



Exhibit "A"

2045 Comprehensive Plan EAR Amendments *Data & Analysis Memorandum*

Introduction

This Evaluation and Appraisal Review (EAR) Memorandum supplies the necessary Data and Analysis for amendments to the Town of Highland Beach's Comprehensive Plan to be consistent with recent changes to the Florida Statutes. The most significant change proposed within this amendment package is the update to the plan's horizon year to 2045 – establishing 10 and 20 year planning periods.

The purpose of this report is to demonstrate that the Town of Highland Beach has successfully taken into consideration its future, including its projected 2045 population, the capacities of its utilities, and other considerations. The topics described below include the Town's future land use and carrying capacity, transportation, housing, infrastructure, coastal management and conservation, recreation and open space, intergovernmental coordination, and capital improvements - the elements of the comprehensive plan.

1. Population

Florida Statutes §163.3177(1)(f)3 states that comprehensive plans shall be based upon the jurisdiction's projected permanent and seasonal populations within the identified planning horizon. For the Town of Highland Beach, the planning horizon year is 2045.

Population growth trends can reliably be based on historic trends or more algorithmic projections and their future planning falls into ranges of low, medium and high growth. Florida Statute §163.3177(1)(f)3 typically requires a minimum projection of medium population growth "absent physical limitations on population growth." The Town of Highland Beach is one such community with physical limitations on its population growth. As a barrier island which has very limited vacant land, the Town cannot accommodate medium growth under its current development regulations. Therefore, the population growth projection for this EAR is based on the maximum growth the land area allows under the Town's current future land use policies.

Current Population

The University of Florida's Bureau of Economic and Business Research (BEBR) provides population projections for the state and counties and annual estimates for each jurisdiction in the state. In 2024¹, BEBR estimated that the Town of Highland Beach had 4,287 permanent residents. The Town also had a seasonal population of approximately 3,564 (45.5%) meaning the Town's total

¹ BEBR April 1, 2024





population was 7,851. Because there has been no known development since that time, this study uses the April 1, 2024 population estimate as its base.

Projected Population

Typically, populations are projected using metrics related to a share of the overall population of a county. Under this methodology, the Town of Highland Beach's population growth would be tied either to historical population share estimated over a period of the past 50 years at .299% of Palm Beach County's population or by current trends, estimated at a .277% share of the Palm Beach County's population. However, because there is such limited vacant land in the Town of Highland Beach, these standard projection methods were determined not to apply.

Though it is anticipated by the Town that over time a greater percentage of the seasonal population may become permanent, it is impossible with the available vacant land area for the Town to accommodate more than a few additional dwelling units under any planning horizon. **Table 1.1** shows that under current regulations and with the current developable land available, it is anticipated that an additional 23 people will move into the Town over the next 20 years. Please see the *carrying capacity analysis* in the next section for further explanation.

Table 1.1: Population Projections with available developable land

Year	Permanent	Seasonal	Projected Population
April 1, 2024	4,287	3,564	7,851
2035	4,293	3,570	7,863
2045	4,299	3,574	7,873

Source: BEBR base population modified by Town of Highland Beach vacant land restrictions

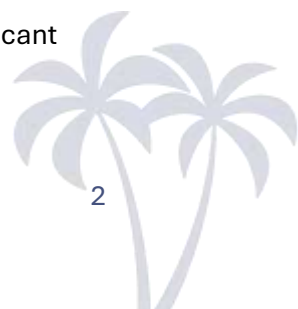
Future Considerations

Many of the Town's buildings were constructed with development regulations which allowed greater density than what is currently allowed by the adopted future land use map. Many of these large, coastal, residential buildings were built several decades ago, and some will need to be heavily renovated or rebuilt, conceivably within the 2045 planning horizon. If existing buildings are to be rebuilt under lower density allowances, the Town is facing the possibility of population decline and may need to consider impacts of the regulations; these may include difficulties attracting developers or the costs associated with providing the same services to fewer people.

2. Impacts on Land Use

Carrying Capacity Analysis

One common planning tool utilized to understand a community's ability to successfully accommodate anticipated growth is a *carrying capacity analysis*, which requires a close examination of the spatial relationships between existing land uses, environmentally significant





features, and Future Land Use Map designations. This analysis was conducted using the following four-step process:

1. Using the Department of Revenue (DOR) use codes included within the latest Palm Beach County Property Appraiser's parcel data, each property within the Town was assigned a generalized existing land use designation (e.g., low density residential, commercial, vacant, etc.). The result of this effort is shown in **Map 2. Existing Land Use** and **Table 2.1** below.

Table 2:1 Existing Land Use

Existing Land Use	Acres (2009)	Percent (2009)	Acres (2025)	Percent (2025)
Multi-Family Residential	154.3	40.3%	159.8	38.2%
Single Family Residential	91.3	23.8%	96	23.0%
Water	74	19.3%	83.5	20.0%
Transportation ROW	N/A	N/A	31.4	7.5%
Conservation	N/A	N/A	19.8	4.7%
Recreation and Open Space	N/A	N/A	12.1	1.1%
Vacant	36.3	9.5%	9.8 ¹	2.3%
Governmental	19.1	5.0%	4.7	1.1%
Institutional	5	1.3%	3.2	0.8%
Commercial	2.9	0.8%	2.9	0.7%
Total	382.9	100.0%	418.3	100.0%
¹ Includes Milani Park and Milani development parcels				

Source: Highland Beach EAR, 2009 and Palm Beach County Property Appraiser

2. All lands not possessing a 'vacant' generalized existing land use designation were removed as they are less likely to be developed for future residential activity compared to currently vacant land.
3. Any portions of 'vacant' lands which contained a wetlands feature (as determined by the latest National Wetlands Inventory (NWI) shapefile) were removed, as these lands are not considered suitable for future development activity.
4. Finally, the carrying capacity of the leftover vacant land was determined by assuming each remaining property will develop to the maximum density permitted by its underlying future land use designation (see **Map 3**).
5. N.B.- Existing Land Use acreages vary somewhat from the 2009 EAR analysis for several reasons, including the data sets used and the fewer land use categories used, DOR code updates, etc. Table 2.1 aims to neutralize discrepancies to the maximum extent possible to show the land use changes over time.





Table 2.2: Carrying Capacity for the Town of Highland Beach

Future Land Use Category	Acres	Vacant Acres	Vacant Wetlands Acres	Max Density DU/Acre	Carrying Capacity DU
Single Family	62.3	1.5	0.2	4	5
Multiple Family (Low)	163.3	8.1	7.2	6	5
Multiple Family (Medium)	34.6	0.2	0.0	12	3
Multiple Family (High)	36.6	0.0	0.0	16	0
Government	4.7	0.0	0.0	N/A	0
Recreational Open Space	14.8	0.0	0.0	N/A	0
Conservation	0.8	0.0	0.0	N/A	0
Non-Future Land Use Categories					
Water	69.8	N/A	N/A	N/A	N/A
Transportation ROW	31.4	N/A	N/A	N/A	N/A
Total	418.3	9.8	7.4	N/A	13
Total Residents ¹					23
¹ Calculated by multiplying the total dwelling units by the person per household of Highland Beach (1.84) ² The carrying capacity run on vacant acres includes the Milani park site and Milani development parcels, which total 6.5 of the 9.8 acres. Currently, it is not expected that there would be any dwelling units in the park and six dwelling units were submitted for development review on January 23, 2025. Therefore, the number of dwelling units may be lower.					

Sources: Palm Beach County Property Appraiser, 2024; Town of Highland Beach, 2024

Future Considerations

As shown above, the Town of Highland Beach only has approximately 9.8 acres of land that is vacant and not within a wetland. This analysis shows extremely minimal population growth which could be offset into negative population growth should any existing buildings be rebuilt at lower densities. The Town should consider whether it is comfortable with little, no, or negative population growth. Implications could include limits to services and increases to taxes if current services are supported by fewer residents.

3. Impacts on Housing

The Town of Highland Beach is a small primarily residential barrier island community. As noted above, there is limited land available for new development and few opportunities to expand housing options within its boundaries. The data does not indicate a need for more housing; however, the age of the existing housing stock combined with a limited ability to rebuild at current densities under the current regulations deserves consideration. The information provided in this chapter is primarily derived from the 2018-2022 American Community Survey 5-year Estimates and data from the Florida Housing Data Clearinghouse.





Table 3.1: Projected Housing Demand

Year	Permanent Population		Seasonal Population		Total Population	
	Projected Residents	Housing Units Needed ¹	Projected Residents	Housing Units Needed ¹	Projected Residents	Housing Units Needed ¹
2035	4,293	2,333	3,570	1,940	7,863	4,273
2045	4,299	2,336	3,574	1,943	7,873	4,279
¹ Assuming an average of 1.84 persons per household. For more information on how this number was derived, see Attachment A).						

Source: Florida Housing Data Clearinghouse, 2025.

Housing Supply

In 2022, the Town of Highland Beach had a total of approximately 4,519 housing units, where nearly 85 percent is composed of multi-family housing units (2 or more units) (ACS, 2022; FDCH, 2024). This includes duplexes, condos, and apartments. The remaining units consist of single-family detached homes, townhomes, and oceanfront estates (ACS, 2022; FDCH, 2024).

Of the total housing inventory, approximately 2,325 units were occupied, while 2,194 units were vacant (ACS, 2022; FHDC, 2024). The high vacancy rate can be attributed to the significant seasonal population, as 1,931 units (42%) remained vacant for seasonal, recreational, or occupational purposes (ACS, 2022). The average household size was 1.84 persons per unit (Inspire, 2024). Of the occupied units, 94.7% were owner-occupied, while 5.3% were rental properties (ACS, 2022; FHDC, 2024).

Housing Affordability

“Housing cost burden” refers to the percentage of a household’s income spent on housing expenses. It is commonly used to assess the affordability of housing. To be considered affordable, total housing costs should not surpass 30 percent of a household’s income. “Area Median Income (AMI)” reflects the median income distribution within a given area.

In 2022, Palm Beach County had a median income of \$76,066, while the Town of Highland Beach had a significantly higher median income of \$140,045 (ACS, 2022). This data indicates that residents in Highland Beach likely have greater financial means, which could make housing more affordable for them relative to the rest of the County. In 2023, the median value of an owner-occupied unit in the Town was \$825,200, with a median monthly owner cost of \$3,849 (ACS, 2023). Meanwhile, the median gross rent was \$3,500 (ACS, 2023).

The Florida Housing Data Clearinghouse provides information on households that are cost burdened by municipality. The data shows that about 62.5% of households earn above 100% of the AMI and are not cost-burdened, allocating less than 30% of their income toward housing. Whereas, 2.5% of households earn 30% or less of the AMI and are considered severely cost-burdened, spending more than 50% of their income on housing. While the data indicates that a small but significant portion of low-income households face a much higher housing cost burden, the majority



of households in the area experience a manageable housing cost burden. This highlights that there are affordability challenges faced by the lowest-income residents. **Table 3.2** outlines cost-burdened households by income estimates in 2022 for the Town of Highland Beach.

Table 3.2: All Households, Cost Burden by Income, 2022 (Estimate)

Household Income (% of Area Median Income (AMI))	Housing Cost Burden (% of income spent on housing)		
	Non-Cost Burdened (30% or less)	Cost Burdened (30.1 – 50%)	Severely Cost Burdened (More than 50%)
30% AMI or less			2.5%
30.01% – 50% AMI	1.3%	3.1%	3.2%
50.01% – 80%	1.8%	5.4%	6.2%
80.01% – 100%	1.1%	0.7%	1.0%
Greater than 100% AMI	62.5%	5.7%	5.3%

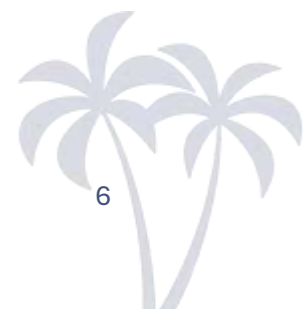
Source: “All Households, Cost Burden by Income, 2022 Estimates” from FDCH, 2024

Highland Beach’s Comp plan provides for adequate and affordable housing in its Housing Element Policies 1.5.1 –Policy 1.5.4. More specifically, Policy 1.5.3 requires the Town to “coordinate with the private sector to encourage new housing developments to provide for a range of housing types that are affordable to all income groups in a proportion that is reflective of demand.” And Policy 1.5.4 states “the Town will coordinate as appropriate with other agencies to ensure that its income qualified residents are made aware of affordable housing and housing assistance programs and will support regional affordable housing efforts through such mechanisms as letters of support, lobbying, and the dissemination of information.”

Future Considerations for Housing

The median age in the town is 70.1, with approximately 63.3% of the population above the age of 65 years old (ACS, 2023). Around 17.3% of the population is between the ages of 80 and 84 (ACS, 2023). In addition to an elderly population, over 75 percent of the housing stock was built prior to 1989, nearly 40 years ago (ACS, 2023). Together, this raises questions about the maintenance of these older buildings, as well as type of future housing development in the area.

The rebuilding of housing is complicated as many of the properties are non-conforming and generally, with the exception of a catastrophic event, cannot be rebuilt with the same number of dwelling units that they contain today. Specifically, the Town’s code Sec. 30-105 a(2) states that should a “nonconforming structure or nonconforming portion of a structure be destroyed or damaged by any means to an extent of more than fifty (50) percent of the assessed value of the structure at the time of destruction, or damage, it shall not be reconstructed except in conformity with the provisions of this article.” While some buildings could be rebuilt with fewer units at higher price points, decreasing the number of units allowed during reconstruction or substantial renovation could also *disincentivize* investment in the redevelopment of others.





4. Recreation and Open Space

The Town meets its adopted level of service standards for public recreation facilities and open space, which are: “one library and community room for every 10,000 permanent and seasonal residents, and one mile of bicycling trail for every 5,000 people.”

The Highland Beach Library serves as a key venue for Town residents and includes a community room that hosts events focused on education, social interaction, and group recreational and other activities. It also features a reading rotunda, screen porches overlooking the Intracoastal waterway, and public computers accessible to the public. Additionally, a 2.8 mile bicycle trail runs along A1A and a sidewalk runs along the west side of A1A. There is a current project on A1A, widening the road to include 5 feet bike lanes in each direction (not protected, but striped). The bike lanes will stretch from Grand Court to Linton Blvd, and the project is expected to be completed in Summer of 2025.

In addition to these public options, many residents have access to private recreational facilities within their residential complexes, which often include amenities such as pools, fitness centers, sports courts, and also have private beachfront access. Additionally, Milani Park, located within the Town but now owned by Palm Beach County, is planned for future design and construction, offering potential for expanded recreational opportunities.

Future Considerations

The Town is currently meeting its Level of Service standards. It could consider enhancing the pedestrian path and biking trail, including working to maintain a consistently-shaded path and including benches, water facilities, and improved signage, and clearly demarcated separation and increased width. These would contribute to a safer experience, particularly for seniors, while promoting health and wellness and sustainability. The Town could also consider how Milani Park might benefit its residents and be involved with County decision-making.

5. Coastal Management and Conservation

The Coastal Management/Conservation Element addresses the Town of Highland Beach's natural environment, including coastal resources, and related issues such as hurricane evacuation and emergency management. The Town has designated 23.45 acres (6.4%) of its land area as "Conservation" on the Future Land Use Map, thereby preserving their use and function for conservation purposes. Additionally, within the Town limits of Highland Beach, there are additionally 41.5 acres of Estuarine and Marine wetlands.

The Town protects its natural and coastal environment through the administration and enforcement of the Resource Protection Standards in its Code of Ordinances (Chapter 20, Article IV.) as well as coordination with other agencies having jurisdiction and regulatory authority over the natural environment, including: the U.S. Army Corps of Engineers, the South Florida Water





Management District, the Florida Department of Environmental Protection, and Palm Beach County.

Southeast Palm Beach County Coastal Resilience Partnership (CRP)

In 2019, the Town entered an Interlocal agreement with the City of Boca Raton, the City of Boynton Beach, the City of Delray Beach, the City of Lake Worth Beach, the Town of Lantana, and the Town of Ocean Ridge, formally creating the Southeast Palm Beach County Coastal Resilience Partnership (CRP). The goal of the CRP is to advance resiliency efforts within its geographical area. The CRP was awarded a \$72,000 Resilience Planning Grant to develop a regional framework to assess climate vulnerability and prioritize adaptation strategies. In 2021, the Coastal Resilience Partnership Multi-Jurisdictional Climate Change Vulnerability Assessment Report was completed. Included in the report is a suggested list of recommendations specific to the Town of Highland Beach to increase resiliency and sustainability in the face of increased storm frequency and strength.

Beach Restoration

To further promote conservation and responsible land stewardship, the Town provides guidelines for beach and dune management and maintenance, a list of recommended dune plants, and informational resources for dune restoration on its website².

In 2023, the Town of Highland Beach conducted a Beach Restoration Feasibility Study to evaluate options for protecting and restoring the beach within the Town. The feasibility study yielded two main recommendations for the Town: the first is a dune toe repair project and/or dry beach nourishment to restore the storm protective capacity of the beach and dune system; the second recommendation is a larger scale beach nourishment project to be pursued long term. The large-scale beach nourishment project involves dredging sand from offshore and placing it along the southern 2 miles of the Town's beach.

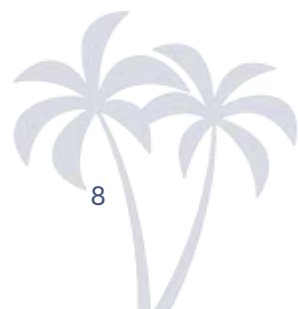
The cost of construction is estimated at \$14 million (in 2024 dollars). A local funding plan is needed to execute the project. Because access to the dunes and beach is largely private, County, State or Federal funding is likely unavailable. Other options for funding suggested in the study include an Ad Valorem Tax, Erosion Prevention District, or Municipal Service Benefit Unit.

Coastal/Natural Hazards

The Coastal Management/Conservation Element also addresses the Town's hurricane evacuation and emergency management strategies and plans, and coastal area planning requirements.

Flooding and storm surge from severe weather events are two potential hazards for the Town of Highland Beach. According to FIRM maps from 2024, 300 acres or 82% of the Town's land falls within a Special Flood Hazard Area. The Special Flood Hazard Area (SFHA), also known as the 100-

² <https://highlandbeach.us/263/Dune-Restoration-Preservation>





year floodplain, has a 1% chance of flooding in any given year and is shown as Zone A or Zone V on FEMA maps. An additional 5.7 acres (1.5%) of the Town falls within the 500-year floodplain, an area of minimal flood hazard. While the 500-year floodplain has only a 0.2% annual chance of flooding, the risk of flooding is lower, but still present.

Highland Beach also contains 40.8 acres of land designated as Coastal High Hazard Areas. Coastal High Hazard Areas are defined by Section 163.3178(2)(h)9 of the Florida Statutes as “the area below the elevation of the category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model.” To discourage further population concentrations in Coastal High Hazard Areas, Florida's growth management requirements discourage density, and intensity increases in these locations. Comprehensive Plan Amendments that increase density in these areas must be reviewed for impacts on evacuation level of service. Additionally, reductions in land use densities should not impair the rights of current residents.

In 2024, the Town passed a FEMA approved Flood Plain Ordinance (Ordinance No. 2024-002). This ordinance expands the applicability of stricter building codes to ensure development in flood-prone areas meets higher standards for better flood resilience.

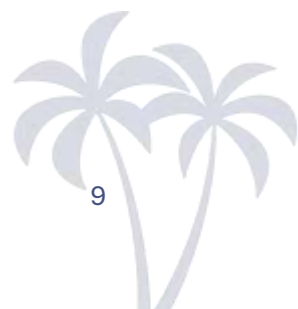
Runoff and Stormwater Management

Considering the Town of Highland Beach is surrounded by the Intracoastal Waterway and the Atlantic Ocean, stormwater runoff from the Town into these waterways can impact their quality and safety. Impervious surfaces, such as roads, driveways, and roofs, contribute to increased runoff, which may pick up pollutants like metals and oil, sediment, fertilizers, and pesticides and carry these substances into local waterways. Observations in the surrounding region indicate that harmful algal blooms (HABs) and water impairments are already occurring and are likely to increase as oceanic temperatures rise and hydrology changes.³

Various measures can be implemented to minimize the impact of stormwater runoff, such as the installation of permeable surfaces, rain gardens, and improved stormwater management systems. Additionally, promoting the use of native landscaping and reducing the application of chemical fertilizers and pesticides can help minimize pollutant runoff. Regular maintenance and upgrading of stormwater infrastructure are also crucial to ensure effective water flow and pollutant filtration. Enhanced monitoring capabilities and water quality models can inform more targeted mitigation strategies. By implementing these measures, the Town can reduce the risk of water quality degradation and protect local ecosystems and waterways.

The Town of Highland Beach is the only jurisdiction within the Coastal Resilience Partnership that does not have guidance to use “Florida Friendly” landscape principles in its fertilizer regulation ordinance. The Town may consider updating this ordinance.

³ Coastal Resilience Partnership Multi-Jurisdictional Climate Change Vulnerability Assessment





Palm Beach County's Environmental Resources Management Department monitors the presence of pollutants in surface waters within the County and the Town of Highland Beach has an interlocal agreement with the County to maintain compliance with the Palm Beach County Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) permit.

Emergency Management

Storm Events

Emergency management in the Town of Highland Beach is coordinated on a regional scale. The transportation network must provide for safe and timely evacuation of residents in the case of a severe storm event. The Town coordinates with other governmental and non-governmental agencies to provide many essential services to residents before, during, and after major storm events (i.e. emergency shelter, emergency services, emergency operation center, post disaster recovery).

The Town provides its residents with a Hurricane Preparation Manual that provides essential information to residents about hurricane planning and disaster preparedness.⁴ Additionally, the Town provides information regarding evacuation orders, regulates access into and out of the Town, ensures continuity of operations, and spearheads post-disaster recovery efforts within its boundaries, including curfew enforcement and the provision of post-disaster security.⁵

Future Considerations

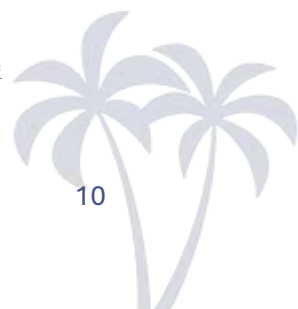
Evacuation or rescue during storm events is currently reliant entirely on A1A remaining passable and bridges to the mainland remaining open. Identifying facilities within the Town that could serve in times of emergency as shelters or distribution points, potentially the future Milani Park in the south and the government buildings in the middle, could help. Additionally identifying docks on the intracoastal side of the Town with connections to the mainland could provide an additional temporary means of connection should bridges or A1A be impassable.

Following the recent studies, there are several updates that should be incorporated into The Coastal Management and Conservation Element to:

- Integrate the strategies outlined in the Climate Change Vulnerability Assessment Report
- Include the goals identified by the Beach Restoration Feasibility Study
- Update dates and references
- Reflect the current implementation status of policies.
- Encourage green infrastructure, such as permeable pavements and rain gardens, and promoting sustainable landscaping practices to reduce runoff, protect natural resources, and maintain the health of local waterways and ecosystems.

⁴ <https://highlandbeach.us/DocumentCenter/View/612/2024-Hurricane-Preparation-Manual?bidId=>

⁵ Town of Highland Beach Evaluation and Appraisal Report (2009)





- Incorporate Florida-friendly fertilizer landscape principles

6. Infrastructure Capacity

Wastewater Service

As mentioned in the Infrastructure Element, the Town of Highland Beach maintains a sanitary sewer collection system that delivers wastewater to the South Central County Wastewater Treatment Plant located in Delray Beach. The Town has no septic and does not need to plan for septic to sewer conversion. The Town of Highland Beach has an adopted LOS for wastewater of 68 gallons per capita per day. Highland Beach's wastewater capacity is 1.95 mgd. **Table 6.1** summarizes the Town's wastewater needs into the 2045 planning horizon.

Table 6.1: Projected Wastewater Demand

Year	Projected Population	Demand in gpd	Demand based on LOS (MGD)	% capacity used
2025	7,851	533,868	0.533868	27.4%
2035	7,863	534,684	0.534684	27.4%
2045	7,873	535,364	0.535364	27.5%

Source: Town of Highland Beach, 2024

As shown in **Table 6.1**, the projected level of service for wastewater in 2045 (0.535 mgd) is within the Town's wastewater capacity (1.95 mgd).

Solid Waste

The Town of Highland Beach provides solid waste collection and disposal services through a contract with the Palm Beach County Solid Waste Authority (SWA). The Town maintains an adopted level of service of 5 lbs per day per capita, which is compatible with disposal facility capacities and operational policies of the SWA. The Town seeks to continue reducing solid waste requiring disposal through participation in the SWA's recycling program.

Table 6.2 summarizes the solid waste collection necessary to maintain the Town's adopted level of service standard into the 2045 planning horizon, based on population projections.

Table 6.2: Projected Solid Waste Demand

Year	Projected Population	Demand based on LOS (lbs.)
2025	7,851	39,255
2035	7,863	39,315
2045	7,873	39,365

Source: Town of Highland Beach, 2024





Stormwater Management

State Road A1A has a 100-foot right-of-way and relies on swales to manage stormwater run-off, retention, and groundwater infiltration. Otherwise, most drainage facilities in the Town are on-site private systems that discharge stormwater to the Atlantic Ocean or Intracoastal Waterway. The Town requires that all new construction projects provide effective stormwater management which prevents flooding and avoids estuarine pollution, consistent with County and State water quality standards. The Town also maintains and enforces provisions within its land development regulations requiring all future development to meet stormwater quality standards as set forth by the South Florida Water Management District.

The Town of Highland Beaches Drainage LOS for stormwater drainage is a three-year design storm: 10-minute concentration with one foot freeboard below gutter elevation. The Town has been able to meet its Level of Service Standard for drainage in previous years and anticipates continuing to meet those standards through the planning horizon.

Potable Water Service

The Town of Highland Beach provides potable water services through their Reverse Osmosis Water Treatment Plant. The Town of Highland Beach's adopted Level of Service (LOS) for potable water is 100 gallons per day (gpd) per capita⁶. The Town's maximum potable water capacity is 3.0 million gallons a day (mgd). Based on the adopted 100 gpd LOS, **Table 6.3** summarizes the potable water needs of Highland Beach into the 2045 planning horizon.

Table 6.3: Projected Potable Water Demand

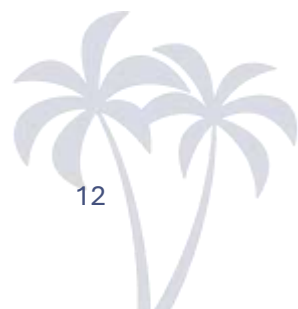
Year	Projected Population	Demand in gpd	Demand based on LOS (mgd)	% capacity used
2025	7,851	785,100	0.7851	26.17%
2035	7,863	786,300	0.7863	26.21%
2045	7,873	787,300	0.7873	26.24%

Source: Town of Highland Beach, 2024

As shown in **Table 6.3**, the projected Level of Service for potable water in 2045 (0.7873 mgd) is within the Town's potable water capacity (3.0 mgd) and the Town is expected to continue meeting LOS standards for potable water through the 2045 planning horizon. Therefore, the only potable water improvements listed in the Capital Improvements Plan relate to maintenance of the water treatment plant, but do not include improvements that will increase capacity.

The Town has an existing bulk water agreement in place with Delray Beach and Boca Raton. Water is not regularly provided to the Town through either of these interconnections; however, they are available and are regularly maintained for use in the event of an emergency or scheduled maintenance.

⁶ Town of Highland Beach Public Works Department





The costs of operating, maintaining, and upgrading the water system are offset through utility fees, water sales, and ad valorem taxes. The water system operates as an enterprise fund, independent of the Town's other funds, and is managed by the Public Works Department.

Future Considerations

The Town of Highland Beach is projected to meet all LOS requirements. Challenges could arise if the Town's population declines and measures are not taken to ensure the revenues which fund the Town's services do not also decline. Additionally, the Town is reliant on neighboring municipalities, such as the City of Delray Beach for wastewater and Palm Beach County for solid waste disposal. Should either of these municipalities lose sufficient capacity, the Town would have to secure other means.

7. Capital Improvements Element

The Capital Improvements Element (CIE) aims to compile and prepare the capital improvement needs identified in the other elements for the County's budgeting and project financing. State statutes mandate addressing only projects that impact the adopted Level of Service (LOS) standards; however, the CIE may also include additional projects that enhance public facilities without affecting LOS. **Table 7.1** summarizes planned improvements for the Town.

Table 7.1 Planned Improvements Summary Table

Utility	Planned Improvements
Transportation	None/maintenance only
Potable Water	None/maintenance only
Wastewater	Updating aging infrastructure, pipe rehabilitation and lift station improvements.
Solid Waste	None, handled by SWA of Palm Beach County
Drainage and Stormwater	None, maintenance
Recreation and Open Space	None, maintenance

Transportation

There are no planned transportation improvement projects included in the Town of Highland Beach's current Capital Improvements Plan besides maintenance of existing roads and bridges.

Potable Water

The Town is expected to continue meeting LOS standards for potable water through the 2045 planning horizon. Therefore, the only potable water improvements listed in the Capital Improvements Plan relate to maintenance of the water treatment plant, but do not include improvements that will increase capacity.





Wastewater

The Town of Highland Beach has enough wastewater capacity to meet projected demand for 2045. Therefore, the planned improvements for wastewater services pertain to maintenance aging infrastructure of the existing system and will not increase capacity. This includes piping rehabilitation and lift station improvements.

Solid Waste

The Town of Highland Beach provides solid waste collection and disposal services through a contract with the Palm Beach County Solid Waste Authority (SWA). The SWA is considering multiple options to increase their capacity in order to handle greater expected demand as the County continues to grow. This does not prompt capital expenditures within the Town of Highland Beach itself.

Drainage and Stormwater

The Town anticipates continuing to meet its LOS standards through the planning horizon. Thus, no major projects, besides maintenance of existing systems, is listed in the Capital Improvements Plan.

Recreation and Open Space

The Town is currently meeting its level of service standards for parks and recreational facilities, which currently include the Town Library and a bicycle path.

Public School Facilities

Public school services for the Town of Highland Beach are provided externally by other government and private agencies. The Town is exempt from public school planning and concurrency requirements as limited new residential buildings permits are issued, there have been no annexations, and there are no school facilities within the Town's boundaries. Thus, no level of service standards are defined for public schools, and no capital improvements regarding schools are planned.

8. Impacts on Transportation

Transportation Facilities

The Town of Highland Beach has a limited transportation network, consisting of one collector road, State Road A1A, multiple local roads, and a sidewalk running along the west side of State Road A1A.

State Road A1A is the only roadway in Highland Beach with an adopted level of service and is projected to maintain this level of service through the 2045 planning horizon.

Transportation plays a critical role in shaping how residents of Highland Beach live, work, and enjoy their community. The Town's transportation system is essential for supporting economic growth,





facilitating the movement of people, goods, and services efficiently. This section offers insights into the current state of the Town’s transportation network—covering roadways, public transportation, pedestrian and bicycle facilities, and transportation improvement projects.

Functional Classifications

The Florida Department of Transportation (FDOT) uses the Federal Functional Classification System, which is common to all states. Each functional classification is based on the type of service the road provides to the motoring public. Design standards are tied to the functional classification assigned to the facility. Each classification has a range of allowable lane widths, shoulder widths, curve radii, etc. The functional classifications are listed below in **Table 8.1**. A1A is classified as Urban Collector and the smaller roads as local roads. These are displayed on **Map 15**.

Table 8.1: Functional Classification Descriptions

Functional Classification	Description	Typical Speed Limits
Interstates (Limited Access Highways)	The highest classification of roadways in the United States. These arterial roads provide the highest level of mobility and the highest speeds over the longest uninterrupted distance.	55-75 mph
Other Arterials	These include freeways, multilane highways, and other important roadways that supplement the Interstate System. They connect, as directly as practicable, the Nation’s principal urbanized areas, cities, and industrial centers. Land access is limited.	50-70 mph
Collectors	Major and minor roads that connect local roads and streets with arterials. Collectors provide less mobility than arterials at lower speeds and for shorter distances. They balance mobility with land access.	35-55 mph
Local roads	Local roads provide limited mobility and are the primary access to residential areas, businesses, farms, and other local areas.	20-45 mph

Source: Federal Highway Administration, 2020

Context Classifications

Florida Department of Transportation’s (FDOT) context classification system describes the general characteristics of the land use, development patterns, and roadway connectivity along a roadway, providing cues as to the types of uses and user groups that will likely utilize the roadway. Context classification is a system based on the complete streets initiative of identifying roads according to their context in the built or natural environment and is a step in the planning and design processes for establishing more comprehensive design criteria and standards for multiple modes of transportation. The eight different context classifications used by the FDOT are described below in **Table 8.2**. A1A is classified as C4-Urban General. These are displayed on **Map 16**.





Table 8.2: Context Classification Descriptions

Context Classification	Descriptions
C1-Natural	Lands preserved in a natural or wilderness condition, including lands unsuitable for settlement due to natural conditions.
C2-Rural	Sparsely settled lands; may include agricultural land, grassland, woodland, and wetlands.
C2T-Rural Town	Small concentrations of developed areas immediately surrounded by rural and natural areas; includes many historic towns.
C3R-Suburban Residential	Mostly residential uses within large blocks and a disconnected or sparse roadway network
C3C-Suburban Commercial	Mostly non-residential uses with large building footprints and large parking lots within large blocks and a disconnected or sparse roadway network.
C4-Urban General	Mix of uses set within small blocks with a well-connected roadway network. May extend long distances. The roadway network usually connects to residential neighborhoods immediately along the corridor or behind the uses fronting the roadway.
C5-Urban Center	Mix of uses set within small blocks with a well-connected roadway network. Typically concentrated around a few blocks and identified as part of a civic or economic center of a community, town, or city.
C6-Urban Core	Areas with the highest densities and building heights, and within FDOT classified Large Urbanized Areas (population greater than one million). Many are regional centers and destinations. Buildings have mixed uses, are built up to the roadway, and are within a well-connected roadway network.

Source: Florida Department of Transportation, 2022

Adopted Level of Service

Roadway performance within the Town of Highland Beach is measured using adopted Level of Service (LOS) standards, which identifies the minimum acceptable operating conditions of a roadway. LOS conditions are generally classified into six categories which are outlined in **Table 8.3**. State Road A1A is the only roadway in Highland Beach that has an adopted Level of Service. The adopted Level of Service for State Road A1A is D.

Table 8.3: Level of Service Descriptions

Level of Service	Descriptions
LOS A	Users are practically unaffected by the presence of other vehicles on a road section. The choice of speed and the maneuverability are free. The level of comfort is excellent, as drivers need minimal attention.
LOS B	The presence of other vehicles begins to affect the behavior of individual drivers. The choice of the speed is free, but the maneuverability has somewhat decreased. The comfort is excellent, as drivers simply need to keep an eye on nearby vehicles.
LOS C	The presence of other vehicles affects drivers. The choice of speed is affected and maneuvering requires vigilance. The level of comfort decreases quickly at this level, because drivers have a growing impression of being caught between other vehicles.



Level of Service	Descriptions
LOS D	The speed and the maneuverability are severely reduced. Low level of comfort for drivers, as collisions with other vehicles, must constantly be avoided. A slight increase in the traffic risks causing some operational problems and saturating the network.
LOS E	Low but uniform speed. Maneuverability is possible only under constraint for another vehicle. Users are in a state of frustration.
LOS F	Unstable speed with the formation of waiting lines at several points. Cycles of stop and departure with no apparent pattern because created by the behavior of other drivers. A high level of vigilance is required for the user with practically no comfort.

Source: Transportation Research Board, 2023

Current and Projected Transportation Level of Service

Level of service was determined using FDOT's Multimodal Quality/Level of Service Handbook which uses roadway characteristics (e.g. functional classification, context classification, number of lanes, etc.) and traffic counts to determine a roadways level of service. Current Annual Average Daily Traffic (AADT) counts from Florida's Department of Transportation (FDOT) were used to calculate current Level of Service for State Road A1A. Historic AADT counts provided by FDOT were utilized to calculate the average annual growth rate (AAGR) for traffic. These were used to project future level of services for 2035 and 2045. The adopted, current, and projected (2035 & 2045) level of service can be seen in **Table 8.4** and on **Maps 12 & 13**.

Table 8.4: Current and Projected LOS for A1A

Name	From/To	Functional Class	Context Class	Lanes	Adopted LOS	AAGR	Current		2035		2045	
							AADT	LOS	AADT	LOS	AADT	LOS
A1A	NE Spanish Boulevard to N/A	Urban Collector	Urban General	2	D	1.56%	12,479	D	14,563	D	16,994	D
A1A	N/A to Linton Boulevard	Urban Collector	Urban General	2	D	0.93%	11,918	D	13,074	D	14,341	D

Source: Florida Department of Transportation, 2024

As **Table 8.4** shows above the two sections of State Road A1A that have AADT counts from FDOT are expected to maintain their adopted level of service through the 2045 planning horizon.

Public Transit

The only form of public transportation available in the Town of Highland Beach is paratransit services provided by the Palm Tran Connection (PTC). PTC is a ride share, door-to-door paratransit service that provides transportation to eligible residents and visitors in Palm Beach County. The service is available to individuals who cannot transport themselves and are dependent on others to access health care, employment, education, shopping, social activities, or other life-sustaining





activities. PTC travels everywhere within Palm Beach County. The paratransit service operates under three different programs that differ in eligibility, operating times, and service areas. **Table 8.5** provides a summary of these three programs and their eligibility requirements, standard operating times, and service areas.

Table 8.5: Paratransit Programs

Paratransit Program	Eligibility Requirements	Standard Operating Times	Service Area
Americans with Disabilities Act Program	Individuals must have a disability which prevents them from riding the fixed-route bus.	Mon.-Fri. 4:45am to 11:00pm Sat. 6:00am to 10:35 pm Sun. 7:45am. to 8:15pm	3/4 of a mile of a Palm Tran bus route
Transportation Disadvantaged	Persons who because of physical or mental disability, income status, or age are unable to transport themselves or to purchase transportation and are, therefore, dependent upon others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities, or children who are handicapped or high-risk or at risk.	Mon.-Fri. 4:45am to 11:00pm Sat. 6:00am to 10:35 pm Sun. 7:45am. to 8:15pm	Anywhere in Palm Beach County
Division of Senior Services	Individuals who are age 60 or older.	Mon.-Fri. 8:00am to 5:00pm Sat. & Sun. No Service	Transportation provided to approved nutrition/meal sites.

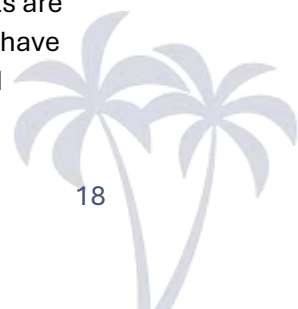
Source: PalmTran, 2024

Pedestrian Facilities

The only sidewalks and bicycle lanes in the Town of Highland Beach are on State Road A1A. A sidewalk runs parallel to the west of the State Road and two bike lanes run parallel to the State Road, one on the east and one on the west. These facilities can be seen on **Map 4**.

Transportation Improvements

There are currently no funded transportation improvement projects in the Town of Highland Beach. However, there is one illustrative project along State Road A1A in the Palm Beach County Transportation Planning Agency's (TPA) Long Range Transportation Plan. Illustrative Projects are projects that align with TPA goals and objectives but may not have cost estimates, may not have available funding for implementation, and may not have funding for ongoing operations and





maintenance. The illustrative project is the completion of the SUN Trail and East Coast Greenway, a complete street project generally along US1 or A1A corridor, from Broward County to Martin County.

9. Intergovernmental Coordination

The Intergovernmental Coordination Element (ICE) serves two main purposes: (1) to assess and analyze the existing interlocal agreements established between the Town and its local, regional, state, and federal partners, and (2) to explore potential opportunities for agreements between the Town, and its partners, that could help advance the community's health, safety, and welfare. The ICE functions as a way to facilitate the implementation of programs, grants, and assistance at the local level.

Existing Intergovernmental Coordination Mechanisms

At present, the Town of Highland Beach maintains open communication by sharing its Comprehensive Plan with adjacent local governments and regulatory agencies. Specifically-identified coordination is listed in **Table 9.1** below.

Table 9.1 Planning Coordination

Policy	Entity to Coordinate with	Type of Coordination
1.1.8	Palm Beach County Water Utilities Department, Palm Beach County Department of Environmental Resources Management, South Florida Water Management District, and through the Lower East Coast Water Supply Plan Update, as necessary.	Planning of potable water and sanitary sewer facilities, water supply sources, demands, and other services and LOS standards
1.4.1	Coastal Resilience Partnership	Coastal Natural Resources, Vulnerability
1.1.9	FDOT	When SR A1A may be impacted by development or redevelopment activities in Town
1.1.10	FDOT	When state may be planning, designing, or constructing transportation facilities within the Town boundaries
1.1.11	Schools	Should a school exist, follow Section 240.155, F.S.
1.1.12	Treasure Coast RPC	Utilize the professional resources and services it offers
1.1.13	Dept Community Affairs	Utilize professional services and resources. Comprehensive Plan shall maintain consistency with the goals and policies of the State Comprehensive Plan and more specifically with the goals pertaining to coastal, marine and



		natural resources, land use, urban revitalization, public facilities, transportation and plan implementation.
1.1.14	DEP	Coordinate planning and permitting activities
1.1.15	FL Dept of State	As Needed, Division of Historical Resources
1.1.19	South County Area	Joint Planning for equitable potable water needs

Sources: <https://www.pbco-npdes.org/InterlocalAgreements/HighlandBeach,Townof-InterlocalAgreement.pdf>, Town of Highland Beach 2022 Comprehensive Plan, <https://discover.pbc.gov/resilience/Documents/191217%20EXECUTED%20ILA.pdf>

As shown in **Table 9.2**, the Town will formally request certain entities to share any amendments to their level of service standards, as shown in the Table below

Table 9.2 Town to request Formal Amendments to Comprehensive Plans from the following

Jurisdiction	Type of Coordination
City of Boca Raton	Potable Water, Traffic (S.R. A1A only), Recreation and Open Space
City of Delray Beach	Sanitary Sewer (Wastewater Transportation), Traffic (S.R. A1A only), Recreation and Open Space, Potable Water
Palm Beach County	Sanitary Sewer, (Wastewater Treatment), Solid Waste

Sources: Town of Highland Beach Comprehensive Plan

Future Considerations

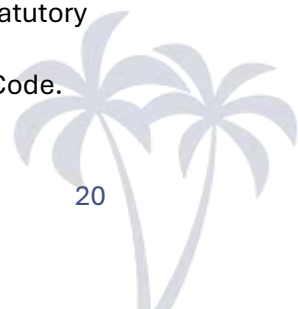
To support clarity, accountability, and maintain effective intergovernmental coordination, the Town should consider maintaining a detailed matrix of coordination efforts. This matrix should include: the entities the Town maintains coordination and/or agreements with, the frequency by which coordination shall be maintained, and the departments that shall be responsible for the coordination efforts.

Proposed Amendments

Perhaps the most pressing takeaway from this Evaluations and Appraisals Report is that the Town of Highland Beach is now effectively built out: it cannot accommodate new growth on vacant land, it can only redevelop; however, most of its older buildings were built at densities higher than those allowed by current development regulations. The Town is therefore likely to face population plateau and perhaps decline, the repercussions of which the Town should consider with priority.

The other significant change since the last EAR report has been to Coastal Management and Conservation where several actions will be reflected in the updated the Goals Objectives and Policies (GOPs).

The updated 2025 Comprehensive Plan update will reflect the results of this analysis as well as changes to the Florida Statutes, including updating references to agencies and outdated statutory references. These updates, based on the best data available at the time, will make the Comprehensive Plan compliant with current Florida Statutes and Florida's Administrative Code.





Comprehensive Plan Maps

The Maps on the following pages reflect the best data available, including from GIS and from the Town of Highland Beach directly.



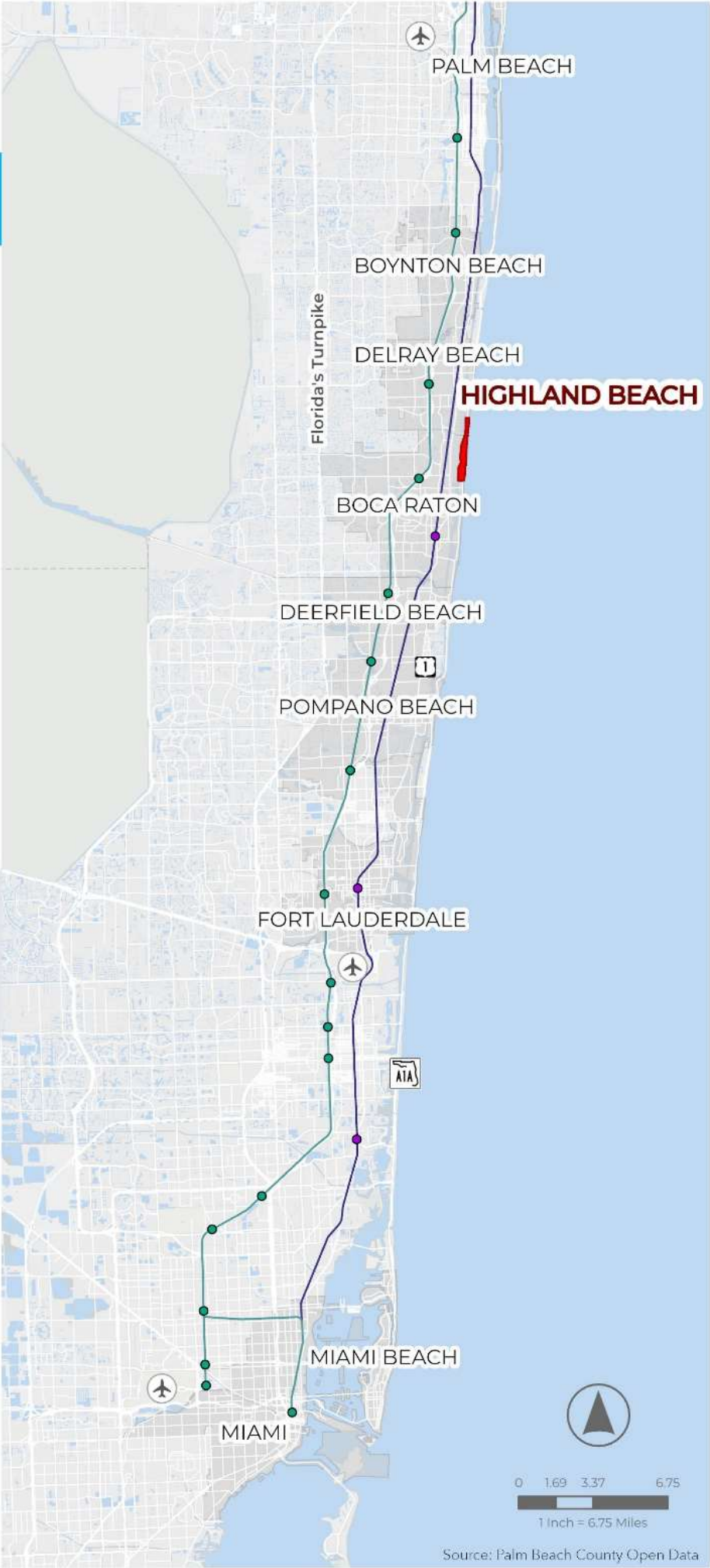
REGIONAL CONTEXT

2045 Comprehensive Plan
Map 1



Legend

- Highland Beach
- Municipality
- Major Road
- International Airport
- Brightline Route
- Brightline Station
- TriRail Route
- TriRail Station



Source: Palm Beach County Open Data

EXISTING LAND USE

2045 Comprehensive Plan

Map 2



Legend

Town Limit

Parcel

Major Road

Existing Land Use

Single Family Residential

Multi-Family Residential

Commercial

Recreation and Open Space

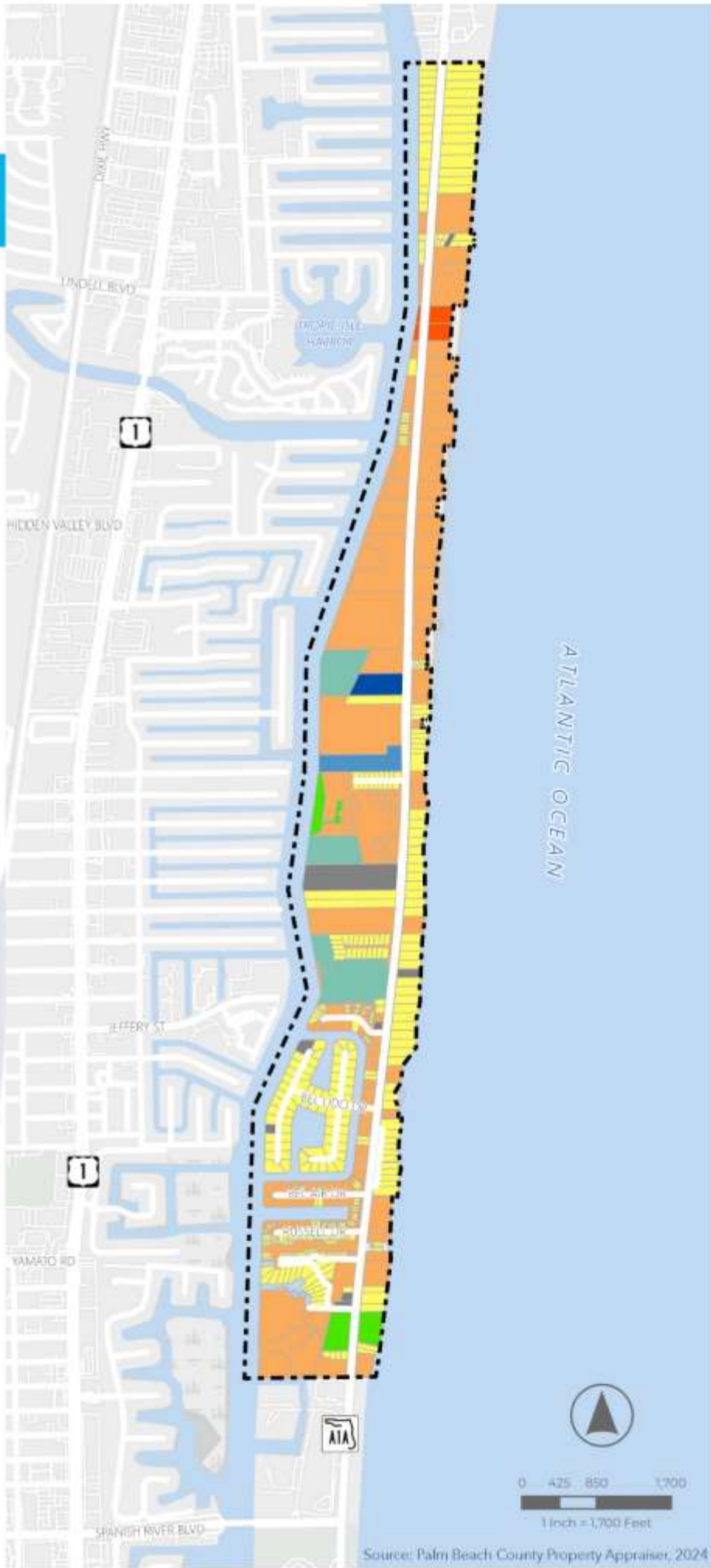
Governmental

Institutional

Conservation

Vacant

Water



Source: Palm Beach County Property Appraiser, 2024

FUTURE LAND USE

2045 Comprehensive Plan
Map 3



Legend

Town Limit

Parcel

Major Road

Future Land Use

Single Family

Multi Family Low Density

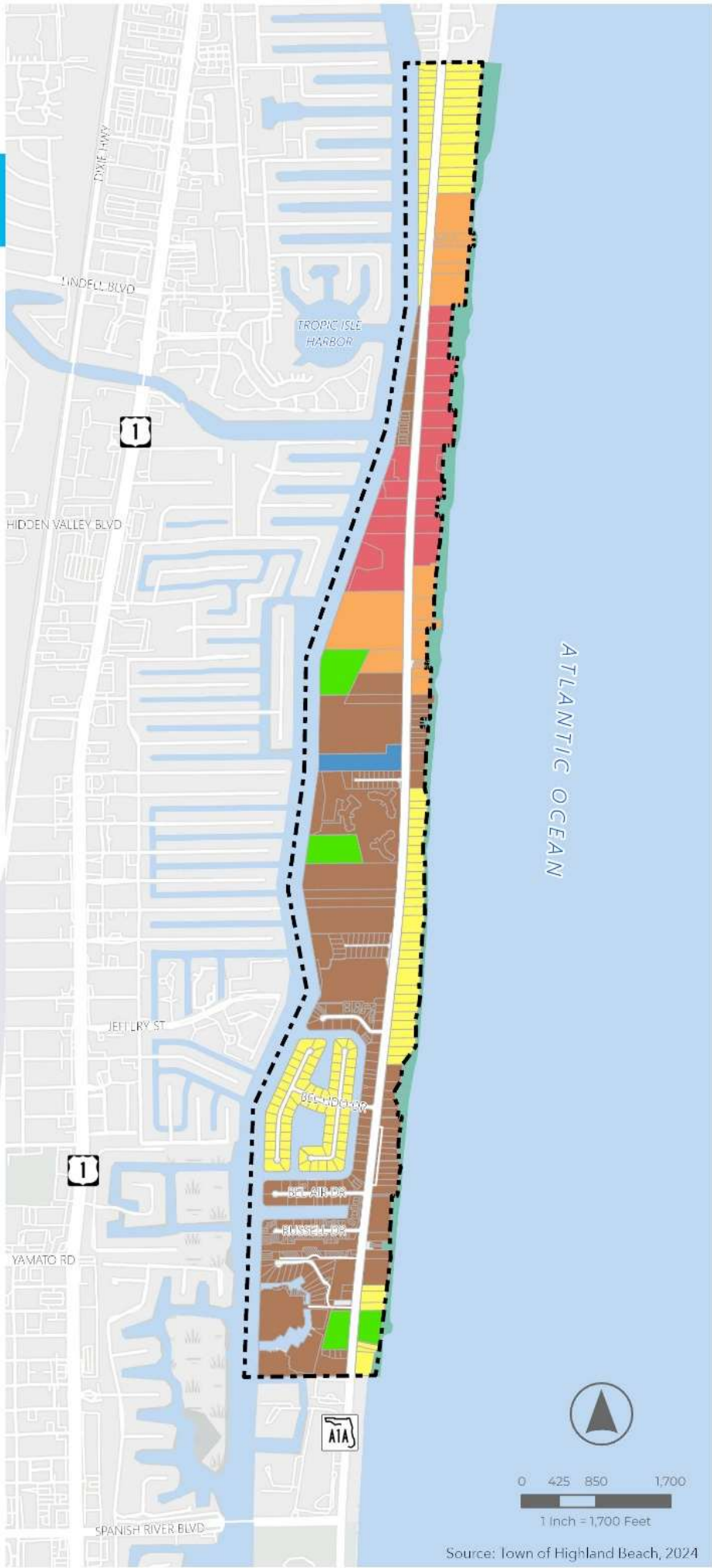
Multi Family Medium Density

Multi Family High Density

Government

Recreational Open Space

Conservation



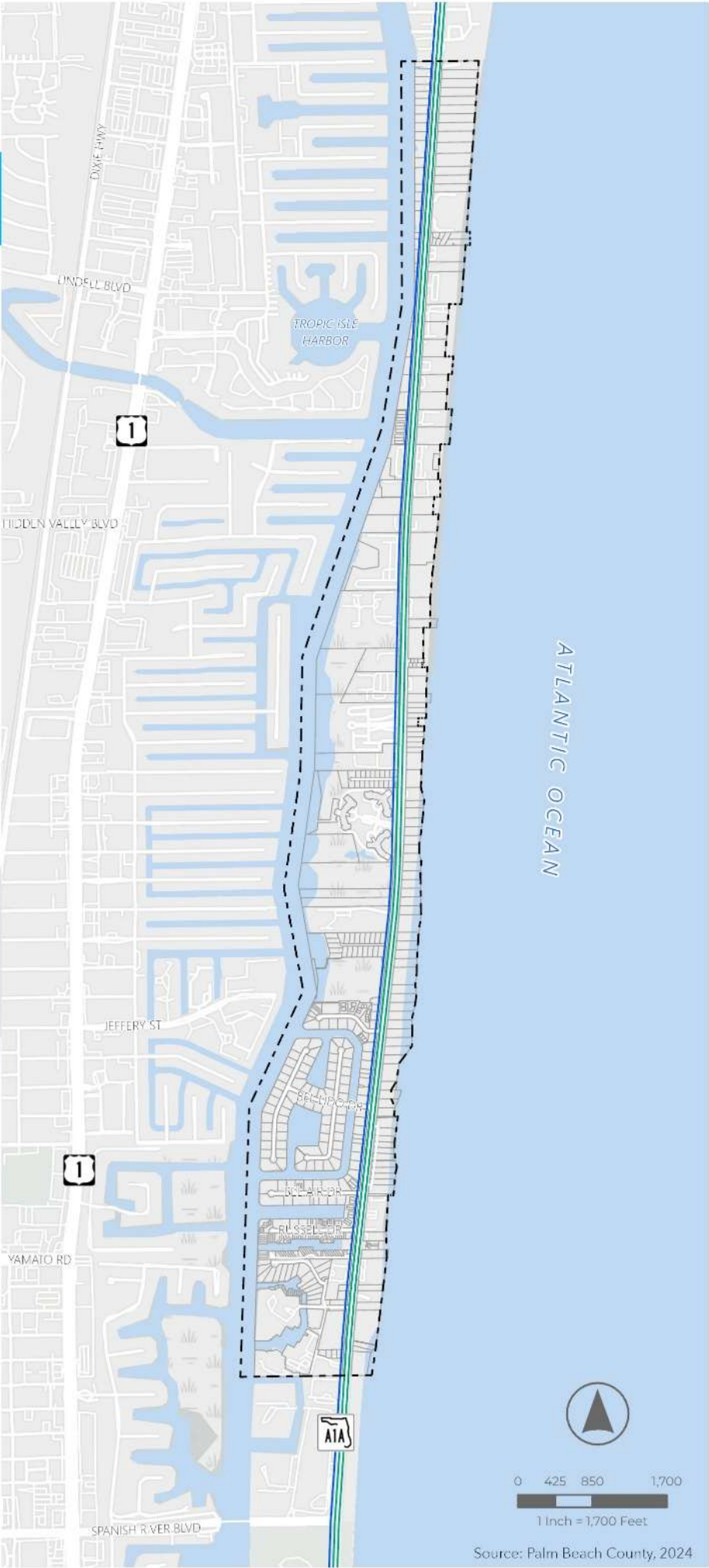
SIDEWALKS AND BIKE LANES

2045 Comprehensive Plan
Map 4



Legend

- Town Limit
- Parcel
- Sidewalk
- Road with two way bike lanes
- Major Road



ATLANTIC OCEAN



0 425 850 1,700
1 Inch = 1,700 Feet

Source: Palm Beach County, 2024

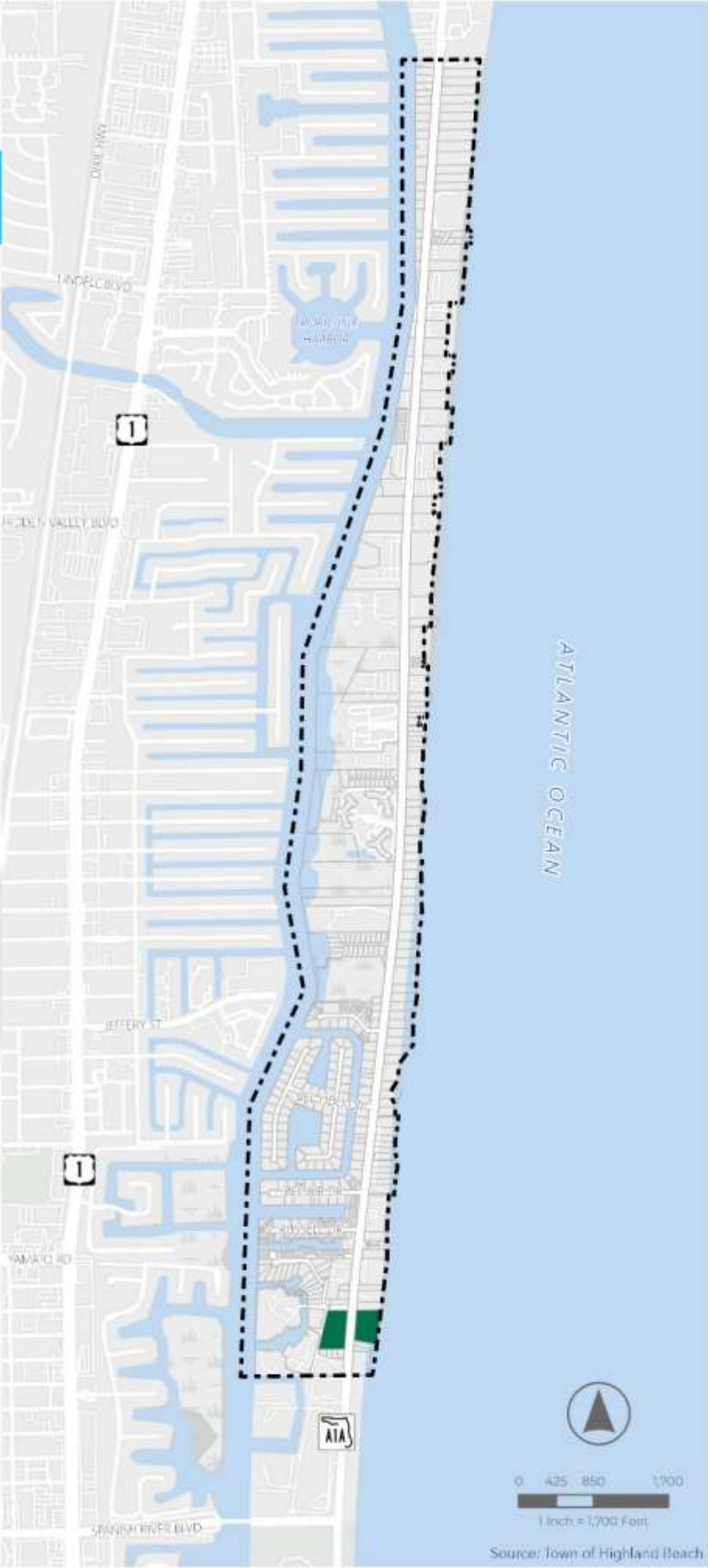
PARK FACILITIES

2045 Comprehensive Plan
Map 5



Legend

- Town Limit
- Parcel
- Major Road
- Milani Park



Source: Palm Beach County Open Data

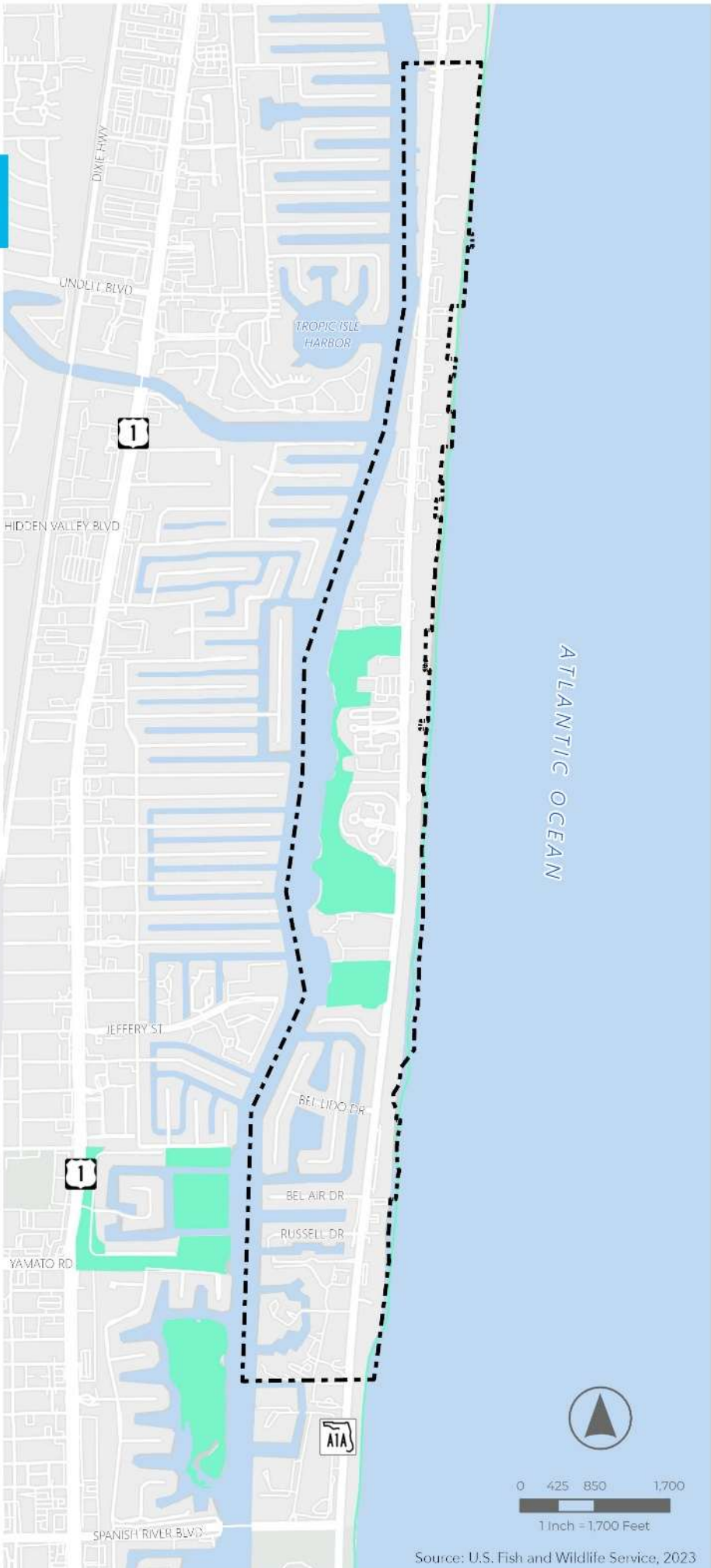
WETLANDS

2045 Comprehensive Plan
Map 7



Legend

- Town Limit
- Major Road
- Estuarine and Marine Wetland



Source: U.S. Fish and Wildlife Service, 2023

COASTAL HIGH HAZARD AREA

2045 Comprehensive Plan

Map 8



Legend

- Town Limit
- Parcel
- Major Road
- Coastal High Hazard Area (CHHA)



SEA, LAKE, AND OVERLAND
SURGES FROM HURRICANES
(SLOSH)

2045 Comprehensive Plan

Map 9



Legend

Town Limit

Parcel

Major Road

Hurricane Category

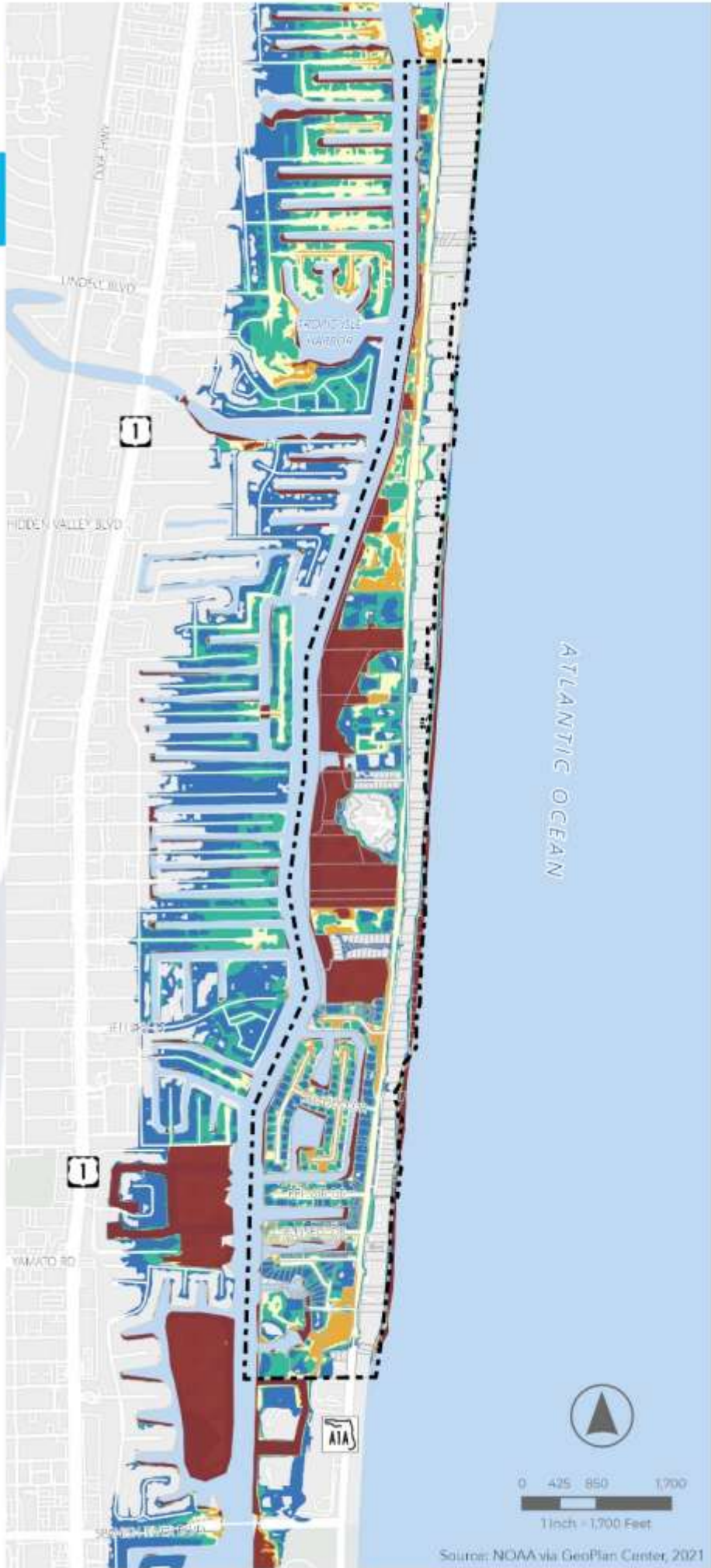
Category 1

Category 2

Category 3

Category 4

Category 5



Source: NOAA via GeoPlan Center, 2021

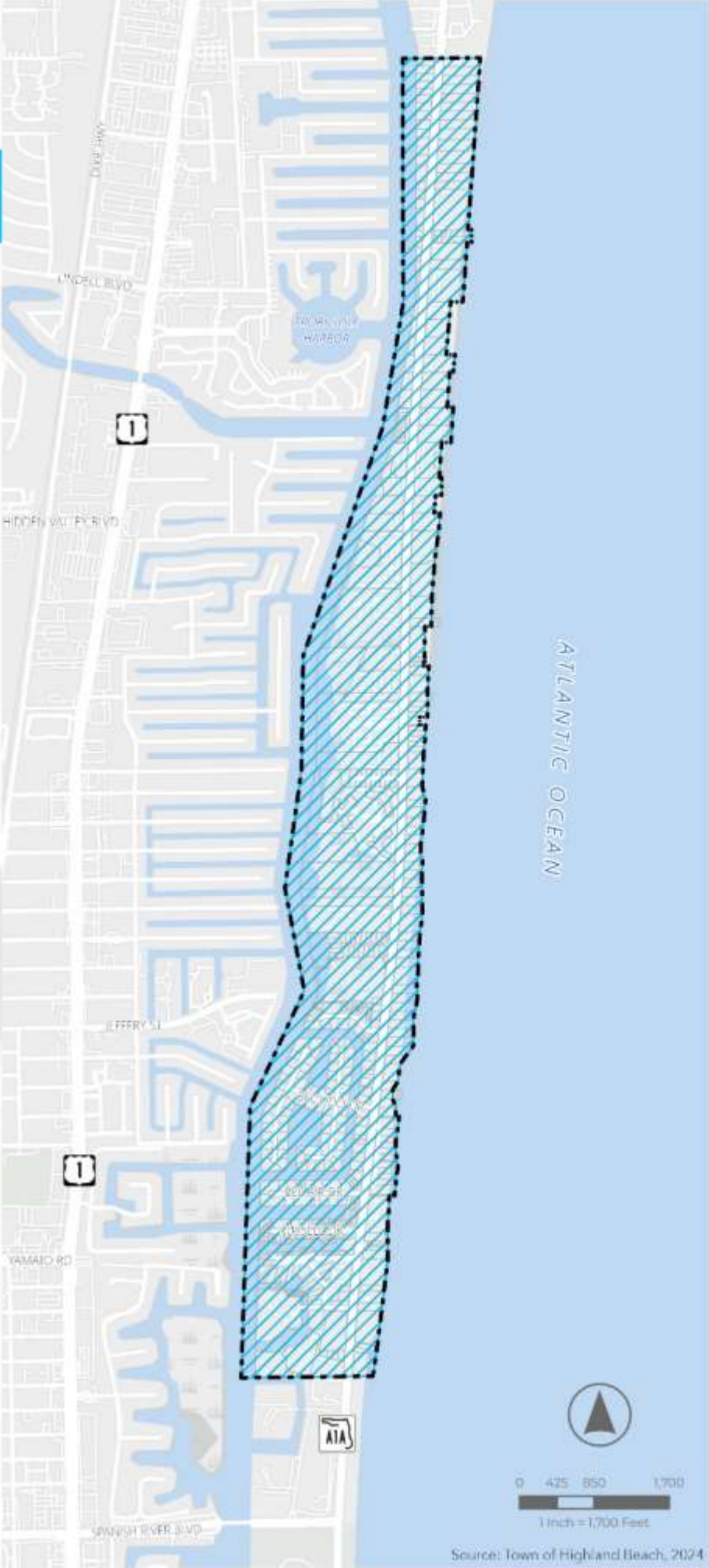
UTILITY SERVICE AREA

2045 Comprehensive Plan
Map 10



Legend

- Town Limit
- Parcel
- Utility Service Area
- Major Road



WELLFIELD PROTECTION AREA

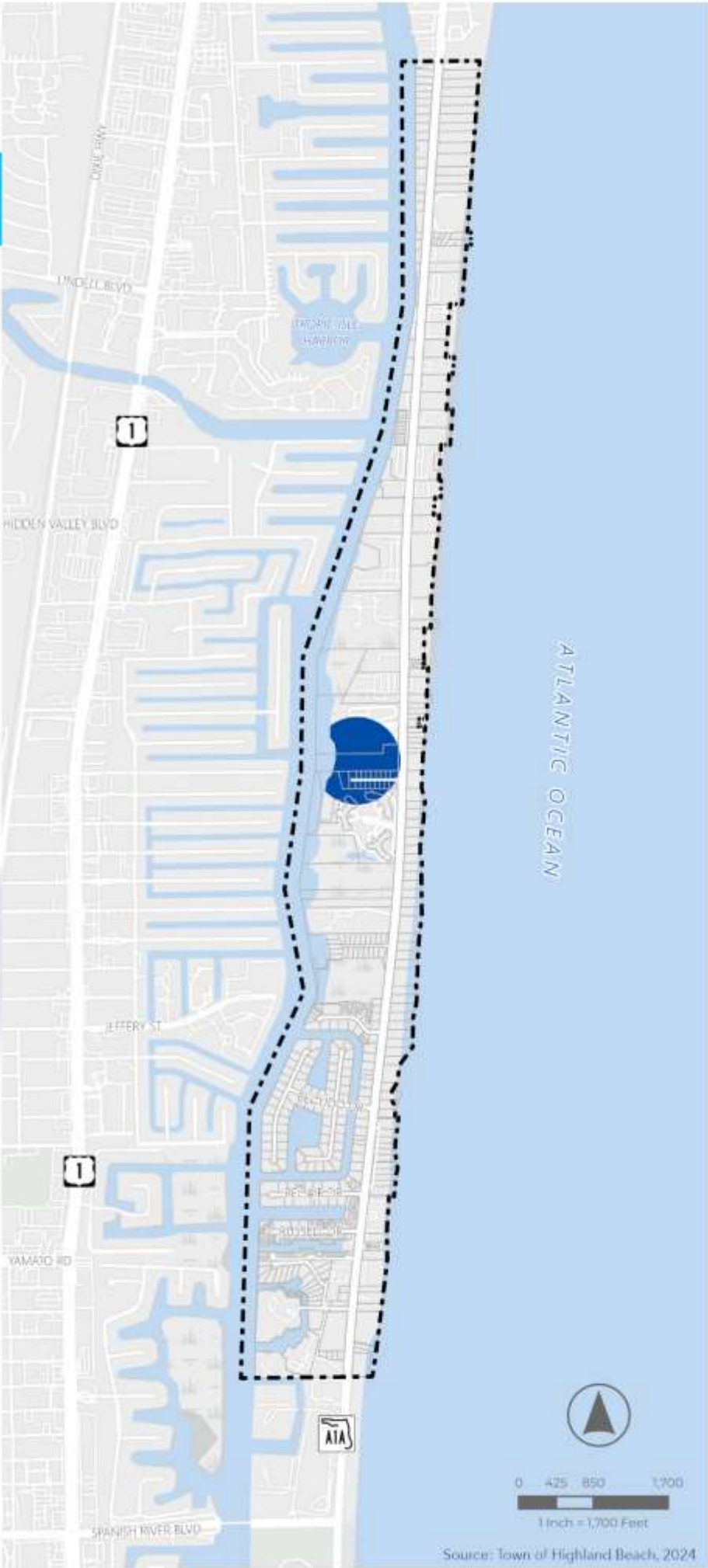
2045 Comprehensive Plan

Map 11



Legend

- Town Limit
- Parcel
- Wellfield Protection Area
- Major Road



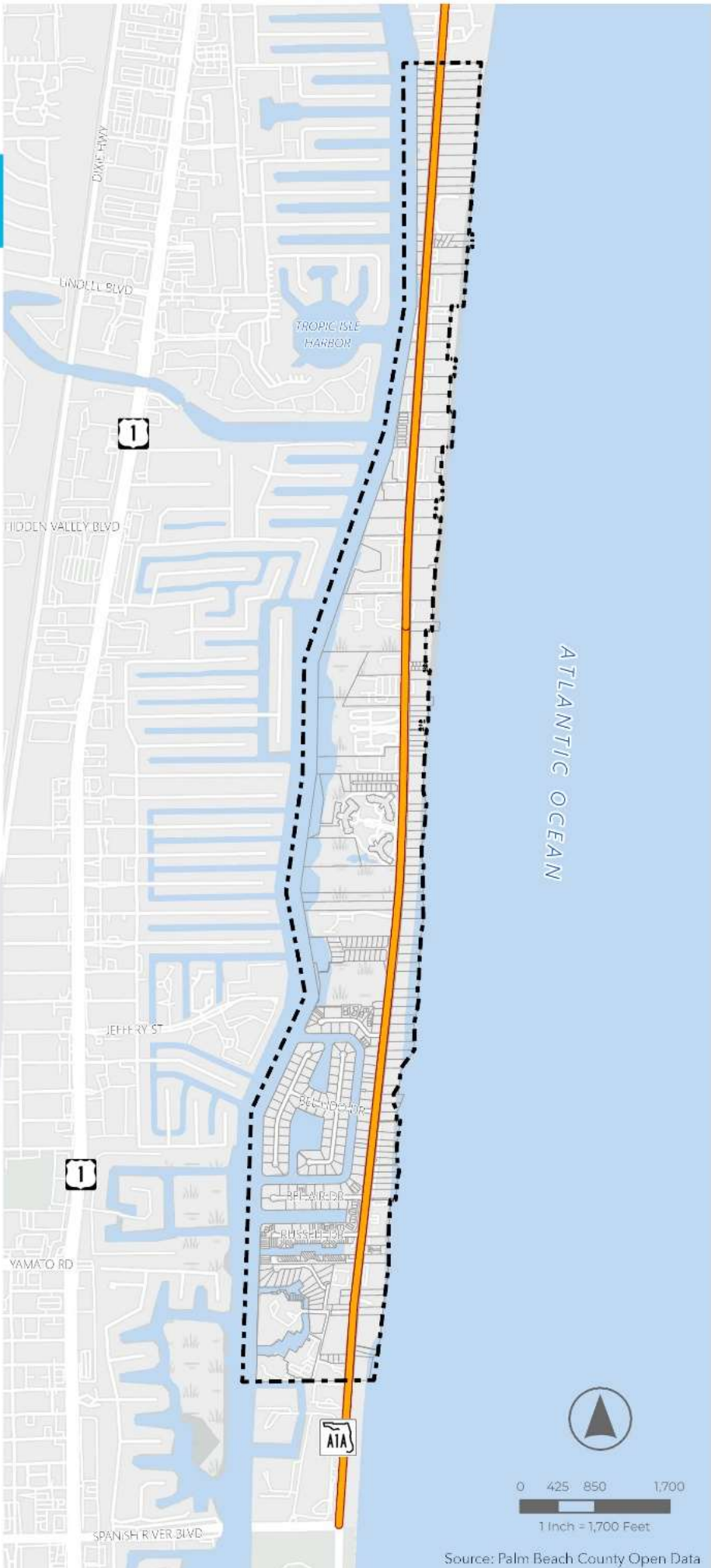
ADOPTED LEVEL OF SERVICE

2045 Comprehensive Plan
Map 12



Legend

- Town Limit
- Parcel
- Level of Service D



Source: Palm Beach County Open Data

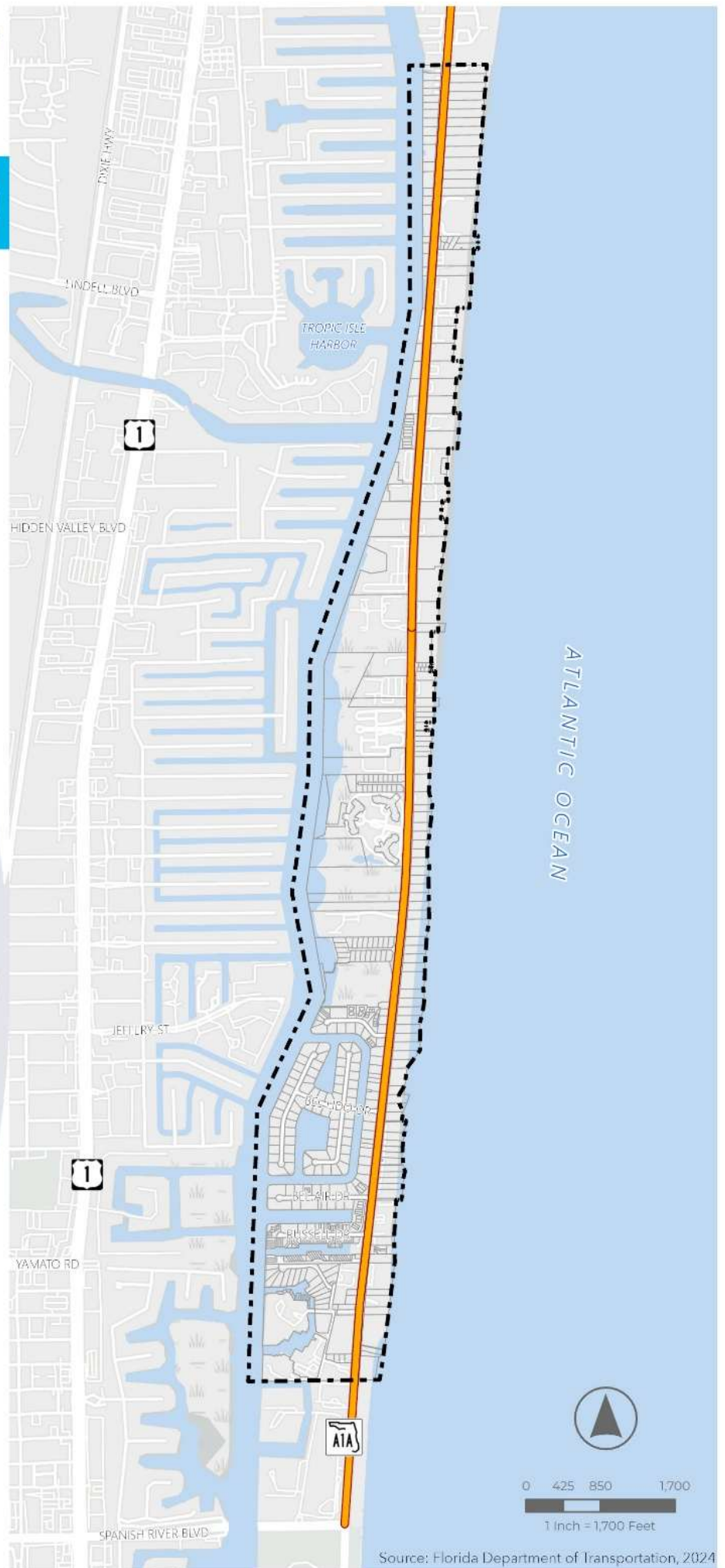
CURRENT & PROJECTED LEVEL OF SERVICE (2035 & 2045)

2045 Comprehensive Plan
Map 13



Legend

- Town Limit
- Parcel
- Level of Service D



ROADWAY MAINTENANCE RESPONSIBILITY

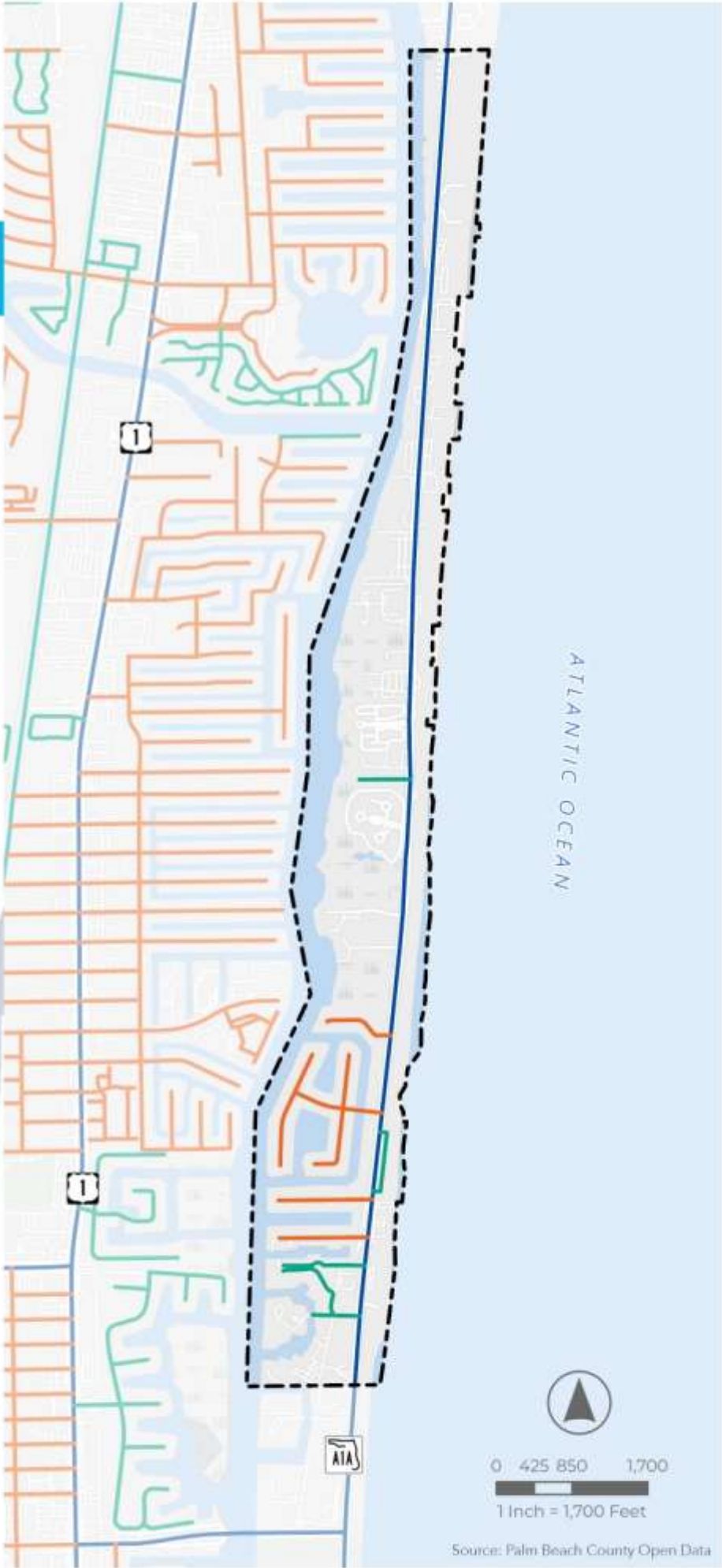
2045 Comprehensive Plan

Map 14



Legend

- Town Limit
- Roadway Maintenance Responsibility**
 - FDOT
 - Palm Beach County
 - Municipality
 - Private



ROADWAY FUNCTIONAL CLASSIFICATIONS

2045 Comprehensive Plan
Map 15



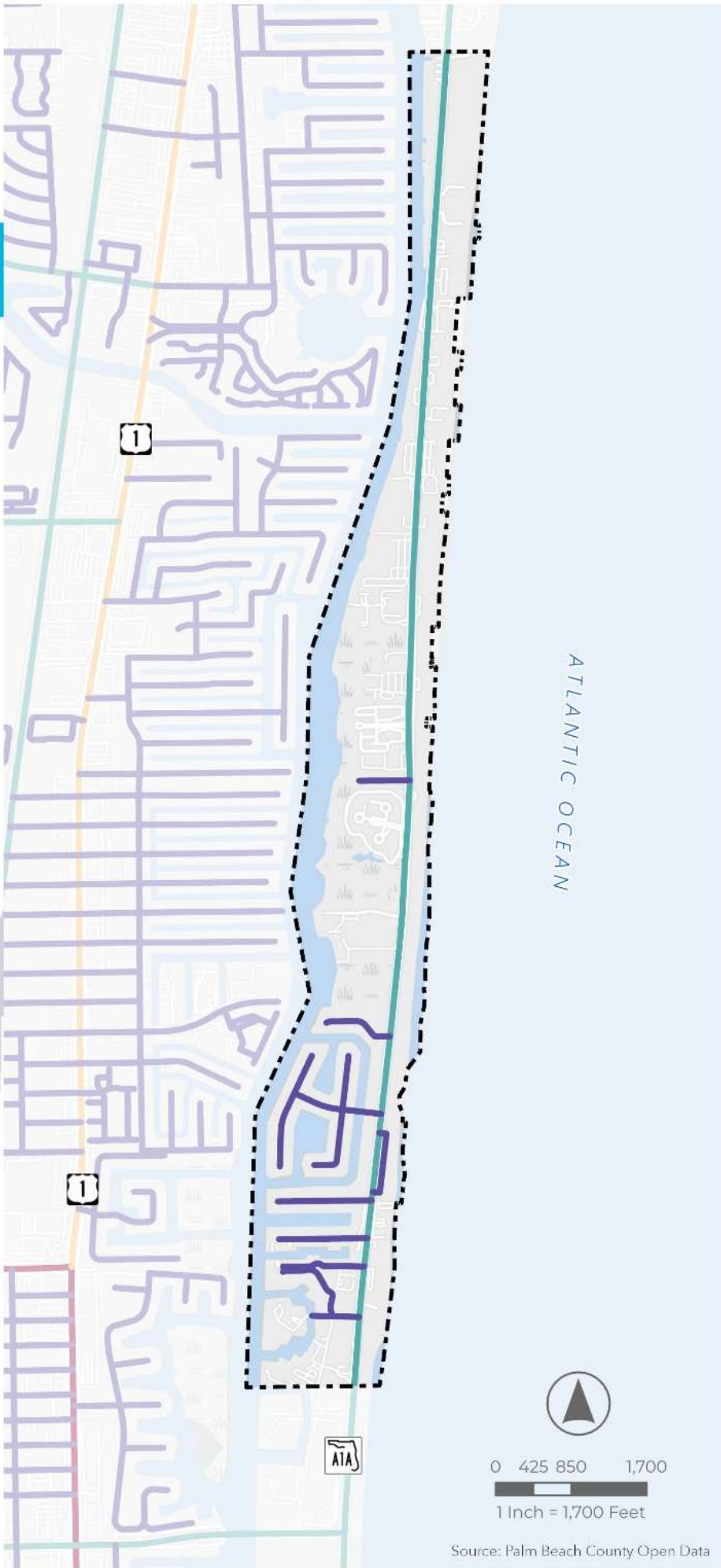
Legend

Town Limit

Functional Classification

- Urban Principal Arterial
- Rural Principal Arterial
- Urban Major Arterial
- Rural Major Arterial*
- Rural Minor Arterial
- Urban Collector
- Local Road

* Please note that the functional classification does not reflect ownership (public or private) or roadway maintenance responsibilities. "Local Road" thoroughfares may therefore include private roads such as Ocean Place, Boca Cove Lane, and Grand Court.



Source: Palm Beach County Open Data

ROADWAY CONTEXT CLASSIFICATIONS

2045 Comprehensive Plan

Map 16



Legend

Town Limit

Context Classification

C2-Rural

C3C-Suburban Commercial

C3R-Suburban Residential

C4-Urban General



Source: FDOT, 2024