

Town of Long Island 2022 Comprehensive Plan



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We would like to thank the community for all the input and engagement throughout the process. Special thanks to those who went over and above to contribute their data, expertise, time, and knowledge.

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There were many others too numerous to name.
The committee thanks all of you for your input.

Community members voted to adopt this plan at Town Meeting on May 14th, 2022.

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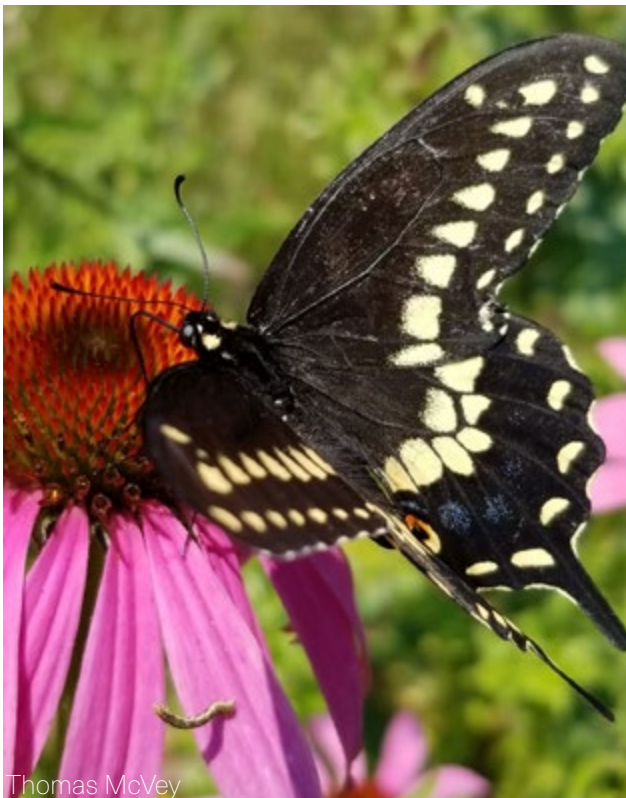
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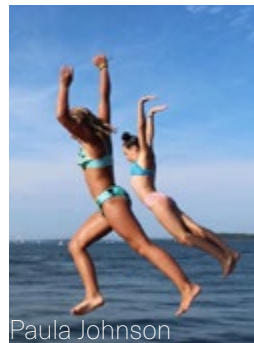
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Courtesy of Marci Train



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Introduction

The original Town of Long Island Comprehensive Plan was completed in 1995 and was subsequently updated in 2008. The 2008 Comprehensive Plan was found to be “consistent” with the state Growth Management Act (30-A M.R.S.A., CHAPTER 187) and approved by the State Planning Office in August 2008, and adopted by the Town of Long Island at Town Meeting in May of 2009. The consistency finding expires after 12 years, which means the Town of Long Island has been without an approved plan on file with the state since 2020.

The development of a comprehensive plan requires a municipality to go through a process to identify long-range priorities expected to impact the municipality’s character, preservation, and growth. The plan provides a shared community vision and policy framework for the future. Having a current plan on file with the state gives the town flexibility over local ordinances, zoning, and fee structures. It also makes the town eligible for funding and grant monies distributed by the state. The comprehensive plan seeks to provide the community’s vision and values as the basis for making decisions in town management and growth while

creating guidelines to prioritize allocation of limited resources and future actions.

The Long Island Comprehensive Plan Citizen’s Committee was recruited and activated early in 2021 by the chairman of the Long Island Planning Board for the purpose of updating the town’s 2008 Comprehensive Plan. The committee includes 15 community members with a mix of seasonal and year-round residents representing a cross-section of town committees, community organizations, and local businesses. We were fortunate to have an Island Institute Fellow join the effort in September 2021. In true island fashion the committee was resourceful enough to complete the plan without a budget. This required tapping into skills from across our community in areas such as research, data analysis, mapping, survey design, photography, editing, municipal planning, and project management. Local experts were willing to share their knowledge on chapter content. We also received state funding and assistance from partners like Greater Portland Council of Governments and the Island Institute.

The committee mission was established and set the tone for our work.

COMMITTEE MISSION

“We will strive to articulate and communicate the shared vision for the future of our town over the next 15 years. In a thoughtful and data-driven process to determine community goals and aspirations, we will look to include diverse perspectives from across all members of our island community with a transparent and inclusive approach open to all voices. We will work to tap into the rich network of expertise and resources in our own community and be mindful of the responsibility we have to manage resources made available to us to support this project. We will strive to be forward thinking to identify future trends and set goals to manage growth and development for our town.”

This committee is building a plan from a strong foundation. After the town was established in 1993, the 1995 plan was developed. This first comprehensive plan emphasized setting up the newly formed town for success. There were two key issues at the time: ensuring viability as an independent town and the ability to utilize a large parcel of previously unusable acreage in the center of the island. In 2008, the second plan focused on retaining small town character while adapting to the changes coming to the coast of Maine and continuing to cultivate an environment where Long Islanders work together to solve problems.

As the committee developed the third comprehensive plan for the Town of Long Island, the focus was on sustaining what we have so carefully built, taking care of what we have, and preparing for the future in order to maintain the sacred 'Long Island way of life'. As one of only 15 remaining unbridged year-round island communities in Maine, Long Islanders are keenly aware of the value and fragility of our unique way of life.

Since the last comprehensive plan in 2008, the island has many new facilities providing services to the community including a new wellness center, community center, and pickleball court. Broadband fiber optic internet cables have also been installed and are in the process of being deployed to residences and commercial buildings on the island. During the COVID-19 pandemic the Long Island Wellness Council facilitated the administration of tests and vaccines.

Population and demographic trends indicate flat population overall, with the older segment making up the majority of residents while the younger population segment, especially under 25, has declined. The other important trend is the blurring of lines between seasonal and year-round residents as the seasonal population is spending more time on the island and many year-rounders are leaving the island in the winter months. In the Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035 Survey), 75% of respondents said they spend time on



Sunny summer days on South Beach. Photo: Candice Dale

Long Island through the month of October. In April, over 50% of respondents were back on the island.

The changes in demographics will impact the pool of volunteers. The Town of Long Island relies heavily on volunteers who fill 88% of the current positions required to run the town according to an analysis conducted by the LICP committee. As the town's population ages, the volunteer base on the island may not be sustained. Understanding potential gaps and developing plans to address those gaps will be critical for the future.

One of the major access points for the waterfront is Mariner's Wharf, located in the 'front' of the island, facing northwest. In 1996, the State of Maine built Mariner's Wharf. At that time, the town and the state agreed that the state would be responsible for the wharf itself and the town would be responsible for the wave screen, floats, ramp, and lighting. Since then, there have been issues understanding the ownership of certain parts of the wharf, which led to a slower system of repairs and maintenance. In January 2022, a winter storm seriously damaged the wave break, floats, and pilings resulting in costly repairs. There have been many past initiatives to repair and maintain Mariner's Wharf, but the latest storm damage serves as a cautionary tale about ensuring that the town is working to maintain our critical infrastructure.

The growth in dwellings on Long Island has not been at the rate and pace that is seen in other parts of coastal Maine. In the last 10 years only 17 primary structures were built or rebuilt. What people may be noticing when they talk about seeing new people on the island is that existing homes are changing ownership, and seasonal residents are spending more time here, partly fueled by the pandemic. There are also more short-term rentals available and more opportunities to work remotely.



A sternman works on preparing bait.
Photo: Nils Caliendo



Fourth of July lobster bake on Front Beach.
Photo: Janice Avignon

The results and analysis from the LICP2035 Survey clearly indicate that island residents value the way of life on Long Island. There is also an acknowledgment of macro trends in society, the economy, and the environment, which are beyond the control of Long Islanders. While some of these changes certainly represent threats, they can also represent opportunities, particularly if we approach them as a community in a thoughtful, sustainable, and inclusive way.

The overwhelming sentiment was that sustaining the cherished character of the island we know and love will require us to grow responsibly. Sustaining the island way of life into the future will require intentional work across the community as we thoughtfully manage change over time.

The comprehensive plan sets up a framework to enable us to grow responsibly,

be good stewards of our resources, and live well in accordance with the visions and values set forth in the plan. To achieve success will take resolve from the town officials and community to set up a strong planning foundation on which we can build. The plan aspires to enable the Long Island community to collectively take action on the recommendations, policies, and strategies immediately and ongoing into the future.

The committee is extremely grateful for and encouraged by the level of engagement from the Long Island community as we went through the comprehensive planning process. Through the interviews, conversations, community survey, public forums, digital and social interactions we heard from a vast majority of the community at some point during the past 16 months enabling us to write a plan truly reflecting the will of the people.



A lobster boat at dawn
Photo: Nils Caliandro

A History of Long Island

Introduction

Since the first European settlers arrived during the mid-1600s, Long Island has undergone a number of transformations from its beginning as a remote fishing and farming community in the 18th and 19th centuries. With the advent of the steamboat era in the 1900s it became a tourist destination during the summer months until a major fire and the threat of World War I curtailed such activity. World War II brought the construction of a major Navy installation to the island that was active into the 1950's. A super tanker port was proposed for this site following the decommission of the Navy facility. Today Long Island is one of 15 unbridged islands in Maine still supporting a year-round community, whereas there were 300 such communities in the state at the beginning of the 1900s. Today the estimated year-round population is 234, a number that swells to between 800 and 900 people during the summer months.

Long Ago

There is archaeological evidence in the form of shell heaps, known as shell middens, that indigenous Native Americans frequented the shores of Long Island, as well as other islands throughout Casco Bay. The Abenaki tribe of the Wabanaki Nation (People of the Dawnland) traveled here during the warmer months to fish, forage, and hunt.

Captain John Smith, the English explorer, soldier, and adventurer, explored New England in 1614, recording his visit to Long Island. The French also explored this region as evidenced by the name of Havre de Grace, a serene harbor on the seaside of the island.

The first European settler was John Sears of Boston in 1640. Very little is known of his activities or background.

The Eighteenth Century

Between 1703 and 1706, ownership of the island passed to a John Smith of Boston; thereafter, the island was named Smith Island. He had planned to settle here, but for reasons unknown it did not come to pass.

Col. Ezekiel Cushing purchased Long Island in the 1720s from John Smith for the sum of 1,200 pounds sterling in cash. Although he did not settle on the island, he established his brother Ignatius and his family here, marking the beginning of a permanent settlement. Many of today's residents, both year-round and seasonal, are direct descendants of this Cushing family.

The Nineteenth Century

The very first census of Long Island counted 146 residents in 1830, the highest population in Casco Bay. By 1880, the number had grown to 252, with neighboring Peaks Island having 370. These early records contain family names that are very much with us today: Bickford, Cushing, Doughty, Dyer, Gomez, Griffin, Horr, Johnson, Littlejohn, MacVane, Rich, Wallace, Woodbury. Out of necessity, in these earlier times the island was self-sustaining. Left behind are cellar holes, abandoned wells, and stone walls marking property boundaries and livestock enclosures. The

abundance of sea life in contiguous waters did not require fishermen to steam long distances from shore for their catch.

Traditionally, farming and fishing were the mainstay of the year-round population. Many able-bodied men were fishermen, as was noted in 1908. Of 260 year-round adults, over 70 men declared themselves fishermen.

Turn of the Century Development

During the late 1890s and early 1900s, Long Island was hit by a limited real estate boom, whereby large sections of the island were subdivided into very small lots with many streets laid out with geometric precision. Many of these lots were built on, lots too small to conform to present day land use standards. This development has contributed to contamination of the groundwater, as described elsewhere in this report.

Prior to the onset of steamboat service to the island, visitors had to sail to their destination, an often-risky undertaking. Several families were known to have perished in sudden squalls. In 1864, regular steamboat service began, changing the island forever. By 1900, Long Island boasted three large hotels accommodating 300-400 guests, as well as several guesthouses and rooming houses. The hotels offered weekly dances, bowling alleys, and fine restaurants. The business district included three grocery stores, an ice cream parlor and confectionery, a fish market, a barbershop, and a poolroom. There were three wharves for passengers and one for freight. Portland built the first city street on the island in 1897. A 4-foot-wide boardwalk, lined with gas lamps, bordered the street in the business district and extended two miles to the east.

During this period, the islands were being promoted as health resorts and idyllic

retreats. Large steamboats transported vacationers in droves from Boston and New York. They were especially attracted by the large summer hotels. There were also a large number of boarding houses and private homes offering a room or two to accommodate the influx of visitors, which included many from Canada.

At this time Long Island became well known for its summer clambakes. Hundreds of people came to partake of clams, lobsters, corn, potatoes, eggs, bread, and pickles, cooked outside over open fires. They were served in a pavilion built for that purpose or in the adjoining fields. The most notable clambake was held in celebration of Portland's Centennial. Over 2,000 people ate 500 bushels of clams cooked over 16 cords of firewood.

Cow Island

In 1901, the military established Fort Lyon on Cow Island as a support for Fort McKinley, which was located nearby on Great Diamond Island. Fort Lyon featured a wharf, a powerhouse, and two gun batteries. Battery Bayard, completed in 1907, was mounted with three guns capable of firing 6-inch diameter shells a distance of five miles. Battery Abbot, completed two years later, was mounted with three guns designed to fire 3-inch shells five miles. These two batteries were among 25 such batteries, equipped with 73 guns and mortars, located in Portland Harbor at Forts Williams, McKinley, Preble, Levett, and Lyon.

The building of these forts was based on a fear that Portland Harbor could be invaded by an enemy fleet and taken over as a base of operations should Saint John, New Brunswick or Halifax, Nova Scotia fall victim to the enemy. Each battery had a specific role and field of fire in the coordinated system of forts defending the harbor. Battery Bayard's primary role was to help defend Hussey

Sound, with the assistance of Battery Abbot. The defense of the channel between the islands and the mainland in Falmouth was also assigned to Battery Abbot.

Fort Lyon was manned for a brief time during World War I, then active again in World War II when 200 men were stationed there. An artillery regiment of the Maine National Guard was charged with defending against patrol boats with the aid of a massive searchlight.

When the harbor forts were deactivated after World War II, the guns were cut up for scrap. The remains help to show how these coastal forts were constructed from the 1890's through World War II. Cow Island is now owned by Rippleffect, a non-profit organization that operates an outdoor adventure camping experience for youngsters. The island is protected by a conservation easement held by Maine Coast Heritage Trust.

Fires and Decline

On June 29, 1914, Long Island's prosperity was dealt a blow on the eve of World War I when a fire broke out in the newly restored and luxuriously decorated Granite Spring Hotel. Although there were no human casualties, the gusty winds the following morning fanned the fire, destroying the hotel, Ponce's wharf, and most of the adjacent business district. Just as the summer season was abreast, the bakeshop, barbershop, popcorn stand, fish market, restaurant, and boarding house were all burned to the ground. The Granite Spring Hotel was never rebuilt, and only a few smaller stores arose from the ashes. Another hotel, the Dirigo House, was demolished in the early 1940s in preparation for the construction of the Navy refueling depot to supply the North Atlantic destroyer fleet. During the 1920s the halcyon days for the islands came to an end with the advent of the automobile. Ironically,



Clarke's Store as it appeared in the 1930s. It is now known as Byers and Sons Long Island Bakehouse. Photo courtesy of Dick Mitchell



The original 7th Maine Civil War Regiment Retreat, located in the East End. The building burned in 1932, but a private home was built in its place in 1970. Photo courtesy Long Island Historical Society



The police barracks was destroyed by a fire in 1948. Photo courtesy of Long Island Historical Society



Three young islanders pose in their Navy uniforms.
All three served during World War II.
Photo courtesy of Long Island Historical Society



The original Maine 1st, 10th and 29th Civil War Regiments Retreat, which later became the island's police barracks during World War II. The building was located just west of Doughty's Landing.
Photo courtesy of Long Island Historical Society

the islands have gradually returned to prosperity and have once again become places where one can “get away” - because of the automobile itself.

World War II Naval Fuel Annex

The most dramatic change to Long Island came with the construction of the Naval Fuel Annex, which supplied the North Atlantic destroyer fleet during World War II. Nearly 90 homes and cottages were destroyed or relocated as islanders' property was appropriated by eminent domain. A good portion of the center of the island was blasted for the creation of underground oil storage tanks with the riprap deposited along the northwestern shore. The military claimed nearly one-third of the 900-acre island. The reinforced concrete tanks were poured in place and equipped with machinery capable of pumping the tanks empty of fuel. Along the shore, sturdy wharves were built to accommodate the huge warships. Barracks, a boat repair shop, firehouse, generator house, administration building, boiler house, and vehicle repair shop are among the other buildings constructed.

The island has never fully recovered from this ordeal. The oil tanks remain in place, the concrete cured to the hardness of rock. The numerous small lots created by the land speculators of the late 1800s, coupled with the presence of the Naval Fuel Annex, are the source of many of the town's land use problems.

In February 1969, King Resources, a Denver oil corporation, purchased the 173-acre tank farm from the Navy for \$203,000. They intended to build a supertanker offloading facility, transshipping oil from the Stepping Stones, across Long Island to the tanks, then over Casco Bay to a refinery projected for the mainland. Agents for King Resources

also purchased many small properties that were offered for sale, often at inflated prices. A group of concerned citizens, fearing pollution of their environment and loss of their island lifestyle, mounted an opposition forming Citizens Who Care, which quickly attracted more than 2,000 members. Through their effort, as well as the change in world oil economies, King Resources was denied a permit for their Long Island facility under a new site law, on the grounds it posed unacceptable risks to Casco Bay and its islands. Although there was some oil stored in the tank farm between 1974 and 1981, King Resources Corporation eventually failed and filed for bankruptcy. The subsequent reorganization was renamed Phoenix Resources.

During the period of King Resources' ambitious plans, the City of Portland refused to rescind zoning approval for the oil depot, despite public opposition. This intense period of conflict became part of the fabric of relations between Portland and Long Island.

Northland Real Estate Development

In the late 1980s, Phoenix Resources sold large and small parcels of its land holdings, not including the tank farm, to Northland Corporation, a Newton, Massachusetts based real estate developer. A large tract on the southwest of the island, known as Jerry Point, was subdivided into large lots, and three homes were built. Large lots along the back shore on Fern Avenue and along Island Avenue to the east of the conservation area were also developed. Other miscellaneous lots were sold to abutters or other local property owners. Northland also donated two large parcels to the Long Island Civic Association (LICA) to be used for recreation purposes by the people of the island. One is the ever popular and scenic Fowler's Beach

located on the western end of the island facing Peaks Island. The other is a nine-acre interior parcel that is used as the island baseball field.

Incorporation of the Town of Long Island

In June of 1991, the City of Portland published a new property revaluation reflecting the real estate boom of the 1980s that had disproportionately affected island real estate values. This resulted in property tax bills that doubled or tripled for island property owners. Frustrated with the paucity of municipal services on the island as compared to the mainland, investigation into means of bringing more local control to the island began. Some residents felt they could not afford to stay on the island, threatening the existence of a year-round community.

LICA set up a committee, under the leadership of Mark Greene, to evaluate options for Long Island, including incorporation as a separate island town with a town meeting form of government. With wide participation from property owners, the committee studied the costs of services on the island, as well as how other island towns functioned with much lower tax rates. The committee learned how well volunteers had already performed in creating an island library and developing a first-rate fire department with trained Emergency Medical Technicians.

In the fall of 1991, "An Act to Allow Certain Islands to Separate from Portland" was filed with the 115th Maine Legislature by Rep. Anne Rand. It was later amended to include only Long Island. The bill was eventually passed and signed by Governor John R. McKernan on April 3, 1992.

Work continued on researching the viability of self-governance and whether it would

be in the best interests of one of the few remaining Maine island communities. Negotiations and the arbitration process with the City of Portland defined the details of separation, as continued discussion of the consequences ensued. A final referendum was held on November 3, 1992, with residents voting 129 to 44 in favor of incorporating a new Town of Long Island.

Three selectmen and three school board committee members were elected at the first town meeting and immediately set to work to develop the structures and budget necessary for the town to begin functioning on July 1, 1993, pending approval at town meeting. To raise funds for initial town expenses, volunteers designed and sold t-shirts, accepted donations, and created a commemorative quilt that was raffled off. A number of property owners voluntarily prepaid more than \$50,000 in taxes to provide the town with working capital.



A commemorative quilt, created by island residents as a fundraiser for the new Town of Long Island, is proudly displayed at the Long Island Historical Society on the 25th anniversary of the founding of the town.
Photo: Linda Ferguson McCann

Changes Since Town Incorporation

Since incorporation of the Town of Long Island, the tax rate has remained stable, police coverage has been contracted with the Cumberland County Sheriff's Department, an emergency rescue boat is moored year-round at the float, the roads are plowed and maintained, and the school has exacting high standards.

Mariner's Wharf

In the late 1990s, the State of Maine constructed Mariner's Wharf to replace Ponce's Landing. The new location is adjacent to town-owned land that was developed for parking. The design of the wharf was influenced by input from fishermen who were knowledgeable of winds, tides, safety issues, and the needs of islanders. There are seasonal and year-round floats, dockage for the emergency vessel, and space for limited time tie-ups for private boats, as well. An expansion of Mariner's was completed in 2018 to better accommodate the increased demand for public access. Ramp and wave break improvements were also undertaken. Recent weather events have tested the wave breaks and the design of the wharf itself, such that modifications and repairs are critical, especially in expectation of the continuing effects of climate change. These include future sea level rise and more frequent and intense storm events.

Ponce's Landing

Ownership of the old ferry wharf was conveyed to the town when Mariner's Wharf was built. It is used as a public landing with pedestrian access, and by a number of commercial fishermen who pay a fee for its use. At Town Meeting in 2007, the voters approved the sale of a "protective covenant" to the State of Maine to ensure in perpetuity

the continued access to this facility for commercial fishing. Proceeds from this sale were designated for the restoration of this working waterfront asset.

Long Island Learning Center

The Learning Center was constructed as an attachment to the Long Island School. Numerous donations, grants, and fundraisers provided most of the funds for the construction of this new addition, requiring only about \$30,000 in tax money to complete the funding. The center is home to the Long Island Community Library, the Dodwell Gallery, a computer center, a small meeting room, and a performance space. The Long Island Historical Society maintains a climate-controlled archival space in the basement. An elevator was installed in 2014 to create access to the basement for use as a public shelter. In 2016, the Long Island Aging in Place Committee was formed to develop programs and on-island access to medical testing, CPR classes, bi-weekly lunches, and in-home care through a relationship with Chebeague Cares. In 2018, this committee became known as the Long Island Wellness Council, to more accurately define its role to encompass the health and wellbeing of all residents of Long Island. A clinic space with two exam rooms, two bathrooms, and a waiting room were constructed in the basement of the Learning Center and now operates with assistance from MaineHealth.

Long Island Community Center

The current Community Center opened in the summer of 2016 on the site of the previous Community Center. It houses the Long Island Historical Society's exhibit space and office, a pottery studio, and a large multi-function room for meetings, lectures, fundraising events, and recreation activities. The space is available to rent for events such as dances, parties, family reunions and weddings. Soup lunches sponsored by the Wellness Council are also held here, facilitated by the presence

of an adjoining kitchen. A smaller meeting room and Recreation Department office are located in the center of the building. Recently, the large room has been fitted for indoor pickleball during the winter months which is being actively used by the 'winter warriors' on the island.

Any Tide Boat Ramp

The barge landing, known locally as Boston Sand and Gravel, has been upgraded to make it accessible at any tide. This valuable resource is critical to the functioning of an island community.

Cemetery Expansion

The New Hill Cemetery was expanded, and further improvements made. A new cemetery bounded by Fowler Road and Cushing Street was constructed in 2016, with further landscaping plans in the works.

Safety Fencing

Sturdy fences consisting of metal posts with a heavy wooden cross bar were installed along the edge of the freshwater pond adjacent to Harbor de Grace, replacing the



The Long Island Community Center was built with funding from private donations and fundraising events to serve as a gathering place for the community. Sometimes its facade also serves as the perfect frame for reflections of a glorious sunset down front.

Photo: Linda Ferguson McCann

deteriorating World War II era chain link fencing. Similar fencing was also installed on Island Avenue where a small stream empties into the Old Cove.

Conservation Land at Wreck Cove

The 11.5-acre property, located on the south shore of Long Island, is owned by the Town of Long Island and is now protected with a conservation easement deeded to Oceanside Conservation Trust of Casco Bay. The easement ensures access to this wild, beautiful location by our residents and visitors for passive recreational use in perpetuity.

Cleaning and Closure of the Tank Farm

After Long Island seceded from the City of Portland, Northland purchased the former tank farm property from Phoenix Resources. Working with the members of the community, Northland developed a site plan for a subdivision of house lots around the perimeter of the property, marshaled the efforts to finalize the closure of the tank farm itself, and then designated the 116-acre core of the tank farm as conservation land. After 40 years of concern about the oil storage facility, it was finally cleaned up to the satisfaction of the Department of Environmental Protection. The former Long Island Naval Fuel Tank Farm is now owned by Long Island Community Land Operating Co. LLC, an independent 5-member Board of Managers formed in 2005 to manage the conservation area. LICA is the easement holder, and as such has the right to inspect the land to ensure the conservation easements are being met and enforced.

Brownfields Grant

The Town utilized federal Brownfields grant funds to clean the Naval Generator building, which is now privately owned.

Broadband

The Broadband Exploratory Committee mailed a survey to all property owners, renters, and voters to gauge interest in a broadband project proposed by Consolidated Communications. Of 200 surveys received by the committee, 155 indicated interest. As of early 2022, many year-round residents had been connected to broadband, as will seasonal residents later in the year.

COVID-19 Pandemic

With the onset of the COVID-19 pandemic in 2020, the town rose to the challenge. Using Center for Disease Control (CDC) guidelines, policies and protocols were developed to keep Long Island residents as safe as possible. COVID was of particular concern to the island because of the large number of residents ages 60 and older who were at greater risk of contracting the potentially fatal virus. For nearly two years, the town used technology to remotely run town government meetings as well as the island's elementary school. The town's emergency medical technicians were among the very first to be vaccinated and received training and supplies to assist the town. The Wellness Council established a COVID testing program in conjunction with Cumberland County EMS and the Maine CDC. The Wellness Council worked to set up vaccination and booster clinics by partnering with public health nurses from Northern Light Health. The council, town officials, the school board and the town's newly appointed health officer worked together to keep the town functioning during COVID while minimizing cases on Long Island.

Regional Coordination

The Town of Long Island has the unique advantage of being an independent town in Casco Bay while maintaining strong connections with the city of Portland, the island communities across Casco Bay, and other coastal communities in close proximity.

The town shares land boundaries with the Town of Chebeague in the form of Little Chebeague Island. Little Chebeague is parkland owned in its entirety by the State of Maine. The town shares water boundaries with the towns of Falmouth, Chebeague Island and the City of Portland.

The City of Portland is our mainland base, and the Casco Bay Lines or CBL, connects the island to the mainland. CBL operates ferries that depart from the Portland-owned

Maine State Pier. These ferries provide the island's primary transportation connection to the mainland, offering passenger, freight, and tide-dependent car ferry service. The CBL terminal links travelers to the Greater Portland Metro public bus service which provides transportation to South Portland, Westbrook, Falmouth, and West Falmouth and includes connections to the Portland Jetport (airport) and the Portland Transportation Center (Thompson Point commercial facilities, Amtrak train station and regional bus station).

The Casco Bay Island Transit District, which operates Casco Bay Lines, is a quasi-municipal entity owned and operated by the residents of the six Casco Bay islands, which it serves. It is governed by a board



Casco Bay Lines ferry on a bright sunny day. Photo: Ginny Stowell

of 12 directors - 10 elected from the islands, one appointed by the City of Portland, and one appointed by the Commissioner of the Maine Department of Transportation. The town has one member elected by the voters of Long Island. The community takes an active interest in the governing decisions of this board and participates in their regular meetings and those public meetings held on islands.

The floats maintained by the City of Portland at Maine State Pier are used by the water taxi services and private boaters as mainland access, and the inner float is the transfer location for the emergency medical vessel. Ambulances meet the patients at this facility to transfer them to a hospital. During warmer months, when the floats are accessible in Falmouth, the rescue boat delivers patients to Falmouth because patients can more quickly get to hospitals in Portland.

There have been changes and improvements to the Maine State Pier in past years and the

island communities all need to stay engaged as decisions are made about changes for the future.

The boat ramp at the East End Beach in Portland is the mainland staging area for a private barge service which transports vehicles, all manner of public works and construction materials, and sometimes whole houses to the 'Any Tide Boat Ramp' landing facility close to Mariner's Wharf on Long Island.

Mainland parking is also a requirement of island living. The availability and affordability of mainland parking resources for island residents and visitors are a grave concern. There is an extreme shortage of parking spaces near Portland's waterfront. There are years-long waits at some parking garages. Some parking garages, including the garage at CBL terminal, are no longer taking names.

The Long Island School Department is linked to Portland and other islands in Casco Bay.



People take the Casco Bay Lines ferry from Mariner's Wharf into Portland or for a trip to one of the other islands.
Photo: Linda Ferguson McCann

The Town of Long Island has a municipal school with its own superintendent. The island school serves its students from pre-kindergarten through the 5th grade, and also accepts 'tuition students' from Great Diamond Island under a contract with Portland. The middle and high school students from Long Island commute to the mainland where they are tuition students. The town has a contract that allows its students to attend King Middle School and any of the Portland public high schools. The town will pay the state allowed amount of tuition for students to attend other public schools or non-parochial private schools, but the Portland schools are the most popular.

Utilities for the town come from the mainland. Electrical power comes by underwater cable from both Peaks Island and Chebeague Island, and the two alternative sources can be an advantage in a storm event when power is cut from one of the two. After years of effort by the Long Island Broadband Committee, broadband service is finally being deployed on the island by Fidium, formerly Consolidated Communications, via an underwater fiber optic cable. We have no shared sewers, water systems or other interconnections which are typical of adjoining towns on the mainland. Each island's groundwater aquifer is discrete to itself making it critical to have measures in place to protect and care for our groundwater source.

Long Island's solid waste is collected and sorted, separating the recyclables from the waste, at the transfer station on Long Island. From here it is shipped by barge to the mainland where the solid waste is taken by Penobscot Energy Recovery to Orrington, ME. Recycled materials currently go to Casella Recycling in Lewiston or Scarborough. Pumped septic waste, pumped from individual wells generally during the summer, is taken off island by barge. Biomedical waste is transported to



Long Island students ride the Casco Bay Lines ferry to town for school and activities. Photo Credit: Janice Avignon



Long Island School students pick out pumpkins at Katharine's Garden. Photo: Marci Train



A local vet comes out to the island for the Wellness Council pet clinic. Photo: Rennie Donovan



Sailors race to Monhegan on a summer day. Photo: Dick Mitchell

boat while Chebeague Island provides the EMTs. These communities are in the process of drafting written agreements to conform to the National Incident Management System (NIMS). Everybody benefits from this back-up resource, and the many shared efforts have built mutual respect, and a strong cooperative relationship has developed over the years. There are no conflicts in these mutual aid policies and strategies. Cumberland and Chebeague Island and Long Island have long shared fire, rescue and EMT training classes and resources.

The town of Long Island has a particularly strong relationship with the Town of Chebeague Island, sharing similar circumstances as two independent island towns. Although the roads do not connect, both public works departments exchange ideas and resources. Both island communities are expected to continue to share ideas and resources, often coordinating shared barge trips when it makes financial sense..

Long Island relies on the Cumberland County Sheriff's Department for its local policing and for back-up when that is necessary. The Town hires a part-time deputy for on-island presence during the summer months and provides officers with island housing when living here.

The town's 911 emergency communications dispatch system is with Cumberland County Regional 911 Dispatch. Radio frequency is shared with the Town of Chebeague Island Fire and Rescue as part of a continuing policy of mutual aid.

The Town of Long Island has enjoyed a long and fruitful relationship with the Island Institute. The island elementary school has benefited from its many island school initiatives, scholarship programs, and networking opportunities. There is informal sharing of staff development opportunities and student enrichment activities with other island schools, primarily fostered through the Island School Initiative of the Island

Institute. The Island Fellows Program has provided Long Island with the skills and talent of fellows whose energy and expertise has benefited the school, the library, the municipal government and the community. Multiple members of the community have participated in the Island Institute leadership and entrepreneurship programs.

The Maine Islands Coalition (MIC) was formed in March of 2004 as a collaboration of year-round unbridged islands represented by elected or appointed representatives from all 15 of these communities. MIC is an independent group that is supported by the Island Institute staff and facilities. The focus of the coalition is to advocate for the economic and environmental sustainability of these islands. Quarterly meetings in Rockland cover a range of topics from affordable housing, transportation, working waterfront to school issues, normally with a contingent of legislators present. The meetings became remote through the pandemic and were as frequent as needed to address the many issues during the early years of COVID.

The Long Island Wellness Council established a COVID testing program in conjunction with Cumberland County EMS

and the Maine CDC. The Wellness Council worked to set up vaccination and booster clinics by partnering with public health nurses from Northern Light Health. The council, town officials, the school board, and the town's newly appointed health officer worked together with local and state partners to keep the town functioning during COVID while minimizing cases on Long Island.

Local municipal and community organizations are a critical resource for the town. The Town of Long Island is a member and makes frequent use of the services of the Greater Portland Council of Governments, Southern Maine Emergency Medical Services, and the Maine Municipal Association. Long Island is represented on the boards of Casco Bay Island Alliance, the Oceanside Conservation Trust of Casco Bay, and other community organizations.

Partnerships with community, municipal and government entities will be critical moving forward as our community works to efficiently and effectively find solutions to challenges being faced by Long Island and similar coastal communities. Consistent and continued cultivation of these important relationships will be key.



Long Island lobster boat races. Photo: Ginny Stowell

Community Engagement

Since the Comprehensive Plan defines what the town will look like for many years to come, the process needs to ensure the final document reflects the needs of all citizens, community members, public officials, and stakeholders. A robust public participation process that reaches a large portion of Long Island's community is critical. Every member of the Long Island community is a source of tremendous insight and creativity which will produce better planning decisions.

The Long Island Comprehensive Plan Citizen Committee (LICP2035) was activated in January, 2021. The committee developed a web presence for the Long Island Comprehensive Plan Committee on the Town of Long Island web page and used this as an anchor for information as the process moved forward. The website includes information on the comprehensive plan's purpose and value, committee mission and members, as well as all public notices, communications, progress reports and output. We also established a visual identity and wordmark to be consistently used across all communication channels to make it easy for the public to recognize any outreach from the comprehensive plan committee.

Full committee meetings were held monthly using the Zoom platform due to the COVID-19 pandemic. Meeting announcements were

posted in town hall and at the kiosk at Mariner's Wharf. The meeting notices and agendas were also distributed electronically via the Town of Long Island website, the email listserv of the Long Island Civic Association (LICA), and the Town of Long Island 04050 Facebook page. All announcements also included links for members of the general public to join these remote meetings through the Zoom platform. We had several guests at each of our monthly meetings, and guests were welcome to make comments and ask questions of the committee members. Minutes of all meetings were posted on the Town of Long Island website.

In order to gain the input needed from across the community throughout the process, the committee created a public engagement plan leveraging best practices from Greater Portland Council of Governments and other municipalities. The public engagement plan contained multiple outreach strategies across the phases of the project. The plan included items such as preliminary stakeholder and community outreach, a community survey, presence at island events, public forums, door-to-door outreach, ongoing email and social media campaigns, and driving community members to the town website, where they would find opportunities to engage with the LICP2035 team.



An island resident created a logo for the comprehensive plan that was used to identify all outreach communications from the comprehensive plan committee.



Volunteers designed social media posts featuring island resident photographs that were pushed out periodically to encourage survey participation.



tolicompplan@gmail.com
<https://townoflongisland.us/wp/>

Business cards were designed, printed, and distributed to the public to allow for easy access to the LICP2035 survey via the QR code and the Long Island Comprehensive Plan 2035 email address for additional comments.

An email account was set up for the comprehensive plan. The email account was promoted through multiple channels (email push, social media, town website, business cards) and included in all communications along with the logo and website url. The public was encouraged to submit ideas, resources, questions or concerns through that mechanism. Some great feedback was received through this channel. This email account was also leveraged in a 'call for photos' to engage the community in the photography to visually portray the ideas in the plan.

A sub-committee (the survey team) was assembled to design a community survey which would allow islanders to share their hopes for the town in 2035 as well as their priorities for the plan. In order to get some initial feedback on possible topics for the survey, a series of community conversations was undertaken which gathered opinions from over 70 Long Island residents. These pilot discussions were held between survey team members and community members and asked islanders to express their hopes, dreams, and concerns for the future of Long Island over the next 15 years. These individual and group interviews were held in the months of March and April, 2021



Healthcare & wellness in 2035 – what will LI residents need & want?

Hosted by
Dr. Dennis McCann, Long Island's Health Officer
Amy Tierney, Wellness Coordinator
Beth Marchak, Wellness Council secretary

Time: 6-7pm - chairs set up to social distance, masks required

Date: Thursday, Aug. 26, 2021

Place: LI Wellness Center, basement of LI Library, 7 Gorham Ave.

Bring your ideas & concerns
Tour the LI Wellness Center
See the new telehealth equipment
We'll supply the pizza

Help us plan our future together!

Beginning in August, 2021 the LICP2035 team held a series of forums to attract both year-round and seasonal residents. Topics included, among others, housing, working waterfront and wellness. Information gathered at each session was used to write the comprehensive plan.

with members of stakeholder groups (LICA, Recreation Committee, Historical Society, Wellness Council, fire/rescue workers, etc) as well as with members of the general public at two COVID-19 vaccination clinics held on the island. This input was used to inform the design of the survey, including the strategic concerns that respondents had to prioritize. Some of the concerns expressed during these conversations included attracting young working families to the island, availability of housing, availability of contractor and mechanical services, and the health of natural resources like the water supply. From there, the survey team consulted resources such as the city of Portland's comprehensive plan, Chebeague Island's community survey and experts from Greater Portland Council of Governments (GPCOG).

The survey was purposefully designed to include both qualitative and quantitative questions. The survey team members felt that including diverse ways of asking questions would help the committee get a more holistic view of the community's feelings about the town. The survey was intentionally designed to allow participants multiple ways to express their feelings about certain topics. Responses to quantitative questions allowed the committee to get a snapshot of the community's feeling about something, where the responses to the open-ended questions allowed for a more detailed, specific look at how people would like to address something in the plan. The committee received a lot of information and feedback in these answers.

A digital strategy was employed for the survey administration and distribution. By creating an online survey, the committee felt that they would be able to reach more people than with a paper survey. The completed surveys would not need to be returned by mail or dropped somewhere, and people could take the survey without being physically present on the island.

To encourage the highest possible response rate, the committee designed the survey to be anonymous. By not requiring names, the participants in the survey could answer more freely and give the committee truly valuable and honest feedback. The survey was open to year-round and seasonal residents regardless of whether they rented or owned property on the island. The survey was administered on Survey Monkey by GPCOG and was designed to take 10-15 minutes to complete.

The survey went live in early June of 2021 and was available until just after Labor Day. After the survey went live, it was up to the committee to make sure the community knew about the survey and how to participate. Physical copies were placed at town hall and various other frequently visited spots on

the island, but the main focus for promotion was encouraging community members to complete the survey online.

To promote the survey, the committee leveraged multiple communication strategies across digital and social media channels and in-person whenever possible given COVID protocols. A QR code was heavily promoted and used to allow access to the survey from a smartphone.

The digital design for the survey was intended to maximize reach. The committee felt strongly about also using the tried and true 'word of mouth' method to spread the word as best we could given COVID protocols. The committee membership spanned neighborhoods on the island and Individual LICP committee members personally reached out to their friends, families, and neighbors about the survey.

There was a promotion of the survey using the Town of Long Island Facebook page and the LICA newsletter, as well as notices posted on the town's website, all driving readers to the survey link to participate.



Posters featuring the LICP3025 logo and QR code were displayed all over the island to allow easy cell phone access to the online survey. Photo: Lorinda Valls

Members of the comprehensive plan committee also distributed specially designed business cards containing the QR code, survey link, and the email for any additional comments to be sent to the committee. Committee members also sent out periodic reminders to 'participate and add your voice' to the survey conversation through the LICA email listserv including a direct link to the survey.

All of this outreach was punctuated by events like a float in the Fourth of July parade and an interactive booth at the Wharf Street Festival. Near the end of the survey's run, members of the committee also made door-to-door visits to speak with islanders and leave literature encouraging them to fill out the survey if they had not already done so.


All of this outreach around the survey set the stage for future community engagement by identifying committee members to the



Social Media posts were used to promote survey participation.



For the first time, Long Islanders responded to a comprehensive plan survey using their cellphones and a QR code. The response was a record - 348 responses - all electronically processed for further analysis



Long Island Comprehensive Plan Survey

We are beginning the process for updating the Long Island Comprehensive Plan. We would like your feedback! Your responses to this survey will help us understand residents' vision for the future as we explore our community's priorities through the year 2035 and beyond.

Please take the survey only once. This survey is only one tool we will be using for public engagement. There will be additional opportunities to provide input throughout the Comprehensive Plan process.

This survey will take approximately 10 to 15 minutes to complete.

1. How satisfied are you with the quality of life on Long Island?

Very Satisfied
 Satisfied
 Neutral
 Unsatisfied
 Very unsatisfied

2. What do you like most about life on Long Island?

3. What do you like least about life on Long Island?

4. What do you like to do in your leisure time on Long Island?

community, expressing the sincere desire for input and participation in the process from the islanders, and promoting future opportunities for engagement based on the survey results.

The survey received 348 responses representing an over 40% response rate which far exceeds typical rates for municipal surveys. In a small community like Long Island, there are often voices which are louder and more consistently involved than others. This survey provided the opportunity for all voices to be heard both equally and anonymously. The data gathered in the survey identified the areas of most concern to the respondents and was used to identify what is working and where the challenges lie. The responses provided a robust data set to guide the creation of recommendations for each of the content areas in the plan.

Based on the survey results, “hot topics” were identified to be explored further in community forums held throughout the fall. The topics for these forums were chosen from the frequency of qualitative and quantitative responses which addressed certain issues. The goal of these meetings was to gather further input from residents regarding concerns and possible solutions to problems in the content areas addressed. Data gathered would be used to inform chapters in the required content areas and guide recommendations in the implementation of the plan. Forums dealing with housing, wellness, youth engagement, land stewardship, the working waterfront, and contractor shortages were attended by over 100 community members.

Two public sessions were also held to engage community members in the creation of the vision and values statements for the town’s comprehensive plan. Those sessions, one held virtually and one held in-person, were attended by 60+ people.

Summaries of all of these public sessions were posted on the Town of Long Island

website, and recaps were reported in the LICA newsletter which is published and distributed bi-monthly.

The LICA newsletter was also used to disseminate information about the progress of the plan’s development and continue to drive community members to the website to keep current on progress. Several articles on different aspects of the committee’s work were published in each newsletter.

Weekly blog posts written by a member of our communication team were pushed out to entice curiosity in the project by giving some behind the scenes glimpses of the process and sharing key findings. Topics for “LICP2035: In the Know ” included the development of our visual identity, the reason for gathering demographics information, the reasons for writing a comprehensive plan, getting to know our Island Institute Fellow, and publicity about our community survey findings. These blog posts were published on the town website, disseminated through the LICA email chain, and publicized through the Town of Long Island 04050 Facebook page.

Throughout the process the town’s Select Board, town office employees, the town administrator, and members of the general public were kept informed of progress with updates at public Select Board meetings.

As comprehensive plan chapters were written by committee members, input was solicited from community experts on the content area of each chapter. Since the Town of Long Island has a huge volunteer corps helping to run the town, content experts were plentiful. Town committees and community groups such as Finance Committee, Planning Board, Long Island Historical Society, and Year-Round Housing Committee were consulted on content and brought in to review recommendations. Members of the community have also been recruited to read through the completed

draft document to ensure that it provides a cohesive and usable plan.

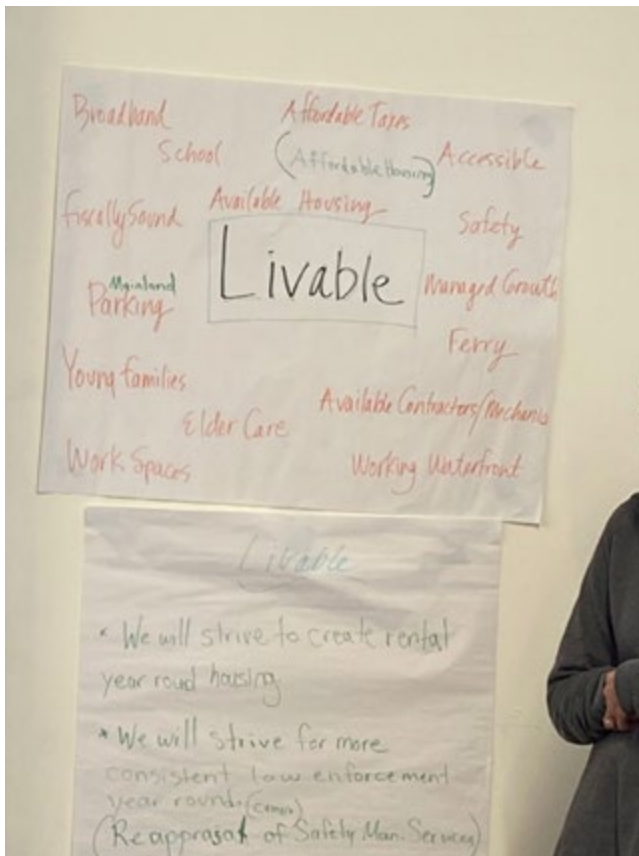
To ensure that the community was engaged in the final product, the comprehensive plan draft chapters were posted on the Town of Long Island website with notifications via email and social media. Public forums were planned to launch the plan with the community, cover plan highlights, and discuss questions and concerns.

A plan for socializing the final document and promoting the public forums included articles in the LICA newsletter, posting the final plan on the town's website with links disseminated through the LICA listserv and the Town of Long Island Facebook page. The public engagement will continue with

the presentation of the comprehensive plan for approval with a vote at the Town of Long Island Annual Town Meeting on May 14, 2022. Further public engagement will be required through the Implementation and Evaluation phases of the plan.



The LICP2035 team created a July 4th parade float featuring game show characters and oversized QR codes to help publicize our community survey. Photo: Lorinda Valls



Word clouds were formed from community survey responses in order to formulate the guiding principles for our vision and values statement. Photo: Elizabeth Marchak



Islanders attend an in-person October 2021 vision workshop. A second session was held via Zoom to attract those not on the island. Photo: Elizabeth Marchak

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COMPREHENSIVE PLAN



The Old Cove of Long Island on a sunny day. Photo: Judy Churchard

Vision and Values

What is a Vision Statement?

The vision statement reflects the high-level values of the town, while also showing how those values will guide us going forward. The vision statement for the Town of Long Island was developed with the help of the community. There were two public vision workshops dedicated specifically to crafting the statement, and additional input was taken from the other numerous community forums and the community survey. This statement is a reflection of the island community, and the committee will ensure that the goals and values expressed here can be seen throughout the rest of the comprehensive plan.

Vision Statement

Situated off of Maine's rocky coast, Long Island is a community home to year-rounders, seasonal residents, and newcomers alike. We believe that to maintain the way of life that is so important to us, we must actively work to care for an island that is **livable** for all its residents and maintains its **community spirit**. We seek to be **resilient** in the face of climate change and demographic shifts in order to protect our natural and human resources and to thoughtfully manage future growth. This community must remain **resourceful** by nurturing the volunteerism that enables the town to function and by being good stewards of our shared assets including the island's aquifer and the working waterfront. We strive to be **equitable** in the way that we enforce rules and regulations and in the way that we involve diverse voices in our community. We maintain that these five guiding principles have been and will continue to be vital for our town to embrace future opportunities and face the challenges ahead. Looking forward to the year 2035 through the lens of this plan provides Long Islanders the means to be effective stewards of our island home and to better plan for our future.



Two Casco Bay Lines ferries dock at Mariner's Wharf Photo: Kimberly Wallingford MacVane

Values

The Comprehensive Plan Committee engaged with the community and translated that input into values for the town. These values are listed below.



Resilient

Long Island will plan and prepare to meet new and ongoing challenges in the future. Focusing on planful growth and climate change preparedness will enable us to prepare for risks to both our town's assets and our valuable natural resources.



Equitable

Long Island strives to be an inclusive community that feels like home to all those who live and visit here. Fairness to all people through actions such as the enforcement of ordinances and involvement in our community is necessary for our success.



Livable

For a remote island community to thrive, Long Island must ensure that people have the ability to live and work here full-time. Supporting young families and business owners through initiatives like accessible housing, wellness services, a thriving working waterfront, and affordable taxes will allow our island to flourish.



Resourceful

Long Island is a community that depends upon people caring for one another and our town. Volunteers are key to any development on the island, and we must strive to support them while also seeking solutions for our needs.



Community Spirit

The unique way of life that we have on Long Island means respecting our independence and cherishing our connections with one another at the same time. We aim to keep the values of simplicity, tradition, and authenticity a major part of the spirit of the island as we grow into our future.

Aspirational Statements

Resilient

- We will work to attract and retain young and working families to the island and enable them to build their lives here.
- We will invest in environmental management and explore grant possibilities to explore and fund necessary actions.
- We will invest in educating both residents and visitors on preserving the natural resources of our island.
- We will address the issues presented by invasive plant and animal populations.
- We will educate our community about the importance of responsible use of water and other island resources.
- We will ensure that the town is prepared for catastrophic events like forest fires and storms.
- We will develop a plan to maintain town infrastructure so it is well managed and available when necessary.
- We will plan and prepare for sea level rise and other climate change issues.

Equitable

- We will strive to ensure equitable enforcement of town regulations and ordinances for all constituents and members of our community.
- We will ensure newcomers feel welcome on the island and are encouraged to participate in the responsibilities of making the island what we want it to be in the future.
- We will be an inclusive and welcoming community who recognizes the value of diversity and will work to build bridges between people
- We will be open and respectful to people of all age groups, genders, racial and ethnic groups, and the LGBTQ+ community.
- We will reach out to all community members and engage them through volunteering and social activities.
- We will continue to enhance public access to natural resources.



Kids outside the community center for a summer event. Photo: Jacqui Lunt



Long Island Comp Plan Housing Forum at the town office with remote participation in Fall 2021. Photo: Elizabeth Marchak

Livable

- We implement policies to ensure that the town is “livable” for all residents, young and old, of all socio economic backgrounds.
- We will make sure the island is business friendly to attract and retain industrious entrepreneurs and businesses and will support and help local businesses thrive.
- We will make the island desirable to young families.
- We will strive to create year-round rental housing.
- We will ensure cost-effective resources and services are available to help people age on the island.
- We will nurture and sustain a viable working waterfront.
- We will improve the island’s transportation infrastructure so that it meets the needs of those who rely upon it.



The community vision and values workshop on October 2, 2021. Photo: Elizabeth Marchak

Resourceful

- We will have accessible housing for those who wish to live, work and learn here.
- We will nurture a sense of stewardship and volunteerism in the younger generation of islanders and continue to encourage by example.
- We will expand services and accessible housing to those who wish to age in place on the island.
- We will enhance health, wellness, and emergency services.
- We will strike a balance between utilizing our community expertise and professional services.
- We will support and promote volunteerism by providing education, training, and succession planning.
- We will have a town government that operates in a planful way and uses all resources and data available to enable better decision making.
- We will employ emerging solutions from other islands and the organizations that support them.

Community Spirit

- We will be welcoming to all who come, whether they are here for a day or a lifetime.
- We will celebrate the efforts of our community volunteers.
- We will actively work to ensure that the voices and perspectives of young people are considered on the island.
- We will continue to work together to solve new challenges while maintaining the community spirit unique to Long Island.
- While managing planful growth, we will sustain our rural character.
- We will maintain the “for Long Islanders by Long Islanders” attitude.
- We will address challenges and explore solutions for our community recreation areas.



Photo: Paula Johnson



Photo: Ginny Stowell



Photo: Lorinda Valls

Current State of Affairs

Population and Demographics

As Long Island moves into another decade, it faces a slowly declining, but rapidly aging population that includes year-round and seasonal residents along with occasional visitors. Meanwhile the steep drop in the number of younger, working-age residents will challenge the town's limited human, financial and natural resources.

Year-Round Population

Long Island's 2008 Comprehensive Plan showed that between 1994 and 2006, the year-round population grew from 180 to 216 people, an increase of 36 people or 20%. Between 2010 and 2020 there was a very slight population increase - just 4 people. This dynamic appears to tell the story of Long Island's present and future: limited growth. While the seasonal population surges some 800+ residents in July, the near-zero growth of the year-round population will test the community's resourcefulness, an important value in Long Island's vision for the future. On an island largely run by volunteers there will be a greater demand for their services, especially during the summer season.

Because work on the current comprehensive plan report started as the 2020 decennial Census was being issued, decennial population figures are used from 2000, 2010 and 2020 to illustrate the town's population changes. They provide comparable longitudinal information about the island's growth. From 2000 to 2010, those figures show Long Island's population grew 13% from 202 to 230 people. Since 2010, the population has grown at a much slower pace - 1% over the 10-year period from 230 to 234 people.



The island's middle schoolers and their high school counterparts pose for that first day of school picture. Photo: Janice Avignon



Another New Year's Eve is ushered in at Mariner's as fireworks pop. Photo courtesy of Marci Train



Love, appreciation for nature and a bit of humor help give Long Island its special character. Photo: Elizabeth Marchak

KEY POINT: Over the last 10 years Long Island's population grew only 1% after growing 13% in the prior 10 years.

Long Island population 2000-2020

YEAR	TOTAL	% CHANGE
2000	202	
2010	230	13%
2020	234	1%

Source: 2000, 2010, 2020 Decennial Census

The slower rate of population growth is expected to continue through at least 2028 according to projections by a Maine State Economist Office report issued in April 2021. The report predicts the state's population will grow 2.1% between 2018-2028. During that time, five Maine counties will lose population while 11 counties will grow. Of the counties with projected population increases the data shows Cumberland County will have the smallest with 0.5%.The report notes there is uncertainty as to what effect the COVID-19 pandemic will have on its population projections. The state does not have local data for Long Island, but locally collected data confirm this population decline is taking place.

The state economist's office projects Maine will lose 27% of its residents under age 65 by 2028 because of aging and a lack of migration to the state. Meanwhile it will experience a 45% increase in population of

residents 65 and older. The most serious population shifts occur between 2018-2023, while the population shifts slow down slightly between 2024-2028.

Maine Statewide Population by Age 2018-2028

Percent Change 0-19	-12%
Percent Change 20-39	-5% -27%
Percent Change 40-64	-10%
Percent Change 65+	+45%

Source: Maine State Economist Office, April 2021

While Cumberland County is projected to see tiny growth, Portland, a city tied in many ways to Long Island, is projected to lose 5.4% of its population. The report cautions that local-level data is not as reliable as county and state level data. The state only released some city-level data for its five largest cities.

Another set of population projections, supplied by the State of Maine to complete this report, shows the state expects Long Island's population to peak at about 238 people in 2023 and begin a long, slow decline through 2038 to approximately 230 residents.

Long Island population, Observed, Projected, 2008-2038

Town	County	Population observed			Population projected			
		2008	2013	2018	2023	2028	2033	2038
Long Island	Cumberland	227	237	240	238	236	234	230

Source: Office of the State Economist, State of Maine



Long Island School students offered a big “Thank You” to the island’s veterans after mailing 100 cards to them on Veteran’s Day. Photo credit: Marci Train

A comparison of the town’s vital statistics compiled by the town clerks for the 2008 report and since then also indicates there are fewer younger people on the island. The numbers for 1994-2006 showed 21 births, 28 deaths and 53 marriages. The vital statistics for 2007-2020 showed 20 births, 30 deaths, and 28 marriages. The 47% decline in marriages, coupled with a slight decline in births, happened at the same time the island’s population was aging.

Census data bestow Maine with the distinction of having the oldest median age in the country. State data and local data as well as island observations confirm this phenomenon.

The current population numbers are not significantly different from those reported by two islanders who have been counting the February population since 2018. They estimate this year’s deep-winter population at 219. Meanwhile, the decennial Census determined the number of people on the island on April 1, 2020 to be 234. Given the time of year for each count and the passage of time, it is not unreasonable to expect a 10% difference in population.

An accurate local count is extremely important to the town’s fire and rescue service and its wellness committee, among other groups. They may reach out to residents who might need assistance during bad weather or make sure the residents, some of whom live alone, receive meals or are remembered with a “winter blues” gift bag. These actions are consistent with the comprehensive plan’s vision to provide a livable community for young and old, and to provide services so residents may live and age on the island.

Information in the town’s 2008 comprehensive plan indicated a decline in the number of younger people. Since then, between 2010 and 2019, residents ages 18-54 declined from 51% and now represent just 27% of the island’s population. Census figures from the same time frame also show the percentage of adults ages 55 and older grew from 40% in 2010 to 53% in 2019.

Meanwhile, the number of adults ages 45-64 has more than doubled between the 1994 and the 2008 reports.

KEY POINTS:

- Residents ages 18-54 declined from 51% to 27% of the population
- Residents ages 45-64 have doubled

Population by Age Group as a Percent of the Population Ages 18 & Older

	2010	2019
18 to 24 years	6%	3%
25 to 44 years	14%	19%
45 to 54 years	31%	5%
55 to 64 years	17%	25%
65 to 74 years	15% 40%	15% 53%
75 years & over	8%	13%
Median age (yrs)	51.1	57.7

Source: ACS 2010, 2019

KEY POINTS:

- In 2010, Long Island’s residents ages 55 and older was 40% of the population
- By 2020, that age group had grown to 53% of the population.
- Younger population has declined significantly, particularly ages 18-24 and 45-54

A breakdown of the three age groups in the 55-and-older category shows exactly where the 13% increase occurred. The group of those ages 55-64 - generally those approaching or starting retirement - grew by 8%. The group over age 75 grew by 5%.

The group in between - those ages 65-74 stayed flat at 15% of the population. The 5% increase in the age 75-plus cohort suggests that Long Island’s rapidly aging population is finding ways to continue to live on the island, probably with the help of friends and neighbors and advances in health care. The median age for those living here year-round increased by 6.1 years to 57.7 in 2019.

Population 65+ % of population

	2010	2019
65 to 74 years	15%	15%
75 years and over	8%	13%
TOTALS	23%	28%

Source: ACS 2010, 2019

Seasonal Population

The year-round information doesn't tell the full story of how Long Island’s population has changed since the last comprehensive plan was published in 2008. For decades, Long Island has had a significant summer population. The Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035 Survey), local population counts, information in town reports and Casco Bay Lines (CBL) ridership data all show the year-round population is slowly declining, but seasonal residents are staying longer, beyond summer months. Seasonal residents outnumber year-round residents. Many are folks with lifelong ties to the island and are now retired and have more time to spend here.

Island population estimates conducted by Mark Greene and Lorinda Valls, who have been performing population island counts since 2018, estimate that in June, about 347 people occupied 164 homes on the island. By mid-July, the island’s population was estimated at around 900 people occupying

some 341 homes. At the end of the season, in October, there are still about 362 people on the island occupying about 150 homes. This increased seasonal population, on the island for a longer period of time each year, has an impact on the island's municipal services as well as the town's grocery store, gasoline tank and food establishments.

In the LICP2035 Survey we saw most respondents spend time on the island during the summer with 97% here in July or August. But we still saw 88% spend time in September and 75% in October. According to this data, the lines between summer people and year-rounders are blurring. This data shows that the respondents are staying longer than they might have in the past. As early as April, 58% of respondents said they were on the island.

COVID helped change the population a bit during the winter of 2019-2020 when a handful of families from major cities moved to the island for the isolation and freedom to safely walk island beaches. During the summer of 2020, some arrived by barge in large vehicles as a way to transport food and families for their visit and to avoid the crowds on CBL ferries, something not seen in previous years.

We have also seen an increase in the number of visitors who have jobs that permit them to work remotely. During the summer it is not unusual to see them clustered near the library taking advantage of what was - pre broadband - the island's fastest internet. The library, in the spirit of community, welcomed them with chairs and an umbrella so they might work out of the sun.

Because of the size of the seasonal population and the visitors' longer time in residence, the town is dependent on them, largely because they support local businesses. Most significantly, one town official notes, seasonal property owners, through their property taxes, support in large part the year-round operating expenses for the town.

One segment of visitors are folks known as "daytrippers" who take ferries from the mainland to the island and often walk in groups or bike to the beaches throughout the summer. This is especially common from Memorial Day through Labor Day holiday weekends.

The community's two seasonal food establishments depend on seasonal residents and tourists for business. Both are extremely busy in the summer, especially on weekends when there are lines of folks waiting to order. Some in the community rely on seasonal visitors for rental income to help pay taxes or earn income.

Another indicator of overall population decline is the gradual decline in ridership aboard CBL ferries to Long Island since at least 2015. An examination of spreadsheets provided by CBL shows the decline is spread out across all months of the year. The decline is not unique to Long Island. It was a common scenario among all Casco Bay islands served by CBL, even before the COVID pandemic began in 2020.



It's hard to resist the allure of walking on the divider, especially if Dad is there to help. Photo: Dick Mitchell

Demographics

Results of the LICP2035 Survey create a picture of the community as a whole. Given the high response rate and the fact that the proportion of respondents mirrored the total population, a profile of the total population, including seasonal, year-round, and visitors, was developed.

There were 67%, or 230 respondents who do not consider Long Island to be their primary place of residence. Another 29%, or 100, do consider it their primary home, and 4% or 12 responded with 'other.'

The responses quantified that Long Island is made up of people who have been here for decades. There are 66%, or 219, respondents who have lived on the island for more than 20 years. On the other end of the spectrum, there are 9% or 29 respondents who have lived on the island for fewer than three years.

To learn more about the size of families and groups on the island, the survey asked how many people lived in each respondent's household and 44% responded that there were two people in the household. The rest of the responses were relatively evenly distributed among other choices: 10% of the respondents had one person in the house, 11% had three people, 18% lived with four people in the house, 9% had five, 4% had six, and 4% had seven or more. This data tells us that the vast majority of Long Islanders live in one or two-person households, which validates data extracted from other sources that shows a decrease in families living on the island.

With the large number of two-person households, it is not surprising that 261 or nearly 77% report having no children. School-age children are defined in this survey as those eighteen years old or younger. In total, 23% or 79 respondents have some school-age children in their households. Broken down, 10% had two

children, and respondents with one, three, or four or more children all fell below 10% of respondents. In the 2010 census, the island had 59 year-round residents under the age of 24. According to the survey data, there are 19 year-round families with children under the age of 18. This survey did allow for multiple responses from each household, which may create some bias in these results. There are 60 families with children under 18 who do not consider Long Island their primary residence.

The overwhelming majority of people who answered the survey own their homes on Long Island. When broken down into percentages, 93% of respondents own their homes while 7% rent. The high percentage of homeowners helps point to a gap in availability of rental properties on Long Island. It also points to the fact that the vast majority of respondents pay taxes to the Town of Long Island and likely have a financial and emotional investment in Long Island's future.

The survey also asked respondents to select an option that best described their current employment status. More than one-third of all respondents selected 'Retired.' Nearly 30% (103) said they commuted to work off island. Of those 103, 27 or 26% consider Long Island to be their primary residence. The next largest category of respondents listed their employment as "Other," closely followed by 14% who work on the island remotely. Another 9% work at jobs located on the island. Students, the unemployed, and full-time caregivers comprise nearly 6% of the responses. The smallest number of employed people represented in this survey are those who work on the island, which suggests that the town's economy could benefit from the creation of more on-island job opportunities. The small number of island workers can also reasonably be expected to grow smaller as the island's working population ages, which raises even

LONG ISLAND POPULATION BREAKDOWN

Total:	234
Population of one race:	229
White alone	227
Black or African American alone	1
American Indian and Alaska Native alone	1
Population of two or more races:	5
Population of two races:	5
White; American Indian and Alaska Native	1
White; Asian	3
White; Some Other Race	1

Source: 2020 US Census

ANCESTRY

American	2%
Czech	2%
English	32%
French (except Basque)	5%
French Canadian	8%
German	10%
Irish	25%
Italian	4%
Norwegian	5%
Polish	8%
Scotch-Irish	1%
Scottish	17%
Slovak	1%
Swedish	3%

Source: ACS 2019 Note: Percentage exceed 100% because respondents chose multiple ancestries.

EDUCATIONAL ATTAINMENT

Less than 9th grade	0%
9th to 12th grade, no diploma	3%
High school graduate (includes equivalency)	22%
Some college, no degree	13%
Associate's degree	8%
Bachelor's degree	37%
Graduate or professional degree	17%
High school graduate or higher	97%
Bachelor's degree or higher	53%

Source: ACS 2019

MARITAL STATUS

Males 15 years and over	
Never married	16%
Now married, not separated	66%
Separated	0%
Widowed	4%
Divorced	14%
Females 15 years and over	
Never married	14%
Now married, not separated	60%
Separated	0%
Widowed	17%
Divorced	9%

Source: ACS 2019

HOUSEHOLD BY TYPE OF LIVING SITUATION

Married-couple family	54%
With own children of the householder under 18 years	19%
Cohabiting couple household	3%
Male householder, no spouse/partner present	18%
Householder living alone 65 years and over	14%
Female householder, no spouse/partner present	26%
Householder living alone 65 years and over	21%
Households with one or more people under 18 years	11%
Households with one or more people 65 years and over	21%
Average household size	2.24
Average family size	2.95

Source: ACS 2019

more concerns for the future economy of the island.

Most people identified with the West or East end of the island. These percentages broke down into 43% of people living in the West Region, 41% in East and 15% in Central. It is important to note that, as many islanders have pointed out, the reason for such a small number of respondents in the Central Region may have to do with the fact that a good portion of that land is conservation land, known as 'The Area.' Overall, this question reflects not only the geographic spread of people who answered this survey, but also how strongly residents of the island identify themselves with their neighborhood.

Long Island relies on volunteers, some of whom receive small stipends from the town government, to do everything from governing the town to running committees like finance, planning, and the school board. The town's emergency services are run by volunteers. The wellness council and community organizations that we depend upon for social engagement like the library, historical society, and civic association are all run by volunteers. Those who consider Long Island their primary residence are more likely to support investment in the school, as well as more likely to have volunteered. This data shows that 66% of respondents (227) do currently volunteer on the island, and approximately 34% do not. This confirms that the vast majority of citizens volunteer in some capacity in order to run the town. When asked about volunteering in the future, survey responses show more than 60 percent of the volunteers will be 55 and older.

When taking all age categories into consideration, 67% of respondents in the LICP2035 Survey are over the age of 55. The two largest age categories represented in the survey are 55-64 at 25%, with 84 respondents, and 65-74, with 92 respondents at 27%. It is also important to consider that even though this response data shows that



Long Island's long-time families have had an impact on the island. In 2019, the Long Island Historical Society featured an exhibit that traced descendants of the Murphy brothers who arrived on the island more than 100 years ago. Photo: Ginny Stowell

the vast majority of respondents are over the age of 55, that is a fairly representative view of the island population. The most recently available data breaking down age groups on Long Island from the 2010 Decennial Census shows that upwards of 44% of the island's year-round population is over the age of 55. The over 55 demographic has significantly increased over the past 10 years. Comparing 2010 census data to the LICP2035 Survey data set we see the under 24 age category has decreased from 26% of the census population contrasted with 5% of the LICP2035 Survey population. Alternatively, the over 55 age group has increased from 44% of the census population to 67% of the LICP2035 Survey population. It appears that the 2020 Decennial Census figure for Long Island, 234, comports well with a carefully executed island count performed by knowledgeable island residents. This data paints a picture of an island that may be shifting to a larger older population while losing much of its younger people,



Long Island School students, family and friends gather 'round to listen to a community member who frequently volunteers on the island. Photo: Long Island Historical Society

whether we are looking at year-round only or combining with seasonal population.

Gender identity of respondents was heavily skewed towards women, with 59% of respondents identifying as female. Approximately 34% identified as male and 7% of respondents elected not to answer the question. In the LICP2035 Survey, genderqueer and not specified are included as potential answers as well, although less than 1% chose 'not specified' and nobody selected genderqueer. Data from the state of Maine 2010 census shows 50% of the town was male and 50% was female. Although those numbers are outdated, it should be noted that the survey results present a less even picture of male and female responses. This is the question that does not appear to be demographically representative of the town unless there has been an extremely dramatic change. The state of Maine census data shows that the total population has been steady, but the survey data would indicate there has been a shift from an even split between men and women to a demographic more heavily weighted towards women. It may be that the population dynamic has

changed, but we do not yet have data from the census to show this.

The majority of respondents identified as 'White or Caucasian,' which made up 307 or 90% of respondents. The second largest response was 8% of respondents who elected not to specify, while the third largest was 1% who identified as 'Asian or Asian American.' The rest of the races/ethnicities each made up less than 1% of respondents. As a state, Maine is one of the whitest states in the nation. According to the 2020 census data, the state's population is 91% white. Therefore, according to this survey data Long Island's racial makeup is very slightly more diverse than the state at large.

Long Island's 2019 median household income for year-round residents, \$80,556, is higher than Cumberland County's \$76,059 median, Maine's \$58,924 average, and the US median of \$65,712. The town's median income ranks 12th in Cumberland County. The island's median income is 81% higher than the 2010 median of \$44,583 according to a comparison of American Community Survey data.

Median Household Income, Cumberland County cities, towns and islands

1	Cape Elizabeth	\$123,116
2	Falmouth	\$121,285
3	Frye Island	\$118,750
4	North Yarmouth	\$113,994
5	Cumberland	\$111,890
6	Scarborough	\$94,905
7	Yarmouth	\$89,984
8	Pownal	\$88,250
9	Freeport	\$86,128
10	Gorham	\$84,767
11	Harpswell	\$81,922
12	Long Island	\$80,556
13	Windham	\$78,284
14	Gray	\$77,267
15	Raymond	\$76,579
16	New Gloucester	\$74,769
17	Standish	\$74,688
18	South Portland	\$69,290
19	Chebeague Island	\$68,333
20	Naples	\$67,935

Source: ACS 2019

Median household income: National perspective

Long Island	State	Nationwide
\$80,556	\$58,924	\$65,712

Source: ACS 2019

The seasonal residents of the island tend to be wealthier, our analysis of the survey shows. One impact of their wealth is the increased price of real estate. One home sold in 2020 for \$950,000. Three sold in 2021 for between \$1 million and \$1.3 million, the first known public sales to hit the \$1 million mark. One town official noted that the town’s seasonal population has or will change demographically, leading to more affluent families coming to the island as a result of the increased values of island properties.



Long Island is home to many generations of families who share a love for the island. Family members often share the same artistic talents that enrich the community. Photo: Dick Mitchell

NOTE on Sources: It’s important to note that there are multiple sources for population estimates, each with different estimates. Even within the Census Bureau, there are multiple estimation programs. For population snapshots every 10 years, we relied on the Decennial Census, the constitutionally mandated population count used to determine how to apportion members of the House of Representatives across the United States. Another series, The American Community Survey (ACS), provides socio-economic data such as income, housing units, family types, households, etc. This survey data is produced annually but is based on five years’ worth of survey data. The ACS does provide a population estimate, which is higher than the US Census Bureau’s estimate series.

Implications of Population and Demographic Trends

The rate of population growth will continue to slow, but shortage of year-round housing will need to be addressed

The rapidly aging population will have an immediate impact on Long Island. With the lack of people moving into the island community, the 47% decline in the number of marriages and the decline in the elementary school-age population is already happening. While state and federal population data differ slightly, all agree Long Island's population is dwindling as its residents age.

In spite of the island's slowly declining but rapidly aging population, we expect demand for housing for the general population to continue to exceed availability. One reason is the trend of selling and converting year-round homes to summer-only residences, making them unavailable for year-round rentals. The island's Year-Round Housing Corporation (YRHC) reports that 50 homes over a recent 25-year period have undergone this transition. The YRHC estimates less than a dozen year-round rentals exist on the island today.

Short-term summer rentals are more attractive than ever before for homeowners. This is fueling the lack of year-round housing stock for the longer term and year-round rentals needed to attract families and skilled workers. Queries on the "Town of Long Island 04050" Facebook page tell the story. Some people are looking for a weekly rental at least a year in advance. Others are looking for new accommodations because a longtime rental has been sold or is no longer available.

Another reason the demand for housing will exceed availability is the lack of contractors to build, remodel, or make repairs. This problem is well documented in written survey responses where those responding to the survey noted the lack of carpenters,

plumbers, landscapers, painters, repairmen, heating and cooling services, and electricians.

We expect demand for housing for young families will be so costly that they will continue to be priced out of our island real estate market. The YRHC has been monitoring housing issues for more than a decade. The group's updates, published in the town's annual report, have repeatedly focused on the lack of year-round housing because of the island's large number of unheated or poorly heated summer homes, plus the lack of affordable housing in general.

In the town's 2012-2013 annual report, the YRHC stated that "The final costs of building our two rent-to-own houses exceeded our planning by nearly \$100,000 when all was said and done. We appreciated the offers of interest-free loans to bridge the gap that several individuals made. The added cost



The island gang tries to keep warm with sweatshirts as they mug for a mom. Photo: Janice Avignon

of these loans unfortunately pushed the monthly rents far above our \$850 monthly “affordable” target. We reluctantly withdrew from the MaineHousing program for this project.”

Since then, the YRHC, which has 501 (c) (3) status and borrowing power, has been looking for opportunities. “What is missing is a small band of dedicated folks with the will and understanding of this slow-motion[sic] crisis,” the group stated in its report in the 2019-2020 town report.

While housing costs can affect all age groups, the declining number of young families living on the island makes it clear this is the group most affected by housing costs.

The island’s declining pool of workers and volunteers means the island will be unable to fill critical positions

State and federal Census data and observable evidence continues to show the number of young families with children on the island has declined since 2000.

In our research and interviews, residents cited many reasons for the decline of residents in this age group. The decline in the number of young and middle-aged residents is already occurring. Further analysis of the data shows at least 60 percent of the volunteers will be ages 55 and older, whether they are year-round or seasonal residents. The volunteers’ advancing age could likely be a constraint on their ability to volunteer over the next 15 years.

While 19% or 65 respondents answered that they already volunteer, 58% (198) indicated willingness to volunteer in the future. Fully 23% of respondents (78) were not interested in volunteering. With fewer people planning to volunteer in the future than are volunteering now, the town faces a potential critical shortage of volunteers to run its fire

and rescue team, town boards and civic groups.

The lack of young families also puts the future of Long Island, as we know it, in jeopardy, limits the number of much-needed able volunteers to perform critical tasks, reduces or eliminates the number of job-age residents to work on the island, and could force scaling back of the elementary school.

While jobs for the town and its businesses are already difficult to fill, that challenge will become more difficult moving forward. The town’s well-known shortage of mechanics, construction workers, sternmen and women and others will only grow worse. Fortunately, our community has neither a major employer nor does it need to make additional efforts to serve a large daytime population that would exacerbate the shortage.

The cradle-to-grave island experience so treasured for generations is at risk of disappearing. This trend began affecting the island’s construction industry around 2015-2016, according to contractors. Then COVID created a more serious shortage of workers. During the summer of 2021, one island food establishment had to cut back hours after it could not find enough employees to keep the doors open every day.

The high price of buying homes, lack of year-round rentals, the high costs of living on an island, and the expense and difficulty of keeping a car on the mainland are cited most frequently causes for the dwindling number of young families with children. Demand for available and affordable housing continues to be strong and will be stronger as the community employs strategies to attract and retain younger population.

The elementary, middle and high school populations will continue to decline

When the Long Island Community School opened its doors for the 2021-2022 school year in August 2021, every child on Long Island was old enough to attend school. As we prepare this report, there are no preschoolers waiting to attend our two-room elementary school. The town's eight children attend the pre-k through-5 school along with seven children from Great Diamond Island.

Students go on to attend middle school and high school in Portland. For the 2021-2022 school year there are six in middle school and nine in high school, for a total of 30 students. The town of Long Island pays their tuition.

The total number of students in grades pre-K through high school is expected to remain relatively stable at about 30-32 students through the 2022-2023 school year according to the Long Island school superintendent. Meanwhile, the number of elementary school students is expected to drop by 50%.

There were 10 preschoolers on the island in 1994 waiting to start pre-kindergarten. In

2006 there were six. As noted above, today there are none. Census data, and well-documented events like the declining school population demonstrate the island is aging before our very eyes.

Elementary School Students by Grade, 2021-2022

Pre-kindergarten	3
Kindergarten	1
Grade 1	4
Grade 2	1
Grade 3	3
Grade 4	1
Grade 5	2
Total	15

**Total includes 8 students from Long Island and 7 students from Great Diamond Island*

Source: Long Island School



Long Island School students' curriculum includes art and music classes. Islanders have enjoyed performances featuring guitarists and violinists. Photo: Long Island Historical Society

Demand for services will increase, especially with new seasonal residents and aging population

Although the population isn't expected to grow very much or very fast, homes will continue to change hands, likely for increasingly higher prices. In 2021, three waterfront homes sold for \$1 million or more, the first time island homes have sold for such large amounts according to the town clerk.

One longtime island volunteer with experience in housing noted every new home and homeowner requires behind-the-scenes work by Town Hall staff that is not immediately obvious and extends beyond just answering questions and dealing with issues to mundane chores such as car registrations, records updates, map changes and tax bills among others. New residents come with expectations that may exceed available local services like lawn care, car repair, and roof repairs. They also face the shortage of contractors like other islanders. The competition for contractors will intensify because the island's aging population will also need additional help.

Beyond the obvious increase in more solid waste costs and the potential desire for more policing, one island veteran who helped establish the town's government said, "Every new resident increases the need for health care services. The aging of our population and the demographics of many older residents settling here does the same."

On an island where homeowners wait years for simple repairs because of a shortage of contractors, elderly residents will struggle to modify their homes to age in place. In interviews with town officials, one expressed concern about elderly residents living in two-story homes where bedrooms and the lone bathroom are located on the second floor. The official noted that the geometry of some stairways is pretty extreme. "It's not a question of if the person will fall

down a steep flight of stairs, but when that will happen." Residents would be much safer, the official said, in one-story homes. However, in addition to the cost and inability to secure a contractor, a major barrier to such renovations is the town's requirement that buildings occupy no more than 15% of a lot. "This needs to be discussed," the official said. This concern is in line with the comprehensive plan's vision that the town will provide cost-effective resources and services to help people age on the island.

Another concern for the elderly population is transportation, the person said. There is a loose, informal network of friends and volunteers who can drive residents to the Wellness Clinic, the store, and the ferry. The official said a larger aging population will likely require a more formal year-round arrangement involving handicapped accessible vehicles and golf carts that are safe for transport.

The US Census' Community Resilience Program has developed 10 metrics to track a community's risk in the face of disasters, including wildfires, flooding, hurricanes, and pandemics such as COVID-19. Residents with more than one risk factor significantly decrease a community's ability to recover from a natural disaster because they may need assistance that is not available.

The metrics include residents ages 65 and older, some individuals who live alone, residents with disabilities, households with no medical insurance, lack of a vehicle, and a lack of broadband internet service, among others.

The data estimates Long Island and nearby islands have an average ability to recover from a disaster. That conclusion is based in part on 2019 American Community Survey data which, in turn, is based on 5-year averages from preceding years.

What the data - and its conclusion - don't capture is Long Island's rapidly aging

population, so it doesn't capture the growing risk the island faces because aging populations generally carry other risk factors. When contacted, one community resilience program official said, "Most of the time those that are older have additional risk factors. As the population ages in your area it is likely they would show as having a higher at risk population, but," without more data he added, "I can't say that for certain."

The data also do not take into consideration Long Island's waterbound location. If broadband goes out, the entire island is likely affected. If residents need to be evacuated, they would be competing with residents on other islands to get to safety. When contacted about whether the data considered the unusual risks that Long Island and other unbridged islands would face, the program official acknowledged it did not, but his group would consider that in the future. In the event of such a disaster, a much smaller group of residents, young and able enough to provide services, will be met with a disproportionate number of residents ages 65 and older needing help.

Each year, the Community Resilience Program will update its data and its conclusions, helping the island understand what the risks might be. Meanwhile, we as a small community can use its metrics - from living alone to lacking health insurance - to

launch conversations about how to best assess risk and to look out for and care for our aging population.



Being able to age in place on Long Island is deeply cherished. There are several families on the island taking care of senior members, but the island will face a growing need for senior services over the next 15 years as the population ages rapidly and fewer young people will live here. Photo: Towanda Brown

Historical and Archaeological Resources

Historic and archaeological sites on Long Island show evidence that more than 10,000 years ago, Native Americans were the first settlers of Casco Bay. Such occupation has left behind the remains of shell middens along the shores of Long Island and many other neighboring islands. European settlers did not arrive until around 1600. Evidence of later settlers is documented by stone walls, cellar holes, foundations, and wells, as well as more recent military remnants from World War I and II.



Above: Brown's Tower, used to track ships and submarines during World War II. Photo: Towanda Brown

Postcards, from top:

The East End's Gypsy Village Beach as it appeared in the 1930s. Photo: Guy Mitchell, Sr.

The Old Cove, facing the mainland, as it appeared in the 1930s. Photo: Guy Mitchell, Sr.

Mariner's Post Office and street scene from a time when most people walked to get around the island. Photo courtesy of Dick Mitchell

Archaeological Sites

Native American Abenakis are members of the Wabanaki nation or “People of the Dawnland,” as they were the first people to greet the sunrise. They traveled throughout Casco Bay from their winter home on the mainland to feast on fish, berries, shellfish, and native wildlife. They left behind heaps of shells, known as shell middens, that might also contain stone tools, arrowheads, bones, seeds or other signs of their occupation. Their lifestyle changed dramatically with the arrival of Europeans as they were faced with assimilation, warfare, and disease. Many were forced to relocate to more northern climes.

An archaeological survey of Long Island was conducted during the 1980s, whereby the State Archaeologist and the Maine Historic Preservation Commission (MHPC) identified several prehistoric shell middens, all of which are located on private property. To protect those sites from inappropriate interest and disturbance, their location is not made readily available to the public. It is, however, kept on file at Town Hall for use by the Code Enforcement Officer to review prior to permitting any development near these sites. Should a land use activity or structural development or soil disturbance on or adjacent to sites listed on, or eligible to be listed on, the National Register of Historic Places, be proposed, the Planning Board can

determine such and require the applicant to submit the proposal to MHPC for review and comment at least 20 days prior to action being taken by the Code Enforcement Officer. As provided in the Land Use Standards, the Code Enforcement Officer shall consider comments from MHPC prior to rendering a decision on the application. There is one historic archaeological site within town boundaries that has been documented by the MHPC. The Joshua Jenks Homestead, which is a designated farmstead, is located on Little Chebeague Island.

More recently, the MHPC has focused on the effects of severe weather on historic sites. In 2021, its survey of cultural and government officials found only 15 of 134 communities surveyed were preparing to protect sites, and most of those were coastal communities like Long Island. Respondents said they were most concerned about summer and winter storms as opposed to wildfires, drought, and landslides. Meanwhile, flooding was the biggest concern in coastal communities. Several identified county-level emergency management officials as most likely to be planning for such events. Others noted that planning for weather-related damage meant planning for and mitigating emergencies. Although Long Island was not part of the survey, there were responses from Chebeague, Kennebunk, Portland and South Portland.



The Long Island Historical Society's summer programs provide interesting history lessons that have attracted large crowds.

Photo: Nancy Noble

Historic Sites of Interest

There are a number of historic sites of interest on Long Island, although none are listed on the National Register of Historic Places or have any other similar designation or protection. A map of historic sites has been developed to identify locations of some sites of local interest. They are identified by number on the map, as well as in the narrative that follows. The first map shows the wider view of the entire island. Due to the large number of sites clustered in certain areas of the island, the wide view will be followed by a closer look at the West End of Long Island, the 'down front' region in the center of the island, and the East End of Long Island, in that order.

Current residents of the island include descendants of the early settlers who farmed, fished, and were largely self-sustaining. They wisely settled the southern side of the island, where their homesteads were shielded from the northerly winter winds. Evidence of their presence includes a farmhouse foundation, well, and stone walls tracing the outlines of former pastures, an area now overgrown with woods. The foundation of the original school is located on private property (42), as are the remnants of two ice houses (37, 41). There are three cemeteries (34, 40, 46) presently under the care of the Friends of Long Island Cemeteries Committee, which depends



Figure 1: Map of the entire area of Long Island, showing historic and archaeological sites. Created with Google MyMaps

on the Maine Old Cemetery Association for guidance. A fourth cemetery was recently developed in anticipation of future needs. There are also the remains of three Civil War retreats for veterans and their families (5),(26),(29).

With the advent of steamships and tourism, a real estate boom occurred in the 1890s and into the 1900s as summer visitors flocked to Long Island's several hotels, and "rusticators" built summer cottages. Of the several wharves from that era, only Ponce's Landing (12) was rebuilt. Having been replaced by the construction of a new Mariner's Landing in 1997, Ponce's is now owned by the town and is used cooperatively by island fishermen.

On June 28, 1914, just before the outbreak of World War I, the business zone and



V.F.W. members outside the police barracks building
Photo: Long Island Historical Society

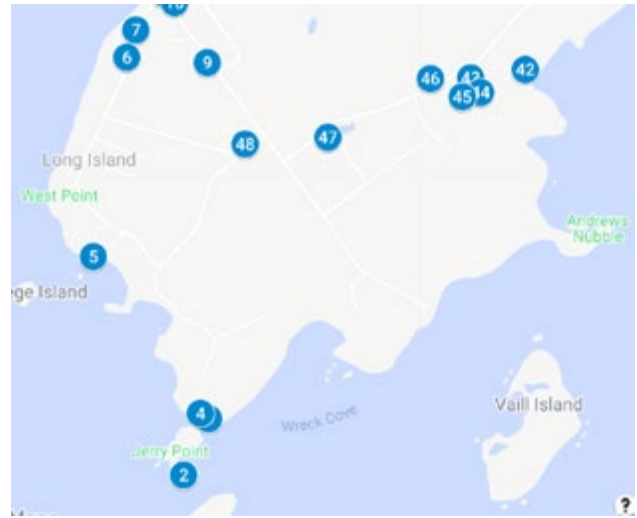


Figure 2: Map of the West End region of Long Island.
Created with Google MyMaps

wharf were ravaged by fire, after which few establishments were rebuilt. As World War II arrived, the government claimed a large part of Long Island, demolishing a good number of homes and cottages to create the Long Island Annex of the U.S. Navy Supply Pier Portland to refuel the North Atlantic Fleet. The town now owns most of the land, with much of it designated as conservation land, while newer homes were constructed around the perimeter.

The current schoolhouse dates to World War II (47), although there were three on the island prior to the war. Of these three, two remain, one as a private residence (33) and one as Ivy Hall Gift Shop (47). The third school was situated next to the tank farm area, now on private property.

One of the stores in the business district, Byers & Sons Long Island Bakehouse, is located on the footprint of the original (Clark & Griffin, E.E. Clarke, Long Island Store) (8) dating to the early 1900s. Rogers' Spa, which later became The Spar Restaurant, is now the site of the Long Island Post Office (11). A building once used as a police station and fire barn (9) has been renovated for use by the town.



Figure 3: Map of the 'down front' region of Long Island. Created with Google MyMaps

There are two churches: Evergreen United Methodist Church (28) built in 1879-1880 and active year-round, and St. Mary Star of the Sea Catholic Chapel (10) built in 1926 and active seasonally.

Military Remnants

Remnants from the military presence on Long Island during World Wars I and II include a number of structures built by the U.S. Army and U.S. Navy. Among them are the U.S. Army Coastal Artillery fire control tower (43) searchlight (44), dormitory, stable, and well house (45) located on the southern side of the island. Along the northern side from east to west are a boat repair shop (16), a small generator house to power the ships (17), fire station garage (Community Center) (18), maintenance building (19), small boiler house (20) and administration building (Town Hall) (21). A breakwater (15) and remains of a Navy pier are located nearby. Along Island Avenue to the east there was a boiler house (22), generator house (23) and public works repair

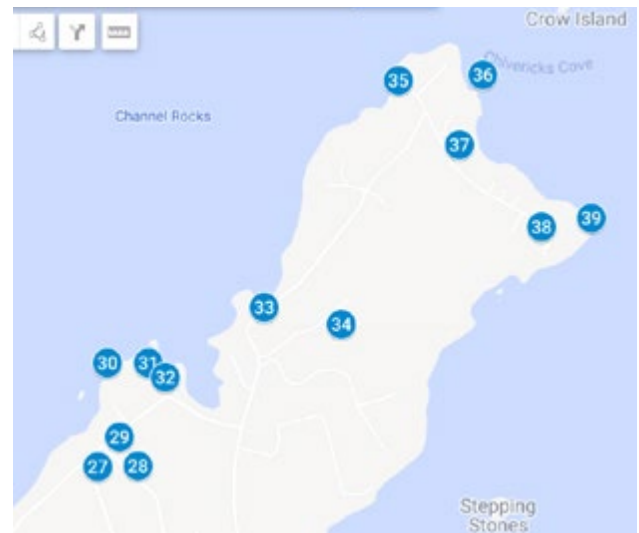


Figure 4: Map of the East End region of Long Island. Created with Google MyMaps

garage (24), all opposite the tank farm (25), which is now the conservation area. Other remnants of interest include a guard house (13,) seaplane hangar (30), officers' quarters (32), two breakwaters (15, 36), barracks (4,14, 38), and gun emplacements (3, 39).

Fort Lyon (50) military remnants on Cow Island include two gun batteries: Battery Bayard, built in 1907, and Battery Abbot, built in 1909. With the guns long removed for scrap, the island is now the site of Rippleffect's outdoor adventure programming for youths.

Little Chebeague Island

Approximately two thirds of Little Chebeague Island lie within the boundaries of the Town of Long Island, while the remaining third is part of the Town of Chebeague Island. As with a number of other islands in Casco Bay, there is evidence of early Abenaki occupation during the warmer months in the form of shell heaps. By the 19th century the island had become developed - there was a farm, a hotel, cottages and a bowling "saloon" until fire destroyed the hotel in 1893, leading to the island's gradual decline. In 1942, the U.S. Government took over use of the island for a fire fighting school, as well as a recreation area for servicemen stationed throughout Casco Bay and aboard nearby ships. The State of Maine acquired the island during the 1970s. Today it is managed by the Bureau of Parks and Lands for recreational purposes in collaboration with the Maine Island Trail Association. The trails are posted with interpretive signage that helps share the story of this unique island, while volunteers work to keep the trails clear of invasive Asiatic bittersweet. The popularity of this asset is most obvious by the presence of numerous boats either beached or at anchor on the eastern side of the island during the summer months.

Although there are few military remnants besides the former fire-fighting trainer, there are a number of documented remains of pre-war cottages, as well as a barn associated with the farm. The Joshua Jenks Homestead (49) is the only historic archaeological site that has been documented for the Town of Long Island. Richard B. Innes, along with a group of volunteers, created the system

of trails that connect some of the sites of collapsed cottages. Innes is also the author of *Little Chebeague Island: Its History from 1874 to 2002*. Archaeological sites have been identified by the State Archaeologist and the Maine Historic Preservation Commission. Their locations are kept on file at Town Hall for use by the Code Enforcement Officer, although development on Little Chebeague is not expected. This information is not available to the general public.

Long Island Historical Society



The Long Island Historical Society, Inc. is a 501(c)(3) organization dedicated to the preservation, research, collection, and display of objects of historical significance to the Town of Long Island, the City of Portland, and the neighboring islands in



A Long Island Historical Society docent explains one of the exhibits to visitors at the society's museum, which attracts young and old each summer.

Photo: Meredith Sweet



Meredith Sweet was surprised as she learned the historical society's processing room has been named in her honor. The dedication took place at the 2018 annual meeting. Photo: Nancy Noble

Casco Bay. Established in 1995, the Society depends on a broad volunteer base to actively collect written materials, artifacts, and oral histories from island residents and those with an intimate connection to the

island. Archival material is stored in a climate controlled atmosphere in a dedicated room in the basement of the Long Island Learning Center. The Society also has an office and exhibit space in the Long Island Community Center on Wharf Street. Meetings are held every month or two throughout the year and an exhibit is mounted for the enjoyment of residents and guests during the summer months. Additionally, a lecture or field trip is sponsored each summer.

Specific actions that can lead to better stewardship on Long Island are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document. There, readers will find a list of recommendations and suggested strategies that can aid in the protection and management of the island's historical and archaeological resources.



In 2019, the whole island turned out to meet and greet Irish Ambassador Daniel Mulhall, his wife, Greta, and Consul General Laoise Moore, who were guests of honor at the celebration for LIHS' exhibit about the Murphy family. LIHS newsletter excerpts courtesy Long Island Historical Society

Economy

Long Island's economy has been subject to two important forces since the town's 2008 comprehensive plan - increased housing costs and a rapidly aging population that will affect both the town's workforce and the tax base.

The island's largely undisturbed coastline, plus its proximity to valuable fishing grounds over the last century, helped make commercial fishing, including lobstering, the island's most popular and best-known form of employment. It is integral to the island's hardscrabble history, identity, and character.

Generations of families lobstered or fished together or with other island families. Being someone's stern man or stern woman is a rite of passage because lobstering is revered on the island. But continuing changes, especially the significant increase in the cost of real estate - three homes sold for \$1 million or more in 2021 - and the accompanying tax bills have changed who can afford to live and work on the island.

The aging of the island's population has had significant implications for the island economy because there are fewer island residents in the workforce, a problem that will become more obvious as the population ages and declines over the next 15 years. Meanwhile, the popularity of and development on the island has made it more challenging for working individuals and their families who simply cannot afford to live on the island.



Byers and Sons Long Island Bakehouse provides baked goods, pizza and sandwiches, and beer and wine served in their cafe.
Photo: Nancy Noble



Boathouse Beverage and Variety continues to be a lifeline to islanders by providing year-round access to groceries and essential household items. Photo: Linda Ferguson McCann



The Bakehouse is also the site of the gas pump with the prettiest view in the State of Maine.
Photo: Linda Ferguson McCann



Many Long Islanders commute to jobs in town on the early ferry and are greeted with sight of the waterfront at dawn.

Photo: Linda Ferguson McCann

One positive trend has been technological enhancements have made working remotely from the island more practical - and a lot safer in the COVID-19 pandemic - for many workers.

Proximity to Portland

There is no bridge to get from the mainland to Long Island, but residents do have the advantage of relatively close proximity and reliable access to the greater Portland area. As a result, the economy of Long Island is more closely aligned with that of the greater Portland area than some other more remote inhabited islands in Maine.

The Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035 Survey) shows 31% of residents commuted a relatively short distance on regularly scheduled ferry service to the mainland for work. That is an example of how the Long Island economy, while distinct, is intertwined with that of the Greater Portland-Cumberland County economy.

In addition to employment, islanders also benefit from the ability to reasonably travel into town for recreational, entertainment, shopping, healthcare and services.

Mainland residents also have the opportunity to travel to Long Island to provide services or for their own recreation. For example, in 2021 the Norton property down front sold for \$1.2 million. Investors are planning to build a marina. Work is already underway. One large building on the property was re-roofed in 2021.

Still, year-round islands in Maine are an endangered species, and to insure they have an opportunity to thrive, the economic policies of both the remaining islands as well as the State of Maine should recognize and address this reality.

The Town's role in the Economy

The Town of Long Island supports approximately 234 year-round residents, according to the 2020 Decennial Census, and as many as 800 to 900 residents during the summer.

The state economist's office projects Maine will lose 27% of its residents under age 65 by 2028 because of aging and a lack of migration to the state. This trend is already beginning to shape Long Island's economy. The number of elementary school students is expected to drop by 50%. The decline in the number of younger families limits the island's financial horizons and will greatly impact the tax base.

Meanwhile the island will experience a 45% increase in population of residents 65 and older. The most serious population shifts occur between 2018-2023, while the population shifts slow down slightly between 2024-2028.

Because of these population shifts, the town's priorities include on-going efforts to promote and develop year-round housing opportunities, including cluster housing initiatives. The town believes both are necessary because a strong population base and education system are the underlying foundation for future economic development.



The entrepreneurial spirit is alive and well on Long Island, even in the youngest generation. Photo: Candace Dale

Long Island is an active member of the Greater Portland Council of Governments (GPCOG) and is included in its economic development plans as either a direct or indirect beneficiary of their planning process. The island supplies data and feedback to GPCOG and Cumberland County as needed. There are no Tax Incremental Financing districts on Long Island.

Financing for economic development projects such as Ponce's Landing and Mariners Wharf include bonds and/or commercial loans funded through the local property taxes, Cumberland County Community Development Block Grants grants, and other state grant programs such as the Maine Department of Transportation Safe Harbor Improvement Program.

Future economic activity involving public facilities needs include accommodations for transient boaters, public toilet facilities, and the town's on-going plans to improve our landing sites, Mariners Wharf, Ponce's Landing and the barge landing ramp at Any Tide Landing, locally known as Boston Sand & Gravel (BS&G).

The largest impediment the island faces is the need to secure financing generally through successful grant applications. The island already has broadband available. Three-phase power is not necessary. Because the island relies on individual wells and septic systems, sewer and water systems are not a concern.

Zoning

Long Island does not have a traditional downtown or a village center as its economic engine, but it does have what islanders affectionately call "down front." The commercially zoned area on Wharf Street and Island Avenue consists of a year-round grocery store with a walk-in cooler, a post office open six days a week, a restaurant with a bar that also sells the gas from the

island's only fuel tank, and a commercial kitchen for take out meals with limited on-site seating. The proposed marina adds another dimension to the town's business district.

In the commercially-zoned business district, the town's zoning ordinances provide for permitted activities and conditional activities in the business district. A conditional use requires the approval of the planning board. In addition to the business district, there are permitted business uses outside the district such as being able to run an accounting, hairdressing or similar home-based business. The town has no industrial zoning designation.

As the town develops, local zoning ordinances may need to be amended by the town's planning board to support future economic development efforts. In recent years, the board has presented amendments to the ordinances at annual town meetings.

The Island's Workforce

Employment that provides a consistent and predictable year-round income to families and other households continues to be one of Long Island's biggest challenges. The economy beyond the local area, environmental concerns, and regulatory restrictions compound those challenges.

Two bright spots are the opportunities created by internet accessibility and the emergence of remote work which was accelerated by the COVID pandemic that began in 2020.

Like other year-round islands, Long Island must balance economic development while maintaining the character, tradition, and natural resources that year-rounders, seasonal residents and visitors hold dear.

The island's tiny labor market will only get smaller as the population continues to age. The LICP2035 Survey question about

employment status showed the largest group of responders are not even in the workforce, another indication of how small the island's workforce is and how its population is aging.

The results show the largest group, 36%, or 123, selected 'Retired.' Students, the unemployed and full-time caregivers comprise 19 or nearly 6% of the responses.

The LICP2035 Survey, using rounded percents, shows:

- 36% are retired
- 31% commute to the mainland for work
- 16% other
- 14% work remotely from the island
- 13% are self employed on the island
- 9% work on the island
- 2% are unemployed or otherwise not in the workforce

The next largest category of respondents listed their employment as "Other," at 16%. Next are 48 residents or 14% of the respondents who work on the island remotely. This group is aided by technological advances including expanded and faster internet and video conferencing, a phenomenon that was accelerated by the COVID pandemic between 2020 and 2022.

The LICP2035 Survey respondents quantified this concern when they selected broadband as the island's most needed strategic improvement. While reliable internet and cellular phone service have been available on some parts of the island, the overall access, strength, and reliability needs to be a priority to meet the work needs of islanders, especially those who run businesses or work at home.

Broadband - and very public promotion of it beyond Long Island - will likely be necessary to attract more residents to contribute to the local economy as well as enhance business opportunities on the island. As we publish this plan, state-of-the-art fiber optic cable is being installed in year-round homes by Fidium. Seasonal homes will follow.

The smallest group of employed people in this survey are those who work on the island, which suggests that the town's economy could benefit from the creation of more on-island job opportunities. That group can also reasonably be expected to grow smaller as the island's working population ages, which raises even more concerns for the future economy of the island.

Of that smallest group, 29 or 9%, the best available data indicates that 22 individuals are employed by the town (3 full time, 19 part time,) and an additional 49 volunteers receive a stipend from the town for fulfilling municipal responsibilities or services to the town.

No island business has more than a handful of employees.

Lobstering and Fishing

At a forum of Long Island residents who work in the fishing industry, many cited the need and opportunity for the town to improve the infrastructure of the waterfront, particularly the Ponce's landing wharf and the BS&G landing, to provide safe and efficient access to the water for professional fishermen and women.

The Department of Marine Resources 2019 licensing information indicates just how important commercial fishing is to the island. In all, 44 Long Island residents hold a commercial fishing or lobster/crab license, and an additional 13 residents hold an apprentice or student lobster/crab license. In addition to the commercial licenses, 14 Long

Island residents hold recreational licenses for lobster/crab, scallop, or saltwater fishing.

There are nine Long Island residents who hold a commercial fishing crew license, which allows each license holder to employ as many as five unlicensed crew members. Two residents hold an aquaculture license, and one resident holds a seaweed license. Some Long Island residents are employed part-time in the industry by these license holders. Others have jobs related to the fishing industry, such as those employed at Casco Bay Lobster which brokers fuel, lobsters, and bait. Johnson's Boatyard which has built many of the newer boats, services many more, provides dock space for smaller boats as well as winter storage for most of the island's boats.

Climate impacts such as warmer temperatures in the Gulf of Maine, sea level rise, and more frequent intense storms are a current and future threat to the viability of the industry. Recent federal regulations intended to preserve the critically endangered right whale will further challenge island fishermen.

However, with these changes, opportunities do exist for significant economic development and the employment that follows. These opportunities include improving infrastructure to support the



Long Islanders are fortunate to purchase recently caught lobsters directly from local fishermen. Photo: Dick Mitchell

fishing industry and facilitating emerging aquaculture industry opportunities.

The climate and relative remoteness of Long Island have historically presented challenges to significant economic development in the past, but with local government and community support, and emerging markets and technologies, opportunities exist to evolve the island economy to meet the needs of Long Island residents while preserving (and even enhancing) the cherished and unique character of the island.

Tourism

Tourism continues to be one of the most significant seasonal economic opportunities for the island. Beginning around mid-May, the island's business community starts switching gears to sell food, clothing, gifts and souvenirs to the summer swell of vacationers, bicyclists and beachgoers. Between Memorial Day and Labor Day, each island business generates the bulk of its sales. Almost everyone who comes downbay from Portland will be aboard a CBL ferry that also carries freight including food and non-perishables for island consumption.

The island's two food service establishments, Hardshell Cafe and Byers and Sons Bakehouse, expand their hours. The island's lone grocery, Boathouse Beverage and Variety, is also open for more hours daily as it stocks up on popular snacks and beverages.

The Ivy Hall gift shop, which generally opens for the season around Mother's Day, moves from weekend hours to a 7-day-a-week schedule around Father's Day. It features clothing, special occasion gifts and local hand-made items popular with both islanders and others. Operated by the Evergreen United Methodist Church, the gift shop uses its proceeds to help islanders with its food pantry and fuel assistance. The gift shop also donates money to the Star of the Sea Catholic Church and Changing Tide, an

island assistance fund. On an island as small as Long Island, it is not surprising that -aside from town taxes - some consider the gift shop to be Long Island's economic engine.

The town's recreation department ramps up its summer programs, mostly for children, from pottery to soccer to day trips to Jewell Island. The programs attract many returning seasonal attendees.

During the warmer months, Katharine's Garden offers a selection of produce, herbs, and plants which pair well with freshly caught lobsters from Fern Park Lobster's Beach Avenue location.

Each business capitalizes on the island's unique assets - summertime sun, quiet beaches and breathtaking sunsets. The island has a large core group of vacationers who return each year and to celebrate summer rituals.

The town's transfer station expands hours to accommodate visitors and residents coming and going on weekends. Some seasonal visitors take advantage of the town's seasonal parking permit, as opposed to the more expensive year-round permit to park their vehicles down front.

The June issue of the island's much-loved bimonthly newsletter, The Long Islander, devotes several pages each year to useful island information, including phone numbers and hours for all the island's business establishments.

The Long Islander, produced by the Long Island Civic Association, also sponsors events popular for the island and its visitors, including a sand castle contest, a picnic, and a baseball field. The Long Island Historical Society usually hosts one or two events about the island's past that generally sell out because of their popularity with seasonal residents and visitors.

Tourism peaks in July, around the time of the island's boisterous, creative and just plain fun



Fairs and festivals, such as the Wharf Street Festival, offer artisans and cooks on the island an opportunity to sell their hand crafted items and island delicacies. Photo credit: Nancy Noble

July 4th parade. The island's economy perks up as lobstermen and women sell lobsters for family gatherings and entrepreneurs sell island themed t-shirts and sweatshirts. Some become instant classics like the one sold by the Long Island Store which asked, "What time is the noon boat?"

The results of the LICP2035 Survey show more people are spending four to six months on Long Island, not the traditional two to three months. Their lengthened presence affects the island's economy. Ivy Hall, for example, continues to staff its gift shop on weekends from Labor Day to Columbus Day.

For the island and its businesses, promoting tourism while trying to maintain the affordability, livability, and unique character of the island is a challenge. The LICP2035 Survey results quantify the importance of maintaining the island's character.

However, the survey also notes some deficiencies in the island's services. There is a lack of public toilets, lack of transportation to and from the beaches, and desire for a publicly accessible marina, although one is proposed. These deficiencies have likely limited the economic opportunity to be gained from short-term tourism on the island.

Construction

Since the 2008 Comprehensive Report, 17 single family homes have been built or rebuilt. Most island construction resources appear to have been engaged for renovations or maintenance and repair to existing buildings, underscoring the challenges of finding someone to build, newer, smaller, affordable house. The wait for any major construction is two or three years.

The construction and trade industries have traditionally been a significant source of economic activity and employment on the island. Demand for island builders, plumbers, electricians, and other tradesmen has only increased since the 2008 Comprehensive Plan as they have struggled to meet the demands of a strong housing market spurred in part by extended and historically low interest rates.

Almost all are home-based island businesses.

In the LICP2035 Survey 45% of respondents noted "attracting new businesses" as one of the town's most important priorities for improving the quality of life on Long Island. In written comments, respondents detailed complaints about their inability to find contractors to build new homes, renovate, add decks, properly maintain their homes and get projects completed.

Data from the 2020 US Census indicates that the median household income for Long Island is significantly higher than that of Portland and more than half of Cumberland County's cities and towns. For Long Island, that median is \$80,556 versus \$73,072 and for the state of Maine overall it is \$57,918.

While 31% responding to The LICP2035 Survey say they are retired, other responses to the survey tells us more about them. It shows 27% of the respondents reported income of \$150,000. Another 29% declined to answer the question, however, an analysis of those responses shows they are primarily

women ages 55 and older in one or two-person homes who do not consider Long Island as their primary home. They are seasonal residents, spending more time here than they did in the past. In other words, they likely own two homes, have a higher income and be here four to six months a year. Because of their age, they will be more likely to need renovations to help them age in place.

As the island's population ages, the lack of contractors to update homes so residents age in place could be a determining factor in who will be able to stay on the island - and contribute to the local economy. This will be especially true of those struggling to use the stairs in homes with bedrooms and a home's lone bathroom on an upper floor in their home.

At a forum for Long Island contractors held in 2021, the cost and transportation of materials were cited as challenges to the contractors' and tradesmen's abilities to grow their businesses, and the town's ability to maximize the opportunities represented by housing development.

Information from contractors also shows they are affected by the ongoing labor shortage, the unwillingness of workers to commute to the island, the rise and volatility in the cost of building materials, and the expense of transporting materials to the island.

Due in part to the relatively small geographic size and population of Long Island, small changes could have a significant effect on the overall economy, though the changes since the 2008 Comprehensive plan have been gradual.

Looking Forward

While it is clear from the LICP2035 Survey and various public forums, there is both a desire and opportunity for more economic development and attending employment on the island, the logistical realities

(remoteness, weather, seasonal population) create inherent challenges for businesses to view Long Island as a viable and sustainable location.

As a community, there are clearly actions that can be taken and investments made to mitigate this issue in terms of infrastructure, business development, as well as zoning and land use, and facilitating affordable housing options to make year-round residency a more attainable option for more people.

The results and analysis from the LICP 2035 Survey clearly indicates that island residents appreciate the way of life on Long Island, there is also recognition that macro changes to the economy are having, and will continue to have, an effect on Long Island.

The challenge for the community and town leadership is to continue to maintain and enhance the cherished character of the island and our people while acknowledging and responding to these changing economic conditions in a way that will allow the island and its residents to thrive in the years to come.

As a community, we need to planfully support and nurture economic growth and opportunity on the island while recognizing our economy's relationship to that of the other Casco Bay islands as well as the Greater Portland Maine area

Specific actions that can lead to improving the economic situation on Long Island are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document.

Housing

The Town of Long Island is experiencing the same housing issues that are present across the nation. Like Portland, Boston and San Francisco, Long Island has a dire need for affordable housing to attract and retain families to the island. Even a modest housing inventory is a real benefit to all of us.

There is long-standing support for year-round housing. The 2008 Long Island Comprehensive Plan touched upon the value of retaining and attracting families to the island. Likewise, responses to the Long Island Comprehensive Plan Community Survey (LICP2035 Survey) conducted in 2021 noted very specific concerns such as “I’m concerned that there aren’t a lot of families on the island to keep feeding kids into the school system.” Attracting new year-round families was consistent as a priority across all age brackets.

The Long Island Comprehensive Plan (LICP2035) Committee conducted a community forum on housing in August 2021. Attendees expressed full support for more available housing to attract and retain working families. The consensus was that more families would contribute to a year-round community, including a school, and add to the pool of town volunteers and skilled trade professionals. As one attendee stated: “New blood, always welcome!”

Benefits of Available Housing

The first benefit of affordable housing, and perhaps most visible, is to our school. Without housing to retain and attract working families – whether employed on island or not – the pipeline of school age children is diminished. As of 2022, there are no pre-kindergarten-aged children on Long Island. Should this trend continue, it could lead to a declining elementary school population. Because other islands face the same population issues Long Island does, we may not always have tuition students from Great Diamond or elsewhere to keep our school open. The Long Island School is highly regarded for the K-5 education it offers. The school’s demise would be a huge loss for the island community.

The school is the center of community engagement and should be an incentive to young families considering moving to Long Island. Losing the school could potentially mean losing experienced school employees and their families if they were to move away.

The drop in overall population or even the continued shift away from year-round



A much-loved island home reflects the late day sunlight as a large flowering hydrangea stands guard.
Photo: Dick Mitchell

population certainly jeopardizes the small-town cultural aspects of Long Island that many describe in the LICP2035 Survey. Evidence of the impact should a community's school close is described in the July 28, 2021 edition of the Island Institute's *Working Waterfront* which says, "The study showed the economic value of the school as well as its role as a social hub." The school's benefit to our town overall leads us to the second benefit, the economy. Should the school be downsized, it may force some difficult decisions about the size of school staff and services offered as well as the ability of citizens to work and live on the island.

The impact of housing availability and school population has been discussed at Maine Island Coalition meetings in recent years. The islands below had well-established housing initiatives in place.

Cranberry Islands – With 14 students K-8 from Great Cranberry and Little Cranberry islands, five, are in Cranberry Islands Realty Trust (CIRT) properties and one is in a winter rental home. Three of the four high school students live in CIRT properties.

Islesboro – This is a 59 student K-12 school. Of those students, Islesboro Affordable Properties (IAP) houses six students. On the waiting list are applications from families with seven more school/preschool children. Islesboro also has a magnet program for "tuition-in" students who commute daily.

Isle au Haut - All five students currently at the school reside in four rental houses owned by the Isle au Haut Community Development Corporation.

As shown above, the housing-to-school population impact is significant on these islands.

Another factor with housing implications, expressed in the LICP2035 Survey, was the lack of available trade professionals to build and repair homes, properties, appliances, or to perform other "handy services." Thus homeowners resort to obtaining services from the mainland, not necessarily bad by itself, but that trend shifts island dollars to mainland companies, instead of on-island businesses.

There is a need echoed in the LICP2035 Survey about everyday needs from home repair, grounds care, taxi, deliveries, car repair, people to run the stores, work in the restaurants (which everyone seems to want more of), and medical-related personnel for caring for our ever aging population, etc.

Economic growth helps businesses to offer more services, which increases the tax base. That helps control the property tax rates. Any change in seasonal occupancy could reduce the patronage needed to support our existing businesses and essential services such as the Wellness Center and the US Postal Service.

VALUE: LIVABLE

For a remote island community to thrive, Long Island must ensure that people can live and work here full-time. Supporting young families and business owners through initiatives like accessible housing, wellness services, access to the working waterfront, and affordable taxes will allow our island to flourish.

Year-round housing helps to retain and attract families needed to fill critical positions required to run the town, most of which are volunteer. Currently, many Long Island citizens, both seasonal and year-round, volunteer their time and energies to many of the essential services such as the school,



An island dining room is set for another summer celebration. The decorations attest to many parties and the table is set for more. Photo: Chris McDuffie

public safety, Fire & Rescue, and to various town governance boards and committees i.e., the library, planning board and finance committee.

As established in the population and demographics section, the overall population of the town is aging. Younger volunteers are much needed. As an example, on the current Fire & Rescue volunteer roster only five members are under age 30 with 12 members ages 50 and older. An analysis by the LICP Committee illustrates the multiple “hats” many citizens wear, and how the community depends on volunteerism to effectively run the town with some 185 positions, 162 being volunteer positions, all covered by about 100 people. This current dependency on volunteerism is mirrored in many other island communities, such as Vinalhaven.

There is no dispute about the linkage between school, economy, and population. Two real Maine town examples, one from long ago, one very recent, provide the backdrop.

The first is the demise of Criehaven (January 2022 issue of Downeast Magazine), an island just south of Matinicus. Without a schoolteacher, families with school-age children had to reside most of the year on

the mainland for schooling. Without these families for a large part of the year, the general store struggled to operate and eventually closed. The situation trickled down to mail service until lobstermen eventually moved to the mainland.

A second more recent example is the island of Monhegan in the September 10th, 2019, edition of The Lincoln County News, which formed the Monhegan Island Sustainable Community Association in 2002 in response to increasing real estate prices and a dip in year-round residents.

The organization’s mission was to ensure affordable housing for year-round residents. “A lot of the stuff that we all enjoy in the summer wouldn’t happen if there wasn’t a year-round community,” claimed Carol Feibusch, the organization’s secretary of the land trust. “Almost all of the businesses are owned by people who live here year-round,” Feibusch said. “It’s about preserving the community...preserving the community on Monhegan Island!”

These two examples illustrate the importance of available and affordable housing, and how it benefits all residents. A vibrant, highly respected school system provides a place for the local workforce to live and offers a wide range of services. It also increases the pool of volunteers so desperately needed to run our town. Alternatively, a lack of housing stifles economic growth, degrades the school opportunities, and changes the overall culture of the community.

In summary, housing, school, economy, town services and overall population are intrinsically connected. The critical importance of available and affordable housing to the sustainability of the community is evident.

Existing Housing

The following table illustrates the number of households on Long Island as reported by the Long Island Year-Round Housing Corporation (YRHC), cataloged by Mark Greene and Lorinda Valls. This local data source is considered highly reliable because of the team’s depth of knowledge and careful attention to collecting information.

Over the years, local unit inventory has been accomplished by using real estate tax records and visual review of all Long Island neighborhoods. The total number of houses on Long Island is approximately 380, again as reported by YRHC in early 2021. Thus approximately 274 units, or 72%, are seasonal residences, and 28% year-round. The margin of error in this most recent data is +-5%.

As shown on the following table based on YRHC numbers, the number of homes used year-round has increased only incrementally. The pace of occupancy year-round has slowed since 1993-2006 when the number of units in Winter use increased 17 units from 80 to 97. During the subsequent 15-year period from 2006-2021, there were only 9 additional units in use, for a total of 106.



For every island home, there’s a crew working to keep it safe, cozy and ready for the next visitors.
Photo: Dick Mitchell

A review of permits reveals improvements to seasonal units for heating during shoulder seasons, with just a few being occupied year-round.

Figure 1: Seasonal vs. year-round occupancy

	Fall 1993		Fall 2006		Spring 2021	
	Units	% of Total	Units	% of Total	Units	% of Total
In Winter Use	80	22%	97	26%	106	28%
Seasonal use	280	78%	270	74%	274	72%
	360		367		380	

Source: 2008 Long Island Comprehensive Plan Count by town volunteers and information

Figure 2: Source: Year-round housing corporation reports

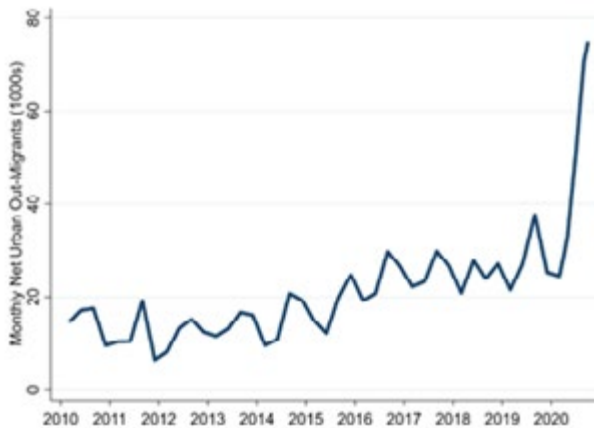
Sample Date	Population		Households		
	Count	% Chng	Count	% Chng	Avg House
February 5, 2022	261	9%	111	5%	2.35
February 1, 2021	239	11%	106	9%	2.25
February 11, 2020	216	4%	97	2%	2.23
February 15, 2019	208	8%	95	6%	2.19
February 3, 2018	192	n/a	90	n/a	2.13

Source: Long Island Year-Round Housing Corporation

Clearly seasonal homes typically do not meet the standards for year-round living as it relates to insulation, heating systems, and even water supply that doesn't freeze over the winter months. So in some respects, a large part of the total town housing stock could be considered "sub-standard," in that it is not suitable for year-round living, which is the thrust of this chapter.

The overall year-round population, and thus housing units, has increased since the pandemic of 2020 began. This urban-to-rural trend is supported nationally as reported by the Federal Reserve in early 2021 in the graph below, which illustrates the accelerated rate of people moving to rural settings. As reported in the most recent 2021 YRHC annual report, the increase is primarily attributed to the pandemic with more families seeking a rural setting.

Figure 3 U.S. urban to rural population trends



Sources: 2021, Federal Reserve Bank of New York/Equifax Consumer Credit Panel, American Community Survey

The question is, how will this trend affect the overall population on Long Island? What about housing needs moving forward? After hearing from experts in the town from the community and the YRHC the estimate is that five additional rental units will be required in

the short term and the population dynamics moving forward will need to be monitored and reassessed over time.

A second more specific need is housing that would support the "aging-in-place" mission of both the YRHC and the Long Island Wellness Council. Many homes occupied by seniors were not designed for single-floor accessible living. Thus, the need exists for this type of housing in order to make aging in-place a safe and practical reality.

Affordability

Consider some data to help define affordability for Long Island. The median household income of Long Island according to the 2000 U.S. Census was \$35,833 (<https://www.mainehousing.org/policy-research/housing-data>). In 2010 the median household income was reported at \$44,583, and in 2019 it jumped to \$80,556. The affordability index reported by Maine State Housing for Long Island as of 2016, was .49, with anything less than "1" meaning the area is generally unaffordable.

According to "Homeownership Housing Facts and Affordability Index for Maine Cities and Towns", by Maine State Housing Authority, the median home price on Long Island in 2016 was reported as \$375,000 and with a median income of \$47,237, therefore nearly 88% of households would be unable to afford a home. An interesting comparison is Portland (which would naturally include neighboring Peaks and Little and Great Diamond islands), which as of 2016 had a slightly higher (though still mainly out of reach) affordability index of .55, based on a median home price of \$262,250 with a median income of \$62,178. Thus, housing is not affordable to those earning 80% of the median income, not only on Long Island, but the greater Portland region.

Current efforts to address this concern have been underway over the past several years

in Greater Portland, though as recently as November 2021, a developer withdrew an affordable housing project after voters collected more than 1,000 signatures at the polls to force a referendum to block the project (Bangor Daily News 11/30/2021).

State-wide, Maine is facing an affordable housing crisis (<https://legislature.maine.gov/legislative-studies-130th-legislature/commission-to-increase-housing-opportunities-in-maine>). In 2021, the Maine Legislature, authorized a commission to study and report on opportunities to increase housing by studying zoning and land use restrictions.

Its report, released in December 2021, had nine recommendations that are now gathering momentum to be codified in statute. The commission recognized that zoning changes alone would not single-handedly solve affordability. Zoning and land use regulations are but one policy initiative among many that can address the challenges. The commission’s recommendations need to be reviewed with an eye towards what Long Island could do in this regard.



A cheery doormat and a friendly reminder welcome family and friends. Photo: Ann Caliandro

Recent state of housing and sales

To understand real estate sales and recent trends we reviewed the Island’s property transfer records at Town Hall, and the Multiple Listing Service database, which proved to provide a reliable digital source.

Figure 4: MLS Long Island sales data over the last decade

Year	Count	Sales	List	Sale/List	Avg Sale
2010	2	\$ 275,000	\$ 294,000	94%	\$ 137,500
2011	1	\$ 538,000	\$ 549,000	98%	\$ 538,000
2012	5	\$ 1,587,500	\$ 1,635,900	97%	\$ 317,500
2013	7	\$ 3,199,000	\$ 3,282,800	97%	\$ 457,000
2014	5	\$ 2,028,500	\$ 2,089,500	97%	\$ 405,700
2015	7	\$ 3,270,000	\$ 3,380,400	97%	\$ 467,143
2016	10	\$ 3,401,799	\$ 3,646,200	93%	\$ 340,180
2017	10	\$ 4,273,500	\$ 4,499,000	95%	\$ 427,350
2018	6	\$ 2,200,000	\$ 2,350,000	94%	\$ 366,667
2019	10	\$ 3,148,214	\$ 3,479,500	90%	\$ 314,821
2020	8	\$ 2,479,000	\$ 2,909,500	85%	\$ 309,875
2021	6	\$ 3,047,848	\$ 3,111,900	98%	\$ 507,975

Source: Multiple Listing Service January 2022

In a small market such as Long Island, the data tends to be skewed by a small number of sales. The early years of this data set are during the Great Recession, which didn't technically end until about 2016, when the real median household income reached its pre-recession level (www.pewresearch.org). That may help explain the double-digit sales count, although the data set is still small. The average sales price in just last year, 2021, was impacted by three property sales exceeding \$1 million.

than Greater Portland median income of \$60,467.

Existing efforts and local regulations

In 2006, Long Island established the YRHC to seek housing solutions for island residents. Chebeague Island, Isle Au Haut, Vinalhaven and Peaks Island housing advocacy organizations were consulted in preparing this report. They achieved varying degrees of success in fulfilling their respective missions of adding more rental and year-round housing to their communities. As an example, Frenchboro created the Homestead Project in the 1980s and developed seven houses and set aside five additional house lots for sale on 55 acres of land donated by heirs of the Rockefellers. Likewise, members of the Isle au Haut Community Development Corporation (ICDC), which was formed in 1999, reported 45 individuals have lived in ICDC homes over a period of 30 years, with 20 still living on the island.

**Figure 5:
A sampling of home sales 2010-2021**



Source: MLS Sales Data 2010-2021

Common lender rules are that homeowners should spend 28% or less of their monthly gross income on a mortgage payment (e.g., principal, interest, taxes, and insurance). Using 2020 sales data above as an example, a sales price of \$309,875, with a 30-year loan at 3.6%, and standard 20% down payment of nearly \$62,000, an annual income of about \$65,000 would be required assuming little other household debt, an amount unaffordable for most younger, first-time homeowners. Thus, the 28% rule would pertain to households with higher incomes



Isle au Haut year-round housing example

In 2006, the YRHC formed a 501(c)(3) non-profit corporation and has worked diligently since then working with the town to set aside town-owned property for homestead development, and with the planning board to amend ordinances related to cluster housing among other activities. The YRHC remains active and has the borrowing power, while the town has land designated for development.

The need for available/affordable housing is clear.

The organization's achievements and activities since 2006 are many as listed below:

- Designed and put in place a successful warrant article at the 2007 Town Meeting to allow the lease of several town-owned lots to eligible candidates. This is for the purpose of constructing year-round dwellings to help retain and keep working families on the island.
- Formed and maintained a 501(c)(3) corporation to oversee future projects and acquisitions, and to become a grant eligible entity.
- Put in place a YRHC candidate selection process as the committee and town moved ahead in offering the town owned parcels for homestead building.
- Continuing advocacy for dedicating land behind the transfer station and other appropriate parcels be preserved for future year-round housing that is sustainable, affordable, environmentally sound, and available to the workforce.
- Conducted the annual "un-official" population and housing counts ("census") as a means to understand the changing dynamics of our full-time population.
- Initiated discussion about the viability of cluster development for housing as a tool to help lower development costs of sustainable housing while at the same time preserving open space and conservation as part of future subdivisions. Result was a cluster housing ordinance.
- Continuously reported via the Town's annual report, the need for year-round, available, affordable housing, and various options for the development of rental homes, and a plea

for others to become involved in moving this critical project forward.

The cluster housing amendment was approved at the 2021 town meeting, though no active developments are anticipated. Available and affordable housing is a complex topic which requires a multitude of strategies to solve.

Most of the land use regulations that were adopted by Long Island in 1993 were lifted directly from the City of Portland's ordinances when Long Island seceded. The ordinances at that time were reviewed and edited heavily to accommodate the island's uniqueness. However, much has changed in the 30 years since then. As discussed elsewhere in this report, there is a new level of scrutiny on the restrictive design of ordinances nationally, regionally, and perhaps now locally, however well-intentioned they were when adapted.

Looking Forward

For the Town of Long Island to be Resilient, Equitable, Resourceful, Livable, and full of Community Spirit, more available and affordable housing is needed. The need and benefits to the community are clear and there is strong citizen support. The housing forum concluded five or six year-round rental units would be "a good start." The town has already provided access to town-owned land to build units for either rental or purchased homes.

In the LICP2035 Survey the issue of 'developing more affordable and scalable housing options' had 109 responses, or 32% of the respondents. Many of the top strategic concerns in survey results require available and affordable housing. These include: Develop ways to expand the number of EMTs (50%); Attracting more businesses and specialty contractors (45%); Attracting new year-round families (36%); and Expanding strategies to increase volunteers (33%).



Two summer cottages, with a commanding view of Little Chebeague Island, bask in the sun in Gypsy Village, on the island's East End. Photo: Dick Mitchell

This all suggests that most residents of the island would support multi-generational investments in available and affordable year-round housing.

The Town of Long Island has several big challenges to address relating to climate impacts, wharf and infrastructure resiliency and housing to name just a few. The first challenge is if there is to be any hope of real progress on housing, town officials and community leaders must do more and become more focused on the topic.

As expressed in several of the past annual YRHC reports, one of the key things needed are one or more devoted sponsors. In the absence of a volunteer, and if the town believes in the benefits of, and is serious about, addressing the housing situation, we, the town, should be willing to financially support a full-time champion to lead the effort. To achieve the addition of five or six

affordable housing units will take a full-time effort. A strategy identified in the 2008 Comprehensive Plan was to “seek to achieve a level of at least 10% of new residential development built or placed during the next decade be affordable” but there simply has not been the focus in monitoring progress against that metric.

There are multiple strategies that have been discussed and proposed many times that should be explored again as they mirror the success of local housing organizations on several other islands.

One strategy is to identify and approach owners of multiple homes about the possibility of designating or converting a seasonal home as a year-round rental unit. There are several ways such an arrangement could benefit the homeowner while providing housing to retain and attract families. A second successful effort at other islands has

been the conversion of seasonal homes to year-round homes, specifically for rental or ownership.

There are federal and state funds for communities with housing needs, and the sponsor would need to assess and pursue all that are practical and available. Recently, there have been conversations among a few town members regarding AVESTA Housing, a 501(c)(3) organization that since 1972 has been addressing local, regional, and national affordable housing needs through strategic collaborations and in conjunction with the Maine Affordable Housing Coalition (MAHC) that has over 100 members ranging from banks to housing authorities. Joining forces with an organization such as AVESTA could possibly provide the necessary momentum for Long Island.

The second challenge is addressing all applicable town ordinances and state laws. The land use zoning and building ordinances foster reasonable property lines and building setbacks to create properties with undue crowding and are based on state rules and laws. Alternatively, the ordinances create restrictive tendencies in that property becomes less “affordable” because it becomes more expensive. Economic theory suggests that over time, as property values increase, moderate income families would not seek to buy or live in these high value localities. Ocean frontage is expensive because it is highly desirable and supply is limited. In addition to \$1 million -plus price tags, property owners must factor in the added costs of living due to commuting and transporting goods and services.

Our subdivision ordinances have quite detailed procedures. To help address this condition, an effort was started in the mid-2010s to designate limited town parcels for “clustered” housing, where the overall property square footage and line setbacks would be retained, but the building envelope set-backs relaxed. This would facilitate

single, multi-family or even multiple single-family residences on a single parcel meeting the standard square footage requirements, which could then share certain infrastructure costs such as site development, driveway, water and septic, and power. This would create economic benefits, thus reducing initial investment costs, making residences slightly more “affordable”.

Septic systems are another example of the complexities of local ordinances and state rules and laws. Both the town and state codes are intended to complement municipal planning, zoning, and land use control. Working together, they are designed to limit groundwater contamination, which is so important given the island aquifer. There are now alternative septic system designs and technology (e.g., aerobic treatment, recirculating sand/peat filter, etc.) with the resulting discharge effectively being clean water. Thus, a strict square footage policy designed for conventional septic fields for building homes could be outdated given the improvements over the past 30 years. Given these advances, neither septic nor water concerns should deter thoughtful housing development.

Specific actions that can lead to improving the housing situation on Long Island are listed in the recommendations for this chapter, which can be found in the ‘Plan Framework’ section of this document.

Agricultural and Forestry Resources



Long Island's back shore is cold, quiet and wonderfully sunny on a winter's day.
Photo: Ben LaMontagne 1995-2014

Agriculture Resources

Commercial Agriculture

At one time Long Island was a self-sustaining farming and fishing community, but the last farm on Long Island disappeared more than 60 years ago. Today many residents maintain family vegetable and flower gardens, but there is no large-scale commercial agriculture on Long Island. The United States Department of Agriculture (USDA) soils data shows there are almost 160 acres of farmland of statewide importance on Long Island. Even though nearly half of this agricultural soil has some type of development on it, this land could still be used for family gardens. The other half of the farmlands of statewide importance are

either on the former Long Island Fuel Farm property or in conservation areas zoned for recreational use.

Although there is no large-scale commercial agriculture on Long Island, there are many smaller community ventures in the town that support the self-sustaining lifestyle that is a hallmark of our island vision and values. These ventures, detailed in the following paragraphs, are aimed at allowing islanders the opportunity to grow their own food, learn about proper gardening techniques, and support future generations in these endeavors.

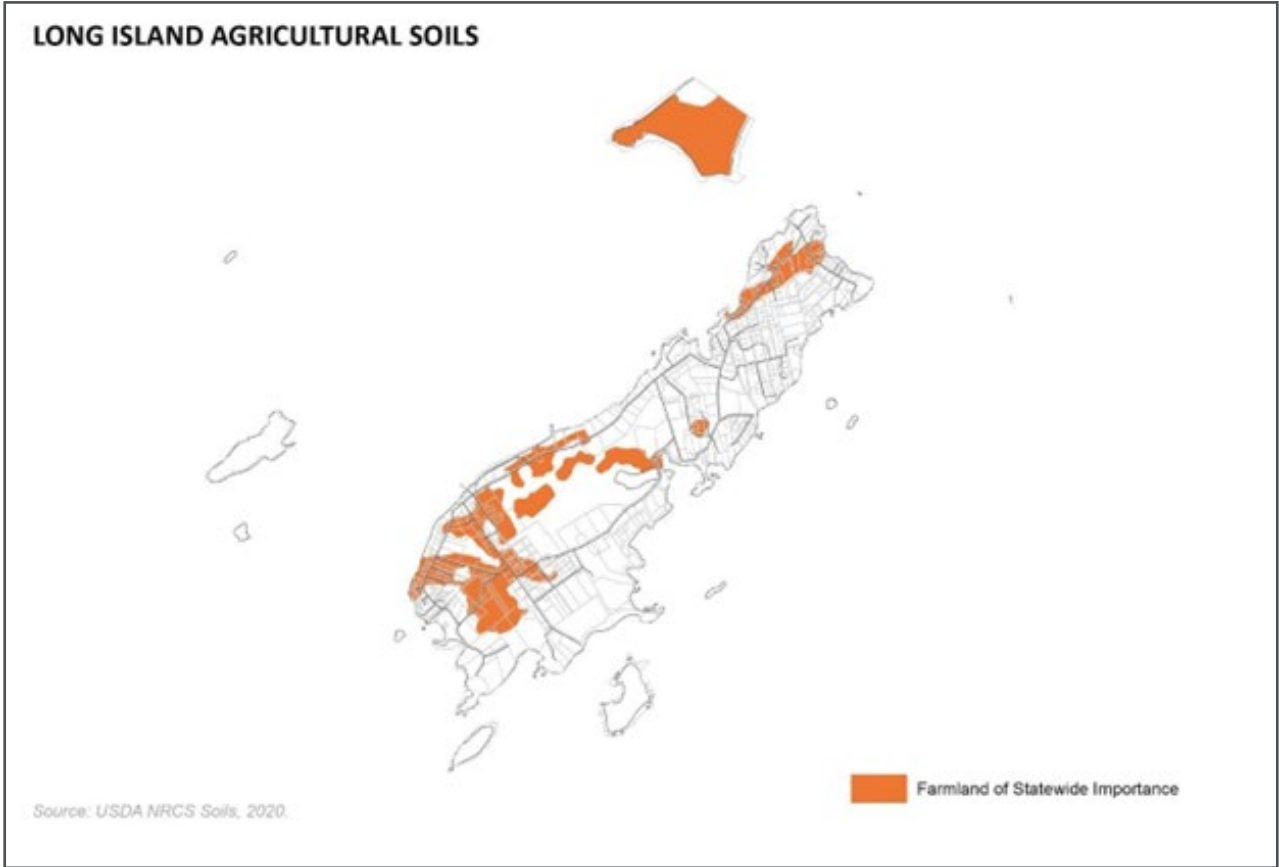
Community Garden

One garden space that island residents enjoy is the Long Island Community Garden. The garden, established in 2006, has provided a place where islanders can grow fresh vegetables and flowers without the incursion of deer. Currently, at 32 beds surrounded by an 8-foot high deer fence, it has been able to satisfy the gardening needs of many island families. Garden members also plant and care for the municipal planters on the waterfront, as well as those at the town office and library.

The garden is a welcoming spot for resting, refreshing and enjoying the beauty of the extensive perennial bed. It provides a source of pleasure for islanders and visitors alike.

The community garden has always aspired to be 'chemical free.' In this case, that means no chemical fertilizers or pesticides are allowed in the garden itself. Hopefully, in years to come, a town-wide or state-wide ban on pesticides will assure the safety of Casco Bay waters and the residential water supply of the island.

The garden was established and is maintained by many volunteers, people with



While flowers and shrubs abound on Long Island during the summer, a peach tree is an unusual and tasty find. Photo: Emeline Avignon

a vision and willingness to work to make it happen. Like every other island tradition, it will take the continued stewardship of

an upcoming generation of volunteers to continue.

The goal of the garden is to always provide a place where island residents and visitors can gather to enjoy the beauty of nature and healthy growing plants. The island can better understand its resources for agriculture by utilizing tools like the Farm-Friendly Test by the Maine Farmland Trust to evaluate opportunities for growth in this sector.

School Programs

The Long Island School has a greenhouse and garden where it plants and raises seedlings and harvest vegetables for use in school lunches. They also raise seedlings in the classroom using aquaponics and seed and harvest a kelp line every year to teach the students about aquaculture. These programs will ensure that we will continue

to have generations of skilled gardeners who understand the value and process of growing their own food.

Katharine's Garden

Katharine and Newell Stewart operate a small nursery and garden in the Harbor de Grace area of the island. The enterprise encompasses one-quarter acre of land and includes a four-season greenhouse in addition to vegetable, herb, and flower beds. They also run the Little Long Island Farm Cooperative which allows members to come to the garden to harvest vegetables on a regular basis. Katharine reports that she has had up to 22 members in the community-supported agriculture (CSA) venture. She also sells seedlings, compost, hanging baskets, and plants to islanders. She welcomes volunteers and school children to her garden to give them experiences in how to plant and care for a garden.

Katharine considers her venture as an opportunity to provide access to healthy vegetables and herbs to island families at market value. She strives to model growing a sustainable, balanced, and plentiful harvest, and she welcomes the opportunity to educate

her community about ways to do the same on their own properties. Katharine's Garden News and Notes has been published weekly since 2011, with over 764 email subscribers who have visited the island and discovered this garden oasis along the shores of Harbor De Grace.

Forestry Resources

Commercial Forestry

There is no commercial forestry on Long Island or on the other islands within the territory of the Town of Long Island. The timber harvest data provided by the Department of Agriculture, Conservation, and Forestry show there have been 342 acres of selection harvest and 40 acres of shelterwood harvest on Long Island between 2007 and 2014. This harvest was mostly clean-up from the 2007 Patriot's Day storm. There have been no timber harvests reported before 2007 or since 2014.

Many islanders harvest firewood for personal use, and there is a good deal of community effort by volunteer firefighters and neighbors-helping-neighbors to deal with fallen trees after a storm event. There are a couple of individuals that own portable small sawmills for private use on their property. There is a licensed Maine arborist living on the island who is capable of doing skilled tree work for the town and for private customers. There is one 10.18-acre parcel which qualifies under the Tree Growth tax policy.

Currently, there is no threat from development or incompatible use to any forestry or agricultural lands. There is no commercial agriculture or forestry on Long Island, which means that there is no threat from any sort of new development.



Katharine's Garden at Harbor de Grace features healthy vegetables and herbs for island families at market value.

Photo: Charlotte Hedge

Conservation Easements

There are also 116 acres managed by the Long Island Community Land Operating Company (LICLOC) which has a conservation easement. LICLOC is a limited liability company organized under Maine law in 2005. It adopted its Operating Agreement in December 2006. Its permitted activities and purposes are to own and manage real estate and fixtures located in the Town of Long Island for the benefit of its member(s) and the citizens of the Town of Long Island. Its “sole member” is the Town of Long Island. It is required to operate exclusively for tax exempt purposes under Section 501(c)(3) of the Internal Revenue Code.

LICLOC is managed by an independent five-member Board of Managers. LICLOC owns the acreage formerly owned by Northland Residential, LLC. The property was deeded to LICLOC in December 2006. The land is the portion of the former US Navy fuel annex (popularly known as “the Area”) remaining after its subdivision by Northland Residential LLC (Northland) and the transfer of residential and commercial lots.

The property includes that portion of the former Naval Fuel Tank Farm with underground fuel tanks, which have been cleaned and closed and will remain in place, in accordance with Maine Department of Environmental Protection (DEP) standards, with open meadows and fields immediately above and surrounding those underground tanks. The remainder of the property remains in a relatively undisturbed natural wooded state, aside from the existing dirt and gravel trails and old roads or streets running through and across the property and the invasive species that are over-taking certain areas.

Other than a four acre “Unrestricted Parcel,” the land is subject to restrictions on its use and activities thereon as described in a Deed of Conservation Easement dated December 27, 1995, in favor of the Long Island Civic

Association (LICA), (as the “Holder”) and the State of Maine by and through its Department of Environmental Protection (as the “Third Party”). This conservation easement was recorded in the Cumberland County Registry of Deeds on February 26, 1996, in Book 12366, Page 193. We refer to both this document and its contents as the “Conservation Restrictions.”

The purpose of the Conservation Restrictions is to assure that the protected portion of the property will be retained forever in its natural undeveloped condition and to prevent any use of the protected property that will significantly impair or interfere with the conservation and recreational values thereof. In general, those uses consist of recreational, fire protection, and conservation purposes only.

As the owner, LICLOC is responsible for all decisions regarding use of this



Beavers take their toll on Long Island's forest land.
Photo: Janice Avignon

community land, subject to the Conservation Restrictions. LICA, as the easement holder, has the right to inspect the land to make sure that the Conservation Restrictions are being met and to enforce them as appropriate. Therefore, any requests for permission to conduct activities in the community land other than those such as skiing, walking or bicycling should be addressed to LICLOC as the owner.

LICLOC and the fire department have coordinated with the state's forest service to conduct controlled burns on LICLOC land to control invasives and knock back ticks. These controlled burns have not taken place for the past two years due to COVID-19 restrictions. The land is also mowed on a regular basis to help control invasives.

The Oceanside Conservation Trust owns College Island and holds conservation easements on Wreck Cove and Fowler's Beach.

Challenges

Invasive and Nuisance Species

The U.S. government defines an invasive species as, "with regard to a particular ecosystem, a non-native organism whose introduction causes, or is likely to cause, economic or environmental harm, or harm to human, animal, or plant health" (Executive Office of the President 2016). An invasive species can be any kind of living organism that is not native to an ecosystem and causes harm. Invasives usually grow, reproduce, and spread aggressively. They can harm the food web in an ecosystem by destroying and replacing the native food sources. Invasives are a huge issue on Long Island. Their presence has a negative impact on the natural communities and animal life of the island.

Plants

There are many invasive plants inhabiting the island. Some of the varieties that many islanders are familiar with include oriental bittersweet, knotweed, Japanese barberry, black swallow-wort, and Tatarian and Morrow's honeysuckle. Anyone who has struggled with trying to remove bittersweet from their property knows how stubbornly this plant can hang on, making eradication extremely difficult. The presence of these invasives can cause the native plant life to be choked out of the region by outcompeting the native plants.

Dense stands of bittersweet have overtaken forested areas previously containing red spruce. Over time the bittersweet entangles the trees and causes them to become top-heavy and topple over during strong winds. The bittersweet then covers the ground and inhibits other native plants from growing.

Swallow-wort has increased significantly during the last decade on the island and now grows in dense, homogenous stands that have overgrown the native bayberry community. Swallow-wort also attracts monarch butterflies because of its similarity to milkweed, however, swallow-wort does



Islanders struggle to control bittersweet invasions on their properties. Photo: Linda Ferguson McCann

not provide the food or nesting resources that milkweed does. Simply put, most invasives outcompete native species, decrease natural diversity, and alter ecosystems they occur in to the detriment of indigenous plants and animals.

Field experiments conducted by scientists at the University of Maine have found an increase in mosquito population in areas with an abundance of Amur honeysuckle. Eradication of the honeysuckle significantly decreased the mosquito population in those areas.

Poison ivy is a nuisance species that has health implications for islanders. The plant produces an oil which can cause an itchy, blistering rash when it comes in contact with human skin. Poison ivy is meant to grow upward around a tree in which case it produces berries that feed birds and other fauna. When poison ivy grows as a ground cover it does not produce berries and is considered to be an invasive and will grow opportunistically. Poison ivy grows more in areas with thriving deer populations since the deer eat the berries and spread the seeds through their excrement.

Deer and Ticks: Nuisance Species

There is an overabundance of deer on Long Island. According to the 2018-2019 town report, the healthy number of deer for a property is five per square mile, which would mean that a healthy deer population on the island would be capped at eight. Estimates indicate that we have six to-10 times that many on Long Island. This has created many issues for our community. Not only has it discouraged islanders from planting gardens due to the fact that deer often invade local gardens and consume the produce found there, but the consumption of the natural vegetation allows for the growth of invasive species on the island. The ticks carried by the deer have spread Lyme Disease

and anaplasmosis to the point where tick borne diseases have become endemic on the island. The tick population is believed to be increasing, in part, because of milder winters. In the past, the cold weather has killed overwintering ticks.

When islanders were asked what they liked least about Long Island on the Long Island Community Survey conducted in 2021 (LICP2035 Survey), “ticks” and “Lyme Disease” were frequent responses. Anecdotal evidence indicates that many who visit and live on the island are hesitant to walk and hike through our conservation area for fear of being bitten by a tick and contracting Lyme disease. In a study done by the Cold Harbor Spring Laboratory between 2020-2021, new evidence was shown of the presence of a COVID-19 variant in one-third of sampled White-tailed deer in Iowa. This presents further concern given our flourishing deer population, although there has been no documented evidence of deer to human transmission of COVID at this point.

The Town of Long Island has made an attempt to reduce the number of deer on the island by conducting an annual hunting season which lasts from November 1 through December 28, with distinct seasons for different types of weaponry. According to annual reports, the deer reduction committee has reduced the population by 35 in 2016, 11 in 2017, 19 in 2018, 35 in 2019, and 25 in 2020. The 2020 annual report stated that there is believed to be an excess of 70 deer remaining after the deer hunt during that season. A study by scientists at the Maine Medical Research Institute and the University of Maine found that the tick population would not decrease unless the deer population was reduced below 8-13 per square mile. Any reduction of the population that does not reach this critical deer density level will not reduce the overall tick population in any given area.

Other insects

Brown-tail moth is an invasive species with public health implications. The brown-tail moth caterpillars have tiny hairs which cause contact dermatitis when they interact with human skin. The hairs can be acquired through direct contact with a caterpillar or through the air when the hairs become dislodged from the caterpillars. The resulting rash can last from hours to days to weeks, depending on an individual's sensitivity to the toxins in the hairs. Under certain circumstances, inhalation of these caterpillar hairs can cause respiratory distress which could become serious.

Winter moth is another invasive insect species that has been negatively affecting native trees and shrubs on the island. Believed first introduced into the United States in the 1930s, it reached Maine in the 1990s and has been spreading rapidly, particularly in coastal Maine. Large numbers of winter moth caterpillars can defoliate trees and shrubs, including ornamentals and fruit trees.

Fire Danger

There were several comments in the LICP2035 Survey responses alluding to concern about fire danger in the wooded areas of the island. "The condition of the conservation land. The debris on the forest floor; fallen and cut trees that were never cleaned up and pose a fire hazard to our island common areas and properties," and "Maintenance of our forest floors would keep our island safe from fires and restore accessibility and beauty to those areas" were two such comments. It was highlighted that a forest fire would be a huge financial burden on the town and could seriously limit the ability of people to continue to live here. By investing in maintenance of the area and its forest floors, that issue could be addressed and possibly prevented.



Once sunflowers start to appear, bees take notice.
Photo credit: Doug Grant

The greatest concern with forest floor fire danger would be the tinder/slash/brush on the forest floor that could be easily ignited. Another concern would be ladder trees, which are dead trees leaning against living trees and have not fallen to the forest floor. If ignited, fire could easily travel up the dead ladder trees and lead to a crown fire in the treetops of a heavily forested area which could spread quickly. It's never good to have a high fuel load in a rural populated area. It is the interface with the residential areas where the danger lies.

There is also concern about dead or unhealthy trees causing power lines to be brought down in storms. The overall health of the trees on the island figures in here. Climate change has made it difficult for the fir trees because they are more accustomed to a temperate climate. The very dry, hot summers that we have had recently make the trees more susceptible to insect infestation, as the insects can sense a tree in declining health and use those trees as host trees to set up a colony. Coniferous feeding beetles and Nantucket top moths are a few insects of concern. Invasive plants such as bittersweet can also endanger trees as it can restrict growth and cause deformities which can catch the wind in storms.

Looking Forward

In 2021, Mainers passed a constitutional amendment stating that “all individuals have a natural, inherent and unalienable right to grow, raise, harvest, produce and consume the food of their own choosing for their own nourishment, sustenance, bodily health and well-being.”

We will need to figure out what that means for our island population. Currently, there are residents who raise chickens and goats, hunt deer for consumption, and tend bee hives on the island. There are resources available such as a community garden, agricultural soil, and purveyors of compost, seedlings, and expertise on the island. In the future there might also be local ordinances and regulations that could prevent the keeping of livestock and the hunting of birds and deer for food consumption? This is definitely something to be considered as we move forward with local ordinances.

One respondent to our community survey stated where we need to go very succinctly in a narrative response: “Replacing invasive and non-native plants with ones native to the region on all town owned or maintained

property. Bringing in scientists to educate the community about the deer population, if it is too large for the health of the island, bring in professionals to bring it to a healthy level.” “Addressing the high risk of contracting Lyme Disease resulting from poor wildlife and environmental management” was another narrative response to the community survey which is addressed in these recommendations.

We have many local examples of successful programs on neighboring islands where these goals have been accomplished to guide our intervention attempts. This plan calls for common stewardship of the agricultural and forestry resources available on the island to make our community a safer place for all to reside.

Specific actions that can lead to better stewardship on Long Island are listed in the recommendations for this chapter, which can be found in the ‘Plan Framework’ section of this document. There, readers will find a list of recommendations and suggested strategies that can aid in the protection and management of the island’s agricultural and forestry resources.



Rosa rugosa, an invasive species, frequently appears along the shoreline because it thrives in sandy soil.
Photo: Linda Ferguson McCann

Natural Resources

Conserved Lands

On Long Island there is a history of valuing stewardship of natural resources. Conserving land is one method of stewardship employed by the community. This comes in the form of ownership or private conservation easements. By conserving land in these ways, the town is able to maintain the natural beauty and ecological health of the island. Conserving land helps ensure that the island's natural resources are not facing undue strain due to issues such as overdevelopment.

There are numerous conserved parcels of land on Long Island. These include Wreck Cove, the Any Tide Landing, also known as Boston Sand & Gravel (BS&G), Front Beach, Ponce's Landing, and Cleaves Landing. The state also owns Little Chebeague Island, Vaill Island (locally known as Marsh Island), Outer Green Island, and the Stepping Stones. One conserved property is located on Cow Island, which is within Long Island's territorial boundaries. The Maine Coast Heritage Trust holds a conservation easement for this property.

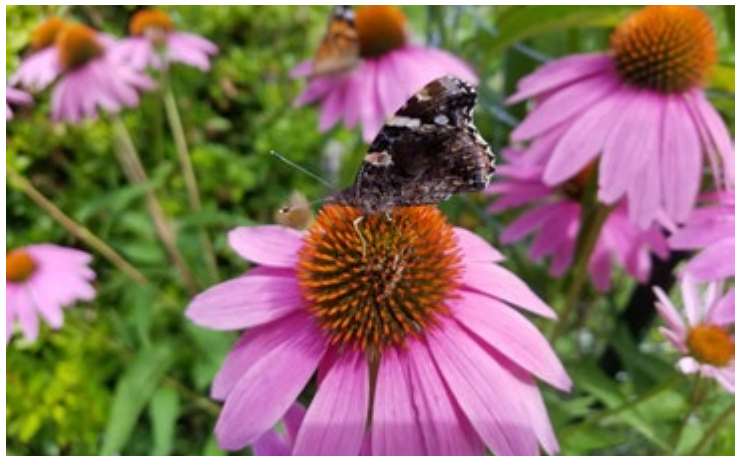
There are 116 acres of conservation land, called the Area, in the middle of the island. Long Island Community Land Operating Co. LLC (LICLOC), is an independent five-member Board of Managers formed in 2005 to manage the Conservation Area. Long Island Civic Association (LICA)



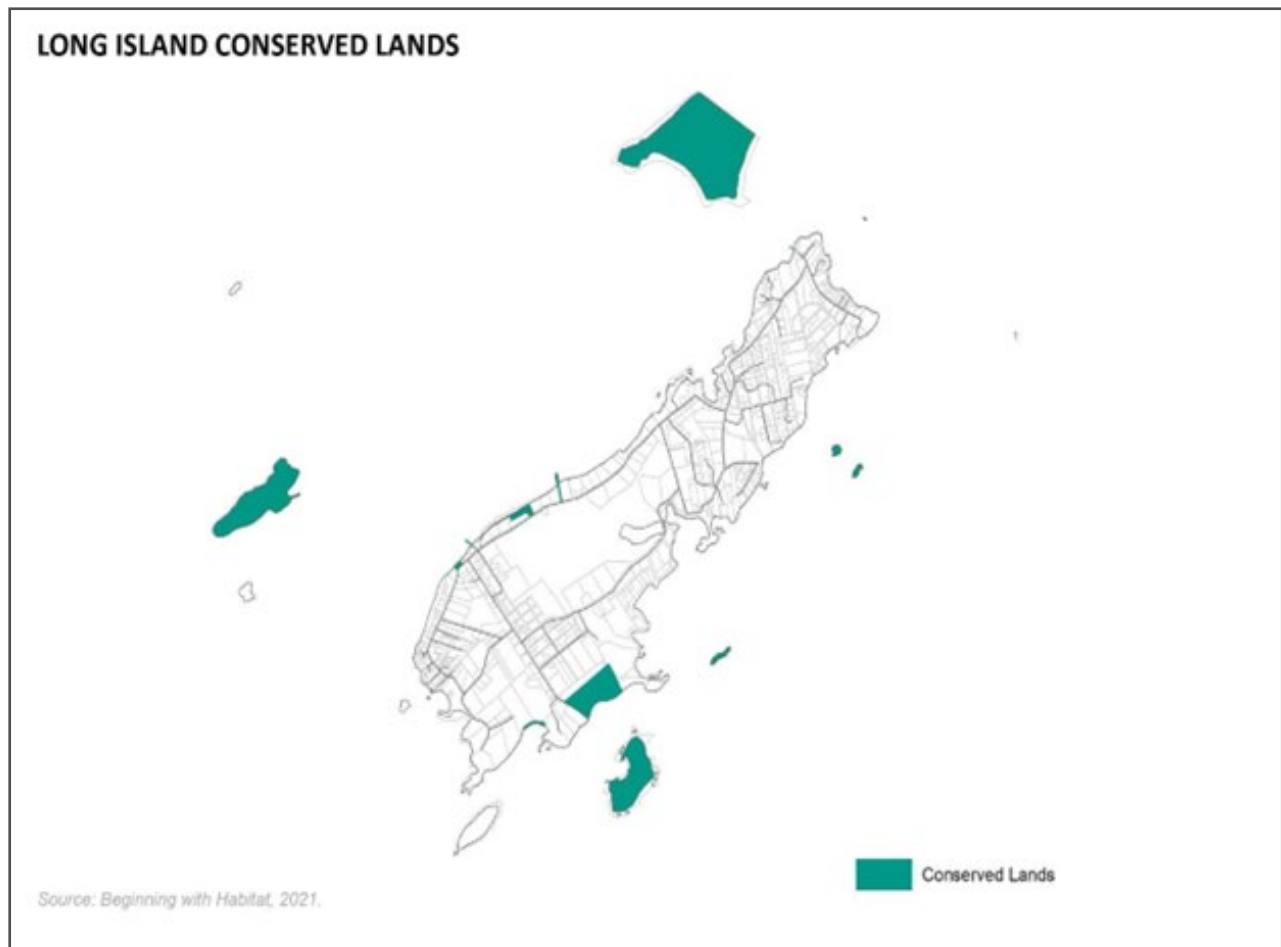
Watching eagles on Long Island is a favorite pastime often captured by photos from eager birding fans. Here a bald eagle keeps watch from a tree. Photo: Nils Caliandro



The trees around the pond off Fern Avenue show off their rich and beautiful fall colors. Photo: Janice Avignon



Late summer is an especially wonderful time to be on Long Long Island. The days are long, the sun is high and butterflies are everywhere. Photo: Judy Churchard



is the easement holder, and as such has the right to inspect the land to ensure the conservation easements are being met and enforced. This land has provided opportunities for recreational activities like hiking, cross-country skiing, and the infamous Long Island buoy toss.

Topography

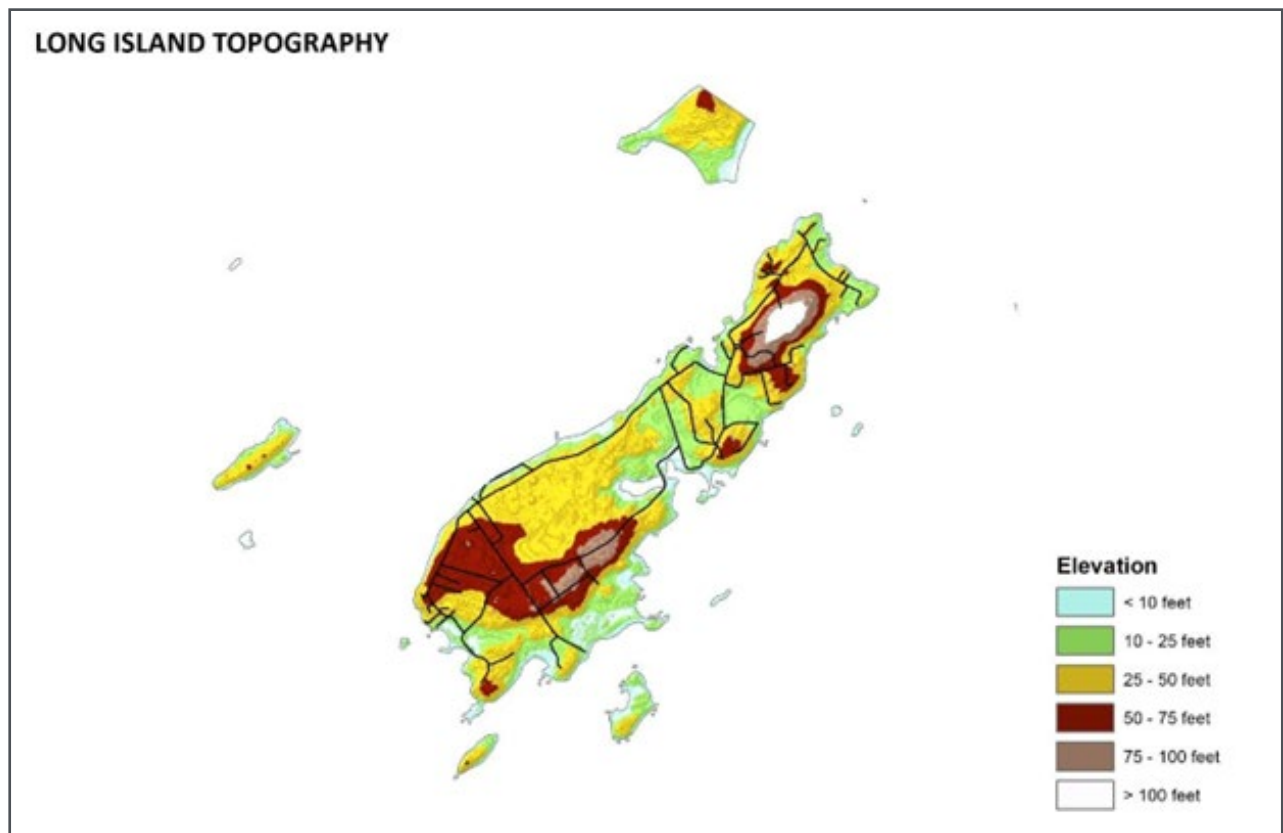
Topography refers to the shape of the land's surface and is defined by the change in elevation above sea level. Slope measures the steepness of the land's surface based on the change in elevation over a given horizontal distance. Topography is a valuable tool in planning because it identifies areas suitable for various types of development. Slopes exceeding 15% can place limitations on septic system installation and operation, add cost to the construction of buildings and roads, increase surface runoff, and may result in erosion from poorly managed construction sites.

The overall elevation on Long Island slopes down from elevations of 75-120 feet at the northern and southern ends of the islands towards the wetlands at the center of the island. The lowest elevations, dropping below 10 feet, are located along the southern, southeastern, and northeastern perimeter of the island, including the areas around Fowler's Beach, Wreck Cove Beach, Andrews (South) Beach, Shark Cove, the coastline around Harbor de Grace, and the East End Beach. The western and northern perimeter of the island are at elevations of 25-50 feet overlooking the ocean.



Long Island has land for recreational activities like hiking, cross-country skiing, and the buoy toss off Island Avenue. Birdwatching is also popular, including watching sandpipers in flight. Photo: Dick Mitchell

The steepest slopes on Long Island are found around the two highest points on the island; Rohrs Hill, commonly as New Hill at the north end of the island and the area at the south end of the island overlooking Andrew's Beach, otherwise known as South Beach. Most of the development on Long Island is generally built at elevations ranging from 20-75 feet.

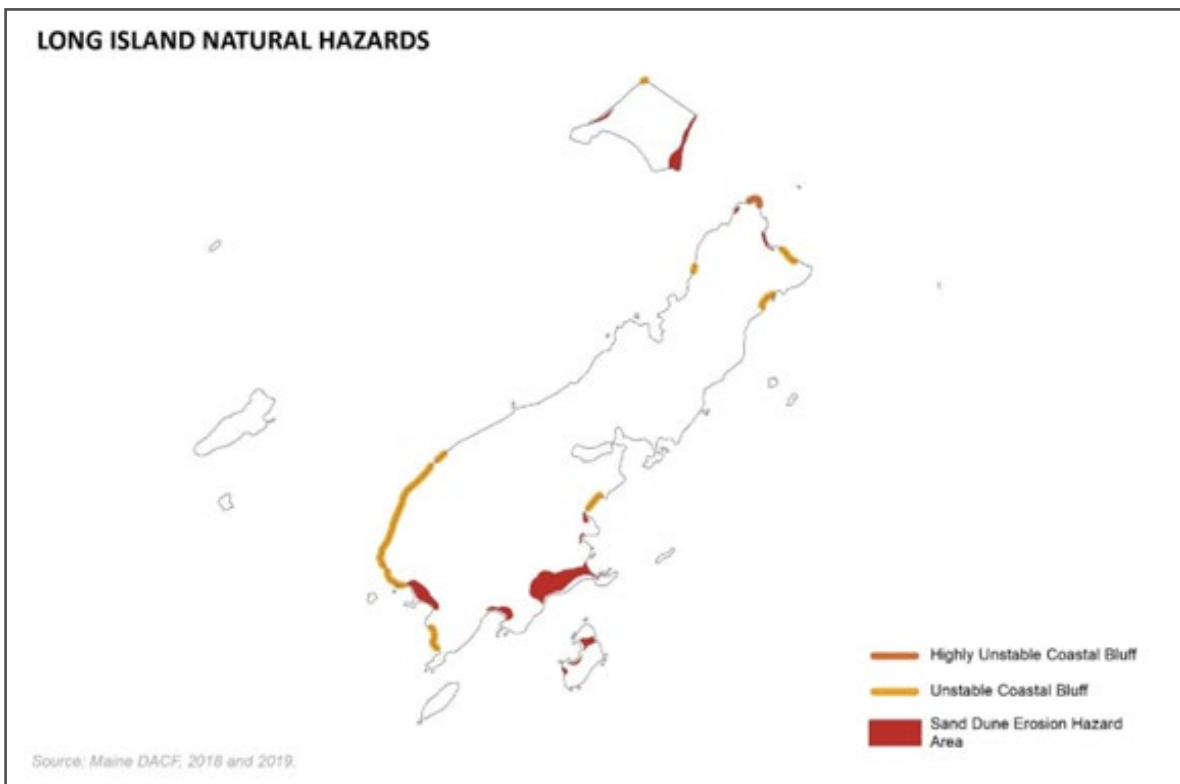


Natural Hazards

The Maine Geological Survey team from the Maine Department of Agriculture, Conservation and Forestry (DACF) has identified both unstable and highly unstable coastal bluffs on Long Island. A coastal bluff is defined as a steep shoreline slope formed in loose material, such as clay, sand, and gravel, that has three feet or more of vertical elevation just above the high tide line. The slope, shape, and amount of vegetation covering a coastal bluff and the adjacent shoreline are directly related to the susceptibility of the bluff to ongoing erosion.

Maine Geological Survey's coastal bluff maps can help identify shorelines with increased risk of coastal erosion. Bluff erosion can result in a landward shift of the top edge of the bluff. This is a natural process that only becomes a hazard when the erosion threatens something of value, such as a building or a scenic resource. The largest area of unstable coastal bluffs can be found on the southernmost end of Front Beach all the way around to Fowler's Beach. There are also unstable bluffs found in some other areas of the island, notably a few spots on the East End.

The natural hazards map also shows sand dunes that are vulnerable to erosion from extreme storms and sea level rise. The sand dunes that are most vulnerable to erosion are found at Fowler's Beach, Wreck Cove, and South Beach.

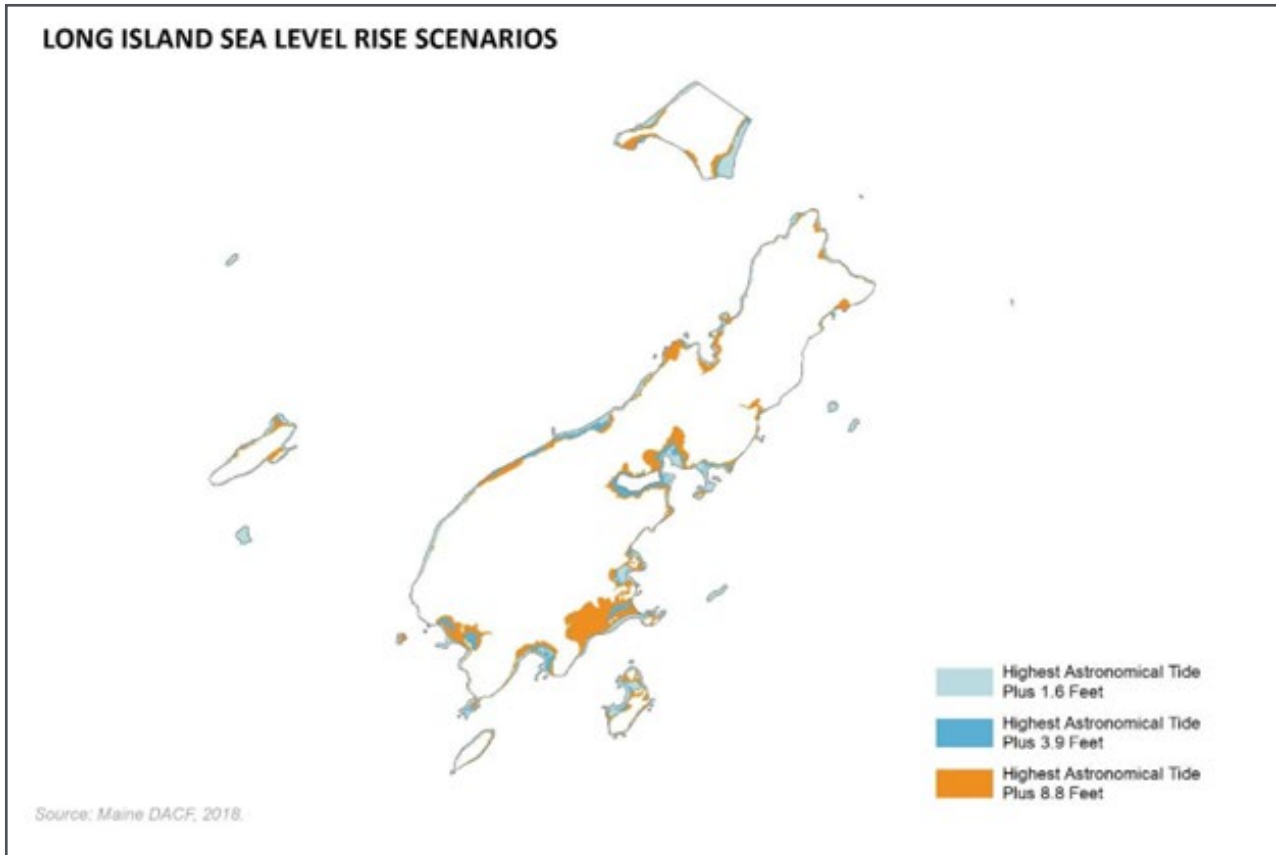


Sea Level Rise

The Maine Geological Survey has created sea level rise scenarios based on high resolution LiDAR elevation data collected by the Federal Emergency Management Agency (FEMA). The following map shows three of the Maine Geological Survey scenarios: 1.6 feet above the highest

astronomical tide (HAT), 3.9 feet above HAT, and 8.8 feet above HAT. These represent low, middle, and high estimates of sea level rise by 2100.

According to this map, there are island areas that could be impacted by sea level rise in even the lowest HAT scenario. The areas that are the most vulnerable under the sea level rise scenarios include Vaill Island, Fowler's Beach, Andrew's Beach, the area around Harbor de Grace, and the stretch of land from Ponce's Landing continuing up into the Old Cove.



Soils

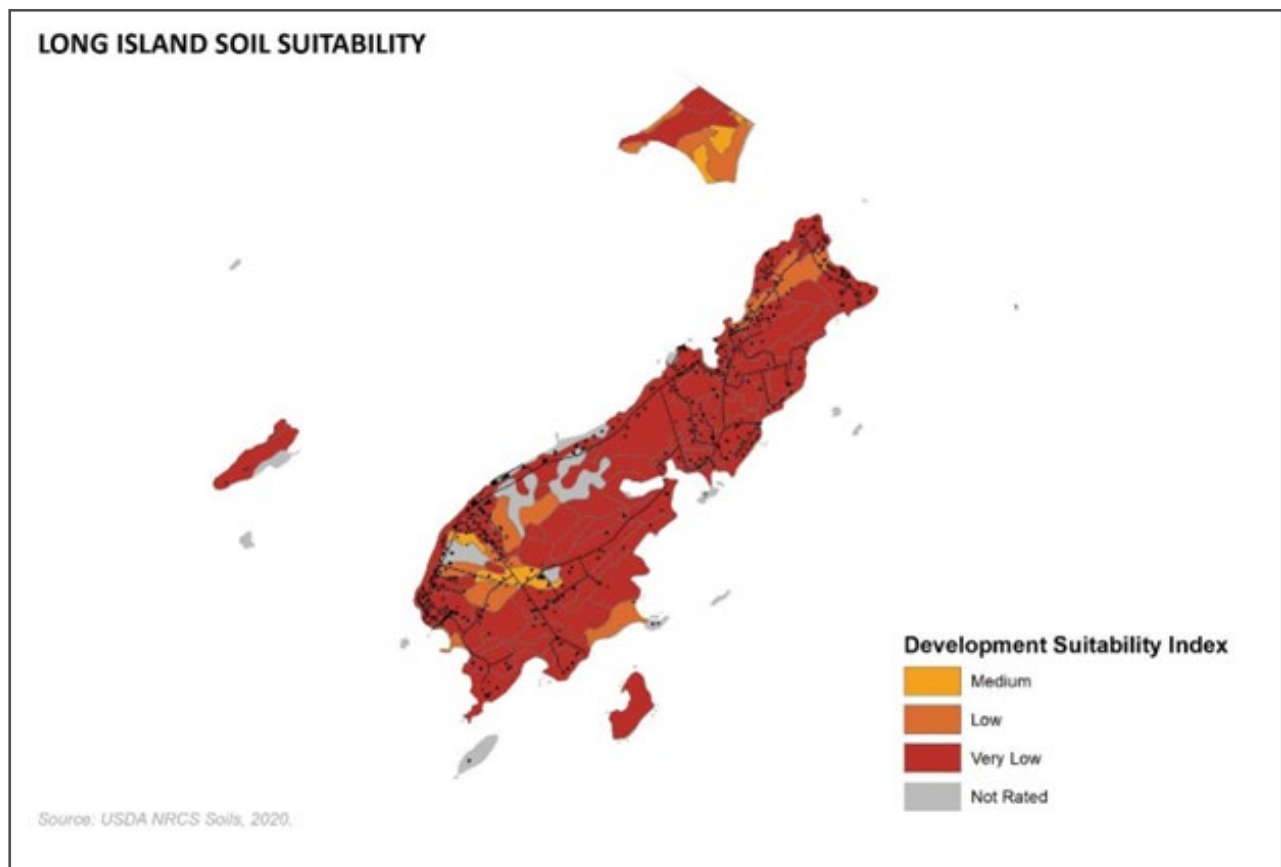
One natural resource on Long Island is the soil itself. Soil characteristics on Long Island have been shaped over a long period of time by topography, climate, and living organisms. Soil characteristics can be used to determine how well-suited different areas are for various types of development or conservation. The USDA Natural Resources Conservation Service (NRCS) has used soil characteristics to create a rating system that can be used to determine the suitability of soils on Long Island to accommodate future development.

Three of the factors in the NRCS rating system help determine the ability to install septic system leach fields, construct dwellings with basements, and construct local roads. The NRCS ranks the suitability of soils for these purposes on a qualitative scale ranging from very limited to not limited. These ratings do not imply that areas of town with low development suitability ratings cannot be developed, but that certain areas may be more appropriate for development based on cost and potential negative impacts over the long-term.

The Soil Suitability for Development map shows an index indicating suitability of Long Island soils for development. This index was created by assigning numerical values to the qualitative NRCS soil suitability ratings for three development factors: dwellings with basements, septic leach fields, and local roads. Soils with a very limited development rating received a score of 1, soils that were somewhat limited for development received a score of 2, and soils that were not limited for development received a score of 3.

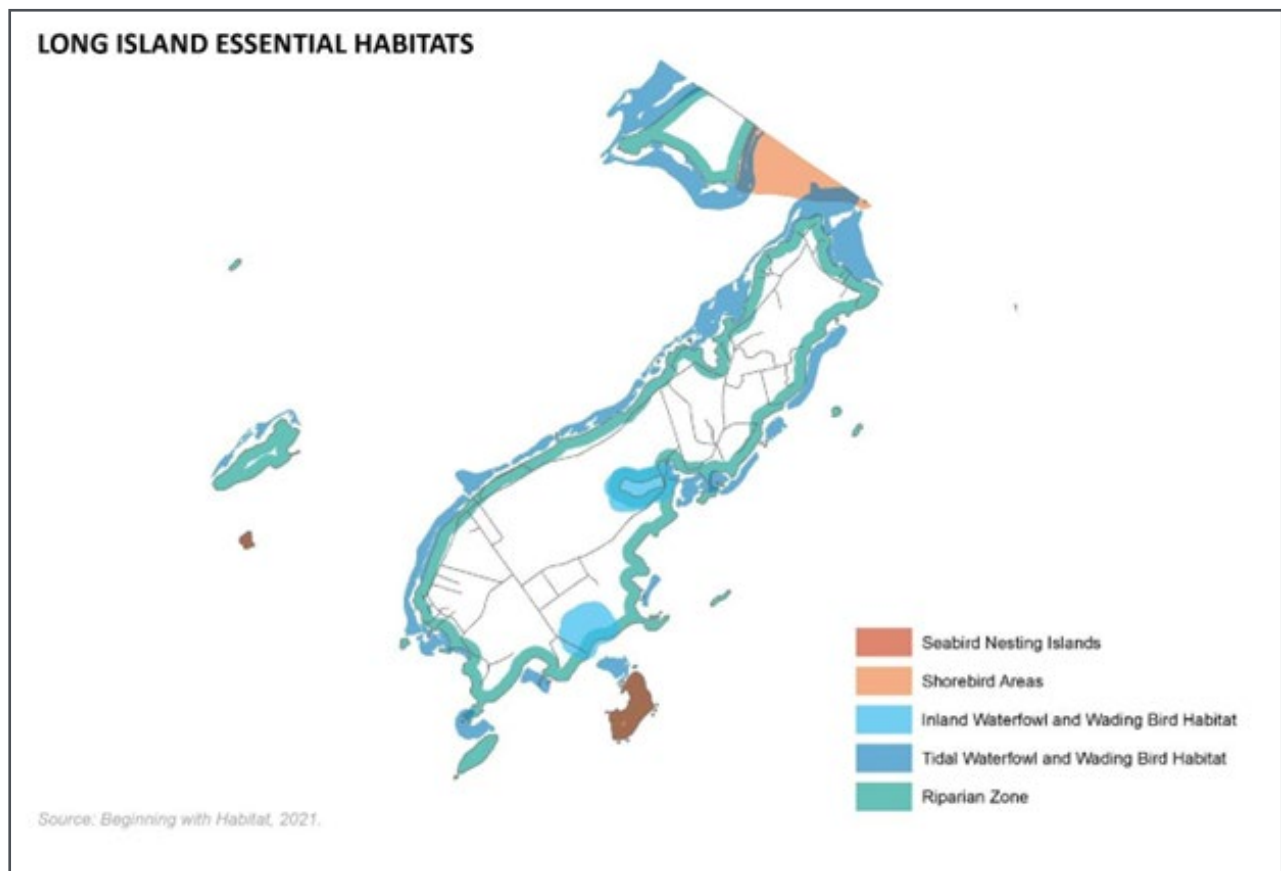
These numerical ratings for each development factor were added to yield the overall development suitability for each soil unit on Long Island. The resulting soil suitability index had a maximum possible score of 9 and a minimum score of 3. The soil suitability score was then assigned a qualitative rating ranging from medium (7) to very low (3) suitability for development, which is what appears on the map. The highest score on Long Island was 7 (medium), but the majority of soil units are scored very low according to this index.

Much of the existing development on Long Island has occurred on soils that have a very low soil suitability for development. The most significant limiting development factor in the index is the ability to install septic system leach fields. The issue with septic system installment on Long Island is the very limited septic tank absorption. Long Island has naturally rocky and sandy soil that may contribute to its very low score on the index. Future land development must consider that soil resources are already pushed to the limit in heavily developed areas. Some of the areas most suitable for development are concentrated around the south-central and northern ends of the island.



Essential Habitats

Essential Habitats are areas that currently provide or have historically provided physical or biological features essential to the conservation of an endangered or threatened species in Maine, and which may require special management considerations. Examples of areas that could qualify for this designation are nesting sites or important feeding areas. For some species, habitat protection is vital to preventing further decline or achieving recovery goals. This habitat protection tool is used only when habitat loss has been identified as a major factor limiting a species' recovery. Before an area can be designated as an Essential Habitat, it must be identified and mapped by the Maine Department of Inland Fisheries & Wildlife (IF&W) and adopted through public rulemaking procedures. The essential wildlife habitats in Long Island are outlined below.



Protected Waterfowl Habitat

Inland and tidal waterfowl and wading bird habitats are freshwater wetlands and surface waters that provide breeding, migration, and wintering grounds for ducks, herons, other wading birds and songbirds, and various aquatic species. As of 2006, State of Maine regulations require that municipalities designate all IF&W designated inland waterfowl and wading bird habitats as resource protection areas.



An owl peers through a snow-covered tree.
Photo: Shirley Conner

There are two areas on Long Island that have been identified as Inland Waterfowl and Wading Bird Habitat by the IF&W, but these areas have not been identified as moderate or high value habitat and may not be protected under Maine's Natural Resources Protection Act (NRPA). These areas are located around Andrews (South) Beach and the wetlands near Harbor de Grace.

Three quarters of the perimeter around Long Island has been identified as moderate or high value Tidal Waterfowl and Wading Bird Habitat, and these areas are protected under Maine's NRPA.

Shorebird Areas

Shorebird areas represent areas that shorebirds use for feeding and roosting during migration. Shorebirds are a diverse group of birds that include sandpipers, plovers, turnstones, knots, curlews, dowitchers, and phalaropes. This group does not include herons, gulls, or cormorants. The IF&W has identified the area between the northern end

of Long Island, Little Chebeague Island, and the southern end of Chebeague Island as a shorebird area.

Seabird Nesting Islands

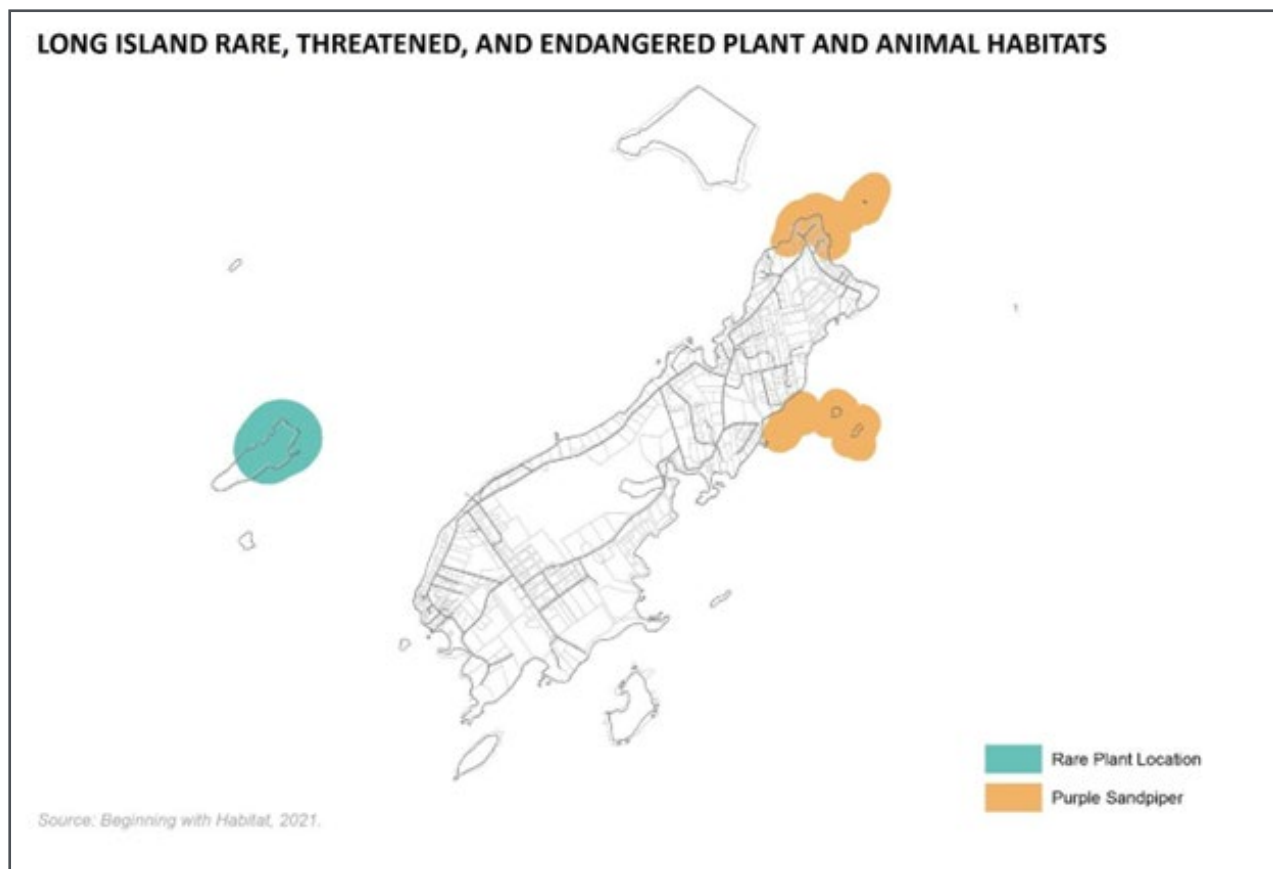
Seabirds are defined by IF&W as colonial nesting waterbirds including Leach's Storm Petrel, Great Cormorant, Double-crested Cormorant, Laughing Gull, Herring Gull, Great Black-backed Gull, Common Tern, Arctic Tern, Roseate Tern, Razorbill, Black Guillemot, Atlantic Puffin, and Common Eider (although eiders are waterfowl, technically not a seabird, they nest on islands with the seabirds). Seabird Nesting Islands are islands or ledges in tidal waters with documented nesting seabirds or suitable nesting habitat for endangered seabirds. Seabird Nesting Islands are regulated as Significant Wildlife Habitat under Maine's NRPA. There are three Seabird Nesting Islands within Long Island's municipal boundary, including Crow Island, just south of Cow Island, Vail Island, and Outer Green Island (not shown on map).

Riparian Habitat

Riparian habitats, or habitats that are located along waterways, are important for many species and can also serve as travel corridors for animals, providing "linkages" between patches of habitat that have been fragmented by development. These riparian habitats are prevalent along the perimeter of Long Island.

Plant and Animal Habitats

The availability of habitat for fish, wildlife, and plants is essential to maintaining an abundant and diverse population for both ecological and recreational purposes. In 2001, a cooperative effort of environmental organizations and government agencies introduced a program called "Beginning with



Habitat, An Approach to Conserving Open Space.” Today, *Beginning with Habitat* still provides periodically updated maps and data identifying valued habitats and rare species locations to municipalities. These maps and tools help local decision-makers create a vision for their community and develop a plan that balances future development with conservation priorities.

The availability of a diverse and large amount of habitat for plants and animals is part of what makes Long Island a special place. Spending time in nature is something that many people identified as something they love about the island in the Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035 Survey). Over 10% of respondents identified natural beauty as the one thing that they love the most about life on the island.

Plant and Animal Species

Maine’s Endangered Species Act protects essential wildlife habitats, which are areas currently or historically providing physical or biological features essential to the conservation of an endangered or threatened species and which may require special management. Maine’s NRPA, which became effective in 1988, was intended to prevent further degradation or destruction of certain natural resources of state significance. Within the act are certain provisions for protecting significant wildlife habitats. The Maine Natural Areas Program (MNAP), a program of the Maine Department of Conservation, maintains information on the status and location of rare and endangered habitats and species in Maine.

Plant Species

The MNAP has identified a rare plant location on Cow Island. The specific plant species name has been hidden to protect the plant habitat. Cow Island is managed by the Maine Coast Heritage Trust.

Species of Conservation Need

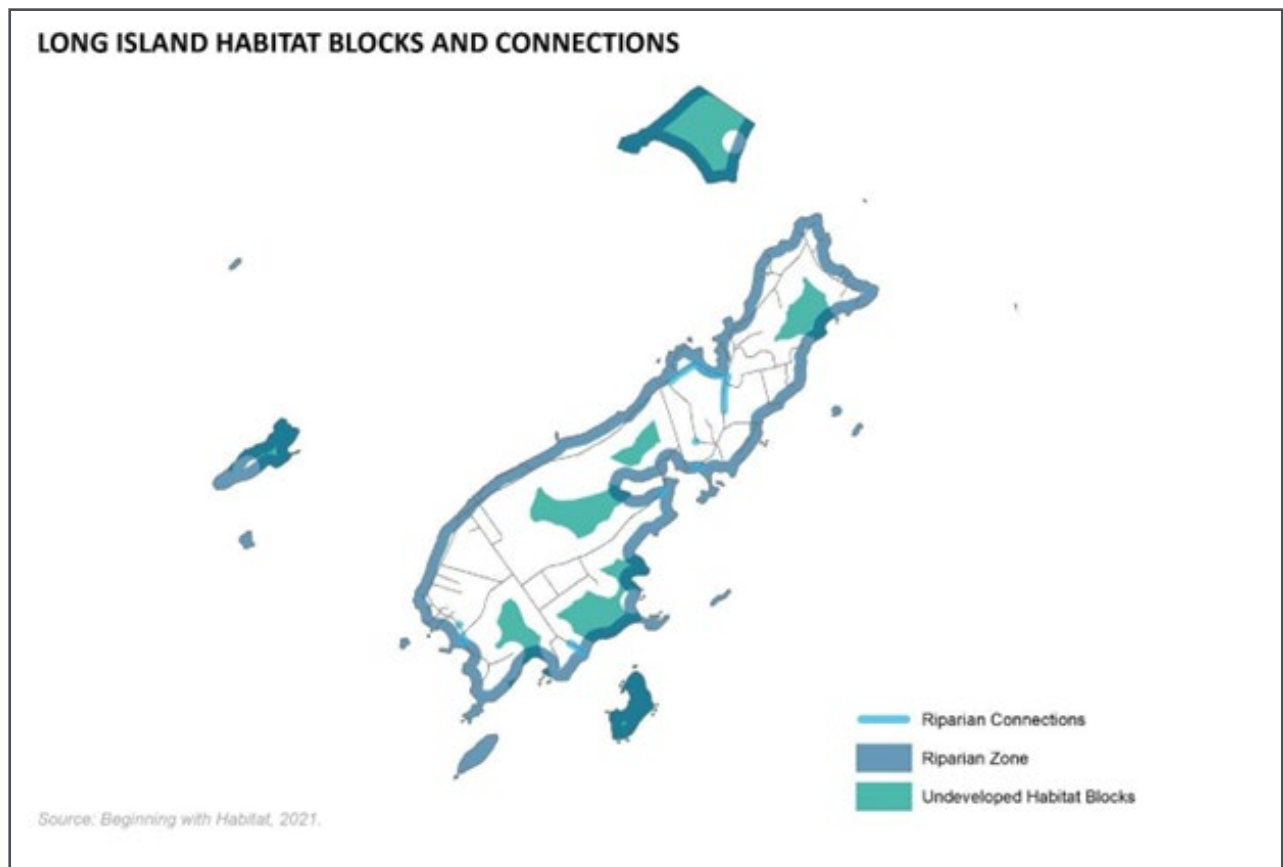
The IF&W data show a Purple Sandpiper habitat along the northern shore of Long Island as well as the northeastern shore, near the Stepping Stones. Purple Sandpiper is designated as a Species of Conservation Need. The Purple Sandpiper is not currently designated as threatened or endangered but is a rare species. Conserving the Purple Sandpiper habitat today may prevent this species from being listed as threatened or endangered in the future.

Endangered Species

Although this is not shown on the map, there is a block of Roseate Tern habitat on Outer Green Island, which is owned by the State. The Roseate Tern is listed as an endangered species.

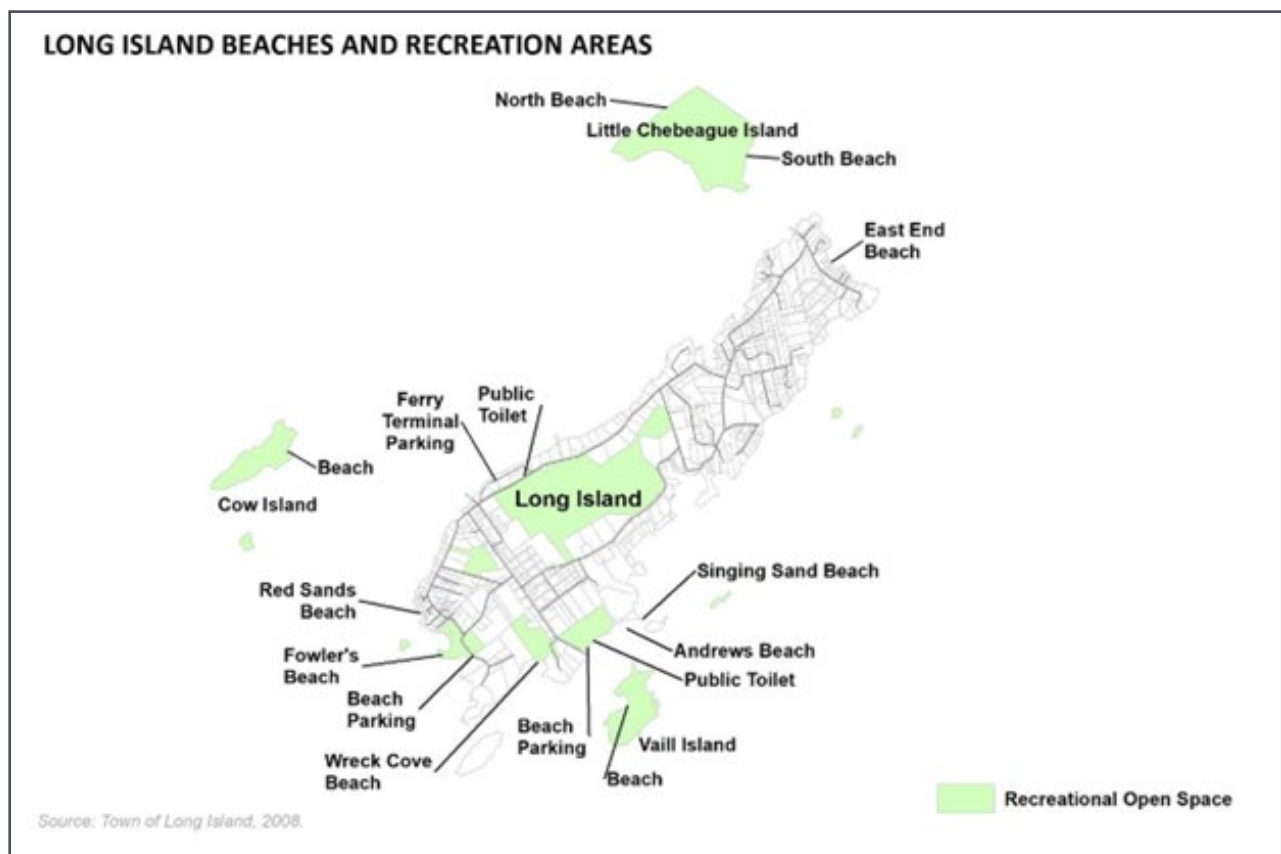
Habitat Blocks and Connections

Unfragmented habitat blocks are large, contiguous areas of natural woodland that are essential to maintaining a diverse and healthy wildlife population. They are also popular areas for outdoor recreational activities and reflect the community's rural character. The value of an unfragmented habitat block increases with its size because larger habitat blocks can support a greater diversity of animal and plant populations.



The MNAP has identified several unfragmented habitat blocks on Long Island, the largest of which is 38 acres near South Beach on the southeastern side of the island. There is also a 31-acre habitat block near the center of the island and a 22-acre habitat block on the northeast side of the island. There are also large unfragmented habitat blocks on Little Chebeague Island and Vaill Island, which are both owned by the state, and on Cow Island, which is owned by Maine Coast Heritage Trust. Altogether there are over 140 acres of unfragmented habitat blocks on Long Island, but only about 11 acres of this land are held in conservation. According to the results of the LICP2035 Survey and public forums in Fall 2021, the Long Island community feels that areas like these habitat blocks can not only increase the natural beauty of the island but also add to the available recreation spaces.

Wildlife corridor connections link habitat blocks and allow for animal movement across roads and other barriers. By preserving habitats and establishing these linkages, Long Island can provide wildlife corridor connectivity through the community and into larger unfragmented habitat blocks. Safe passage zones or protected crossings can be preserved or re-established to improve connections between fragmented habitat areas.



Scenic Resources

Natural resources include beaches and recreation areas, of which Long Island has many.

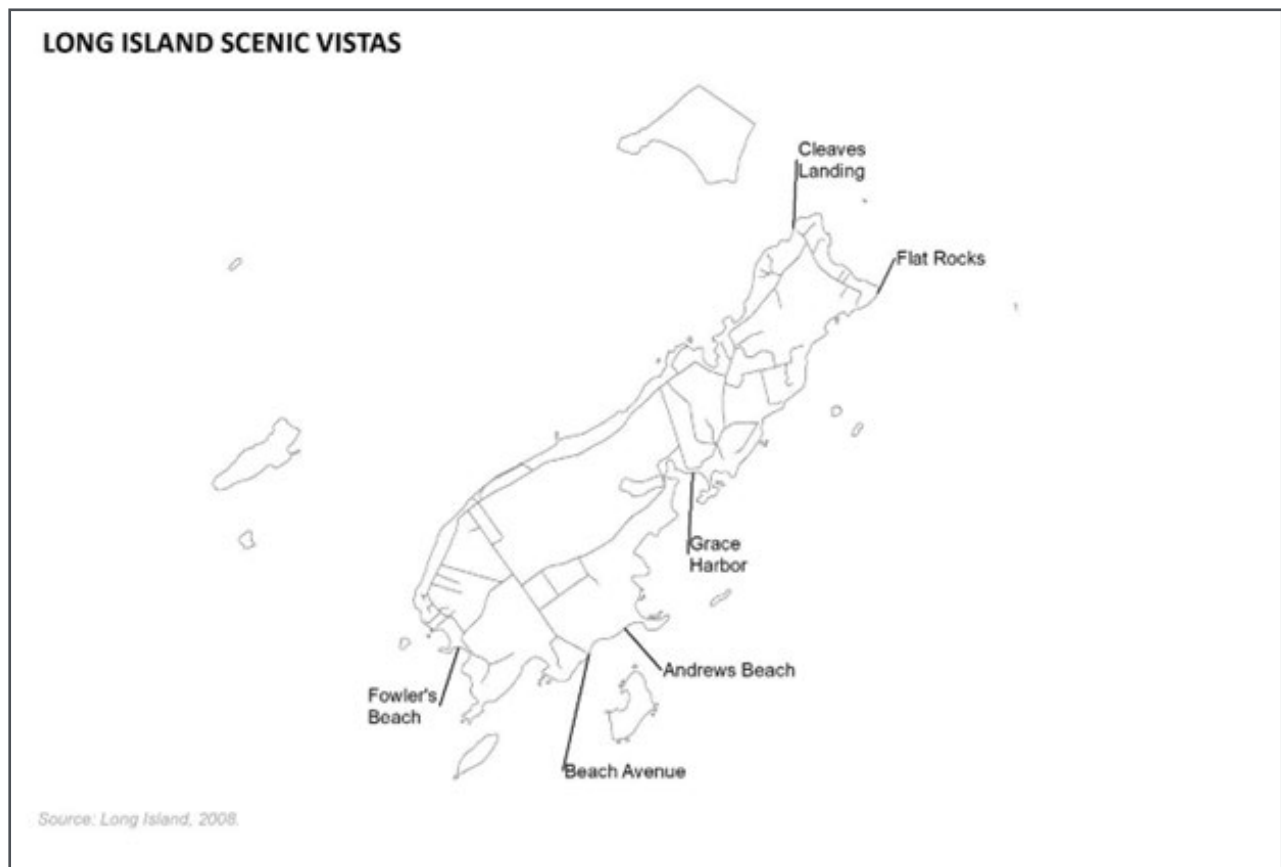
The map above shows the locations of many of the open spaces and recreational areas that can be considered scenic resources for Long Island. Some of the most loved are the beaches, especially Fowler's Beach and Andrews Beach (locally known as South Beach).

Protecting and managing open spaces and natural resources was cited as a strategic priority by over 63% of respondents to the LICP2035 Survey. In the open-ended responses, people mentioned the fact that the natural beauty of the island is what drew them here. Access to nature and the spaces shown above are a key part of the way of life on the island.

South Beach, which faces Vaill Island, is one of the biggest and most popular scenic resources on Long Island. Approximately two-thirds of South Beach is state owned and under the control of the Department of Parks and Recreation. Together with the remaining privately owned section, it is by far the largest beach on the island. There are no facilities with the exception of a single privy sited well behind the dunes about midway along the stretch of beach.

Fowler's Beach is located on the southwest side of the island. This beach and some of the land around it is owned by LICA, a non-profit and tax-exempt island organization. This beach is one of the island areas protected by a conservation easement preventing any development of this beach in the future. The easement is held by Oceanside Conservation Trust of Casco Bay.

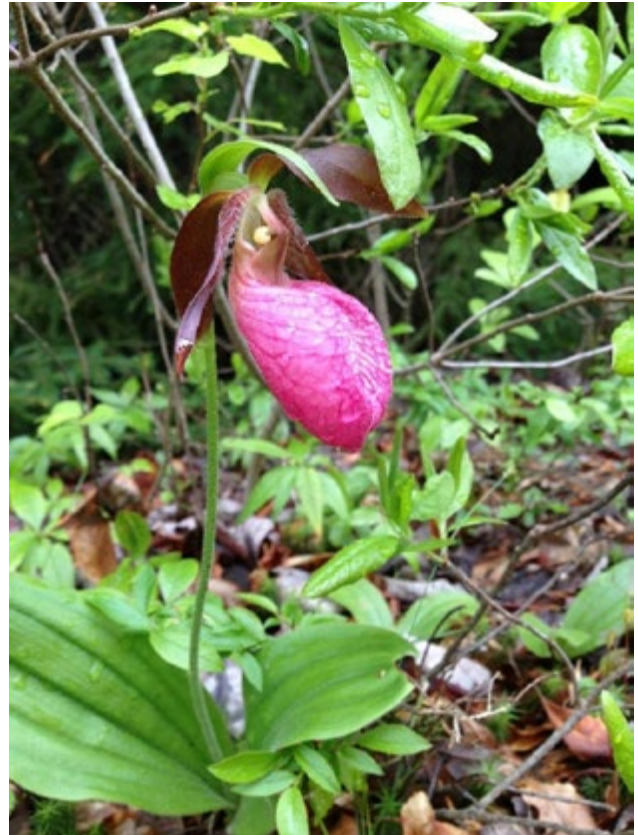
Wreck Cove is another example of one of Long Island's scenic resources. This parcel includes about 12 acres of wooded forest, scattered wetlands, a seasonal stream, and alder marsh land which abuts the nearly 400-foot section of rock and cobble beach cove open to the ocean. Wreck Cove is accessible by a path created by island volunteers. The Wreck Cove property is protected by a conservation easement held by Oceanside Conservation Trust of Casco Bay.



Regulatory Protection

Long Island has a wealth of natural, scenic, and open space resources, including forested wetlands, coastal bluffs, beaches, and several smaller nearby islands. Long Island is subject to state and federal regulations and has also adopted local ordinances on shoreland zoning and floodplains to protect these resources. However, the town should monitor environmental health and implement additional regulatory and non-regulatory measures to adequately protect these resources beyond shoreland and floodplain ordinances.

Specific actions that can lead to better stewardship on Long Island are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document. There, readers will find a list of recommendations and suggested strategies that can aid in the protection and management of the island's natural resources.



Flowers and gardens bring a special beauty to Long Island including pink lady slippers.
Photo: Lorinda Valls



Cross country skiing and snowshoeing are favorite winter sports in the conservation area.
Photo: Elizabeth Marchak



Creating structures on the beach using driftwood and found objects is a popular Long Island pastime. Photo: Ann Caliandro



Our tight-knit island community loves to gather to celebrate special milestones. In this case, it takes a lot of cakes to hold 90 birthday candles. Photo: Dick Mitchell

Recreation

Maine's Growth Management Act recommends promotion and protection of the availability of outdoor recreation opportunities for all Maine citizens, including access to surface waters. This chapter quantifies and qualifies the recreation and open space resources of Long Island, and explores how they are positioned for the demands of the future.

The extent and type of recreation and open space available to residents reinforce the value Long Island residents place on providing opportunities for citizens to meet, play, exercise, relax, and reflect.

The Town of Long Island owns and/or offers public access to a multitude of natural outdoor open spaces. Long Island residents and visitors routinely use these spaces for active and passive recreation activities such as walking, spending time with pets, biking, trail running, hiking, bird watching, fishing, swimming, hunting, gardening, visiting the beaches, and boating.

In addition to natural outdoor spaces, the town provides additional spaces for tennis, pickleball, and basketball, a ball field with a baseball diamond, and a playground.

Interior recreational spaces, such as the library, VFW hall, and the community center provide opportunities for human social interaction by means of active recreation, exercise classes, organized club events, craft fairs, and much needed winter outlets for year-round residents.

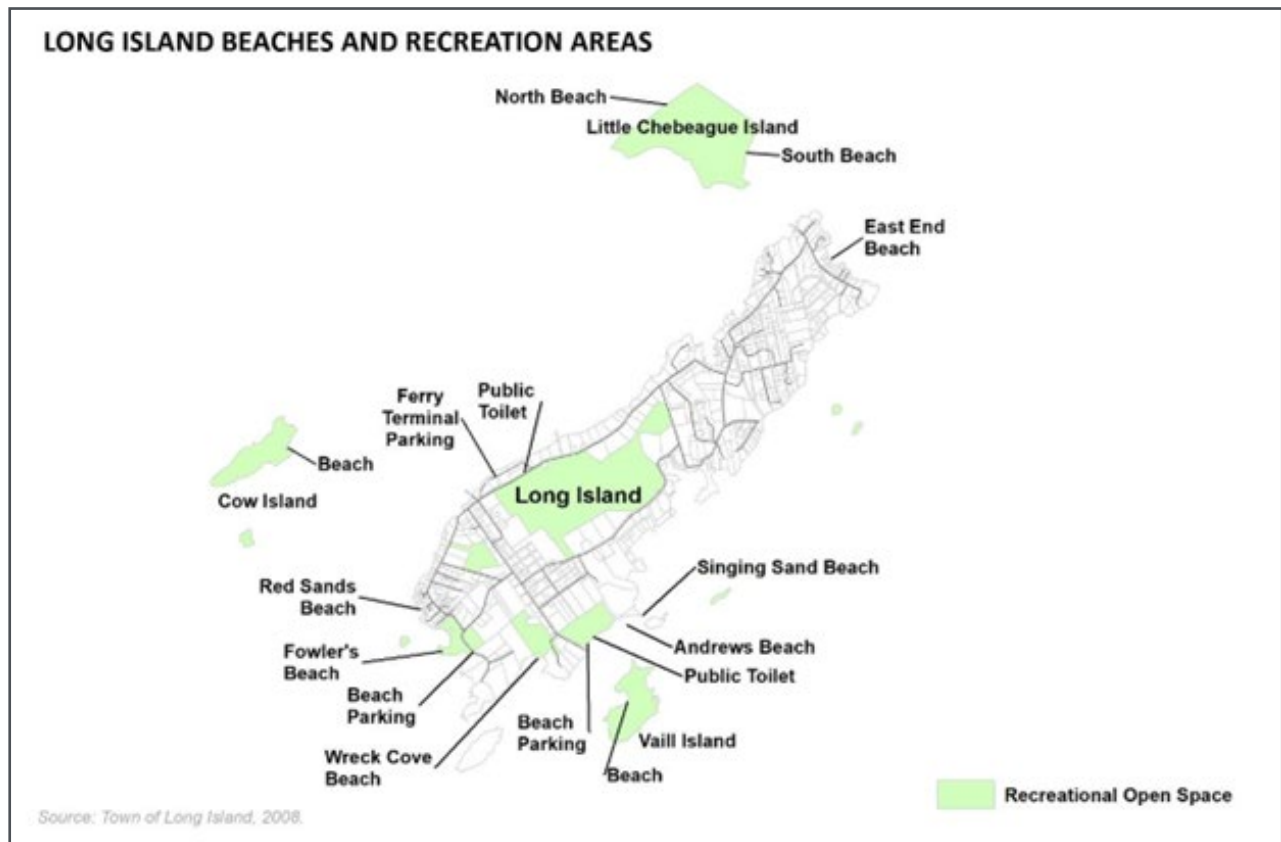
Summary of Recreation and Open Spaces

In 2022, Long Island outdoor recreational spaces included:

- Undeveloped lands - 116-acre conservation area with a maintained system of trails and a buoy toss game
- Developed lands - a tennis court, a pickleball court, a basketball court, and a playground, all owned by the Town of Long Island
- A large forested area with walking trails, some on private land available for public use
- Public Beaches - 8: Andrews Beach (known locally as South Beach with a rustic privy in the dunes), Shark Cove (known locally as Singing Sands), Fowler's Beach, East End Beach, Front Beach, Cleaves Landing, Back Shore, and Wreck Cove with public access via paths and right-of-ways

- An abundance of rocky shoreline accessible for walking
- A community garden area
- A ballfield owned and maintained by the Long Island Civic Association (LICA) with a summer portable toilet provided
- A large marsh area which serves as a skating surface during the winter months

In addition, there are many paved and unpaved roads with little automobile traffic for walking, running, and riding bicycles. Dog walking is a favorite recreation of many islanders, and you can often meet fur friends while strolling on Andrews Beach in the off season. Some folks also enjoy traveling the roadways at a leisurely pace in golf carts as they enjoy the scenery. Additional scenic and recreational resources can be seen in the map below.





Dogs walk their humans on Andrews Beach on a winter day. Photo: Linda Ferguson McCann

Waters

Much of Long Island's recreation and open space exists because of its location in the middle of Casco Bay, whose waters provide the setting for a large amount of our recreation and pleasure. Islanders enjoy swimming and playing on our beaches, boating from the shore, and cruising to various points of land by motor boat, sailboat, or kayak. Our watery surroundings also provide opportunities for recreational fishing. Scenic vistas abound on Long Island, and there is no better place to enjoy a day in the sun than on the shores of our little town.

Public access to these waters is available on Long Island from many locations. The Town of Long Island owns Ponce's Landing, the former ferry dock. It is currently used by the lobstering community and as an access point for the delivery of gasoline to the island. The town also owns Any Tide Boat Ramp, locally known as Boston Sand and Gravel (BS&G), which is our local boat launch and barge landing area. There is also the town-owned Wreck Cove property, which is permanently protected by a conservation easement held by Oceanside Conservation Trust of Casco Bay, a local land trust. The State of Maine owns the current ferry landing, Mariner's Wharf, where the town has at least one publicly accessible float in the water year-round where the town rescue boat is docked.

In the summer season there are floats located on both the east and west sides of the wharf offering access to the island for recreational boaters, water taxis, and other commercial vessels. There is a two-hour tie-up limit and overnight docking by private boats is prohibited on these floats.

Three of Long Island's offshore islands (Little Chebeague, College Island, and Cow Island) are all part of the Maine Island Trail Association (MITA). Little Chebeague and Cow both have campsites maintained by MITA, and College Island is listed on the trail as a pullout site for kayakers traveling the trail. Being able to connect with the Maine Island Trail is another recreational benefit for islanders and visitors alike.

Beaches

Long Island has the distinction of having some of the most beautiful beaches of any island in Maine. The largest is Andrews Beach, also known as South Beach, on the south side of Long Island, facing Vaill Island (also known as Marsh Island). Approximately two-thirds of this beach is designated as a Maine state park and is fully accessible for use by the general public. This has both positive and negative implications as it attracts numbers of pleasure seekers during the summer months to a location which has



Fowler's Beach is a popular destination on a warm summer day. Photo: Nancy Noble

the barest amenities. The state has built one privy, which is located in the woods behind the dunes and is maintained by the town's parks director and volunteers.

A second beach is owned by LICA (Fowler's Beach) and is open to the residents of Long Island. LICA deeded a conservation easement to Oceanside Conservation Trust of Casco Bay, which monitors the restrictions placed on its use by LICA. Efforts have been made to protect its dune structure with the planting of beach grass and beach roses (*Rosa rugosa*) and the installation of snow fencing.

There are several other beaches on the island including Front Beach, Red Sand Beach, Cleaves Landing, East End Beach, Shark Cove, and the Back Shore. All of these beaches have public access through roadways and rights-of-way. The only beach with public restroom facilities (a privy in the dunes) is Andrews Beach.

State Owned Islands

There are two islands within the Town of Long Island that are owned by the State of Maine and used for recreational purposes. One is Little Chebeague Island, part of which is within the boundary lines of the town. It is used by private boaters throughout the summer for day trips, picnicking and camping. It is also accessible by foot during low tide from Great Chebeague Island, which claims the remaining portion of the island within its borders. Interns from the Maine Island Trails Association (MITA) have done a thorough job maintaining walking trails on the island which include historical markers relating the story of land use over the years. A MITA caretaker resides on a private campsite on the island during the summer months, assisting campers and mowing the trails. There are several designated campsites maintained by MITA. There is also an outhouse for use by visitors and campers.

The beaches on Little Chebeague are idyllic and are a frequent destination for Long Islanders who enjoy beachcombing and gathering shells at low tide on the sand bar on the back side of the island.

The other island, Vaill Island, locally known as Marsh Island, attracts some use by boaters and is sometimes accessible at very low tides by means of a rock and sand bar that connects it to Long Island's Andrew's Beach. Recently, the Casco Bay Swim-Run event has included segments on both of these islands, as well as stops at various points on Long Island.



Jumping from Mariner's Wharf into the ferry wake is a popular activity during the summer months.
Photo: Dick Mitchell

Privately Owned Islands with Public Access

Cow Island is owned by Rippleffect, a group that conducts youth adventure and kayaking programs there. This island is also open for limited public access on the northern shore, and is protected by a conservation easement held by Maine Coast Heritage Trust, a land trust based in Topsham, Maine. College Island is a tiny island off the west end of Long Island. It is owned by Oceanside Conservation Trust of Casco Bay and is listed by MITA, which monitors its use, as a brief pull out spot for kayakers.

Island Recreations

LICA owns a nine-acre parcel located in the interior of the West end of the island that is used as a baseball and soccer field in the summer and occasionally for kickball, ultimate frisbee, and other recreational games. It is maintained by volunteers with the cost for materials paid by LICA, which organizes fund-raising events to cover those costs. A summer adult softball league is open to inter-island players and welcomes many players from Great Diamond Island each week. Soccer camps are held by the Rec Department, often featuring coaches from away who stay on the island for a week while they run their camps. A portable toilet is placed at the ballfield for these events.

There is also a large open area in the center of the Island that serves as a park open to the public. The former Long Island Naval Fuel Tank Farm is owned by Long Island Community Land Operating Company, LLC (LICLOC). This property is also protected from development by a conservation easement held by LICA with the Department of Environmental Protection as a backup holder. LICLOC is governed by a board of five members appointed by the Selectmen. Motorized vehicles are prohibited under the terms of the conservation easement.

It has walking trails that are maintained by volunteers under the supervision of LICA and LICLOC and can be used for cross-country skiing and snowshoeing in the winter. It offers one of many opportunities to observe a variety of wildlife such as birds, deer, fox, and even beavers at work. A buoy toss game is also set up in this area for people to enjoy.

There is a community garden located on land that is part of the community center property owned by the town. It consists of thirty-two raised beds for use by the public for growing flowers and vegetables and is enclosed by a fence to keep deer out of the gardens. Individual residents can join the community garden and have access to a raised bed for their personal use. The garden has a dedicated portion on which crops are grown for benefit of the local food pantry.

Not all of Long Island's recreational opportunities occur in the great outdoors. People are drawn to gather together in this friendly community, and many folks have multi-generational connections with their neighbors. Although the COVID-19 pandemic has put a pause on many community events, in previous years we have had well attended soup lunches through the Long Island Wellness Council and fundraisers for the school, the churches, the VFW, the Fire & Rescue, and the Wellness Center. Community auctions, craft fairs, bridge and knitting groups, bean suppers, dances, pancake breakfasts, horseshoe tournaments, exhibits at the Long Island Historical Society, and volunteer projects have all provided opportunities for islanders to socialize. Many projects have been undertaken by volunteers in the community including rebuilding of the Community Center through the Revitalization



The annual Fourth of July Road Race is well attended by both young and old. Photo: Janice Avignon



Kayakers of all species are often seen in the waters off of Long Island Photo: Linda Ferguson McCann



Less than five years after the first net was set up, pickleball has become a popular sport for community members of all ages. Photo: Charlotte Hedge

Project, renovation work on the ball field, purchasing of a temporary ice rink, and work parties to clean the beaches and pick up trash and brush on open lands. All of these things make Long Island the close-knit community that it is. In general, we like each other, help each other whenever possible, and it usually will not take too much prodding to get a group working or playing together.

Long Island is also home to many talented artists and crafters who often share their talents with the island community. There are regular exhibits of local art at the Dodwell Gallery at the Long Island Community Library. The library also features smaller exhibits of local crafts throughout the year. During the summer, artists and crafters may sell their wares on consignment at the Ivy Hall Gift Shop and at craft fairs such as the Wharf Street Festival. Survey respondents mentioned knitting and making art as things they enjoy in their leisure time. We have anonymous “rock fairies” and “shell fairies” who deliver unique hand-crafted keepsakes made from locally found treasures to islanders throughout the year. Some of the artwork created by island artisans is visible for all to see while touring the island by car, bike, or foot.

There is also a dedicated adult tennis and pickleball community on the island. You can often find them gathering on the weekends for tennis scrambles, and families often use the courts for multi-generational play. With pickleball recently becoming a popular sport on the island, there is often competition for playing time on both the pickleball and tennis courts, which are adjacent to each other next to the school. During the winter of 2021-2022, temporary lines were taped on the floor in the community center to allow indoor pickleball play on a slightly smaller than regulation court, encouraging people to play indoors on a daily basis.



An island mailbox shows off the talents of our local artisans. Photo: Linda Ferguson McCann

Recreation Department

The Town of Long Island Recreation Committee is responsible for planning and overseeing recreational programs both in the summer and off-season in the interest of year-round and seasonal residents. The Recreation Department seeks

- To provide, maintain, and develop safe and enjoyable recreational programs to enhance the well-being of the members of the community;
- To build relationships with our community members that will help facilitate program participation;
- To respect not only our program participants but also our fellow committee members, volunteers, and staff;
- To take pride in our resources: we strive to maintain and effectively run our Community Center and facilities; and
- To provide a safe and healthy work and volunteer environment.

The Long Island Recreation Department organizes and operates many programs for both the youth and adults on the island, most of which take place at the Long Island Community Center, the school, or the ball field. They include after-school programs, art and pottery classes, dance classes, yoga, gymnastics, and an Art Club. Teen programs include trips to various venues in the Greater

Portland area, teen nights, dances, and a game room with video games. The recreation department also organizes outdoor sporting activities such as archery, track, soccer, softball, basketball, kickball, ultimate frisbee, and volleyball games. Family events include ice-skating, movie nights, the Wharf Street Festival, and campfires with marshmallows and s'mores.

The Long Island Community Center is home to a pottery studio with two kilns, several pottery wheels, a slab roller, and various equipment needed for producing ceramic creations. The studio is under the direction



The pottery studio is enjoyed by islanders of all ages under the careful tutelage of talented island artisans. Photo: Doug Grant

of an artist who has developed programs for both children and adults. She also teaches art (including pottery) at the Long Island School. There are aspiring artists who travel from other nearby islands to create in the studio, too. A full program of pottery classes for children and adults takes place throughout the summer and into the fall months, and the studio is available to islanders throughout the off-season as well.

The Town of Long Island abounds with talented artisans who have been willing to share their skills through programs at the Community Center. Some examples include quilting workshops, creating painted floorcloths, creating textiles with homemade stamps, jewelry making, and working with fused glass. Guest potters also hold workshops at the studio on occasion. These activities combine with athletic and exercise programs in tennis, pickleball, yoga, and basketball to create a diverse list of offerings for our community.

Off Island Recreations

Mainland and regional recreational opportunities can be somewhat limited by ferry schedules, especially in the winter



Archers take aim during one of the programs offered by the Long Island Summer Recreation Program. Photo: Erica Papkee

months, but the recreation department does arrange some field trips to take advantage of facilities, explorations, and programs offered on other islands and on the mainland.

Conservation Groups Active in the Town of Long Island

Oceanside Conservation Trust of Casco Bay

P.O. Box 10404, Portland, ME 04104 44

Maine Coast Heritage Trust

Main Office: 1 Bowdoin Mill Island,
Suite 201, Topsham, ME 04086

Long Island Civic Association

P.O. Box 307, Long Island, ME 04050

Recreational options are clearly on the minds of the Long Island Community. Based on data from the LICP2035 Community Survey conducted in 2021 (LICP2035 Survey), there is a strong desire for the town to continue to provide recreational facilities and opportunities. Both the youth and adult populations see a need for these facilities in order to get and stay fit, remain engaged and healthy, and maintain the sense of community. Survey data showed that 43.6% of respondents cited “improving existing parks, trails, and recreation opportunities” as one of their top priorities for 2035. Additionally, 34.40% of respondents are looking for expanding environmental sustainability efforts (eg. non-vehicle ways of travel such as walking and biking)” and 27.03% of survey respondents expressed a desire for “providing new or expanded arts and cultural offerings”. 29.36% of survey respondents indicated a desire for “building new community services (e.g. childcare center, senior center, welcoming “gateway” down front)”, some of which could come under the purview of the recreation department.



Participants in the summer recreation day program show off the ferry replicas they created for Casco Bay Lines Appreciation Day. This celebration, generally held in August, is the island’s way of expressing gratitude for the ferry service provided to our community. It features signs and food delivered throughout the day by islanders who greet each boat as it arrives.

Photo: Erica Papkee

When asked what they like to do in their leisure time on the island almost all respondents mentioned some form of outdoor recreation, such as going to the beach, walking, gardening, playing tennis or pickleball and enjoying the “endless outdoor opportunities” the island provides. However, others indicated a hesitancy to use the existing trails in the conservation area due to the high prevalence of deer ticks, which spread Lyme disease. Survey respondents also commented on the need to reimagine the use of the conservation area to include things such as expanded trails with improved maintenance, a fenced-in dog park to accommodate off-leash recreation for pets, and the possibility of moving the pickleball court to this unpopulated part of the town where it might be possible to construct a regulation-sized court. There was also interest expressed in a year-round indoor fitness facility with a swimming pool. Survey respondents also requested more recreation programming for both children and adults, more family activities, and more social gatherings for adults year-round.

Challenges

Staffing Challenges

The Recreation Department was disrupted in a major way, much like other aspects of island life, by the COVID-19 pandemic. Prior to the pandemic, a robust summer program and year-round offerings were implemented by the Recreation Department. Summer Programs were staffed by adults, high school students, and Counselors-in Training. Over 575 working hours were logged by summer staff and volunteers in 2019, the last “typical” summer before the onset of the pandemic.

The Recreation Department is run by a collection of both paid staff and volunteers. Much like other departments of the Town of Long Island, the Recreation Department is experiencing a shortage of people willing and/or able to run its programs. Most recently, the COVID pandemic closed the summer program down in 2020. After this disruption, the summer of 2021 revealed a deep imbalance between desire for quality recreational programming and the number of qualified staff willing and able to run these programs. In 2018 the summer program boasted 13 paid staff members plus numerous volunteers committed to running its programming. In 2019, there were 12 paid staff members. After the shutdown in 2020, the 2021 summer staff consisted of only 7 paid staff (plus volunteers), but with greatly limited availability when compared to the summer of 2019. In interviews with staff and former staff, many stated that they cut back on available hours because the previous year they needed to find alternative employment opportunities and were unsure whether the Recreation Department would be up and running again in 2021. The reduction in regular staff members in 2021 created a necessary decrease in the number of programs that could be offered. This was reflected in the LICP2035 Survey results,

which requested more programming for both children and adults. As we move forward, there will be a need to secure a more stable base of staff members in order to run a successful recreation program.

Programming and Facilities Concerns

With the median age of island residents rising over the past decade and into the foreseeable future, improvements in availability and accessibility of recreational opportunities for this age group will be critical in maintaining the fitness, intellectual engagement, and physical and mental well-being of our aging population. A senior day program would offer opportunities for socialization, fitness, and intellectual stimulation for our aging residents, specifically targeting the grouping number of year-round residents aged 65 years and over. Maintenance of hiking trails and roadways will also allow for safe walking, hiking, and biking for residents of all ages. The issue of transportation for elderly residents should be visited in order to allow for increased socialization opportunities and access to programming, especially in the winter months.

Concern has also been expressed for making our currently available recreational facilities more usable year-round. Currently, the community center receives minimal use in the winter. The pottery studio is used throughout the year, and there has been an effort to offer more programming in that space during the off-season. Taped lines have been applied to the floor of the large room to accommodate an indoor pickleball court which has been used regularly this winter. Soup lunches and gatherings sponsored by the Wellness Council have been on hold for the past two years due to COVID, but those will be resuming this spring in the large room in the community center. The middle room has been used as a meeting and office space for the purpose of completing the comprehensive plan, but there is definitely

room for more programming in this space. There have been issues with the heating system and the water freezing in the community center in the winter, and there is some question about the potability of the water supply in that building. These issues should be addressed in a sustainable way in order to make the space reliably comfortable for future year-round use.

The island's pickleball court, located next to the tennis courts, is currently less-than regulation size. In addition, noise complaints have limited playable hours. This issue needs to be addressed moving forward. The popularity of the sport will surely put more demand on the one existing court, and, although there are only a few houses in close proximity to the existing court (which is contained in a major recreation area on the island which also hosts a tennis court, basketball court, and playground), the residents of those homes do find the noise from the pickleball courts to be disturbing. The select board has addressed the noise issue by limiting the hours of pickleball play, but this has created dissatisfaction among the pickleball players.

Access to Long Island's public open spaces is well protected by conservation easements and town and state ownership of key recreational areas as enumerated in previous sections of this chapter. Conserving land through ownership or private conservation easements is key to the preservation of open spaces and forested areas for recreational use by our community for years to come. Conserving natural spaces also aids in dispelling some fears on the island of over-development. LICA, LICLOC, and the Town of Long Island and the State of Maine all hold conservation easements on points of public access to recreation areas and Oceanside Conservation Trust of Casco Bay and Maine Coast Heritage Trust are also involved with conservation work on the island.

Specific actions that can allow us to better meet the future recreation needs of Long Islanders are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document. There, readers will find a list of recommendations and suggested strategies to address these needs.



Long Island beaches are equally beautiful in the winter covered in snow. Photo: Linda Ferguson McCann



The interplay between the sky and water at Harbor de Grace is a sight to behold even on a cloudy day.
Photo: Shirley Conner

Water Resources

Planning to protect and conserve the water supply was the top strategic challenge for 67% of those who responded to the Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035 Survey). Water resources on Long Island are finite, and there are many concerns about the quality and quantity of drinking water in the future. Developing an understanding of our water resources and using that knowledge to craft a plan for the protection of these resources is critical to the future of Long Island.

Water Quality and Protection

Long Islanders have long known that the protection of water resources must be prioritized. In 1986, the City of Portland commissioned “The Gerber Report,” a study of the groundwater of all of the inhabited islands then within the City. The Long Island Civic Association (LICA) made a valuable contribution to that study by conducting a well sampling survey that tested 104 of the wells on Long Island, and the resulting data was folded into the final “City of Portland Island Ground

Water Management Study”. Because of that significant sampling of Long Island wells, Robert Gerber, author of what has become known as “The Gerber Report” said that at the time Long Island “[had] about as good a database as any community in regard to their water resources.”

The Gerber Report talks about the testing that was done in 1985 for the report, and also talks about what they found as far as water quality on the island. That information can be found in the callout box below:

From the 1986 Gerber Report:

‘In 1985, 104 of the wells on the island were tested more-or-less simultaneously for common health and esthetic related water quality parameters. The Long Island water quality results found that almost half the wells tested had some total coliform bacteria, and over 1/3 of the wells had nitrate-nitrogen concentrations significantly above what would be typical of uncontaminated groundwater. It appears that high densities of subsurface sewage disposal systems and/or malfunctioning systems have caused this degradation of ground water. On the “Special Features” map, we have identified sections of Long where subsurface sewage disposal systems are suspected of contaminating wells. In addition, we have identified other known or potential sources of contamination such as 60 large petroleum storage tanks and landfills. It is important to note that there are very few cases of reported salt water intrusion in the island wells. Some local chloride contamination may be due to road salting or sand/salt storage.’



Source: 1986 “Gerber Report,” commissioned by the City of Portland.

In 1986, the Gerber Report stated acceptable levels of contaminants to be found in wells. Of the 104 water quality tests done on Long Island, they found a number of cases where the contaminant levels exceeded their recommended screening level. This 1986 data can be seen in the chart on the following page, and gives a good idea of the baseline water quality issues with which the Town of Long Island has to contend.

Well Test Results, Long Island, 1985		
Parameter	Number of Cases Exceeding	Percent
Nitrate	35	34
Iron	16	15
Chloride	3	3
Copper	5	14
Manganese	30	28
Coliforms	51	49

Data Source: 1986 "Gerber Report," commissioned by the City of Portland.

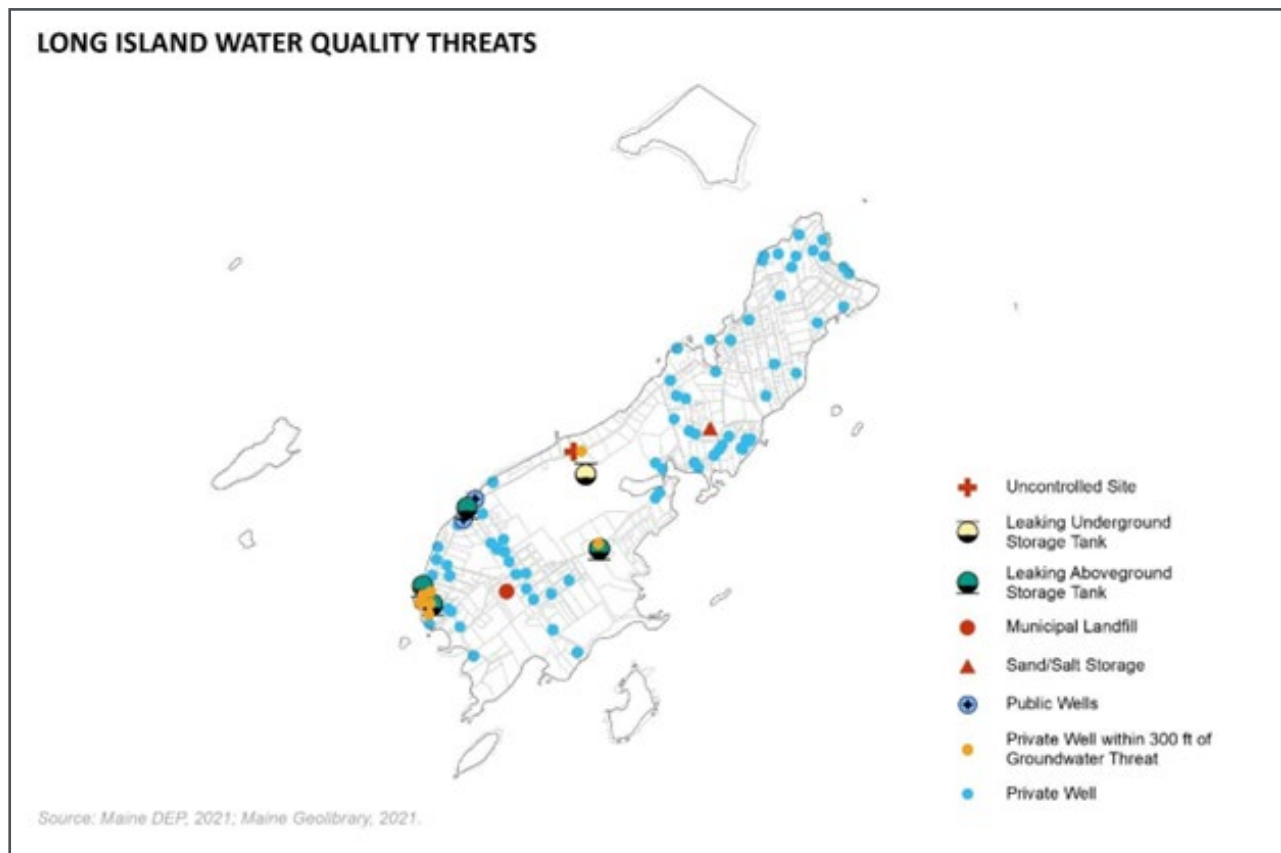


Children observe ocean life in a tidal pool.
Photo: Doug Grant

Some wells exceed more than one parameter level, and nitrate and total coliform appear to be the most prominent issues in wells on Long Island. Today, all of these parameters remain areas of concern, and all of the wells on Long Island should be tested for these contaminants..

One of the major factors in water quality on Long Island is the island's history of use by the United States military. When the U.S Navy was using the island as the 'Long Island Fuel Farm' in World War II, they installed underground fuel pipelines and storage tanks. These are still impacting the water quality on Long Island today.

Another concern about water quantity for the island is the finite nature of the island's aquifer, which is recharged by rainwater. With the aquifer as the only source for water on the island, residents are concerned that water supply could be under threat as the island population grows and as people spend more and more time in their island homes. The multiple threats to water quality and quantity are illustrated in the map on the next page.



Point Source Pollution

One of the largest sources of point source pollution on Long Island was historically the Navy refueling depot from World War II. On July 9, 1998, the Department of Environmental Protection (DEP) issued a certificate of completion for the Voluntary Response Action Program (VRAP). This did not indicate total cleanup of the polluted area, but did indicate a management plan to remediate the contamination. The Long Island Community Land Operating Company, LLC (LICLOC), which manages the area, has an active drainage system that includes five Oil Water Separators (OWS) which serve to collect residual oil before it exits into the ocean or into the marsh. These OWS systems have been inspected annually by LICLOC since 2017.

The municipal landfill is another potential source of pollution for the island. This property is currently being used only as a

transfer station, not as a true landfill. Even so, there are potential threats to water quality in the surrounding area. Landfills are known to sometimes result in elevated concentrations of manganese and iron in both surface and groundwater in the surrounding area. The Groundwater Quality Committee is aware of this potential source of pollution. Two of the island's test wells are on either side of the transfer station, and the committee has a plan to test these wells and track potential contamination in the near future.

In addition to the examples above, there are also three overboard discharge permits on Long Island. Two of these are in the 'down front' region of the island. One is at the business Byers & Sons Bakehouse, and the other is at the store, Boathouse Beverage and Variety. The third overboard discharge permit is at a private residence known as the nubble by Harbor de Grace.

Non-Point Source Pollution

One issue that impacts water quality as a non-point source of pollution is the large number of septic tanks on the island. Most of the soil on Long Island is not suitable for septic tanks, but every structure on Long Island has a septic tank or an overboard discharge. The 2008 Comprehensive Plan described many pollution issues related to these septic tanks, and Long Island has responded by requiring septic system inspections upon the sale of property and before any bedroom addition permits can be issued by the code enforcement officer.

The 1986 Gerber Report also mentioned septic tanks as a source of water pollution 36 years ago. At that time, there were at least 50 cases of groundwater contamination from subsurface sewage disposal. This contamination was found in 42% of the wells that were tested for the water quality study. The Gerber Report had this to say on the finding: "This does not necessarily imply that the groundwater is unsafe to drink, but it does mean that ground water contains physical and biological matter that is probably derived from subsurface sewage disposal systems. Should anyone using these septic systems have a disease that is readily transmitted in water, downgradient wells could pick up this virus or bacteria and transmit it to humans drinking the water. High nitrate concentrations have also been linked to the potential to cause gastric cancer. The potential reasons for such a high incidence of contamination by subsurface sewage disposal systems are: a) poorly designed or maintained subsurface disposal systems; b) high localized concentrations of systems; and/or c) thin soil under the systems and fast contaminant travel times to the nearest well."

This is undoubtedly an area of concern for the island. Considering the history of issues with water pollution and contaminants in well water, the island should have a vigorous testing program to maintain a baseline

understanding of issues facing the water supply here. Water testing and protecting the water supply was identified as a top concern in the LICP2035 Survey, and the Town of Long Island must prioritize the issue of groundwater protection in the coming years.

Public Water Supply

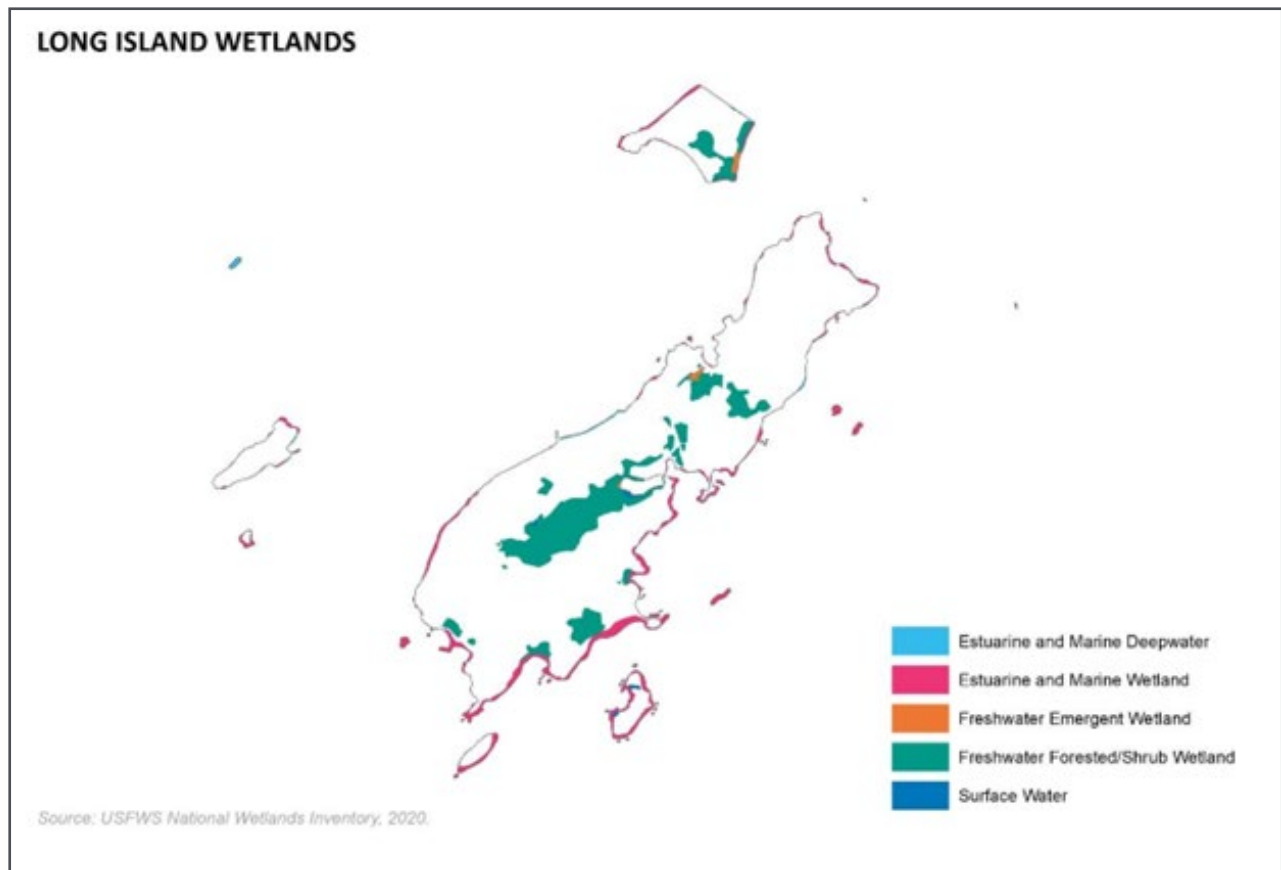
There is the possibility of a public water supply using the two potential public wells identified on the map on the previous page. The first potential public well is located at Byers and Sons Bakehouse. The second is located at the Post Office building, which also includes a number of condominiums. This building was previously the site of a restaurant called the Spar, which closed in 2006. There is potential for renewal of the public water supply on this property.

Water Resources

Wetlands

Wetland areas are an incredibly valuable natural and water resource that add environmental value and protection to their communities. Wetlands represent the interface between the aquatic and terrestrial environments. Wetlands provide a variety of functions which include helping to filter excess nutrients and contaminants from runoff before they enter surface waters; the temporary storage of flood waters; erosion control through the stabilization of riverbanks and other shoreland areas; and as habitat for a variety of water-dependent and upland species of animals. Wetlands on Long Island are regulated federally under the Clean Water Act (CWA) and in Maine by the State Natural Resources Protection Act (NRPA).

Wetlands are defined based on a combination of plant species, soil types, and duration of flooding/saturation by water. The National Wetlands Inventory (NWI) is used to identify



wetlands for municipal comprehensive planning purposes. The NWI was originally produced during the mid-1980s by the U.S. Fish and Wildlife Service (USFWS) based on an analysis of aerial photography and was most recently updated by the USFWS in 2020. This method of identifying wetlands allows the USFWS to map wetlands for the entire country, but also makes some types of wetlands more difficult to identify if they were obscured by tree cover. The NWI data is very useful for general planning purposes, but it does not substitute for site specific field investigations and wetland boundary delineations required by the Maine Department of Environmental Protection under the NRPA.

Most of the wetlands on Long Island are freshwater forested and/or shrub. The largest contiguous patch of forested wetlands is located at the center of the island with several smaller forested wetlands

located near Doughty Landing or towards the southwestern end of the island. The NWI wetlands data show a 1-acre patch of freshwater emergent wetlands located just south of Doughty Landing. Estuarine and marine wetlands cover more than three-quarters of Long Island's perimeter. These coastal wetlands are the first line of defense against flooding during storms. In recent years, storm surges and wind damage have gotten more intense on the island. In January 2022, there was a large storm that caused severe damage to the 'down front' region of the island. Many believe that the strength of this storm is indicative of what is to come, which signals that resources like wetlands are more important than ever.

Groundwater Quality and Quantity

The Town of Long Island is entirely within the Casco Bay Frontal Drainage watershed. There are no mapped streams, ponds, or



In response to the LICP2035 survey, islanders expressed great interest in preserving the island's wildlife and outdoor spaces. Here, spiderwebs take form in a marshy island area on a cloudy, foggy summer day.
Photo: Lorinda Valls

lakes on Long Island. All surface water that falls on Long Island either drains directly to Casco Bay or is absorbed into the groundwater.

Water Quality

In all of the outreach conducted by the Long Island Comprehensive Plan Committee in 2021, it was clear that water quality was a major concern for members of our community. There is a history of water quality testing on the island. In 1985, 104 of the wells on the island were tested in the same time period for some basic health measures. The Long Island water quality results found that almost half of the wells tested had some total

coliform bacteria, and over one-third of the wells had nitrate-nitrogen concentrations significantly above what would be typical of uncontaminated groundwater. It appears that high densities of subsurface sewage disposal systems and/or malfunctioning systems have caused this degradation of groundwater.

In October 2021, the community met for a series of vision workshops to discuss the future of Long Island. One of the topics that came up frequently was water quality and the health of the water supply on the island. Community members expressed concern about water quality, especially around the issue of potential future development. The future of Long Island depends on the ability of the island's resources to support those who live and work here. To begin to address these issues immediately, a Groundwater Quality Committee was formed with the approval of the town select board.

The Groundwater Quality committee has begun to take action to preserve the health of water resources on the island. Current plans involve an extensive water testing project. The goal of this project is to establish a baseline on the health of the water supply on the island, especially in the areas with the highest density of wells. Beyond testing water quality, the committee is also starting to map wells and Subsurface Wastewater Disposal Systems, as well as gathering information about said wells and systems. This adds to the wealth of knowledge that will be helpful in the future when dealing with climate change and other issues. When writing this chapter, it was difficult to piece together the history of water testing on the island due to a lack of consistent data sources. Developing a data system to track water quality and quantity will aid the island in its water protection in the future.

Water Quantity

The water supply on Long Island comes primarily from the bedrock aquifers. In 2008, a groundwater management plan was recommended to correct some current problems and preserve the supply of groundwater. This management plan has not been fully enacted, and therefore the community is in need of further work to evaluate the water supply on the island and develop a fuller understanding of the state of the water resources.

Public Works

Another piece of water quality protection on the island centers on cooperation with public works. The town's public works department recognizes two major issues when it comes to protection of water resources; erosion and pollution from road salt and sand. There is also the issue of hazardous waste from public works projects and other operations on the island. This waste is stored and then disposed of through the proper off-island channels during the annual hazardous waste pickup day.

Based on a recommendation from earlier plans, a salt shed was constructed to protect the island's salt supply. All salt is kept in the salt shed year-round. This was a major recommendation to protect both the water supply on the island and the ocean environment surrounding the town. The salt shed undoubtedly helps with the issue, but some are still concerned that this shed doesn't do enough to keep the salt out of the groundwater. This threat is compounded by erosion on certain areas of the island that washes salt placed on the roads directly into the ocean.

The issue of protecting water resources on Long Island is urgent. It has long been accepted that water resources are a priority for the town, illustrated by the fact that the

City of Portland commissioned the Gerber Report in 1986. Today, 36 years later, water remains the biggest concern. Long Island prides itself on its resilience as a community, and to maintain this resiliency the island must ensure that it has a full understanding of what resources it has at its disposal and how healthy those resources are. There is still a large amount of work to be done to ensure that Long Island is doing its due diligence to protect its water resources.

Specific actions designed to ensure sufficient quantity and quality of water resources for future needs are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document. There, readers will find a list of recommendations and suggested strategies to address these needs.



Wetland areas are an incredibly valuable natural and water resource that add environmental value and protection for the community. The marsh and the duck pond at Fowler's Beach, part of the island's wetlands, show off late-summer goldenrod. Photo: Dick Mitchell



A lobsterman who worked Long Island's waters for decades sizes up his catch at the end of the day. In some families, there are three generations who lobster on Casco Bay. Photo Credit: Nils Caliandro

Marine Resources

Marine resources have long been central to the economy and the way of life on Long Island. The value that the marine economy adds to life here on the island is hard to quantify; it is so deeply ingrained in the history and identity of Long Island. Many community members rely on the ocean for a career and a means of income, and proximity to the sea is a critical part of Long Island's identity. In the Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035 Survey), respondents mentioned that fortifying the working waterfront is one of their greatest hopes for the future of the island.

Lobster fishing, fishing for shellfish, aquaculture, and other marine economic ventures have always been a part of the way of life here. One of the guiding principles to come out of the LICP2035 Survey was resilience. With so many issues facing the marine economy and especially the lobster fishery in Maine, those who rely on the working waterfront must be more resilient than ever. The Town of Long Island is determined to do what they can to support the working waterfront. According to participants in the fishing industry, one way for the town to support them is to continue ensuring that they have access to the waterfront. For the island to retain its character, it is absolutely critical that the comprehensive plan sets up a roadmap to a future that can maintain the working waterfront for many years to come.

Mariner's Wharf

One of the major access points for the waterfront is Mariner's Wharf, located in the 'down front' area of the island, facing northwest. In 1996, the state of Maine built Mariner's Wharf. At that time, the town and the state agreed that the state would be responsible for the wharf itself and the town would be responsible for the wave screen, floats, ramp, and lighting. The complicated ownership agreement has contributed to challenges in accountability for ongoing maintenance.

This situation has led to a slowdown in repairs and maintenance. This history of ownership is important to keep in mind when discussing the working waterfront on Long Island.

Waterfront Access

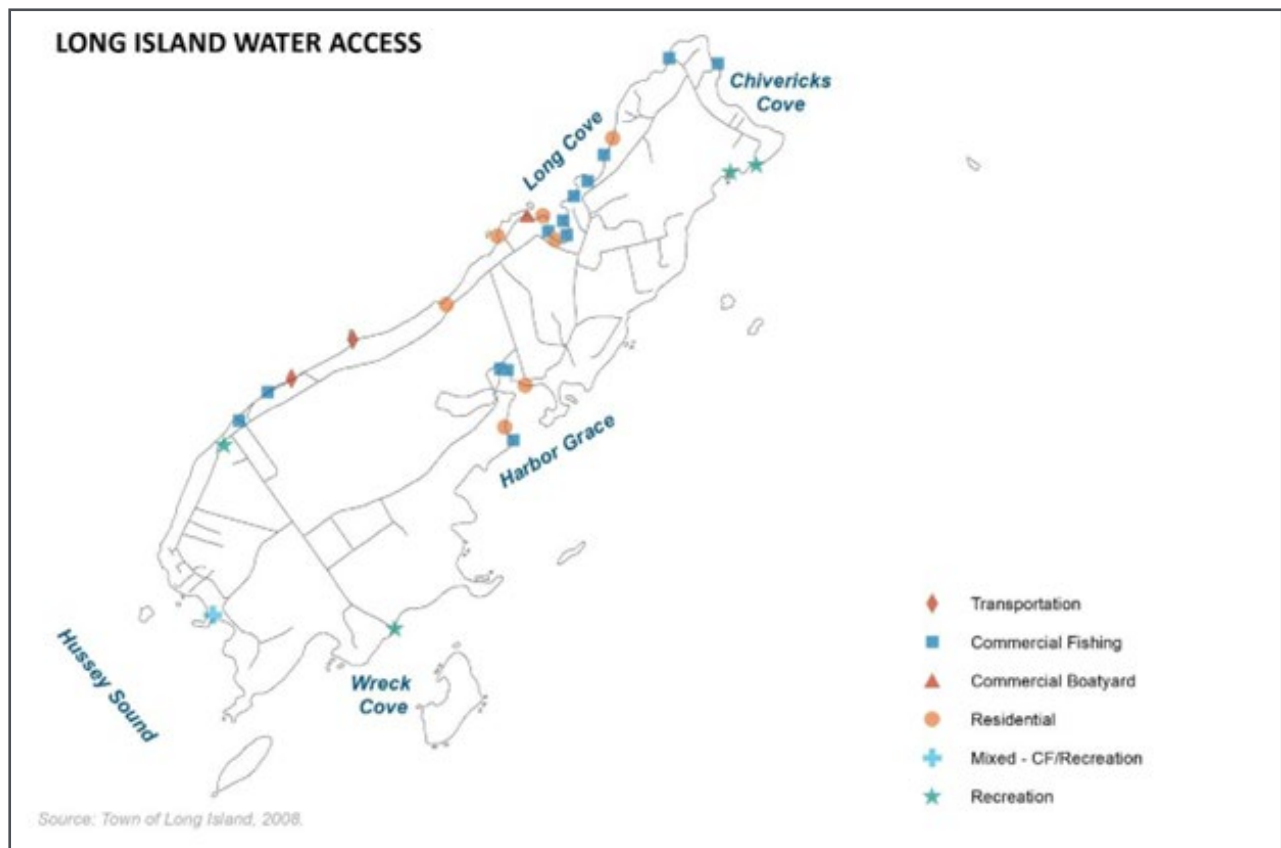
It is the State of Maine's goal to protect the state's marine resources, industry, ports, and harbors from incompatible development and to promote access to the shore for commercial fishermen and the public. The viability of marine use is continuously under threat by the heavy real estate/recreational pressures on the Southern Maine coastline, but the Town of Long Island has taken several steps to secure deep-water access.

Long Island has actively pursued this goal with the purchase of waterfront land, including the parcel where the Community Center is now located. This land has deep-water access, if ever needed, and is adjacent

to Mariner's Wharf. It provides support for that facility in the form of parking. The town also owns Any Tide Ramp, known locally as Boston Sand and Gravel, a boat ramp and barge landing location which enables residents to move materials and equipment on and off the island.

The island accepted ownership of Ponce's Landing, the former ferry wharf, when the state constructed a new ferry wharf at Mariner's Landing. In 2007, voters approved the sale of a protective covenant to the State to ensure continued access for commercial fishing. Ponce's Landing now provides public deep-water access for private boats and, by a fee-paying cooperative arrangement, to commercial lobstermen.

The island has previously accessed money from the State's Small Harbor Improvement Program (SHIP), which has been used to repair Ponce's Landing, construct additional floating docks for public access at Mariner's



Landing, and acquire working waterfront property adjacent to Mariner's Landing. There are currently proposals by the Town of Long Island to apply for a SHIP grant to finish some ongoing maintenance work on Mariner's Wharf. If received, this SHIP grant would cover two-thirds of the cost of the project.

Long Island does give preference to water-dependent uses by continuing to support the construction of lobstering wharves with minimal regulation and the exemption of small fish houses from setback requirements. The town applies minimal taxation to the fishing infrastructure of wharves, floats, and related gear. The "current use" tax program is available to owners of waterfront land that is used to provide access to or support the conduct of commercial fishing activities. There are currently many challenges facing the lobster fishery in Maine, and the Town of Long Island recognizes that in a community where so many depend on the fishery, they must support the working waterfront and

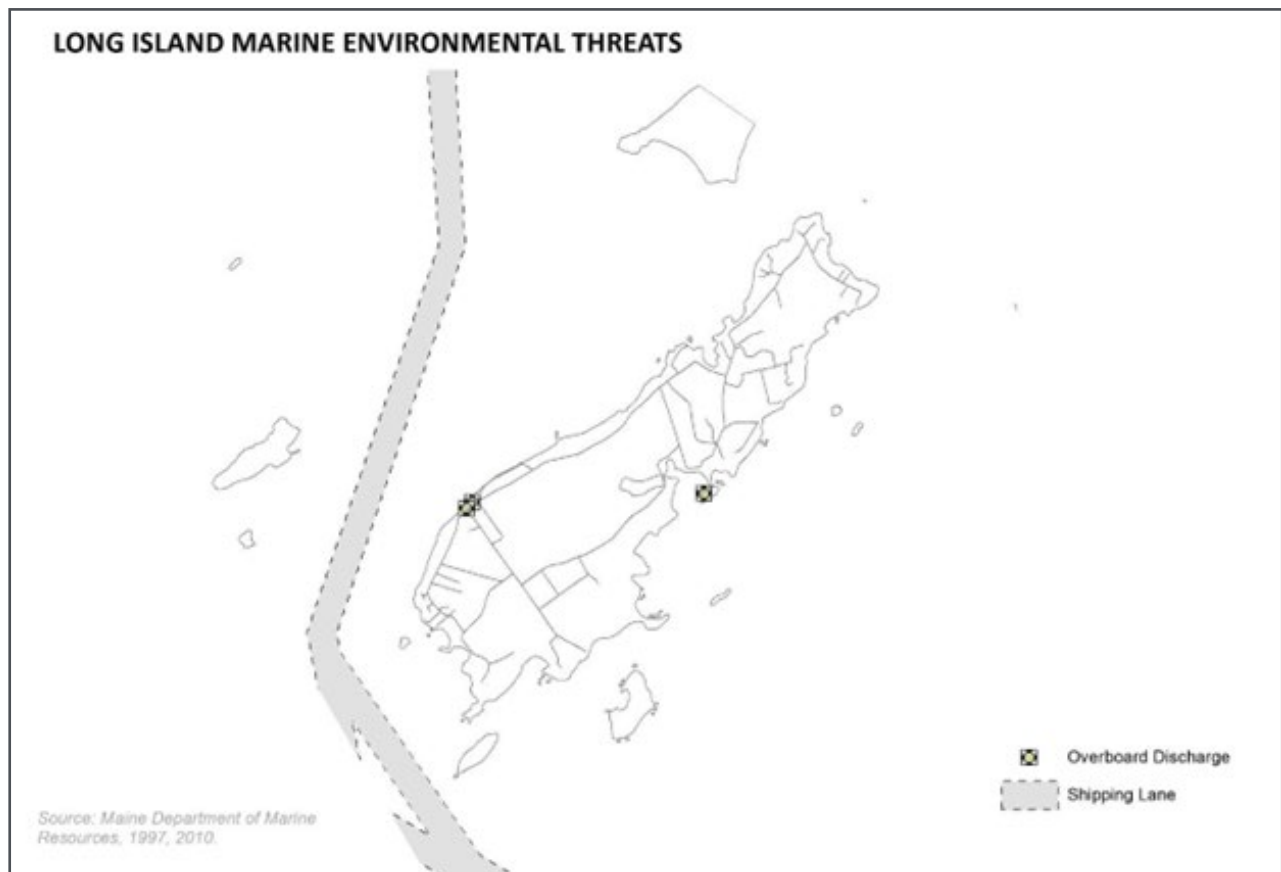
fishermen and women when it comes to waterfront access.

Balancing transient or recreational access with access for commercial fishers is something that must be considered, especially in the summer. Currently, the only transient moorings or tie-up spaces are short term, for a few hours at most. Therefore, the bulk of available mooring space is available for fishermen.

Long Island does include sufficient funding for a harbormaster in the budget. The harbormaster must be certified by the Harbormasters' Association and works under the supervision of the select board. The harbormaster's duties include monitoring the use of the town's wharves and public floats to ensure there is a balance of recreational and commercial uses. There is also supposed to be a certain amount of cooperation between the harbormaster and the Town Harbor Commission, which is listed in the town ordinances but is not strongly enforced.



Long Island's working waterfront is as important now as it was 50 years ago. The town faces many challenges keeping the waterfront accessible for lobstermen, fishermen and those in allied fields. Photo: Dick Mitchell



Environmental Threats

The marine resource areas around Long Island face a number of threats, both environmental and commercial. The water resources chapter of this plan talks about the issues that runoff and overboard discharge cause for the waters surrounding the island.

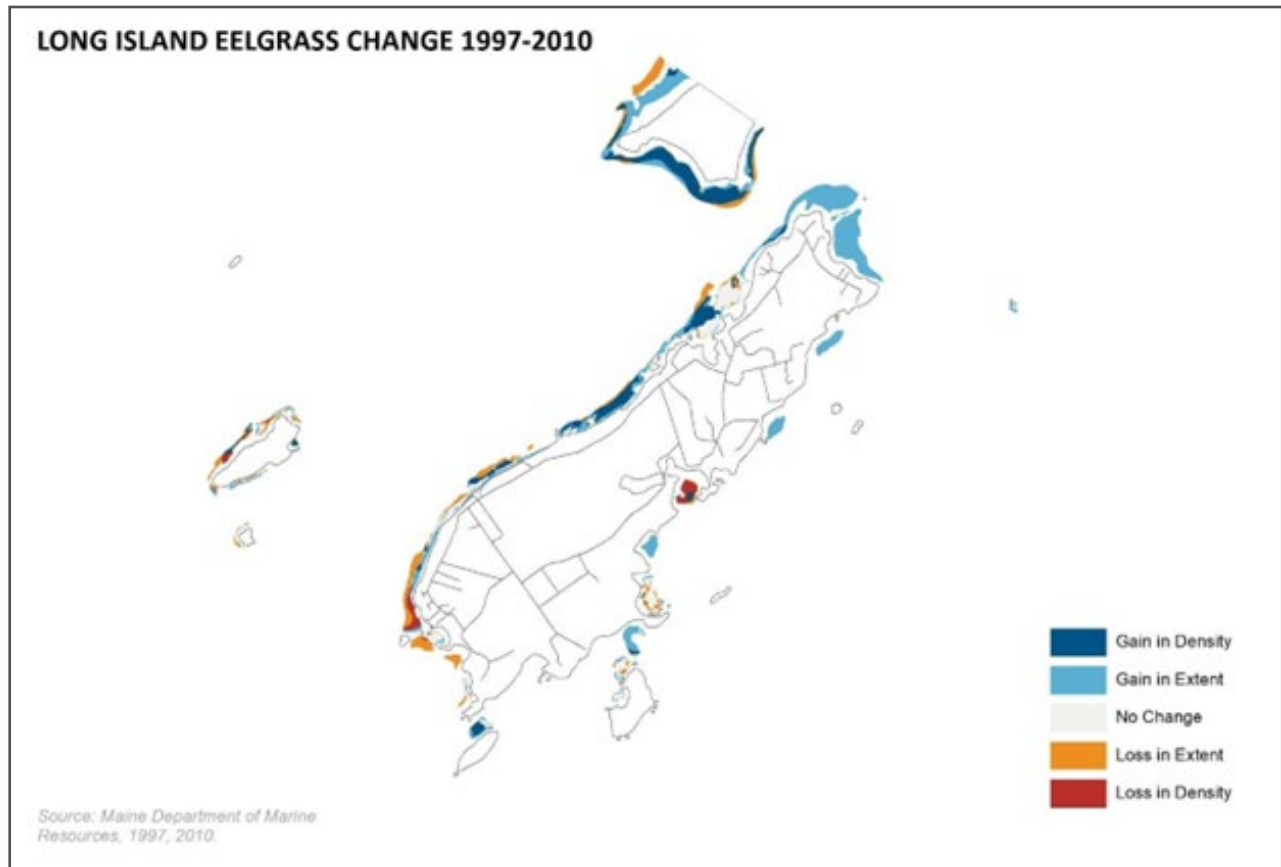
The 2008 Comprehensive Plan mentioned that the state had studied the pollution levels around Long Island, but the state did not share the details of their study with the town. The state subsequently suspended a volunteer water quality testing program along the shores of Long Island. Due to the issues with point-source and nonpoint-source pollution on Long Island and the lack of water quality data, the state currently does not permit shellfish harvesting in the

areas around Long Island. However, shellfish harvesting is allowed in the area around Little Chebeague Island within Long Island’s municipal boundary.

There is an established shipping lane within Long Island’s boundary, and the town has an anchorage within its territorial waters. These waters are also prime lobstering grounds, and large vessels may damage marine habitat and fishing gear while traveling through the shipping lane or while at anchor. One potential way to manage threats from this shipping lane is through enforcement and monitoring by the harbormaster. Communication by the harbormaster about avoiding the channel at common work hours for fishing vessels may aid in the management of this threat.

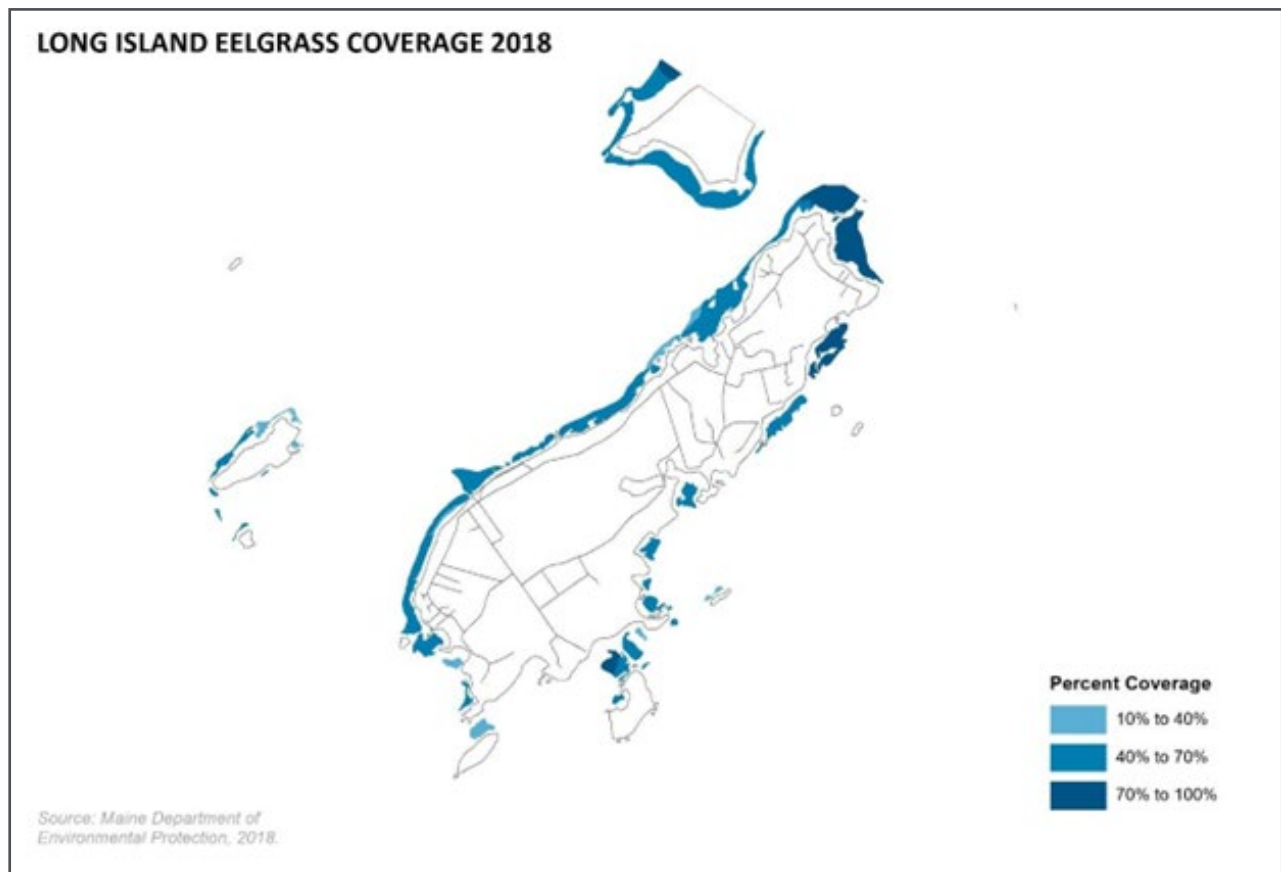
Eelgrass

Eelgrass provides essential habitat for shellfish breeding, mitigates erosion in the intertidal zone, absorbs greenhouse gasses, and may be used as a water quality indicator to determine if Maine is complying with the water quality standards set by the Clean Water Act. In the past, the Maine Department of Marine Resources (DMR) conducted periodic surveys, based on aerial photography, to assess the health of eelgrass beds. The following maps show the change in the extent of eelgrass beds around Long Island between 1997 and 2010, and then since 2018.



This map shows that over this period, the eelgrass beds decreased both in density and extent along the southwestern shoreline, in the area near Harbor de Grace, and along the northwestern shore of Cow Island. There has also been a decrease in the extent of the eelgrass beds near Long Cove and around Little Chebeague. These declines have been offset by increases in the density or extent of the eelgrass beds along the northern and eastern shorelines of Long Island and closer inland around the perimeter of Little Chebeague Island.

More recently, the Maine Department of Environmental Protection (DEP) has surveyed the health of eelgrass beds in Casco Bay. The following map shows the eelgrass data from 2018. Despite the changes in density and extent shown in the DMR data, the more recent data from the DEP show that most of the existing eelgrass beds along the western and northwestern coastline still have 40%-70% coverage, while the eelgrass beds along the northeastern shoreline have between 70%-100% coverage. The eelgrass along the eastern and southeastern shoreline appears to be more confined to the sheltered areas around Harbor Grace and Wreck Cove.



Although the more recent data from the DEP appears to show a positive trend, it is not clear if this data can be directly compared to the DMR data, because the DMR data reports change in terms of gain/loss in extent or density while the DEP data is reported as percent coverage. Also, since the condition of eelgrass beds can change significantly from one year to the next, the data collected by state agencies on a 5-year cycle may not reveal emergent trends affecting the health of eelgrass beds and the surrounding marine environment.



According to the Maine Department of Marine Resources, 44 Long Island residents hold a commercial fishing or lobster/crab license, and another 13 residents hold an apprentice or student lobster/crab license. Docked for the evening, this lobster boat awaits another sunrise as juvenile seabird chicks sit in the foreground. Photo: Ginny Stowell

Commercial Fishing

There are a significant number of residents that are employed full time in fishing, lobstering, and aquaculture. According to the 2019 license data from the DMR, 44 Long Island residents hold a commercial fishing or lobster/crab license, and an additional 13 residents hold an apprentice or student lobster/crab license. In addition to the commercial licenses, 14 Long Island residents hold recreational licenses for lobster/crab, scallop, or saltwater fishing. The table at right, which is sourced from the Maine DMR 2019 data, shows Long Island licensure in more detail.

Nine Long Island residents hold a commercial fishing crew license, which allows each license holder to employ as many as 5 unlicensed crew members. Two residents hold an aquaculture license, and one resident holds a seaweed license. Other residents are employed part time, and still more have jobs related to the fishing

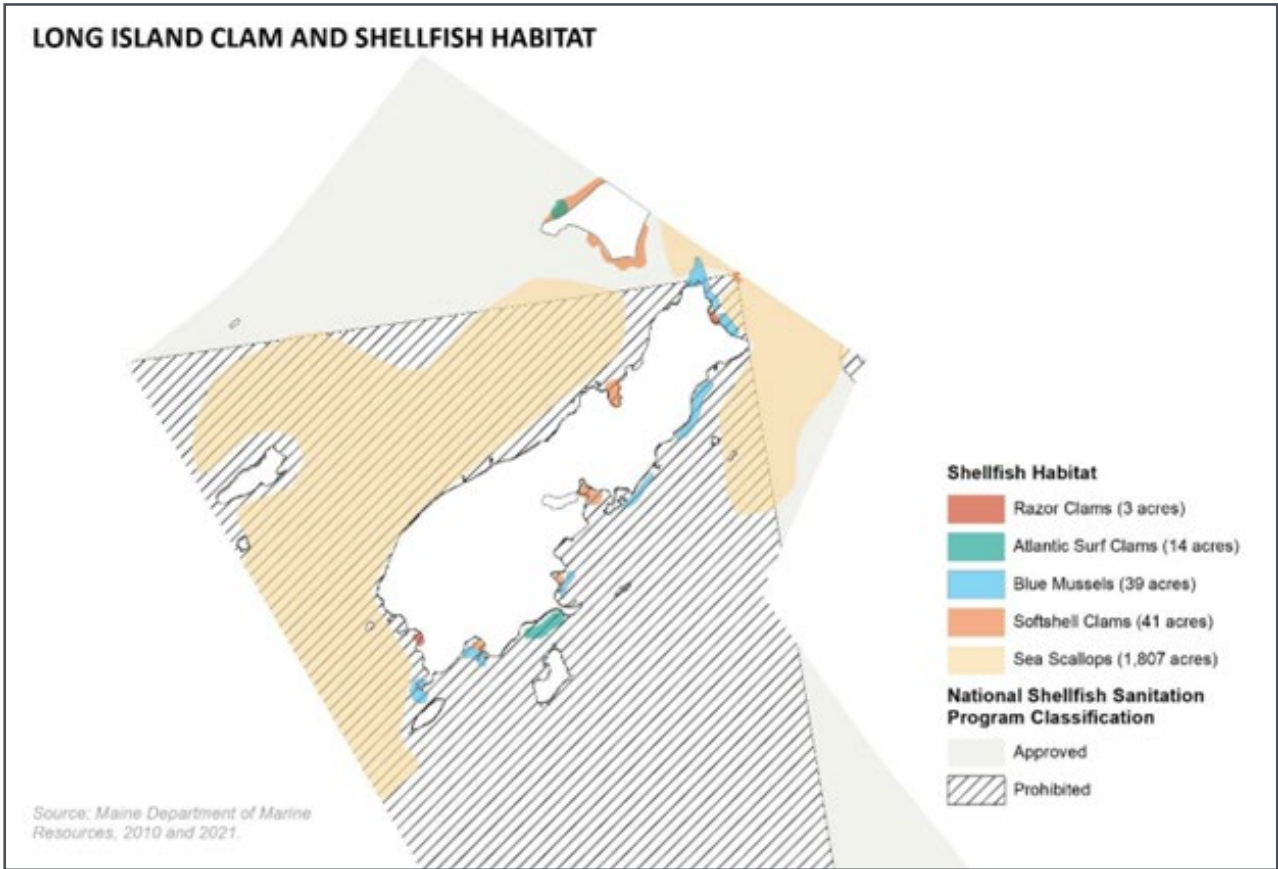
License Type	Number of Licenses
Commercial Fishing- Crew	9
Commercial Fishing- Single	6
Lobster/Crab Commercial	23
Lobster/Crab Apprentice or Student	13
Elver	1
Mussel	1
Scallop	1
Aquaculture	2
Seaweed	1
Total	57

industry such as those employed at Casco Bay Lobster, which brokers fuel, lobsters, and bait, or at Johnson's Boatyard, which has built many of the newer boats, services many more, and provides dock space for smaller boats as well as winter storage for most of the island's boats.



Starting the day long before sunrise, a lobsterman and his boat catch an early morning glint. Photo: Nils Caliendo

A fishing expedition pays off handsomely for a young man with some freshly caught sea bass. There are nearly four dozen residents with a commercial fishing or lobster license who live on Long Island. Photo: Nils Caliandro



In 2010, the Maine DMR completed an inventory of shellfish habitat in Maine. The above map shows that the state's inventory identified several smaller patches of shellfish habitat in the waters around Long Island, including razor clams, Atlantic surf clams, blue mussels, and soft shell clams. The

most significant shellfish habitat within Long Island's municipal boundary is the 1,800 acres of sea scallop habitat. Altogether, Long Island has more than 1,900 acres of shellfish habitat, but only 300 acres of that habitat is approved for harvesting as of March 1, 2021.

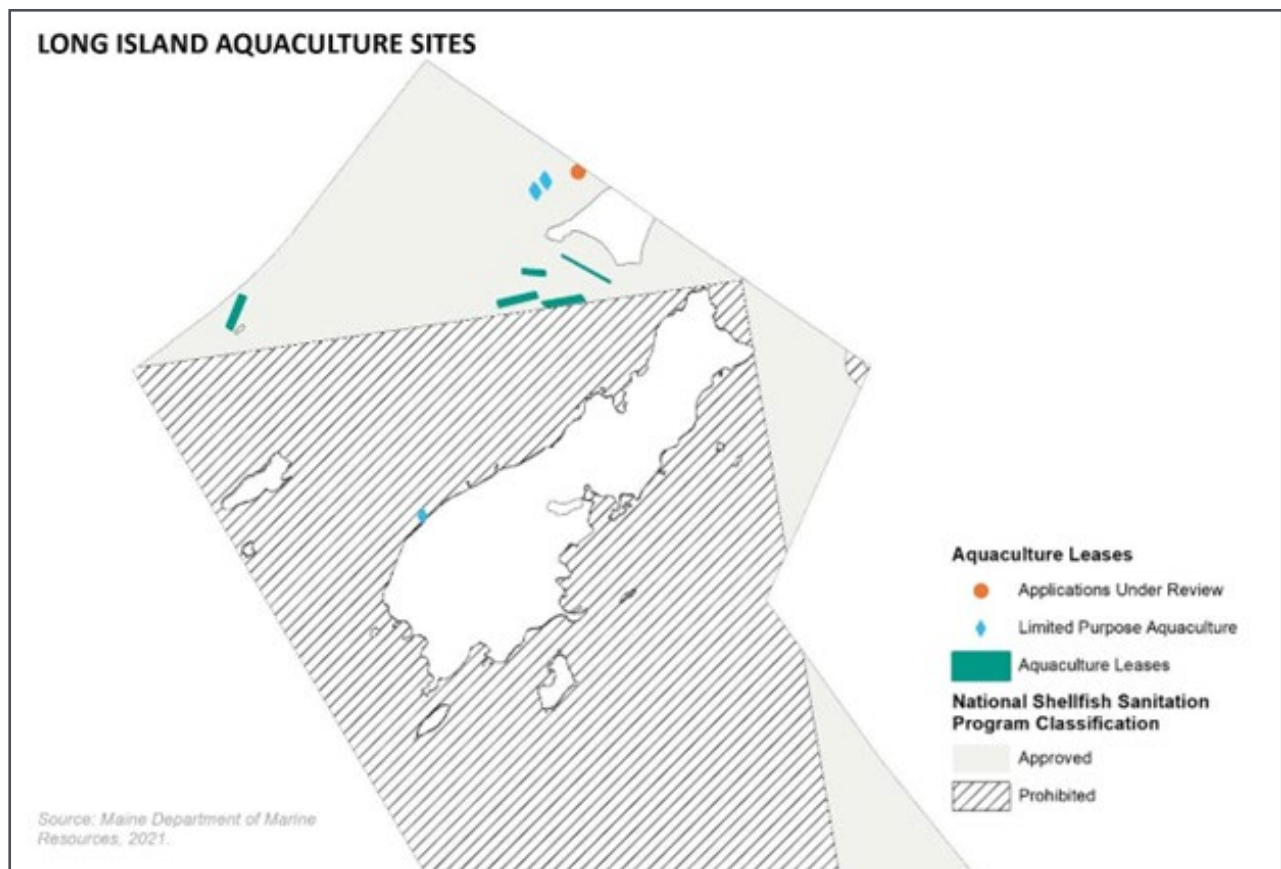
The 2008 Comprehensive Plan stated that, while many residents of Long Island enjoy the mussels and/or clams from Long Island, only 40% of those surveyed were interested in committing tax-payer funds to expand shellfish testing and open more of the Town's shoreline to shellfish harvesting. At that time town residents believed that the small acreage of shellfish habitat around the island could not sustain commercial harvesting, even if the clam-flats were cleaned-up and reopened for commercial use. Since then, the focus on marine economies has shifted from shellfish to aquaculture ventures. There is not a lot of talk on the island about developing clam-flats as a fishery.

Aquaculture

The 2008 Long Island Comprehensive Plan mentioned two licensed aquaculture sites

within the municipal boundary of Long Island. Over the past decade the number of aquaculture operations in Casco Bay has increased. The following map shows that as of June 2021, there are six available aquaculture leases, three limited purpose aquaculture sites in operation, and one aquaculture lease for an experimental oyster farm currently under review by the Maine DMR.

The number of potential lease sites shown in this map represents an opportunity for growth in this sector. Except for one limited purpose aquaculture site located near Ponce's Landing, all of the aquaculture sites within the town's municipal boundary are located outside of the prohibited zone around Long Island. The Long Island School was one of the first to get involved with kelp farming in the bay. Most of the aquaculture leases and limited purpose sites are for kelp





Volunteers work on repair efforts at Mariner's Wharf following the January 2022 storm that damaged floats and pilings. Photo: Elizabeth Marchak

or other varieties of seaweed, but there is one lease for blue mussels to the south of Little Chebeague.

Working Waterfront Infrastructure

Mariner's Wharf is the gateway for freight and ferries to the island. Mariner's is part of the larger system of working waterfront infrastructure present on Long Island. Other important locations include Ponce's Landing and Johnson's Boatyard on Island Avenue. The infrastructure of the working waterfront is currently enduring some challenges, and in the fall 2021 working waterfront public forum there were many comments on needed improvements to facilities and access for commercial fishers.

Currently, one of the most important places on the island for commercial fishers is Ponce's Landing. This wharf is managed by a committee of commercial fishers on the island. This space is used primarily as an area to load and unload gear and catch, and there is a \$600/year fee for each fisherman to use the facility. The Ponce's committee currently operates independently and does not have a representative from the select board involved in their decision making. When asked about Ponce's, fishers noted that the facility is in

obvious need of some serious repairs, and that it sometimes feels dangerous to have a vehicle and heavy equipment on the wharf. Some fishers feel like the fees that they pay to use the space are not currently serving to improve the wharf as much as is needed.

Since 2008, there have been attempts to improve working waterfront infrastructure. The select board and the harbormaster worked together to develop a multi-stage work plan that would improve facilities and build the capacity to focus on long-term maintenance. In 2015 and 2016, the first leg of this work started with an initiative to replace the ramp and the floats on the western side of Mariner's Wharf. Around the same time, an engineer was hired to create an engineering plan by completing an underwater survey. This plan recommended replacing the entire wave screen to better protect the wharf from wind and waves.

The wave screen is especially recommended in order to protect the new investments from 2015 and 2016. The town would like to replace the wave screen, but the Maine Department of Transportation (DOT) still needs to fix some of the underpinnings of the wharf. These pieces are owned by the DOT. There are critical repairs needed across both the town- and state-owned elements

of the wharf. This means that cooperation and coordination between stakeholders is necessary for forward movement. The engineers' underwater survey shared that the wooden infrastructure underwater is deteriorating, and it is necessary to work towards serious maintenance and repairs.

In January 2022, a winter storm seriously damaged the wave break, floats, and pilings, representing significant costs to repair. After the storm, volunteers worked to repair many areas including one of the floats used for the rescue boat. As mentioned, the shared ownership of the wharf makes completing further repairs complex. The DOT is willing to work on repairs, but their work may not take into account the engineers' survey that was conducted by the town.

All of these concerns with the infrastructure mean that access to the working waterfront is changing. Fishers are concerned with

making sure that they remain able to access the waterfront which they depend upon for their livelihood, especially if they do not own property on the water. The approach to management of waterfront infrastructure has not been consistent over the years. A more purposeful management structure which can focus on the maintenance and long-term planning for the waterfront is required to ensure that Long Islanders are able to access the waterfront for many years to come.

Specific actions that can allow us to better meet the future marine resource needs of Long Islanders are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document. There, readers will find a list of recommendations and suggested strategies to address these needs.



Mariner's Wharf under repair after a January 2022 storm. The town held emergency meetings after the storm to assess damage and plan repairs. Photo: Elizabeth Marchak



Throughout the COVID-19 pandemic, islanders and visitors wore masks indoors and outside to protect each other.
Photo: Ginny Stowell

Wellness

Wellness Defined

The concept of wellness is an all-encompassing idea that affects individuals as well as their community. The Global Wellness Institute defines wellness as the active pursuit of activities, choices, and lifestyles that lead to a state of holistic health. Although this definition describes an approach to goals for individual wellness, it can also be broadened to describe a community's wellness goals.

This definition of wellness also describes individual pursuits that extend beyond physical health. It is truly multidimensional. We should strive for mental wellness by engaging the community around us through learning, problem solving, and creativity. We should strive for emotional wellness by accepting our own feelings and understanding the feelings of others.

Our wellness should include spiritual wellness attained by searching for meaning and higher purposes, social wellness attained by connecting and engaging with others and our community, environmental wellness attained by fostering positive interactions between our environment and our human actions, and occupational wellness by seeking satisfaction and active participation in our careers.

All of these are goals that each of us hopes to attain, and they can be applied to Long Island's quest for wellness.

A Tradition of Wellness

The Town of Long Island has a tradition of residents caring for one another. The community has long supported wellness goals for individuals as well as for the entire community. Today the island is fortunate to have a very active Wellness Council made up of community volunteers and led by a Wellness Center Coordinator salaried by the town.

The Wellness Council was originally formed in 2015 to address the issues associated with aging in place for our elderly residents. The mission statement indicated that the original group wanted to provide support to help elderly people stay in their homes for as long as possible, and postpone or avoid moves to off-island care institutions. The mission also included advocating for necessary services and safe housing and

providing medical services on Long Island for all residents, with a focus on senior care. Although a major focus of the Wellness Council continues to be care and support for our senior residents, it has an opportunity to provide health-related services to all island residents, regardless of age.

In 2018, a dedicated Wellness Center space was completed in the basement of the Long Island Learning Center. This space was designed and built to provide an office, waiting area, and exam room that could be used to support medical care provided on Long Island. Since its completion, the clinic space has been used for annual flu vaccine clinics and biweekly visiting nurse appointments. Both of these services are provided in partnership with MaineHealth. During the height of the COVID-19 pandemic, the clinic space was also used as a COVID testing site.

The council has supplied the clinic space with technology and equipment in anticipation of expanding island medical services for our residents. In 2021, a successful grant application allowed for the purchase of state-of-the-art telemedicine equipment. This equipment gives our residents the ability to conduct remote medical appointments with their medical providers on the mainland. In 2021, the council also purchased an exercise bicycle, therapy table, and hand weights in anticipation of providing on-island physical therapy services.

Recognizing that the COVID pandemic exacerbated issues of isolation, loneliness, and depression, the council provided COVID survival gift bags for our at-risk populations during the winter of 2020-2021. Elderly residents received three gift bags over the winter months, and teenagers received a gift bag to help them deal with the new experience of remote learning.

The council supported the distribution of free Narcan rescue kits to our island residents



The Wellness Council's soup lunch and blood pressure clinics have attracted large, hungry lunchtime crowds. Lucky attendees sometimes go home with tasty leftovers for supper. Photo: Elizabeth Marchak



The Long Island Wellness Council sponsored a pet clinic to take care of everyone's best friends.
Photo: Rennie Donovan

as part of a concerted effort to address the problem of opioid addiction and the concerning rise of opioid-related overdose deaths.

Prior to the COVID pandemic, the Wellness Council coordinated opportunities for social gatherings throughout the year, which has been especially important during the more isolating winter months. Monthly to bi-weekly soup lunches, held in the community center from September through May, have been very popular, and served as an important social experience for everyone during the winter months. These lunches often included a speaker, which added to the events' educational value.

The Wellness Council financially supports a "meals on wheels" food delivery program that is provided by island food establishments. This program prepares and delivers meals to islanders who are identified as possibly having food insecurity or isolation concerns.

The Wellness Council responded in a number of ways to the unique and unanticipated

challenges posed by the COVID pandemic. Throughout the pandemic, the council supported the community by providing free, island-based COVID testing through a partnership with Cumberland County EMS and the Maine CDC. Both polymerase chain reaction (PCR) and rapid antigen tests were available to islanders with quick turn-around on test results. In addition to COVID testing, the council provided help with contact tracing and supplied advice about exposure risk, the proper timing of testing, quarantine recommendations, and disease mitigation strategies, in accordance with CDC standards

The council coordinated and supported four COVID vaccination clinics as well as two vaccination booster clinics. The island was fortunate that Northern Light Healthcare was able to provide the nurses and vaccine doses for these clinics. This service was offered to residents of our neighbor islands, and people from Great Diamond and Cliff Islands took advantage of these vaccination opportunities. The Wellness Council was proud to report that the vaccination clinics contributed to Long Island's vaccination rate of over 95%.

Wellness Today and Tomorrow

As the Town of Long Island looks to its future, there are many potential public health issues that could impact residents' wellness. Although we are a short ferry ride from Portland, we still are considered a remote community, and, as such, we need to consider the many issues that could affect both young and old.

In order to properly assess and prepare to meet the health and wellness needs of the Long Island community, the Wellness Council will need to perform a community health assessment every three to five years. A community health assessment survey is defined as a systematic examination of health

status indicators for a given population and is used to identify key health problems and assets in a community. The ultimate goal of a community health assessment is to develop strategies to address the community's health needs. (Turnock: Public Health, What it is and how it works, 2009). Developing and completing such a survey will be essential in allowing the Wellness Council to identify and prioritize present and future health issues affecting our residents and to allocate resources appropriately.

The ability to provide medical services through telemedicine will help the island support its aging population and its working community. It may also serve as an asset for attracting new families that might be considering living and working on a small island. The ability to see a medical provider via telemedicine, instead of traveling to a medical office on the mainland, will present a convenient, time saving approach to receiving medical care.



On a gorgeous summer Long Island day, a young girl enjoys a gentle push and the breeze. Photo: Dick Mitchell

The Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035 Survey) showed that 46.5% of respondents identified expanding health and wellness services available on the island as a top priority. Individual comments made by survey respondents regarding health and wellness said the town should:

- Address the high risk of Lyme Disease caused by poor wildlife and environmental management
- Provide additional basic medical care on the island
- Build a senior living facility similar to Chebeague Commons
- Develop a fully functioning health center
- Build a gymnasium and an indoor pool
- Do something about people driving while intoxicated on our roads
- Improve medical care options
- Hire a nurse practitioner
- Provide AA meetings
- Admit that alcoholism is a problem on the island.

As a follow-up to the LICP2035 Survey, a Health and Wellness forum was held in August 2021. Those attending said they wanted to see the town help residents age in place in their homes. One avenue for accomplishing this would be to have the town address the restrictions placed on building an ADU (accessory dwelling unit) by present zoning ordinances. Attendees also discussed establishing a senior day program on the island that would include activities and provide a period of respite for their caregivers.

Those attending the forum also noted that the lack of affordable housing makes it difficult for extended families to care for elderly residents. Several people complained

about the island's surging tick and deer population resulting in increasing cases of Lyme disease. Some said that the services offered at the Wellness Center should be expanded to include weekly blood drawing capability. Others requested the scheduling of informational presentations about health issues like alcoholism, smoking cessation, and diabetes. There was also the desire for mental health counseling to be available on the island. Finally, attendees discussed the possibility of building a fitness center in conjunction with a proposal to build a new fire station and town hall.

Access to health care is somewhat limited by the geographic factors associated with island life. Although we are fortunate to have emergency medical technicians (EMTs) services on the island, a fire and rescue boat for emergency transportation to Portland, and access to Maine Emergency Medical Services LifeFlight helicopter service, we still will face delays in care associated with transport time to Portland. The added cost associated with transportation services like LifeFlight will financially burden residents, especially those who may have inadequate health insurance coverage.

A small island community like Long Island would be expected to have difficulty financially supporting the presence of a physician, nurse practitioner, or physician assistant who could provide non-emergency medical care. As a result, some non-emergency acute conditions might require transport to Portland, adding time and expense to getting appropriate treatment.

In addition to access issues, it is important that we are able to identify other public health issues that would affect the Long Island community. One public health issue facing the island is addiction. Abuse of alcohol and drugs is a public health concern that spans all age groups, and can have negative impacts on both individual and community wellness.



Holiday-themed desserts are a highlight of Wellness Council lunches.
Photo: Nancy Noble

A recent study conducted by Cigna identified social isolation and loneliness as growing public health issues, particularly in older people. The National Institute on Aging reported that prolonged loneliness has been linked to worsening of hypertension and the development of heart disease, obesity, and mental illness. Loneliness and social isolation can contribute to an increased risk of mortality in our elderly population, with several studies reporting that loneliness can increase mortality by approximately 30%. Isolation has been identified as an important issue for our elderly island population, especially during the long, dark winter months.

Food insecurity is also an important public health issue. Low personal income, higher prices for food items, lack of public transportation, and lack of access to full-service supermarkets can all contribute to food insecurities across all age groups.

Communities have also directed their public health efforts toward several issues that affect children and teenagers. The CDC identifies childhood obesity as a growing concern, and it has been shown that up to 17% of children aged 2-19 are classified as clinically obese. Childhood obesity has been



There's no better exercise than a nice long walk on your favorite Long Island beach and there's no bigger prize than scoring it rich with seaglass, especially if it's blue.
Photo: Lorinda Valls

associated with development of diabetes, sleep disorders, heart disease, arthritis, and mental health issues like depression.

Expanded access to electronic technologies like smart phones raises the concern about internet safety for our younger residents. We need to educate ourselves and our children about safe use of such devices to make sure they will not become victims of cyberbullying or online predators.

The Wellness Council is positioned to respond to the challenges that will face our residents in the coming years. According to state demographic data, the over-65 age group will grow significantly faster than any other age group. This change in demographics will present obstacles, but also opportunities for enhancing the overall wellness of our residents and our community.

Providing for the wellness of the island community requires support from all of the services identified in our comprehensive plan. We will need access to health services. We will need opportunities for social interaction and safe age-appropriate exercise. We will need well-maintained roads to walk on, and safe accesses to our beaches. We will need easy access to our recreation facilities (tennis court, pickleball court). We will need consistent interpretation of building ordinances with regard to home modifications to allow aging in place.

Specific actions that can lead to a better understanding of the health and wellness needs of Long Island are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document. There, readers will find a list of recommendations and suggested strategies to best serve the health and wellness of this community.



To help ease winter isolation and loneliness, the Wellness Council started delivering winter gift bags to islanders in 2021. In 2022, some residents took to Facebook to not only thank the council, but show off their bounty. Photo: Elizabeth Marchak

Public Services and Infrastructure

The Town of Long Island separated from Portland and became an independent town in 1993. Since then, any property owned by the City of Portland has become town-owned. Since the incorporation of the town in 1993, Long Island has worked to ensure that the public facilities currently on the island continue to meet the needs of the islanders. When asked about what they value about Long Island, respondents to the Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035 Survey) mentioned that they feel like the town does strive to provide services that can accommodate both seasonal and year-round residents.

Since the 2008 comprehensive plan, there have been changes and updates to the town's infrastructure. A new Community Center was completed in 2016 down front near the Town Office. Long Island Fire and Rescue added a new ambulance and fire truck to its fleet. The Long Island Wellness Center was formally opened in the basement of the Long Island Learning Center in 2018. It added new telehealth equipment in 2021. The town received a grant from Cumberland County to complete an emergency shelter in 2019.

One of the values that came out of the responses to the LICP2035 Survey was the word 'livable.' The values that many identified can also be seen as ways to sustain the island's way of life. All of the pieces that work towards the functionality of a town (education, healthcare, and transportation) are things that community members feel are a key part of keeping the island 'livable.' To ensure that the comprehensive plan is working towards a sustainable future for the island's community, it is critical to develop an understanding of what public facilities and services the Town of Long Island has to offer, and where it could improve and grow.



Islanders of all ages help with restoration at the Apple Tree Lane Cemetery. Photo: Long Island Historical Society

Long Island's Public Facilities

On Long Island, there are a number of things that are currently considered public facilities. These include cemeteries, public works facilities, and public buildings. The maps below show the location of these facilities on Long Island. The first map is a view of the entire island, and the second map shows a zoomed in view of the 'down front' region. A description of these public facilities follows below, with the buildings numbered as they appear on the map.

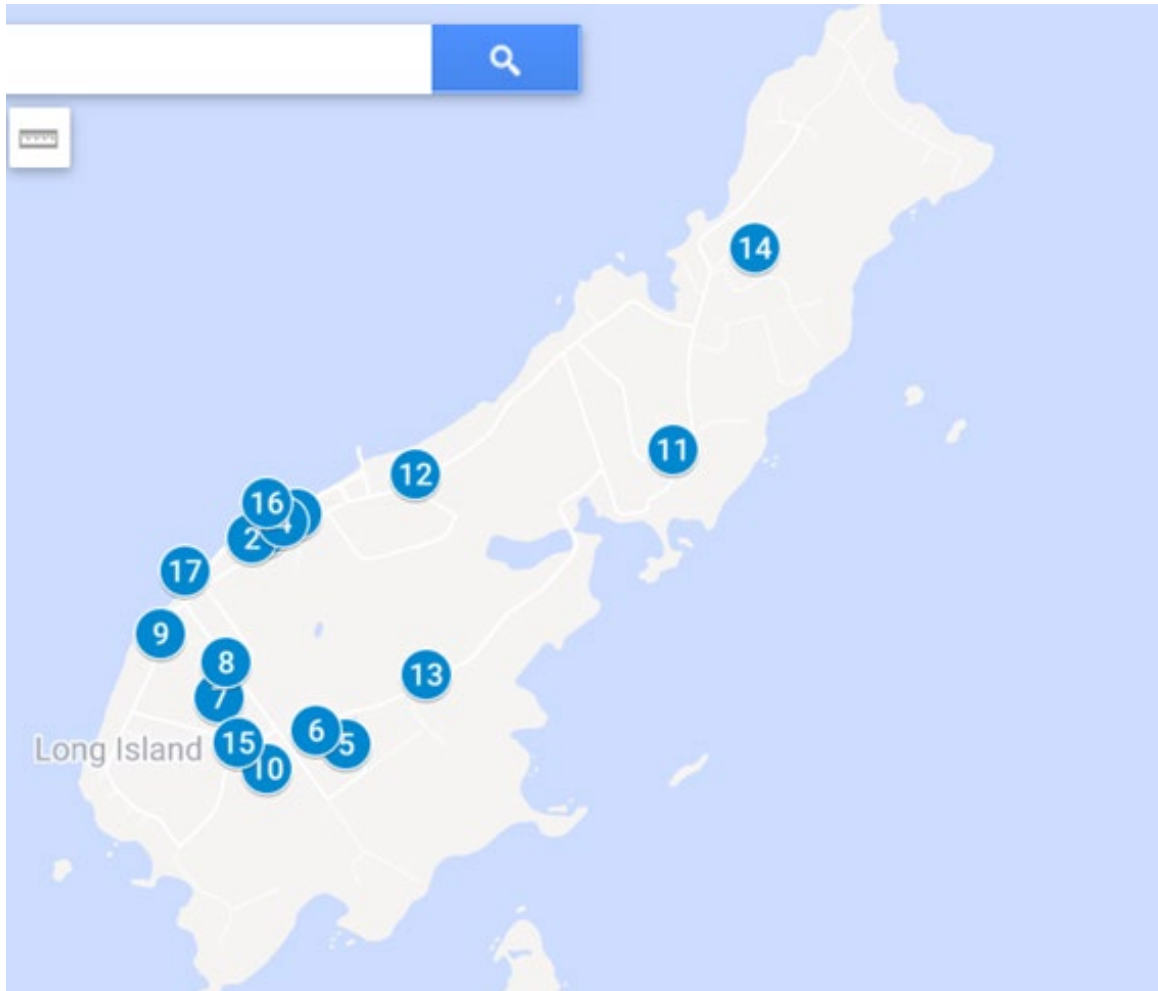


Figure 1: Map of public facilities and services on Long Island. Created using Google MyMaps.

There are fifteen buildings owned by the Town of Long Island. In the 'down front' area of the island, these buildings include the Long Island Community Center (1), which was opened in summer 2016. The Community Center serves as a gathering place for town meetings, a recreation center, winter pickleball court, and pottery studio. It also houses the Long Island Historical

Society. The marine building (2) and the town hall (3) are also located in this area of the island. The marine building is a remnant of military history on the island, now used for town storage. There are also three garage buildings (4) in this area that are owned by the town.

In other areas of the island, there are more buildings owned and managed by the town.

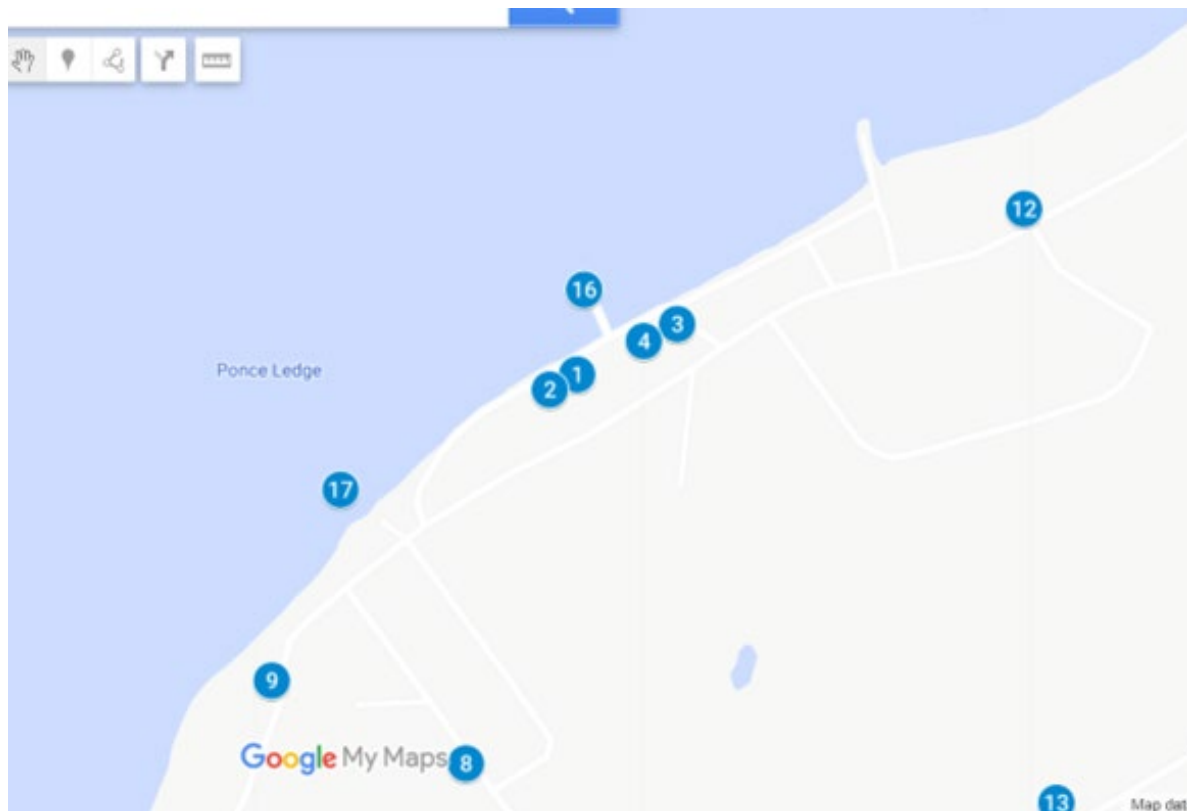


Figure 2: Map of public facilities and services in the 'down front' region of Long Island. Created using Google MyMaps.

Housed in the Long Island Learning Center are the Dodwell Gallery, the Long Island Community Library, the emergency shelter, and the Long Island Wellness Center (5). Attached to this building is the Long Island School (6). On the West End of the island, the ball field shed (7) is owned by the town, as is the Police Barn on Beach Avenue (8). The Police Barn property is currently serving as emergency or volunteer housing for the island. During the COVID-19 pandemic, it served as quarantine housing for the island when necessary. The VFW hall (9) is also on the West End, and serves as an event venue for the island. There are multiple public works buildings owned by the town as well; these consist of the transfer station building on Fowler Road (10) and the two public works buildings near the Conservation Area (11). Towards the middle of the island on Island Avenue, the Fire Station (12) is also owned and managed by the town. Also managed

by the town are the three cemeteries: the New Hill Cemetery on Fern Avenue (13), the Apple Tree Lane Cemetery (14), and the new cemetery located between Cushing Ln. and Fowler Rd. (15).

There are also two wharves owned and managed by the town. The first of these is Mariner's Wharf (16), which serves as the gateway to the island. Mariner's is where the Casco Bay Lines ferries dock daily to take people back and forth from Portland. It is also where the rescue boat and water taxis are able to tie up, and where there are floats for transient docking in the summer. Mariner's wharf is also where the mail and freight coming to the island arrives, and it is therefore a critical piece of the island's infrastructure. The other town-owned wharf is Ponce's Landing (17), which is used primarily by the fishermen of the island.

Fire and Rescue

One of the most endorsed strategic issues from the LICP2035 Survey was developing ways to expand the number of EMTs, ambulance drivers, and boat captains to continue to provide safe and effective life-saving service. The annual town budget does include a line for Fire & Rescue volunteer compensation, but that budget line has not increased for a number of years.

There are multiple roles required to have a successful Fire & Rescue team. These roles include EMTs, backup EMT coverage, ambulance drivers, boat captains, and fire truck drivers and firefighters. Team members are often required to serve multiple roles. Right now there are five certified EMTs on the island. Because of limited personnel, there is no official daytime coverage. Instead, every morning members have an informal check in with each other to make sure there is enough available personnel on the island to respond to an emergency.

To keep their licenses current, EMTs must take a class to be certified, be relicensed every three years, and pick up 52 hours of continuing education credits. To be an ambulance driver one needs to take an Ambulance Vehicle Operator Class, which

is one day of instruction followed the next day by a test. In addition to being on call, all members attend weekly training sessions. Usually, there is evening rescue training on the second and fourth Mondays of each month and fire training the first and third Mondays of each month for an hour or two.

In addition to the fire station building, the Fire & Rescue squad of Long Island owns the equipment and vehicles shown in Figure 1.

Equipment	Vehicles
Cardiac Monitor	Engine 1
Ambulance Stretcher	Engine 2
Integrated NAVComm	Dry Hydrant Pump Truck
SCBA Compressor	Ambulance
	Tank Truck 1
	Tank Truck 2
	Fire & Rescue ATV
	Fire & Rescue Boat

Figure 1.

Fire and rescue equipment is well maintained. The town anticipates replacing an ambulance or a piece of firefighting apparatus about every four to six years.

For response times, in 2021 the rescue team did a total of 45 EMS calls. The average response time was 13 minutes from tone to patient contact. Most of these were in the 12 to 16 minute range with a couple over 20 minutes. It is important to note that although these are the numbers pulled from the EMS recording system, some responders note



Long Island's Fire and Rescue is the town's largest volunteer group. Members train regularly throughout the year. True to the town's aging demographics, 43% of the members are aged 50 and over.

Photo: Nancy Noble

that this number of total calls seems low to them.

Municipal Staff

The island relies on both its municipal staff and volunteers to keep the town running. The Town of Long Island, not including the school department, has a Town Administrator, a Town Clerk, a Tax Collector and a Treasurer. These are all part-time positions. All public works services are contracted out to an island-based contractor who maintains roads and plows and sands in the winter months.

Long Island's strength, character and resilience come from residents who fill more than 185 positions that help run the town, including taking care of the island's medical emergencies, putting out fires, tackling zoning issues and charting its finances. Of those 185, there are approximately 160 volunteer positions. Many islanders who volunteer serve in more than one role, evidenced by the fact that there are about 99 people filling these 160 volunteer positions. Of these volunteers, approximately 30% received a stipend. In addition to volunteers, there are 22 full and part-time salaried employees which represents 12% of those required to run the Town of Long Island.

Island Healthcare

Healthcare on the island is a field that is expanding and changing as the needs of the island residents change. The Long Island Wellness Council, created in 2017, operates the Wellness Center. The Wellness Center's companion 501(c)(3) Friends of the Long Island Wellness Center, created in 2019, helps operate the Wellness Center, built in the basement of the Long Island Learning Center in 2018. With the assistance of a block grant from Cumberland County, the Friends of the Long Island Wellness Center purchased telemedicine equipment in 2021. This will allow island residents to get



Volunteers puzzle out a problem while working together in the Long Island Community Library's conference room. The library was largely built with donations and is still run by volunteers. Photo: Nancy Noble

healthcare without leaving the island. The council is actively working towards a long-term plan for healthcare on the island. The population of the island is not shown to be growing at this time, but it is shown to be aging.

With an aging and changing population, the healthcare needs are changing as well. These needs are being met by the implementation of new programs, especially those that involve some regional coordination of services. MaineHealth nurses come out to the island twice a month, and are available for appointments at the Wellness Center. Physical therapy on the island is also starting in Spring 2022, ensuring that people do not have to go off-island for these services.

The island is also contributing to healthcare in Casco Bay with things like COVID and flu vaccination clinics. These brought healthcare providers to the island to vaccinate not only Long Islanders, but also residents of the Diamond islands and neighboring Cliff Island. Even though there are no growth areas identified for the Town of Long Island, healthcare on the island is expanding and changing, especially since the arrival of the COVID pandemic. Many island residents identified in the LICP2035 Survey said that they would like to see more healthcare services to allow people to age in place here on Long Island, and the Wellness Council is determined to meet the needs of the residents. The town's investment in the creation of a viable, on-island Wellness Center with telemedicine capability is helping meet the changes in our demographics with an increasing elderly population.

Waste Disposal and Water Services

The town Transfer Station has been seeing increased activity for the past few years, mostly from commercial contractors. Recycling expenses have gone from zero dollars per ton to over \$125 per ton which forces the town to reconsider its existing

zero sort program. The island is reviewing some reconfiguration plans of the Transfer Station so as to improve public safety there as well as reduce traffic time within the facility. Currently, municipal solid waste goes to the Penobscot Energy Recovery Co, in Orrington, ME. Recycling and old corrugated cardboard (OCC) goes to Casella Recycling in Scarborough, ME. The Fire & Rescue team on Long Island has had a long-standing program to receive donations through the returnable recycling with deposits, but this program has recently stopped. The island must now figure out an alternative to this recycling stream, especially with recent increases in recycling expenses.

The Town contracts with an outside vendor to supply dumpsters to the transfer station and replace them when they are full. Through its contractor, the town has processed the following tons of trash for 2016 to 2020, as shown in the table below.

Another piece of waste management on the island is sewage and septic. The island does not have public sewer systems, but rather relies on private wells and septic systems. Therefore, 38 M.R.S.A. §1163 on the sanitary extension policy is not relevant to the Town of Long Island. This is not preventing the

Figure 2. Total Tonnage of Waste Processed 2016-2020

	Municipal Solid Waste (MSW)	Demo/ Oversized Bulky Waste (OBW)	Recycled Metal	Recycled Cardboard	Zero Sort	Total Tonnage Processed
2016	131.15	96.1	21.9	14.1	28.3	291.6
2017	129.6	116.5	36.9	18.6	23.3	324.8
2018	123.4	113.9	29.4	13.7	22.9	303.3
2019	118.4	90.25	22.25	15	15.8	261.7
2020	131.4	98	25.8	15.9	19.6	290.7

Source: Town of Long Island

community from growth, as there are no projected growth areas at this time.

The town ordinances contain specific regulations for septic systems and the application process for a Subsurface Solid Waste Discharge (SSWD) permit. There are concerns about the proximity of wells to septic tanks in certain areas of the island, but this has to do with congestion in particular neighborhoods rather than a need for public septage systems. There are approximately 103 year-round households using water year-round according to a February 2022 citizen count. A count done by citizens between July 15-22 in 2018 (the most recent available data) shows the household count at approximately 341. For more information on water quality, see the plan's 'Water Resources' chapter.

To dispose of septic tank waste on the island, there is a yearly effort to organize a truck to come to the island every summer to pump out septic tanks. The cost for this service is paid for by residents on a per tank basis.

Stormwater management planning is not applicable to the Town of Long Island at this time. The town of Long Island is not a Municipal Separate Stormwater System (MS4) community.

Energy and Telecommunications Infrastructure

Broadband internet services were identified in the LICP2035 Survey as the top strategic concern for residents. Fidium Fiber has just installed fiber optic cable throughout the island so as to offer our residents and public facilities access to broadband speeds up to 250 mbps. The addition of broadband services allows people to have reliable communication and entertainment systems in their homes on the island. It also allows for more work from home capabilities for island residents, adding to the "livability" of the island.



A major focus of the public works department in the winter is managing the removal of snow.
Photo: Nancy Noble

The Town currently has fuel services for municipal vehicles at its public works garage. There is one private operator that dispenses gasoline to the general public. There is no backup tank or diesel fuel available. Trucks and equipment that need diesel must bring it from town, and if the gasoline tank runs dry islanders have to wait until the tank is resupplied to fill their vehicles' gas tanks. Propane and oil deliveries are currently done on the island through the utilization of the Casco Bay barging services. The island does not have three-phase power, and it is not applicable to the Town of Long Island at this time.

Home heating on the island is done through a number of different sources. There is a lot of propane heat on the island through systems like Monitor wall heaters. There is also a recent movement towards electric heat pumps as a heat source for island homes. When discussing home heating, it is important to note that many homes on the island have more than one heat source, and one of them often is designed to be able to operate without electricity. The island loses power frequently during storms, and people

like to have systems such as pellet or wood stoves to support their home heating during the winter.

Island Education

The school system on the island provides education to students in grades pre-kindergarten through five at the Long Island School located in the middle of the island. After fifth grade, students from Long Island generally attend King Middle School, and then various high schools in Portland. The school administrative unit consists of a local school board, a superintendent, two teachers, an administrative assistant/school bus driver, an educational technician/art teacher, a school nurse, and a special education director. Currently, there are 15 students enrolled in the school. Eight of those students are from Long Island, and seven come from neighboring Great Diamond island. At this time, enrollment numbers going out as far as ten years are not available from the school board. It should be noted however that the school system is currently under capacity so there is room for growth should the island see an increase in its year-round population of young families. There is no construction or expansion anticipated during the planning period.

Regional Coordination

Long Island is participating in a variety of county-based initiatives at regionalization of certain services. However, it is difficult to fully benefit from these efforts due to our geographic location. We do use the same animal control officer as Chebeague Island. Healthcare on the island also benefits from regional coordination in many areas, specifically with the MaineHealth nurses coming twice a month as explained above. County initiatives that impact Long Island also include the longstanding contract for a sheriff to come work on the island for

the summer season. The island has also applied for and received a number of grants from Cumberland County. Some examples include grants to create the Wellness Center and the emergency shelter. For more information and specific examples of regional coordination on Long Island, please see the 'Regional Coordination' chapter of this plan.

Tree Programs

The street tree program is not applicable to the Town of Long Island at this time. The island is a small rural community. In fact, many of the responses to the LICP2035 Survey list natural beauty and a feeling of being in nature as the thing they like best about being on the island. Due to the fact that so much of the island is forested, especially in the Conservation Area, the island does not need a street tree program at this time, nor is one anticipated during this planning period. Even so, the town is undertaking a new program with the aid of a State canopy grant to plant upwards of 60 new trees.

Predicted Growth and General Conditions

As noted in other places in this chapter, there are no predicted growth areas during this planning period. Therefore, there is no need for planning for a period of high growth in public facilities. There are capital investment plans for maintenance to town facilities, which makeup a good portion of the town budget, amounting to \$2,779,000. For more information on proposed capital improvements, see the 'Fiscal Capacity and Capital Investment Plan' chapter of this plan.

Even so, island facilities and services are working to ensure that they are able to support the population of the island. One such example is the three cemeteries on the island. There were two existing cemeteries

at the time of the last plan, one on Apple Tree Lane and one on Fern Avenue. There was an anticipated need for more space, so a new cemetery was planned for a piece of land between Fowler Road and Cushing Lane. There have been no plots purchased at this cemetery as of March 2022.

The general condition of services on the island is good and meets the needs of current residents. The Wellness Center is a good example of a service that not only is able to meet many of the island's needs, but is also working towards an expansion of their programming to meet future challenges.

All public works services are contracted out to an island-based contractor who maintains roads and plows and sands in the winter months.

The general physical condition of facilities and equipment owned by the town is currently managed largely by the Facilities and Wharves Superintendent, a stipend position. This position has the responsibility for all public facilities, and there are currently some issues with the condition of some of the public buildings. One example is Mariner's Wharf. In January 2022, a storm caused serious damage to the wharf, including ripping out large pieces of the wave screen, smashing temporary wave break floats, and destroying one of the floats used to dock the rescue boat. There were immediate efforts to mitigate the damage, but it is widely acknowledged on the island that the wharf needs serious work and long-term planning efforts to maintain it in better condition.

That type of issue is seen in other areas of the island as well. Long-term planning and upkeep is not seen as a priority next to immediate needs. The general condition of island facilities could be improved with more people or work hours dedicated specifically to their maintenance.

One demand that has emerged during this planning period is for a harbormaster, as the

role is temporarily being filled by the assistant harbormaster. The position of constable is also currently vacant.

There are many miscellaneous pieces of equipment owned and maintained by the town. These include the school bus, dump truck, and harbor master boat for vehicles. A trash compactor is also owned and maintained by the town transfer station. There are also numerous recreational facilities on the island including the tennis court, pickleball court, ball field, Conservation Area, and basketball court. These facilities can be considered in generally good condition. For more information on the Conservation Area, see the 'Natural Resources' and 'Agricultural and Forestry Resources' chapters of this plan.

Overall, the island's services and facilities meet the needs of the residents. In all, 91% of LICP2035 Survey respondents were either satisfied or very satisfied with life on Long Island, and 73% were either satisfied or very satisfied with the value of services they receive from their property taxes. Even so, there is work to be done to ensure that the town can continue to provide these services and maintain these facilities into the future. The town is fortunate to own so many resources for Long Islanders and must ensure that they can continue to meet peoples' needs.

Specific actions that can allow us to better meet the future public service and infrastructure needs are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document. There, readers will find a list of recommendations and suggested strategies to address these needs.

Transportation

Since the last Comprehensive Plan was published in 2008, Long Island's transportation infrastructure has seen many changes. Boats are still the only way to get to the island, but the island's infrastructure needs like roads and parking have increased. This is largely due to increasing numbers of cars and golf carts.

Casco Bay Island Transit District, better known as Casco Bay Lines (CBL), added the Wabanaki to its fleet of down bay boats in 2013. Its new mainland terminal was finished in 2014. The new terminal has an improved ferry berth, fender system, waiting area, and ticket office. Beginning in 2019, CBL started the second round of renovations to the terminal, which added a second floor for office space and greatly expanded the main floor freight traffic area. The pier foundation was also reconditioned, and the pier was extended. There will also be a dedicated sidewalk area aimed at assisting pedestrian access.

CBL adjusted its ferry schedule during the COVID-19 pandemic that began in 2020 to accommodate the changes in passenger traffic and to prevent spread of the virus among its staff.

In July 2012, after the Long Island School Board and superintendent secured approval at a special town meeting, the town purchased a 23-passenger handicapped-accessible school bus.



Summertime parking down front, featuring a cross-section of island vehicles and snow plows at the ready.
Photo: Emeline Avignon



A vintage Ford at Mariner's Wharf awaits its owner's return.
Photo: Dick Mitchell



Private sailboats are another way to get to Long Island.
A schooner glides through the waters off Fowler's Beach as the water sparkles on a perfect summer day.
Photo: Ginny Stowell



Man's best friend has a front row seat at Long Island's annual Lobster Boat Races. Photo: Nancy Noble

Following the purchase of the bus, a town-employed school bus driver position and a substitute driver position were created.

In 2018, Mariner's Wharf began a substantial renovation. This included a new wave screen on the southern side to protect the E-3 rescue boat, the relocation and replacement of the current ramp with an 80-foot Americans with Disabilities Act (ADA) compliant ramp coming from the shore, plus the addition and reconfiguration of the existing floats to allow more transient berthing.

To fund this project, the town budgeted \$57,000. The project also received state funding from the Department of Transportation's Small Harbor Improvement Program Grant, the Department of Agriculture, Conservation, and Forestry's Shore and Harbor Improvement Management Grant, and a Cumberland County Community Development Block Grant. The primary goal of the project was to improve the safety and function of the E-3 rescue boat. A secondary goal of the project was to increase capacity for commercial and recreational vessels.

In response to the growing number of golf carts, one section of the parking lot at Mariner's Wharf was repaved so 18 car parking spaces adjacent to the community center were converted into spaces for 24 golf

carts. During the winter months, when golf cart use is extremely limited, these spaces are used for snow removal.

In January 2022, a powerful Nor'Easter damaged Mariner's Wharf's floats and wave break. Repairs are ongoing, and the town is attempting to get government funding to pay for them. For more information on Mariner's Wharf, please see the 'Marine Resources' chapter of this plan.

Transportation to the Mainland

Long Island is one of 15 unbridged Maine islands with a year-round population, which means residents and visitors rely on a network of boats to get them - and everything they own - to and from the island every day of the year.

Those coming to Long Island are most likely to arrive at Mariner's Wharf, a state-owned pier that is the centerpiece of the island's small transportation system. Mariner's features a separated walkway for pedestrians, a semi-protected year-round float, and upper and lower slips. It is large enough to accommodate vehicles, passengers, and freight. Sheltered on the east side of the wharf is the town's rescue boat. The wharf faces the island's largest parking lot, which has spaces for vehicles, golf carts, and bicycles.

The town is responsible for the wave-break system, the floats, and the access ramp for this facility. The state is responsible for the pilings, fendering system, and submerged support beams. The town and the state are currently working together on a plan for needed infrastructure improvements to this important gateway to the island. In particular, there is \$715,000 allocated to this project for fiscal year 2023 from the Maine Department of Transportation (DOT). Its condition is the

most significant transportation concern because of a January 2022 storm.

At Mariner’s Wharf the next boat pulling into the dock is most likely a red, yellow, black and white CBL ferry. With year-round passenger ferry service, CBL provides as many as 13 boats a day in the summer and 10 in the winter.

Three handicapped-accessible passenger ferries regularly service Long Island. The Maquoit II, built in 1994, has a capacity of 399 passengers and has a crane which makes it possible to offload freight. The Aucocisco III, built in 2005, also has a capacity of 399 but does not have a crane. The newest ferry, The Wabanaki, built in 2013, has a capacity of 398 passengers and has a crane for freight.

Casco Bay Lines has a board of directors that includes representatives elected from the Casco Bay islands which it serves. As of spring 2022, CBL is set to receive \$3.6 million dollars for the construction of a new diesel-electric hybrid vessel to replace the aging Maquoit II. As CBL moves ahead with plans to update its fleet, an examination of its passenger data showed a 5% decline in ridership from 2015-2018. The data shows ridership increased slightly in 2019, just ahead of COVID, which forced CBL to offer only 3 boats a day at the height of the pandemic. As expected, ridership dropped dramatically in 2020, only to rebound in 2021.

The decline is in line with state and local population counts that show a gradual decline in the population. When asked what metrics would result in changes in service, CBL’s general manager said that while there are no target numbers, he does expect to see a reversing trend, but said he had no data to back up that statement.

CBL also sees several possible reasons for the decline in ridership. Aging residents and

Casco Bay Lines year-round ridership to Long Island 2015-2021

Year	Ridership	% change year to year
2015	106,092	
2016	103,509	-2.44%
2017	101,290	-2.15%
2018	100,705	-0.6%
2019	100,993	0.28%
2020	71,784	-28.93%
2021	87,243	21.53%
2015	106,092	
2021	87,243	-17.77%

Source: Casco Bay Lines

those who are younger who don’t travel as much could be contributing to the decline. “The decrease can also be due to the introduction of connectivity to the islands allowing people to work and shop from home,” the general manager said. Factoring in COVID’s pandemic effect, ridership declined nearly 18% between 2015-2021. CBL’s numbers for 2019 show ridership appeared to have begun to stabilize before COVID struck. CBL does not anticipate any changes in service unless they are triggered by COVID.

CBL’s monthly passenger load is the island’s best indication of the ebb and flow of travel to and from the island. Monthly numbers



Casco Bay Lines' Aucocisco III, (left) and the Maquoit II at Mariner's Wharf on a winter morning.
Photo: Linda Ferguson McCann

CBL summertime* ridership: Destination Long Island

Year	2015	2016	2017	2018	2019	2020	2021
Summer ridership	66971	65187	63773	64020	63151	39037	55658
% Of annual ridership	63.1%	62.9%	62.9%	63.5%	62.5%	54.3%	63.7%

* Ridership figures for May-September 2015-2021

Source: Casco Bay Lines

show the uptick begins in May, peaks in July, declines very slightly in August, and then drops off in September.

CBL's ridership data correlates with responses to the Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035) and local population counts that show folks spending more time here seasonally as opposed to just the summer months. Prior to the COVID pandemic, visitors in the May-to-September frame generally accounted for 63% of CBL's annual ridership.

Data also shows that in 2021, seasonal ridership appears to have rebounded to pre-COVID levels. Meanwhile a comparison of full-year ridership versus seasonal ridership (May-September) shows both dropped about 5% between 2015-2019.

Freight shipments aboard CBL vessels have increased, even though overall ridership has declined as explained above. CBL retrofitted the Wabanaki with a crane during the 2017-2018 offseason to accommodate the increase in downbay freight shipments,

which CBL believes is caused in part by more people shopping from home. The increase in freight is so significant that during the week preceding the July 4th holiday, CBL sometimes run all-freight boats to Long Island and its neighbors.

In early 2020, CBL had planned to roll out an enhanced schedule to Long and other down-bay islands. That schedule change was delayed by the COVID-19 pandemic until late 2021.

Some of those responding to the Long Island Community Survey said the ferry schedule to Long Island did not include enough boats. Meanwhile, the Summer 2021 ferry schedule included 13 boats, one more than in 2019, the last summer before the COVID-19 pandemic.

There were more complaints about the winter schedule. Many did not believe it was sufficient. However, the survey closed on September 6, 2021, before CBL's expanded winter schedule went into effect in October 2021. That schedule added two boats for a total of 10 a day compared to the 2019-2020 pre-COVID schedule of eight boats a day.

At the beginning of the 2021-2022 school year, the Portland public school system announced it would move back the starting time for classes at its high schools from 7:45 a.m. to 8:20 a.m. As this plan was being written, Portland was considering moving back the starting time even further for the 2022-2023 school year. When contacted, CBL said it has no plans to alter its schedule.

While CBL is the biggest user of dock space on Long Island, other wharfs and launching areas play a significant role in the island's transportation web. Ponce's Landing is a public pier that is primarily used by commercial fishermen as access to the waterfront. In addition to being used by fishermen, Ponce's Landing provides a tie-up float for private boaters and is vital to transportation because the fuel barge docks there to deliver gasoline to the island.

Like most coastal communities, Long Island has a shore-side staging area for barges, launching area for boats, and dock space accessible at any tide, in any season, and hopefully in any weather.



Rowing to work in the early morning fog off Mariner's Wharf. Photo: Nils Caliendo

To serve the island's needs, these facilities must be available both on the mainland and on Long Island. On the mainland, the Portland East End Beach facility and Any Tide Landing, locally known as Boston Sand and Gravel (BS&G), on Long Island provide the accessibility needed. The BS&G site is what remains of a former naval pier used during World War II. Named for the company that delivered gravel to the island during the war, the site was given to the town by Northland Development Corp.

Since Long Island became a town in 1993, BS&G has been cleaned up and paved so that it is now accessible at all tides. It is maintained by the town and is used mostly by commercial barge companies that service the island, delivering moving vans, automobiles, lumber, concrete, gravel, and sand to contractors and residents. An alternate landing site is also available at the Johnson's Boatyard. Prior to 1993, vehicles and goods were offloaded onto an old naval beach on the north side of the island that was only accessible at certain tides.

The town also has five floats for public use. The float at Ponce's Landing on the mainland-facing side of the island is available from May to November and provides private boaters easy access to the business district down front. The float at Mariner's Wharf is used year-round for emergency medical evacuation and provides access for the water taxi, utility companies, fishermen, and other private boats. During extreme weather, the ramp to the year-round float can be lifted to avoid damage, and the rescue boat is moved to safety in Portland. Two other floats at Mariner's are seasonal. All seasonal floats are removed in the winter due to weather.

Private docks on the island serve as transportation links for their owners. At Johnson's Boatyard, there are seasonal slips. Like the seasonal floats at Mariner's Wharf, the slips at Johnson's Boatyard and most

private dock floats are removed during the winter months due to weather.

Some residents use private boats for travel to the island, especially during the summer. Year-round water taxi services are also available. Goods and materials for everything from construction to furniture are transported on the ferries, on private boats, and by barge.

Transportation on Long Island

Long Island has 9.2 miles of public roads, .89 miles of former military roads, approximately 3 miles of private roads, and no sidewalks or bridges. There are no state aid roads, but the town receives limited state subsidy from the Urban-Rural Initiative Program of around \$9,000 annually. The town budgeted \$40,000 for general road maintenance in 2022 and spends \$5,000-\$10,000 on gravel for repairs annually.

The Town of Long Island participates in a program called Road Service Management through the state that helps determine the on-going maintenance needs of our roads. The Town has a road grading report done by an engineering firm and every year improves roads that are in the worst condition. The island has a 20-mph speed limit. The roads' design takes into consideration the needs of pedestrians and cyclists, so significant traffic safety concerns do not exist.

A DOT dataset (updated up to Fall 2020) lists 12 vehicle accidents on Long Island since 2003. Because of its remote location and lack of law enforcement coverage, there are likely some vehicular accidents that were not reported. Of the 12 reported accidents, seven have occurred since 2008. Half of the vehicle accidents reported on Long Island since 2003 have involved a driver under the influence of either drugs or alcohol. For context, less than 1% of vehicle accidents in the state of Maine since 2003 have included a driver under the influence of either drugs



A bike, fresh off the ferry, sports a “LO” sticker, CBL’s label designation for freight destined to Long Island.
Photo: Nancy Noble

or alcohol. Although the sample size of Long Island’s vehicle accidents is small, Long Island has an increased number of drivers operating under the influence.

The apparent problem with drivers under the influence and speeding shows up as a concern in responses to the LICP2035 Survey. Respondents not only noted the island’s problem with alcohol, they cited those who drive too fast and the potential for accidents.

There is occasional traffic congestion during the summer months at boat times in the vicinity of Mariner’s Wharf. This situation was also noted by those responding to the LICP2035 Community Survey. They also cited the lack of parking down front and the need for more parking across the island. Others said there were too many cars parked at the ferry.

In addition to the occasional traffic congestion near Mariner’s Wharf, there is sometimes congestion in the parking areas of both South and Fowler’s beaches. On busy summer evenings or during special events, the area down front near the Long Island Bakehouse, Fern Avenue near the Long Island Learning Center, and Wharf Street near the Community Center can have traffic congestion.

Occasionally during the winter months, a road may be closed because of icy or dangerous weather conditions. The town budgeted \$55,000 for snow removal and maintenance in 2022. Additionally, the town spends roughly \$10,000 annually on sand for the roads.

Because of the town’s investment in maintaining our roads, their overall condition is largely sufficient for the needs of its drivers. Potholes and other troublesome features do exist, but most of the island’s mileage is well maintained.

Residents are asked to remove vehicles from the Mariner’s Wharf parking lot during snowstorms to aid snow removal efforts, or leave keys so the vehicles may be moved. The town has posted roads during wet springtime seasons, banning large trucks from using them. This is usually only for a few weeks and is intended to preserve the condition of the roadways.

For islanders who do not own vehicles and the island’s many visitors, there is one golf-cart rental business. There are bicycle racks at Mariner’s Wharf, the Community Center, South Beach, Fowler’s Beach, and the learning center. There is a year-round valet service known as Valet Valls providing drop off and pick up of vehicles or persons.

Because of Long Island’s small size and its water-bound location, there are no conflicts between local and state or US routes, because we only have town roads. There is also no need for local access management techniques. We neither host nor abut a public airport, there are no private airports, and there are no rail terminals on the island.

Subdivision development to enhance dead-end streets is unlikely due to the high cost of building on the island, the high cost of establishing roads, the amount of undeveloped land, septic and well requirements, the large number of lots that do not meet minimum standards for building,

and the location of some lots in the shore land zone.

The island's little-traveled roads and footpaths in the woods and fields provide sufficient space for bicyclists and pedestrians to easily access neighborhoods, schools, waterfronts, and other activity centers. Long Island does not have any sidewalks or bridges. Meanwhile, the island's small year-round population of 234 people and the unbridged island's location - not parking - are the major deterrents to village and town business development.

Vehicles on Long Island

In the spring there is an influx of vehicles belonging to seasonal residents, and in the fall some of these vehicles leave. Every year, however, more and more vehicles are stored for the winter here on the island.

It is difficult to get an accurate count on the number of vehicles on Long Island using vehicle registrations because any vehicle owned by a resident must be registered in the town or city in which they reside. For island residents, that includes any vehicles located on the mainland, which dramatically skews the vehicle count.

That's why parking permits for the down front wharf area are the most accurate way to get a count of vehicles on the island. This methodology was confirmed by the town clerk and was also used in the 2008 Comprehensive Plan to determine the number of vehicles on Long Island.

In 2021, the town issued 682 year-round parking permits, an increase of 281 vehicles or a 70% increase since 2007. In that same time period, the number of golf carts increased from 51 to 178 for a 349% increase. That number does not include seasonal permits.

As of July 2021, the town began using a more comprehensive method to track vehicles with full year parking permits - current or lapsed - to get a more accurate picture of the vehicles on the island.

While the number of parking permits has increased 70% from 2007 to 2021, it is the ratio of cars and trucks to golf carts that has changed the most. In 2007, 13% of the vehicles on the island were golf carts. In 2021, 33% of the vehicles with either a current or recent parking permit were believed to be golf carts. The ratio of golf

Vehicles on Long Island 2007-2021

YEAR	TOTAL	VEHICLES*	GOLF CARTS	ATVs
2021	682	468	214	**
2020	513	322	178	13
2019	522	341	169	12
2018	501	323	168	10
2017	481	321	149	11
2016	437	284	143	10
2015	429	288	130	11
2014	413	284	121	8
2013	408	287	118	3
2012	378	280	95	3
2011	369	275	88	6
2010	368	281	82	5
2009	375	298	77	8
2008	378	316	62	2
2007	401	350	51	1
	Overall	Vehicles*	Golf Carts	ATV
	+70%	+34%	+20%	+1200%

* Cars, vans, trucks, ATVs, trailers

** ATV count for 2021 not available

Source: LICP compilation of Long Island town data



Off-road abandoned vehicles like 'Yukkie' are a common sight on Long Island. Photo: Ginny Stowell

carts to cars/trucks has almost tripled since the last comprehensive plan.

The increase in the number of vehicles occurs at the same time the island's population is aging rapidly but declining in numbers. An examination of the permits shows many residents, especially contractors and businesses, have permits for multiple vehicles.

More golf carts on the road - and a more recent increase in larger 6- and 8 passenger carts - supports anecdotal evidence and LICP2035 Survey results that show widespread concern that the carts are more likely to be driven by underaged unlicensed individuals when compared to traditional vehicles.

The LICP2035 Survey results showed widespread concern about speeding, the

increase in the number of vehicles, and the explosive growth of golf carts and what appear to be underage drivers who are driving them. The trend of more and more golf carts being brought to the island, paired with the lack of understanding about underage driving poses safety risks.

Vehicle Maintenance and Disposal

Vehicles on Long Island are required to be registered, but they are not required to pass inspection. This quirk in the law has spawned a whole class of vehicles known as "island cars," many of which have multi-colored paint jobs, broken windshields and large dents.

Many arrive on the island - usually via barge from East End Beach to BS&G - well used before they arrive. They deteriorate rapidly in the salt air. Junk cars and trucks are a perennial problem here as they are on every island. Local volunteers have organized junk car removal efforts that attempt to keep up with the annual crop of delinquent vehicles. Cars are removed each year by barge and a mainland towing company.

Transporting Vehicles to Long Island

Getting vehicles from the mainland to the island is not easy. There is no regularly scheduled car ferry to Long Island and the other downbay islands as there is to Peak's Island. Cars can be transported on the Maquoit II, with reservations made in advance with Casco Bay Lines, weather and tide permitting. The cost of transporting a vehicle on the Maquoit II is \$88 in the off season (October to May) and \$122 in peak season (June to September). Vehicles can also be transported to the island on one of the frequently scheduled barge trips. The price is determined by the company and is somewhat dependent on the number

of vehicles on board, usually somewhere between \$100 and \$500.

Island Parking

The parking lot at Mariner's Wharf is currently meeting the needs of the community, although in the summer months space is limited as there are more cars than available spaces. There are approximately 125 parking spaces divided into short-term and long-term spaces, which balances the island's needs and helps make best use of the spots. Handicapped parking and golf cart spaces are also available.

Thanks to the voluntary cooperation of most of the residents who follow the parking guidelines, there is currently no plan to expand parking to an additional satellite lot. Through education, more residents are understanding the importance of taking care of their long-term parking needs by leaving their vehicles on their own property or paying for storage of their vehicle.

In addition to the parking available near Mariner's Wharf, there is also parking at the learning center, South Beach, and Fowler's Beach. Most locations on the island have sufficient on-street parking.

Mainland Parking

Parking in Portland is available at the Casco Bay Garage and other garages within walking distance of Casco Bay Lines. However, mainland parking is both expensive and, in many cases, not even available. Garages like the Casco Bay Garage typically have a multi-year waiting list for year-round parking. Some garages no longer place new names for the list, creating yet another obstacle to living on Long Island. The current cost of the Casco Bay Garage is \$170 per month.

Responses to the LICP2035 Survey show mainland parking is very much a concern. Several cited the inability to find parking

within walking distance to the CBL terminal as a deterrent to living here or having visitors.

Emergency Response Plan

The Town of Long Island has a state-mandated Emergency Response Plan. The plan is on file at Town Hall, the Long Island Fire Department, and the Cumberland County Emergency Management Agency bunker in Windham. The escape routes are Mariner's, Ponce's, BS&G, Johnson's Boatyard as well as any private dock. CBL, the Long Island Fire and Rescue boat, charter boats, private boats or helicopters would provide transportation. Helicopter landing areas include the ball field and the conservation area across from the fire station. One selectman serves as the Emergency Management officer.

Specific actions that can allow us to better meet the future transportation needs are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document. There, readers will find a list of recommendations and suggested strategies to address these needs.

Governance

The 2008 Long Island Comprehensive plan discussed how Long Island should govern and take care of its community by saying “...we are fiercely independent, willing and very able to take on the responsibilities of governing ourselves, providing our own services, and protecting this very small place which we care so much about.” That 2008 comprehensive plan was compiled by a dedicated group of volunteers who captured Long Island’s independent spirit, grit, and determination to succeed.

An overwhelming majority, 74%, of respondents to the Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035 Survey) said they were satisfied or very satisfied with the value they got for their tax dollars. Over 91% said they were satisfied or very satisfied with life on Long Island. The written responses to open-ended survey questions indicated concern about how well prepared the town is to move ahead into the future.

Since the 2008 plan, data, as well as results of survey and public forums show Long Island has evolved into a town where residents are not only engaged in the present, they are concerned about the future. As its population slowly declines while aging rapidly, median household income has increased 80% from 2010 to 2020, and residents support technological improvements like broadband. The town’s need to adapt to its changing population and the island’s future needs have become more pressing.



A creative display shows off the Long Island Civic Association's many contributions.
Photo: Nancy Noble

LICP2035 Survey Strategic Challenges

ANSWER CHOICES	RESPONSES
Implementing broadband	67.44% 232
Planning to protect and conserve water supply	66.57% 229
Protecting and managing open space and natural resources	63.08% 217
Preserving access to the working waterfront	52.33% 180
Developing ways to expand the number of EMTs, drivers, and boat captains to continue to provide safe and effective service	50.29% 173
Building resiliency and self-sufficiency in our capacity to cope with climate change (e.g. moving towards energy independence with alternative power sources)	47.38% 163
Financial planning to ensure stable tax rate	47.09% 162
Expanding health and wellness services available on the Island	46.51% 160
Attracting more businesses and specialty contractors (e.g. electricians, plumbers, mechanics, etc.)	44.77% 154
Improving existing parks, trails, and recreation opportunities	43.60% 150
Fostering inclusivity in our community	41.28% 142
Creating a robust approach to maintain public facilities and community resources (e.g. improving roads, waste management system, local law enforcement)	40.12% 138

Source: LICP2035 Survey

The responses to the community survey question about strategic concerns generated an unusually large number of endorsements that show the breadth of respondents' concerns. Of the strategies listed, all received a significant enough response to require action according to Greater Portland Council of Government records.

In written comments, many respondents noted that sustaining the character of the island we know and love will require us to grow responsibly using thoughtful and resourceful planning. Some mentioned that the town government and residents have a considerable amount of work to do for the town to move ahead. Sustaining the island way of life into the future will take a tremendous amount of effort and will require some carefully managed and thoughtful change.

The interest in broadband, which also dominated written responses, shows the

community's interest in immediate access to new ideas, emerging solutions, and impactful information. This theme is repeated again and again in written comments. Respondents want to preserve what people love most about Long Island while finding ways to address and manage change.

Responding to Today's Needs Now

Many people who were interviewed, surveyed or attended public forums believe the town should develop a long-term strategic approach to managing its assets. The town now owns and manages 15 buildings, two wharves, nine vehicles, and two boats. Other town assets include three cemeteries, multiple recreation areas including the beaches and ball field, two parking areas, and over 9 miles of public roads, close to a mile of former military roads, and approximately 3 miles of private roads. To care for these assets, the town needs



Long Island Fire and Rescue is the town's largest volunteer group including five full-time EMTs filling six spots.
Photo: Marci Train

more sustainable procedures and resources to make sure long-term projects are properly funded and finished.

One recent cautionary tale occurred in January 2022 when an intense storm event seriously damaged Mariner's Wharf. The wave screen was ripped out in places, temporary wave break floats crashed into shore, and a float used to house the rescue boat was damaged. The town immediately went to work to mitigate the damage. But it is widely acknowledged, based on previous projects, that the wharf needs serious work and long-term planning to better maintain the island's gateway and to prevent further damage from future storms.

The town has a plan to move forward with repairs to the structure of the wharf with the cooperation of the Department of Transportation (DOT), and that funding has been partially secured. The goal should be a more proactive stance in order to ensure that there is an ongoing effort to keep up with the maintenance and repairs, and to plan for potential long-term replacement.

Those who responded to the LICP2035 Survey listed water quality as one of the topmost concerning issues facing the island. Many noted they were worried about preserving the town's water supply. The town, however, currently has no way to tell if the island has enough water or if the water is safe.

The town's shortage of Emergency Medical Technicians (EMTs) grows more acute, and the town currently does not have formal daytime coverage. The town has started to address gaps with a newly approved incentive plan and a new training schedule. An example of the town addressing issues facing the EMTs is the fact that the 2022-23 budget includes an item to restructure Fire and Rescue compensation. More needs to be done to sustain the island's Fire and Rescue needs long-term as population and demographics change.

In a series of interviews conducted to inform this plan, some islanders suggested possible solutions including rethinking the town's governing structure. LICP2035 Survey comments also show respondents believe

long-range planning is critical to the island's future. Long-range plans to take care of top issues should reflect the community's desire for town government to move forward. Examples of top identified issues on the island include Mariner's Wharf maintenance, water supply, the Fire and Rescue coverage, and election transparency.

Transparency in elections is something that the Town of Long Island could move to address in the coming years. The current system of elections to town selectboard and other elected positions involve a nomination on the day of town meeting, followed by a vote. Best practices from other towns show that there is often a campaign period preceding the day of nomination and voting. This campaign period would allow hopeful candidates to campaign on the island and to share their positions on important issues. This would allow voters to have a fuller understanding of the candidates' positions when it comes time to vote at town meeting.

Inequitable enforcement of laws and ordinances came up in responses to the LICP2035 Survey with written responses documenting concern about the increase in traffic and the belief there is preferential enforcement of town ordinances.

Discrepancies in attitudes about this enforcement are not lost on our community. Several of those who responded to the LICP2035 Survey said enforcement is based on who you are or who you know. This problem is not unique to Long Island, but the problem is more pronounced in such a small, remote community. Some who were interviewed noted that the lack of uniform enforcement of ordinances for infractions like parking and the town's building code creates inequality. They also said they are increasingly concerned about the lack of enforcement of drunk-driving laws.

Interviews and community survey responses reveal widespread concern about the inequitable adherence to the town's building

code on display across the island. Community survey responses noted that some cottage rebuilds are not following town codes. The responses also noted the perception that the town wasn't openly and fairly dealing with permitting and compliance issues. In the community vision work from October 2021, participants sought to ensure equitable enforcement of regulations and to be an open and inclusive community. According to these vision sessions, the Long Island community sees equity as one of the five values key to the island's long-term success.

Automating the Town Office

In developing the town's vision for the next 15 years, residents said that they want a town government that operates in a planful way and uses all resources and data available to enable fact-based decision making. This



Candidates for elected offices in Long Island are nominated publicly at the annual town meeting.
Photo: Nancy Noble

desire for a town government that operates utilizing all available resources is directly in alignment with the aspirational principle of 'resourcefulness,' which came out of the results of the LICP2035 Survey.

When the town government was set up nearly three decades ago, paper records were the easiest solution. The town has grown, and technology has become more sophisticated and affordable. Still the town has yet to fully automate its data entry and use electronic records for its most time-consuming processes.

Vehicle registrations and property files are in paper format only. The town does not accept credit and debit card payments, only cash and checks, which makes it impossible for islanders and the island's large seasonal population to pay bills online from home. Many other small communities have instituted these time-saving electronic conveniences.

The town is beginning to move some registrations online, but it lacks the means to completely automate its processes. Having a fully digital suite of records means employees can more easily access the information remotely, a planful strategy in the event of another pandemic. It is also easier to spot trends that can help set spending, enforcement, and staffing priorities.

The Importance of Volunteers

Long Island has a small number of paid employees to run the town. Its strength, character, and resilience come from both these staff and the large pool of residents who fill more than 160 volunteer positions. These volunteers take care of the island's medical emergencies, chart its finances, educate its children, and oversee its land use. Most islanders who serve play at least two roles.

The town's heavy reliance on aging volunteers does not appear to be sustainable. Of the 100 year-round residents who responded to questions about volunteering, 86 said they volunteer now or would be available to volunteer in the future. Of those, 62, or 72% are ages 55 and older. More than half of those are ages 65 and older.

Meanwhile, among seasonal residents, 166 said they volunteer now or would be available to volunteer in the future. Of those, 102 or 61% said they are ages 55 and older. More than half of those are ages 65 and older as well, including one hearty soul who lists their age as older than 84.

Those seasonal residents who volunteer may not be available if they are ill or need prolonged care because they are more likely to seek medical care near their primary



Members of the Long Island Community Library board of directors have made a decades-long commitment to grow and maintain the collection. The building the library is in also houses an elevator to the basement Wellness Center and emergency shelter. Photo: Nancy Noble

Positions required to run the Town of Long Island	
Unpaid volunteers	113
Stipend volunteers	49
Paid part time	19
Paid full time	4
Total positions	185

Source: LICP2035 Committee Analysis

residence. Aging handicapped volunteers may be unable to perform duties for the town, or will require assistance that the town is not equipped to provide.

There are strong arguments for rethinking and perhaps combining some volunteer roles into paid positions. But the town has no systematic way to evaluate its 185 paid and volunteer positions to achieve the greatest benefits for Long Island. In fact, many islanders we talked to were surprised that the town had so many volunteer positions. There does not appear to be any information available to the town government and the general public about the volunteer positions and their job descriptions.

The town's broad reliance on volunteers, less than one third of whom earn a stipend, sometimes puts islanders in positions where they have limited training and oversight and few resources. They make decisions that can involve islanders' homes, property, finances, safety, taxes, and emergency services.

Other islands offer examples of best practices to address aging volunteers. As noted in the chapter on Public Facilities and Services, the Town of Chebeague Island, like Long Island, is also concerned about having enough EMTs to service its island community. Whatever Chebeague decides to do could have a significant effect on Long Island, as



Some of Long Island's town functions are filled by those who work part time and also earn a stipend as a volunteer. There are as many as 162 volunteer positions. These positions are filled by about 100 people, 70% of whom live on the island year-round.

Photo: Nancy Noble

the islands provide mutual aid to each other. Both islands also team up to provide mutual assistance to Hope Island with Long Island providing the rescue boat and captains and Chebeague providing the EMTs.

Up the coast on Vinalhaven, the town created a position to work with volunteers, many of whom serve on comprehensive plan-related committees. That coordinator also works with the rest of the community to share information and coordinate and facilitate meetings. The job also includes implementing recommendations from the town's comprehensive plan that was adopted in 2013. To implement the changes explained in this chapter of Long Island's comprehensive plan, the community should turn to the policies and recommendations laid out for each chapter. Specific actions that can allow us to better manage our town are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document.

Fiscal Capacity

The Town of Long Island's financial situation is one of sound fiscal policy and management. The table below illustrates revenue and expenses by category as reported by the town.

Every year there are small unplanned revenue and expense items, yet over time the town has managed revenue and expenses very well as evidenced by the stable mil rate shown further below.

Property taxes are by far (approximately 80%) the largest source of revenue which would be 80+% without education revenues from students' transferring into the Long Island Schools from other communities. In 2019, more students "tuitioned" into the Long Island school, which accounts for the increase that year and beyond. The Long Island School Committee, school superintendent, and town officials recognize that scenario may not be sustainable over the long term.

Town of Long Island Revenue & Expenditures Summary					
	Actual	Actual	Actual	Actual	Budget
	FY2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Income					
4010-28 · Property Taxes	\$ 1,205,286	\$ 1,215,325	\$ 1,246,718	\$ 1,247,929	\$ 1,279,825
Non-Property Tax Revenues					
4000-00 · Government Income	\$ 90,263	\$ 100,068	\$ 101,951	\$ 114,090	\$ 92,611
4310-00 · Public Works Revenues	\$ 9,328	\$ 9,068	\$ 9,244	\$ 8,636	\$ 8,150
4330-00 · Solid Waste Revenues	\$ 25,679	\$ 21,653	\$ 15,907	\$ 22,334	\$ 19,250
4400-00 · Grant Income	\$ 101,615	\$ 30,000	\$ 7,400	\$ 145,803	\$ -
4650-00 · Cemetery Revenues	\$ 450	\$ -	\$ -	\$ -	\$ 3,090
4770-00 · Library Revenues	\$ 5,369	\$ 15,081	\$ 3,467	\$ 2,250	\$ 5,000
4800-00 · Education Revenues	\$ 75,430	\$ 133,694	\$ 172,604	\$ 171,059	\$ 177,356
4900-00 · Recreation Revenues	\$ 17,600	\$ 24,351	\$ 18,669	\$ 8,576	\$ 17,750
4950-00 · Community Center Revenues	\$ 915	\$ 1,220	\$ 2,960	\$ 550	\$ 1,000
4960-00 · Wellness Council Revenue	\$ 6,973	\$ 14,302	\$ 5,422	\$ 7,000	\$ 5,005
Total Non-Property Tax Revenues	\$ 333,534	\$ 350,137	\$ 337,623	\$ 480,297	\$ 329,212
Total Income	\$ 1,538,820	\$ 1,565,462	\$ 1,584,342	\$ 1,728,226	\$ 1,609,037
Other Funding Sources	\$ 103,208	\$ 183,184	\$ 77,649	\$ 4,074	\$ 107,431
Total Funding	\$ 1,642,028	\$ 1,748,646	\$ 1,661,991	\$ 1,732,300	\$ 1,716,468
Change from Prior Year		6.5%	-5.0%	4.2%	-0.9%
Percentage of Property Tax Rev to Total	73%	70%	75%	72%	75%
Expenses and Other Amounts to be Financed					
5000-00 · Town Expenses					
5010-00 · Town Positions & Professional	\$ 147,566	\$ 149,831	\$ 165,199	\$ 163,990	\$ 176,993
5100-00 · Government Expenses	\$ 105,046	\$ 86,659	\$ 74,299	\$ 88,683	\$ 105,778
5130-26 · Wellness Council Expenses	\$ 1,195	\$ 14,710	\$ 10,697	\$ 12,621	\$ 15,627
5300-00 · Education Accounts	\$ 495,900	\$ 519,179	\$ 537,109	\$ 572,179	\$ 594,786
5400-00 · Public Safety	\$ 160,570	\$ 150,434	\$ 166,491	\$ 133,117	\$ 173,842
5500-00 · Solid Waste Expenses	\$ 100,896	\$ 104,541	\$ 111,487	\$ 116,174	\$ 118,275
5600-00 · PW Expenses	\$ 116,640	\$ 103,404	\$ 126,975	\$ 83,163	\$ 117,094
5700-00 · Social Service Expenses	\$ -	\$ -	\$ -	\$ 40	\$ 250
5710-00 · Recreation Expenses	\$ 29,149	\$ 35,190	\$ 27,128	\$ 12,193	\$ 34,428
5780-00 · Community Center Expenses	\$ 20,206	\$ 22,562	\$ 17,812	\$ 14,946	\$ 19,899
5760-00 · Cemetery Expenses	\$ 100	\$ 4,651	\$ 1,170	\$ 3,505	\$ 2,550
5770-00 · Library Expenses	\$ 11,923	\$ 9,267	\$ 7,583	\$ 6,307	\$ 5,000
5859-00 · CIP Expenses	\$ 232,715	\$ 18,254	\$ 7,400	\$ 134,112	\$ -
5900-00 · Insurance Expenses	\$ 32,129	\$ 32,881	\$ 34,393	\$ 36,730	\$ 37,662
6020-00 · Loan Payments	\$ 94,232	\$ 118,049	\$ 138,827	\$ 155,850	\$ 175,066
6500-00 · County Taxes	\$ 105,973	\$ 115,464	\$ 119,367	\$ 119,978	\$ 121,095
Total 5000-00 · Town Expenses	\$ 1,654,241	\$ 1,485,075	\$ 1,545,937	\$ 1,653,780	\$ 1,698,344
Change from Prior Year		-10.2%	4.1%	7.0%	2.7%
Additions to Reserves	\$ 45,355	\$ 99,264	\$ 28,540	\$ 15,542	\$ 10,190
Total Expenses & Otr Amts to be Financed	\$ 1,699,596	\$ 1,584,339	\$ 1,574,477	\$ 1,669,321	\$ 1,708,534
Surplus or (Deficit)	\$ 73,533	\$ 164,307	\$ 87,513	\$ 62,979	\$ 8,147

Local Mil Rate, Local & State Valuation (\$ thousands) for Past Five Years						
FY Year	Mil Rate	Change	Local Valuation	Change	State Valuation	Change
2021	7.880	0.0%	158,860	0.1%		
2020	7.880	2.4%	158,736	0.4%	203,350	7.6%
2019	7.694	0.0%	158,046	0.9%	188,900	5.1%
2018	7.694	0.0%	156,568	0.3%	179,800	3.2%
2017	7.694		156,078		174,150	

Source: Local Finance Reports, Maine Dept. of Revenue

The above table shows the local mil rate and local and State property evaluations for the town over the last 5 years, again showing a picture of health. References to the hope of maintaining a reasonable tax rate were expressed by citizens in the Long Island Comprehensive Plan Community Survey conducted in 2021 (LICP2035 Survey), the pilot community conversations that preceded the LICP2035 Survey and in public forums held in the fall of 2021.

In comparing our tax rate with any other coastal communities in the state, the current property tax burden on owners is very reasonable. The Town of Long Island has tended to have the second lowest tax rate after Harpswell which has a mil rate of \$6.76. Chebeague, our neighbor, has a mil rate of \$13.25 per 1,000 of assessed valuation; Vinalhaven \$13.73; Cranberry Isles \$9.90 and Islesboro \$17.65. Of course, mil rates do not show the full story of town services, but they point to the fact that Long Island has a very reasonable property tax rate.



The Town of Long Island's financial situation is solid which helps retain - and hopefully attract - local business owners who will live on the island. Photo: Dick Mitchell



Recent damage to Mariner's Wharf is a prime example of what will continue to happen from climate impacts such as sea level rise and more frequent and intense storm events. Photo: Elizabeth Marchak

The bottom line is the town has met its financial guidepost metric of limiting annual mil rate increases to a maximum of 2.5% in any given year.

The State of Maine Revenue Services property valuation process uses a sample of community property sales to calculate a community's total valuation. This methodology differs greatly from the one used in our town and other municipalities. State law requires that when a municipality's ratio of valuation to property sales - the "Certified Valuation Ratio" - falls below 70%, the municipality is required to do a complete property revaluation assessment. In the above table for example, the Town of Long Island reported property valuation for 2020 was 78% of the State's valuation.

The Town of Long Island Finance Committee instituted a Capital Improvement Project (CIP) process to identify and project capital improvements over 5-10 years. The CIP process involves working with town department leaders in forecasting major building and wharf repairs (roofs, heating, etc.), replacement of public infrastructure,

investments required for roads or other public works projects, and acquiring replacement public safety equipment (ambulance, firefighting gear, etc.). The process begins in the fall and ends before town approval in late spring. Each CIP request from department heads is vetted with the finance committee and the select board, ensuring there is supporting rationale and financial estimates before CIPs are translated into warrants submitted for approval at the annual town meeting.

The Long Island Capital Improvement Plan for anticipated capital investment needs including estimated costs, and timing is shown on the following page.

Every year, the departments and the Town of Long Island Select Board consider a range of capital projects. Some may be deferred or trimmed down to fit within property tax rate expectations. Major projects have been identified in other sections of The Town of Long Island Comprehensive Plan, and the finance committee will work with sponsors to develop CIP requests in maturing those projects for town approval.

	Last Completed / Purchased		Due Next		Fiscal Year												
	Year	Total Cost	Year	Est. Cost	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
					63	318	367	292	553	210	287	157	260	50	50	172	
Multi-Purpose																	
Community Center	2016																
Exterior painting & repair	2016		2031	15												15	
Interior painting & repair	2016		2026	10				10									
Reroofing	2016		2041	35													
HVAC	2016		2041	15													
Library, Shelter, Wellness Center	2003																
Exterior painting & repair	2021		2028	10							10						
Interior painting & repair	2019		2029	11								11					
Reroofing	2003		2028	20							20						
HVAC	2016		2041														
School/Learning Center																	
Exterior painting & repair	2013		2025	15			15										
Interior painting & repair	2018		2028	10							10						
Reroofing	2005		2030	40									40				
HVAC	2011		2026	45				45									
School bus	2013		2033	40												40	
VFW Hall																	
Exterior painting & repair	2018		2022	8	8												
Interior painting & repair	2011		2024	7			7										
Reroofing	2018		2043	25													
HVAC	N/A		2028	10								10					
Septic system	2019	30	2044														
Public Safety																	
Fire Station																	
Exterior painting & repair	2016	10	2023	10		10						10					
Interior painting & repair	2006	17	2031														
Reroofing	2003		2025	10				10									
HVAC	2009	25															
New Fire Station	2018	22	2038		8	150	150										
Replace SCBA/Hoses/Turn Out Gear			2025	20			20						20				
Sheriff's House - Sam																	
Exterior painting & repair	2015		2025	10			10										
Interior painting & repair	2022		2029	6								6					
Reroofing	2019		2044	15													
HVAC	2021		2036	12													
Boats																	
Fire & Rescue Boat	2000		2028								175						
F&R Boat engine	2017		2027							25							
harbor master boat, motor & repair	2015		2025	10			10						45				
Vehicles																	
Engine E1, purchase new	2006	250+	2026	300				300									
Engine E2, purchase used	2007	90	2027	100					100								
Pump truck E4 pur used	2015	80	2030	100								100					
Tank 1, purchase used	2018	8	2033	20													
Tank 2, purchase used	2011	55	2026	20				80									
Rescue 1 ambulance, purchase used	2019	14	2029	20								20					
Cardiac monitor	2019	36	2029	40								40					
Rescue 1/E3 Stretchers	2020	40															
ATV, purchase new	2006		2026	13				13									
Piers, docks, moorings																	
Ponce's Wharf																	
Ponce's Wharf repair	2003	67															
Ponce's Wharf repair	2009	54															
Mariners Wharf																	
Mariner's wave screen repair/expansion	2011	11	2023		250	130											
Public Works																	
Buildings (2 barns)																	
Exterior painting & repair	2000		2022	5	5						10						
Interior painting & repair	2000		2026	5				20									
Reroofing						15											
HVAC										10							
Transfer Station																	
Trash compactor	2011	18	2026					25									
Solid Waste Truck	2018	20	2033													45	
Roads																	
Paving, Chip-Seal, ditching	1996	110	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
Other Town Buildings/Assets																	
Garage lot 3 (at pier)																	
Exterior painting & repair	2016	18	2023	10		10					10						
Interior painting & repair	2000	17	2035	20													
Reroofing	2000		2025	15			15										
HVAC	N/A																
Marine Building																	
Exterior painting & repair	2016	10	2023	5		5						5					
Interior painting & repair	N/A		2026	10				10									
Reroofing	Unk		2025	12			12										
HVAC																	
Town Hall																	
Exterior painting & repair	2011	12	2031														
Interior painting & repair	2018	9	2028	12							12						
Reroofing	2013		2038	19													
HVAC	2018		2033													22	
Tennis Courts																	
Resurfacing	2019	16	2027						25								



To help manage the town's budget, Long Island has acquired used vehicles and equipment from nearby towns. Most are used by the town's volunteers, including the town's rescue boat, pictured in the background. In the foreground, residents line up on a summer weekend to buy produce and baked goods off a visiting farmer's market boat. Photo: Nancy Noble

Capital Funding Sources

In general, there are several sources for funding capital projects, which are defined as asset maintenance of, or acquisition of new assets that would typically have a life of five (5) years or more. Project examples include building roof replacement, purchase of fire apparatus, and road paving.

For smaller capital projects, such as rescue boat navigation electronics replacement, the town has chosen at times to use "direct funding", meaning to pay for the project outright rather than borrowing funds. For larger projects that have longer life expectancy, the town has used commercial lending sources, the Maine Municipal Bond Bank, and grant programs.

In July 2014, the select board authorized the finance committee to undertake a long-term study of capital improvement project (CIP) needs and costs. Then, in 2018, the town adopted a rating system to assist in capital project priority setting and funding.

- Category 1 projects are those that “maintain essential town services”, such as replacement fire trucks or road paving/sealing. These projects should be funded entirely by the town and available grants.
- Category 2 projects are defined as “improving essential town services”. Examples include a generator for the school and replacement fire hoses. The source of funding for these projects should be the town and available grants, with the expectation that a higher percentage could be funded from grants.
- Category 3 projects are meant to “establish or improve nonessential services that make our town a better place to live”. A good example would be recreational improvements. These projects should be funded from grants and donations, with encouragement or minor funding by the town. In all cases, project sponsors identified are for each CIP and are expected to research and apply for grant funding as available.

Another approach to handling town capital investment needs is through collaboration with neighboring towns. The town maintains great relationships with Falmouth, the City of Portland and Town of Chebeague Island as examples. As a specific example, instead of spending more than \$20,000 on a new compressor and fill station to refill fire fighter air cylinders, Long Island’s Fire & Rescue department coordinates with the Falmouth

Fire Department to refill the air cylinders. Talks are underway to explore the “gifting” of Falmouth’s recently replaced compressor to Long Island.

Discussions have recently begun with the Town of Chebeague Island which hopes to hire a full-time medic. Chebeague has approached the Town of Long Island to share in that effort to add more full-time emergency personnel. The Town of Long Island has received capital items at discounted prices (ambulances, fire trucks, etc.) from other towns when they no longer need them.

Every capital project identified in this comprehensive plan could use any of the funding sources described above.

Debt Capacity

The town has plenty of borrowing capacity should it need to draw on that source of funding. With about \$1.3 million in debt as of fiscal year 2021, the town’s guidepost is approximately 0.8% and has been constant over the past 5 years.

The parameters above position the town in a very conservative fiscal state, which on the one-hand is very good, yet on the other hand limits acting on capital improvements and improving essential town services. The impact of mil rates and tax loads can be managed.

For example, a \$250,000 loan, ten-year term at 4%, would have a loan repayment

Town of Long Island Debt Guidepost			
	Metric Parameter	Limit	Actual Debt
Town of Long Island Guidepost	<= 1.25% of property valuation	\$2.3M	\$1.3M
Maine State Law	<= 15% of last full state valuation	\$27M	
Maine Bond Bank Limit	Follows statutory, plus other common commercial metric		



In comparing our tax rate with any other coastal communities in the state, the current property tax burden on owners is very reasonable. One issue facing islanders is the slowly declining population and rapidly aging population, which makes sitting on the porch with a grandchild even more meaningful. Photo credit: Chris McDuffie

of \$30,372 per year. The additional debt service would increase the mil rate (the amount of tax payable per thousand dollars of the assessed value of a property) less than 13 cents from the current mil rate of 8.035. That debt would increase the property tax by \$38.70 a year on a \$300,000 property. The point is that additional debt need not excessively burden property owners, and a thoughtful mixture of loan terms – short and long – is good practice.

As noted, the key debt capacity metrics hinge off property valuation. In late 2021, the town's finance committee began discussing the need and approach for a revaluation, since the last valuation was conducted in 2009. As noted earlier, the state encourages towns to revalue when a municipality's ratio

of valuation is less than 70% of the state's methodology, or every 10 years. A revaluation would certainly increase the town's overall property value, thus increasing the debt limits.

The town has borrowing capacity for typical capital needs, and should the town have a need for large capital projects, it has the borrowing capacity.

Looking Forward

The financial situation may change substantially over the next decade. The recent damage to Mariner's Wharf is a prime example of what will continue to happen from climate impacts such as sea level rise and more frequent and intense storm events. The town will need to get serious and determine the plan for larger, complex topics that include:

- protecting against climate impacts, shore zone protection, and fire mitigation
- major public infrastructure such as Mariner's Wharf, Ponces Wharfs, and fire station
- available/affordable housing, aging in-place
- the overall health & welfare of citizens (i.e., wellness, public safety)
- water and ground quality and quantity

These topics are large, sometimes million-dollar ticket items. To maintain a reasonable tax rate, it will be imperative for the town to solicit and participate in all available public grant sources such as the Bipartisan Infrastructure Bill and the State of Maine's Governor's Office of Policy Innovation and Future (GOPIF). These funding sources will be key to reducing the potential increased property tax burden related to critical capital investments.

The current financial "guideposts" set by the town and adhered to by the finance committee may need adjustment either temporarily or more permanently.

The current metrics are:

- Hold annual budgets as close to flat as possible
- Limit annual mil rate increase to <+ 2.5% and 5 year cumulative to <+7.5 %
- Commit 100% mil rate revenue increase to new debt for CIPs
- Debt limit to not excess 1.25% of Assessed Property Value

Through the years, the mil rate and resulting tax dollars form the largest proportion (approximately 80%) of total town revenue. To address some of the capital projects above, other revenue sources could be explored for viability and adoption.

Just a few examples include a modest local real estate transfer tax that acknowledges to both seller and buyer that they benefited from, and will benefit from, the infrastructure and other capital investments the town has made.

We will need to continue to explore options like investing in the K-5 Long Island School as a magnet school to draw more students from surrounding communities. The tuition revenue would support not only existing or growing school staff but also school infrastructure improvements etc. This concept could also draw more families to live on the island, which is discussed in detail in the Housing section.

Additionally, the State of Maine is proposing a bill (LD 1337) that would facilitate towns to license housing rentals and collect impact fees to be used for affordable housing programs. More information about this bill can be found on legislature.maine.gov.

Specific actions recommended related to fiscal capacity for the Town of Long Island are listed in the recommendations for this chapter, which can be found in the 'Plan Framework' section of this document.

Land Use

Existing Land Use

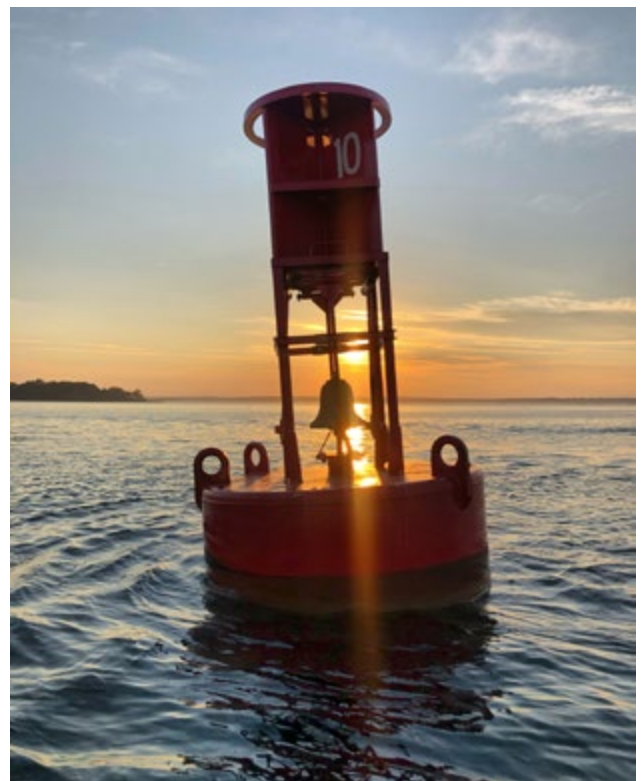
The boundaries of the Town of Long Island include about 866 acres made up of Long Island itself as well as several other surrounding islands. The town boundaries include a large portion of Little Chebeague Island, Cow Island, Vaill Island (known locally as Marsh Island), Overset Island, College Island, Crow Island (the one on the west side of Long Island), tiny portions of a couple of islands lying within the boundaries of Chebeague Island and a number of other named and unnamed rocks and ledges, generally devoid of vegetation and some only exposed at low tide. Only the Town of Long Island has year-round inhabitants. A few other islands have seasonal and occasional inhabitants (i.e. Cow Island and Overset Island).

In the early 1900's large parcels of land on Long Island were bought by Portland land development companies and subdivided into small (11,000 square foot) lots. The most desirable lots, primarily on the western, northwestern and northeastern shore of the island were sold and developed. Land in other parts of the island was subdivided for development and laid out in grids, complete with roads (on paper). Although the subdivided lots were sold, many were not developed, and most of the roads were never built. This activity resulted in a sizable number of privately owned very small undeveloped lots and a relatively large number of paper roads in the town. This situation still presents challenges today in terms of land use strategy.



Long Island features beaches, rocky coastline, marshes, and woods that are great for an afternoon stroll.

Photo: Dick Mitchell



Once you go by the No. 10 buoy on the mainland side of Long Island, you know you're almost home. The buoy's clang welcomes thousands every year.

Photo: Kimberly Wallingford MacVane



Long Island viewed from the air, with the West End most prominent. The island is over 700 acres with a combination of forests, rocky shores, and sandy beaches. Photo: Anil Melwani

This pattern of land use continued up until the early 1940s when the United States government took over a sizable portion of Long Island and all of Little Chebeague and Cow Islands for the war effort. Long Island served as a fuel depot during the war and related construction resulted in making a number of acres of land on the island unusable. The government retained ownership of this land until it was sold to King Resources in the late 1960s. Most of the undeveloped property outside of the fuel depot area was then sold to Northland Residential Corporation in the 1980s. A large tract on the southwest end of the island known as Jerry Point (formerly Mount Hunger) was subdivided into large lots, and three houses were built. Large lots were also sold on the back shore, and many interior parcels of land were sold to abutters and other local property owners. Residential lots were conveyed with deed restrictions preventing further subdivision.

Two separate tracts of land were donated by Northland to the Long Island Civic Association (LICA) to be used for recreation purposes by the people of the island. One is the beautiful double horseshoe Fowler's Beach, with its swampy backland, which is located on the western end of the island facing Peaks Island. The second is an interior parcel that is used as the island baseball field. In 1995, Northland also acquired the fuel depot property and, after a cleanup supervised by the The Department of Environmental Protection, subdivided and sold the usable portions. The remaining area, approximately 116 acres, was unusable because of the presence of the underground fuel tanks and pipelines. This parcel was put into a conservation easement that is held by LICA. In 2005 the town voted to create a limited liability corporation, Long Island Community Land Operation Company, LLC (LICLOC), for the express purpose of owning this property. In 2007 the corporation was formed and assumed ownership.

Current Land Use

Long Island

Long Island itself is made up of about 745 acres. There are 977 lots recorded in 2021 tax data. There are currently 400 recorded dwellings and 12 public structures. There are beaches on every 'coast' of the island - 'front', east, west and 'back'.

Of the total acres on Long Island there are over 145 protected acres which can be used for recreation. There is a 116 acre parcel that was part of the U.S. Naval Fuel Depot in World War II and is currently owned and managed by LICLOC. The use of this land is governed by a conservation easement held by LICA. There is a 12 acre parcel on Wreck Cove that is owned by the Town of Long Island and covered by a conservation easement held by Oceanside Conservation Trust of Casco Bay. LICA owns an eight acre ball field and an eight acre beach (Fowler's Beach). Use of Fowler's Beach is controlled by a conservation easement held by Oceanside Conservation Trust of Casco Bay. This easement prevents future development. Public recreational land on Long Island also includes a state owned beach on the south side of the island and tennis/basketball/pickleball courts near the school that are owned by the town.

There are two residential zones on Long Island scattered across the island, and there are two places on the island designated as business zones. One business zone is in the middle of the island facing the mainland and includes a boat yard/marina. The other business zone is located in the neighborhood known as 'down front' and includes a general store, an eating establishment, and town buildings including the Town Hall and the Community Center. There are some residences located in the business zone as well as the post office, a church and the VFW hall. A significant parcel of land including waterfront access has been recently sold with plans to develop still being fleshed out. There are four wharves located in the 'down front' business zone: Mariner's Wharf currently used by Casco Bay Lines ferry service, Ponce's Wharf which is owned by the town and currently used and maintained on a cooperative basis by island lobstermen, and two privately owned wharves.

There are several plots categorized as 'Utility and Transportation land use' located on the east end of the island in a place referred to as 'Cleaves Landing'. These are described as Casco Bay Lines East End Landing and Central Maine Power (CMP) access to Little Chebeague Island.



Sections of the Long Island's coastline are a rugged mix of craggy rock and scrubby bushes with evergreens just a few feet from the waterline. Photo: Dick Mitchell

Other Islands within the town boundaries

Little Chebeague is owned by the State of Maine and the Department of Conservation's Bureau of Parks and Lands has oversight. There is an undeveloped park where picnicking, walking, camping and swimming are allowed. Cow Island is owned by Rippleffect, a non-profit which runs youth programming and has built facilities to support those programs. Cow Island is covered by a conservation easement held by Maine Coast Heritage Trust. Vaill Island is owned by the State of Maine and comes under the purview of the Department of Inland Fisheries and Wildlife, and is a location for which NOAA makes tide height and time predictions available. Overset Island is privately owned with one home. College Island is a tiny gull and seabird nesting site owned by Oceanside Conservation trust of Casco Bay. Crow Island is owned by the United States Government and the U.S. Coast Guard maintains a lighted navigational aid there. Other named islands include Stepping Stones, Obed's Rock and Outer Green Island which is an important seabird nesting area.

Trends

Although a relatively small island there is a strong sense of place. Within the island there are many well established neighborhoods and most residents feel a strong affinity to their 'place' on the island. A large percentage of residences across these neighborhoods are seasonal. In 2021 there were 380 housing units observed in use with 72% of those being used on a seasonal basis and 28% in use year-round.

There has been low growth in housing stock on the island from 2006 to 2021, increasing from 367 to 380 units. The big difference is the increase in winter use housing stock was up 9% with a 1% increase in seasonal use units. The growth in dwellings on Long

Island has not been at the rate and pace we see in other parts of coastal Maine.

In the last 10 years only 18 new buildings have been constructed, all residential. There was one multi-family permit issued but the building was never constructed. There have been 31 new buildings constructed since 2006, all residential single family. This rate of growth is much slower than forecasted in the 2008 comprehensive plan where the next 10 years forecasted 49 units to be developed over 39 parcels with 15 units over five lots to be multi-family.

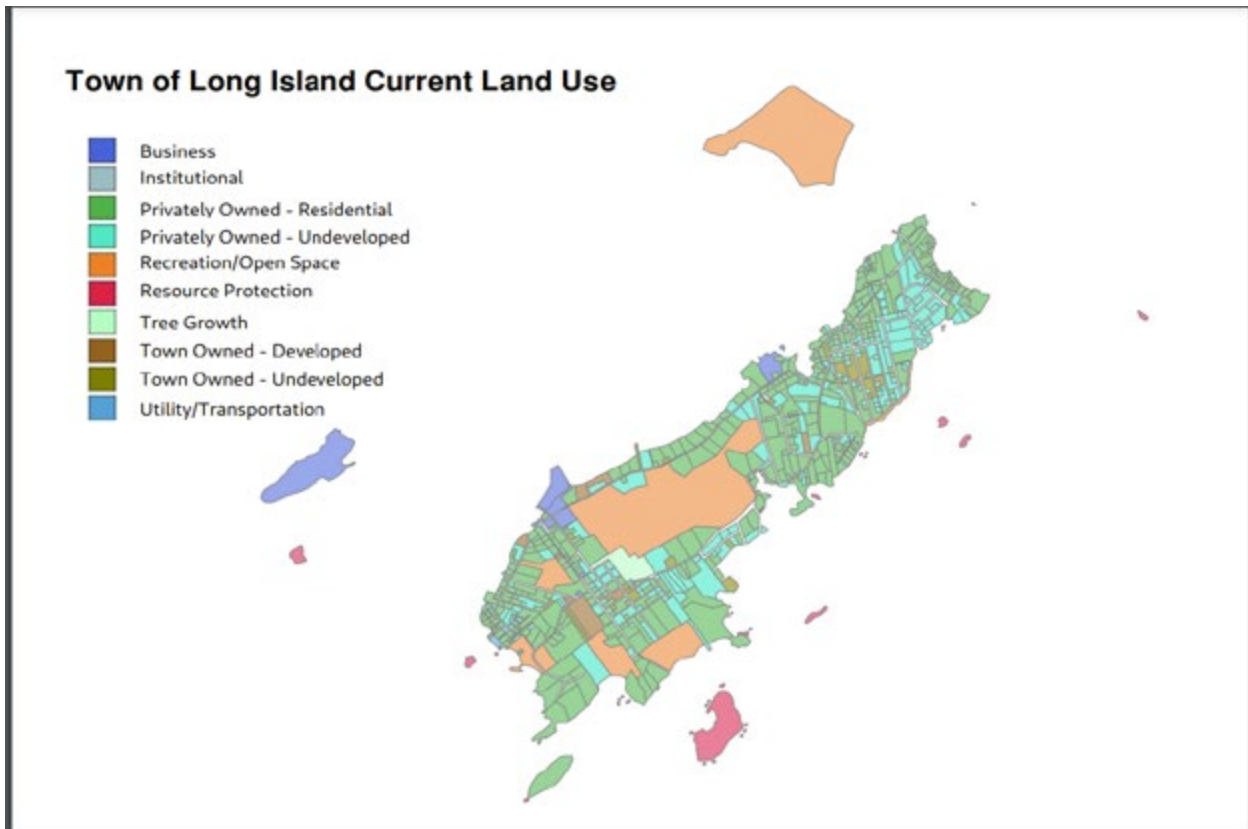
New development has been lot by lot as there have been no planned developments or subdivisions. The opportunity for subdivision is very limited and consists primarily of cluster development where possible in accordance with the new 2021 ordinance. The minimum lot size of 60,000 square feet for new construction limits the number of parcels which may be subdivided. Recent development is consistent with the community's vision overall. The vision and values are outlined in the vision chapter of this plan. There are questions on future development based on constraints with groundwater quality and quantity as well as how best to utilize the conservation area. The big challenge is the lack of sufficient availability of year-round housing stock which has not kept pace with the vision to sustain the year-round community on the island.

The challenge to any new construction and development on the island is the constraint in supply and quality of groundwater. The town has limited growth through minimum lot size requirements of 60,000 square feet which direct new residential development to Residential Zone IR-1 where these parcels exist. Much of the new development is expected to happen on grandfathered 11,000 sq ft lots to be developed as long as state subsurface waste disposal rules can be met. Development on these lots needs to be carefully managed.

Since 2008 there have been 101 building permits of which 35 were single family (including teardowns and rebuilds), one two family home, and 65 related to accessory buildings. Over the past 10 years there were 18 new builds. Over the last three years the rate has slowed to one new building per year. Most of the permits issued have been for accessory buildings in the last ten years.

Several measures may be taken by the town to promote development while keeping the character of the community vision. An improvement plan to renew the wharf area, the gateway to the island, was consistently mentioned many times in community feedback during this comprehensive plan process. The town should activate a long-term approach to address and mitigate the impacts of more frequent storm events and sea level rise on commercial and public infrastructure close to the waterfront, in keeping with the sea level rise scenarios developed by the Maine Climate Council.

The minimum amount of land needed to accommodate projected residential, industrial and commercial growth expected over the next 10 years is 46 acres across 22 plots. This estimate accounts for a potential new fire station, commercial development on a plot located in the “down front” Business Zone and the wharf area which recently changed ownership, as well as expected residential growth on town owned and public owned parcels.



Map of Long Island New Construction since 2006, Source TOLI, April 2022



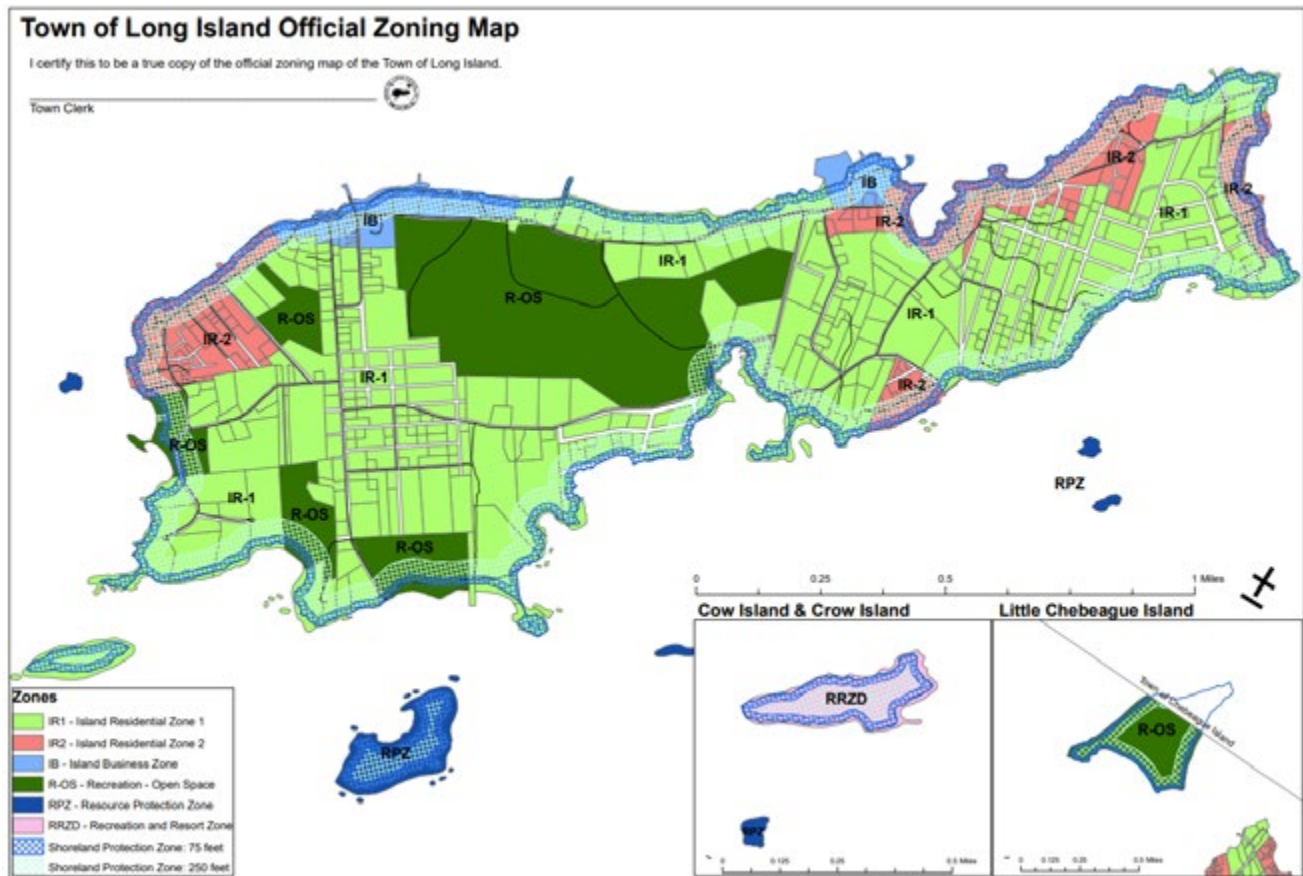
Permits Issued by the Code Enforcement Officer since 2007

	10 years	15 years	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Single family home	21	38	1	1	1	3	5	1	3	1	3	2	2	6	6	3
Two family home	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Accessory Building	<u>47</u>	67	<u>8</u>	<u>4</u>	<u>4</u>	<u>2</u>	<u>4</u>	<u>4</u>	<u>8</u>	<u>2</u>	<u>4</u>	<u>7</u>	<u>1</u>	<u>7</u>	<u>10</u>	<u>2</u>
Total	69	106	9	5	6	5	9	5	11	3	7	9	3	13	16	5
Homes	32%															
Accessory	68%															
New Primary	18	31														
Rebuild	4	6														
New structure	14	25														

Flood Management

Individual property owners participate - or choose not to - in the federally subsidized flood insurance program. The town updated the land use ordinance to be in alignment with the current state/federal standards at Town Meeting 2021. The town plans to update the ordinance to correctly reference FEMA's floodplain map when FEMA releases the final Cumberland County map in 2022.

Current Zoning



Island Residential -1. The purpose of the IR-1 island residential zone is to provide for low intensity residential, recreational, and rural uses in the less developed areas of the town in order to preserve the rustic character of the town, to protect groundwater resources and natural and scenic areas, and to permit only appropriate low intensity development in areas lacking adequate public facilities and services.

Island Residential -2. The purpose of the IR-2 island residential zone is to protect the character of existing developed residential neighborhoods on the island. Expansion or extension of an existing IR-2 zone should be strictly limited, generally focused toward areas adjacent to existing village IR-2 areas, and restricted by such factors as adequacy of access, whether adequate water will be available for private use and for fire protection, and whether soils in the area are adequate for subsurface water disposal. IR-2 rezoning on substantially sized parcels should not be considered for those sites that should be more appropriately zoned IR-1.

Recreation and Resort Zoning District (Adopted May 14, 2005) The purpose of this zoning district is: (1) To preserve and protect limited and valuable natural and scenic resources. (2) To permit low impact passive recreational and educational uses of island shoreland and upland areas while providing measures to protect and preserve natural and scenic characteristics and resources. (3) To allow limited, low-impact and low-density development that supports passive recreational and educational activities. (4) To control development and construction activities, the removal or disturbance of vegetation, earthmoving to the minimum amount necessary to allow for development that supports passive recreational and educational activities. (5) To preserve existing scenic vistas.

Recreation and open space zone(R-OS) The purpose of this division is: (1) To preserve and protect open space as a limited and valuable resource; (2) To permit the reasonable use of open space, while simultaneously preserving and protecting its inherent open space characteristics to assure its continued availability for public use as scenic, recreation, and conservation or natural resource area, and for the containment and structuring of development; and (3) To coordinate with and carry out federal, state, regional, and town recreation and open space plans. The recreation open space zone may include major parcels (over two (2) acres) of public property, and private property legally restricted from intensive use or development through deed, covenant, or otherwise.

Island business zone (I-B) The purpose of the I-B island business zone is to provide limited areas on the island for retail and service establishments that serve primarily the needs of the local island market area.

Resource Protection Zone The purpose of the Resource Protection Zone is to restrict development in those areas of the Shoreland Zone (see Article 4) in which it would adversely affect water quality, productive habitat, biological ecosystems or scenic and natural values.

Shoreland Overlay Zone (Article 4) The purposes of this article are to further the maintenance of safe and healthful conditions; to prevent and control water pollution; to protect fish spawning grounds, aquatic life, bird and other wildlife habitat; to protect buildings and lands from flooding and accelerated erosion; to protect archaeological and historic resources; to protect commercial fishing and maritime industries; to protect freshwater and coastal wetlands; to control building sites, placement of structures and land uses; to conserve shore cover, and visual as well as actual points of access to inland and coastal waters; to conserve natural beauty and open space, as appropriate in an island environment; and to anticipate and respond to the impacts of development in shoreland areas.

Existing Land Use Regulations

The town has a Land Use Ordinance that was adopted on July 1, 1993 and consists of 16 articles. The articles include: Preamble, Definitions, Zoning District Standards, Shoreland Zoning District Standards, General Provisions, Non-conforming structures, uses and lots; Townwide Performance Standards, Administration and Code Enforcement Officer, Changes and Amendments, Site Plan Review, Subdivisions, Flood Plain Standards, Zoning Board of Appeals, Planning Board, Wireless Communication Facilities and Driveway Standards. Over the years the Land Use Ordinance has been reviewed on a regular basis to align with community needs and multiple changes have been proposed and subsequently adopted by the town by vote at annual town meeting. The water quality and supply are of particular concern on the island given the only water source is wells. The Land Use Ordinance addresses subsurface waste disposal and the safety of drinking

water by permitting the enlargement of existing structures or new construction only if the parcel can support disposal of waste per state guidelines. Septic systems must be inspected at time of title transfer.

The community's administrative capacity is at capacity in terms of ability to manage land use regulation programs with one part-time Code Enforcement Officer coming from the mainland and the Planning Board struggling to keep sufficient numbers of members.

The Town of Long Island dimension requirement summary by zone is as follows:

IR-1 and IR-2

- Minimum lot size - 60,000 square feet
- Minimum street frontage - 100 feet
- Setbacks - front 30 feet, rear 30 feet, side 20 feet
- Max lot coverage - 15%
- Min lot width - 100 feet
- Max structure height - 35 feet for primary and 18 feet for accessory
- Recreation and Resort
- Minimum lot size - 120,000 square feet
- Minimum lot width - 200 feet
- Minimum shore frontage - 200 feet
- Common Shore Frontage: 200 feet of shore frontage for the first owner and an additional 25 feet of shore frontage for each additional property owner
- Setbacks - front 30 feet, rear 30 feet, side 20 feet
- Max lot coverage - 15%
- Max structure height - 35 feet

Recreation and Open Space

- Minimum lot size: 2 acres
- Minimum front yard: 25 feet, rear yard: 25 feet, side yard: 12 feet
- Max building height: 35 feet
- Max lot coverage 25%
- Max floor area ratio: 0.2

Island Business Zone (IB)

- Minimum lot size - 30,000 square feet
- Minimum street frontage: 40 feet.
- Setbacks: Front yard: 20 feet, Rear yard: 10 feet, Side yard: 10 feet
- Maximum lot coverage: 20% percent
- Minimum lot width: 40 feet
- Maximum structure height: 35 feet

The most significant changes to Land Use Ordinances adopted since the last comprehensive plan include the following:

Article 3: Zoning District Standards (adopted 2016)

While the definition of material storage was added to the land use ordinance in 2009, the ordinance contained no provision for “material storage” which was problematic because the land use ordinance precludes any use not listed as a permitted or a conditional use. The 2016 change added material storage as a conditional use in three zoning districts: Island Residential-1, Island Residential-2, and Island Business. Making material storage a conditional use rather than a permitted use means that Planning Board approval is required. This will come into play at Town Meeting this year since the Planning Board is recommending changing the zoning status of a parcel in the Conservation Area used for material storage from Recreation and Open Space to Island Business since that use is not allowed in that former zoning district.

Article 4: Shoreland Zoning District

State law sets standards for development within the first 250 feet of shoreland. Towns can include shoreland zone standards within the Town’s municipal land use ordinances, but the town standards cannot be less strict than the state’s regulations. The change adopted in 2021 aligned Long Island’s shoreland zone standards with the current state regulations.

Article 7: Town Wide Performance Standards

7.16 The Planning Board proposing an ordinance that “will insure the proper functioning of subsurface waste disposal systems” was a strategy recommended in the 2008 Comprehensive Plan. The requirement that a subsurface waste disposal systems (SSWD) system be inspected and certified to be functioning when title to the property transferred was first adopted in 2001 and further amended in 2019. 7.23 In 2009, voters approved an amendment adding a requirement for an applicant for an Accessory Dwelling Unit to certify that an existing or proposed SSWD for the unit meets or will meet state standards. That action was consistent with the 2008 strategy regarding the proper functioning of SSWD systems. The 2019 amendment just transferred the authority to approve the conditional use from the Zoning Board of Appeals to the Planning Board.

Article 11: Subdivisions - R. Cluster Development

An amendment adopted in 2021 allows a developer to include cluster development within a proposed subdivision or a section of a proposed subdivision. Cluster Development would be a conditional use to allow homes to be clustered or concentrated more densely onto one or more portions of the parcel rather than on a one house per lot basis, as long as the total density requirement in the zoning district was not exceeded. A primary potential benefit of clustered development is reduced costs to construct infrastructure for the development. It might be possible to construct a single driveway; provide electric connections with a single line; a single septic system to serve multiple homes, etc. The Year-Round Housing Committee was the primary advocate for this language - consistent with a strategy from the 2008 Comprehensive Plan.

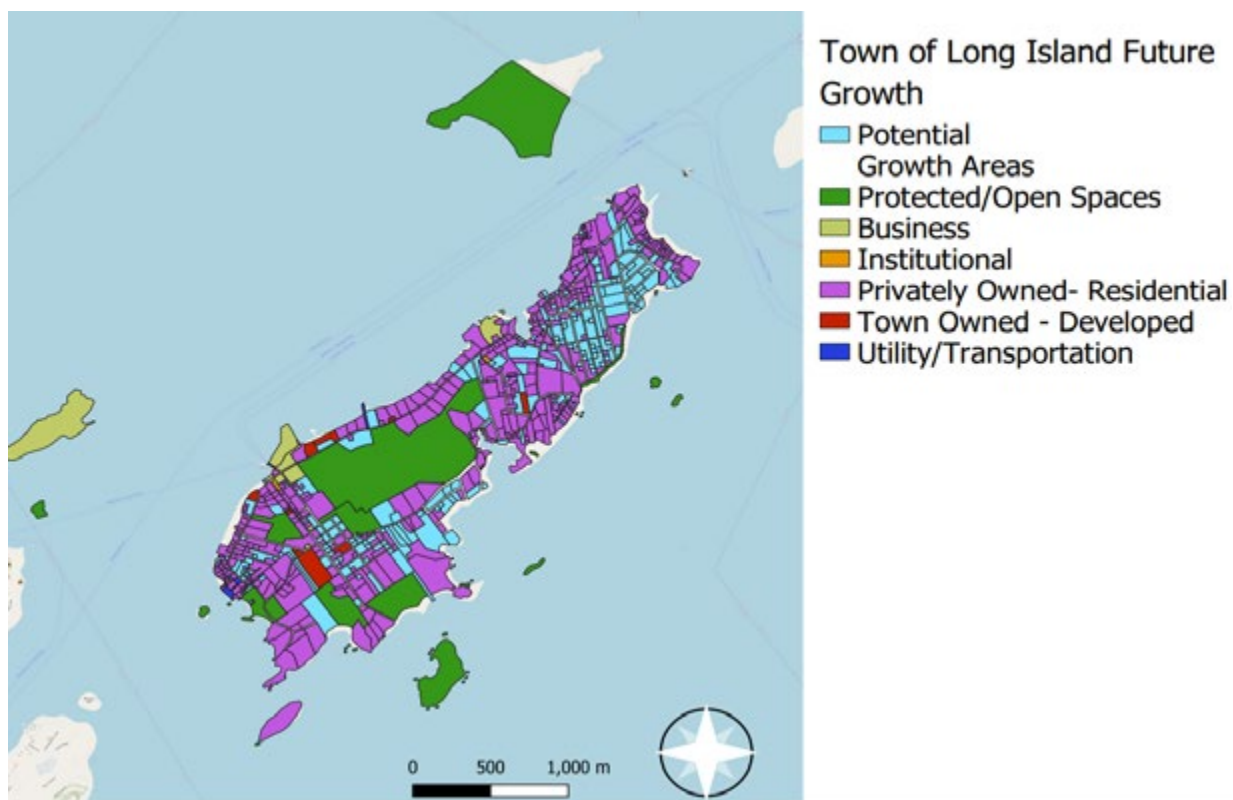
Article 12:Floodplain Standards

Long Island’s Floodplain standards were amended in 2011 and 2021 to be aligned with revisions to the program, or related definitions, standards, or citations made by the Federal Emergency Management Agency (FEMA). The town adopting FEMA’s floodplain standards are necessary in order for property owners on Long Island to continue to be eligible to participate in the Federal flood Insurance Program. Last year, five properties on Long Island, with coverage of almost \$1.5 million participated in that program.

Future Land Use

The future land use strategy for Long Island is a delicate balancing act. On the one hand the community's primary concern is that building and development do not exceed the land's capacity for a safe and sufficient water supply. On the other hand, the community's vision is for a sustained year-round community for which today's housing stock is insufficient. The community is also interested in maintaining and building new public infrastructure to keep current with changing needs based on trends in population and demographics. Long Island is a fishing community and the vision and values place a high importance on working waterfront maintenance and access.

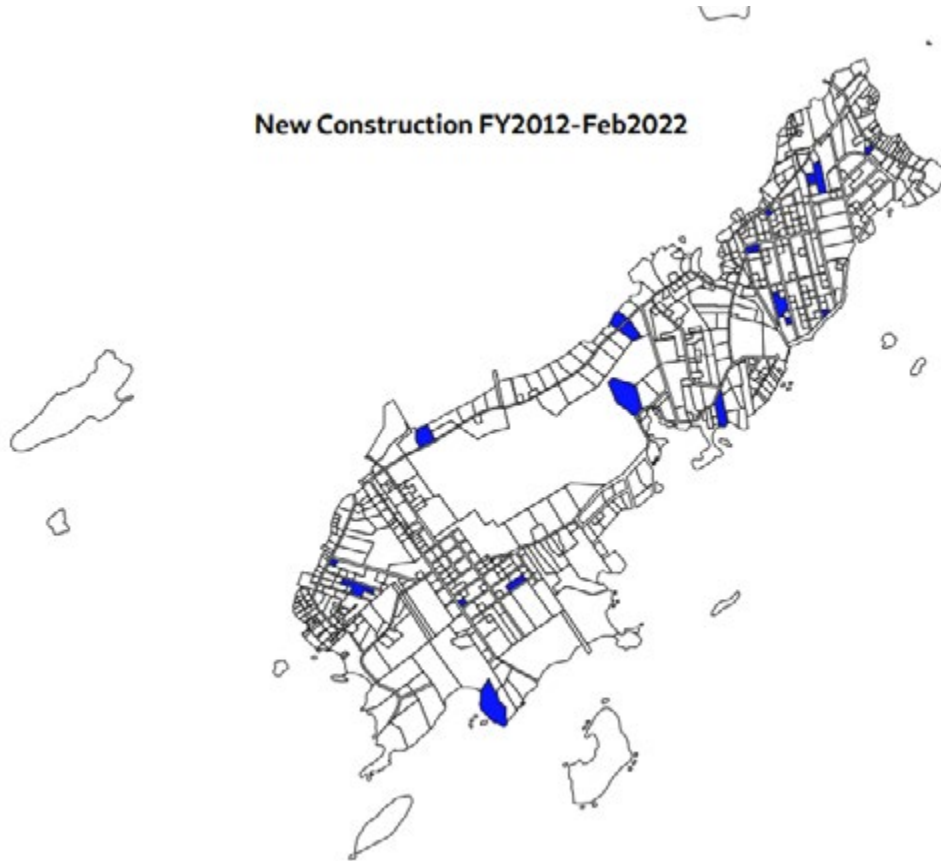
Town of Long Island Future Growth, TOLI, April 2022



Looking at the potential growth areas on the island shows available parcels in residential and business zones. Although undeveloped lots are scattered across the island, the biggest number of parcels is in the east end of the island where the challenge is accessibility to the parcels. The three undeveloped town owned parcels in the center of the island between the transfer station and Wreck Cove Conservation parcel are intended to be used for year-round housing. Of the parcels in the potential growth area there are currently 205 privately owned parcels with the potential to be developed: one parcel in an open space zone, three parcels in a business zone, and the remainder in residential zones. There are currently 27 town owned parcels with potential for development which are all in residential zones, primarily in IR1 with just three parcels in IR2.

Constraints to development consist of Open Space and Resource Protection zones defined in the land use ordinances, the Tree Growth area, as well as land within the shoreland zones and wetland buffers. There are no transitional or rural areas designated at this time.

New Construction in the past 10 years, TOLI, April 2022



In the past 10 years there have been 18 new residences built. Over the past three-five years new building has slowed to one or two per year. This slower rate and pace is expected to continue for the next 10 years with two exceptions- year-round housing stock and public infrastructure aging out (such as the fire station). Most residential growth is expected in the form of additions and adjustments to existing structures to accommodate multiple generations as the aging population has accessibility needs and younger generations may need accommodation to be able to continue living on the island. Accessory Dwelling Units in particular are expected to grow to meet the needs of the population and in line with recent regulations. This type of growth will need to be watched carefully and managed relative to water supply and quality.

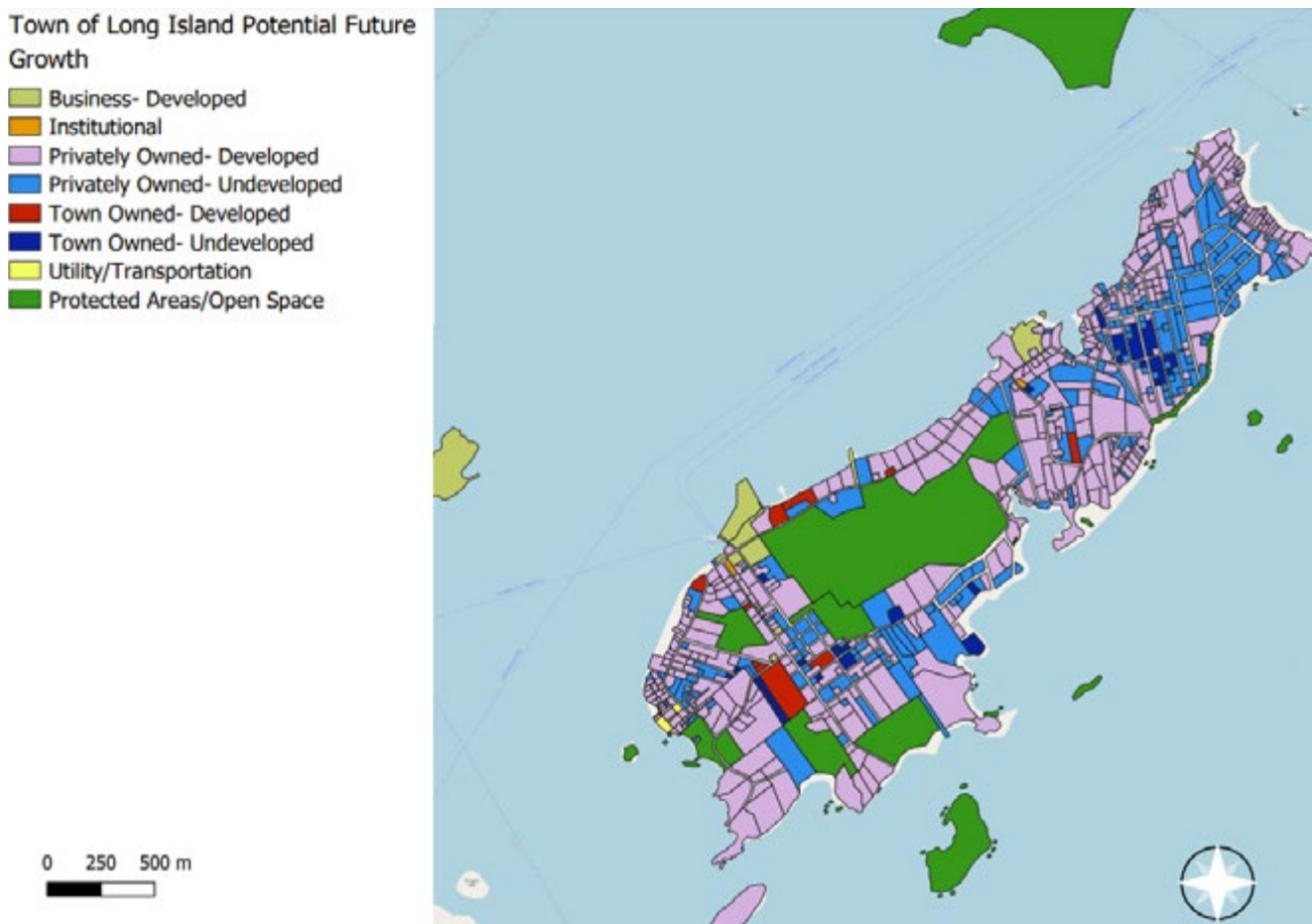
Commercial growth is expected to be slow with only several parcels available for development. The biggest project will relate to the parcel of land in the 'down front' business zone with waterfront access. The town will need to work closely with the new owners to ensure alignment with the community's vision as well as local and state ordinances.

Given the current regulations, development trends and population projections, one-two new residential units are projected to be constructed per year over the next 10 years on privately owned parcels, with an additional five units potentially being constructed on town owned land to address year-round housing needs. The minimum lot size of 60,000 square feet is expected to be sufficient to account for the limited water supply on the island. In 2021 there was an ordinance passed allowing cluster housing, which opens up opportunities for selected parcels. No activity has happened yet, but the expectation is that several parcels will be developed under this model in the next 10 years.

There are a large number of 11,000 square foot grandfathered lots in IR-2 where current land ordinances allow further development provided state subsurface waste disposal rules can be met. Development of these undersized lots in the densely developed IR-2 zone should be discouraged.

In the next 10 years there is potential for development of a new fire station. One potential place for this complex is on a 4.15 acre “Excluded Property” zoned land currently managed by LILOC. Other locations should be explored in the context of overall planning for public infrastructure over the next 20 years, especially considering expected climate impacts. Funding for this project will be managed through the town’s Capital Investment Planning (CIP) process with funds expected to be sourced from a mix of town funds and grants.

Town of Long Island Detailed Growth Map, Source: TOLI, April 2022



This future land strategy is in keeping with the community's vision statement.

Critical and important natural resources can be effectively protected through current ordinances and zoning in parallel with implementing the recommendations in the Natural Resource section of this plan, but should be continually monitored given climate impacts are uncertain even with the scenarios laid out by the Maine Climate Council.

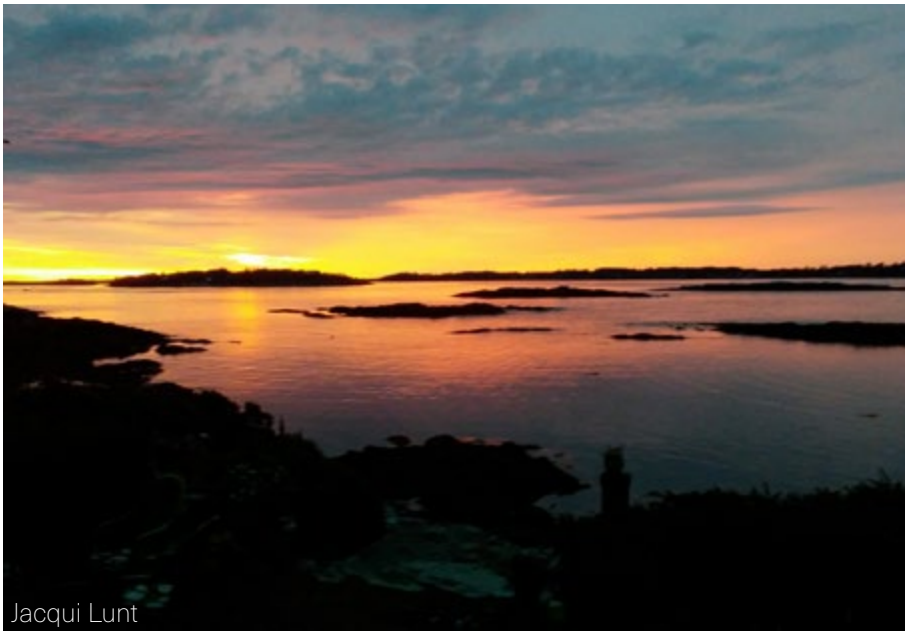
As mentioned throughout this plan, the island's biggest opportunities stem from the natural resources including the waterfront. The most significant natural and manmade constraints relate to the limited quantity and quality in the supply of water; and access to the working waterfront needed for fisheries.

Given population and demographic dynamics, the new development is expected to come primarily from existing residential structures to accommodate for aging residents and to convert seasonal dwellings to year-round.

Serious consideration needs to be given to existing land use close to shoreland zone areas. The climate impacts are already evident in more frequent and intense storm events as well as sea level rise. Planning for the infrastructure in the area close to Mariner's Wharf including Town Hall, Community Center and ferry parking should be assessed for the sea level rise scenarios developed by the Maine Climate Council.



A walk to Wreck Cove takes you down a path to a wonderfully private rocky beach. If you don't know the way, just look for the buoys. Or follow the dog. Photo: Janice Avignon



Jacqui Lunt



Thomas Moyer

Plan Framework

Policies and strategies for the future

Policies, strategies and recommendations for the community of Long Island to continue the path forward to being Resilient, Equitable, Resourceful, Livable, and full of Community Spirit



Kimberly Wallingford MacVane



Ann Caliandro



Ginny Stowell



Jane Conley

Responsibly Managing Growth

Economy

Economic Policies

1. It shall be the policy of the town to employ strategies to attract and retain new and existing entrepreneurs and businesses to both serve the island community and provide employment opportunities for residents.
2. It shall be the policy of the Town of Long Island to financially support infrastructure improvements and provide incentives for the lobster, fishing, and aquaculture industries, to ensure the long-term economic viability for those residents employed in the industry.
3. It shall be the policy of the Town of Long Island to coordinate with regional organizations to support development efforts including Greater Portland Council of Government (GPCOG) and Cumberland County.
4. It shall be the policy of the Town of Long Island that all businesses conform to state and federal environmental (including sewage and wastewater treatment) standards and that the costs of ensuring sustainability and conforming to established standards should be appropriately borne by those businesses.

Economic Strategies

1. Establish a plan to maintain and improve town resources and infrastructure, including the internet broadband service and working waterfront, to support existing and encourage new economic development and activity.
2. Encourage and remove barriers to the development of affordable housing to make year-round island residency more practical and equitable to support and grow the island workforce.
3. Support and empower the Long Island code enforcement officer to effectively, fairly, and equitably monitor and enforce code compliance and the environmental safety of present and future development
4. Maximize opportunities to access regulatory, environmental, and financial support from Cumberland County, the State of Maine, and the federal government to balance the fiscal independence of the island with the broader interests of ensuring the viability and the preserving unique history and character of year-round Maine island communities such as Long Island.
5. Evaluate local ordinances for alignment with promoting growth in marine economy and supporting local businesses.

Housing

Housing Policies

1. It is the policy of the Town of Long Island to financially support a new position as Housing Sponsor to make it possible and desirable for families to locate and remain here.
 - a. The job roles and responsibilities in leading the town's effort to increase available and affordable housing would include working with governmental agencies and financial institutions on funding sources, coordinating activities with the town leaders and Year-Round Housing Corporation, and eventually supervising the maintenance and operation of rental properties.
2. It is the policy of the Town of Long Island Planning Board to proactively review land use ordinances and recommend changes that support the creation of quality affordable housing including rentals.
3. It is the policy of the Town of Long Island to add five (5) rental housing units within five (5) years.

Housing Strategies

1. The Town shall form a citizen-based housing committee and pursue specific strategies that increase year-round housing, seeking to achieve an increase of at least 10% in new affordable residential development in the next decade.
2. The Planning Board will proactively consider land use ordinance changes stemming from the nine (9) recommendations from the State of Maine Legislature Commission to Increase Housing and bring ordinance changes forward to increase affordable housing in 2023. This would include revisiting current ordinances related to Accessory Dwelling Units (ADU).
3. The Housing Sponsor will meet with AVESTA Housing, Maine State Housing Authority, and others able to provide partial or total funding for housing.
4. The Housing Sponsor will drive forward a proposal to incentivize conversion of seasonal homes and vacant homes to year-round rental properties.



The Old Cove. Photo: Dick Mitchell

Public Facilities and Services

1. Re-examine roles of facilities managers to dedicate more work hours to maintenance of island buildings and wharves.
 - a. The current facilities and wharves position places a large deal of responsibility onto the shoulders of one volunteer. This results in a need for prioritization of some properties or facilities over others.
 - b. The positions of constable and harbormaster are also currently vacant. Examining how these roles may fit together to create one full-time paid position may allow for capacity building in the public facilities and services realm.
2. Continue to explore regional coordination movements and opportunities to collaborate with neighboring towns and islands.
 - a. There are many benefits to the collaborations that Long Island has already facilitated. Maintaining these partner relationships will lead to plentiful opportunities as the island changes.
 - b. Partner relationships can also lead directly to opportunities to apply for grant monies for public facilities and services.
3. Continue to check in with Long Islanders for the duration of the planning period to hear what they need.
 - a. This strategy has already been employed with the installment of broadband capabilities on the island. That need was expressed by the community, and islanders came together to make it happen.
 - b. Continued attention paid to islanders can lead to further development of opportunities for growth and improvement to island infrastructure.

Transportation

Transportation Policies

1. It is the policy of the Town of Long Island to evaluate the risks climate impacts pose to the transportation infrastructure of the town and identify actions to address them.
2. It is the policy of the Town of Long Island to maintain and further improve safety on the roads and in the waters of the town.
3. It is the policy of the Town of Long Island to responsibly manage the number of vehicles on the island and encourage alternative modes of transportation.
4. It is the policy of the Town of Long Island to maintain transportation infrastructure.
5. It is the policy of the Town of Long Island to support the town's Casco Bay Island Transit District representative to ensure that the needs of the island are met with affordable and convenient service aligned with commuters and timing of school schedules.

Transportation Strategies

1. Commence data collection related to storm surge and high tides to inform an action plan to address climate impacts on public infrastructure.
 - a. Evaluate the risk that sea-level rise and storms will have on our low elevation roads.
 - b. Continue to improve the wave-break system at Mariner's Wharf and explore other solutions to the problem of weather at this important transportation hub.
2. Address parking needs for islanders both on-island and in Portland.
 - a. Coordinate with other Casco Bay islands, Portland, and state officials to find new affordable parking spaces to alleviate parking concerns in Portland.
 - b. Continue to encourage on-island vehicle owners to store vehicles on private property for longer parking needs. Enforce current parking restrictions and consider reducing parking duration limits if needed.
3. Maintain safe island road conditions and enforce road safety.
 - a. Ensure safe sharing of the roads between vehicles, bicycles, pedestrians, and other means of transportation.
 - b. The town should seek stronger law enforcement to mitigate the problems of speeding and driving under the influence of either drugs or alcohol.
 - c. With an increasing number of golf carts on the island, the town should properly educate residents as well as increase enforcement of driving rules specific to golf carts.

4. Address concerns about dramatic growth in vehicles given steady population and natural resource constraints on the island.
 - a. Incentivize people to use alternative modes of transportation to decrease the number of cars, including walking, bicycles, and electric golf carts.
 - b. Encourage flexibility in land use and ordinances to allow for maintenance, servicing, and storage for all modes of transportation on the island.
 - c. While vehicles on the island are typically older than their mainland counterparts, electric vehicles will eventually make their way to the island (electric golf carts already have) and the town should be poised to embrace their arrival by researching vehicle charging stations.
 - d. Consider using the town-owned school bus as a shuttle during peak season to provide alternative transportation.
5. Infrastructure Maintenance
 - a. Undertake an engineering study to determine options and investments required for long-term maintenance of roads.
 - b. Maintain staging area for barges, a launching area for boats, and accessible dock space.

Fiscal Capacity

Fiscal Capacity Policy

1. It shall be the continued policy of the Town of Long Island to prepare annual long-range fiscal and capital improvement plans that address long-term needs that balance property tax increases.

Fiscal Capacity Policy Strategies

1. The Finance Committee will work with departments to improve the capital improvement plan (CIP) process, updating the 12-year Capital Needs projections so that capital spending can be planned and managed in a cost-effective manner.
2. Shift towards a more strategic approach to maintenance of town assets. Increase the accuracy of CIP and maintenance cost estimates by working with professionals and engaging with engineering firms as appropriate.
3. The town will devote the resources (volunteer or paid) to proactively seek out and apply for grant funding for every capital project, as well as new one-time projects not defined as CIP, approved by the town.
4. By town meeting 2023, the Finance Committee will present a 10-year capital plan that incorporates all investments identified in this comprehensive plan.

Governance

1. Maintain systems to govern the Town of Long Island, and reimagine the current governance model for the future.
 - a. Ask that candidates announce candidacy in advance to share views about strategic concerns and major issues in order to promote transparency in town elections.
 - b. Establish and maintain partnerships with Maine Municipal Association and GPCOG for best practice sharing and ideas, professional development, and to clarify town government roles.
 - c. Based on a town-wide Capital Improvement Plan (CIP), develop an annual work plan that addresses the island's needs.
 - d. Look to towns with similar assets, limited population, and high volunteer rates to better understand best management practices.
 - e. Ensure that current laws and regulations are uniformly and equitably enforced.
2. Ensure that there is a management plan in place for all staff and volunteers who work to manage the town.
 - a. Have overlapping coverage with outgoing and incoming elected officials to establish continuity.
 - b. Institute basic human resources practices including job descriptions and an annual review of the workload.
 - c. Clarify roles by developing descriptions for each volunteer slot and how it fits into the town's picture.
 - d. Have succession plans for volunteer positions with high specialized skills.
 - e. Explore new ways to recognize and reward the town's 100+ volunteers who devote thousands of hours to making Long Island work.
 - f. Judiciously hire from off-island to help fill staffing needs in critical areas.
3. Automate systems and data related to town personnel and resources.
 - a. Provide routine public reports to keep the community notified about progress in major projects.
 - b. Require continuing training for elected officials.
 - c. Use the town's website to better inform the community and keep town-related data up to date and available for public consumption.
 - d. Establish and maintain processes to collect and retain data, which should remain available to current and future town staff and elected officials.
 - e. Help town volunteers identify and partner with advocacy and resource groups to address community concerns and to facilitate training.

Stewardship of Resources

Water Resources

1. Develop educational resources for town government leaders and homeowners to better protect the water resources of Long Island.
 - a. These resources should include things like brochures for homeowners about water on Long Island, as well as information for homeowners to pass out to renters.
 - b. This recommendation is based on the need for the whole community to understand the impact that day-to-day activities may have on the island's resources.
 - c. Educational resources available to homeowners also add to personal accountability for the water used by each household, which should be considered when you have a finite resource like the aquifer.
2. Create ongoing water testing programs on Long Island.
 - a. The 2008 comprehensive plan recommended a water testing program. With the new Groundwater Quality Committee in place, there is now a group of invested citizens who may be able to lead this work.
 - b. This water testing program should empower not only the town government to make decisions about the state of resources on the island, but also empower homeowners to understand how best to take care of their property and the island.
 - c. Any newly developed water testing programs should also create a consistent and traceable dataset resource for the town. Tracking water quality history on the island is made difficult by a lack of data. It must be ensured that any new work done in this area is traceable in the future.
 - d. The Town will develop a long-term monitoring program that will continue to collect well data and will monitor long-term trends in ground water elevations. A monitoring program is essential to the success of any management program.
3. Develop new systems for maintaining the resources that we already have.
 - a. One example that the Groundwater Quality Committee gives is retention ponds in the conservation area. These retention ponds would act as additional water resources to supplement the existing aquifer.
 - b. Another potential new system would be a more rigorous hazardous waste and road salt/sand storage plan. Having a plan to keep these items off the ground and therefore the pollution out of the groundwater would improve the state of affairs for water resources on the island.
4. Consider developing test parameters for an ordinance that may require each well to be tested with each 'change of title' on the property.

Natural Resources

1. Explore research opportunities on sea level rise and how it could impact the island.
 - a. As climate change becomes more evident on the Maine coast, it becomes more important to evaluate the risks to the island.
 - b. This research should lead to action plans especially for vulnerable areas of the island, including the island's gateway area surrounding Mariner's Wharf, which includes the Town Hall and Community Center as well as commercial businesses.
2. Develop educational materials for residents and visitors to better understand how to preserve the island's natural resources and promote across multiple communication channels.
 - a. These resources will aid in the understanding of personal responsibility for protecting the island's natural resources, as well as starting conversations about longer term natural resource protection.
 - b. Educational materials can range between handouts for renters to informational signage at scenic vistas and important habitat areas.
 - c. Collaborate with regional and statewide partners to utilize educational resources and systems that have proven to work well in communities with similar needs.
3. Align with the goals of the Maine Climate Council for a climate action plan for Long Island.
 - a. The Maine Climate Council has multiple potential climate change scenarios, all of which will apply to Long Island in the future. Aligning with their strategic plan will help the island prepare for the impacts of climate change.
 - b. Aligning with the Maine Climate Council can also open up grant and funding opportunities needed to execute the action plans.



Ponce's Landing. Photo: Nancy Noble

Marine Resources

1. Establish leadership structure and accountability for waterfront assets.
 - a. Establish the Harbor Committee as expressed in the ordinances.
 - b. Redefine the responsibilities pertaining to fishing and the working waterfront of both the Town Administrator and the Harbormaster.
2. Collaborate with the Maine Climate Council as they work towards a climate action plan for numerous possible climate change scenarios.
 - a. Craft specific actions to address the needs of the fishing community.
 - b. Utilize local and regional partners that may be able to provide resources and information sharing as the Maine coast deals with climate change in the coming years.
3. Make a plan to invest monies not only in the maintenance of the marine infrastructure, but also in the preservation of the working waterfront for the fishing community of Long Island.
 - a. Investing in the future of Long Island means investing in the fishermen and others who work in the marine economy.
 - b. Investing in maintenance of the marine infrastructure should reduce the amount of emergency funds that are needed for surprise expenses, like storm damage, in the future. Well-maintained infrastructure can better prepare us for the future.
4. Provide commercial fishers and others involved in the marine economy with the resources to grow their business and retain their way of life.
 - a. The identity of Long Island is tied to being a fishing community, and supporting those who rely on fishing for a way of life should be a priority for the island.
 - b. Enable and empower Long Island fishers to get involved in local and statewide conversations discussing the future of fisheries and aquaculture in the Gulf of Maine, and more specifically in Casco Bay.



There are a handful of kelp harvesting licenses on Casco Bay. Those with licenses include local lobstermen and the Long Island School. Photo: Marci Train

Agriculture and Forestry Resources

1. Develop a plan to bring the deer population to a reasonable level of 8-10 deer on the island.
 - a. This would drastically reduce the public health hazard of the endemic level of tick-borne illness on the island.
 - b. Reducing the population would allow more islanders to enjoy gardening and produce healthy food for their families.
 - c. The deer have no natural predators on the island, so this would require human intervention to accomplish.
 - d. Enforcement of the State of Maine law which makes it illegal to feed deer between June 1 and December 15, subject to a fine of no less than \$500, could also help thin the herd.
2. Develop a plan to educate islanders on how to safely remove browntail moth webs from trees on their properties.
3. Develop a plan to eradicate the invasive species that are causing damage to our ecosystem.
 - a. One part of this plan must be an education program with islanders to teach them how to identify the invasive species and remove them from their properties.
 - b. This would also require some investment of time and energy by volunteers to do the same in our shared and conservation areas.
 - c. Work with island contractors as part of this program to educate them about invasives and how they spread. Many places on the island have invasives because contractors spread soil containing invasive seed and roots.
4. Model environmentally-sound landscape management practices, such as planting for pollinators, planting native species, and limiting the use of pesticides and fertilizers.
 - a. This could include setting aside some shared or town-owned land to create a garden where native flora could be cultivated and distributed to island families to replace the invasives they have removed with plants that would attract bees, birds, butterflies and other pollinators, improving the overall health of the ecosystem. We have a great model for this kind of program in our community garden.
5. Encourage private landowners to recognize potential fire hazards such as unhealthy and fallen trees near their homes and to remove them where feasible.

Historical and Archaeological Resources

Policy

1. It is the policy of the Town of Long Island to protect, to the greatest extent practicable, the significant historic and archaeological resources in the community.
 - a. The Long Island Historical Society will be consulted to assist in determining the significance of such resources.
 - b. Part of this policy is to work with county-level emergency management officials and nearby shoreline communities to protect significant resources from storm and flooding damage by planning for and mitigating emergencies.

Strategies

1. The Code Enforcement Officer will continue to take into consideration the effect development plans might have on identified historical or archaeological sites.
 - a. As provided for in the Land Use Standards of the Land Use Ordinance, "Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on, or eligible to be listed on the National Register of Historic Places, as determined by the permitting authority, shall be submitted by the applicant to the Maine Historic Preservation Commission for review and comment, at least twenty (20) days prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the Commission prior to rendering a decision on the application."
2. The Town of Long Island Planning Board will review the local land use ordinances relating to historic and archaeological resources and make any necessary changes.
 - a. These changes will be focused on ensuring property developers are informed of any such resources and are prepared to take measures to protect them.
 - b. Such measures may include but not be limited to modification of proposed site design, construction timing, and/or extent of excavation.
 - c. The Long Island Historical Society may also be consulted to assess the historic or archaeological significance of these sites.
3. The Town of Long Island will take measures to protect the valuable shell middens from climate impacts and human disturbances.
 - a. The shell middens are being affected by coastal erosion caused by a combination of sea level rise and storm-driven waves. Other factors of a less dramatic nature include a freeze/thaw cycle, which is certain to occur more often as Maine experiences a greater temperature variability.
 - b. An additional threat to shell middens is looting, which can cause a great deal of disturbance.
 - c. The Long Island Historical Society has expressed an interest in working with the Maine Midden Minders, run by The University of Maine, and hopes to formalize a working relationship in the near future.

Land Use

Policies

1. It is the policy of the Town of Long Island to actively coordinate the community's land use strategies with other local and regional land use planning efforts tapping into partnerships with Greater Portland Council of Governments and Island Institute
2. It is the policy of the Town of Long Island to support the locations, types, scales, and intensities of land uses in keeping with vision and values in this plan and support the level of financial commitment necessary to provide needed infrastructure in growth areas through the CIP process
3. It is the policy of the Town of Long Island to review, refine, and focus zoning and ordinances to allow for appropriate growth, continually monitoring permitting procedures for efficiency, especially in IR-1, IR-2 and IB
4. It is the policy of the Town of Long Island to vigorously and equitably enforce our codes and ordinances, especially those which impact quantity and quality of water
5. It is the policy of the Town of Long Island to carefully consider subsurface waste disposal issues related to both existing and future development.
6. It is the policy of the Town of Long Island to continue to protect natural resource areas and the waterfront from the impacts of development.

Strategies

1. The Planning Board will be responsible for implementing the Future Land Use Plan. Each year it shall be required to report to the community the type and location of growth that has occurred and make recommendations regarding any changes that may need to be made to local ordinances and permitting processes to address growth related problems.
2. The Code Enforcement Officer (CEO) shall be supported in his or her efforts to vigorously enforce our codes and ordinances in a fair and equitable manner. To include: tools, training, and support necessary to enforce land use regulations, and ensure that the Code Enforcement Officer is certified in accordance with 30-A M.R.S.A. §4451.
3. The town will produce an inventory of all subsurface wastewater systems and explore incentives for using safest and most effective subsurface wastewater systems.
4. The town will institute a process for tracking land use including existing and new development by type, location, parcel, and make the information publicly available.
5. Actively encourage the abandonment of paper streets to allow the merger of adjacent lots in common ownership.
6. Enable the Planning Board and CEO to be responsible for protecting natural resource areas and working waterfront from the impact of development.
7. The town will direct a minimum of 75% of new municipal growth-related capital investments into designated growth areas identified in the Future Land Use Plan.

Living Well

Recreation

1. We recommend the town create and implement a senior day program for residents that addresses the socio-emotional, physical, and intellectual needs of our aging population.
 - a. Transportation to such a program will need to be part of the discussion.
 - b. In 2006, survey results indicated a desire for a “senior citizens center.” This seemed to be echoed in the survey conducted in 2021.
2. We recommend a long-term plan to address indoor fitness, creative, and recreational opportunities for all residents on a year-round basis.
 - a. This should include a plan to increase the usage of town-owned spaces for various purposes on a year-round basis.
3. Assuming the COVID-19 pandemic will come to a close in the near future, we recommend returning to community-wide social opportunities on a year-round basis.
4. We recommend surveying the community to determine which type and quantity of recreation programs are desired.
 - a. The poll would give the Recreation Committee a clear direction for creating and implementing programs.
 - b. Survey results indicate that residents are looking for new or expanded recreation and arts and cultural offerings.
 - c. A new strategy for finding volunteers and paid staff for the recreation department will also need to be implemented to keep up with the demand for programming.
5. We recommend continued maintenance and improvement of the trails on the island.
 - a. Maintenance and improvements in both paved and unpaved roads on the island will also encourage and allow safe non-motorized travel by foot and by bicycle.
6. We recommend a study of the current usage of the conservation area, engaging the community in a discussion about reimagining how best to make use of this open space to meet the recreational needs of the island population.
 - a. This discussion should involve the Long Island Community Land Operating Company (LICLOC) board of directors, the select board, the planning board and members of the general public.
7. We recommend that the recreation department address the issue of the pickleball facility in terms of suitability, availability, and noise complaints.
8. We recommend that the town provide educational materials regarding the benefits and protections for landowners allowing public recreational access on their property. At a minimum this will include information on Maine’s landowner liability law regarding recreational or harvesting use, Title 14, M.R.S.A. §159-A.

Wellness

1. The town should address housing and aging-in-place issues for senior residents of the island.
 - a. The town should address restrictions placed on building an Accessory Dwelling Unit (ADU) by present zoning ordinances.
 - b. Residents who are deliberating building an ADU should be provided with access to resources to explain the relevant ordinances.
 - c. The Wellness Council should be encouraged to make connections with agencies providing home care services on neighboring islands.
 - d. There must be a continued evaluation of the feasibility of a long-term care facility for our senior residents. This could potentially also mean continued evaluation of the need for and cost of an indoor, year-round recreation facility.
 - e. A day program for elderly residents to provide recreation and social connections would be beneficial, especially during the winter months. The town could explore using space at the community center to develop this type of programming.
2. Healthcare on the island should continue to be developed as the needs of the residents evolve. This includes both senior residents looking to age in place as well as the younger population of the island.
 - a. Aging in place will represent both challenges and opportunities for healthcare. Providing information about and on-site assessments of home safety strategies for the island's elderly residents could be an island healthcare initiative.
 - b. As the population ages, it generally needs more assistance with physical therapy, transportation, scheduling and getting to a larger number of medical appointments, routine medical checks, groceries, cooked meals, shoveled and sanded walkways, maintaining medical devices, and keeping track of medication. Someone with a good grasp of Medicare and Medicare programs could also help residents understand their rights as well as how to manage medical needs and expenses.
 - c. The island should work to engage with MaineHealth, Northern Light Health, Tufts Medical School, and other community health entities to bring more medical and educational services to the town.
 - d. Healthcare services on the island should work to promote child health. This can be done through work with the school teachers, recreation director, parents, and the community medical entities. Some possible services include educational programs to identify and address the unique public health issues facing our school children and teenagers.
3. The town should develop and distribute a community health needs assessment survey to best identify the needs of the community. Developing and completing such a survey would be essential in allowing the Wellness Council to identify and prioritize present and future health issues affecting our residents.

4. Long Island should address the prevalence of deer ticks on the island to reduce incidences of Lyme Disease and other tick-borne illnesses.
5. The Wellness Council should work to expand their services and the services provided in the town's Wellness Center.
 - a. The Council should continue to explore options for elderly home care.
 - b. There should be a plan developed to increase usage of the Wellness Center for both on-site medical services and educational programs.
 - c. The council should work to develop strategies to increase the use of telemedicine equipment.
 - d. There should be a plan developed to identify long-term physical therapy services on the island and at the Wellness Center.

Population and Demographics

1. Attract and retain young families.
 - a. Monitor programs and funds that could finance or support young island families.
 - b. Attend sessions that promote island-centric networking and problem solving and share the information across the community.
 - c. Review best practices, especially on other islands and remote locations, to attract and keep young families.
 - d. Monitor emerging technologies and changes in construction methods that could lower building costs.
 - e. Be knowledgeable about changes in federal and state laws and new ordinances that could attract young families.
 - f. Review town building code changes to make it easier to build or rent to attract or retain young families while balancing community needs.
 - g. Find ways to increase the number of year-round rentals.

These policy and strategic recommendations are all drawn from local, state, and town data combined with the input from the community during the writing of this comprehensive plan. To move forward, the comprehensive plan suggests an implementation plan that will be outlined in the coming sections. This implementation strategy lays out the priorities for the island, and should be used as a tool to track progress in the years to come.

Driving Success

Action Plan for Implementation and Evaluation

Many hundreds of volunteer hours have been invested in the development of the Town of Long Island Comprehensive Plan (LICP2035). A coordinated effort by the citizens of the town to implement the ambitious recommendations spelled out throughout the plan will be required. The findings and proposals enumerated throughout this document are the direct result of input from members of our community, backed up by thorough research by LICP2035 committee members and collaboration with local experts. The implementation of these proposals represents an opportunity for stakeholder groups, town employees, elected government officials, and individual citizens to work together for the betterment of our town.

As detailed in the governance chapter, the Town of Long Island has a long history of volunteerism. The town is largely run by volunteers with many members of the community willing to serve multiple roles. They are the connective tissue that keeps the town functioning. It is within this culture of people donating their time and talent to make Long Island a better place to live that we will be working to implement the recommendations of the comprehensive plan. Coordination of volunteer efforts will play a key role in accomplishing the goals of the plan, and a strategy for recruiting volunteers with specific knowledge and skill sets will need to be developed.



Christmas Eve is celebrated at Evergreen Methodist Church with carols sung around an outdoor fire for safety during the COVID pandemic. Photo: Nancy Noble

The stage has been set to engage citizens in the task of implementing the goals of LICP2035. Transparency at every step of the process, from community engagement through a survey and open forums to drafting of the chapters, has been the goal of the comprehensive plan committee. This level of inclusivity has been fostered to allow the community to join in the momentum that the comprehensive planning process has engendered around the topic areas addressed in the final plan. The implementation stage of the plan seeks to capitalize on the impetus generated during the creation of the plan to drive forward the recommendations contained therein.

Once the plan has been approved by Long Island's registered voters at the town meeting, an implementation committee will be appointed by the select board to oversee the work on the specific recommendations developed for the different content areas of the plan. The implementation committee will be charged with championing the plan and shepherding the execution of the recommendations in a manner consistent with the vision and values defined in the plan, namely creating a town/community that is resilient, equitable, livable, resourceful, and full of community spirit. The committee will also be responsible for capitalizing on the energy that has already been generated during the formation of the plan and keeping the momentum going while addressing topics that were revealed to be of importance to large groups of people. Members of the implementation committee should include LICP2035 committee members, elected and volunteer members of local government boards and committees, private citizens, and local content area experts who are passionate about improving, protecting, and enriching their community.

The implementation committee will create a timeline for the completion of the recommendations listed in the execution matrix, constantly evaluating progress toward the intermediate goals and adjusting the timeline as needed based on a reasonable expectation of completion. Small subcommittees may be established as needed to deal with specific content areas



Long Islanders are patriotic and several private homes have flagpoles. Here, an East End flagpole catches the sun's first rays on a summer morning.
Photo: Linda Ferguson McCann

in the plan and allow for efficient use of volunteer time and resources. These subcommittees will identify resources (grants, volunteer experts, town budget funds, regional partners and non-profits) that can be used to implement the recommendations for the assigned content area. Quarterly to semi-annual check-ins with the select board and other town employees and committee members to discuss progress and any impediments encountered in the process will allow for accountability in the movement toward goal attainment. Implementation committee reports should also appear in the Town of Long Island Annual Report, mailed to all town residents prior to the annual Town Meeting. As has been the practice throughout the development of LICP2035, transparency and ongoing community engagement (making use of the town website, email listservs, and social media) will be critical in attaining the goals of the plan.

Throughout the life of the plan, constant awareness and evaluation of the current needs of the town and how they relate to the recommendations in the comprehensive plan will be required. As things change, goals and expectations may need to be revised based on current situations. Achievement of intermediate goals and evaluation of their impact on the challenges that were present at the writing of the plan may require revision of the long-term goals. In that way the plan becomes fluid and ever responsive to the needs of the community and the environment. Celebration of achievements and recognition of volunteer contributions should also be a part of the implementation and evaluation process, and members of the community should always feel welcome to join the efforts of the committee at whatever point in the process they feel moved to participate.

This implementation plan will provide an opportunity for islanders to engage in the civic life of the Town of Long Island in a meaningful and purposeful way and become catalysts for action on the issues that matter most to them.



After a brief rain shower, a beautiful rainbow appears in the sky over Long Island. This one, viewed from East End Beach, seems to begin and end on the shores of our island town, where we seek to create a community that is Resilient, Equitable, Resourceful, Livable, and full of Community Spirit - the pot of gold at the end of the rainbow.

Photo: Linda Ferguson McCann



Photo: Dick Mitchell

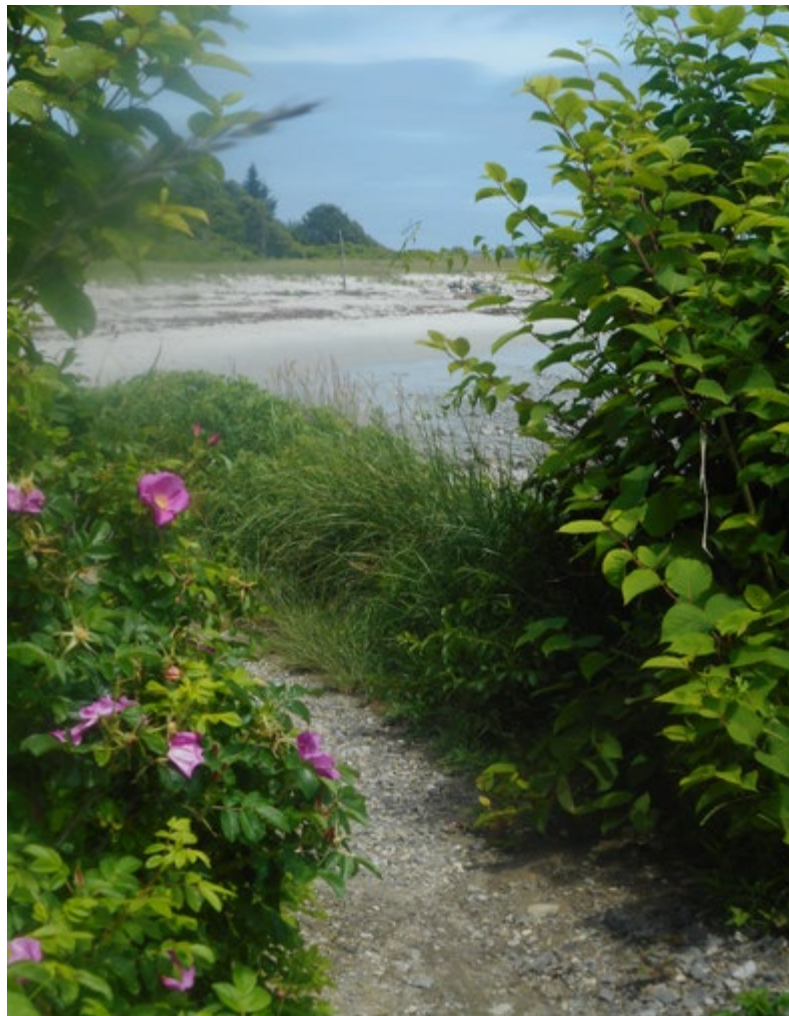


Photo: Ginny Stowell



Our Vision

The Town of Long Island is a unique island community that is sustained by the people who call it home both year-round and seasonally. Our island believes that to maintain the way of life that is so important, we must be ready to balance the need to have an island that is livable with the maintenance of our community spirit. This community spirit includes a need to be equitable in the way that we include people in our town and in the way that we enforce rules and regulations. We seek to be resilient in the face of climate change and demographic changes to protect our natural and human resources. This community must be resourceful in the way that we support ourselves through volunteers and through the usage of resources like the island's aquifer and access to the working waterfront. This comprehensive plan seeks to provide the town with a framework that will allow the community to act as stewards of the island that we all know and love and plan for a better future.



Winter: Lorinda Valls, Spring: Ann Caliandro, Summer: Thomas McVey, Fall: Nancy Noble

This matrix is a tracking tool intended to be used with recommendations outlined in the Plan Framework section of the 2022 Town of Long Island Comprehensive Plan. The full recommendation detail is found there.					
Strategy	Priority	Timeframe	Lead/Owner/ Responsible Party	Support	Ordinance Related
Economy					
1. Establish a plan to maintain and improve town resources and infrastructure, including the internet broadband service and working waterfront, to support existing and encourage new economic development and activity.	High	Short	Admin	IC	
2. Encourage and remove barriers to the development of affordable housing to make year-round island residency more practical and equitable in order to support and grow the island workforce.	High	Ongoing	PB	IC	Yes
3. Support and empower the Long Island code enforcement officer to effectively, fairly, and equitably monitor and enforce code compliance and the environmental safety of present and future development.	High	Ongoing	SB, CEO	IC	
4. Maximize opportunities to access regulatory, environmental, and financial support from Cumberland County, the State of Maine, and the federal government to balance the fiscal independence of the island with the broader interests of ensuring the viability and preserving the unique history and character of year-round Maine island communities like Long Island.	Med	Ongoing	Admin	IC	
5. Evaluate local ordinances for alignment with promoting growth in the marine economy and supporting local businesses.	Med	Short	PB (if Land Ord)	IC	Yes
Housing					
1. The Town of Long Island will create and financially support a new position for a Housing Sponsor to lead the town's effort to increase available and affordable housing whose responsibilities would include:	High	Short	SB	IC	
a. working with governmental agencies and financial institutions on funding sources,					
b. coordinating activities with the town leaders and the Year-Round Housing Corporation,					
c. and eventually supervising the maintenance and operation of rental properties.					
2. The town shall form a citizen-based housing committee and pursue specific strategies that increase year-round housing, seeking to achieve a increase of at least 10% in new affordable residential development in the next decade.	High	Ongoing	SB	IC	
3. The Planning Board will proactively consider land-use ordinance changes stemming from the nine (9) recommendations from the State of Maine Legislature Commission to Increase Housing and bring ordinance changes forward to increase affordable housing in 2023. This would include revisiting current ordinances related to Accessory Dwelling Units (ADU).	High	Short	PB	IC	Yes

4. The Housing Sponsor will meet with AVESTA Housing, Maine State Housing Authority, and others able to provide partial or total funding for housing.	High	Short	HS	IC	
5. The Housing Sponsor will drive forward a proposal to incentivise conversion of seasonal homes and vacant homes to year-round rental properties.	High	Ongoing	HS	IC	
Public Facilities and Services					
1. Re-examine roles of facilities managers to allow more work hours to be dedicated to maintenance of island buildings and wharves.	High	Short	,Admin. FW	IC	
a. The current facilities and wharves position places a large deal of responsibility onto the shoulders of one volunteer. This results in a need for prioritization of some properties or facilities over others.					
b. The positions of constable and harbormaster are also currently vacant. Examining how these roles may fit together to create one full-time, paid position may allow for capacity building in the public facilities and services realm.					
2. Continue to explore regional coordination movements and opportunities to collaborate with neighboring towns and islands.	Med	Ongoing	Admin	IC	
a. There are many benefits to the collaborations that Long Island has already facilitated. Maintaining these partner relationships will lead to plentiful opportunities as the island changes.					
b. Partner relationships can also lead directly to opportunities to apply for grant monies for public facilities and services.					
3. Continue to check in with Long Islanders for the duration of the planning period to hear what they need.	Med	Ongoing	IC		
a. This strategy has already been employed with the installment of broadband capabilities on the island. That need was expressed by the community, and islanders came together to make it happen.					
b. Continued attention paid to islanders can lead to further development of opportunities for growth and improvement to island infrastructure.					
Transportation					
1. Commence data collection related to storm surge and high tides to inform an action plan to address climate impacts on public infrastructure.	High	Short/Ongoing	DPW, Admin, FW	IC	
a. Evaluate the risk that sea-level rise and storms will have on our low elevation roads.					
b. Continue to improve the wave-break system at Mariner's Wharf and explore other solutions to the problems that weather poses at this important transportation hub.					

2. Address parking needs for islanders both on-island and in Portland.	Med	Ongoing	Admin, SB	IC	
a. Coordinate with other Casco Bay islands, Portland, and state officials to find new affordable parking spaces to alleviate parking concerns in Portland.					
b. Continue to encourage on-island vehicle owners to store vehicles on private property for longer parking needs. Enforce current parking restrictions and consider reducing parking duration limits if needed.					
3. Maintain safe island road conditions and enforce road safety.	High	Ongoing	Admin, C,SB	IC	
a. Ensure safe sharing of the roads between vehicles, bicycles, pedestrians, and other means of transportation.					
b. The town should seek stronger law enforcement to mitigate the problems of speeding and driving under the influence of either drugs or alcohol.					
c. With an increasing number of golf carts on the island, the town should properly educate residents as well as increase enforcement of driving rules specific to golf carts.					
4. Address concerns about dramatic growth in vehicles given steady population and natural resource constraints on the island.	Med	Mid	Admin. SB	IC	
a. Incentivize people to use alternative modes of transportation to decrease the number of cars, including walking, bicycles, and electric golf carts.					
b. Encourage flexibility in land use and ordinances to allow for maintenance, servicing, and storage for all modes of transportation on the island.			PB, Admin, SB	IC	
c. While vehicles on the island are typically older than their mainland counterparts, electric vehicles will eventually make their way to the island (electric golf-carts already have) and the town should be poised to embrace their arrival by researching vehicle charging stations.					
d. Consider using the town-owned school bus as a shuttle during peak season to provide alternative transportation.					
5. Infrastructure Maintenance	Med	Ongoing	Admin, SB, DPW	IC	
a. Undertake an engineering study to determine options and investments required for long term maintenance of roads.					
b. Maintain staging area for barges, a launching area for boats, and accessible dock space.					
Fiscal Capacity					
1. The Finance Committee will work with departments to improve the CIP process, updating the 12-year Capital Needs projections so that capital spending can be planned and managed in a cost-effective manner.	High	Ongoing	FC	IC	

2. Shift towards a more strategic approach to maintenance of town assets. Increase the accuracy of CIP and maintenance cost estimates by working with professionals and engaging with engineering firms as appropriate.	High	Ongoing	Admin, FC, FW	IC	
3. The town will devote the resources (volunteer or paid) to proactively seek out and apply for grant funding for every capital project, as well as new one-time projects not defined as CIP, approved by the town.	High	Ongoing	SB	IC	
4. By town meeting 2023, the Finance Committee will present a 10-year capital plan that incorporates all investments identified in this comprehensive plan.	High	Short	FC	IC	
Governance					
1. Maintain systems to govern the Town of Long Island, and reimagine the current governance model for the future.	High	Ongoing	SB, Admin, IC		
a. Ask that candidates announce candidacy in advance (of the town meeting and) to share views about strategic concerns and major issues in order to promote transparency in town elections.					
b. Establish and maintain partnerships with Maine Municipal Association and Greater Portland Council of Governments for best practice sharing and ideas, professional development, and to clarify town government roles.					
c. Based on a town-wide Capital Improvement Plan (CIP), develop an annual work plan that addresses the island's needs.					
d. Look to towns with similar assets, limited population, and high volunteer rates to better understand best management practices.					
2. Ensure that there is a management plan in place for all staff and volunteers who work to manage the town.	High	Short	Admin, IC, SB		
a. Have overlapping coverage with outgoing and incoming elected officials to establish continuity.					
b. Institute basic human resources practices including job descriptions and an annual review of the workload.					
c. Clarify roles by developing descriptions for each volunteer slot and how it fits into the town's picture.					
d. Have succession plans for volunteer positions with high specialized skills.					
e. Explore new ways to recognize and reward the town's 100+ volunteers who devote thousands of hours to making Long Island work.					
f. Judiciously hire from off-island to help fill staffing needs in critical areas.					

3. Automate systems and data related to town personnel and resources.	Med	Short	IC, SB, Admin, TO		
a. Provide routine public reports to keep the community notified about progress in major projects.					
b. Require continuing training for elected officials.					
c. Use the town's website to better inform the community and keep town-related data up to date and available for public consumption.					
d. Establish and maintain processes to collect and retain data, which should remain available to current and future town staff and elected officials.					
e. Help town volunteers identify and partner with advocacy and resource groups to address community concerns and to facilitate training.					

This matrix is a tracking tool intended to be used with recommendations outlined in the Plan Framework section of the 2022 Town of Long Island Comprehensive Plan. The full recommendation detail is found there.					
Strategy	Priority	Timeframe	Lead/Owner/Responsible Party	Support	Ordinance Related
Water Resources					
1. Develop educational resources for town government leaders and homeowners and their renters to better protect the water resources of Long Island.	High	Short	H2O	IC	
2. Create ongoing water testing programs on Long Island and create a dataset that will allow ongoing monitoring of of water quality and quantity.	High	Mid	H2O	IC	
3. Develop new systems for maintaining the resources that we already have.	Med	Mid	Admin, DPW, LICLOC	IC	
a. One example that the Groundwater Quality Committee gives is retention ponds in the conservation area. These retention ponds would act as additional water resources to supplement the existing aquifer.					
b. Another potential new system would be a more rigorous hazardous waste and road salt/sand storage plan. Having a plan to keep these items off the ground and therefore the pollution out of the groundwater would improve the state of affairs for water resources on the island.					
4. Consider developing test parameters for an ordinance that may require each well to be tested with each 'change of title' on the property.	High	Short	PB	IC	No
Natural Resources					
1. Explore research opportunities on sea level rise and how it could impact the island. This research should lead to action plans, especially for vulnerable areas of the island including the island's gateway area surrounding Mariner's Wharf, which includes Town Hall and the Community Center, as well as commercial businesses.	High	Mid	IC		
2. Develop educational materials to allow residents and visitors to better understand how to preserve the island's natural resources and promote the availability of these materials across multiple communication channels.	High	Short	IC		
a. Educational materials can include handouts for homeowners and renters and informational signage at scenic vistas and important habitat areas.					
b. Collaborate with regional and statewide partners to utilize educational resources and systems that have proven to work well in communities with similar needs.					
3. Align with the goals of the Maine Climate Council for a climate action plan for Long Island.	High	Ongoing	SB, Admin	IC	

a. The Maine Climate Council has multiple potential climate change scenarios, all of which will apply to Long Island in the future. Aligning with their strategic plan will help the island prepare for the impacts of climate change.					
b. Aligning with the Maine Climate Council can also open up grant and funding opportunities needed to execute the action plans.					
Marine Resources					
1. Establish leadership structure and accountability for waterfront assets.	High	Short	SB	IC, HM, Admin	
a. Establish the Harbor Committee as expressed in the ordinances.					
b. Redefine the responsibilities pertaining to fishing and the working waterfront of both the Town Administrator and the Harbormaster.					
2. Collaborate with the Maine Climate Council as they work towards a climate action plan for numerous possible climate change scenarios.	High	Ongoing	IC		
a. Craft specific actions to address the needs of the fishing community.					
b. Utilize local and regional partners that may be able to provide resources and information sharing as the Maine coast deals with climate change in the coming years.					
3. Make a plan to invest monies not only in the maintenance of the marine infrastructure, but also in the preservation of the working waterfront for the fishing community of Long Island.	High	Short-Mid	FC, SB, Admin, HM, FW	IC	
a. Investing in the future of Long Island means investing in the fishermen and women and others who work in the marine economy.					
b. Investing in maintenance of the marine infrastructure should reduce the amount of emergency funding that is needed for surprise expenses like storm damage in the future. Well-maintained infrastructure can better prepare us for the future.					
4. Provide commercial fishers and others involved in the marine economy with the resources to grow their businesses and retain their way of life.	Med	Ongoing	FC, IC, Admin	IC	
a. The identity of Long Island is tied to being a fishing community, and supporting those who rely on fishing for a way of life should be a priority for the island.					
b. Enable and empower Long Island fishers to get involved in local and statewide conversations discussing the future of fisheries and aquaculture in the Gulf of Maine, and more specifically in Casco Bay.					
Agriculture and Forestry Resources					
1. Develop a plan to bring the deer population to a reasonable level of 8-10 deer on the island to help reduce the incidence of tick-borne illness and to allow more homeowners to enjoy gardening and produce healthy food for their families.	High	Short	DRC, SB	IC	
a. Enforce of the State of Maine law which makes it illegal to feed deer between June 1 and December 15, subject to a fine of no less than \$500.					

2. Develop a plan to educate islanders on how to safely remove browntail moth webs from trees on their properties. Remove the webs from all town-owned land.	Med	Short	IC, DPW, LICLOC		
3. Develop a plan to eradicate the invasive species that are causing damage to our ecosystem.	Med	Short/Ongoing	IC		
a. One part of this plan must be an education program with islanders to teach them how to identify the invasive species and remove them from their properties.					
b. This would also require some investment of time and energy by volunteers to do the same in our shared and conservation areas.					
c. Work with island contractors as part of this program to educate them about invasives and how they spread. Many places on the island have invasives because contractors spread soil containing invasive seed and roots.					
4. Model environmentally-sound landscape management practices, such as planting for pollinators, planting native species, and limiting the use of pesticides and fertilizers.	Med	Ongoing	IC		
a. This could include setting aside some shared or town-owned land to create a garden where native flora could be cultivated and distributed to island families to replace invasives.					
5. Encourage private landowners to recognize potential fire hazards such as unhealthy and fallen trees near their homes and to remove them where feasible.	Med	Ongoing	IC		
Historical and Archaeological Resources					
1. The Code Enforcement Officer will continue to take into consideration the effect development plans might have on identified historical or archaeological sites.	High	Ongoing	CEO, PB	IC	
a. As provided for in the Land Use Standards of the Land Use Ordinance, "Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on, or eligible to be listed on the National Register of Historic Places, as determined by the permitting authority, shall be submitted by the applicant to the Maine Historic Preservation Commission for review and comment, at least twenty (20) days prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the Commission prior to rendering a decision on the application."					
2. The Town of Long Island Planning Board will review the local land use ordinances relating to historic and archaeological resources and make any necessary changes.	High	Short	PB, LIHS	IC	Yes
a. These changes will be focused on ensuring property developers are informed of any such resources and are prepared to take measures to protect them.					
b. Such measures may include but not be limited to modification of proposed site design, construction timing, and/or extent of excavation.					
c. The Long Island Historical Society may also be consulted to assess the historic or archaeological significance of these sites.					

3. The Town of Long Island will take measures to protect the valuable shell middens from climate impacts and human disturbances.	Med	Ongoing	LIHS, CEO, SB	IC	
a. The Long Island Historical Society has expressed an interest in working with the Maine Midden Minders, run by th University of Maine, and hopes to formalize a working relationship in the near future.					
Land Use					
1. Actively coordinate the community's land use strategies with other local and regional land use planning efforts tapping into partnerships with Greater Portland Council of Governments and Island Institute	Med	Ongoing	PB	SB, Admin	
2. Support the locations, types, scales, and intensities of land uses in keeping with vision and values in this plan and support the level of financial commitment necessary to provide needed infrastructure in growth areas through the CIP process	High	Ongoing	PB, FC		Yes
3. The Planning Board will be responsible for implementing the Future Land Use Plan. Each year it shall be required to report to the community the type and location of growth that has occurred and make recommendations regarding any changes that may need to be made to local ordinances and permitting processes to address growth related problems.	High	Ongoing	PB		
4. The Code Enforcement Officer (CEO) shall be supported in his or her efforts to vigorously enforce our codes and ordinances in a fair and equitable manner. To include: tools, training, and support necessary to enforce land use regulations, and ensure that the Code Enforcement Officer is certified in accordance with 30-A M.R.S.A. §4451.	High	Ongoing	SB	PB	
5. The town will produce an inventory of all subsurface wastewater systems and explore incentives for using safest and most effective subsurface wastewater systems.	High	Short	H2O, PB	IC	
6. The town will institute a process for tracking land use including existing and new development by type, location, parcel, and make the information publicly available.	Med	Short	IC		
7. Actively encourage the abandonment of paper streets to allow the merger of adjacent lots in common ownership.	Med	Ongoing	PB		Yes
8. Enable the Planning Board and CEO to be responsible for protecting natural resource areas and working waterfront from the impact of development.					
9. The town will direct a minimum of 75% of new municipal growth-related capital investments into designated growth areas identified in the Future Land Use Plan.	Med	Ongoing	PB, FC	SB	
10. Review, refine and focus zoning and ordinances to allow for appropriate growth, continually monitoring permitting procedures for efficiency, especially in IR-1, IR-2 and IB	High	Ongoing	PB		Yes

11. Vigorously and equitably enforce our codes and ordinances, especially those which impact quantity and quality of water	High	Ongoing	PB	SB	Yes
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This matrix is a tracking tool intended to be used with recommendations outlined in the Plan Framework section of the 2022 Town of Long Island Comprehensive Plan. The full recommendation detail is found there.					
Strategy	Priority	Timeframe	Lead/Owner/ Responsible Party	Support	Ordinance Related
Recreation					
1. Create and implement a senior day program for residents that addresses the socio-emotional, physical, and intellectual needs of the island's aging population.	High	short-mid	RC, Rec	IC, WC	
a. Transportation to such a program will need to be part of the discussion.					
2. Develop a long-term plan to address indoor fitness, creative, and recreational opportunities for all residents on a year-round basis. This should include a plan to increase the usage of town-owned spaces for various purposes on a year-round basis.	med	mid	Rec, RC	IC	
3. Resume community-wide social opportunities on a year-round basis once the status of the COVID-19 pandemic makes it safe to do so.	med	short-mid	Rec, RC, WC, LICA	IC	
4. Survey the community to determine which type and quantity of recreation programs are desired in order to give the recreation committee a clear direction for creating and implementing programs.	high	short	Rec, RC	IC	
a. Develop a new strategy for finding volunteers and paid staff for the recreation department in order to keep up with the demand for programming.					
5. Develop and implement a plan for maintenance and improvement of the trails on the island.	med	mid	LICLOC, LICA, DPW, PD	IC	
a. Maintenance and improvements in both paved and unpaved roads on the island will also encourage and allow safe non-motorized travel by foot and by bicycle.					
6. Conduct a study of the current usage of the conservation area and engage the community in a discussion about reimagining how best to make use of this open space to meet the recreational needs of the island population.	high	short	LICLOC, Rec, RC, IC		
7. The recreation department should address the issue of the pickleball facility in terms of suitability, availability, and noise complaints.	med	short-mid	RC, Rec	IC	
8. Provide educational materials regarding the benefits and protections for landowners allowing public recreational access on their property. At a minimum this will include information on Maine's landowner liability law regarding recreational or harvesting use, Title 14, M.R.S.A. §159-A.	med	short	IC, TO	IC	
Wellness					

1. Develop and distribute a community health needs assessment survey to identify the needs of the community. This will be essential in allowing the Wellness Council to identify and prioritize present and future health issues affecting islanders.	high	Short	WC	IC	
2. Develop a plan to address housing and aging-in-place issues for senior residents of the island.	high	Ongoing	PB, WC	Rec, RC, IC	Yes
a. Evaluate restrictions placed on building an Accessory Dwelling Unit (ADU) by present zoning ordinances. Provide resources to explain the relevant ordinances to islanders.					
b. Encourage the Wellness Council to make connections with agencies providing home care services on neighboring islands.					
c. Evaluate the feasibility of a long-term care facility for senior residents.					
d. Develop a senior day program to provide socialization opportunity for elderly residents and respite for their caretakers. Consider the need for transportation to such a program.					
3. Develop a plan to lower the number of deer ticks on the island to reduce the incidence of Lyme Disease and other tick-borne illnesses.	high	Short	DRC, IC		
4. Expand the Wellness Council programs and the services provided in the town's Wellness Center to meet the needs of the island's population.	med	Ongoing	WC, HO	IC	
a. Explore options for elderly home care.					
b. Develop a plan to increase usage of the Wellness Center for both on-site medical services and educational programs.					
c. Develop strategies to increase the use of telemedicine equipment.					
d. Develop a plan to provide long-term physical therapy services on the island and at the Wellness Center.					
e. Develop a plan to identify and address the needs of our elderly residents, including scheduling medical appointments, obtaining groceries, cooking meals, snow-removal, managing medications, and transportation.					
f. Provide information about home safety strategies for the island's elderly residents, including on-site assessments.					
g. Develop a plan to promote child health by partnering with school teachers, recreation staff, parents, and community medical entities to create educational programs addressing the unique public health issues facing our school children and teenagers.					
5. Engage with MaineHealth, Northern Light Health, Tufts Medical School, and other community health entities to bring more medical and educational services to the town.	med	Short	WC	IC	
6. Develop a strategy to support those islanders struggling with substance abuse and addiction.	high	Short	WC, HO	IC	
Population and Demographics					

1. Attract and retain young families to live on Long Island.	High	Ongoing	IC, YRHC, HS, Admin. SB, PB		Yes
a. Monitor programs and funds that could finance or support young island families.					
b. Attend sessions that promote island-centric networking and problem solving and share the information across the community					
c. Review best practices to attract and keep young families, especially those occurring on other islands and remote locations,					
d. Monitor emerging technologies and changes in construction methods that could lower building costs.					
e. Monitor changes in federal and state laws and new ordinances that could attract young families.					
f. Review town building code changes to make it easier to build or rent to attract or retain young families while balancing community needs.					
g. Find ways to increase the number of year-round rentals.					

Acronym	Name of position or group
Admin	Town Administrator
C	Constable
CEO	Code Enforcement Officer
DPW	Department of Public Works
DRC	Deer Reduction Committee
FC	Finance Committee
FW	Facilities and Wharves Manager
H2O	Groundwater Quality Committee
HM	Harbormaster
HO	Health Officer
HS	Housing Sponsor
IC	Comprehensive Plan Implementation Committee
LICA	Long Island Civic Association
LICLOC	Long Island Community Land Operating Committee
LIHS	Long Island Historical Society
PB	Planning Board
PD	Parks Director
Rec	Recreation Board
RD	Recreation Director
SB	Select Board
TO	Town Office Staff
WC	Wellness Council
YRHC	Year-Round Housing Committee
Timeframe	
Short	less than 2 years
Mid	2-5 years
Long	5+ years
Ongoing	