive to water temperature which is related to storms and type of vegetation living along back (NH Coastal Risk and Hazards Final Report 2016).

In addition, increased precipitation and flooding will lead to increase in untreated stormwater and potentially wastewater entering nearby waterways (NH Coastal Risk and Hazards Final Report 2016).

Freshwater Flooding

Freshwater flooding in coastal New Hampshire has increased in magnitude and frequency, and expected to increase in the future. Riverine (freshwater) flooding is also expected to increase in response to increases in extreme precipitation events in the northeast US (New Hampshire Coastal Flood Risk Summary, 2019).

The greatest number of annual floods in New England occur during the late winter/early spring. The dominant flood producing mechanism is rainfall, which is linked to Nor’easters and storms sourced from the Great Lakes region. Rainfall combined with snowmelt also represent an important flood mechanism (New Hampshire Coastal Flood Risk Summary, 2019).

(4) Groundwater Rise

Coastal groundwater levels are expected to rise with sea level rise, with projected rise decreased with distance from coast. Groundwater rise is influenced by the characterization of the coast, including geology and the proximity of freshwater discharge areas such as streams and freshwater wetlands. Rising groundwater may contribute to water-quality degradation, saltwater intrusion, and streamflow increases, and may result in land-surface inundation and wetlands expansions (New Hampshire Coastal Flood Risk Summary, 2019).

Freshwater and saltwater wetland ecosystems, including vegetation, biota, and substrate, are sensitive to water depth, flooding frequency and duration, and salinity changes. Freshwater and saltwater wetlands are sensitive to the duration of root zone saturation and are highly susceptible to changes in groundwater levels. Low-lying lands adjacent to existing freshwater wetlands are the most vulnerable to wetland expansion from groundwater rise (New Hampshire Coastal Flood Risk Summary, 2019).

(5) Winter Weather

Winter weather occurs frequently in Hampton and includes heavy snowstorms, ice storms, blizzards, and Nor'easters. Heavy snow accumulation, such as those with heavy snowstorms or Nor'easters, usually affect the entirety of the town and can cause extended power outages, road closures, roof collapses, and high snow removal costs. Ice storms can affect trees and powerlines, causing ice damage, power outages, road closures, forest damage, and icy roads that impact rapid emergency responses. Power outages affected functional needs populations (Hampton Hazard Mitigation Plan Update, 2016).

The Hazard Mitigation Plan details ten major winter weather storms that occurred in the previous 10 years of the plan's writing (2005 – 2010). The leading cause of power outages in NH's storms have been weather and falling trees. Following the large snowstorms in NH in 2011, utility companies have worked to improve resiliency of the electrical grid. More assessment is needed to understand vulnerability of electrical grid and the communications grid in NH, particularly of large power transformers and substations (NH Coastal Risk and Hazards Final Report 2016).

(6) Hurricane

A hurricane is a tropical cyclone with high winds, which can occur occasionally in Hampton, with high winds affecting the entire town. The rainfall associated with hurricanes affect mainly the 100-year floodplain. High winds cause power outages, structural damage to buildings, road closures, and debris management issues (Hampton Hazard Mitigation Plan Update, 2016). The Hazard Mitigation plan details two recent occurrences of Hurricanes, including Hurricane Sandy in 2012 which downed numerous trees and caused widespread power outages (the impact in Hampton was minimal, and largely affected inland New Hampshire) and Hurricane Irene in 2011, which brought strong winds and heavy rain to New Hampshire. Hampton experienced minimal flooding but power outages for several days.

(7) Severe Wind

Severe wind events are probably in Hampton, occurring due to downbursts from thunderstorms or tornadoes. Higher elevations are more vulnerable, though severe wind events can occur anywhere in Hampton. Depending on where these events occur and the size of the events, the destruction in Hampton could be major, causing roofs to be torn off houses, mobile homes to be demolished, large trees to be uprooted or snapped, and debris (Hampton Hazard Mitigation Plan Update, 2016). The Hazard Mitigation plan details several recent severe wind events, including large hail, damaging winds, and flash flooding in 2014, severe thunderstorms and hail in 2011, high wind gusts causing power outages in 2010, and a 2006, a F2 tornado with maximum winds between 120 and 130 that landed on Interstate 95 in Hampton causing damage to trees but not to homes or structures.

(8) Lightning

Lightning occurs frequently in Hampton, and the entire town, including critical facilities, are at moderate risk to lightning hazard. Higher elevations have an increased probability. Residents and visitors to New Hampshire are vulnerable to lightning due to activities outside on warm summer days when lightning is likely to occur. Lightning that strikes structures and utilities may cause structure fires and power outages (Hampton Hazard Mitigation Plan Update, 2016). The Hampton Hazard Mitigation Plan details the most recent significant lightning occurrence to be in 1999 when lightning struck a home and caused severe damage to the electrical system and house.

(9) Drought

Drought can occasionally occur in Hampton and would affect the entire town. Droughts can adversely affect growing or living conditions, and severe droughts can affect the public water supply, increase the probability of fires, and impeded fire suppression especially in areas that do not have access to water. Droughts are not as damaging to Hampton as floods or winter weather. The Hampton Hazard Mitigation Plan details recent occurrences of drought in New Hampshire in 2016, 2010, and 2002 (Hampton Hazard Mitigation Plan Update, 2016).

(10) Wildfire

Wildfires can occasionally affect Hampton. The Hampton Beach area has many older wood-framed structures in close proximity to each other that are at risk, as well as dense downtown areas including High Street, Lafayette Road, Exeter Road, Timber Swamp Road, Mill Road, and Whites Lane. Fires in the area are most often human-caused. The Hazard Mitigation Plan details a recent fire event in 2010 when the A Street block had a conflagration of five buildings that were ultimately destroyed and cost \$9-10 million in damages to private and town property (Hampton Hazard Mitigation Plan Update, 2016).

(11) Dam Failure

Dam failure may occasionally affect Hampton. There is one low hazard Dam (Batchelder Dam on Drakes River) and one significant hazard Dam (Old Mill Pond Dam) located in Hampton. There are seven nonmenace dams. A dam failure or breach could occur due to extreme rainfall or a human caused incident and would result in a rapid loss of water usually held behind the dam, causing inundation downstream. There are no recorded dam failures (Hampton Hazard Mitigation Plan Update, 2016).

(12) Earthquake

There is remote possibility of an earthquake affecting the Town of Hampton, and generally the town is at low risk to earthquakes. New Hampshire is considered to be in an area of moderate seismic activity with respect to other areas of the United States and is bordered to the North and Southwest by areas of major activity. There have been a few earthquakes of 2.5 magnitude or greater on the Richter scale in New Hampshire in recent years, including a 4.0 magnitude earthquake in Southern Maine in New Hampshire, a 3.1 magnitude earthquake in Boscawen, NH in 2010, and a 5.0 earthquake on the OntarioQuebec Border in 2010. Earthquakes from 2.5-5.4 are often felt but cause only minor damage (Hampton Hazard Mitigation Plan Update, 2016).

(13) Hail

Hail occurs with occasional probability in Hampton and could affect any part of the town. Hail can damage communications infrastructure and agricultural crops. There are no recorded

ignificant hail events in Hampton (Hampton Hazard Mitigation Plan Update, 2016).

(14) Extreme Heat

An extreme heat wave is a remote possibility in Hampton and due to a heat wave’s widespread nature, it would affect the whole town. The town experiences frequent heat wave frequently in any given 25- year period, however the impact on the town has been minimal and there is no information on past extreme heat waves (Hampton Hazard Mitigation Plan Update, 2016).

FLOODPLAINS AND FLOOD HAZARD AREA

Floodplains

Flood hazard zone descriptions and area within the Town of Hampton are displayed in Table 1. The number of structures located in floodplain, by zone, is displayed in Table 2. 4% of all structures in the Town of Hampton are within “high flood risk” areas (zone AO and zone VE). Those areas are along the beach and account for a cumulative 2% of the towns area. The majority of the structures in these “high flood risk” areas are in the northern “walkable neighborhood”. More than a quarter (27%) of all structures in town are within 1% chance annual flood, with the majority of these structures being along the ocean or eastern side of the Hampton River and Hampton Harbor wetland complex. Most of these structures are within 0.5 miles of the beach. The structures appear to be roughly evenly split between the northern and southern “walkable neighborhoods” along the beach. 6% of all structures in town are within exclusively the 0.2% chance annual flood. Almost all of them are along the ocean or eastern side of the Hampton River/Harbor wetland complex. The majority of these structures are within 0.5 miles of the beach. Additionally, most appear to be in the southern “walkable neighborhood”.

Table 1. Flood hazard zones identified on FEMA Flood Insurance Rate Maps (FIRMs) for Hampton. Area is calculated based on land area only (not including water). Descriptions of Flood Hazard Zones are from <https://www.fema.gov/glossary/flood-zones>.

Flood Hazard Zone	Description of Flood Hazard Zone	Area (acres) ^[MK2]	Percent
Zone A	Areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.	105	2%

Zone AE	Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. Base Flood Elevations (BFEs) are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.	737	11%
Zone AO	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements and floodplain management standards apply.	45	1%
Zone VE	Areas subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. Base Flood Elevations (BFEs) derived from detailed hydraulic analyses are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.	72	1%
Total Acres of Special Flood Hazard Area		959	14%
Zone X (0.2%)	Areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood.	129	2%
Zone X	The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood.	5,540	84%
Total Acres of Moderate Flood Hazard areas (Zone X 0.2%) and Minimal Flood Hazard (Zone X).		5,669	86%

Table 2. The number of structures located in floodplain, by zone.

Zone	Number of structures	Percent of structures
That touch waterbodies	42	0.4%
Zone AO: SFHA with high flood risk	309	3%
Zone VE: SFHA with high flood risk	101	1%
Zone AE: 1% annual chance flood	2,625	27%
Zone X: 0.2% annual chance flood	556	6%
Zone A: SFHA with low flood risk	0	0%
Zone X: Area of minimal flood hazard	6,869	72%
Total	9,600*	100.0%
<i>*Some structures intersect multiple flood zones, so the total number of structures adds up to greater than 9,600.</i>		

Floodplain Management Ordinance

Hampton's current Floodplain Management Ordinance was adopted in March 2017. The Town of Hampton is a participating member of the National Flood Insurance Program and complies to the requirements of the National Flood Insurance Act of 1968. The floodplain management ordinance details the requirements the Town of Hampton upholds to participate in this program. In 2017, Hampton adopted new floodplain regulations that require in Zone VE which requires the lowest horizontal structural member of the lowers flood to be elevated at least one foot above the base flood elevation (in exchange, the height of the building may exceed the maximum height requirements in the district by up to one foot).

The regulations of the floodplain ordinance applies to all lands designated as special flood hazard areas by the Federal Emergency Management Agency (FEMA) in its "Flood Insurance Study for Rockingham County, NH" dated May 17, 2005, together with the associated Flood Insurance Rate Maps dated May 17, 2005.

Community Rating System

The town of Hampton is working with the Rockingham Planning Commission to participate in the Community Rating System (CRS), which is a voluntary incentive program that provides a percent discount for flood insurance premiums for communities that participate in the NFIP. The CRS program includes planning and policy, regulatory, non-regulatory, and community outreach and engagement activities. The residents and businesses of communities who participate in the CRS program receive a discount (typically 5-10%) on their annual flood insurance premiums.

Flood Studies: Hampton Harbor and Meadow Pond Area

In 2018, the Town of Hampton approved Warrant Article 20 to fund hiring a consulting engineering firm to study and report on the impacts of and solutions to flooding in Hampton. The consulting firm Hoyle, Tanner, and Associates conducted two flood studies – one of the Hampton Harbor that looked "at opportunities for Hampton to modify current practices and to identify improvements that can be planned or constructed to adjust water's negative impacts on property, infrastructure and quality of life", and a second study on the Meadow Pond Area "to evaluate the current and future flood patterns and to identify alternatives to reduce future flood risks". The studies were completed from 2019-2021.

The final reports were released in March and April of 2021, and is summarized briefly below. Due to the more frequent and impactful flooding events that Hampton's residents and guests have been experiencing recently, the Town of Hampton is interested in opportunities to plan for and minimize flooding disruptions. The first study of the Hampton Harbor and adjacent marsh system indicated there are viable short-term solutions such as the temporary barriers and continued revisions of the town's zoning ordinance. The most feasible long-term solution is to elevate key roads, and have landowners do voluntary or assisted retreat. The study recommended that managed retreat of structures in floodprone areas that are affected should be seriously considered as an option.

In the Meadow Pond Area study, a hydraulic model was used to investigate flood patterns and evaluate flood mitigation alternatives. Data collected to be input into the model included topographic data, water levels, precipitation, and tide levels. The model suggests that the tide has more of an effect on current and future flooding than freshwater flooding from the upstream river system. Low-lying areas are flooded by the tide and existing drainage systems are inundated, resulting in flooding along roads and homes in the area. The chronic flooding problem is worsened by the minimal and deteriorating drainage infrastructure. The bridges at Route 101 and Winnacunnet Road constrict flow through the marsh and river system, creating a tidal lag. To reduce flood risk, the study recommends improving drainage on Green Street, Gentian Streets, Meadow Pond Road, and Kings Highway, as well as ditch and marsh remediation, installing a berm behind Gentian road, elevating floodprone houses, and managed retreat.

Hazard Mitigation Plan

The 2016 Hampton Hazard Mitigation Plan provides information on the National Flood Insurance Program (NFIP) which is administered by FEMA. The town of Hampton regulates floodplain development using federal standards for site plan review and subdivision regulations and zoning, which enables landowners to qualify for federally insured flood insurance. The town's existing ordinance meets the minimum requirements for the National Flood Insurance Program, per the last Community Assistance Visit in 2015. The town continues to maintain regulations to be in compliance with that NFIP and updating the Floodplain Ordinance as federal requirements are updated (Hampton Hazard Mitigation Plan Update, 2016).

In Hampton, there are 1,796 National Flood Insurance Program policies in the Town of Hampton, and there have been 513 claims to the National Flood Insurance Program in Hampton since 1975, totaling \$4,572,987 paid claims (Hampton Hazard Mitigation Plan Update, 2016). Hampton is the largest repetitive loss community in the State of New Hampshire, with 40 repetitive losses in the town and a total of \$1,823,740 in repetitive losses being paid by the National Flood Insurance Program (Hampton Hazard Mitigation Plan Update, 2016).

POTENTIAL IDEAS OR RECOMMENDATIONS

Incorporating Natural Hazard Risk into Planning Coastal NH's exposure to current and future flood risks is significant. As of 2016 – NH's 17 coastal zone municipalities are home to approximately 11% of the state population, host 100,000 jobs, and generated 2014 Gross Regional Product of approximately \$11 billion. Incorporating projected flood risk into planning, design, construction, and conservation will reduce exposure to flood hazards – lives saved and lower response and recovery costs.

Table 2.1 NFIP Flood Policy Data

	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$ of Closed Paid Losses
Single Family	724	\$865,580	\$150,928,600	369	\$2,735,806
2-4 Family	288	\$279,436	\$59,034,100	69	\$479,028
All Other Residential	724	\$294,101	\$105,771,400	29	\$918,336
Non Residential	60	\$151,792	\$18,584,900	46	\$439,817
Total	1,796	\$1,590,909	\$334,319,000	513	\$4,572,987

Type of Resident	# of Repetitive Loss
Single Family	24
2-4 Family	7
All Other Residential	6
Non Residential	3
Total	40

Coastal storms will be more severe as a result of warmer oceans and other changes in climate systems, but it is unclear if storm frequency will change. Storm surge events will have greater inundation extent and destructive impact due to higher sea levels.

Recommendations Hampton is already doing or has underway:

- Update the Natural Hazards Mitigation Plan – completed in 2016.
- Master Plan Coastal Hazards Chapter – in progress through the Coastal Resiliency Report and current master plan update.
- The FEMA Community Rating System supports the implementation of climate adaptation actions includes planning and policy, regulatory, non-regulatory, and community outreach and engagement activities – Hampton is currently applying for the CRS [status update?].
- Continue participating with the Seabrook-Hamptons Estuaries Alliance (SHEA) and continue the partnership with NH Coastal Adaptation Workgroup in climate adaptation activities that facilitate, coordinate, provide technical information, and convene public outreach events for the Estuary towns.

Regulatory Recommendations

- Adopt an ordinance or Coastal Flood Hazard Overlay District with performance-based standards to protect against flooding impacts from SLR and coastal storm surges based on FEMA maps and projected future high-risk flood areas (Tides to Storms Hampton Vulnerability Assessment 2015).
- Adopt buffers and setbacks that adequately separate development and infrastructure from tidal wetlands, freshwater wetlands and surface waters to allow for flood storage capacity, inland migration of marsh systems, conversion of freshwater systems to tidal systems during SLR
- Elevate structures 2 ft above base flood elevation (Tides to Storms Hampton Vulnerability Assessment 2015).
- Implement regulatory standards and/or enact enabling legislation to ensure that the best available climate science and flood risk information are used for the siting and design of new, reconstructed, and rehabilitated state-funded structures and facilities, municipal structures and facilities, and private structures (NH Coastal Risk and Hazards Final Report 2016).

Planning and Policy Recommendations

- Incorporate the consideration of impacts of SLR and storm surge flooding into current and future capital infrastructure projects and infrastructure management plans, and evaluate current infrastructure for extent of SLR impact (Tides to Storms Hampton Vulnerability Assessment 2015).
- Land conservation offers a great opportunity for the adaptation of impacts of SLR and coastal storm surges. Adopt a scoring prioritization into existing land conservation prioritization efforts which consider climate adaptation as benefits of land conservation. Increase the funding and resources for land conservation (land conservation scores high in CRS program) (Tides to Storms Hampton Vulnerability Assessment 2015).
- Integrate comprehensive land use and environmental planning with floodplain management approaches that prevent and minimize impacts from coastal hazards (NH Coastal Risk and

Hazards Final Report 2016).

- Prepared evacuation plans with other towns in coastal region and mark evacuation routes with signage, communicate them to public, and put them on town's website and via printed maps (Tides to Storms Hampton Vulnerability Assessment 2015).

Community Outreach Recommendations

- Implement FMEA's High Water Mark Initiative by providing information on past floods, such as documenting high water marks in public places, and posting maps and photographs of past floods on their websites (Tides to Storms Hampton Vulnerability Assessment 2015).
- Use the Coastal Flood Hazard Overlay District as a tool to inform property owners of existing and future risks and hazards based on projected sea-level rise and coastal storm surge flooding (Tides to Storms Hampton Vulnerability Assessment 2015).
- Maintain natural shorelines (marshes, dunes, estuaries) to provide flood storage, recreational areas, and commercial fishing (Tides to Storms Hampton Vulnerability Assessment 2015). Natural Resources Recommendations
- Use land conservation to support retreat from high-risk areas by buying and returning land to its natural state (Tides to Storms Hampton Vulnerability Assessment 2015).
- Protect land that allows coastal habitats and populations to adapt to changing conditions and also provides ecosystem services that protect people, structures, and facilities (NH Coastal Risk and Hazards Final Report 2016).
- Restore or maintain natural flow regimes (groundwater, surface water and wetlands) to increase ecosystem resilience to extreme weather events and other coastal hazards, including floods, drought, and sea-level rise (NH Coastal Risk and Hazards Final Report 2016).
- Identify and inventory wetlands where protection provides benefits to protect against flooding and where barriers can be removed to tidal function and marsh migration (Tides to Storms Hampton Vulnerability Assessment 2015).
- Assess the impact of freshwater and tidal crossings on adjacent tidal wetlands, aquatic organism passage, and public safety under existing and future climate conditions (NH Coastal Risk and Hazards Final Report 2016).
- Develop natural resource restoration plans that explicitly consider future coastal risk and hazards, and the ecological services that they provide (NH Coastal Risk and Hazards Final Report 2016).
- Document coastal and riverine shoreline conditions and assess vulnerability of natural features and engineered structures that protect people, structures, and facilities under current and future conditions (NH Coastal Risk and Hazards Final Report 2016).

QUESTIONS FOR CONSIDERATION

The NH Coastal Risk and Hazards Report has identified the following questions for consideration regarding coastal hazards:

- Will New Hampshire's highly-sought-after waterfront properties continue to attract investment and appreciate in value even in the face of significant risk of repetitive losses in the coming decades?
- Will repetitive losses in New Hampshire and elsewhere influence demand for New Hampshire coastal real estate and availability of National Flood Insurance Program (NFIP)

funds to insure those New Hampshire properties at risk of flooding?

- At what point will the risk from coastal flooding become high enough to cause coastal property values to decline from falling demand and discouraged investment?
- Will properties destroyed by coastal flooding continue to be rebuilt, and if so will the reconstructed buildings be of greater or lesser value than those that preceded them?
- When and to what extent will bank lending practices change to become less supportive of coastal real estate investment?
- What is the role of insurance in enabling reinvestment? Will the phasing out of the most highly subsidized insurance categories in the NFIP result in disinvestment in high-risk areas or will property owners simply self-insure?

TRANSPORTATION

STUDIES AND REPORTS REVIEWED

- Phase 1 - MM Literature Review and Resources map
- Phase 1 Vision
- Phase 1 Coastal resources chapter
- Phase 1 Outreach efforts and responses
- 2003 Transportation Chapter
- 2019 Coastal Flood Risk Summary
- NH Seacoast greenway & other bike/ped resources
- <https://www.experiencehampton.org>
- 2019 Recreational Needs assessment
- Hazard mitigation Plan
- CIP <https://www.hamptonnh.gov/DocumentCenter/View/3917/2021-2026-Town-CIP>
- RPC 2015 Regional Plan
- Long Range Transportation Plan 2021
- 2018 Hampton Beach Area – Transportation Update - https://www.nh.gov/dot/projects/hampton40797/documents/40797_rpt_08012018.pdf
- RPC Transportation Specific Resource Pages/Links - <https://www.therpc.org/transportation>

KEY FINDINGS

- Hampton experiences large increases in traffic and congestion during the summer months.
- There are a lack of transit options in Hampton currently.
- Hampton's transportation network is primarily composed of roadways, and some of this roadway network is under threat from sea-level rise and flooding.
- The expanding bicycle and pedestrian network needs further investment in order to reduce vehicular traffic in the community.
- Other ways to decrease vehicular traffic include roadway planning and infrastructure upgrades aligned with complete street designs, parking management, and travel demand management strategies.
- Opportunities exist to also calm traffic, clean stormwater, address localized inland flooding, and other impacts through the construction of complete and green streets.
- Land use planning and future development opportunities focused on inland areas of Hampton must be coordinated with transportation system upgrades.
- There is a need to showcase some case study examples of coastal communities with strong transit systems and interconnected pedestrian and bicycle networks.
- There is a need to engage the public in identifying the specific infrastructure upgrades needed to make the vision a reality.
- Explore the role of technology – access and quality of broadband – in supporting telecommuting and reducing vehicular traffic.

OVERVIEW OF HAMPTON'S TRANSPORTATION SYSTEM – ISSUES, OPPORTUNITIES, AND VISION

Hampton's Transportation System is characterized by:

- Its location in a rapidly growing region, with frontage and access to the ocean, and the related demand of tourism and recreation facilities.
- Good access to the regional transportation system, but limited access to public transit, and an increase in seasonal traffic.
- The impact of land use decisions and the predominant higher density areas of the community which include the Downtown and Hampton Beach; linear commercial development and a variety of residential neighborhoods at different densities; and some lower density areas to the north and west.
- Impacts related to sea-level rise

Transportation Related Goals:

- Reduce vehicular traffic and congestion.
- Improve roadway safety for all residents and visitors.
- Preserve/improve the capacity and efficiency of existing roadways/infrastructure.
- Accommodate all users with a variety of transportation options
- Ensure transportation infrastructure is constructed and maintained to withstand natural hazards and rising tides

2020 Phase 1 Master Plan Public Input Related to Transportation:

- Increased walkability (sidewalks, crosswalks, benches, destinations)
- Increased bikeability (bike lanes, bike paths, bike racks)
- Public transportation connecting town center to the beach district
- Work to diminish vehicle traffic

Transportation Related Vision (2021):

Connected Community: A future Hampton will have a town-wide community that is connected both as practical matter and with regards to the identity of residents and visitors. One important aspect of this vision is connecting Hampton's beach areas, inland neighborhoods, and western corner through bike-paths, sidewalks, public transit, and way-stops. This increase in transit availability will increase travel between these different parts of the community, and cause co-benefits of reducing vehicular traffic and fossil fuel use while increasing positive public health outcomes.

Hampton will work to reduce vehicular traffic in other ways as well, including through route planning, parking management, and infrastructure upgrades. Reduced traffic backup will improve the quality of life for residents, support local businesses that rely on the use of Hampton's roads for their livelihoods, and attract visitors and investors.

Over the long term, this increased connectivity, and the improved the accessibility of

Hampton's coastal recreational and natural resources from the rest of town, will encourage development in, and migration to, the town's inland areas as rising sea levels and changing shorelines limit development and living opportunities on the coast.

(Find and feature Case Study Examples from Coastal Communities that can serve as Models – for community outreach and possibly in final plan.)

Threats to Hampton's Transportation Infrastructure:

The 2015 report "From Tides to Storms" presents a regional understanding of the geography of future coastal flood risks in the Seacoast.

Roads: Hampton has the most miles of roadway at risk in the region. By the year 2100, during non-storm conditions, a range of 3.4 to 20.6 miles of road will be inundated, depending on the sea level rise scenario investigated. The report specifically notes that the expected NH DOT reconstruction of Ocean Boulevard will need to account for sea level rise and future coastal flooding.

Seacoast Transportation Corridor Vulnerability Assessment and Plan

This RPC-led study is assessing impacts of sea level rise on the NH coastal road network, including traffic volume and patterns, as well as road capacity and conditions. The study will identify resilience strategies for priority sites.

www.therpc.org/regional-community-planning/climate-change/STCVA

Hampton's Coastal Resilience Report (2021)

With higher sea level or storm surges, roadways may flood more frequently, drainage systems may become ineffective, and culverts may fail. The structural integrity of roads may also be undermined due to frequent inundation and elevated water tables. The Report also identified the concept of Resilient Connectors which are primary roadways that facilitate evacuation as tides rise. In particular, it was noted that roads leading inland, away from coastal risks, should be designated as Resilient Connectors.

Examples of areas that may be appropriate as Resilient Connectors include:

- Ocean Boulevard from the Hampton Bridge to Church Street
- Highland Ave, Church Street, and Route 101
- Winnacunnet Road
- High Street
- North Shore Road

Note that most of the roads above are State-owned and maintained, so Hampton will need to coordinate with NH DOT on efforts to protect them from coastal hazards. North Shore Road is included despite not being identified in the Seacoast Transportation Corridor Vulnerability Assessment because it is under local jurisdiction, so Hampton has more authority to make alterations to it. The 2017 Hazard Mitigation Plan also identified Interstate 95, NH Route 1, NH Route 101 NH Route 1A, NH Route 27 and the Town Dock as a critical facilities to consider when planning for natural hazards.

Equity and Access to Transportation Options

The Coastal Resilience Report (2021) identified Hampton's Social Vulnerability Index (SVI)/ The SVI scores hazard vulnerability due to socioeconomic status, household composition and disability, minority status and language, and housing type and transportation. Analysis shows that vulnerabilities in Hampton include older or disabled residents who may have difficulty accessing information and assistance, as well as low access to vehicles for evacuation in some areas. <https://svi.cdc.gov/map.html> A UNH led SVI investigation also found that Hampton Beach has a high number of residents who have disabilities, rent their homes, don't have health insurance, and don't have access to a vehicle (Kirshen, et al., 2018).

The Impact of Covid 19 on the Transportation System

The 2045 Long Range Transportation Plan by RPC identified medium and potentially long term impacts on the transportation. The most notable being - Telecommuting Growth & Implications. COVID-19 has forced a massive experiment in working from home, and many employers have found that has worked surprisingly well for them, reducing traditional skepticism about productivity if employees aren't in the office. Certainly, many employees will return to normal office situations once infection risk is lowered. To the extent that other employers determine they can realize cost and efficiency benefits by continuing telework after widespread vaccination is completed, this will have implications for traffic levels, emissions levels, transit ridership, the commercial real estate market and businesses near employment centers. http://www.therpc.org/application/files/8116/1375/7087/1_Introduction.pdf

TRANSPORTATION DATA

- Total length of roads in Hampton 122 miles
- Length of I-95 in Hampton 2.2 miles
- Roadways by classification type shown in Table to the right.
- Over the past 20 years it appears that the only changes in road mileage in Hampton are from reclassification, and from some small increases in both state maintained and town maintained roadways. This represents an increase of 16.2 miles in total since 2002.

TABLE: ROAD MILEAGE BY STATECLASSIFICATION

STATE CLASS	2021
Class I (State-maintained)	23
Class II (State-maintained)	7
Class IV (Urban-compact)	13
Class V (Town-maintained)	65
Class VI (Non-maintained)	2
Private Roadways	12
TOTAL	122

- Miles by Surface Type:
 - Paved: 119
 - Unpaved: 3.3
 - Total: 122

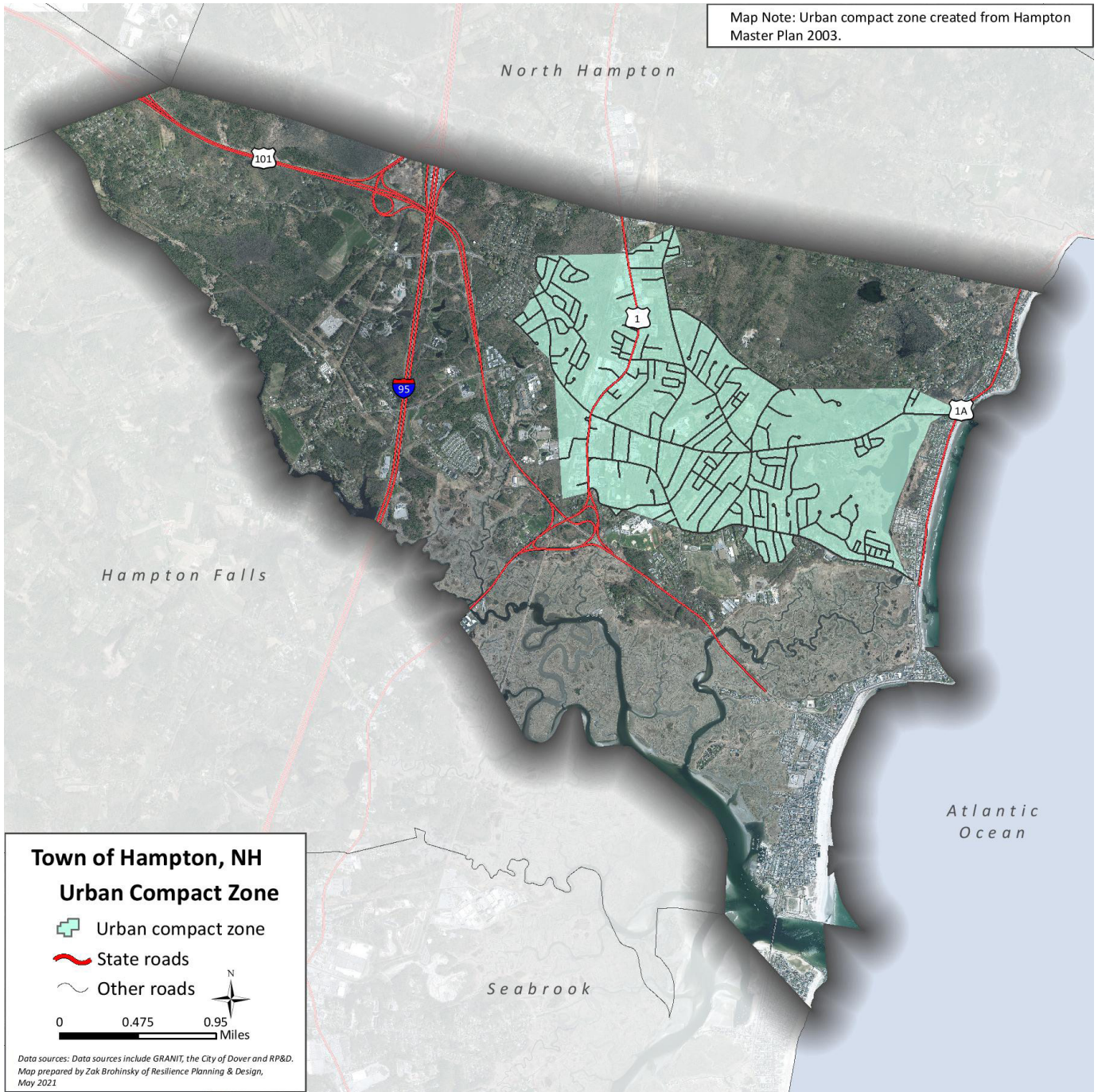
- Federal Classification system
 - The system is hierarchical in its organization, with higher order roadways (arterials) more oriented towards moving traffic, and lower order roadways (collectors and local streets) more oriented towards providing access to land uses adjacent to the roadway. This is important for two reasons; first, because they are used to determine where and under what conditions Federal highway funds may be utilized. Roads that have a functional class of collector or higher are eligible for Federal highway funds.

Roadway	FEDERAL FUNCTIONAL CLASSIFICATION		
	Principal Arterial	Minor Arterial	Collector
U.S. Rte 1	X		
NH Rte 101	X		
NH Rte 27		X	X
Winnacunnet Rd		X	
Ocean Blvd		X	X
High Street		X	
Ashworth Ave		X	
Brown Ave			X
Ann's Lane			X
Locke/ Little River/ Woodland Roads			X
Mill Road			X

Second, understanding the function of each roadway is important for setting policy and for designing improvements.

- The Goal - for these minor arterials and collectors in Hampton is to have them all reconfigured to meet complete street standards, and to be protected from the projected sea-level rise.
- Urban Compact: The Urban Compact program provides funding on a per mile basis for communities to maintain the State Primary and Secondary system roadways within their defined urban compact boundaries. Hampton's Urban compact includes 37.3 miles of roadway, and covers 20% of the community by area. The miles of roadway in the urban compact increased by 6 miles in the past 20 years. The Table below shows Urban Compact Mileage by road type in 2021.

State Primary System within Urban Compact [Winnacunnet Road & Lafayette Road (US 1)]	3.8
State Secondary System within Urban Compact [High Street and Mill Road]	3.9
Town & City maintained streets within the Urban Compact [Locke Road, Ann's Lane, Exeter-Hampton Road]	29.6



TRAFFIC COUNTS BY LOCATION

While 2020 was an outlier given the international pandemic and its disruption of travel patterns, the volume of traffic on Interstate 95 has nearly tripled in the past forty years. Now with more than 70k vehicles per day on average. Route 101 is carrying nearly 50k cars per day as well.

Hampton I-95 Toll Count Location (Includes NB and SB lanes):

- 1980 = 26,238 AADT
- 1990 = 48,331 AADT
- 2000 = 61,556 AADT
- 2010 = 61,950 AADT
- 2019 = 71,739 AADT

- 2020 = 56,200 AADT

NH 101 BETWEEN EXITS 12 - 13 (EB-WB)

- 2020 = 39757
- 2019 = 47105
- 2015 = 41000

The other major roadways in Hampton experience seasonal fluctuations, but on average these traffic volumes have stabilized.

Traffic volumes at other key locations:

NH 101 WEST OF HIGHLAND AVE (EB-WB)

- 2020 = 7115 AADT
- 2019 = 8364 AADT
- 2015 = 8755 AADT

NH 1A (OCEAN BLVD) AT SEABROOK TL (SB-NB)

- 2020 = 9300 AADT
- 2019 = 9164
- 2015 = 8959

NH 1A (OCEAN BLVD) SOUTH OF NH 101E (WINNACUNNET RD) (SB-NB)

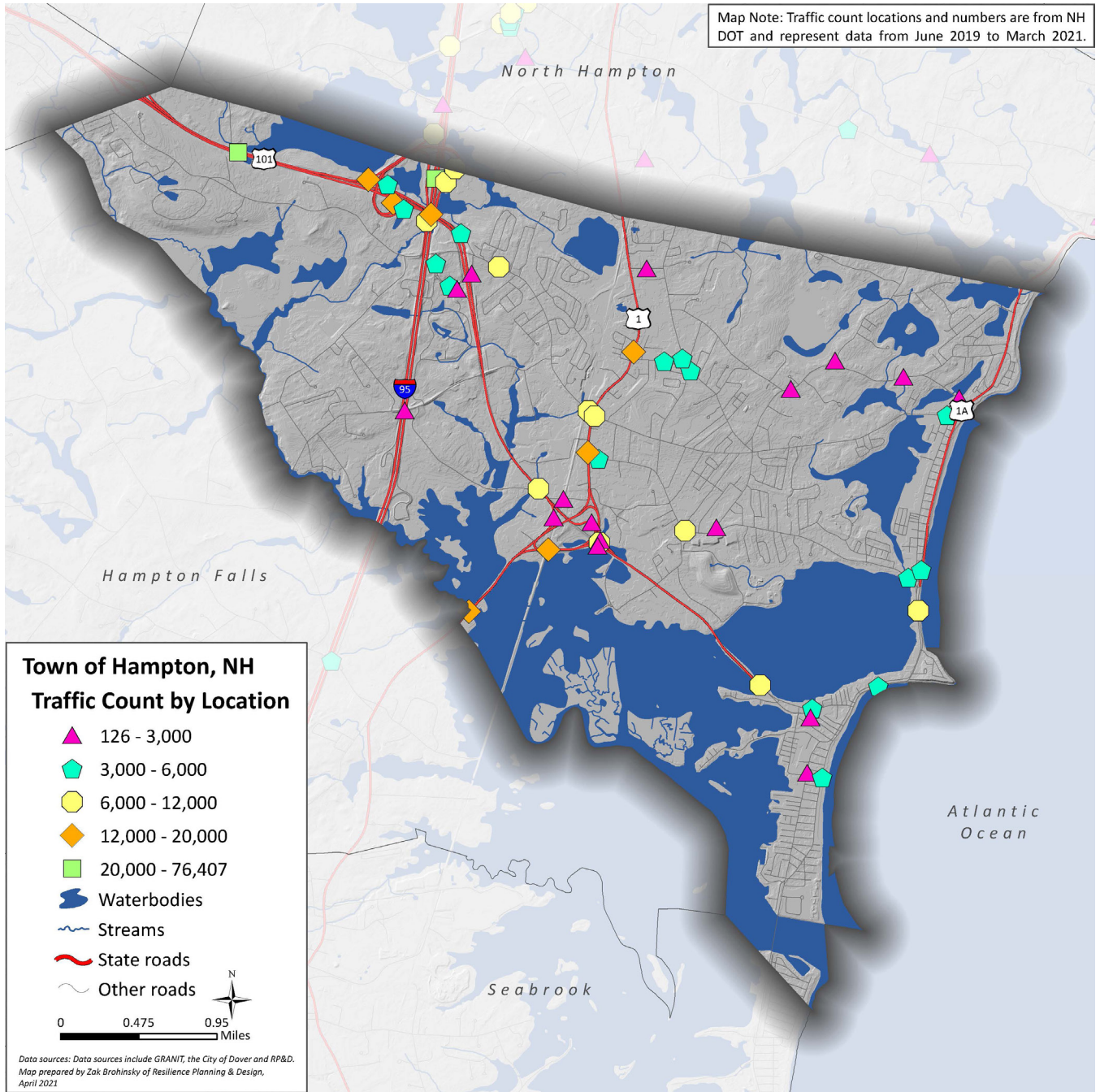
- 2020 = 6848
- 2019 = 8114
- 2015 = 8400

NH 27 (HIGH ST) EAST OF US 1

- 2020 = 6764
- 2019 = 8275
- 2015 = 9373

US 1 (LAFAYETTE RD) SOUTH OF ROAD SPLIT TO NH 101 (SB-NB)

- 2020 = 18847
- 2019 = 20600
- 2015 = 21837



CRASH DATA/LOCATIONS: From the Hampton Police Chief

Annually the greatest number of accidents occur in the months of June, July, and August when vehicle trips related to seasonal traffic is at its peak. Several Streets have been highlighted on the following pages because of the high numbers of accidents reported on them.

Hampton Accident Data by Street/Location		
Street	Total # of Accidents from 1/1/2011 thru 4/15/2021	Context Related to Specific Intersections or Locations of Concern
Alumni Drive	48	This road intersects with two other major roads on both ends (Winnacunnet Rd and High St). Lots of school traffic in the morning and afternoon.
Ashworth Avenue	389	Two lanes southbound with several side streets to the east and west. Several accidents were due to improper turning and unsafe lane changes.
Brown Avenue	53	This roadways includes a few busy intersections (Island Path, Church St, Ashworth Ave). It also receives major ingress and egress of beach traffic.
Church Street	35	This is a difficult intersection at Rt 1A. Major egress for beach traffic.
Drakeside Road	44	This road intersects with Rt 1 and Towle Farm Rd.
Exeter Road	168	This is a major roadway with several neighborhood streets intersecting.
High Street	280	This is a major roadway with several neighborhood streets intersecting. The intersections with Locke Rd, Mace Rd, and High St - "5 Corners" are most notable.
Kings Highway	49	Narrow roadway often utilized as an alternative for beach traffic.
Lafayette Road	1109	This is a major roadway with traffic lights and heavy traffic throughout the day. Should look at the Winnacunnet Rd and High St intersections.

Landing Road	43	Intersects with Rt 101. Intersections with Winnacunnet Rd
Mill Road	61	Runs parallel with Rt. 1 and is used as an alternative to Rt 1 traffic. The intersections with Anns Ln, Mace Rd, and Mill Rd are notable.
Ocean Boulevard	885	This roadway is maintained by the State, and experiences heavy traffic during the summer. Portions consist of 2 lanes south and 2 lanes north. Unsafe lane changes and improper turning contribute to the high accident count.
Route 101	213	This State Route is a major roadway providing access to the beach area and other areas of the town.
Towle Farm Road	44	The intersection with Exeter Rd. can be difficult, and truck traffic is heavy due to the nearby industrial park.
Winnacunnet Road	165	This is a major roadway with several neighborhood streets intersecting.

BRIDGE DATA

There are 25 bridges in Hampton that NHDOT monitors for their structural conditions. Two of these bridges have been red-listed and will need replacement.

- The Hampton – Seabrook Bridge on NH Route 1A and over the Hampton River is slated for replacement in 2023.
- The Route 1 Bridge (Over what? NHDOT says “PAR(ABD)”)

COMMUTING DATA

COMMUTING TO WORK (ACS 2015–2019)

- Workers 16 years and over:
 - Drove alone, car/truck/van 78.6% (84.7% in 2000)
 - Carpooled, car/truck/van 4.9% (5.4% in 2000)
 - Public transportation 1.0% (1.4% in 2000)
 - Walked 2.2% (2.3% in 2000)
 - Other means 12.5% (1.7% in 2000) - big increase to call out
 - Worked at home 20.4% (4.5% in 2000) - big increase to call out and this pre-date the Pandemic
 - Mean Travel Time to Work 25.7 minutes
- Percent of Working Residents: ACS 2015–2019
 - Working in community of residence 19.9
 - Commuting to another NH community 59.7
 - Commuting out-of-state 20.4

SCENIC BYWAYS

- Hampton is home to two of the State's Scenic & Cultural Byways.
- The Coastal Byway follows Route 1A from Seabrook to Portsmouth The American Independence Byway links Hampton inland with Exeter, Hampton Falls and Kensington. The Hampton portion of the American Independence Byway follows NH 27/High St. from the Exeter town line to Rte 1A, Rte 1A south to Winnacunnet Road, Winnacunnet Road west to US Route 1, and US Route 1 south to the Hampton Falls town line.

PARKING:

Parking has long been considered a significant issue in several parts of Town, most notably the Hampton Beach area, downtown, and in the vicinity of the High School. A 2018 Study of the Hampton Beach Area included an inventory of the numerous parking lots (both public and private) and existing on street parking infrastructure. This document should be referenced for recommendations on transportation and parking improvements for that area. https://www.nh.gov/dot/projects/hampton40797/documents/40797_rpt_08012018.pdf

There is no comprehensive information on the parking infrastructure, usage rates and parking demand for other areas of the community. A parking inventory and utilization study would allow the Town to determine the actual parking needs.

PUBLIC TRANSPORTATION

Public transportation plays an important role in providing a more efficient use of the existing road network, and reducing energy consumption, by carrying passengers that otherwise might be driving their own vehicles. A successful public transportation system can remove a significant number of vehicles from the roadway and offer many benefits by providing a reliable means of travel for those who are unable or otherwise choose not to drive themselves.

FIXED ROUTE BUS SERVICE

There is very limited fixed-route bus service available in Hampton. The Cooperative Alliance for Seacoast Transportation (COAST) has operated some routes within Hampton in the past but funding has been a challenge. A summer route operated by the Merrimack Valley Regional Transit Authority (MVRTA) includes a stop at Hampton Beach and access south into Seabrook and several Massachusetts communities.

DEMAND-RESPONSE SERVICE

Door to door transportation services in the Hampton area are provided by a variety of health and human service agencies. Each varies in its schedule and the population that it serves. There are also some publicly funded demand-response transportation services.

- Transportation Assistance for Seacoast Citizens – TASC provides transportation, at no charge, to persons who are unable to drive themselves.
- Lamprey Health Care's Senior Transportation Program provides transportation services

to the elderly and disabled residents of Rockingham County and parts of Strafford County. Transportation Services include trips to banks, pharmacies and grocery stores, as well as shopping trips to the local malls, recreational trips for social outings, and medical appointments. Vans are handicap accessible, and provide door to door service for the convenience of the riders.

PASSENGER RAIL SERVICE

The Amtrak Downeaster operates between Boston, MA and Brunswick, ME. The closest station to Hampton is located in Exeter, NH but there is no current bus service from Hampton to the station. This passenger service now allows bicycles on board.

INTERCITY BUS SERVICE

C&J Trailways operates two bus terminals in the Seacoast Region with service to Boston and beyond. The main terminal is located in Portsmouth just off Interstate 95m, and a new terminal is located in Seabrook.

RIDESHARING

- A New Hampshire Park and Ride lot is located on Timber Swamp Road in Hampton and maintained by the NH Department of Transportation (NHDOT).
- NHDOT also manages a free ride matching service called NH Rideshare. NH Rideshare provides personalized information and assistance about ridesharing including carpools, vanpools, buses, and trains. <https://www.nh.gov/dot/programs/rideshare/>
- CommuteSMART Seacoast is another free program that helps commuters find the best way to get to work or school. <https://commutesmartseacoast.org/>
- Hampton is also served by traditional taxis and ride share companies like Uber and Lyft.

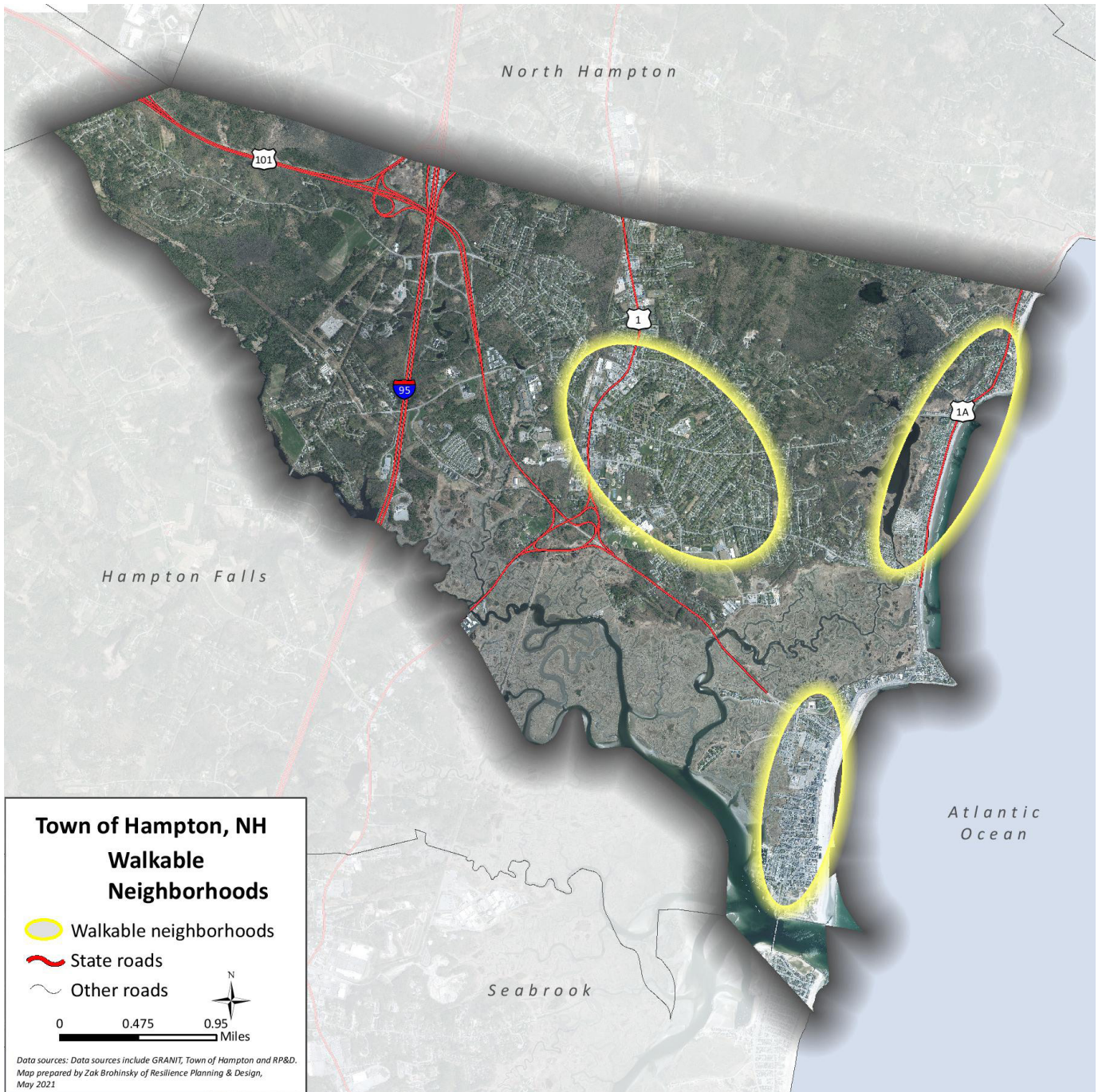
NON-MOTORIZED TRANSPORTATION

Walking and bicycling are also important transportation modes that require dedicated infrastructure, but also provide human health and environmental benefits. While there are improvements and additions needed to the sidewalk, path, and bike lane network in Hampton the biggest change on the horizon will be the completion of the New Hampshire Seacoast Greenway (NHSG). The NHSG is a proposed 17 mile non-motorized trail that will connect eight coastal NH communities including Hampton.

PEDESTRIAN INFRASTRUCTURE

Sidewalks are provided in the more densely settled areas of Hampton including the Village and in the vicinity of Hampton Beach, but they are also included along major roadways like Route 1, Route 101 E, Route 1A, and Route 27. Many residential neighborhoods include lower volume roads and no sidewalks are provided. This image shows the three areas of the community with the densest sidewalk networks and the most walkable neighborhoods.

The Hampton School District adopted a Safe Routes to School Travel Plan in 2015 which identified needed pedestrian improvements in the vicinity of the public schools. Hampton has



four public schools clustered within a half mile radius. The Plan includes six general recommendations and 38 specific project recommendations. All are intended to improve connectivity to the Marston School, Hampton Academy, and Centre School which were the focus of this planning effort, but non-motorized access to the High School will also benefit. These improvements will enhance safety for those walking, bicycling and riding scooters to school. All of these projects improve ADA accessibility as well, a significant benefit to all people throughout the Town, as well as students, faculty, staff and visitors to the schools.

https://www.sau90.org/UserFiles/Servers/Server_210790/File/Health%20&%20Wellness/hampton%20final%20safe%20routes%20travel%20plan.pdf

The Hampton Capital Improvement Plan (2021 – 2026) identifies paving and infrastructure improvements planned for each calendar year. <https://www.hamptonnh.gov/DocumentCenter/View/3917/2021-2026-Town-CIP>

Three large projects have been pursued but have not received the funding necessary to be completed. High Street and Winnacunnet Road were both on the warrant in 2020 and did not pass. What is submitted for consideration in future years is still to be determined. According to the Hampton Public Works Department both of these projects include the replacement of aging infrastructure and a repaving of the roadways with repairs to sidewalks. The third project is the completion of the Lafayette Road project. The sewer infrastructure was completed – and the roadway was then repaved – but the planned sidewalk and drainage upgrades were not completed at that time.

The 2045 Long Range Transportation Plan completed by the Rockingham Planning Commission also provides an overview and regional context related to the existing transportation infrastructure and issues in Hampton and surrounding communities and projects planned for the future. <https://www.therpc.org/transportation/transportation-plan>

TRANSPORTATION CONCEPTS AND POLICIES FOR IMPLEMENTATION

Transportation Concepts from 2003 to expand on:

- Access management
- Traffic calming
- Any good examples in Hampton of either of these that we can highlight?

New Transportation Concepts to Introduce:

- Electric Vehicle charging: no charging stations in Hampton yet. Expand to include electric bicycles.
- Complete Streets:
 - Status of Planned Lafayette Rd Improvements in Downtown?
 - A complete street project planned for Winnacunnet Road?
 - A complete streets project planned for Lafayette Road from Winnacunnet Road to High Street / Exeter Road?
- Green Streets
- Context Sensitive design
- o Sea-level rise and adaptation efforts

EXISTING LAND USE

THE EXTENT OF DEVELOPMENT

The land use pattern in Hampton has changed dramatically over time as the community has transitioned from primarily being an agricultural community to becoming more of an urban and suburban community. This has been documented in earlier Master Plans, and the urbanization of Hampton continues today. This transition can be seen in the loss of farm and forest land over time, and in the increase of the year-round population and the number of buildings. As the table below illustrates, Hampton has experienced an increase in developed land area and a decrease in undeveloped land over nearly 70 years. This change in Hampton’s land use pattern has required a significant investment in infrastructure over these decades, and some of these areas are now at risk from sea-level rise, flooding, and storm damage which will require new financial commitments.

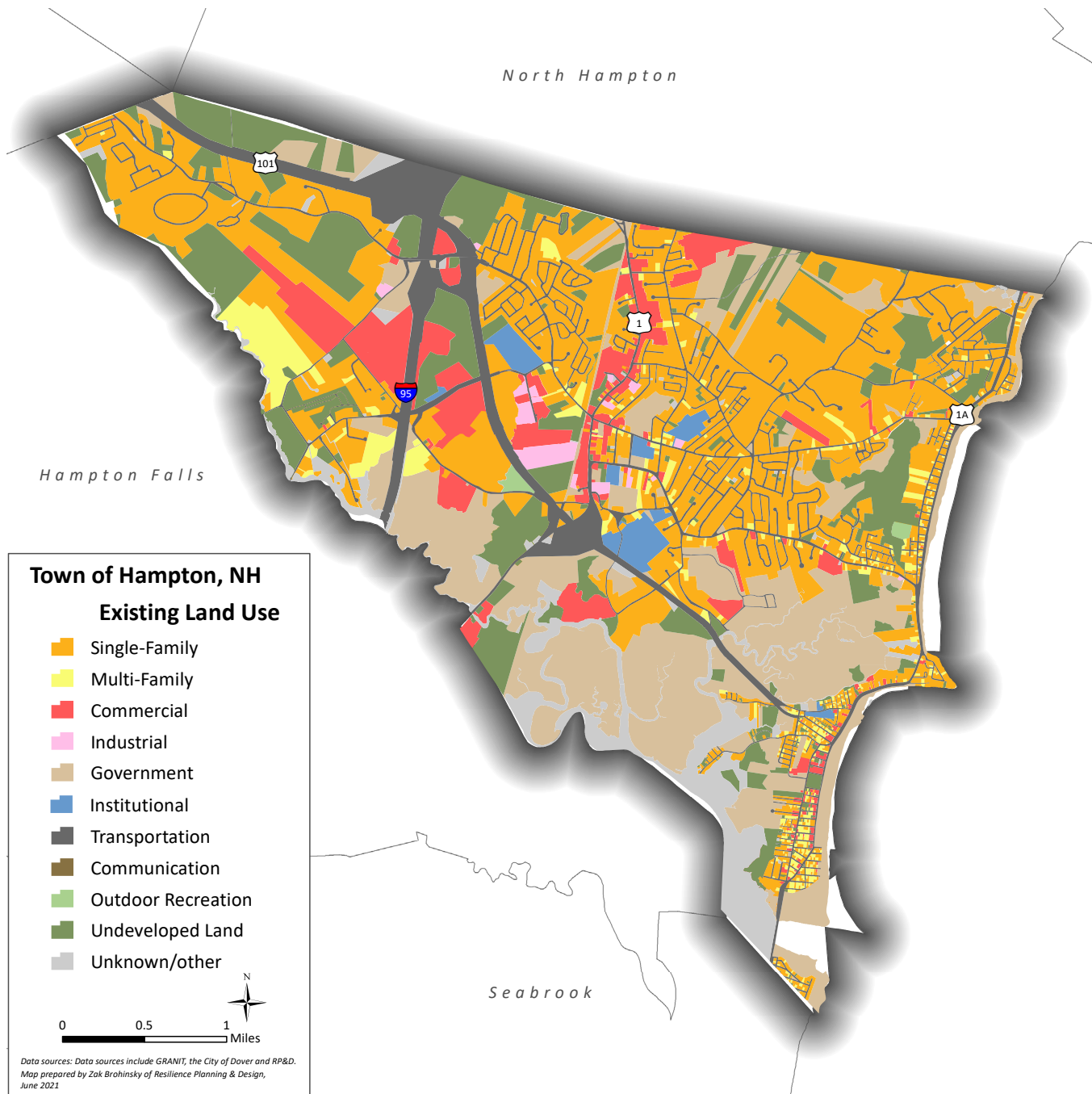
	1953	1982	2021
% of Developed Land	27%	60%	68%
% of Undeveloped Land	73%	40%	32%
Source: 2003 Master Plan & 2021 Hampton Assessor’s Data			

THE TYPE OF DEVELOPMENT

A clear understanding of Hampton’s existing land use pattern informs the master planning process, and will be critical to the creation of a future land use plan later on in this process. The land use map (pictured on the following page) included with this analysis was developed with data from the Hampton Tax Assessor, and illustrates the distribution of land uses across the community. Shaped by Hampton’s natural resources, available infrastructure, zoning, and market forces this is the current configuration of land uses in Hampton.

The majority of Hampton is dominated by residential neighborhoods of various densities. However, Hampton’s development pattern also includes concentrated mixed-use areas particularly along the coastline and Route 1A, and stretching out along NH 27/High Street from the town center. The I-95 Corridor and Route 1 Corridor are areas of the community that have a greater percentage of non-residential uses. These patterns are reinforced by the availability of water and sewer infrastructure. West of I-95 in Hampton there are lower density residential uses, industrial development, and a few of the remaining larger undeveloped parcels. The Town’s existing land use data was consolidated into land use classifications as shown on the existing land use map, and in the Existing Land Use Table. These uses include:

Existing Land Use	
Source: Town of Hampton Tax Assessor’s Database	
Use	Percent of Town
Single-Family	33.4%
Multi-Family	3.3%
Commercial	9.4%
Industrial	.8%
Government	20.8%
Institutional	1.4%
Transportation/Communications	10.5%
Outdoor Recreation	.7%
Agriculture	0%
Unknown/other	5.2%
Undeveloped Land	14.4%
Total	100%



- Single-family - Single-family structures, condominiums and mobile homes.
- Multi-family - Two-family and greater structures.
- Commercial - Retail establishments, hotels, services and professional offices.
- Industrial - Manufacturing and other industrial building and warehousing facilities.
- Government - Town, state and federal land and/or facilities.
- Institutional - Schools, churches, nursing homes and fraternal organizations.
- Transportation and Communication - Rights of way and infrastructure
- Outdoor recreation - Parks, campgrounds, and recreational fields.
- Undeveloped land - Undeveloped and undevelopable land
- Other - Other uses not included above.

It appears that some properties are accounted for multiple times in the assessor’s database as additional units are added or they transition to mixed-use and multiple owners. If this is a growing aspect of the land use pattern, and something the community wants more of, it should be further inventoried and presented in the final master plan.

As land use conversions have continued over the past 20 there has been a slight increase in single-family and multi-family uses, and a large increase in commercial land uses. These changes are also reflected in the decrease in undeveloped land.

As shown, the largest single category of land use in Hampton continues to be single-family residential, which now accounts for about 33% of the Town’s land area. The second largest category is Government owned land with 21 % of the land area. This is primarily because of the extensive coastal wetlands that fall under state and federal ownership.

It is important to note that land in the undeveloped category may include protected conservation land, but also includes land that is potentially developable. Transportation/ Communication account for an additional 10.5% of Hampton’s land area due to the extensive roadway, rail, and utility properties and rights of way. Commercial and industrial land uses represent 9% and 1 % respectively.

BUILDOUT CALCULATIONS

According to a buildout analysis completed by the Rockingham Planning Commission in 2015, Hampton is now more than 70% built out. Complete buildout of the community at that time was forecast as 2040. This means that Hampton will reach a maximum level of development as permitted by current plans and regulations. At complete buildout the RPC estimates the total number of housing units in Hampton will be 9,443. In 2010 the town had 6,821 housing units, and now has a total of 9,654 (from Housing section by RKG) housing units. This seems to indicate that Hampton is approaching (or has reached) buildout earlier than expected given the development activity experienced in the past decade.

DEVELOPMENT IN THE REGION

When just looking at the impervious surfaces and disturbed areas that qualify as development, we see that Hampton is on the high end for actual area of developed land at 40%.

TAXABLE VALUATION

There are a total of 9,648 taxable properties in Hampton as of 2019. The Taxable Properties represent 94% of the Town. 80% of this taxable valuation is from residential properties. The remaining 14% is

ALL DEVELOPED LAND in Abutting Towns			
Towns	Total Acreage in Town	Acreage of ALL DEVELOPED LAND	Percentage of town
Hampton Falls North	8,078	1,119	14%
Hampton	8,923	2,071	23%
Stratham	9,902	2,396	24%
Exeter	12,813	3,418	27%
Hampton	9,073	3,586	40%
Seabrook	6,161	2,773	45%

composed of commercial, industrial, and utility related properties.

LAND AREA OF EXISTING ZONING DISTRICTS

The following Zoning Table shows the percent of Hampton each zoning district covers. Residential A, Residential AA, and General are the three largest zoning districts and together cover 65% of Hampton

ALL DEVELOPED LAND in Coastal Towns			
Towns	Total Acreage in Town	Acreage of ALL DEVELOPED LAND	Percentage of town
New Castle	1,348	243	18%
Rye	8,406	1,807	21%
North Hampton	8,923	2,071	23%
Hampton	9,073	3,586	40%
Seabrook	6,161	2,773	45%

Zoning		
Zone	Acres	Percent of town
Business	102	1%
Business - Seasonal	259	3%
Business - Seasonal 1	23	0.3%
General	1,63	19%
	2	
Industrial	1,03	12%
	0	
Professional Office/Residential	47	1%
Residence A	2,83	32%
	1	
Residence AA	1,20	14%
	8	
Residence B	543	6%
Residence C - Seasonal	954	11%
Town Center Historic	41	0.5%
Town Center North	27	0.3%
Town Center South	54	1%
Total	8,75	100%
	1	

RECREATION

STUDIES REVIEWED

- 2010 Community Facilities Chapter
- 2009 Natural Resources Chapter
- Draft 2020 Master Plan Vision
- 2021-2026 Capital Improvement Plan
- April 2020 - Town of Hampton Recreation Needs Assessment
- NH Seacoast Greenway
- Town of Hampton Website
- 2019 Town Report

FACTS, FIGURES, AND FINDINGS

Parks and Recreation Department

- The Hampton (NH) Parks and Recreation Department is a multifaceted parks and recreation department serving more than 15,000 residents in the town of Hampton and surrounding areas. The department manages a wide-range of natural and built facilities used for passive and active recreation. For example, the department manages a variety of parks, playgrounds, athletic fields, and waterfront areas. The department also provides diverse, multi-generational program offerings, including senior programs, trips, youth and adult recreational and instructional sports, fitness classes, afterschool programming, summer camps, and special events.
- Based on the FY 2019 approved budget, the Hampton Parks and Recreation Department received approximately \$256,754 in general fund allocations to cover department expenses (e.g. payroll, benefits, administrative services, equipment, fuel, maintenance, printing, supplies, and utilities). Hampton's total park and recreation operating expenditure per capita was \$16.39 for 2019 – which is well below the national and New England averages of \$78.60 and \$60.61 respectively.
- Hampton currently spends approximately \$1,446 per park acre on park operating expenses. This lags significantly behind the national and New England averages of park operating expenses per acre.

2019 Town Report

- Membership in programming increased by 30%
 - Programming revenue increased by 15.5%
- Youth Resident Programming Statistics
 - Parks and Rec created a 23% increase in programs offered to youth from 2018 to 2019
 - Parks and Rec said that their most popular programs continue to be K-2 Sports, Tuck Camp, Flag Football and High School Rec. Basketball
 - Of the 50 programs offered to Hampton youth in 2019, 40% of programs were sports related while 60% were non-sports related programs
- Senior Citizens Programming Statistics
 - Parks and Rec increased in the number of trip offerings from 2018 by 20%

- Parks and Rec maintained an overall 93% occupancy rate for our trip offerings
- Of the trips Parks and Rec offered, 40% were sold out and many were requested for waitlists.

PARKS AND REC OUTDOOR RECREATION AND ATHLETIC FACILITIES

- Hampton Parks and Recreation manages approximately 23 acres of parks and outdoor recreation areas, for an average of approximately 1.47 acres of park land per 1,000 residents. Nationally, the average benchmark standard is approximately 10.1 acres per 1,000 residents - this is similar to the New England average of 10.0 acres per 1,000 residents. This puts Hampton below the lower quartile in park acres per 1,000 residents in New England.
- Hampton's outdoor recreation facilities suffer from deferred maintenance and lack of general upkeep due to their high use and limited funding for fertilization and general maintenance.
- High demand for outdoor field use, particularly for multipurpose rectangular field space as well as over-programming of existing fields points to the need for additional multipurpose fields.
- *Outdoor Recreation Facilities:*
 - Facilities include
 - Tuck Field
 - Eaton Park
 - Lew Brown Field
 - Bicentennial Park
 - Philbrick's Children's Park
 - Marelli Square Park
 - Joe Billie Brown Park
 - Plaice Cove
 - Sun Valley beaches
 - Playgrounds such as Kid's Kingdom, Five Corners, Academy Avenue, and Tuck Field
 - Athletic Fields include baseball, soccer, softball, tennis, pickleball, and basketball at Tuck Park and a multipurpose field, inline skate rink, skatepark, and outdoor volleyball at Lew Brown Field.

INDOOR RECREATION FACILITIES

- The Hampton Parks and Recreation Department directly controls approximately 2,000 square feet of programmable indoor recreation space - The Tuck Building.
- The Tuck Building is an indoor multipurpose facility that provides a home for a variety of indoor recreation programs, meetings, and summer camp activities. Specifically, it's used for senior programs (the town does not have a dedicated senior center at this point in time), youth summer camp programming, and community meeting space.
- **Known Issues**
- The space is not suitable for large group activities or active programs (i.e. sports). It's also inadequate to run more than one small recreation program at a time.
- The lack of indoor space for community activities makes program relocation a challenge, and relocating programs creates confusion for participants.
- Other limitations include limited or inadequate storage, limited parking when other activities are happening on Tuck Field, and the fact that park and recreation staff offices are located off-site.

- Hampton Academy for use of the school's gymnasium and community room, and partners with the library to provide community space for seniors. The department partners with other groups as well for facility access, including St. James Masonic Lodge and the local United Methodist Church. Hampton's current level of service standard is 0.13 square feet per resident - well below national (2 square feet) and comparable local level of service standards.

RECREATION PROGRAMMING

- Over 70% of the participants who took part in the 2020 Recreation Needs Assessment said that they or some member of their household, participated in a Hampton Parks and Recreation program, activity, or event in the past 12 months.
- Staff report that they offered 20% more senior trips over the past year. Capacity rates for senior trips are approximately 93%, and 40% of senior programs sold out in the past year. Similar statistics demonstrate the popularity of Hampton's youth programs.
- Hampton offered approximately 49 youth recreation programs in 2019, including after school programs, sports leagues, early release programs, and summer camps - a 14% increase in the number of programs offered in 2018. Even after increasing the number of youth programs, program capacity rates were over 96%, and 71% of youth programs were sold out.
- One of the challenges in expanding programs for youth, adults, and seniors is the lack of suitable indoor facility space in which to offer recreation programming. Without access to adequate indoor space, Hampton is limited in the types of recreation programs they can offer. The department has additional challenges that inhibit programming. This includes having staff offices separated from program space, a lack of adequate equipment storage, and obtaining enough part-time staff to assist with program duties, such as driving vans or setting-up/cleaning-up program areas.

RECREATION ACTIVITY TRENDS

- In 2018, approximately 72.7% of Americans (ages 6+) participated in some form of recreation activity - a percentage that has held steady since at least 2013, indicating strong interest in recreation activity participation.
- Approximately 71.8% of 6-12 year olds participated in a team or individual sport in 2018.
- The fastest growing category of recreation activities are fitness-related,
- More than 8% of the population participated in the following activities in 2019: walking for exercise, swimming, hiking, jogging/running, overnight camping, weight lifting, fishing (fresh water), bicycling (road), yoga, canoeing/kayaking, golf, aerobics, and bowling. Hampton's Market Potential Index (MPI) - or the likelihood that adults in the household will exhibit certain consumer behavior or purchasing patterns - is higher than the national average for 26 of 35 recreation activities (74.0%).
- Hampton residents spent \$30.3 million on entertainment, recreation, and sports in 2019. (ESRI Community Profile)

PUBLIC OUTREACH

- What Stakeholders Liked Best:
 - Hampton has strong, dedicated, and quality park and recreation staff members that have the respect of the public.
 - Hampton has an active, engaged senior population interested in park and recreation programs, facilities, and amenities
 - Hampton offers a diverse range of recreation programs and activities that meet the needs of a variety of age groups.
 - Hampton has a strong youth sports culture, with a variety of active youth leagues and organizations operating in partnership with the town
 - The parks and recreation department maintains strong relationships with other town services (e.g. library, schools), as well as with recreation stakeholders and user groups.
- What Stakeholders Would Change:
 - Hampton lacks suitable indoor space for senior-specific programming, including senior center space. There is a lack of suitable dedicated indoor recreation and community space and this is limiting the ability to adequately meet the indoor recreation needs of the town. There is interest in indoor aquatics/swim programs.
 - There is a need for facility-based senior programs and activities (means, cards, games, meetings, physical activities).
 - Existing facilities need additional amenities to make them more appealing to users and user groups (improved parking, running water and bathrooms at Lewis Brown Field, and more storage for equipment and supplies).
 - The parks and recreation department needs additional resources (staff, funding) for maintenance of existing facilities (fertilizer, over-seeding, irrigation, playgrounds, perimeter fencing, and general maintenance).
 - There is a desire for additional lighted multi use rectangle athletic field/s to accommodate sports in fall and spring/summer.

SUMMARY FINDINGS AND RECOMMENDATIONS FROM RECREATION NEEDS ASSESSMENT

- Provide suitable indoor recreation and community activity space to meet the needs of Hampton residents, with dedicated space for seniors and older adults.
- A multigenerational indoor community center should incorporate a variety of activity spaces to host diverse recreation, community, and civic activities in Hampton. This should include:
 - Increase resources (funding, staff support) for park and recreation field maintenance, improvement, and upkeep, and upgrade facility amenities to meet the needs of users.
 - Increase lighted multipurpose rectangular field space, and consider planning for additional outdoor athletic field space (e.g. baseball, softball) if growth trends warrant.
- Finance park and recreation improvements, including new indoor and outdoor amenities, from a diverse mix of funding sources.

OUTDOOR RECREATION SPACES

The NH Seacoast Greenway (NHSG) is a proposed 17 mile non-motorized trail that will connect the eight coastal communities of: Seabrook, Hampton Falls, Hampton, North Hampton, Rye,

Greenland, New Castle and Portsmouth. The NHSG is part of the larger East Coast Greenway (ECG), running from Maine to Florida in addition to connecting to the NH coastal towns, the NHSG will connect with segments of the ECG currently being built in Maine, Massachusetts and beyond. The NH spine route will total 17.2 miles, and it is anticipated that virtually all of it will use the corridor of the Boston and Maine Railroad from Seabrook to Portsmouth. None of the New Hampshire route is in place today, but several miles of abandoned railway are pending development.

The portion of the corridor extending through Hampton was more recently acquired by NHDOT. The State of New Hampshire also recently purchased the northern section (10 miles) from Guilford Industries/Pan Am Railways, for conversion to trail. This project is currently in planning and design. The route will hug close to the coast and offer continuous views of the Atlantic Ocean. The NHSG Advisory Committee includes representatives from each corridor community, NH state agencies, the Rockingham Planning Commission, East Coast Greenway Alliance, NPS Rivers and Trails Conservation Program, regional and statewide bicycle organizations, etc. and they are currently working to move the project from concept to reality.

Seacoast Trails Initiative: The Seacoast Trails Initiative seeks to build on the proposed NH Seacoast Greenway and use that rail trail as a trunk route connecting multiple local trail networks used by walkers, mountain bikers, and equestrians to form an interconnected regional trails network. Similar regional trails networks like the Jackson XC ski trail system in Jackson, NH or Kingdom Trails Vermont's Northeast Kingdom, are major economic engines for their regions, drawing active recreation enthusiasts from around the northeast and beyond. RPC provides technical assistance with mapping and trail planning.

White's Lane: White's Lane is a class VI road. Surrounding Whites Land is Twelve Share. "Twelve Share," is named after the original 12 shares of land granted by the King of England to the first settlers of the area. This land is a combination of Public Hampton and North Hampton land as well as private property. One of the goals of the Town's Master Plan is to create a Town forest in the White's Lane/Twelve Share area. "Twelve Share," is named after the original 12 shares of land granted by the King of England to the first settlers of the area. The Town of Hampton accumulated several small properties in this area over the years and with the help of the Conservation Commission, it has grown substantially. It is a goal of the Conservation Commission to have a trail that allows residents to walk from Ice Pond to Mill Road.

Hurd Farm Easement: Hurd Farm has frontage on Timber Swamp and Towle Farm Roads in Hampton and Hampton Falls with 135 (more or less) acres of the land in Hampton. It is a mix of farmland, forests, wetlands and more than one mile of river frontage on the Taylor River. An agricultural conservation agreement on the property guarantees that the most important farm soils will never be developed. A water quality and recreational preservation agreement on the lands along the river protect water resources, and provide for permanent public recreational access. This land is available for public passive recreation including birding, cross-country skiing, fishing, hiking, hunting, and snowshoeing.

Hampton Salt Marshes - The Hampton Salt Marshes is 46 acres of marsh that the Forest Society manages for sustainable forestry, productive wildlife habitat, and other conservation benefits in support of the greater Hampton community. While all of our reservations are open to the public, this property may be difficult to access due to a lack of developed recreation

features and resources such as signage, parking, established trails, and a detailed Forest Reservation Guide map. Little recreation opportunities exist at this time.

Seabrook-Hampton Estuary: According to NH Audubon, the Hampton-Seabrook Estuary is 5000 acres in size and contains the largest amount of salt marsh in the state. These marshes, along with their associated tidal flats, provide critical habitat for breeding and migratory birds, particularly shorebirds and salt marsh sparrows. It's forty-seven square miles and includes land in Hampton, Hampton Falls, North Hampton, Stratham, Seabrook, Exeter, Kensington, and Salisbury MA. Unlike the Great Bay Estuary, the Hampton Seabrook Estuary is dominated by salt marsh habitat. As a result of the important ecological services provided by the Hampton-Seabrook Estuary, it was listed as a conservation focus area in The Nature Conservancy's Land Conservation Plan for New Hampshire's Coastal Watersheds (Zankel et al. 2006). The Hampton Salt Marsh was registered as a Prime Wetland, with approval of the Town's voters, in 2009. Recreation activities available include swimming, boating, paddling, bird watching, fishing, walking, bicycling, running, etc. . The marsh and estuary represent nearly 20 percent of Hampton's total area and contains several water courses and water bodies including Hampton River, Tide Mill Creek, Nudds Canal, Blind Creek, Nilus Brook, Eel Ditch, Meadow Pond and Old Mill Pond (fresh water).

Meadow Pond: This area runs from the upland boundaries behind High Street and Gentian Road to the edge of Meadow Pond Estuary. It is a large, 7-acre stand of common reed (*Phragmites australis*). It is the northern extremity of the largest marsh complex in New Hampshire: the Hampton Seabrook Marsh. The marsh is located landward of a highly developed barrier beach system and obtains tidal flow through a small inlet as its southern terminus. Birding and fishing are common activities that occur at Meadow Pond.

Batchelder Park: The historic Batchelder Farm has frontage on Exeter Road and contains approximately 120 acres of scenic farmland, uplands, and wetlands on the west side of Hampton. The land is available to the public for passive recreation, such as birding, cross-country skiing, hiking, hunting, and snowshoeing. Residents and visitors use Batchelder Pond and Lamprey Pond for fishing. Batchelder Pond is stocked with trout by the NH Fish and Game Department

Town of Hampton Ice Pond: Town of Hampton owns 25.53 contiguous acres around and including the 10-acre Ice Pond. This area contains wetlands, lightly forested wetlands, and uplands. During the summer of 2009, Seacoast Youth Services of Seabrook added two handicapped accessible trails.

Lamprey Pond: Residents and visitors use Batchelder Pond and Lamprey Pond for fishing. Batchelder Pond is stocked with trout by the NH Fish and Game Department

Hampton Victory Garden: The Hampton Victory Garden is located on Barbour Rd. In 1991, the Conservation Commission finalized the purchase of a 33- acres parcel owned by Leston Perkins. Mr. Perkins had used the property as a chicken farm. In 1992, with the help of many townspeople, including students of Hampton Academy and Winnacunnet High School, and volunteers from the Fire Department, the water and fencing were installed and Victory Garden was officially established. The fertile soil is home to 40 plots that are 20 feet by 15 feet and \$25 a season.

RECREATION RELATED COMPONENTS OF THE DRAFT 2020 VISION

- Natural resources of Hampton, including the Seabrook-Hampton Estuary, Meadow Pond, Harborside Dunes, Batchelder Park, and other open space areas are treasured for recreational, ecological, natural-hazard-mitigation, and aesthetic values
- Continued municipal support of the Recreational Department, Lane Library, and school system, as well as expansion and improvement of community spaces, will help maintain the sense of a close-knit and friendly community.
- Taking steps to maintain a robust local fishing and recreational boating industry, including through preservation of water access.
- Hampton will be a community that continues to be identified by its extensive coastal wetlands, and that provides recreational opportunities to residents and visitors in its forests, lakes and other natural features
- Hampton will achieve this future by choosing to proactively protect open space, preserve natural ecosystems, and expand outdoor recreation opportunities
- Priorities include:
 - Continuing to support the Parks and Recreation Department.
 - Leveraging the town's existing natural areas.
 - Minimizing stormwater pollution to wetlands, lakes, and coastal ecosystems.
 - Promoting the accessibility of open space and recreational assets to all of the town's residents.
 - Supporting development of the New Hampshire Seacoast Greenway.
 - Setting aside new conservation land when appropriate, prioritizing areas in flood hazard zones and that can facilitate marsh migration.
 - Utilizing green infrastructure and living shoreline approaches for capital improvement and hazard mitigation projects when possible.
- Over the long term, this increased connectivity, and the improved accessibility of Hampton's coastal recreational and natural resources from the rest of town, will encourage development in, and migration to, the town's inland areas as rising sea levels and changing shorelines limit development and living opportunities on the coast.

COMMUNITY FACILITIES

STUDIES REVIEWED

- 2009 Community Services and Facilities Chapter
- 2021-26 CIP Documents: Town of Hampton, SAU 90, SAU 21
- Correspondence with department heads
- Public Works Presentations: WWTF Phase I Upgrade Progress_March 2021;
- 2017 WWTP Facilities Study Presentation
- Hampton Parks and Recreation 2020 Recreation Needs Assessment Study

FACTS AND FIGURES

- Normal population is ~15,300; increases to more than ~110,000 during tourist season
- 23 acres of Town-owned park (less than 2 acres per 1,000 residents, less than the national average)
- 426,600 square feet Town-owned buildings
- 23 acres of Town-owned park - Note: does not include Hampton Beach; GIS to verify Less than 2 acres of recreation space per 1,000 residents, national average 9.9 acres per resident
- Average age of Town-owned building = 70 years
- School capital projects planned: ~\$30Million
- Public works capital projects planned: \$75K / year , \$500K in 2024
- 3-Phase Wastewater Treatment Facility Plan: Phase 1 \$13.8m nearing completion; focus on replacement of aging infrastructure and increasing capacity
- Town Offices: \$200K allocated in 2009 for renovations. No known future projects
- According to the 2009 Master Plan the revitalization of Hampton Beach State Park was predicted to cost \$14.5M.
- According to the 2001 Hampton Beach Master Plan, the total cost of all phases was projected at \$52m
- Town of Hampton 2019 Census Data
- Link to Community Facilities Database- <https://drive.google.com/file/d/1WsPcNX9MdGcjBmDg7mchSvOZ5fcwDwq3/view?usp=sharing>

KEY FINDINGS AND EMERGING ISSUES

Many of Hampton's town resources and buildings are outgrowing their spaces or are outdated and in need of repair. Often, improvement projects are hampered by town voters' reluctance to approve spending. Throughout the past thirty years, the Town periodically engaged third-party studies to both quantitatively and qualitatively identify the current status of community facilities, and assess their need for improvement, but there is no up-to-date comprehensive assessment or set of recommendations for all Town-owned facilities.

State-wide infrastructure plans that involve Hampton – such as regional water upgrades and state roads projects – move forward more easily as a coordinated effort. Hampton Beach State Park Redevelopment Plan was undertaken to revitalize local economy and is in the beginning

stages of implementation. The west side of Hampton is relatively cut off from areas east of 95. This applies to services, infrastructure, access to Town programs, and most importantly transportation, especially for seniors and children. (confirmed by both Planning and Parks/Rec). Throughout Hampton's history, the Town has made efforts to maintain public and private assets and protect against the effects of climate change. Community services and facilities must necessarily be prioritized, many as critical infrastructure, to assure the functioning of governmental and community services and serve as resources to residents and visitors.

Due to changes in population, demographics, and development, combined with the growing understanding of climate impacts on this coastal community, deferred and planned projects must be properly documented and prioritized to ensure that ongoing community needs and vision of the Master Plan are achieved.

OBSERVABLE TRENDS

- Large-scale improvements and transformations have been possible when the Town of Hampton works in coordination with a larger entity. Locally-led projects are less successful, tending to fail or stall due to lack of public support.
- Sustainability measures were listed as accomplishments and recommendations throughout the previous master plan, but have not been consolidated to an easily discernable Town policy.
- Barriers to passage of bond votes or other public funding:
 - Cost to taxpayer, especially projects without partnerships to share cost
 - Lack of excitement or understanding of project
 - Perceived benefit and to what populations or groups
- Greater support for western areas of Hampton are needed, including transportation, sidewalks, equitable infrastructure, etc. Sense of identity with other Hampton areas is relatively weak

QUESTIONS

- Placework made efforts to determine the status of various recommendations in the 1995 and 2009 master plans. Specifically:
 - Town-wide sustainability standards/codes/enforcements – this does not currently exist but the Town would be receptive to creating it. There was a sustainability committee which no longer exists.
 - Implementation of the Hampton Beach Master Plan – beginning stages of implementation, but no more specific information
 - Recommended building upgrades:
 - Town Offices – status unknown
 - Lane Memorial Library – see facility database for information
 - the two Fire Stations – projects were completed; they were prioritized above other
 - Town projects such as a community center. See facility database for more information
- What major municipal projects have been successful in securing funding from voters, and what important projects have been sidelined due to lack of public support?
 - Community Center was once a high priority with the public and a committee was formed

to plan for it. Project was included in 2002 CIP, but fire stations and other projects were prioritized above it since then. Currently, the Rec Dept and Lane Library are in beginning phases of planning for a potential shared facility.

- Have any increases in services (police calls, school enrollment, waste disposal, etc.) been challenged due to inadequate facilities?
 - FD responded that facilities are adequate but there is no room for growth
- Are Town-owned facilities equipped to maintain operations and provide assistance in emergencies and natural disasters? (Coordinate with resiliency efforts)?
- Which Town-owned facilities are designated critical infrastructure and require investment to maintain this designation?
- Where are emergency shelters located and are they sufficient for need?

RECOMMENDATIONS

- Complete a comprehensive list of project/recommendations from prior Master Plan review combined with recent Capital Improvement Plan (Placework has provided Community Facilities-related list)
- Create updated maps of Town-owned facilities and land, including parks and playgrounds
- Note: Recreation Director agreed to create web-based map of parks and playgrounds since addresses were unclear. This task is not complete.
- Synthesize facility-related goals in the Master Plan as an actionable road map for future projects. Recommendations with projected dates, measureable outcomes and prioritization will enable Town to incrementally attain Master Plan goals.
- Establish Town-wide sustainability guidelines applying to all new construction and major renovations in Hampton and/or reference national standard(s)
- Commission a Town-wide Facilities Assessment with actionable plans to update facilities, including phased recommendations, projected budgets and time frame
- Include schools and/or recommend similar assessment for public schools
- Recommend reinstatement of sustainability committee
- Consider studies of:
 - Connectivity to/from western areas of Hampton from the town's center and shoreline, and how it might be improved.
 - Potential linkages and opportunities presented by future rail trail
 - Town Office building functionality and space use, together with assessment of projected space use for all town administration functions and building improvements.
- Prioritize studies for future planning and building assessments in the near-term to adequately plan and achieve funding for future projects in alignment with master plan goals.
- Placework observation: there do not seem to be many large and coordinated projects planned for Community Facilities. A Recreation Center was mentioned but no immediate plans for this are apparent

UTILITIES AND COMMUNITY SERVICES

COMMUNITY SERVICES

- Solid Waste and Recycling
- Wastewater Treatment
- Stormwater Management
- Publics Works Department Information - Staffing and Vehicle Fleet

UTILITIES

- Water Supply and Distribution
- Electric Supply and Distribution
- Gas Supply and Distribution
- Telecommunications

SOLID WASTE AND RECYCLING

- The Department of Public Works provides trash pickup and runs both a curbside recycling program as well as a drop-off collection program at the transfer station. These programs provide residents with multiple opportunities for disposing of waste materials. The town maintains a waste disposal contract with the Turnkey facility in Rochester for trash disposal. The Turnkey Landfill did submit a permit for a proposed expansion to the NH Department of Environmental Services in 2020, though it has not been approved yet. Since 2009, the average trash collection per year is 6,751 tons. The average amount of recycling per year is 2,579 tons. While the intent for recycling is to reduce the waste stream, the Town has an average of 27.6% of the solid waste stream as recycling. The increased cost to recycle and the larger contamination rates have decreased recycling over the last couple years.
- Since 2011, the Town switched from a contracted collection service to the purchase of trucks and collection of our own solid waste and recycling. The Town is under contract with Greenworks for our recycling collection disposal. Other commodities that are recycled are generally done through the Northeast Resource REcovery Association (NRRA).
- Future Projects Identified in the CIP:
 - Transfer station improvements including door repairs and replacements to fix the main patron door on the garage and overhead door damage over the years
 - Household Hazardous Waste Days: The Town of Hampton along with willing participating towns plans to hold two Household Hazardous Waste Days (HHWD). This twice a year event is organized to provide a safe environment to properly dispose of household hazardous waste products.
- Future need: A new facility should be considered to remove the essential operations from the flood zone and provide the adequate space for our operation needs. (not identified in the CIP)
- The Board of Selectmen has created the Solid Waste & Recycling Study Committee in 2019-202 to research and make recommendations to the Board of Selectmen about trash pick-up

and recycling. Major discussions center on increasing education on the “right” materials to recycle to reduce contamination rates/costs, looking at decreasing costs by separating commodities for reduced disposal charges and increased revenue, and whether the Town should continue commercial trash collection and the fairness in equity related to the number of collections and number of bins issued, etc. The BOS has acted on some of the recommendations from 2019 and 2020 including the implementation of a Cart Collection Policy limiting the number of carts distributed and other procedures.

WASTEWATER COLLECTION AND TREATMENT

- The Leavitt E Magrath Wastewater Treatment Plant (WWTP) is owned by the Town of Hampton and is operated by the Public Works Department. It is a grade 4 secondary treatment, activated sludge facility. Located at 1 Hardardt’s Way, behind the closed landfill, the WWTP presently treats the domestic and industrial wastes from Hampton and Rye. It provides primary and secondary treatment (solids and bacteria removal and removal of dissolved organic matter) and single stage nitrification using activated sludge treatment process. The Hampton WWTP continues to serve as a septage receiving facility for several surrounding communities, including Hampton, North Hampton, Hampton Falls, Exeter, Stratham and Rye. The average daily wastewater flow is 2.6 million gallons per day.
- The Hampton WWTP also serves the Rye Beach sewered area which contributes about 3.4% of the total annual flow. A sewer line and related pumping facilities connecting Rye Beach to the Hampton sewer collection system was constructed in 1989 at the cost of \$5M contributed by Rye and Federal funds. A 20-year agreement between Hampton and Rye was established in 1989 to enable the Town of Rye to discharge wastewater into Hampton sewer system and wastewater treatment plant. In exchange for this service Rye pays Hampton a proportionate share of the operating and capital costs of the Treatment Facility based on waste volume.
- At the current rate of growth, there is sufficient hydraulic capacity at the plant for at least the next 10 years. What is unknown is what the regulatory pressures will be. In the next 10 years Hampton anticipates needing to address copper, total nitrogen, arsenic, and PFAS. In order to meet NPDES requirements this would mean expanding treatment capacity.
- The plant was initially constructed in the early 1970s and has received several significant upgrades since then. Currently, Hampton is in the middle of Phase 1 of a three-phase, \$11.7 million dollar upgrade project to implement recommended improvements from the 2017 Facilities Study completed by Wright Pierce Engineering. This includes upgrading aging infrastructure and improving capacity. Phase 1 Improvements include a comprehensive headworks upgrade (screening, grit removal, influent pump station), primary clarifier mechanism replacement, aeration system modifications (diffusers, piping, blowers), gravity thickener mechanism replacement, disinfection improvements, plant water upgrade, mixed sludge pumping upgrade, polymer system addition, and septage receiving improvements. In addition, there will be SCADA and instrumentation upgrades, structural, electrical, and architectural upgrades to the affected buildings/structures where required.
- The WWTP operates under a NPDES (National Pollution Discharge Elimination System) permit which was last issued in 2006. Generally, the plant operates well within permit limits for key parameters, except during very high flow rates associated with storm events, indicating a significant impact from stormwater on waste flows and treatment

SEWER COLLECTION SYSTEM

- The Department is also responsible for the oversight and maintenance of the municipal sewer collection system including inspecting and permitting all new connections or reconnections to the system. The Department also cleans all sewer lines and catch basins throughout Town on a rotating basis. Sewer system maintenance includes repairs, replacement and cleaning.
- 9,185 properties are supplied sewer service. The sewer collection system consists of new and old infrastructure including the following. This numbers are based on 2020 data.
 - Gravity Sewers - 356,045 lf = 67.4 miles
 - Forced Mains - 36,169 lf = 6.9 miles
 - Pump Stations - public - 10
 - Pump Stations - private - 4
 - Pump Stations - in Rye - 3
 - Sewer Manholes - 1,595
- Primary focus over the next five to ten years is to continue replacing aging infrastructure and remove infiltration.
- Future CIP Projects
 - The existing sewer within Ross Ave, Charles St. and Kentville Ave, has been identified to have severe infiltration. This type of infiltration creates an increase of flow at the treatment plant and decreases the capacity of the pipes to accept the sewerage it was intended to transport. The existing pipes are VCP and are original to the development of these areas. The existing drainage consists of corrugated metal pipes and aging structures. The roadway conditions are in desperate need of repair. This Warrant Article would include the replacement of the sewer and drainage infrastructure and the repaving of these three roadways.
 - In March of 2020, the Town approved the investigation and design of the High Street and Winnacunnet Road sewer, drain and roadway improvements. It is recommended to secure funding for the completion of these roadways in their entirety, that a multiple year bond be obtained for each High Street and Winnacunnet Road.
 - It is proposed that in 2021, the Sewer Access Fee Account be used to upgrade the motors and pumps at the Merrill Industrial Drive Pump Station. These motors and pumps have had several repairs over the last few years including impellers, valves and electrical components and are reaching the end of their useful life. In addition a new Raw Pump is needed to replace a broken pump at the WWTP.

STORMWATER MANAGEMENT

- The Town of Hampton is an MS4 community as defined by the EPA Stormwater Phase II Final Rule, which applies to operators of and communities having regulated small municipal separate storm sewer systems (MSs). MS4 communities are identified as having urbanized areas comprising one or more places or central places - including the adjacent densely settled surrounding area or urban fringe — that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile.
- Hampton has increased their public education on the importance of stormwater management as part of their permit compliance.
- Stormwater infrastructure includes:
 - Storm Drain Mains - 164,000f. or 31 mi. 194,866 lf = 36.9 miles

- Catch Basins - in excess of 1800 1,582 (stormwater inlets)
- Drain Manholes - 258
- Discharge Locations - 174 (outfalls)
- Culverts - 209
- There is a need to develop a comprehensive plan that addresses aging infrastructure, flooding, and maintenance of the stormwater system.
- There is also a critical need to replace aging infrastructure as collapsed systems can lead to road failures.
- While the Town of Hampton has not installed any green infrastructure projects as of yet, there are some private property owners who have, but mostly in the form of porous pavement installation. Several recent condominium projects at the beach are using this method. Some residential developments have included rain gardens.
- Space constraints and funding for new projects are some challenges the Town faces to implementing green infrastructure systems.

PUBLIC WORKS DEPARTMENT INFORMATION

- There are 42 full time staff, 1 part time staff and up to 14 seasonal positions that are part of the Public Works Department team. The Department currently has 5 vacant full time positions, 1 vacant part time position and seasonal positions are never completely filled. There is a critical need to fill their full time positions as well as a need to add at a minimum 3 positions to the Department.
- There are 61 vehicles in our fleet including 7 ejection trailers. This does not include mixers, hotboxes, and non motorized "equipment".
- The Department currently tracks vehicle maintenance needs through the use of spreadsheets. They intend to add Vehicle Maintenance to our People Gis Asset Management system by 2024.

WATER SUPPLY AND DISTRIBUTION

- Public water supply for the Town of Hampton is provided by the Aquarion Water Company of New Hampshire, a corporate descendent of the Hampton Water Works Company which was established more than a century ago. Aquarion is an investor-owned public utility regulated by the Public Utilities Commission. Aquarion's offices are located on Merrill Industrial Drive in Hampton.
- The water supply system in Hampton itself consists of five production wells, three of four storage facilities (Exeter Road Tank, Glade Path Tank, and Mill Road Tank), one of two booster pumps (Mill Road Booster, and two pressure regulation stations (Kings Highway Pressure Reducing Valve and Tide Mill Road Pressure Reducing Valve). In addition to the five production wells in Hampton, Aquarion's system obtains water from 9 wells in North Hampton, one in Rye Beach (Jeness) and one in Stratham.
- Currently, the water supply services about 17,000 residents and businesses. In 2019, Hampton's wells supplied an average of 2.1 million gallons of water per day to the system. The average daily use of potable water per day in Hampton is 1.7 millions gallons.
- Steadily increasing population and business growth in Hampton is considered by Aquarion when planning for future expansion projects. In general, growth in the system has been steady, however, total demand has been relatively flat due to reduced per capita demands. According to Aquarion, there is excessive capacity for most demand periods, and summer

peaks are only challenged during abnormally dry periods when lawn watering demands become excessive. Forecasting into the future, growth is highly likely, and is considered in the annual updates of the company's long range capital plans.

- The Aquarion-owned wells are included in the NHDES public water supply database (PWS ID # 1051010) and are tested regularly for bacteria, inorganic chemicals, MBTE, nitrates, synthetic organic compounds (SOC) and volatile organic compounds (VOC). The water supply meets all drinking water standards.
- Existing/Future Water System Improvements: System improvements include new treatment facilities for the removal of PFAS, and for chemical feed and storage equipment. Between 2,000 and 4,000 feet of water mains are replaced each year.

ELECTRIC SUPPLY AND DISTRIBUTION

- The supply of electricity for the Town is provided by Unitil Corporation. Unitil is a non generating electric utility, obtaining its electric energy requirements through short and long term purchase contracts from power producers throughout the Northeast region and beyond.
- The electric system supplying the Town consists of a combination of 34.5 kV transmission lines feeding several distribution substations, and a primary distribution network of 4.16 kV lines serving residential and non-residential end users. In general, the primary distribution voltage of the central downtown area of the Town and the outermost areas is 4.16kV. The existing electric system has sufficient capacity and is generally adequate to meet electric requirements of the Town as they exist now.
- From 2010 Master Plan: In an effort to improve and beautify Hampton's central business area, especially along Route 1, there has been interest in burying utilities within the corridor and downtown area. This is an expensive proposition; the Town's effort to incorporate the burying of overhead lines as part of the Route 1 reconstruction project were not supported by the NHDOT. While it is unlikely that Unitil would finance such an undertaking this remains a desirable long term objective in the municipal center and Route 1 corridor.
- The Company will be undertaking a line rebuild project for one of the lines that traverses the marsh to the south side of Route 101. In addition, the Company has recently filed a grid modernization plan and electric vehicle charging proposal with the NH PUC. The NH PUC is in the evaluation phase of these proposals.

GAS SUPPLY AND DISTRIBUTION

- Hampton is one of the few communities in the New Hampshire Seacoast where natural gas service is widely available, and widely used. Unitil Corporation, is the private utility which provides gas service in the New Hampshire Seacoast region.
- According to the 2019 American Community survey, 4,048 or 57% of the 7,088 year round occupied homes in Hampton heat with natural gas. This compares to just 18,363 homes or 15% for all of Rockingham County.
- Service areas in Hampton include most of the town center and surrounding residential areas as well as the Route 1 corridor and Hampton Beach areas. Natural gas services are provided through a network of underground distribution lines, to approximately 6,477 residential and non-residential customers in Hampton.
- At present, future service area expansions are considered upon request and demand. The cost for such extensions are usually borne by the customer. The Company continues

to evaluate opportunities to cost-effectively expand its gas distribution system into areas not presently served.

TELECOMMUNICATIONS

- At present, the Town of Hampton is served by two major 'land line' telecommunication companies, Consolidated Communications and Comcast, which provide direct service to homes and businesses. Both companies provide local and long distance telephone services.
- These services are currently available to all homes and businesses in Hampton, however, telephone line based DSL services are only available to homes and business located within approximately one mile of the FairPoint central telephone switching facility located on Winnacunnet Road near the town center.
- Dial-up (low speed) internet carrier services are available to both residential and commercial customers through Consolidated Communications and Comcast landline facilities. Comcast high speed internet service is available essentially everywhere in Hampton, so long as cable service is accessible. In 2005, Verizon began to build a high speed fiber optic broadband network in HAMpton to offer fast internet services to residents. Consolidated Communications took this work over and plans to finish the town-wide build out by 2024.
- Cellular service coverage from the four largest domestic services (Verizon, AT&T, SprintNextel and T-Mobile) are available in Hampton, and all include 3G data services within this coverage. However, based on their service coverage maps AT&T and Sprint service is weak in the northernmost part of town, especially to the east of Mill Road.
- The Town is served by a 750 MHz cable system owned by Comcast. The system is capable of delivering analog video, digital video (DTV) and high definition digital video (HDTV) as well as video on demand services. The Town maintains a local committee to oversee the use of town Cable broadcast equipment and services.
- The Cable TV Advisory Committee was established when Cablevision (now Comcast) was awarded the cable TV contract in Hampton, in the 1980's. The Committee manages the operation of Hampton's cable television channel, including operating the equipment, maintenance of the equipment, and making decisions and/or recommendations for equipment upgrades and expansion.
- Hampton has invested in broadcasting all town meetings live and operates two Town managed channels.

