# TOWN OF MELBOURNE BEACH COMPREHENSIVE PLAN

# SUPPORT DOCUMENTATION



August 2021

#### **TOWN OF MELBOURNE BEACH**

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# CHAPTER 1 INTRODUCTION

#### Introduction

The Town of Melbourne Beach has designated the Planning and Zoning Board to act as the Local Planning Agency to work with consultants to prepare amendments to the Comprehensive Plan based upon the August 2019 *Town of Melbourne Beach Florida Evaluation and Appraisal Report* (EAR).

Included with the 2019 EAR, the Town has opted to create separate Support and Goals, Objectives and Policies documents. In order to complete the task, the Town of Melbourne Beach Comprehensive Plan now consists of the following two documents: (1) April 2020 Town of Melbourne Beach Comprehensive Plan Support Documentation (Support Document); and (2) April 2020 Town of Melbourne Beach Comprehensive Plan Goals, Objectives and Policies (Goals, Objectives and Policies).

The following Town of Melbourne Beach Support Document consists of: (1) data and analysis for each of the required Comprehensive Plan Elements extracted, and updated where necessary, from the September 2010 Town of Melbourne Beach Comprehensive Plan; and (2) updates from the 2019 EAR. The Support Document is adopted by Town Resolution for ease of future updates while the Goals, Objectives and Policies document is adopted by Town Ordinance, as required by Florida Statutes.

#### **Definitions**

The following are definitions created for use with the Melbourne Beach Comprehensive Plan. All other terms are as defined in Chapter 163, Florida Statutes which shall apply within the Support Document and Goals, Objectives and Policies Document of the Town of Melbourne Beach.

ACCESSORY USE: A use of land or of a building or portion thereof customarily incidental and subordinate to the principal use of the land or building and located on the same lot as the principal use.

ACQUIRE: To come into possession or control of.

ADAPTIVE REUSE: The installation of a new use within an older building, or within a building originally designed for a special or specific purpose, while retaining historic features, if any, of the original building.

AFFORDABLE HOUSING: A dwelling unit for which monthly rents or monthly mortgage payments, including taxes, insurance and utilities, do not exceed 30 percent of that amount which represents the percentage of the median adjusted gross annual income for households or persons indicated in Section 420.0004, Florida Statutes (F.S.) (i.e., Low income, moderate income and very low income households or persons as defined herein.) Affordable housing definitions that are prescribed by housing programs administered by the U.S. Department of Housing and Urban Development (HUD) or the State of Florida may also be used by Melbourne Beach when implementing such programs.

AGRICULTURAL USES: Uses of land or water for the following purposes: crop cultivation (including crops for biomass purposes), plant nurseries and greenhouses; poultry and livestock production; grazing and pasturing of animals, including horses; veterinary services for livestock and horses; fish hatcheries; dairies; apiculture; silviculture; structures such as stables, barns, sheds, silos, granaries, windmills and related agricultural structures and supportive appurtenances, such as machinery for harvesting and processing of crops and the sale of such machinery; and farm worker and farm owner housing directly associated with land and water in bona fide agricultural use.

ANCILLARY USES: Uses that are supportive of and subordinate to the principal use or uses of a property or structure; such uses may not be customarily located with the principal use.

ANTIQUATED PLAT: A subdivision of land that does not comply with current zoning district and/or subdivision requirements, or that has limited development potential due to inadequate public facilities, services or environmental constraints. These generally include lands platted prior to modern land development regulations adopted in 1972. Examples include plats with substandard designs for lot size, configuration, roads or drainage facilities.

ANTIQUATED SUBDIVISION: A subdivision of land that was created prior to modern land development regulations adopted in 1972 and does not comply with current zoning and/or subdivision standards, typically in terms of lot size, road access, stormwater management or utility service.

AQUIFER: A subsurface rock layer that contains water and releases it in appreciable amounts. Aquifers are important reservoirs storing large amounts of water relatively free from evaporation loss or pollution. An aquifer may be porous rock, unconsolidated gravel, fractured rock or cavernous limestone.

AREAS OF SPECIAL FLOOD HAZARD (ALSO KNOWN AS SPECIAL FLOOD HAZARD AREAS): Land in the floodplain of a community subject to a one (1) percent or greater chance of flooding in any given year.

AREA MEDIAN INCOME (AMI): Median income is that income which divides the income distribution into two equal parts, with one-half of the cases falling below the median income and one-half falling above. HUD uses the median income for families in metropolitan and non-metropolitan areas to calculate income limits for eligibility in a variety of housing programs and adjusts the median for different family sizes so that family income is expresses as a percentage of the area median income.

ATTAIN: To reach an end, to arrive by effort.

BACKLOGGED FACILITY: Road on the State Highway System operating at a level of service below the minimum level of service standards, which is not a constrained facility, and which is not programmed for construction adequate to bring it up to the applicable minimum level of service standard in the first three years of the Florida Department of Transportation's adopted work program or in a local government's capital improvements element.

BASE FLOOD ELEVATION (BFE): The elevation of flooding expected in a one (1) percent chance flood event. The Flood Insurance Rate Map (FIRM) for Melbourne Beach measures such elevations in North American Vertical Datum (NAVD) 1988.

BONA FIDE AGRICULTURAL USE: Land or water areas currently in active use for one or more of the agricultural uses specified herein and eligible for Federal, State and local recognition as such for tax purposes.

BUFFER, OPEN SPACE: A specified setback between land uses that contains no buildings or signage; a physical dimension intended to reduce the impact of a more intense use on a less intense use.

BUFFER, VEGETATIVE: A permanent strip of perennial native vegetation (or vegetation with low water demands) of a specified width, established and maintained in accordance with an approved landscape plan to minimize the risk of pollutants reaching surface waters, to treat stormwater, and/or to provide a protective transition between land uses and reduce the impact of a more intense use on a less intense use.

CENTRAL TREATMENT FACILITY/PLANT: A large water or sewage treatment facility providing service to a number of customers over a broad area.

COASTAL EROSION: The wearing away of land, including depletion of dune systems and damage to water-front properties and infrastructure, by the action of natural forces embodied in waves, water currents and wind. Additionally, coastal erosion effecting inland properties can occur along streams, canals, drainage ditches and rivers.

COASTAL HIGH HAZARD AREA (CHHA): The area defined by the SLOSH model to be inundated by a Category 1 hurricane.

COASTAL PLANNING AREA (CPA): The area most susceptible to sea level rise and other flooding, and where the main focus on being sustainable regarding these events will occur.

COMMUNITY PARK: A community park is designed to serve the recreation needs of several communities, a city or a county, and may provide some areas and facilities that are resource-based. Typical areas and facilities include ball fields, sport courts, multipurpose jogging/walking trails, community centers along with natural areas, playgrounds and picnic areas. A size range between 10-50 acres is desirable, although larger areas are found often where a large portion of a site is set aside for passive recreation and preservation.

COMMUNITY RESIDENTIAL HOME: The term "community residential home" shall be defined as set forth in Section 419.001, Florida Statutes, or its successor provisions.

#### COMPATIBILITY:

1. A condition in which land uses can coexist in relative proximity to each other in a stable fashion over time such that no use has a materially negative impact directly or indirectly on another use; and

2. A use or structure that by function, hours of operation, type and amount of traffic generated, building size, setbacks from property lines, relationship to land value, and relationship to mass and bulk of other structures in the same zoning district and neighborhood, does not alter the character of the community or neighborhood.

CONCURRENCY: A requirement of Florida Statutes mandating that public services and facilities meet or exceed the level of service standards established in the Capital Improvements Element required by Section 163.3177, Florida Statutes., and are available for a development in accordance with the requirements of Florida Statutes, or that development orders and permits are conditioned on the availability of these public facilities and services necessary to serve the proposed development without reduction in level of service. The concurrency requirement does not apply to public transit facilities, defined by state law to include: transit stations and terminals, transit station parking, park-and-ride lots, intermodal public transit connection or transfer facilities and fixed bus, guideway and rail stations.

CONSERVE: To keep in a safe or sound state, to avoid wasteful or destructive use of.

CONSTRAINED FACILITY: Road on the State Highway System operating at a level of service below the minimum level of service standards and on which it is not feasible to add two or more through-lanes to meet current or future traffic needs because of physical, environmental or policy constraints. Physical constraints primarily occur when intensive land use development is immediately adjacent to roads making expansion costs prohibitive. Environmental or policy constraints primarily occur when decisions are made not to expand a road based on environmental considerations, operational considerations or documented policy (FDOT definition).

CONSUMPTIVE USE PERMIT (CUP): A permit issued by a Florida Water Management District (such as the St. Johns River Water Management District) that specifies the maximum amount of water that can be withdrawn from a regulated water resource by the permit holder.

CONSISTENT: Development that complies with land use categories, densities or intensities, and furthers the goals, objectives and policies in the Comprehensive Plan and meets all other applicable criteria established by the local government.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED): A multi-disciplinary approach to deterring criminal behavior through the use of strategies that rely on the ability to influence a potential offender's decisions that precede criminal acts. These design strategies emphasize the use of 'defensible space' design features, such as natural surveillance and natural access control, that enhance the perceived risk of detection, thus deterring criminal action.

DENSITY: See NET RESIDENTIAL DENSITY

DEVELOPMENT: The carrying out of any building activity or mining operation, the making of any material change in the use or appearance of any structure or land, or the dividing of land into three or more parcels. This term does not include the use of land for the purpose of growing plants, crops, trees, and other agricultural or forestry products, or the raising of livestock; or for other agricultural purposes.

- 1. The following activities or uses shall be taken for the purposes of this chapter to involve "development," as defined in this section:
  - (a) A reconstruction, alteration of the size, or material change in the external appearance of a structure on land.
  - (b) A change in the intensity of use of land, such as an increase in the number of dwelling units in a structure or on land or a material increase in the number of businesses, manufacturing establishments, offices, or dwelling units in a structure or on land.
  - (c) Alteration of a shore or bank of a seacoast, river, stream, lake, pond, or canal, including any "coastal construction" as defined in s. 161.021.
  - (d) Commencement of drilling, except to obtain soil samples, mining, or excavation on a parcel of land.
  - (e) Demolition of a structure.
  - (f) Clearing of land as an adjunct of construction.
  - (g) Deposit of refuse, solid or liquid waste, or fill on a parcel of land.
- 2. The following operations or uses shall not be taken for the purpose of this chapter to involve "development" as defined in this section:
  - (a) Work by a highway or road agency or railroad company for the maintenance or improvement of a road or railroad track, if the work is carried out on land within the boundaries of the right-of- way.
  - (b) Work by any utility and other persons engaged in the distribution or transmission of gas, electricity, or water, for the purpose of inspecting, repairing, renewing, or constructing on established rights-of-way any sewers, mains, pipes, cables, utility tunnels, power lines, towers, poles, tracks, or the like. This provision conveys no property interest and does not eliminate any applicable notice requirements to affected land owners.
  - (c) Work for the maintenance, renewal, improvement, or alteration of any structure, if the work affects only the interior or the color of the structure or the decoration of the exterior of the structure.
  - (d) The use of any structure or land devoted to dwelling uses for any purpose customarily incidental to enjoyment of the dwelling.
  - (e) The use of any land for the purpose of growing plants, crops, trees, and other agricultural or forestry products; raising livestock; or for other agricultural purposes.

- (f) A change in use of land or structure from a use within a class specified in an ordinance or rule to another use in the same class.
- (g) A change in the ownership or form of ownership of any parcel or structure.
- (h) The creation or termination of rights of access, riparian rights, easements, covenants concerning development of land, or other rights in land.

"Development," as designated in an ordinance, rule, or development permit includes all other development customarily associated with it unless otherwise specified. When appropriate to the context, "development" refers to the act of developing or to the result of development. Reference to any specific operation is not intended to mean that the operation or activity, when part of other operations or activities, is not development. [Sources: Section 380.04(1) and 380.04(3)(f), Florida Statutes (Florida Statutes.)]

DEVELOPMENT ORDER: An order granting, denying or granting with conditions an application for a development permit. (Source: Section 163.3164(7). F.S.)

DEVELOPMENT PERMIT: A building permit, zoning permit, subdivision approval, rezoning, certification, special exception, variance, conditional use or any other official action of local government having the effect of permitting the development of land. (Source: Section 163.3164(8), F.S.)

DIRECT: To regulate the activities or course of, to dominate and determine the course, enjoin with authority.

EFFECTIVE: Producing a desired result.

EFFICIENT: Productive with minimal waste when compared to current conventional methods.

ENCOURAGE: To stimulate, spur on, inspire, and give help or patronage.

ENHANCE: To improve, to make better in value, function, desirability or attractiveness.

ENSURE: To make sure; to make certain; guarantee

ESTABLISH: To institute permanently by enactment or agreement, bring into existence, bring about.

EVALUATE: to determine the significance or worth of by careful appraisal or study

EXTREMELY LOW INCOME HOUSEHOLDS (FORMERLY KNOWN AS POVERTY LEVEL HOUSEHOLDS): One or more persons or a family, the total annual adjusted gross income of which does not exceed 30 percent of the median annual adjusted gross income for households within the metropolitan statistical area (MSA), or, if not within an MSA, within the county in which the person or family resides, whichever is greater.

FINANCIAL FEASIBILITY: A comprehensive plan is financially feasible if sufficient revenues are currently available or will be available from committed funding sources for the first three years, or will be available from committed or planned funding sources for years 4 and 5, of a 5- year capital improvements schedule or financing capital improvements, such as ad valorem taxes, bonds, State and Federal funds, tax revenues, impact fees, and developer contributions, which are adequate to fund the projected costs of the capital improvements identified in the comprehensive plan necessary to ensure that adopted level-of-service standards are achieved and maintained within the period covered by the schedule of capital improvements.

FLASH FLOODING: Flooding that begins within six (6), and often within three (3) hours of heavy rainfall.

FLOOD INSURANCE RATE MAP (FIRM): An official map of a community, on which the Federal Insurance Administration has delineated both special flood hazard areas (SFHA) and the risk premium zones applicable to the community.

FLOODING: The inundation of a normally dry area caused by an increased water level in an established watercourse, such as a river, stream, drainage ditch, or ponding of water at or near the point where rain fell.

FLOODS: An inundation of water which occur during heavy rains, when rivers overflow, or when dams or levees break.

FLOODWAY: The channel of a river and the portion of the overbank floodplain that carries most of the flood.

FLOOR AREA: The sum of the gross horizontal areas of all floors of a building or buildings on a property measured from the exterior faces of exterior walls, or from the centerlines of walls separating two attached buildings.

FLOOR AREA RATIO (FAR): The floor area of the building(s) on a property divided by the square feet of land area of that property.

FREEBOARD: A margin of safety added to the base flood elevation to account for waves, debris, miscalculations, or lack of data.

FLORIDA-FRIENDLY LANDSCAPING: Landscaping practices designed to preserve Florida's natural resources and protect the environment.

FUNCTIONAL CLASSIFICATION: Assignment of roads into systems according to the character of service they provide in relation to the total road network. Basic functional categories include arterial roads, collector roads and local roads.

GEOGRAPHIC SERVICE AREA: For recreational facilities, a geographic service area identifies the time or distance which a resident is willing to travel to use a given park of facility.

GOAL: a generalized statement of a desired end state toward which objectives and policies are directed.

GREEN BUILDING PRACTICES: Green building design and construction practices address: sustainable site planning; safeguarding water; energy efficiency; conservation of materials and resources and indoor environmental quality. (Website of US Green Building Council, Atlanta Chapter).

GREEN ROOFS: Ecological roof gardens that improve a building's thermal insulation, absorb less heat, produce oxygen, absorb carbon dioxide, filter air pollution and absorb and/or manage a portion of rainwater falling onto it, thus slowing stormwater runoff.

GROUP HOME FACILITY: The term "group home facility" shall be defined as set forth at Section 393.063(25), Florida Statutes, or its successor provisions.

IMPLEMENT: To carry out, to give practical effect to, ensure actual fulfillment by concrete measures.

IMPROVE: To make more acceptable or bring nearer to some standard.

IDENTIFY: To establish the identity, location or existence of.

INFILL DEVELOPMENT AREA: Infill development areas are developable vacant lands located in otherwise built up urban areas where public facilities such as sewer systems, roads, schools and recreation areas area already in place or are in close proximity; the average residential density is at least four dwelling units per net acre. Infill development areas may be located within residential, nonresidential or mixed use urban areas.

INTENSITY: A measurement of the amount of development either allowed or existing on a property typically expressed as density (units per acre) for residential uses and floor area ratio (FAR) for non residential uses.

JOINT PLANNING AGREEMENT (JPA): An interlocal agreement enabled by Chapter 163.3171 and adopted through appropriate official action that provides for joint policies and programs on annexation, future land use designations, provision of services and conflict resolution.

LAGOON: A shallow body of water connected with a larger water body.

LAGOON-FRIENDLY LANDSCAPING/YARDS: Landscaping practices designed to preserve Florida's natural resources and protect the environment, in the Town's case with particular emphasis on landscaping practices which limit pollutants and emphasize cleansing of the Indian River Lagoon. The term is synonymous with Florida-friendly landscaping.

LAND USE DESIGNATION: Classification of land use that specifies the allowed range of densities (numbers of housing units per acre or other similar measure) and/or intensities (number of square feet of buildings or similar measure), general types of uses allowed, and zoning district or districts allowable within that land use classification. Land use designations represent the long-range desired use of a property. A land use designation is not a development order nor development permit. It does not grant permission to begin construction, and does not automatically assure rezoning to a particular zoning district. The uses identified in the definitions for land use designations are intended to identify the range of uses allowable within each designation.

All uses noted as examples are not permitted within each zoning classification permitted within the designation. The Code of Ordinances identifies the particular uses permitted within particular zoning classifications.

LEED: Leaders in Energy and Environmental Design, a building environmental certification program developed and operated by the United States Green Building Council.

LEVEL OF SERVICE (PARKS): An indicator of the extent or degree of service provided, based on the operational characteristics of a facility both from a programming and maintenance standard.

LEVEL OF SERVICE (TRAFFIC): For highways is a qualitative measure describing operating conditions within a traffic stream and driver perception of the quality of traffic flow. Levels range from "A" to "F" with level of service. A representing the best operating conditions and level of service F representing the worst operating conditions as defined by the Transportation Research Board.

LEVEL OF SERVICE: An indicator of the extent or degree of service provided by, or proposed to be provided by a facility based on the operational characteristics of the facility. Level of service indicates the capacity per unit of demand for each facility, providing a measure indicating the planned operating condition or capacity of a service according to a measurable unit, as in 'gallons per capita' for water or wastewater service.

LIMITED ACCESS FACILITY: A street or highway especially designed for through traffic, and over, from or to which owners or occupants of abutting land or other persons have no right or easement of access, light, air or view by reason of the fact that their property abuts upon such limited access facility or any other reason. Such highways or streets may be facilities from which trucks, buses and other commercial vehicles may be excluded or they may be facilities open to use by all customary forms of traffic.

LOCAL ROAD: A route providing service which is of relatively low average traffic volume, short average trip length or minimal through-traffic movements, and high land access for abutting property.

LOT: The least fractional part of subdivided lands having limited fixed boundaries, and an assigned number, letter, or other name through which it may be identified.

LOWEST FLOOR: The lowest floor of the lowest enclosed area (including basement) for living purposes. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor provided that such enclosure is not so built so as to render the structure in violation of requirements.

MINIMIZE: To reduce to the least quantity possible.

MAINTAIN: To keep in an existing state, to support or provide for, bear the expense of.

MAXIMIZE: To increase to the greatest quantity possible.

MINOR STRUCTURE: As also defined in Section 4A-110 of the Land Development Code, pile supported, elevated dune and beach walkover structures; beach access ramps and walkways; stairways; pile-supported elevated viewing platforms, gazebos, and boardwalks; lifeguard support stands; public and private bathhouses; sidewalks, driveways, parking areas, shuffleboard courts, tennis courts, handball courts, racquetball courts, and other uncovered paved areas; earth retaining walls; sand fences, privacy fences, ornamental walls, ornamental garden structures, aviaries, and other ornamental construction. It shall be characteristic of minor structures that they are considered to be expendable under design, wind, wave, and storm forces.

MULTIMODAL TRANSPORTATION SYSTEM: A transportation system that provides for the safe and efficient use of multiple modes of transportation for people and goods, and the seamless transfer of people and goods from one mode to another.

NEIGHBORHOOD PARK: The Neighborhood Park is a "walk-to" park generally located along streets where people can walk or bicycle without encountering heavy traffic. Neighborhood Parks may be provided through the development review process, direct acquisition and joint use through schools or the municipal jurisdiction.

NET BUILDABLE ACRES: The number of acres within the boundary of a development excluding areas devoted to road rights-of-way, transmission power line easements, lakes and wetland or flood prone areas.

NET RESIDENTIAL DENSITY: The number of dwelling units per net buildable acre.

OBJECTIVE: Statements, more specific in nature and which further define the area's goals and identifies the steps necessary for the satisfactory pursuit of a goal.

PARCEL OF LAND: Any quantity of land capable of being described with such definiteness that its location and boundaries may be established. It may be designated by its owner or developer as land to be used, or developed as a unit, or which has been used or developed as a unit.

PLAT: A map or delineated representation of the subdivision of lands, being a complete, exact representation of the subdivision and other information in compliance with the requirement of all applicable statutes and of local ordinances, and may include the terms "replat".

POLICY: A statement that is more detailed than an objective and provides guidelines for specific actions, which will satisfy particular objectives.

POTABLE WATER: Water suitable for drinking purposes that conforms to the drinking water standards of Federal, State and local authorities for human consumption.

PRESERVE: To keep intact.

PROMOTE: To contribute to the growth of prosperity of, to help bring into being, to present for public inspection.

PROPORTIONATE SHARE, PUBLIC EDUCATIONAL FACILITIES: A program established in accordance with Section 163.3180(13)(e), Florida Statutes (F.S.) that allows the school district and local government to enter into a legally binding agreement with a developer to provide mitigation proportionate to the demand for public school facilities to be created by actual development of a property.

PROPORTIONATE SHARE, TRANSPORTATION: A program established in accordance with Subsection 163.3180(16), Florida Statutes (F.S.), that shall apply to all developments in the Town that impact a road segment in the Town Concurrency Management System for which the developer has been notified of a failure to achieve transportation concurrency on a roadway segment or segments. This program shall not apply to Developments of Regional Impact (DRIs) using proportionate share under Subsection 163.3180(12), F.S., developments meeting the de minimis standards under Subsection 163.3180(6), F.S., or to developments exempted from concurrency as provided in the Melbourne Beach Code of Ordinances. An eligible applicant may choose to satisfy the transportation concurrency requirements of the Town by making a proportionate share contribution if the proposed development is otherwise consistent with the Comprehensive Plan of Melbourne Beach and applicable Code of Ordinances, and if the Town's five-year capital improvement program (CIP) and the Capital Improvements Element (CIE) of the Town's Comprehensive Plan includes a transportation improvement or improvements that. upon completion, will accommodate the additional trips generated by the proposed development. The Town may choose to allow an applicant to satisfy transportation concurrency through the Proportionate Share program by contributing to an improvement that, upon completion, will accommodate the additional trips generated by the proposed development.

PROTECT: To shield from injury or destruction.

PROVIDE: To supply what is needed for sustenance or support, to supply for use.

PURSUE: To find or employ measures to obtain or accomplish.

RECLAIMED WATER: Water resulting from treatment of domestic, municipal or industrial wastewater and sewage that is suitable for reuse for purposes such as irrigation of landscaping.

RECREATIONAL FACILITY: A place designed and equipped for the conduct of sports and leisure-time activities.

RECREATIONAL FACILITY, PRIVATE: A recreational facility operated by a private organization and open only to bona fide members and their guests.

RECREATIONAL FACILITY, PUBLIC: A recreational facility open to the general public; ownership need not be a governmental agency.

REGIONAL WATER SUPPLY PLAN: Adopted by the Governing Board of a Water Management District pursuant to Section 373.0361, Florida Statutes, for each water supply planning region within the District where it has been determined that existing sources of water are not adequate to supply water for all existing and future reasonable-beneficial uses, and to sustain water resources and related natural systems for the planning period. Each regional water supply plan shall be based on a 20-year planning period and include, but not be limited to a water supply development component for each water supply planning region that includes a quantification of water supply needs for existing the future reasonable-beneficial uses within the planning horizon, based on best available data, and a list of water supply development project options from which local government, government-owned, privately owned utilities and other water suppliers may choose for water supply development. Water conservation and other demand management measures, and water resources constraints, must be taken into account in developing the plan.

RETAIL SALES: Retail stores, sales and display rooms, including places where goods are produced and sold at retail on the premises.

SEA LEVEL RISE: The long term hydrologic, atmospheric and geographic effects of rising seas as caused by climate change.

SHALL: Used to express a command, is mandatory, to be done at all times without deviation.

SHOULD: Expresses ultimate desire, is generally mandatory unless otherwise justified.

SPECIAL FLOOD HAZARD AREA (SFHA): The base floodplain displayed on FEMA maps. It includes the A and V zones, which are areas with a one (1) percent chance of flooding at any given time.

STORM SURGE: The increase in water level along a shoreline during wind and wave-induced storm events.

STRIP COMMERCIAL: Strip commercial development is shallow-depth, free standing commercial development along a road, as opposed to being concentrated at major intersections or within a planned development that allows access by multiple modes of transportation, a transit-oriented development, or a mixed use development. Strip commercial is characterized by:

- Relatively small and narrow parcels (lot depths of approximately 300 feet or less); or,
- Frequent curb cuts, lack of coordinated access such as cross access drives or joint use driveways; or
- Lack of coordinated parking, between commercial uses.

STRIVE: To endeavor, to devote serious effort or energy.

SUBSTANTIAL IMPROVEMENT: Any combination of repair, reconstruction, rehabilitation, addition, or other improvement of a building or structure, taking place during a two (2)-year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. For each building or structure, the 2-year period begins on the date of the first improvement or repair of that building or structure subsequent to October 26, 1988. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

- 1. Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.
- 2. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

SUPPORT: To promote the interest or cause of, to favor actively, to advocate.

TOTAL MAXIMUM DAILY LOAD (TMDL): A calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources.

TRANSPORTATION CONCURRENCY EXCEPTION AREA (TCEA): A specified geographic area delineated in comprehensive plan within which, under limited circumstances, exceptions to transportation concurrency is allowed to reduce the adverse impact transportation concurrency may have on urban infill development and redevelopment, and the achievement of other goals and policies of the state comprehensive plan, such as promoting public transportation. Exceptions apply to land uses within the designated area. When a local government designates a TCEA, data and analysis must support the designation, and guidelines and policies within the plan must specify how transportation needs will be met. Programs may include improvements to public transportation, transportation demand management, transportation system management and financing tools for public transportation. A TCEA may cross jurisdictions when appropriate and be designated in each comprehensive plan.

URBAN SPRAWL: Urban development or uses that are located in rural areas, or rural areas interspersed with generally low-intensity or low-density urban uses, and which are characterized by one or more of the following conditions:

- (a) the premature or poorly planned conversion of rural land to other uses which fails to adequately protect and conserve natural resources;
- (b) the creation of areas of urban development or uses which are not functionally related to land uses which predominate the adjacent area:
- (c) failure to provide a clear separation between rural and urban uses;
- (d) allowing for land use patterns or timing that disproportionally increase the cost in time, money and energy of providing and maintaining facilities and services, including roads, water, sewer, stormwater management, law enforcement;

(e) the creation of areas of urban development or uses which fail to maximize the use of existing public facilities or the use of areas within which public services are currently provided or proposed to be provided. Urban sprawl is typically manifested in one or more of the following land use or development patterns: leapfrog or scattered development; ribbon or strip commercial development; or low-intensity, low- density, or single-use development other than bona fide agricultural uses.

WATERSHED: A geographic area in which water, sediments, and dissolved materials drain from higher elevations to a common, low-lying outlet or basin, a point on a larger stream, lake, underlying aquifer or estuary (US Environmental Protection Agency).

WATER DEPENDENT: a use or activity which is dependent upon a location on the water, i.e. a marina is water dependent

WATER RELATED: a use or activity which derives a benefit from a location on the water, however, it may exist away from the water, i.e. a bait shop may derive a benefit from a shoreline location but may exist in an upland location.

WORKFORCE HOUSING: Housing affordable to Melbourne Beach working households that earn up to 140 percent of Area Median Income (AMI). Melbourne Beach further defines Workforce Housing to include households in which one or more of the wage-earners, employed by either the private or the public sector, are compensated for provision of services essential to Melbourne Beach, including but not limited to: teachers and educators, police and fire personnel, government employees, healthcare personnel, and skilled building trades personnel.

ZONING DISTRICT: A specifically delineated area shown on The Town of Melbourne Beach Official Zoning Map Identified in section 7A-15 of the Code of Ordinances within which regulations govern the use, placement, spacing and size of buildings, lots and yards.

# CHAPTER 2 FUTURE LAND USE ELEMENT

#### **Introduction**

The purpose of the Future Land Use Element is to provide for the future general distribution, location, and extent of the uses of land for residential, commercial, recreation, education, public facilities, and other purposes by private and public property owners.

#### **Existing Land Uses**

The Town of Melbourne Beach is predominantly a residential community. Approximately 73.0% of the developed land area is used for residential purposes. Of the total 627 acres of land within the Town, 5.06 (0.8%) acres remain vacant.

#### **Existing Land Use Categories**

Existing Land Uses are divided into categories of Residential, Commercial Recreational, Educational, Public Facilities, Places of Worship, Rights-of-Way, and Vacant. Bays, lakes, harbors, wetlands and significant soils or minerals are not located within the Town. The distribution of existing land uses in Town is illustrated in Table 1 below.

TABLE 1

#### **EXISTING LAND USE**

LAND USE	ACRES	% OF TOTAL
Residential	457.98	73.00
Commercial	10.47	1.67
Recreational	8.25	1.32
Educational	17.90	2.86
Public Facilities	2.88	0.47
Places of Worship	6.32	1.01
Rights-of-Way	117.60	18.76
Vacant	5.06 (1)	0.80
TOTAL	627.00	100.00

<sup>(1)</sup> Consists of the following vacant parcels: Residential common area; Single-family platted lots; municipally-owned land, commercial and multiple-family.

<u>Future Land Use Categories:</u> Town of Melbourne Beach Future Land use categories are presented in Table 2 below.

#### TABLE 2 - PERMITTED LAND USE BY FUTURE LAND USE CATEGORY

#### Future Land Use Category

#### **Permitted Use Description**

Single Family Single Family dwellings, Public and private kindergarten through 12<sup>th</sup>

grade (K-12) schools meeting standards for property size and location consistent with the Brevard County School District standards, electric utility substations meeting compatibility standards included in the Comprehensive Plan and Code of Ordinances, accessory structures and certain uses permitted by Special Exception as specified in the

Code of Ordinances.

Multi-Family Multi-family residences, duplexes, single family dwellings, Public and

private K-12 schools meeting standards for property size and location consistent with the Brevard County School District standards, electric utility substations, accessory structures and certain uses permitted by

Special Exception as specified in the Code of Ordinances.

Residential/Business Single-family dwellings, multi-family residences, electric utility

substations meeting compatibility standards included in the Comprehensive Plan and Code of Ordinances, and certain uses permitted by Special Exception as specified in the Code of Ordinances.

General Commercial Retail sales, professional offices, personal services, vocational and

trade schools, , educational and cultural institutions (excluding public and private K-12 schools), gas stations and recreation areas, electric utility substations, and certain uses permitted by Special

Exception as specified in the Code of Ordinances.

Downtown Business Retail sales, professional offices, personal services, vocational and

trade schools, educational and cultural institutions (excluding public and private K-12 schools), financial institutions, government and municipal buildings, public and private parking lots and public recreation areas, electric utility substations, and certain uses permitted

by Special Exception as specified in the Code of Ordinances.

Recreation/ Public Buildings Parks; Playgrounds; Active recreation facilities including, fields, courts,

pools, and similar features; Public beaches, Fishing pier, Community Center, Restrooms, Dune crossover structures, electric utility substations, and other uses and structures determined by a 4/5 vote of

the full Town Commission to fulfill a recreational need.

#### **Compatible Zoning Categories**

Town zoning districts which implement the Future Land Use Categories are listed in Table 3 below.

#### TABLE 3

#### COMPATIBLE ZONING DISTRICTS BY FUTURE LAND USE CATEGORY

Future Land Use Category	Zoning District
Single Family	1-RS Single Family Residential 2-RS
	Single Family Residential 3-RS Single
	Family Residential
Multi-Family	4-RM Multi-Family Residential 5-RMO
	Oceanfront Multi-Family
Residential/Business	8-B Residential Business
General Commercial	7-C General Commercial
Downtown Business	6-B Downtown Business

9-I Institutional District

#### **Density and Intensity Standards**

Recreation/ Public Buildings

Town maximum residential densities (i.e. units/acre) and non-residential intensities (sq. ft. of building floor area/sq. ft. of lot or parcel = Floor-Area-Ratio; F.A.R.) are presented in Table 4.

TABLE 4

FUTURE LAND USE DENSITY/INTENSITY STANDARDS

Future Land Use Category	Acreage*	<u>Percent of</u> <u>Total Land</u>	Maximum Density or Intensity
Residential			
Single Family	459.99	73.4%	4.3 Units/Acre**
Multi-Family	27.0	4.3%	6.00 Units/Acre
Residential-Business	8.48	1.4%	
Multi-Family Non-Residential			15.00 Units/Acre 0.50 FAR
Commercial			
General Commercial	1.41	0.2%	0.50 FAR
Downtown Business	9.00	1.4%	0.50 FAR
Recreation/ Public Buildings			
Recreation	8.25	1.3%	0.00 FAR
Public Buildings	1.55	0.2%	1.00 FAR

<sup>\* 18.8% (117.88</sup> acres) of the total percent of land is attributed to rights-of-way.

#### **Infrastructure Analysis**

#### Potable Water

Potable water is provided to the Town by the City of Melbourne as stipulated in a water franchise agreement that was extended for a term of 31 years beginning February 12, 2018. The agreement stipulates that the City of Melbourne will sell and distribute potable water within the Town and has the right to construct, erect, maintain and operate a water distribution system including mains, pipes, valves, meters and fire hydrants. The City of Melbourne is obligated to operate and maintain the water supply and distribution system in accordance with applicable statutes, rules and regulations and to maintain a level of service including water pressure equal to the service provided throughout the water system.

Distribution lines exist to serve all properties within the Town. These lines are the maintenance responsibility of the City of Melbourne Utilities Department. Details of the sufficiency of the water supply to meet current and future needs of Melbourne Beach are further discussed in the Ten Year Water Supply Facilities Work Plan in the Infrastructure Element.

<sup>\*\*</sup>minimum lot size of 10,000 square feet yields density of 4.3 units per acre

#### Sanitary Sewer

Sanitary sewer service is provided by Brevard County Utilities Department. Adequate capacity, available to serve Melbourne Beach currently and in the future, is addressed in the Brevard County Comprehensive Plan. The Brevard County Plan includes policies to ensure capacity is available prior to approval of new development throughout the County system. A resolution that serves as a contract binds the Town of Melbourne Beach to participation in the Brevard County sanitary sewerage system. Policies to assure sanitary sewer capacity is available through the planning period be addressed in the Infrastructure Element.

#### **Solid Waste**

Solid Waste and recycling service is provided, through contract with the Town, by a private collection service, and disposed of in an approved Sanitary Landfill outside the jurisdiction of the Town of Melbourne Beach. Brevard County includes policies in their Comprehensive Plan regarding providing land fill space sufficient for every county household to have twice per week service. The level of service standard is also established and maintained by Brevard County.

#### **Transportation**

The existing traffic circulation patterns of streets are sufficient to meet the anticipated future needs of the community. State Road A-1-A runs north and south along the east side of Town. Traffic volumes on State Road A-1-A north of Ocean Avenue have exceeded the level of service standard "E" adopted in the Comprehensive Pan. At current levels of usage the facility does not materially affect other streets or roads within the Town. The limited new development that is possible combined with the impacts of any redevelopment activity during the next 10 years is expected to have no more than a *de minimus* impact on levels of service. Virtually all traffic volume increases are a result of traffic generated either to the north or south of Melbourne Beach.

#### **Drainage**

Drainage standards consistent with the standards of the St. Johns Water Management District are in place and are enforced. Melbourne Beach has implemented recommendations included in a drainage study and has completed installation of storm water treatment devices in strategic locations. The Town continues to improve and retrofit old drainage facilities. Drainage structures have been installed as development occurred in most areas of Melbourne Beach.

#### **Vacant Land Analysis**

There are 5.06 acres of vacant land in Melbourne Beach. Six vacant platted parcels are designated for single family residential development according to Brevard County Property Appraiser records. The lot sizes range from 0.21 acre to 0.41 acre. There are a total of 2.01 acres of vacant single family residential properties; a total of 6 units.

There is one vacant multi-family parcel of land. The parcel is 0.31 acres in size according to the Brevard County Property Appraiser. Development of this parcels will yield a maximum of three multi-family residential units. Two vacant properties are designated for commercial use. These properties total 0.30 acres.

#### **Population Projections**

The 2020 population of Melbourne Beach was estimated at 3,247 residents by the U.S. Census. It was projected during the 2019 EAR process that buildout of the Town will occur during the FY 2020 – 2030 period. Based upon the data included herein (i.e. buildout potential of 9 dwelling units at 2.64 persons per household per the U.S. Census), it is projected that Melbourne Beach will attain a population of 3,271 permanent residents and 292 peak seasonal residents by 2030, the planning horizon of this Comprehensive Plan (Source: Land Research Management, Inc.).

#### <u>Soils</u>

With the exception of the barrier, dune, topography is reasonably level, ranging from approximately 12 feet above mean sea level west of the dune line to 15 feet above mean sea level. (U.S.G.S) Quad Sheet N2800-w8030/7.5)

According to the <u>Soil Survey of Brevard County</u>, the soils in this area (Ref: Table 5) are one of four series of Coastal Beaches; Galveston; Palm Beach; or Welaka. With the exception of the Coastal Beaches the soils hold moderate limitations for urban development. Drainage structures have previously been installed when the subdivisions were developed. Wetlands exist only along the lagoon waters edge.

Vegetation above the line of mean high water consists of lawn grasses and landscaping generally associated with single- family residential development. Thus wetlands do not present obstacles to development consistent with existing ordinances. Given the reasonably flat terrain as well as soils types associated with a barrier island and the fact that no large tracts exist, future development of vacant properties consistent with existing regulations is not incompatible with soils, topography, natural and/or historic resources.

#### **Future Needs For Land To Accommodate Population Growth**

The Town of Indialantic occupies the entire northern town boundary, while the Atlantic Ocean and the Indian River make up the eastern and western boundaries. South of Melbourne Beach land in unincorporated Brevard County is developed at urban densities and intensities. This development straddles either side of State Road A-1-A from the southern edge of the Town to a distance at least one mile to the south. It is not reasonable to plan for this land to meet any future needs for land to accommodate population growth.

TABLE 5

#### SOILS OF MELBOURNE BEACH

Soil type	Depth to Season High Water Table	Permeability Rate	Limitations as Absorption Field
Coastal Beaches	No valid estimates		Very severe High water table Salinity
Galveston	40 – 60 inches	> 20	Moderate Rapid permeability Results in Inadequate Filtration and Contamination of Ground water
Palm Beach	>120 inches	> 20	Slight Rapid permeability Results in Inadequate Filtration and Contamination of Ground water
Welaka	40 – 60 inches	>20	Moderate Rapid permeability Results in Inadequate Filtration and Contamination of Ground water

Source: Soil Survey of Brevard County Florida, S.C.S.

#### **Redevelopment Needs Analysis**

The Town of Melbourne Beach is a bedroom community to the larger metropolitan areas of Melbourne and Palm Bay. These areas serve as employment centers and provide for most of the services necessary within reasonable commuting distance. The existing commercially zoned areas are adequate to provide for convenience goods and service to the Town.

Very few uses exist which fail to conform to the community' character and/or existing zoning. Since the Town is a bedroom community many of the elements leading to blighted areas are nonexistent. At the present time redevelopment is not an important consideration. The major commercial area within the Town borders on the north and south sides of Ocean Avenue. This area is not blighted or in need of redevelopment however, Code of Ordinances designed to improve the aesthetics and ensure future uses are compatible with the character of the Town are in place. Additional polices regarding redevelopment activity along Ocean Avenue will also be considered in the future.

<u>MAP 1</u>

#### **FLOOD ZONES MAP**



#### Analysis Of Potential Development And Redevelopment Activity In Flood Prone Areas

The Town of Melbourne Beach is on a barrier island, with less than 5000 feet of land separating the Atlantic Ocean and the Indian River Lagoon. Flood prone areas are significant considerations in development and redevelopment activity. Map 1 illustrates the areas of the Town within the various 100-year flood zones (A zones and V zones).

State and Federal regulations regarding construction and reconstruction must be rigorously enforced, including the Florida Building Code, flood resistant standards. The Town has adopted and enforces several ordinances regarding construction in coastal areas including: a Coastal Construction Code designating the entire Town as existing within the "Coastal Building Zone (CBZ)" and the Floodplain Management Code (Article XII). The CBZ designation establishes minimum building and renovation requirements within this area and a Coastal Setback Line 25 feet landward of the Coastal Construction Control Line. Permitted densities are consistent with the requirements of the Brevard County Hurricane Evacuation Plan, for the south beaches area. The Town also participates in the National Flood Insurance Program

Wetlands exist only along the edge of the lagoon. Vegetation above the line of mean high water consists of lawn grasses and landscaping generally associated with single-family residential development. There are no bays, lakes harbors or significant mineral resources within the Town of Melbourne Beach.

#### **Discouragement Of Urban Sprawl**

The compact development pattern of Melbourne Beach is well established. All properties within the Town are platted. Most of the Town is platted in a traditional grid pattern. There are a few minor modifications to the grid that are a result of the shoreline alignment and location of roadways prior to the platting of the land. The Government Offices, Library, and commercial areas are located near the center of the Town. Most basic goods and services can be obtained within a maximum of a one mile travel distance for all Town residents. Any goods and services not available in Melbourne Beach are readily available in the commercial district of the Town of Indialantic, just one mile north of the Town limits.

Remaining development potential in Melbourne Beach includes 30 single family units, 3 multifamily units and approximately 1.29 acres of commercial use. Any redevelopment activity that occurs is not anticipated to materially increase residential densities or commercial intensities.

Land to the north and south of Melbourne Beach is also urbanized at similar or higher densities than those within the Town.

The Town does not promote sprawl and has strongly expressed the desire to keep the existing land use pattern in place. Primary indicators of urban sprawl, defined in Florida Statutes Chapter 163.3164 (52), are not present in Melbourne Beach.

#### **Energy Efficient Land Use Patterns**

Alteration of future land use patterns in Melbourne Beach is not anticipated in the foreseeable future. It is highly unlikely that any change in the land use pattern will occur within the 10 year planning horizon. The compact design of the Town; the central location government offices, library; recreation facilities; and commercial development; the traditional grid pattern; and the sidewalks along -State Road A-1-A and Ocean Avenue all contribute to an energy efficient land use pattern. The land use pattern results in short automobile trips, ease of pedestrian and bicycle travel and efficient use of infrastructure resources. Many Town residents either ride a bicycle or walk to Town Hall for government meetings or to conduct other Town business.

#### **Green House Gas Reduction Strategies**

The Town of Melbourne Beach has a significant tree canopy and has policies in place to protect and enhance the canopy. The shade to rooftops and paved areas near houses and commercial buildings helps to reduce energy consumption for cooling these buildings. The Town is participating in a curbside recycling program that recycles yard debris, plastic, glass, paper, and metals.

Garbage collected in Melbourne Beach is disposed of in a landfill operated by Brevard County. The County has programs that do not allow yard debris to be disposed of in plastic bags or containers; converts methane gas to green energy; and treats leachate water so that it can be included in the reuse irrigation water system.

The Town intends to continue to explore new techniques to reduce green house gases.

#### **Future Land Use**

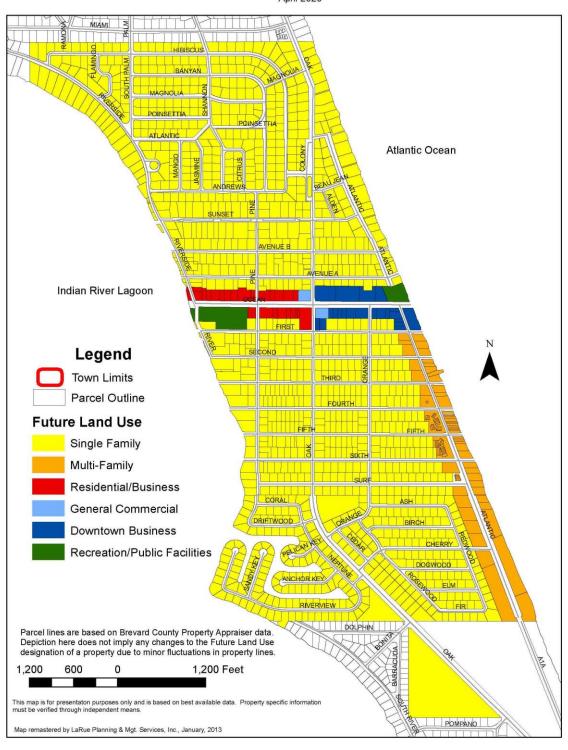
Town projected future land uses are illustrated on Map 2 Melbourne Beach Future Land Use Map.

#### MAP<sub>2</sub>

#### TOWN OF MELBOURNE BEACH FUTURE LAND USE MAP

#### Town of Melbourne Beach Map 2 - 2020 Future Land Use

Melbourne Beach Comprehensive Plan April 2020



### **CHAPTER 3 TRANSPORTATION ELEMENT**

#### Introduction

The purpose of the Transportation Element is to plan for a multimodal transportation system that places emphasis on ecologically friendly transportation alternatives including public transportation systems.

#### **Existing Traffic Circulation System**

Map 3 depicts the following existing transportation system features:

Road System including collector roads, arterial roads, bicycle and pedestrian ways, the functional classification and maintenance responsibility of all roads, the number of through lanes for each roadway, and the peak hour level of service (LOS).

There are no limited and controlled access facilities, significant parking facilities, public transit system facilities, public transit routes or service areas, public transit terminals or transfer stations, public transit rights-of-way, ports facilities, airports facilities including clear zone obstructions, freight and passenger rail lines and terminals, intermodal terminals and access to intermodal facilities, or major public transit trip generators and attractors, based on the existing land use map, within Melbourne Beach.

Table 6 shows the average daily traffic counts within the Town of Melbourne Beach. All roadways within the corporate limits are two lane facilities. The Florida Department of Transportation Functional Road Classification System identifies A-1-A from the south corporate limits to the north corporate limits, to include Ocean Avenue between A-1-A and Oak Street, as a Minor Arterial in the State Highway System. Riverside Drive, to include the portion of Ocean Avenue west of Oak Street to Riverside Drive, to the north corporate limits is an Urban Collector. The Florida Department of Transportation Functional Classification System states that, "all local roads (not otherwise identified) within the municipal limits are included on the city street system."

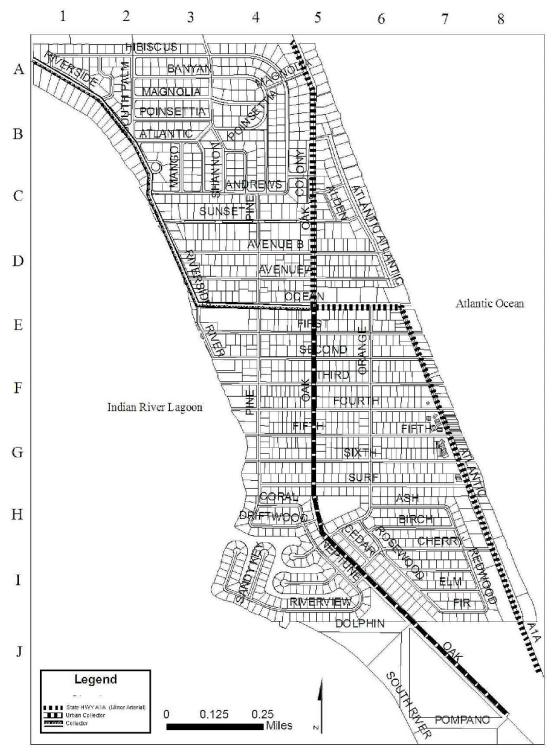
Access to the Town from the north is via A-1-A and Riverside Drive. Both of these roadways enter the Town through the Town of Indialantic. Access from the south is via A-1-A and Oak Street. These roadways enter the Town from unincorporated Brevard County. The nearest east/west access to the mainland is the Melbourne Causeway, S.R. 500.

#### **Bike Paths and Non-motorized Circulation**

Bike paths are designated along A-1-A and Ocean Avenue by striping and signage. A system of non-motorized vehicular circulation is nonexistent.

Brevard County has adopted a minimum level of service standard of "E" for arterial and collector roadways within the urban area. The minimum level of service standard for State arterial roadways, excluding the Florida Interstate Highway System, in the urbanized area is also E.

MAP 3
EXISTING TRANSPORTATION SYSTEM MAP



#### TABLE 6

#### **TOWN OF MELBOURNE BEACH AVERAGE DAILY TRAFFIC COUNTS**

**Average Daily Traffic** 

A-1-A North o	f Ocean Avenue	19,20	00
A-1-A at south	nern Town limits	14,90	00
Municipal Str	<u>reets</u>	<u>ADT</u>	
Ocean Av. Be	tween Oak St and Riverside Dr	4100	Two Lanes
Oak Street Sc	outh of Ocean Av.	4800	Two Lanes
Riverside Driv	re North Ocean Av.	4100	Two Lanes
Out of Jurisdiction			
A-1-A north of Ormond Avenue		19,200	Two Lanes
US 192 west of A-1-A		22,000	Four Lanes
Riverside Drive south of US 192		4,100	Two Lanes
Source: Space Coast Transportation Planning Organization, 2019 Traffic Count		n, 2019 Traffic Counts	

The only other functional classification not previously referenced is for the residential or local street. The primary purpose of these streets is to provide direct access to adjoining properties. Local streets should be designed to minimize through traffic and discourage excessive speeds. Traffic volumes should not exceed 1000 vehicles per day.

#### **Analysis of Existing Level of Service**

**State Roads** 

There are four functional roadway classifications within the Town of Melbourne Beach: Minor Arterial, Urban Collector (FDOT Classifications), Collectors and Residential Streets (Local Classifications). The Town roadways within the Town are classified as follows:

A-1-A	Undivided Arterial, Two lane
Ocean Avenue west of Oak Street	Undivided Collector, Two lane
Oak Street South of Ocean Avenue	Undivided Collector, Two lane
Riverside Drive	Undivided Collector, Two lane

All other streets within the Town are residential streets, providing access to individual properties.

Comparing existing traffic counts on State Road A-1-A, provided in Table 6, to capacity standards in the 2020 FDOT Quality/Level of Service Handbook results in a determination that the current level of service on all segments of State Road A-1-A is "E". State Road A-1-A is the only State roadway within Melbourne Beach.

Based on traffic counts provided in Table 6 and the standards in the 2020 FDOT Quality/Level of Service Handbook the level of service on Oak Street and Riverside Drive remain at LOS B.

Transit service is not available in Melbourne Beach. The nearest transit service to Melbourne Beach is provided by Space Coast Area Transit (SCAT). The South Beach Trolley serves the Town of Indialantic with a route that runs approximately 1.6 miles to the north of Ocean Avenue at the nearest point to Melbourne Beach.

#### **Analysis of Future Land Use Upon Traffic Circulation**

As noted in the Future Land Use Element, the Town of Melbourne Beach, is essentially a fully developed community with only scattered vacant lots remaining to be developed. Thus, development consistent with the Future Land-Use Element will have very little impact upon the Level of Service of existing roadways within the Melbourne Beach area. The existing number of occupied units within the Town is 1,229. By the year 2030 this number is projected to increase to 1,238. Based upon the average number of weekday trip ends as outlined in the Institute of Transportation Engineers <u>Trip Generation</u>, <u>Informational Report</u> for residential uses (10 trips for single family detached and 6.1 for multi-family) an additional 78 trips per day may expected, for the entire Town.

The major consideration with respect to a deterioration of the Level of Service of the various roadways within the Town will be growth which may occur south of the Town in the unincorporated South Beaches area of the County and whether or not an additional route to the mainland is provided south of the Town.

Existing conditions indicate that at least a portion of A-1-A south of Melbourne Beach is operating at the acceptable level of service. Additional traffic resulting from the growth south of this area may result in adverse impacts upon the level of service of other roadways, such as Oak Street south of Ocean Avenue and Riverside Drive north of Ocean Avenue.

Comparing future 2030 traffic projections on State Road A-1-A resulting from development of vacant properties consistent with the Comprehensive Plan to capacity standards in the FDOT Quality/Level of Service Handbook results in a determination that the future (2030) level of service on all segments of State Road A-1-A will remain at "E". State Road A-1-A is the only State roadway within Melbourne Beach.

The magnitude of future development through the planning period (2030) is not anticipated to generate traffic on Oak Street or Riverside Drive that will result in a deterioration of the LOS below acceptable standards.

Based on this analysis there is no need for new facilities to enhance mobility for the short term or long-term planning horizons.

#### Non-Motorized Traffic Circulation

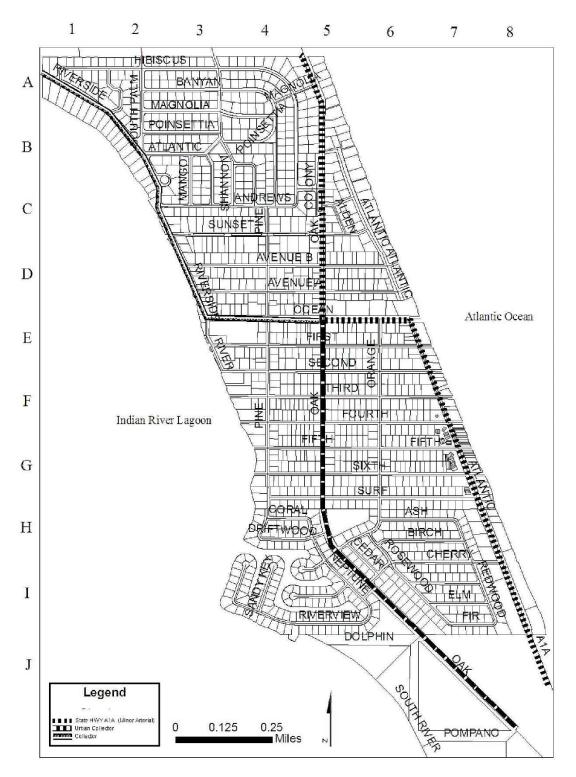
Bikeways, as a separate striped lane exist on A-1-A north of Ocean Avenue, Oak Street south of Ocean Avenue and Ocean Avenue. Sidewalks are available along Oak Street, Ocean Avenue and most of State Road A-1-A. In the remainder of the Town sidewalks are very limited.

Short travel distances to the beach, the Indian River, recreation facilities as shown in the Open Space/Recreation Element, Town Hall, the commercial district, and the library make a more complete non-motorized circulation system practical and beneficial.

The Existing Transportation Map and the Future Transportation Map are identical. (See Map 3 Existing Transportation and Map 4 Future Transportation).

Impacts to the transportation system by the remaining properties to be developed in Melbourne Beach are minimal. Those impacts will not create a necessity for capacity improvements on any of the arterial or collector roadways within the Town. Thus, efforts toward reducing the impacts of existing development will be the focus of the planning and coordination efforts during the next 10-year planning period. Coordination with Brevard County in efforts toward enhancement of pedestrian and bicycle facilities, obtaining transit service from SCAT, and encouraging use of the transit service will be the most feasible and productive efforts in reduction of traffic congestion accompanying greenhouse gasses.

MAP 4
FUTURE TRANSPORTATION SYSTEM MAP



# CHAPTER 4 HOUSING ELEMENT

#### Introduction

The purpose of this element is to prepare policies for the provision of housing for current and future residents of Melbourne Beach and to meet any identified or projected deficits in the supply of housing for moderate, low, and very low income households, group homes, foster care facilities, and households with special housing needs.

#### **Residential Growth**

Residential development in the Town of Melbourne Beach has virtually reached the saturation point. Infill on the 6 remaining single-family lots and one small parcel designated for multiple family development will result in a total of 9 additional units. This infill is expected to occur over the next 10 year planning period.

There are no renter-occupied units currently using Federal, State, or local subsidies, group homes licensed by the Florida Department of Health and Rehabilitative Services, or mobile homes parks licensed by the Florida Department of Health and Rehabilitative Services within the Town of Melbourne Beach. Also, there are no dwellings on the Florida Master Site File, National Register of Historic Places, or designated as historically significant by local ordinance.

#### Inventory

Table 7 provides a summary of the characteristics of the existing housing and households in Melbourne Beach using U.S. Census American Community Survey data. The table also provides a comparison of the characteristics in Brevard County.

#### **Housing Analysis**

Based upon data from the U S Census and Shimberg Center for Affordable Housing, and population projections outlined in the Future Land Use Element (FLUE) the Town of Melbourne Beach can theoretically contain 1,561 total housing units (i.e. resident plus part-time occupancy). The additional 9 units are projected to be in place by 2030. Six of the additional units will be single family residential and the remaining 3 units will be multi-family residential. Land for units in excess of 1,561 units is neither currently available nor expected to be available in the future. Approximately 87% of the total units will be single family detached structures with the remaining 13% in multi-family structures. Based upon the Census data approximately 85% of all units will be owner occupied. The land necessary to provide the estimated number of new units presently exists as scattered lots within existing subdivisions and is currently zoned for residential purposes. All new housing is to be provided by the private sector. Current zoning and building regulations appear to be sufficient to meet the needs for future housing.

Since the Town is urban in nature with no agricultural land-uses, there is no demonstrated need for rural or farm worker housing. Given the general condition of existing units within the Town, replacement housing is not seen as a significant consideration.

TABLE 7

HOUSING INVENTORY PER 2019 AMERICAN COMMUNITY SURVEY (ACS) (1)

<u>N</u>	lelbourne Beach	<b>Brevard County</b>
Population	3,247	585,507
Dwelling Units	1,536	278,173
Households	1,230	230,417
Average Household Size (persons)	) 2.64	2.52
Families	871	145,323
Units In Structure		
One	78.1%	79.0%
Two or more	21.9%	21.0%
Household Tenure		
Owner	85.0%	74.3%
Renter	15.0%	25.7%
Median Household Income (\$/yr.)	76,250	56,775

<sup>(1)</sup> ACS Data collected over a 5-year period. Therefore, doesn't necessarily specifically represent the current year.

The infrastructure necessary to provide service to these new units is currently in place and operational.

Ordinances currently exist to insure the elimination of units in deteriorated condition. Principal issues related to housing condition in Melbourne Beach include flooding and sea level rise. To address these issues, the Town has included several provisions in its land development code, including: Article II – adoption of the Florida Building Code and the Florida Residential Building Code; Articles IV, V, VI, VII, and VIII – adoption of .Florida Building Code unsafe building abatement, plumbing, mechanical, and fuel gas codes; Article X – Coastal Construction Code; Article XII – Floodplain Management code; and Chapter 5A – coastal setback regulations.

### **CHAPTER 5 INFRASTRUCTURE ELEMENT**

#### Introduction

The purpose of this Infrastructure Element is to provide for necessary public facilities and services correlated to existing development and anticipated growth of the Town that include existing and proposed sanitary sewer, solid waste, drainage, and potable water facilities and services. The Element also addresses the natural groundwater aquifer recharge system as it relates to the Town and the surrounding area.

#### **Sanitary Sewer**

Sewer service, as well as maintenance of the existing infrastructure is provided by the Brevard County Utilities Department. The Brevard County wastewater plant serving the South Beaches area is located just south of the Town at 2800 A-1-A. The plant is currently operating at a volume of approximately 4.5 million gallons per day (mgd) (Source: South Beaches WWTP administration) which is well below its design capacity of 8 m.g.d. Effluent disposal is by deep well injection. County officials have estimated that at current levels of service the facility treats approximately 92 gallons of sewage per person per day for its service area. Thus the Town of Melbourne Beach, based on the Future Land Use Element population projections of 3,271 persons in 2030, would be contributing approximately 300,932 gallons of sewage per day (0.30 mgd).

Brevard County has estimated that the actual per capita flow is approximately 92 gallons per person per day. According to the Brevard County Planning Department, the County Comprehensive Plan will not allocate plant capacity to a specific municipality, however, it will compare a Level of Service per person of 92 gallons per day and distribute it according to the county population projection for the plant's service area.

The estimated demand (level of use) for sewer service in the Town of Melbourne Beach, based on the 2030 projected population of 3,271 is 300,932 gallons per day (3,271 population "x" 92 gallons/person/day).

#### Solid Waste Collection and Disposal

Solid Waste Collection within the Town of Melbourne Beach is provided by a private sanitation company, under contract with the Town Commission. As it currently exists, solid waste collection within the Town is satisfactory.

Brevard County, by a special act of the Legislature is responsible for the disposal of all solid waste within the County.

Brevard County has established a policy that the level of service standard shall be established to provide for the disposal of all solid waste generated by Brevard County's population at a rate of 8.32 pounds per capita per day, or 27,215 pounds per day in 2030.

#### **Drainage**

Generally, storm water runoff, within the Town, is collected within storm sewers located in the public rights-of-way and is disposed of at several outfalls into the Indian River. The drainage structures as shown on Map 5 are the responsibility of the Town in terms of operation and maintenance. The service area is the Town of Melbourne Beach. The drainage patterns are essentially east to west.

The Drainage structures that were installed as part of the development process, are sufficient to accommodate additional development envisioned by the Future Land Use Map, as the Town is approximately 99% built-out. The existing design capacity and level of service is a 10-year storm event.

Much of the storm water is untreated prior to disposal, because the bulk of the development occurring since the adoption of minimum storm water discharge standards has been below the minimum thresholds for enforcement. Storm water associated pollution is responsible for:

- 1. Virtually all of the sediment deposited in surface waters
- 2. Increasing the load of oxygen demanding substances in the Indian River Lagoon.
- 3. Approximately 90 percent of the heavy metals that enter surfaces waters.

The Town of Melbourne Beach is responsible for only a very small portion of the water quality problems of the Indian River.

#### **Potable Water**

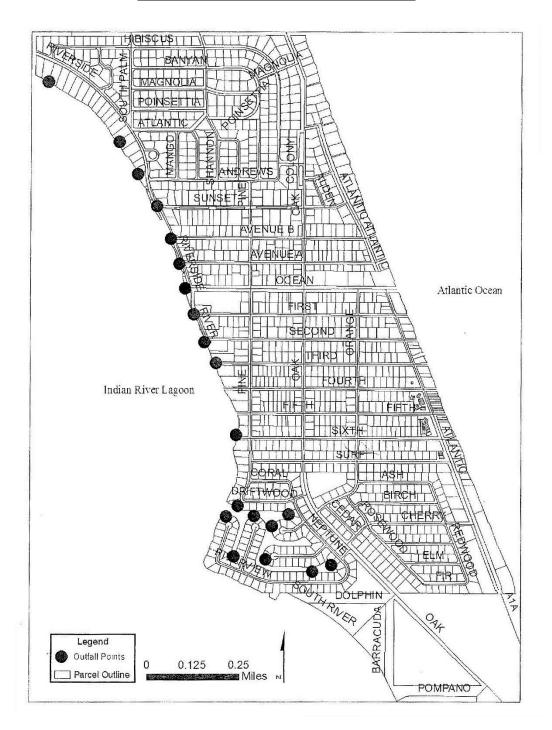
Potable water is provided to the Town by the City of Melbourne. Distribution lines exist to serve all properties within the Town. These lines are the maintenance responsibility of the City of Melbourne Utilities Department.

The City of Melbourne is a regional water supplier for south Brevard County. The City holds a Consumptive Use Permit (CUP) issued by the St. Johns River Water Management District (SJRWMD). This permit allows the withdrawal of a combination of surface and ground waters of the state for public water supply. The Florida Department of Environmental Protection (FDEP) has issued all necessary current permits and regulates the city's water treatment and distribution facilities.

The City of Melbourne currently owns and operates two water treatment plants (WTPs). The John A. Buckley Water Treatment Facility treats surface water from Lake Washington which is a part of the St. Johns River. The Joe Mullins Water Treatment Facility uses a reverse osmosis treatment system to treat ground water drawn from the Floridan Aquifer.

MAP 5

DRAINAGE OUTFALL LOCATIONS MAP



With respect to the distribution system, the City of Melbourne is responsible for maintenance. The entire Town has water service available. There are no known deficiencies in the system.

The Town has an interlocal agreement with the City of Melbourne for the provision of water service. This agreement indicated that the level of service to be provided to the Town will be equivalent to that provided others. There is no allocation of plant capacity to the Town.

#### **Natural Groundwater Aquifer Recharge**

As noted in the Conservation Element of the Town's Comprehensive Plan, the soils in the Melbourne Beach area are not suited to groundwater recharge. The permeability is so rapid, inadequate filtration may result in contamination of the groundwater. Table 5 in the Future Land Use Element outlines the soil types and gives estimates regarding depth to the season high water table, permeability rates, and limitations upon use for absorption fields.

There are no aquifer recharge areas within the Town of Melbourne Beach. The Town is located on a barrier island between the Atlantic Ocean and the Indian River. Other than the location of the Atlantic Ocean and the Indian River, both of which are outside of the jurisdiction of the Town, there are no natural drainage features. Considering the minimal level of development, the low intensity of development, and the location of the Town, any further analysis would not be applicable.

Given that the Town is approximately 99% developed, with a large portion occurring prior to, or below the thresholds, for storm water management systems, a large volume of storm water that may be available to recharge the groundwater is lost

The regulations of the Saint John's River Water Management District regarding the management and storage of storm water apply to the Town of Melbourne Beach. These regulations are geared more toward controlling pollution of the surface waters than protecting or enhancing groundwater recharge. The Town has no regulations regarding recharge areas.

Given the level and form of development within the Town (of the total 627 acres of land within the Town, 13.2 (2.1%) acres remain vacant), future development consistent with the Future Land-Use Element will not significantly reduce groundwater recharge as it currently exists.

#### TEN- YEAR WATER SUPPLY FACILITIES WORK PLAN SUB-ELEMENT

#### Introduction

The purpose of the Town of Melbourne Beach Water Supply Facility Work Plan (hereinafter the Work Plan) is to identify and plan for the water supply sources and facilities needed to serve existing and new development within the local government's jurisdiction.

#### **Data and Analysis**

Melbourne Beach residential and non-residential users purchase retail water directly from the City of Melbourne which is enabled through a 30-year Water Franchise Agreement enacted in 2018. The Agreement grants the City of Melbourne the non-exclusive right to operate a potable water distribution system within Melbourne Beach and to sell and distribute water through said system. Specifically, the Agreement grants the City of Melbourne the right to erect, maintain and operate a potable water distribution system in order to provide potable water service to customers within Melbourne Beach.

Per the Florida Department of Economic Opportunity Division of Community Development Bureau of Community Planning document entitled: "A Guide to the Preparation of the Water supply Facilities Work Plan", local governments with no water supply responsibility need only compile the following data and analysis:

1. Population and Water Demand Projections for at least a 10-year period, and a discussion of reuse and conservation methods to reduce demand during the projection period. The City of Melbourne has a consumptive use permit (CUP) from the St. Johns River Water Management District for its potable water system. The permit (CUP No. 50301) was renewed in July 2019.

The City of Melbourne has proposed population and water use projections which were reviewed by the St. Johns Water Management District as part of the CUP renewal process. Projections for the Melbourne service area are presented in Table 8, assuming a consumption rate of 100 gallons per capita per day (gpcd). The projections will be used in the Town of Melbourne Water Facilities Work Plan Update.

Town-specific Melbourne Beach population and water use projections are not prepared by the City of Melbourne as part of its CUP and Water Supply Facilities Work Plans. However, Town-prepared projections are used in Table 9 to project Melbourne Beach water demand.

Section 10 of the Water Franchise Agreement states that Melbourne Beach will, at its discretion, cooperate with and support Melbourne with implementation of water conservation plans and consider municipal ordinances relating to adopting codes for using cross-connection prevention devices, ultra-low flow water fixtures, and moisture sensing devises for irrigation systems and or xeriscape landscaping alternatives. Further, the City of Melbourne may, at its sole discretion, discontinue water services to any customer pursuant to Melbourne's systematic rules and regulations in an effort to enforce compliance with water conservation plans.

2. If the supplier is another local government, demonstration that it has the capacity through its Water Supply Facilities Work Plan or plans to provide adequate capacity. The Town of Melbourne CUP was renewed in July 2019. The City of Melbourne's Water Supply Facilities Work Plan update is pending.

Table 8
City of Melbourne Potable Water Service Area
Population and Potable Water Consumption Projections

Year	Population Projection	Potable Water Consumption (mgd)
2020	192,966	19.2
2025	202,847	20.3
2030	211,121	21.1

Source: Town of Melbourne, St. Johns Water Management District; April 2019

Table 9
Town of Melbourne Beach
Population and Potable Water Consumption Projections

Year	Population Projection	Potable Water Consumption (mgd)
00.10	0 0 4 7	0.0047
2019	3,247	0.3247
2025	3,259	0.3259
2030	3,271	0.3271

Source: Melbourne Beach Comprehensive Plan; Place Planning and Design; April 2019.

### CHAPTER 6 COASTAL MANAGEMENT ELEMENT

#### **Introduction**

The purpose of the Coastal Zone Management Element is to provide direction and establish a plan for and where appropriate restrict development activities that would damage or destroy coastal resources, and to protect human life and limit public expenditures in the coastal area.

#### **Existing Land Uses**

Melbourne Beach is a coastal community bounded by the Atlantic Ocean to the east and the Indian River Lagoon to the west. The entire Town is a coastal area and is located on the barrier island.

Characterized by single family subdivisions, several multiple family developments, and a commercial strip along Ocean Avenue, Melbourne Beach is predominately a residential community, as described in the Future Land Use Element.

Melbourne Beach existing land uses are described in the Future Land Use Element. Virtually all shoreline uses through the entire Town are residential with the exception of ocean and river parks, and one commercial restaurant/office use fronting the ocean.

#### Water-Dependent and Water-Related Uses

The Town is approximately 99% built out. Water dependent recreation is the only water dependent use occurring in the Town. The beach along the ocean provides recreation opportunities to the Town's residents and others. Public access to the beach is available at several access points as well as at Ocean Park.

The need for additional water-dependent or water-related development is not anticipated within the Town for the foreseeable future.

#### **Estuarine Pollution**

The Indian River lagoon to the west of the Town includes the Intracoastal Waterway which is connected with the Atlantic Ocean through inlets to the north and south of Town. The only known point sources of estuarine pollution within Melbourne Beach are the drainage outfalls shown on Map 5 in the Infrastructure Element. Table 10 provides a listing of State, regional and local regulatory agencies and programs that maintain or improve estuarine environmental quality.

#### TABLE 10

### STATE, REGIONAL AND LOCAL REGULATORY AGENCIES AND PROGRAMS THAT MAINTAIN OR IMPROVE ESTUARINE ENVIRONMENTAL QUALITY

#### STATE

- Department of Environmental Protection. The Department of Environmental Protection (DEP) is the state's lead agency for environmental management and stewardship, protecting air, water and land. DEP is divided into three primary areas: Land and Recreation programs acquire and protect lands for preservation and recreation. Regulatory programs safeguard natural resources by overseeing permitting and compliance activities that protect air and water quality, and manage waste cleanups. Ecosystems Restoration programs protect and improve water quality and aquatic resources, as well as coordinates the protection of Florida's submerged lands and coastal areas.
- Department of Economic Opportunity, Community Planning Division. The Community Planning Division is responsible for administering the state's areas of critical concern, comprehensive planning, community and economic development, disaster preparedness, and Developments of Regional Impact (DRI).
- 3. Florida Fish and Wildlife Conservation Commission. The Florida Fish and Wildlife Conservation Commission includes five divisions devoted to various research, management, law enforcement, and conservation efforts across the state.
- 4. Department of Transportation. The Department of Transportation works with the local governments on anticipated projects having possible impacts on the natural resources of the Town.
- 5. Department of State. The Division of Archives, History and Record Management in the Department of State works closely with interested individuals and municipalities in order to protect archeological and historical sites.

#### REGIONAL

- 1. St. Johns River Water Management District. The Water Management District administers permitting programs for the local consumable use of water, storm water discharge, and dredge and fill activities.
- 2. East Central Florida Regional Planning Council. The East Central Florida Regional Planning Council (ECFRPC) serves Brevard, Volusia, Osceola, Lake, Seminole, and Orange counties. Among the ECFRPC's duties are: assist the local governments with planning expertise; act as the regional representatives for the Development of Regional Impact review process; serve a regional clearinghouse for State and Federal projects and programs; and convey information from the local governments to the State and Federal levels.

#### **TABLE 10 (continued)**

3. Florida Inland Navigation District (FIND). FIND is responsible for providing and maintaining spoil areas to the U.S. Army Corps of Engineers for the dredging and maintenance of the ICW.

#### **LOCAL GOVERNMENTS**

- 1. Adjacent Municipalities. The Town of Melbourne Beach coordinates its land use policies and environmental concerns with Brevard County, the City of Melbourne and the Town of Indialantic. Further coordination mechanisms have been provided in the Intergovernmental Coordination Element.
- 2. Town of Melbourne Beach Departments, Brevard County and the City of Melbourne also have programs and/or policies which are utilized in the maintenance or improvement of environmental quality.

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#### **Hurricane Evacuation/Disaster**

The Town of Melbourne Beach is bordered on the east by the Atlantic Ocean and on the west by the Indian River lagoon. These bodies of water critically impact the hurricane/disaster evacuation plans of the Town. The entire Town, a barrier island, is within the Brevard County Mandatory Evacuation Zone. The Brevard County Hurricane Evacuation Plan and provides for an orderly system of timely evacuation of the Town's residents and visitors. Considering the Town's coastal location as described above, the entire population of the Town will require evacuation during a hurricane/disaster. During the 2020 hurricane season, Town resident population was estimated at 3,247 residents by the U.S. Bureau of the Census.

Based upon a behavioral survey the East Central Florida Regional Planning Council (ECFRPC) has estimated that approximately 64.7% of the population would evacuate immediately, while 27.5% would leave within an average of 2.2 hours. Additionally it has been estimated that it would require 6 to 7 hours before all persons desiring to evacuate begin to leave. The Brevard County Peace Time Emergency Plan indicates that evacuation of the South Beaches area will take approximately 16 hours.

The Brevard County Hurricane Evacuation Plan establishes Melbourne High School and Riviera Elementary School as evacuation shelters. The official evacuation route for the residents and visitors is north on State Road A-1-A, then west on US 192, then north on Babcock Street to Melbourne High School. The route to Riviera Elementary School is south on Babcock to Palm Bay Road, then west to Riviera Drive, then south to the school.

The transportation and hazard constraints in the evacuation route exist primarily due to the fact that the only practical route in and out of the Town is on A-1-A and US 192. A severe storm, hurricane, or abnormal tide conditions that could cause serious flooding which in turn could inundate these roads, making the evacuation of the Town's population difficult, if not impossible.

Since the Town's entire population is expected to increase only marginally through the planning period, the implementation of the future land use element is not expected to have any significant impact on the Town's current evacuation plan.

The Town of Melbourne Beach recognizes the potential danger of a hurricane/disaster to a community located on a barrier island. In view of this potential danger, the Town is fully prepared to proceed with evacuation if the situation warrants it. The Town's experience with Hurricanes in 2004 and 2006 proved that those wishing to leave can be evacuated within a reasonable time.

#### Reduction of Flood Risk

Redevelopment principles included in F.S. 163.3178 (2) (f) are related to: (1) the elimination, when opportunities arise, of inappropriate and unsafe development in coastal areas; and (2) participation in multi-level government disaster prevention and mitigation programs. In order to assist in addressing these issues, Melbourne Beach was awarded a Florida Department of Environmental Protection (FDEP) grant to assess sea level rise, storm surge and flooding impacts on the Town, engage the public and develop strategies and policies aimed to mitigate, adapt and plan for the impacts.

The Town contracted with the East Central Florida Regional Planning Council (ECFRPC) to develop the vulnerability assessment, engage the public and develop Coastal Management Element policies and recommendations.

Grant work products included the following seven Deliverables which are included herein by reference, and summarized as follows:

- 1. County and Regional Plans Summary (January 2019): A summary of regional and county plans, programs and policies related to addressing the issue of coastal flooding was prepared as the basis to insure Town continued awareness of, and participation in multijurisdictional cooperation efforts. The East Central Florida Regional Planning Council (ECFRPC), through several programs, is involved in coastal flooding resiliency planning for its multi-county region, including the 2060 Plan, Regional Resiliency Action Plan, Vulnerability Analyses for specific areas, and Public Outreach (e.g. Peril of Flood and Resiliency Newsletter and Peril of Flood Website).
- 2. Review of Flood-Resistant Codes and Recommendations (January 2019): A determination was made that the Town code is generally consistent with the flood-resistant construction requirements of the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. part 60.lt was concluded that, through its Comprehensive Plan, Land Development Code, and educational programs, the Town complies with the intent and letter of the requirements of the Florida Building Code and 44 CFR 60 regarding flood-resistant construction. It was recommended that the Town continue to coordinate with applicable State and Federal agencies, enforce various code provisions for flood-resistant construction, and update the Comprehensive Plan and Land Development Code to reflect changes and innovations in construction methods to minimize impacts of local flooding.
- 3. Review of the Town's National Flood Insurance Program (NFIP) Rating and Recommendations (January 2019): The Town of Melbourne Beach currently benefits from the (NFIP) Community Rating System (CRS); however, potential areas for class improvement were explored.

The Town currently holds a CRS class 8 score on a scale of 1 to 10. If the Town Floodplain Manager/ CRS coordinator works with the Insurance Service Office ISO/CRS, the community can either choose to strengthen the current class, improve the class, or decide to take no action at this time.

Data was obtained from the State of Florida and examined related to common activities that other small communities implement to receive additional credits in order to help the Town determine the best course of action.

It was recommended that the Town remain in the CRS program at a class 8 unless significant further action is taken. The Town has decided not to pursue a class improvement since an improvement would require additional costs, including personnel to oversee the program.

- 4. Vulnerability Assessment (February 2019): Maps, data and analysis were prepared identifying at-risk coastal areas that currently experience, or have historically experienced flooding and coastal inundation. Within these areas, public and private resources that are at risk of being inundated were identified. As part of the vulnerability assessment, maps, charts and/or tables illustrating the coastal high hazard area, storm surge areas, areas subject to sea level rise and flooding were prepare in order to identify vulnerabilities of roadways and Town land uses and facilities.
- 5. Public Meetings and Online Survey Results (April 2019): Public Engagement consisted of three distinct components; two separate public workshops and a MetroQuest Online Survey. Discussions at the initial public workshop, including results of a Menti-meter poll, were used in the development of the on-line survey. The results of the on-line survey were then considered when preparing initial draft Comprehensive Plan amendments that addressed citizen concerns regarding flooding, sea level rise, and safeguarding and improving the functions of the Indian River Lagoon.

An overview of the project, vulnerability analysis, survey findings and preliminary recommendations were discussed at the second public workshop. Results of discussions at the workshop, as well as input from Town staff, were used in drafting final proposed Comprehensive Plan recommendations.

Notices of the public meetings and on-line survey were available to residents, businesses, property owners and known interest groups through postings on the Town website, targeted mailings, and existing public announcement procedures.

- 6. Strategies and Tools Recommendations (May 2019): Potential development and redevelopment principles and strategies for consideration by the Town were discussed, including Peril of Flooding and Adaptation Action Area policies, and tools that reduce flood risk in the coastal areas identified in the Vulnerability Assessment. Recommendations were based upon interaction with the residents, survey results, opinions by experts and the Vulnerability Assessment. Feedback from the public engagement process was emphasized in order to develop strategies and policies for consideration by the Town, including Coastal Element objective and policy revisions to address the state mandated Peril of Flood legislation.
- 7. Proposed Comprehensive Plan Amendments (May 2019): Draft Comprehensive Plan amendments were prepared incorporating the results of Tasks 1 6 above. Proposed amendments were prepared for the following Comprehensive Plan elements: Future Land Use; Housing; Coastal Management; Intergovernmental Coordination; and Capital Improvements.

#### **Coastal Planning Area and Peril of Flood**

Melbourne Beach, while on the barrier island, will not have critical facilities impacted by sea level rise in the near future. However, it is important to recognize that this does not mean the Town is safe from storm surge related to hurricanes.

A vulnerability assessment was conducted by the East Central Florida Regional Planning Council which concluded that a Coastal Planning Area (CPA) should be established for the Town and Peril of Flood policies adopted to address areas most susceptible to sea level rise and storm surge. The CPA, illustrated on Map 6, is the area most susceptible to sea level rise and other flooding, and where the main focus on being sustainable regarding these events should occur.

Coastal high hazard area (CHHA), illustrated on Map 7, means the area defined to be inundated by a Category 1 hurricane. It is important to understand that the CHHA does not consider a hurricane surge beyond Category 1. As a result, the Town should be cognizant that surge beyond Category 1 can impact the Town's critical facilities.

The Town's Flood Insurance Rate Map (FIRM), illustrated on Map 8, is an official map on which the Federal Insurance Administration has delineated both special flood hazard areas (SFHA) and the risk premium zones applicable to the community.

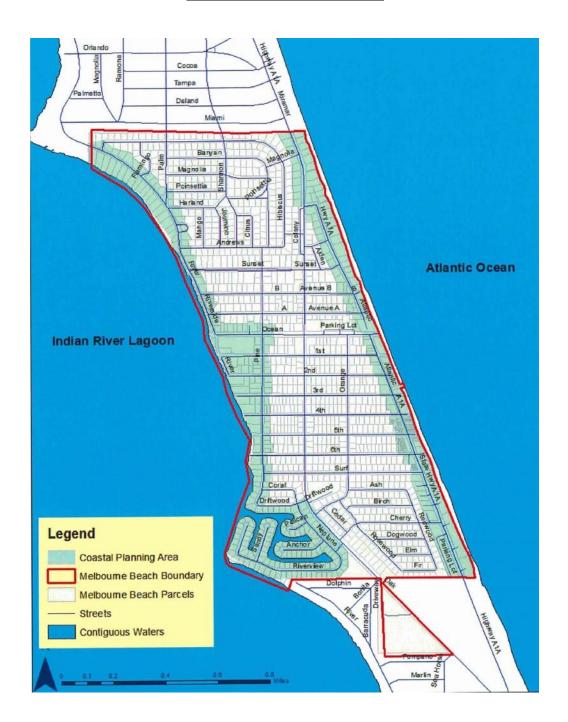
#### **Post-Disaster Redevelopment**

In the event that property becomes available for redevelopment due to damage by storm, fire or other disaster, or due to attrition or age, the Town faces a range of options for redevelopment. Alternately, continuing beach erosion will force a choice among a range of options. These options fall into the following categories:

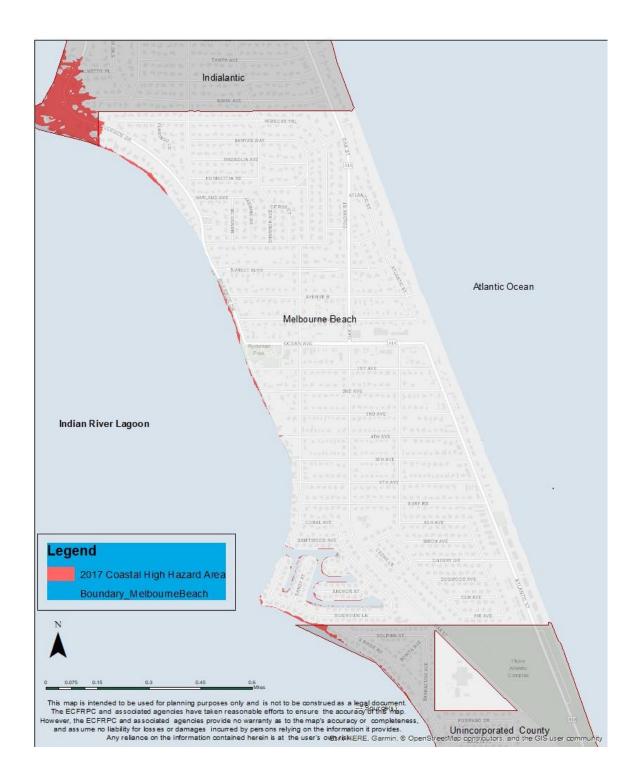
- 1. Abandon the shoreline. In light of the public and private investments on the barrier island. This is not considered a reasonable alternative.
- 2. Regulatory Solutions. The use of Town ordinances and rules to define an acceptable level of development. These would include the protection of beaches and dunes, minimum setbacks for storm protection, and restoration of degraded dunes.

MAP 6

COASTAL PLANNING AREA



# MAP 7 COASTAL HIGH HAZARD AREA



MAP 8

MELBOURNE BEACH FLOOD INSURANCE RATE MAP



## **CHAPTER 7 CONSERVATION ELEMENT**

#### Introduction

The purpose of Conservation Element is to provide a guide for the conservation, use and protection of natural resources, including factors that affect energy conservation, located within the Town. A specific component of this guide is the provision of a 10 year water supply plan.

There are 6 vacant lots zoned single family and 1 zoned for multi-family uses. The total acreage of these vacant lots is approximately 2.32 acres.

Economically, the Town is a "bedroom community" to the larger urban areas of the South Brevard County mainland. The Town is now and plans to continue to be a residential community. There exists a strip of commercial land along Ocean Avenue, which primarily serves to accommodate the convenience needs of the Town's residents, not the economic vitality of the area.

#### **Vegetative Cover**

The Town of Melbourne Beach as previously noted is essentially developed. Development occurred during a period when the practice was to clear the subject land of vegetation and install the necessary infrastructure to support development. Further, it has been pointed out the Town has only 0.8 % (5.06 acres) of its land vacant, existing as scattered lots within previously developed subdivisions. Significant vegetative communities do not exist, expect along the dune system and within the Indian River, which is outside the jurisdiction of Town. With respect to the affect of future development upon vegetative communities and other natural resources, there are three vacant lots on the Indian River, shoreline, and two vacant properties along the Atlantic Ocean.

The dune system is vegetated by the following species:

Sea Oats
Railroad vine
Sea rocket
Sea grapes
Cabbage Palm
Saw Palmetto

The dune system is also vegetated by exotic species such as Australian pines, Brazilian pepper trees. It has been reported that Sea lavender and Beach creeper, both on the list of protected species exist within the dune system, however locations of these species is unknown.

Two important vegetative communities occur in the Indian River- sea grasses drift algae aggregations. Principal sea grass species include manatee grass, shoal grass, and turtle grass.

Sea grass coverage has been determined by the Brevard County Natural Resources Department to be less than 10% for this immediate area. However, the Town will work to cooperate with the County and other governmental agencies to reverse the declination.

Sea grass coverage has been determined by the Brevard County Natural Resources Department to be less than 10% for this immediate area. However, the Town will work to cooperate with the County and other governmental agencies to reverse the declination.

Drift algae aggregations have only recently be recognized as an important habitat in the lagoon. These drift algae aggregates have no fixed location and therefore are not mapped. Most of the lagoon bottom is exposed sand or shell. Off shore in the Atlantic, the bottom is either exposed shell and sand or outcroppings colonized by algae and animal life.

Wetlands do not exist within the Town except along the lagoon water's edge. Upland of the mean high water line vegetation is predominantly lawn grass and landscaping common to single family development. Wetlands below the mean high water line is outside the jurisdiction of the Town, and as such are not mapped in this element or any other element the comprehensive plan.

Areas subject to coastal flooding are shown on Maps 7 and 8.

Because of the developed nature of Melbourne Beach, very few terrestrial animals have natural habitats within the Town limits. It is to those few that we will address this section.

The beaches and fore dunes of the Town are important nesting areas for green turtles and loggerhead turtles. In addition, leatherback and hawksbill turtles may use the beaches of the Town for nesting sites. Other animals that would frequent the dune system would be sand crabs, seagoing birds such as sandpipers, terns and gulls, and an occasional raccoon or field mouse.

The lagoon waters edge is the habitat for several species of animals including nursery areas for shrimp, crabs, mullet, manatee, clams and snook. Herons, egrets, and white ibis frequent the lagoon waters edge. Scrub Jays, which have been placed on the list of protected species, have been observed in the Melbourne Beach area. It is pointed out that the Town of Melbourne Beach is a bird sanctuary.

The open waters of the Lagoon and the near shore waters of the Atlantic Ocean are inhabited by numerous fish. The list of these fish can be obtained from the Florida Game and Freshwater Fish Commission (FWC). Table 11 outlines species, which are considered "Endangered," "Threatened," and "Of Special Concern."

#### <u>Impacts of Development on Historic Resources</u>

The Town has one site of historical significance. The pier, located at the west end of Ocean Avenue has been designated as an historic structure. It has previously been restored through a grant from the Department of Natural Resources.

The land-use activities proposed in the Future Land Use Element will not adversely impact the continued use and enjoyment of the pier.

### TABLE 11 ENDANGERED SPECIES, THREATENED SPECIES AND SPECIES OF SPECIAL CONCERN

**Endangered Species** 

Atlantic Loggerhead Turtle
Atlantic Ridley Turtle
Leatherback Turtle
Atlantic Salt Marsh Snake
Woodstork
Peregrin Falcon
West Indian Manatee

Chelonia mydas mydas
Lepidochelsy kempii
Dermochelys coriacea
Nerodia fasciate taeniata
Mycteria Americana
Falco peregrinas
Trichechus manatus

Threatened Species

Atlantic Green Turtle Carretta carretta

Eastern Brown Pelican Pelecanus occidentalis Carolinensis

American Kestrel Falco sparverius paulus

Roseate Tern Sterna dougallii Least Tern Sterna albifrons

**Species of Special Concern** 

Common Snook Centropomus undecimalis

Rivulus Rivulus marmoratus

American Alligator Alligator mississippiensis

Little Blue Heron Florida caerules
Snowy Egret Egretta thula
Louisiana Egret Hydranassa tricolor
Reddish Egret Egretta rufescens

Roseate spoonbill Ajaia ajaia

American Oystercatcher Haematopus palliates

Bald Eagle Haliaeetus I

Source: Brevard County Comprehensive Plan

#### **Estuarine Pollution**

Melbourne Beach borders on part of a large estuary, the Indian River Lagoon, which stretches from north of Titusville to Stuart, Florida. The Lagoon is connected to the Atlantic ocean through several inlets, the nearest being Sebastian Inlet, 20 miles to the South, and, to a limited extent, Port Canaveral, about 30 miles to the North.

There are several areas within the surrounding jurisdictions (i.e. County and surrounding municipalities) where fresh water enters the Lagoon. Because these areas are beyond the scope of this plan and beyond the Town's ability to control, this Plan will only concern itself with the storm water outfalls within its jurisdiction. Map 5 shows these outfalls. (This issue will be covered in greater detail in the Sanitary Sewer, Solid Waste, Potable Water, Drainage and Natural Groundwater Element).

The State of Florida has classified the Indian River in the vicinity of the Melbourne Beach Area as Class III waters. By this classification these waters should maintain a quality sufficient to allow water body contact sports and support the propagation of fish and wildlife. The principal water quality problem is high nutrients, associated with storm water runoff. Pollutants, which may be contributed by the Town, include fertilizers, oils, and other hydrocarbons. The principal pollution problem is sewer effluent and urban runoff. The water quality problems are exacerbated by the limited tidal flushing in this area. Although Melbourne Beach cannot solve the entire lagoon pollution problem, the Town can limit its contribution to the overall cumulative effect.

#### Known Point Source and Non-Profit Source Estuarine Pollution

Known point sources of pollution are the storm water outfalls located on Map 5. There are no other known point sources of pollution. Generally, given the nature of development within the Town the non-point source of pollution is run-off from lawns and yards.

#### Impact of Proposed Land Uses and Facilities on Estuaries

The proposed land uses for the lagoon waters edge are single family residential or recreational in nature and to a great extent currently exist. Obviously, additional construction, even on the limited scale outlined in the Future Land Use Element can have an adverse impact upon the estuarine system. Additionally, increases in traffic volumes passing through the Town on A-1-A can increase the pollutants, which may be deposited within the Indian River. Implementation of the Goals, Objectives and Policies of this element will significantly reduce the point source pollution levels.

#### **Analysis of Remedial Action**

Current regulations issued by the Saint John's River Water Management District require that new construction retain on-site as a minimum the first ½ of runoff with treatment (i.e. skimming and/or filtration) prior to discharging the overflow into the drainage system. The purpose of such regulation is to reduce pollutants entering wetlands, and/or other water bodies. The enforcement of these regulations however will have a limited effect within the Town of Melbourne Beach because, as outlined in the Future Land Use Element, new construction which may be expected in the Town will predominately be new single family dwellings on six individual lots in previously developed subdivisions. Only 0.31 acres of the remaining 5.06 vacant acres is available for multiple family development with some limited non-residential possible. The provisions of Chapter 40C-42 F.A.C. specifically exempts single family construction form the requirements of the rule. Thus, many of the regulations that are directed at reducing storm borne pollutants are not applicable to a bulk of the new construction, which occurs within the Town.

One way to address the problem of nutrient levels would be to address basic storm water management practices on the construction of single-family homes. The Town has recently amended its land development regulations, and which is reflected in the Goals, Objectives and Policies, to require additional stormwater management requirements and should continue to monitor and amend the requirements as necessary.

An additional measure would "capture" stormwater at the outfall locations and skim the stormwater prior to entering the Lagoon system. This could be done through a system of weirs and skimmers. This would be more costly and require funding from extra-jurisdictional sources. The potential funding of this option will be addressed in the Capital Improvements Element.

#### State, Regional and Local Regulatory Programs to Reduce Estuarine Pollution

State pollution regulation is largely vested in the Florida Department of Environmental Protection (FDEP). The FDEP regulates dredge and fill of waters and adjacent wetlands. FDEP also regulates discharge of pollutants in water bodies.

FDEP and the water management districts regulate the withdrawal, diversion, storage and consumption of water with the water management districts responsible for most of the permitting and operational aspects.

The Florida Department of Environmental Protection (FDEP) is also involved in controlling estuarine pollution. The FDEP is responsible for selling or leasing state owned submerged lands if the sale or lease is "not contrary to the public interest." The proposed use of the conveyed or leased submerged land "must not interfere with the conservation of fish, marine or wildlife, or other natural resources." Deeds or leases may contain restrictions on dredging or filling. The FDEP is also the chief land-purchasing agent for the state. Through the FDEP, the state may purchase environmentally sensitive land, which is vital to the estuary.

The county, through its police power, regulates numerous activities, which impact estuarine water quality. Applicable to Melbourne Beach would be sewer hook-ups, maintenance of sewer lines, and the issuance of septic tank permits. The County also has a Beach and Riverfront Acquisition Program, which enables the County to purchase lands that border on these water bodies.

#### Air Quality

According to the St. Johns River District Office of the Florida Department of Environmental Protection, the air quality in the Melbourne Beach area is considered to be acceptable based on available data and observations by that Agency. According to FDEP officials, there are no continuous air quality monitoring programs in the South Brevard Beaches area. The good air quality in this air is attributed to the fact that there are no major industrial land uses and the prevailing winds and air circulation patterns. Given the limited potential for additional development in the Town, no significant change in air quality is anticipated.

#### Flood Prone Areas

In that, the Town of Melbourne Beach is on a barrier island, located between the Atlantic Ocean and the Indian River with less than 5000 feet of land separating the two, flood prone areas are significant considerations in the development and or redevelopment of areas within the community. Map 7 shows that portion of the Town within the Coastal High Hazard Area and Map 8 is the Town's FEMA Flood Insurance Rate Map (FIRM).

#### <u>Infrastructure</u>

S. R. A-1-A is located within the Coastal High Hazard Area, as shown on Map 7, as well as water and sewer lines necessary to serve existing land-uses. The cost associated with relocating approximately 1.6 miles of roadway, water and sewer in a community that is essentially built out would be catastrophic. As a result, State and Federal regulations regarding construction and reconstruction in such areas must be rigorously enforced.

#### **Commercially Valuable Minerals**

There are no known sources of commercially valuable minerals within the Town of Melbourne Beach.

#### **Dunes**

Sand dunes occur behind the beaches in all areas. Dune heights range from 5 to 12 feet. The average height is approximately 8 feet. Some building practices have since been regulated although there is a potential for strengthening those measures.

#### Impacts of Coastal and Shore Protection Structures on the Beach

Due to the fact that Melbourne Beach has experienced accretion rather than erosion, the impacts of the minimal number of shore protection structures within the Town cannot be determined. However, improperly designed and installed systems can produce negative results and the permitting of any such structures, if allowed at all, should be done only after intense scrutiny and review by qualified professionals.

#### **Existing and Potential Beach Renourishment Projects**

It is the desire of the Town to cooperate with County and State officials in the future if it is deemed beneficial to the Town to institute renourishment projects in the area.

#### **Analysis of Beach and Dune Protection Measures**

The State, County and Town contribute to the control process. Beach and dune protection in Melbourne Beach is currently handled by state rules and local ordinances. The State controls the Coastal Construction Control Line (CCCL) and the thirty-year erosion setback. FDEP regulates all development seaward of the CCCL to ensure that proposed development has minimal impact on the beach and dune system and will survive a major storm. As a part of the review process, thirty years of accumulated erosion must be considered. Florida law prohibits (with limited exceptions) construction of buildings that will be in the water in thirty years. State law also prohibits driving on the beach and picking sea oats.

The Town has several public beach access points as shown on Map 9. These access points are equipped with dune crossovers. The Town enforces existing ordinances, which prohibit walking along or across the dune except on the crossovers. Additionally, vegetation has been planted which is intended to reduce erosion and to discourage bypassing the crossovers.

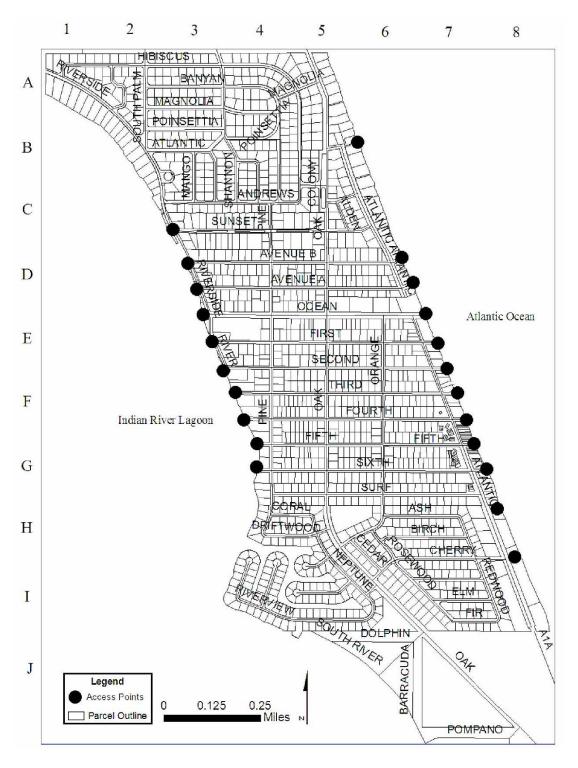
#### **Beaches**

Melbourne Beach has 1.59 miles of sandy beaches. Brevard County has studied the shoreline movement and has found that, during the Study years (1972-1985), the shoreline gained between 16.77 and 21.07 feet.

#### **Public Access**

Public access to the Indian River Lagoon and the Atlantic Ocean beach is shown on Map 9. All future needs are discussed in the Recreation and Open Space Element.

MAP 9
BEACH AND RIVER ACCESS



## CHAPTER 8 RECREATION AND OPEN SPACE ELEMENT

#### Introduction

Public access to the Indian River Lagoon and the Atlantic Ocean is a dominant recreation and open space resource in Melbourne Beach. Continuing to provide public access so that residents and visitors can enjoy recreation opportunities at these natural features is a priority of the Town.

#### **Existing Facility Inventory**

Table 12 provides an inventory of recreation areas available to Town residents, including the facilities provided.

#### **Standards for Recreation Areas**

Standards for recreation facilities and open space focus on quantity and accessibility. Quantity relates to the number and size of the various types of facilities necessary to serve a given population. Accessibility standards are designed to assure convenient access to recreation facilities and open space.

Recreation facility standards vary widely due to many factors such as need, population density, climate, geography, and political environment. The standards presented were determined after workshops and public hearings with citizens of the Town, the Planning and Zoning Board and the Town Commission in visioning sessions and in preparation of the previous Comprehensive Plan Evaluation and Appraisal Report. These standards are subject to change over time due to fluctuations in population densities, age levels, life styles, levels of leisure time and resident preferences. Therefore, it is recommended that these standards be reviewed periodically and adjusted to reflect changes in the various factors affecting the need for the amount of recreational open space.

#### **Park Classification System**

#### 1. Neighborhood Parks:

A neighborhood park is a "walk-to" park generally serving the residents of one residential neighborhood. The service radius is approximately one half mile. No major streets should have to be crossed by the users. The minimum size is 1.5 acres per 1000 population according to county standards. The service areas for neighborhood parks often coincide, in part, with elementary schools; therefore, it is desirable for neighborhood parks to physically join elementary schools to meet the recreational needs of the particular neighborhood by designing facilities and programs according to age, income level, and limited to, play areas for preschool age children, apparatus for children 6-12 years of age, areas for free play, hard surface courts, and areas with benches for passive recreation.

**TABLE 12 - RECREATION FACILITIES** 

Description	Location	Improvements	Size
Ryckman Park     Activity Based	Ocean Ave	Tennis Courts Multi-Use Courts Playground Equip Community Center Building Picnic Tables Multi-use areas Gazebo	3.13 ac
2. Ocean Park	Ocean Ave	Picnic Area	1.75 ac
Resource Based		Beach Access Parking Unloading Area Showers	
3. River Accesses  Resource Based	Sunset Blvd B Avenue A Avenue Ocean Avenue  1st Avenue 2nd Avenue 3rd Avenue 4th Avenue 5th Avenue 6th Avenue	Unimproved Unimproved Unimproved Public Pier Parking Unimproved Bench Bench Paved Street Unimproved Park Boat ramp	50 x 50' 50 x 50' 50 x 50' 100 x 100' 50 x 50' 50 x 50' 50 x 500' 50 x 350' 50 x 150' 50 x 150'
4. Beach Accesses  Resource Based	Atlantic Street East end of Harland Ave. Avenue B Avenue A  1st Ave 2nd Ave 3rd Ave 4th Ave 5th Ave 6 Ave Ocean Avenue Loggerhead Park Preserve East end of Cherry Drive	Dune Crossover All areas have crossovers and limited parking	Access Easement All areas have 50 x 150'
5. Adjacent to Town Activity/Resource Based	Spessard Holland Park	Beach access, parking, golf boardwalk Ball fields Tennis Multi-use area	1.65 ac not including golf course

#### 2. Community Parks:

A community park is a "ride-to" park located near major streets and arterials. It is designed to serve the needs of four to six neighborhoods. This type of park serves an area within a radius of up to three miles or a maximum population of 10,000. A minimum of 20 acres is recommended, with acreage needs based on two acres per 1000 population. Approximately 25 percent of the park area should be reserved for landscaping and passive type recreation.

Essentially, community parks are family recreation areas with programs and facilities for all age groups. Activities are on a broader scale that at neighborhood parks. Typical facilities include, but are not limited to: baseball fields, tennis courts, swimming pools, play apparatus areas, open play areas and additional areas to meet specific needs.

#### 3. District Parks:

District parks are designed to serve the diversified needs of a large number of people. Sizes according to state, regional county standards are a minimum of 100 acres and serving a population of 50,000 to 100,000 people.

#### 4. Regional Park:

A regional park normally serves one or more metropolitan areas. The park should be located so that principal users are within ½ to 1 hour driving time. Usually a regional park is associated with a natural resource, such as a lake, forest or beach. Therefore, great emphasis should be placed upon natural sport activities.

#### 5. Special Use Facility:

Special use facilities are important in fulfilling the demand for particular outdoor recreation activities. Generally designed for a single purpose use, the facilities need to be tailored to each community's situation and needs. Standards for these facilities are dependent upon the activity to be performed. Some special use facilities may be privately owned such as bowling alleys, golf courses, tennis clubs, etc. Special use facilities in the Melbourne Beach area include a fishing pier, golf course and bikeways.

#### **General Guidelines for Effective Open Space Planning**

The Town of Melbourne Beach will consider the following guidelines when determining the location, access, and function of recreation facilities and open space.

- 1. Compatibility- the proposed use of an open space area must be (a) suited to the physical characteristics of the area; (b) compatible with adjacent land uses and features; and (c) compatible among themselves so that one particular use does not destroy the value of the site for other intended uses.
- 2. Continuity- the value of an open space area may be significantly increased if it contributes to the continuity of the overall, multipurpose open space system.

3, Accessibility- depending upon the proposed function of an open space area, public access or the prevention of access is an important factor to consider. For example, access is necessary for active recreation sites while denial of access may be necessary to preserve natural processes such as a dune system

#### **Facility Design Criteria**

The Town of Melbourne Beach will consider the following design guidelines for public open spaces.

- 1. Parks should be compatible with surrounding areas and should be designed and maintained to enhance the natural beauty, generate local pride and to provide a progressive image for the Town. The design should reflect the desires of the public and not be a result of ease of construction.
- 2. A complete plan for facilities should be prepared that includes short and long-range plans.
- 3. Lighting at some facilities should be installed to help maximize proper use of the facility, reduce vandalism and improve security in the recreational facilities.
- 4. Selection of site amenities and facility equipment should be made based upon durability and quality to withstand intense use and possible vandalism rather than upon the least expensive equipment.
- 5. Selection of play equipment for children should be made with regard to the child's safety and the benefits the equipment will provide toward physical and mental development.
- 6. Activities should be appropriately associated and/or separated to insure minimal conflict with various groups using the recreational facility.
- 7. For the comfort of facility users, most neighborhood and community parks should include benches, water fountains, restrooms, shaded areas and tables, that are aesthetically pleasing and durable.
- 8. Off-street parking areas should be provided in major neighborhood parks and all community parks.
- 9. Landscaping should be included as an integral part of every park. The use of both native and exotic plants can produce a desirable environment for recreation.
- 10. Locate uses within parks according to demand for shape, soil capability, need for vegetation, nearness to water, utilities, transportation, wind, and sunlight.

- 11. Land should not be wasted within a recreational site. There should be various purposes for all land or water within a site. These uses can be intensive (e.g. play areas) or passive (e.g. nature trails).
- 12. When a new park site is being examined, consideration should be given to its impact on the surrounding areas (transportation, adjacent property values, noise activity level and other factors that may impact the surrounding area.)
- 13. New recreation facilities should be made to meet the American National Standards Institute (ANSI) specifications for making buildings and facilities accessible to and useable by the physically handicapped.

#### Facilities Needs Analysis

The recreation and open space standards for the Town of Melbourne Beach shall be as shown on Table 13:

TABLE 13
TOWN OF MELBOURNE BEACH RECREATION STANDARDS

FACILITY	LEVEL OF SERVICE	SERVICE AREA
Neighborhood Park Ball fields Multi-purpose field Tennis Courts Playgrounds	1.5 ac per 1000 1 per 2000 pop 1 per 2000 1 per 2000 1 per 4000	1 mile radius
Community Center Beach Access River Access	1 per 5000 1 per 500 1 per 500	2 mile radius .5 mile radius .5 mile radius

#### **Analysis of Needs**

Based upon a review of the inventory of existing facilities in Table 12, the level of service standards outlined in Table 13 and a comparison of the supply versus demand outlined in Table 14 it is noted the Town has adequate open space and recreation areas to meet the needs of existing and future residents, through the Year 2030.

In terms of providing public access to the Indian River, existing conditions appear to be sufficient to meet the public need.

TABLE 14
FACILITY DEMAND ANALYSIS

FACILITY	CURRENT SUPPLY (2010)	2010 DEMAND	2030 DEMAND	
	Acres or	Acres or	Acres or	
	No. of	No. of	No. of	
	Facilities	Facilities	Facilities	
Neighborhood Parks	5.94	5.03	5.26	
Rykman Park	3.36			
Ocean Park	1.75			
Spessard				
Holland	1.65/2.83*			
Loggerhead				
Park 5 <sup>th</sup> Avenue Park				
Ball fields	4/2=2*	2	2	
Multi-purpose fields	2	2	2	
Tennis Courts	2	2	2	
Playgrounds	1	1	1	
Community Center	1	1	1	
Beach Access	•		8	
River Access 10		8	8	

<sup>\*</sup>These facilities are shared between Brevard County and Melbourne Beach. Thus, Melbourne Beach includes ½ of the land and facilities in the inventory.

Given the proximity of most of the residents of the Town to the recreational facilities and the street and thoroughfare patterns, it is suggested that the Town encourage the use of alternatives to the automobile as a means of transportation to recreational facilities. This could be accomplished through the provision of bikeways/bike paths, pedestrian ways between residential areas and recreational facilities, and the provision of areas to secure bicycles at these recreation areas. Bikeways exist in some locations, as a traffic lane along portions of Ocean Avenue, Oak Street, A-1-A and Riverside Drive. The inclusion of bikeways is addressed more specifically in the Transportation Element.

The Town of Melbourne Beach is currently providing recreation/open space facilities in excess of the Level of Service Standard and pursuant to the population projection will continue provide such facilities in excess of the standard through the Year 2030.

# CHAPTER 9 PUBLIC SCHOOL FACILITIES ELEMENT

#### <u>Introduction</u>

Growth management is an essential component of the School District's interaction with local governments. Legislation in 2002 resulted in the Interlocal Agreement for Public School Facility Planning between the School Board, Brevard County and 14 municipalities, including Melbourne Beach.

#### **School Concurrency Program**

In 2005, state legislation required school capacity to be available for residential development, resulting in an updated interlocal agreement titled: Interlocal Agreement for Public School Facility Planning and School Concurrency. The agreement was adopted in 2008, and updated in 2014, including participation by Melbourne Beach to provide a consistent school concurrency program and framework for Brevard County's school concurrency program.

The School Board created Policy 7130 and Administrative Procedures 7130.01 and 7130.02 to manage the School concurrency process outlined in the 2014 interlocal agreement.

#### **School Enrollment Projections**

School enrollment projections and projected capacity utilizations for Brevard public schools and Concurrency Service Areas are calculated annually for the concurrency program. The Facilities Planning Department uses geospatial analysis of the local government development data, birth rate data, mobility rates, and matriculation rates to calculate student membership projections for the ensuing five years. Further analysis takes into account any potential redistricting or grandfathered students from previous redistricting.

### CHAPTER 10 INTERGOVERNMENTAL COORDINATION ELEMENT

#### <u>Introduction</u>

The purpose of this element of the Comprehensive Plan is to identify to the needs for coordination with other local, county, and regional governments as well as state agencies. The Town of Melbourne Beach is a Commission/Manager form of government. The elected Town Commission consists of a Mayor and four Commissioners which establish policy and approves the annual budget. The Town Manager, appointed by the Town Commission, is responsible for the day to day operation and administration of the Town government and heads an organization of Town Officials and Departments.

The Town Manager is a full-time Town employee and the organization that the Town Manager directs is staffed by full and part time paid employees. The Town Attorney reports directly to the Town Commission. This position serves both the Town Commission and the Town Manager in a consulting capacity and is compensated for services based upon time and materials.

The Town Commission has established several boards and/or commissions, staffed by citizen volunteers, as follows:

Planning and Zoning Board Code Enforcement Magistrate Environmental Advisory Board History Center Board Parks Board Board of Adjustment and Appeals

Each of these entities is established by ordinance and governed by their respective bylaws. Organizationally, all exhibit similar organization with each board electing its own officers.

Town representatives, (elected and/or appointed officials and citizen volunteers) serve on boards or commissions with greater jurisdiction that the Town limits, including the Technical Advisory Committee of the Spacecoast Transportation Planning Organization. The Town, through its Charter, provides for coordination with other governmental entities as follows:

"The Town may exercise any of its powers or perform any of its functions and may participate in the financing thereof, jointly or in cooperation by contract or otherwise, with any one or more states or agencies thereof, other counties or municipalities, or the United States or agencies thereof, to the fullest extent permitted by law, providing however, all participation involving financial obligations of the Town shall be approved by Ordinance."

#### **Intergovernmental Coordination Mechanisms**

Municipalities are required to coordinate with adjacent municipalities, Brevard County entities, and Regional, State and Federal agencies. Effective and timely interaction is essential to the provisions of public services. Table 13 outlines the key organizations, relationships, and coordination mechanisms.

# TABLE 15 TOWN OF MELBOURNE BEACH INTERGOVERNMENTAL COORDINATION

AGENCY	ACTIVITIES	CONTACT OFFICE	COORDINATION MECHANISM	
Local Governments:				
Melbourne	Water Supply Town Manager		В	
Indialantic	Voluntary cooperation on common concerns	Town Manager	А	
	County Departmen	nts:		
Health Dept	Regulation Enforcement	Town Manager	С	
Transportation Planning Agency TPA	Planning and Implementation of Transportation Activities	Implementation of Transportation		
Fire Department	Mutual Aid	Mutual Aid Fire Chief		
Planning and Development Dept	Coordination of Development Activities			
Intergovernmental Coordination of Comp Plan Committee	Coordination	Town Manager	A,D	
Utilities	Sewer System	Sewer System Town Manager		
Property Appraiser	Property Assessments	Town Manager, Building Official	C, A	
Tax Collector	Taxes and Revenue Estimates	Town Manager	C, A	
Supervisor of Elections	Assistence Town Town Manager Elections		В	
Clerk of Courts	Records	Town Manager	A, C	
School Board	Education	Town Manager	A, D	
Sheriff	Law Enforcement	Police Chief	A, C	
League of Cities	General Government	Town Manager	А	

AGENCY	ACTIVITIES		CONTACT OFFICE	COORDINATION MECHANISM
	Re	gional Entitie	s	
East Central Florida Regional Planning Council	Planning and Management		Town Manager	A, C
St. Johns Water Management District	Planning,	Resource Permitting, cement	Town Manager	A, C
	Stat	e Departmen	ts	
Economic Opportunity	Planning	Assistance	Town Manager	A, B, C
Environmental Protection (DEP)		lation, nt permitting	Town Manager	С
Health and Rehabilitative Services (HRS)	Regulation	Enforcement	Town Manager Police Chief	С
Motor Vehicles	Regulation enforcement information		Police Chief Town Manager	С
Law Enforcement (F.D.L.E.)	Law enforcement		Police Chief	A, D
Transportation	Maintenance permitting		Town Manager	С
	Fed	leral Agencie	s	
Environmental Protection Agency	Regulation		Town Manager	С
Corps of Engineers	Regulation, Permitting, Enforcement		Town Manager	С
Air Force	Mutual Aid		Fire Chief	В

#### Coordination Mechanisms:

- A Informal
- B Binding Agreement
  C Regulation/Statute/Ordinance
  D Training

#### Intergovernmental Coordination\_Analysis

Generally, the existing mechanisms for intergovernmental coordination have been effective. The Town has been active in working with other governmental entities resulting in accomplishments such as implementation of open container laws and securing funding for beach and dune renourishment projects. Organizations such as the Brevard League of Cities have been effective in maintaining informal relationships among the various municipalities throughout the County, by allowing issues to be aired in an informal setting.

Growth within the Town of Melbourne Beach will be limited to construction on approximately 13.2 acres of remaining vacant land. Redevelopment is highly unlikely to result in an increase in population for a number of reasons. The Town requires a voter referendum to rezone property to increase densities. Currently developed multi-family properties are at or near the maximum density allowed. Increasing density in the coastal area will require a number of additional issues to be addressed including hurricane evacuation times, water supply adequacy, transportation concurrency, and maintaining service level standards for all services offered by the Town.

Informal coordination with Indialantic, as well as Brevard County is the most common form of intergovernmental coordination. This produces an effective relationship between the entities.

Formal agreements exist between the Town, the Town of Indialantic, Brevard County, and Patrick Air Force Base mutual aid for fire protection. Agreements among law enforcement agencies exist with respect to mutual aid and assistance within the County. Also the Town has a formal agreement with the City of Melbourne regarding the provision of water service to the Town.

The agreements regarding the mutual aid for both fire and law enforcement appear to be adequate and meet the needs of the organizations involved.

## CHAPTER 11 CAPITAL IMPROVEMENTS ELEMENT

#### Introduction

The purpose of the Capital Improvements Element is to evaluate the need for facilities and other improvements identified in the various elements of the Comprehensive Plan; to estimate the costs of such improvements for which the local government has responsibility; to analyze the fiscal capability of the Town to finance and construct such improvements; and to schedule the funding and construction of these improvements to ensure that they are provided when required based upon needs identified in the other elements.

#### **Needs Derived From Other Elements**

The Town of Melbourne Beach is a small ocean-front community that is built out. The analyses performed in the other elements of the Comprehensive Plan indicate that the existing facilities are adequate to serve the existing, as well as, future developments in the Town. No facility improvements are needed to meet the existing or future demands for transportation, sanitary sewer, solid waste, potable water or recreation facilities.

#### **Public Educational And Health Care Facilities**

One public elementary school is located within the Town. The geographic service area of the school includes the Town limits and the unincorporated barrier island for approximately one mile south of the Town limits.

There are no public health care facilities located in the Town of Melbourne Beach.

#### **Existing Revenue Sources & Funding Mechanisms**

For the fiscal year 2020/21, the Town of Melbourne Beach projects a total of \$3,376,532 in revenues from the following sources:

Source	Amount (\$)	Percent
Taxes	2,739,012	81.1
Licensing and Permits	161,300	4.8
Intergovernmental Revenue	298,400	8.8
Services	114,183	3.4
Fines & Forfeitures	13,425	0.4
Miscellaneous	50,212	1.5
Total	3,376,532	100.0

As shown above, the Town's major sources of revenues are: property taxes and intergovernmental revenues including state revenue sharing, sales tax, communications services tax, etc.; and franchise fees.

#### **Analysis**

The Town annually adopts the Ten-Year Capital Investment Plan as part of budget process as a means of guiding the timing and location of construction or extension or any necessary public facilities.

The existing infrastructure continues to be adequate to serve the existing, as well as, any redevelopment that may occur. No extension or increase in capacity of any public facility is necessary at this time to correct any existing deficiency or to satisfy any future needs.

State Road A-1-A is the only public facility in Melbourne Beach that is provided and maintained by a State agency. The St. Johns River Water Management District has no facilities in Melbourne Beach that they provide and manage.

There are no other tax bases, or sources of revenue, such as impact fees or user fees in Melbourne Beach. With little growth projected in the Town and absence of user-oriented facilities, impact fees or user fees are not a feasible source of future revenues.