The City of Miami Beach Comprehensive Plan

Data and Analysis 2019

Prepared by
KCI Technologies, Inc.

MIAMI BEACH 2019
EAR-BASED COMPREHENSIVE PLAN AMENDMENTS

DATA & ANALYSIS

These following support documents are Data and Analysis for the amended Goals, Objectives and Policies of the 2019 EAR based amendments. The data and analysis is not formally adopted, but serves as supporting documentation to the proposed amendments included in the transmitted element to the Florida Department of Economic Opportunity. In addition to the data and analysis provided in this document, the supporting local studies and master plans are identified by applicable element and available online:

- https://www.miamibeachfl.gov/city-hall/city-manager/master-plans/
- http://www.mbrisingabove.com/

Overview

The City of Miami Beach is a dense urban community located on a barrier island on the southeast coast of Florida. Incorporated in 1915, the City has grown from a resort island into a vibrant, tropical, historic city, though tourism is still our largest industry. The southern portion of Miami Beach, commonly known as South Beach, is the primary dining and entertainment destination in Southeast Florida for tourists and residents of the greater metropolitan area. It should also be noted that to a great extent, the National Register Architectural District, most commonly known as the "Art Deco" District, a collection of 20th Century architecture consisting of approximately 800 buildings, is a great attractor of international tourism.

The Goals, Objectives and Policies of the City's adopted Comprehensive Plan direct the vision of the City for the future and how to meet the needs of current and future residents, visitors and businesses. The proposed amendments were prepared as part of an EAR process to update the comprehensive plan for consistency with state law and to address changing conditions and needs in the city. Such updates are required every seven years, pursuant to Section 163.3191, Florida statutes. As part of the EAR process, the city and our consultants have gathered data and performed analyses on existing conditions and trends in the City. Other plans and strategies that the city has formulated have been considered, including the storm water master plan, the transportation master plan, the Urban Land Institute (ULI) report, and the Resilient 305 plan.

A public meeting took place on January 28, 2019 to solicit input from residents and stakeholders. The comments were primarily focused on issues related to sea level rise, the environment, and incentivizing workforce and affordable housing. Attached is a summary of the comments that were provided by residents. The information gathered at this meeting, as well as any subsequent feedback, were utilized to determine best practices for policies to incorporate into the plan, while addressing the needs of residents and other stakeholders.

Chapter 1 - Resilient Land Use and Development Element

The Resilient Land Use and Development Element (RLU) of the Comprehensive Plan, previously titled Land Use Element, serves as a guide for future land development and redevelopment in a manner consistent with the City's vision of a vibrant and resilient Miami Beach, and the requirements of the Florida Statutes. The Principles, Goals, Objectives and Policies in the Resilient Land Use and Development Element are closely interrelated to most, if not all other elements in this Comprehensive Plan. Its function is to define future land uses and set their location, and to draw upon the core principles within the Comprehensive Plan to help ensure that growth is directed in a manner that is resilient, sustainable, supported by essential services, and improves the quality of life of the City and its residents. The majority of the changes to the element are housekeeping changes and include a reorganization of the element for easier use and understanding of the GOPs of the element. A set of principles were added to aid in the review of amendments based on the planning GOPs of the element.

Summary of Element Revisions:

- Renames the Future Land Use Element to the *Resilient Land Use and Development Element*.
- Adds sound planning criteria for consideration when making recommendations on future land use map (FLUM) and comprehensive plan amendments.
- Removes the Parking (P) future land use category and designates those parcels as Pubic Facility: Governmental Uses (PF).
- Incorporates descriptions for RM-PS-1 and RM-PRD-2 future land use categories that were on the FLUM but not described in the element.
- Improves internal consistency and clarity.
- Updates Goals, Objectives, and Policies to be consistent with changes in state law.
- Removes citations to obsolete Florida Statutes and Florida Administrative Code sections.
- Modifies the general organization of the Element to improve usability.

Supporting Studies and Master Plans

- Miami Beach Florida: Stormwater Management and Climate Adaptation Review, *Urban Land Institute* (2018)
- North Beach Master Plan (2016)
- South Florida and Sea Level: The Case of Miami Beach, *Harvard Graduate Study* (2017)

Supporting Data & Analysis:

Population

Between the 2000 and 2010 U.S. Census, the permanent population of the City of Miami Beach decreased from 87,933 to 87,779 (0.17% decrease). Estimates and projections show growth will occur slowly in the City: however these projections are based on prevailing trends.

According to the 2017 Population estimates by the U.S. Census Bureau, the total population for the City of Miami Beach is 92,307. According to the Bureau of Economic and Business Research Florida Estimates of Population, the 2018 estimate for the City of Miami Beach is 92,502.

The table below shows the comparison from the 2010 Census (actual) to the estimates to date, which indicates a growth of 5.2% in seven years.

Population Estimates, 2010-2017[1]

	2010	2011	2012	2013	2014	2015	2016	2017[2]
Population	87,779	87,956	88,628	89,412	90,669	91,564	91,784	92,307

Attached is a data and analysis document that identifies expected changes in population. The estimated growth in population, as identified by the State of Florida Shimberg Center is below:

Permanent Population Projections (2010-2040)							
	2010	2016	2020	2025	2030	2035	2040
Miami Beach	87,779	92,799	95,537	98,342	98,342	100,526	105,144

The expected population for the 2040 planning horizon of the comprehensive plan is 105,144. According to the estimate, there were 92,799 residents in 2016. Therefore, throughout the planning horizon, there is an expected population increase of 12,345 residents.

As the City of Miami Beach is built-out, it is expected that this population increase will be accommodated through infill redevelopment. The City expects to be able to accommodate an additional 2,655 residents in the North Beach Town Center – Central Core (TC-C) area, which currently has an estimated population of 735 residents, but can accommodate approximately 2,655 residents. It is anticipated that the remaining population can be accommodated through redevelopment of vacant or underutilized properties throughout the City.

Demographic and Economic Information[3]

Demographic and Economic Information									
	1980	1990	2000	2006	2008	2010	2012	2013	2014
Population									
Total Population	96,298	92,639	87,933	84,880	84,633	87,779	88,628	91,026	90,669
Population under 18	n/a	13,081	11,815	13,624	11,970	11,220	13,980	13,912	11,605
Population over 65	48,727	27,884	16,927	13,808	13,628	14,233	13,444	14,262	14,544
Median Age	65	45	39	40	41	41	39	39	40
Race									
White	n/a	n/a	86.7%	87.3%	88.5%	87.6%	77.0%	78.4%	77.0%
African American	n/a	n/a	4.8%	1.4%	2.8%	4.3%	4.90%	4.90%	4.80%
Asian	n/a	n/a	1.4%	0.6%	1.7%	1.8%	2.10%	2.60%	1.84

[1] 2010, U.S. Census Bureau; 2010-2016, American Community Survey 5 year estimates

[2] U.S. Census Bureau; 2017 QuickFacts, Population Estimates

[3] Miami Beach Environmental Scan 2016- All data based on Census for 1980, 1990, 2000, and 2010. Data from 2005, 2007, 2008, 2012, 2013, and 2014 based on American Community Survey.

Other	n/a	n/a	7.1%	0.4%	8.5%	3.4%	13.80%	15.20%	14.34%
Hispanic Origin	n/a	n/a	53.4%	52.1%	49.4%	53.2%	52.30%	52.40%	53.52%
Households									
Total Households	55,673	49,234	46,242	44,521	41,463	47,168	43,115	43,312	43,650
Median Household Income	$8,503	$15,312	$27,322	$44,739	$42,274	$38,640	$43,321	$43,316	$42,547
% Income from Earnings	37.4%	57.1%	72.2.%	79.0%	78%	77.5%	78.1%	**	**
Mean Earnings	$16,234	$31,320	$56,767	$79,940	$81,863	$77,829	$86,688	$83,225	$85,725
Average Household Size	n/a	1.85	1.87	1.91	2	1.84	2.21	2.09	2.05
Family Households	24,895	21,326	18,342	17,652	16,228	18,350	17,979	17,844	18,476
Median Family Income	$14,061	$22,020	$33,440	$54,431	$53,491	$50,758	$54,155	$53,351	$54,513
Family Size	n/a	n/a	2.76	2.84	3.00	2.70	2.99	3.01	3.00
Total Housing Units	64,129	62,413	59,723	65,583	66,194	67,499	68,237	67,975	68,388
Housing Unit Occupancy									
Owner-Occupied	14,447	14,067	16,895	19,109	22,804	18,194	15,521	16,154	15,683
Renter-Occupied	41,238	35,238	29,299	25,412	18,659	28,974	27,932	27,158	27,967
Vacant	n/a	13,108	13,529	20,123	**	20,331	27,784	24,663	24,738
Vacant Seasonal Use	n/a	4,207	7,668	10,680	10,979	11,988	**	**	**
Apartment Rents (Adjusted for Inflation)									
Lower Quartile	n/a	$562	$603	**	**	$746	**	**	$786
Median	n/a	$719	$747	**	**	$933	$1,059	$1,088	$1,115
Upper Quartile	n/a	$964	$958	**	**	$1,248	**	**	$1,576

Population

Households: According to the U.S. Census, the average household size increased slowly from 1.85 in 1990 to 1.87 in 2000, and continued to increase in 2014 (2.05). According to the 2011-2015 and 2012-2016 American Community Survey (ACS) 3-Year Estimates, there is a slight increase in rental vacancy rates and owner vacancy rates from 2015-2016, and a slight decrease in average household size in both rental-occupied units and owner-occupied units.

Vacancy Rate and Household Assumptions		
	2015	2016
Rental Vacancy Rate	5.6	5.9
Owner Vacancy Rate	3.2	3.6
Household Size of Rental-Occupied Units	2.02	1.97
Household Size of Owner-Occupied Units	2.21	2.19

The City of Miami Beach has unique circumstances that set it apart from the rest of Miami-Dade County because of the significant influx of tourists and seasonal residents. The 1998 EAR noted that due to the large number of tourists and seasonal residents, the demand on City services is higher than the impact of the permanent residents. A formula was devised to portray more accurately the need for services within the city by multiplying the permanent population of the City increasing it 20% to estimate required services and facilities.

Average Daily Population[4]

Average Daily Population									
	2005	2009	2010	2011	2012	2013	2014	2015	% Change Since 2005
Permanent Residents	84,086	86,916	87,779	88,349	89,546	90,588	91,540	91,714	9.1%
Seasonal Residents	14,917	20,927	22,780	22,928	23,239	23,509	23,756	23,801	59.6%
Residents leaving for work	(28,551)	(27,106)	(27,402)	(27,939)	(28,528)	(28,759)	(30,007)	(32,513)	13.9%
Non-Resident Workers	29,278	28,985	30,252	31,303	33,519	33,561	31,510	33,080	13.0%
Hotel Guests	26,986	21,042	22,226	24,983	25,208	25,688	27,257	32,985	22.2%
Other Tourists	8,675	9,368	10,773	10,923	13,606	13,726	14,565	22,312	157.2%
Beach Visitors	22,202	19,861	24,480	24,293	30,917	31,191	33,096	30,800	38.7%
Daily Population	157,593	174,808	182,077	183,588	201,640	203,765	206,847	222,079	40.9%

[4]**Source:** City of Miami Beach Environmental Scan 2016

Definitions Demographic Table:

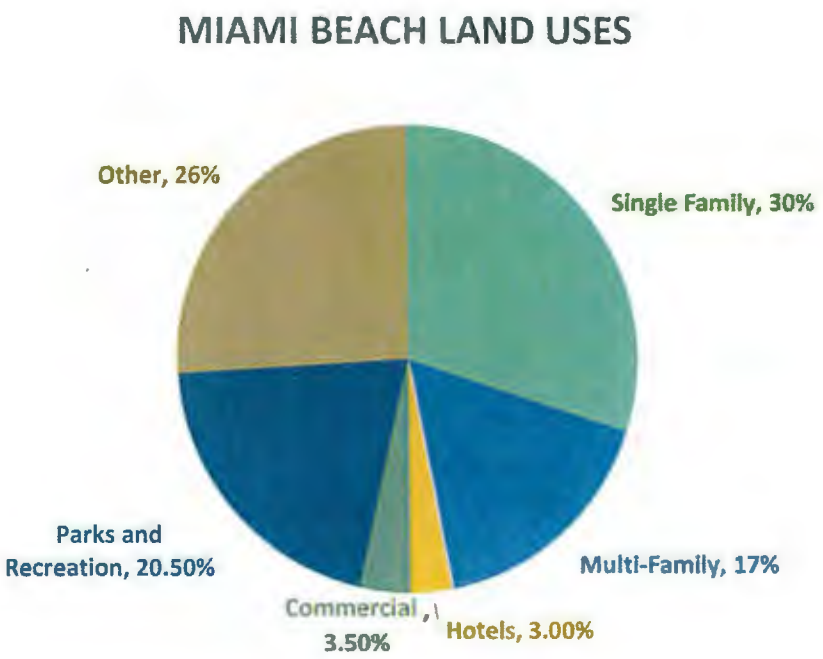
- Permanent Resident- Residents that live in Miami Beach year round
- Seasonal Residents- Residents utilizing a Miami Beach residence as vacation/second home
- Residents leaving for work- Residents leaving Miami Beach for work
- Non-Resident Workers- Number of non-Miami Beach resident workers
- Hotel Guests- Average amount of guests staying in Miami Beach hotels on a daily basis
- Other Tourists- Tourists visiting tourist locations/events other than beaches
- Beach Visitors- Average number of beach goers on a daily basis

Existing Land Use Inventory

The *Existing Land Use* table shows the existing land use acreage by land use category and by neighborhood. This pattern has changed very little and with most of the land developed, the potential for land use shifts is minimal. Instead, reinvestment in the same land use is the pattern.

The single-family density category ranges from 1 to 7 units per acre. The multifamily categories range from 25 units per acre in the Low Density Planned Residential Category to 150 in the High Density Multifamily Residential and the High Intensity Commercial Categories. It must be noted that, with a few exceptions, most land use categories in the City of Miami Beach permit a mix of residential and commercial uses.

Miami Beach Land Uses



Land Use

The City of Miami Beach is approximately 7.1 square miles in size, and is bounded by three other municipalities: Miami (west of Biscayne Bay), North Bay Village and Surfside, as well as Biscayne Bay and the Atlantic Ocean. It consists of a number of islands interconnected with bridges and also a portion of Fisher Island, which is separated by Government Cut and connected to the City via a ferry service from Terminal Island in the City proper. The City has not expanded in land area since the data of the last Data and Analysis and does not expect to expand in the future. As urban community located on a barrier island, only by annexation can the City aggregate land. The *Existing Land Use* table reflects the existing land use categories by acreage and the *Miami Beach Land Uses* figure depicts the future land use categories.

Existing Land Use (in acres)

Zoning District	Acreage	Percent of City
CD-1	18.00	0.50%
CD-2	106.35	2.97%
CD-3	61.27	1.71%
CPS-1	12.07	0.34%
CPS-2	25.80	0.72%
CPS-3	1.96	0.05%
CPS-4	15.80	0.44%
I-1	28.55	0.80%
MR	1.49	0.04%
MXE	50.12	1.40%
P	25.70	0.72%
PF	69.09	1.93%
PF(CCC)	58.67	1.64%
PF(E)	49.39	1.38%
PF(HD)	58.57	1.64%
RM-1	427.04	11.93%
RM-2	122.92	3.43%
RM-3	272.63	7.61%
RM-PRD	16.09	0.45%
RM-PRD-2	8.54	0.24%
RMPS-1	7.09	0.20%
RO	13.75	0.38%
ROS	651.97	18.21%
RPS-1	5.11	0.14%
RPS-2	10.69	0.30%
RPS-3	12.62	0.35%
RPS-4	31.44	0.88%
RS	1,374.20	38.38%
SPE	4.90	0.14%

TC-1	1.34	0.04%
TC-2	0.40	0.01%
TC-3	2.56	0.07%
TC-3(c)	0.95	0.03%
TC-C	20.84	0.58%
TH	12.86	0.36%
Total	**3,580.73**	**100.00%**

Vacant Land

Most of the City's land identified as vacant is currently being used as surface parking lots. Privately-owned, vacant land is approximately 101 acres scattered throughout 367 parcels. All the vacant land is fully developable and zoned for development.

These vacant parcels are subject to the existing Future Land Use Map categories and Land Development Regulations of the City Code and will be reviewed on an individual basis as development proposals are submitted. The development and re-development that has occurred in the City has been consistent with the City's adopted Future Land Use Map and the Land Development Regulations that govern each zoning district. The difference between 2008 and 2018 in vacant land may be due to the demolition of unsafe structures or redevelopment of properties that is planned but has not occurred.

Demands of Growth

During the last few years, the City has experienced a wave of development and redevelopment, notwithstanding the down-zoning that occurred between 1997 and 1999. About the same time, the Portofino DRI was approved, which when completed would result in construction of approximately 1400 residential units and commercial space. Construction under the approved DRI is still ongoing. Demands on services throughout the City have continued to rise, however, levels of service have been maintained throughout with a few exceptions relating to traffic at some intersections.

Previous Reduction in Density Impairing Redevelopment Property Rights

With regard to redevelopment of non-conforming buildings in the event of a catastrophic event, including, but not limited to, fire, tornado, tropical storm, hurricane, or other acts of God, which results in the complete demolition of a building or damage to a building that exceeds 50 percent of the value of the building as determined by the building official, the Land Development Regulations of the City Code provide that such building may be reconstructed, repaired or rehabilitated, and the structure's floor area, height, setbacks and any existing parking credits may remain, if certain conditions set forth in the LDRs are met. These conditions are, but not limited to, residential units meeting the minimum unit size requirements, having a previously issued certificate of use, certificate of completion, certificate of occupancy or occupational license by the city to reflect its current use; the building must meet the Florida Building Code and any other life safety codes that may be required; and if located within a designated historic district, or a historic site, the repairs or rehabilitations shall comply substantially with the Secretary of Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Structures, as well as the Certificate of Appropriateness criteria in the LDRs.

Chapter 2 - Climate Resiliency and Sustainability Element

Previously Conservation / Coastal Zone Management Element

The Resiliency and Sustainability Element consolidates the principles of sustainability and resiliency that were previously located in studies and other planning efforts commissioned by the City, as well as adopted objectives and policies that were previously located in other elements of the Comprehensive Plan. The element's central purpose is to centralize these objectives and policies regarding climate change and sea level rise. The element includes goals, objectives and policies that address interdisciplinary nature of resiliency planning, including natural resource protection, land development, city operations and emergency preparedness. This element also houses the goals, objectives and policies required for consistency with the Florida Statues for the Conservation and Coastal Management Elements.

Summary of Element Revisions:

- The proposal merges policies from the Conservation/Coastal Zone Management into a new *Climate Resiliency and Sustainability Element*.
- Incorporates guiding principles of the ULI Miami Beach Study.
- Incorporates the Resilient 305 and the Miami Beach Strategic Plan to the list of referenced documents.
- Updates *Adaptation Action Area* (AAA) strategies to utilize more relevant language.
- Incorporates strategies to promote placemaking as a way to complement sea level rise mitigation strategies.
- Incorporates policies to incentivize and support private property adaptation.
- Incorporates policies to support the City maintaining or improving its FEMA community rating system score.
- Provides policies to that ongoing environmental issues are addressed through proactive planning approaches.
- Incorporates policies to provide for the protection of cultural and historic resources.
- Provides that the City will consider ecologies when making decisions on future projects.
- Updates references to other environmental documents.
- Establishes policies to promote energy efficiency.
- Provides policies to improve the resiliency of the City's operations.
- Updates Goals, Objectives, and Policies to be consistent with changes in state law.
- Removes citations to obsolete Florida Statutes and Florida Administrative Code sections.
- Modifies the organization of the Element to improve usability.

Supporting Studies and Master Plans

- http://www.mbrisingabove.com/your-city-at-work/resilience-strategy/climate-action-plan/
- Elevation Calculator: https://gis.miamibeachfl.gov/Html5Viewer/Public/index.html?viewer=EC
- Resilient 305
- Miami Beach Florida: Stormwater Management and Climate Adaptation Review, *Urban Land Institute* (2018)
- North Beach Master Plan (2016)
- South Florida and Sea Level: The Case of Miami Beach, *Harvard Graduate Study* (2017)
- Miami Beach Sustainability Plan https://www.miamibeachfl.gov/wp-content/uploads/2017/12/City-of-Miami-Beach-Sustainabilty-Plan_FINAL.pdf

- 2017 Local Mitigation Strategy https://www.miamibeachfl.gov/wp-content/uploads/2017/12/local-mitigation-strategy-part-4-appendices.pdf

Supporting Data & Analysis:

Water Resources
There are few seagrass beds in and around the waters adjacent to the City. It is important that any development along the western shoreline must be sensitive to these seagrass beds and their critical importance to the ecosystem of Biscayne Bay. In this regard, the City, along with Miami Dade County DERM, is vigilant when these types of developments are proposed, whether large or small as a residential dock projecting into the Bay or any of the waterways surrounding the City.

Soils
The entire City is essentially "made land" except for the sand along the ocean beach. Therefore, soil erosion is not a problem.

Vegetative Cover
Between the man-made soil of the island and the full development pattern, there is no significant natural vegetation cover. Vegetation is limited the landscaping planted in conjunction with development, including parks, and limited ocean dune vegetation.

Minerals
The man-made nature of most of the island's subsoil means there are no commercially significant minerals.

Floodplains
According to 163.3178, F.S., the Coastal High Hazard Area (CHHA) is the area below the elevation of the category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model. The entire City is classified as a Coastal High Hazard Area (CHHA) which is reflective of its status as a Category 1 Evacuation Zone.

Hurricane Vulnerability Zones are defined as areas delineated in the regional or local evacuation plan as requiring evacuation. In Miami-Dade County, the Hurricane Vulnerability Zones are considered Hurricane Evacuation Zones A and B. Following Hurricane Andrew, State law redefined the "Coastal High Hazard Area" (CHHA) from the FEMA "V" Zone to the Category 1 Hurricane evacuation zone as established in the regional hurricane evacuation plan. In Miami-Dade County the CHHA consists of the barrier islands. The State also eliminated the "Coastal Hazard Area" and established the "Hurricane Vulnerability Zone" (HVZ), defined as areas delineated as Category 3 Hurricane Evacuation Areas by the regional or local evacuation plan. In addition, the Strategic Regional Policy Plan for South Florida established policies addressing hurricane Category 4 and 5 evacuation areas.[5]

[5] Source: Miami Dade County CDMP

Conservation

Biscayne Bay
The Bay is an important recreational asset, particularly boating and fishing. Commercial boating and fishing play a lesser role in the vicinity of Miami Beach.

Floodplains
The Florida Building Code requirement for new construction to have its first floor elevated to meet FEMA standards is the most practical means of floodplain conservation.

Wildlife
The most significant conservation concerns are manatees and sea turtles. Manatees have sighted in a number of the City's waterways. The City of Miami Beach is nesting habitat for three species of protected sea turtles; the Loggerhead, Green, and Leatherback. Annually, beginning in April and extending through early November, the native sea turtles come to nest on our beaches. On beaches where artificial lighting is visible, nesting females may be deterred from nesting and the hatchlings' important journey to the sea can be disrupted. To prevent disorientation and adverse impacts on nesting turtles, installation of oceanfront exterior lighting that is disruptive to sea turtles is prohibited by state law (Chapter 62B-55, Florida Administrative Code). The City of Miami Beach has adopted a Turtle Nesting Protection Ordinance to minimize the impact of artificial lighting on hatchlings and nesting sea turtles and thereby protect the endangered species which frequently visits its beaches. The Ordinance encourages light management on private and public lands, preventing light pollution that is problematic for sea turtles and other nocturnal animals.[1]

Water Needs
The City's 10-Year Water Supply Facilities Work Plan is hereby incorporated in this analysis by reference.

Water Quality
It is the City's goal to provide its residence a safe and dependable supply of drinking water. To ensure the safety of the water, the City routinely monitors for contaminants in the drinking water according to Federal and State laws, rules and regulations. A water quality report based on the results of Miami Beach and Miami-Dade Water and Sewer Department (WASD) monitoring for the period of January 1, 2017 to December 31, 2017 is available on the Florida Department of Environmental Protection's website cited below.

Miami-Beach receives treated water from Miami-Dade County. Miami-Dade's source of water is groundwater from wells. The wells draw solely from the Biscayne Aquifer for a large part of WASD's system. The Alexander Orr, Jr. Water Treatment Plant, draw water mostly from the Biscayne Aquifer and some water from the Floridian Aquifer, and receives lime treatment to reduce hardness, and is then disinfected and filtered.

Water from WASD's other two regional water treatment plants-Hialeah and John E. Preston-comes solely from the Biscayne Aquifer. Together with the Alexander Orr, Jr. plant, all three plants supply treated water to a common distribution system, running throughout most of Miami-Dade

[1] **Source:** https://fldep.dep.state.fl.us/swapp/SelectPWS.asp?county=13

County. In general, the Hialeah and John E. Preston Plants treat water that is supplied to residents who live north of SW 8 Street up to the Miami-Dade/Broward Line. Water from the Hialeah plant is treated similarly to that from the Alexander Orr, Jr. plant, plus fluoridation and water supplied to the John E. Preston plant has a higher level of naturally occurring organic materials than the water at the other plants. It goes through a slightly different process called enhanced softening. It is disinfected fluoridated and filtered, before going through air stripping towers that remove volatile organic compounds. This process has the added benefit of reducing the yellow tint once present in water supplied by the Preston plant.[2]

Storm Water Outfall Mitigation

The City will use an integrated stormwater management approach that will also address climate change and sea level rise. The approach will allow the City to evaluate cost-effective stormwater infrastructure improvements, remediate excessive flooding, prioritize stormwater basins, and ensure continued compliance with regulatory agencies. This work will also allow the City to better evaluate drainage hot spots and protect the City from flooding resulting from high tidal conditions (i.e. Tideflex Valves, Injection systems, etc.)

Hurricane Planning

Coastal High Hazard Area

According to Section 163.3178 (2) (h), F.S., the coastal high-hazard area is the area below the elevation of the category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model. The Miami-Dade County Department of Emergency Management and Homeland Security, the evacuation in the case of any hurricane. The City does not maintain shelters; those persons needing emergency shelter are transported to those maintained by Miami Dade County Emergency Management.

Evacuation Routes

The four causeways that provide evacuation routes for Miami Beach, as well as the CHHA Cat. 1 Storm surge:

- MacArthur Causeway
- Venetian Causeway
- Julia Tuttle Causeway
- 71st Street, a/k/a Kennedy Causeway (79th Street in Miami) Causeway

[2] **Source:** 2016 Water Quality Report MB

Climate Change – Resiliency and Adaptation

As the economic, environmental, and social impacts of climate change are becoming more apparent, the City of Miami Beach is hoping to provide a proactive planning framework through the creation of the Climate Resiliency and Sustainability Element. The purpose of this Element is to make the City of Miami Beach a climate resilient and sustainable community that will sustain itself for years to come.

The City of Miami Beach recognizes, and agrees with the international scientific consensus that climate change is occurring from the anthropogenic burning of fossil fuels. The city understands the reality of climate change, and the threat it poses to the City of Miami Beach. As a coastal community, consisting of multiple barrier islands, Miami Beach is extremely vulnerable to sea level rise and other climate change impacts, such as increased weather intensities. Accepting the inevitable challenges Miami Beach will face due to climate change, the city has made numerous strides in transforming Miami Beach into a sustainable community.

The City of Miami Beach has been an instrumental leader in publicly addressing sea level rise, with the outreach tool known as "Miami Beach Rising Above." The City provided residents with this resource in order for them to be updated on the climate adaptation and mitigation strategies performed by the City.

Sea Level Rise

The Southeast Florida Climate Compact developed a unified existing local sea level rise projection, which is used as a single regional sea level rise projection, including Miami Beach. The entire southeastern portion of the state is adapting to sea levels which is shown in the figure below. While Miami Beach is more vulnerable than other areas to sea level rise, it is crucial to coordinate with other municipalities in the climate compact.

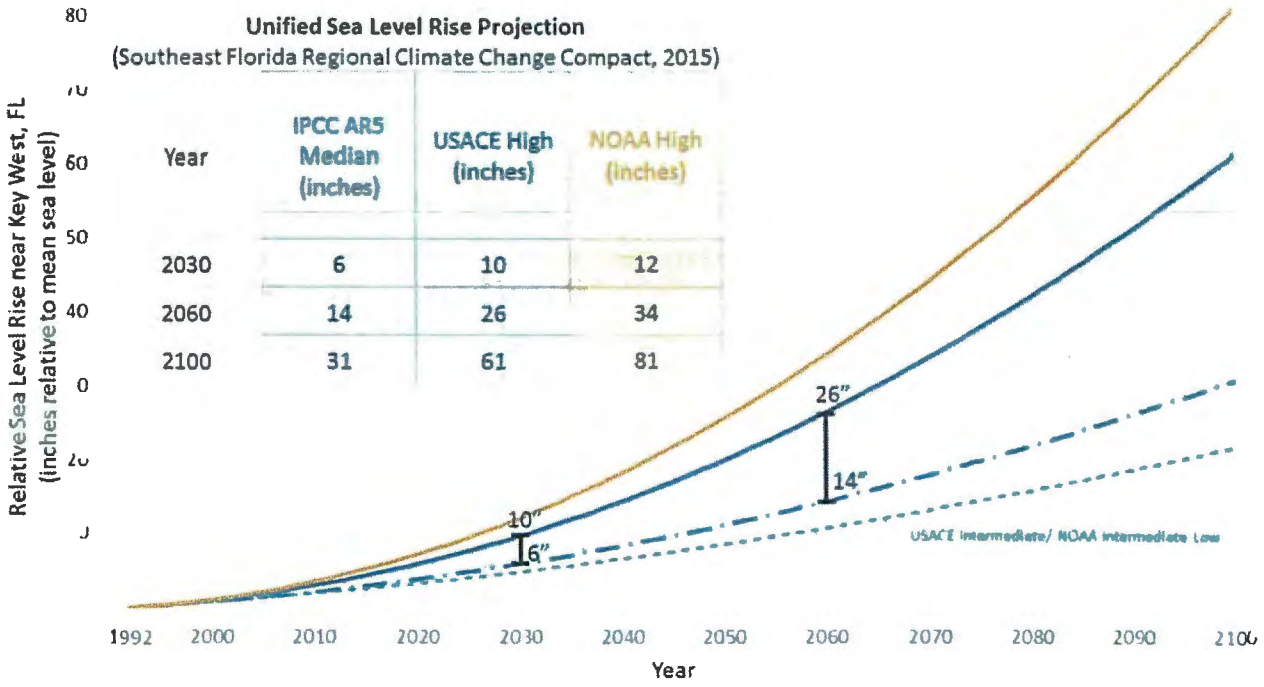


Figure A-1: Unified Sea Level Rise Projection. These projections are referenced to mean sea level at the Key West tide gauge. The projection includes three global curves adapted for regional application: the median of the IPCC AR5 scenario as the lowest boundary (blue dashed curve), the USACE High curve as the upper boundary for the short term for use until 2060 (solid blue line), and the NOAA High curve as the uppermost boundary for medium and long term use (orange solid curve). The incorporated table lists the projection values at years 2030, 2060 and 2100. The USACE Intermediate or NOAA Intermediate Low curve is displayed on the figure for reference (green dashed curve). This scenario would require significant reductions in greenhouse gas emissions in order to be plausible and does not reflect current emissions trends.

2015 Climate Compact Projections for Sea level Rise by Planning Horizon:

- Short term, by 2030, sea level rise is projected to be 6 to 10 inches above 1992 mean sea level;
- Medium term, by 2060, sea level rise is projected to be 14 to 26 inches above 1992 mean sea level with the less likely possibility of extending to 34 inches;
- Long term, by 2100 sea level rise is projected to be 31 to 61 inches above 1992 mean sea level with the less likely possibility of extending to 81 inches.

Projection Conversion table From MSL to NAV88*

	Mean Sea Level (MSL) in feet NAVD 88	Mean Sea Level in inches NAVD 88
Miami Beach	-0.96	-11.5

**North American Vertical Datum of 1988 (NAVD 88) is the topographic reference point used in surveying land elevations. By definition it is the vertical control datum of orthometric height established for vertical control surveying in the United States of American based upon the General Adjustment of the North American Datum of 1988.*

Adaptation Action Areas

While Adaptation Action Areas are optional frameworks for comprehensive plans, the City is responding to the Southeast Florida Regional Climate Change Compact (SFRCC) encouragement of the addition of an Adaptation Action Area into the document. As defined in Section 163.3164 (1) of the Florida Statutes, an Adaptation Action is a designation of a local government's comprehensive plan which identifies one or more areas that experience coastal flooding due to extreme high tides and storm surge, and that are vulnerable to the related impacts of rising sea levels for the purpose of prioritizing funding for infrastructure needs and adaptation planning. The Florida Statues also state in Section 163.3177(6)(g)(10) that an Adaptation Action Area may include, but need not be limited to, areas for which the land elevations are below, at, or near mean higher high water, which have a hydrologic connection to coastal waters, or which are designated as evacuation zones for storm surge.

Rising seas cannot be avoided, and the impacts are detrimental to the City's fabric and the residents. Impacts of rising sea levels include:

- Increased flooding
- Drainage issues
- Destruction of natural resource habitats
- Higher storm surge, increased evacuation areas and evacuation time frames
- Increased shoreline erosion
- Saltwater intrusion
- Loss of infrastructure and existing development

The City is composed of barrier islands, and has an average elevation of 4.4 feet NAVD[6] increasing the vulnerability to climate change. Over 90,000 people live in Miami Beach, and millions of tourists visit annually, making this 7.1 mile land mass a popular destination. According to the Florida Department of Revenue, residents in 2016 were paying a median of $1.5 million for a single family home, and $346,900 for a condo. These residents have large amounts of money invested in the City, and by developing an Adaptation Action Area, Miami Beach is proactive to the potential impacts of sea level rise, such as a loss in property value. It is essential to invest in protecting the City's infrastructure and residents today, rather than spending large sums on repairing damages to buildings and infrastructure.

Hurricane Planning

Hurricane Irma presented Miami-Dade County and Miami Beach with a test for resiliency. The category 5 storm of 2017 presented the City and County with flaws in hurricane planning.
Evacuation During the evacuation phase of the storm, many faced heavy traffic congestion on major north thoroughfares. The City utilizes four major causeways during hurricane evacuation which are:

- MacArthur Causeway
- Venetian Causeway
- Julia Tuttle Causeway

[6] Miami Beach Rising Above

- 71st Street, a/k/a Kennedy Causeway (79th Street in Miami) Causeway

The City and the County should coordinate evacuation efforts with the State of Florida, in order for a more efficient hurricane

Shelters

The City does not maintain shelters; those persons needing emergency shelter are transported to those maintained by Miami Dade County Emergency Management. During Hurricane Irma, shelters were not filled to maximum capacity, and pet friendly shelters were offered. However, communication of which shelters were open was limited, and better coordination between the City and the County needs to occur in the future.

LEED

On February 10, 2016, the City Commission adopted the Sustainability and Resiliency ordinance which requires LEED Gold certification or Living Building Challenge certification for new constructions over 7,000 square feet or ground floor additions to existing structures that encompass over 10,000 square feet of additional floor area. In order to achieve green building standards, the proposed ordinance requires the payment of a Sustainability Fee prior to obtaining a Temporary Certificate of Occupancy, Certificate of Occupancy, or Certificate of Completion. This fee is set as a five (5%) percent of the construction valuation. If there is a failure to obtain the gold certification, the fee is not refunded or is partially refunded according to the level of certification achieved below Gold. The applicant has up to two years to obtain a full or partial refund of the fee or bond depending on the level of green building certification achieved. Earned fees in the Sustainability and Resiliency Fund shall be utilized to provide public improvements that increase the sustainability and resiliency of the City. Expenditures from these funds shall require prior City Commission approval. Prior to any expenditure, the City Manager shall provide a recommendation to the City Commission.

- Total Existing Bike Network: 29.5 miles Number of Bikeway Types: 3 Existing Bicycle Lanes: 17 miles Existing Bicycle Route: 7.7 miles Existing Shared-Use Path: 4.8 miles[3]

Sustainability

Sustainability is defined as the extent which a system in its current state will be able to meet the economic, environmental, and social needs of future generations. As a step toward the overall cities goal of sustainability, the City's Sustainability Plan was created. This plan was drafted to improve resources, prevent harm to the natural environment, protect human health, and benefit the social, economic, and environmental well-being of the community for present and future generations. The plan also functions as the work plan for the city's participation in the Energy Economic Zone Pilot Program administered by the Florida Department of Community Affairs.

[3] **Source:** Southeast Florida Regional Compact Climate Change

As a world-class city, Miami Beach is striving to be a leader in sustainability. The Environment and Sustainability Department was created in 2015, and is one of a kind

- Buildings
- Fuel and Energy use
- Water Management
- Transportation
- Affordable Housing

Resiliency

Resiliency is defined as the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow, no matter what kinds of chronic stresses and acute shocks they experience. City resilience is centered on improving a city, in both good times and bad, for the benefit of all its citizens, particularly those most vulnerable.[7]

Collaboration

With thousands of lives, and billions of dollars at stake, collaboration has been a key strategy for the City of Miami Beach when faced with the challenges presented from climate change. The City has been collaborating with other cities in Miami-Dade County, such as the City of Miami, and together as the "Greater Miami and the Beaches", the metropolitan area was selected to join 100 Resilient Cities. The organization has indicated the main shocks and stresses the area faces. These shocks and stresses include[8]: coastal/tidal flooding, hurricanes, inadequate public transportation systems, infrastructure failure, and lack of affordable housing, poverty, rainfall flooding, and sea level rise /coastal erosion. Other cities around the world are facing challenges similar to Miami Beach, and through this collaboration of ideas, smart and effective investments in adaptation and mitigation plans can be made.

Miami-Dade County has collaborated with Broward, Palm Beach, and Monroe County to form the Southeast Florida Climate Compact. This group unified the region by developing "regionally-consistent methodologies for mapping sea-level rise impacts, assessing vulnerability, and understanding the sources of regional greenhouse gas emissions[9]". While each county is diverse, issues and opportunities similar to those in Miami-Dade County are present in other counties.

Vulnerability

As a coastal city, that is an average of 4.4 NAV above sea level, the residents and infrastructure of the City are vulnerable to the flooding and other impacts resulting from climate change. Adaptation Action Areas have been assigned to determine the most vulnerable areas within the City. Striving for urban resiliency, the City is focusing on the protection of its most vulnerable populations; such as those living in poverty and the elderly.

As represented in the *Percent of Persons Living in Poverty* table, the percentage of the population living in poverty in the City of Miami Beach is higher than in Florida for the 2016. According to the 2010 census numbers in the *Population by Age* table there are 14,233 Miami Beach residents

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[7] 100 Resilient Cities

[8] Greater Miami and the Beaches' Resilience Story, 100 Resilient Cities

[9] Southeast Florida Regional Climate Change Compact Counties – Regional Climate Action Plan, 2012

over the age of 65. These results indicate the need to prioritize these populations that require more assistance during these times of adaptation and mitigation.

Percent of Persons Living in Poverty			
Year	Florida	Miami Dade County	City of Miami Beach
2011	14.7%	13.0%	15.0%
2012	15.6%	13.5%	16.3%
2013	16.3%	14.3%	16.9%
2014	16.7%	14.6%	17.5%
2015	16.5%	14.5%	17.7%
2016	16.1%	19.9%	16.7%

Source: U.S. Census Bureau, 2007-2011 American Community Survey, 5-Year Estimates

Population by Age		
Age Range	**Population**	**Percent**
Total Population	87,779	100.0
Under 5 years	3,727	4.2
5 to 9 years	3,028	3.5
10 to 14 years	5,177	5.9
15 to 19 years	3,082	3.5
20 to 24 years	5,177	5.9
25 to 29 years	8,353	9.6
30 to 34 years	7,530	8.6
35 to 39 years	8,384	9.6
40 to 44 years	7,530	8.6
45 to 49 years	7,028	8.0
50 to 54 years	5,878	6.7
55 to 59 years	5,141	5.9
60 to 64 years	4,490	5.1
65 to 69 years	3,636	4.1
70 to 74 years	3,250	3.7
75 to 79 years	2,729	3.1
80 to 84 years	2,281	2.6
85 years and over	2,337	2.7
Median age (years)	40.3	

Source: 2010 U.S. Census

Post-Disaster Redevelopment

There were no proposed substantive changes to the post-disaster redevelopment. Existing adopted Goals, Objectives and Policies address redevelopment planning, including the impact of Living with Water as the sea level continues to rise. The impacts of sea level rise are document below in images from the NOAA sea level rise viewer:

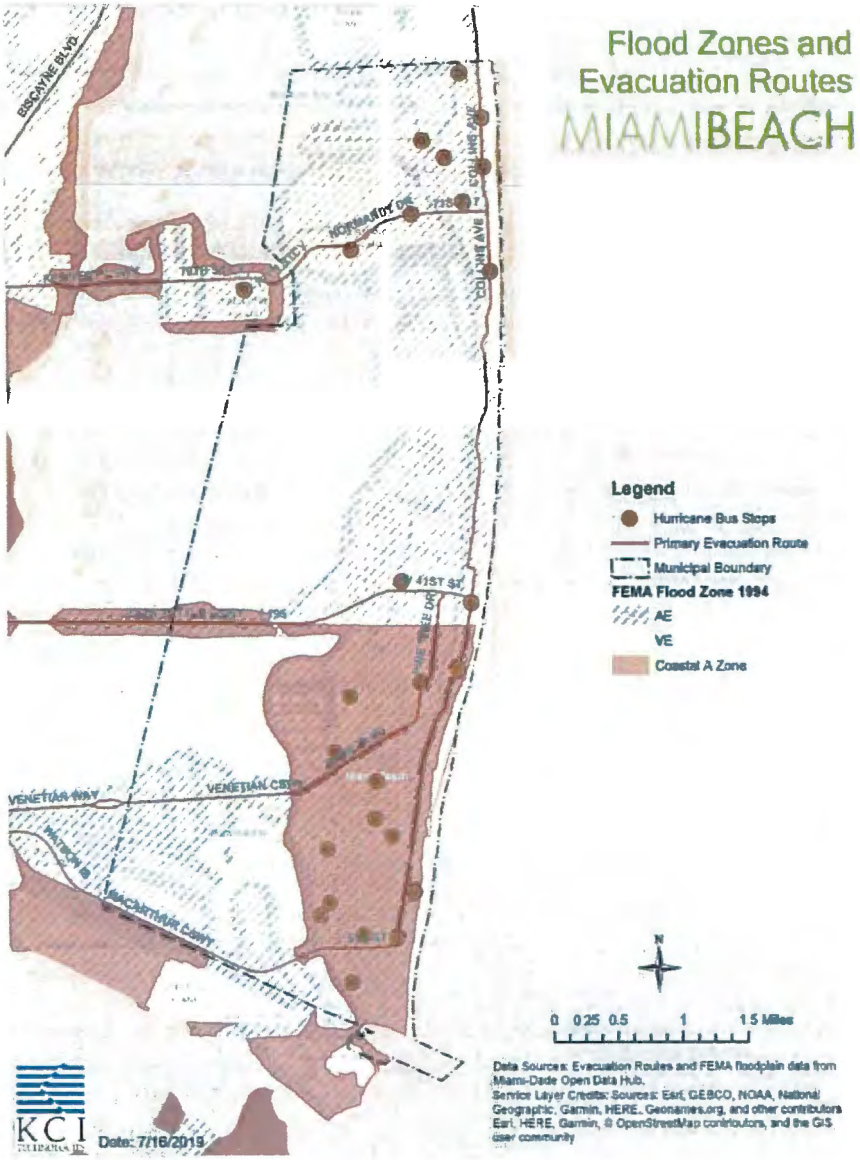
Miami Beach with Current Mean Higher High Water Levels

Miami Beach at 1 Foot of Sea Level Rise

Miami Beach with 3 Feet of Sea Level Rise

Miami Beach with 6 Feet of Sea Level Rise

Storm Surge Planning Zone



The southern tip of Miami Beach is categorized at Zone A, which means it is at the greatest risk for storm surge for Category 1 and higher storms.

In order to comply with the Southeast Florida Climate Change Regional Compact, the City of Miami Beach created a "Greenhouse Gas Emissions Inventory" report to guide the city in the process of establishing emissions reduction targets.

- In 2015, there were 1,247,211 MT CO2e released community-wide.
- Commercial energy use created 50% of GHG emissions in the community.
- Emissions from electricity use accounted for 69% of the total GHG emissions in the community.
- Emissions from the combustion of gasoline and diesel for transportation accounted for 18% of the emissions in the community.

The 2015 Community Inventory Greenhouse Gas Emissions Results[10]

Residential Energy	Usage	Units	CO2e (MT)	% of Emissions
Residential Natural Gas	2,163,381	Therms	11,503.74	0.92%
Residential Electricity	613,366,809	kWh	303,219.71	24.3%
Commercial Energy				
Commercial Natural Gas	12,929,242	Therms	68,750.99	5.51%
Commercial Electricity	1,113,323,891	kWh	550,374.99	44.13%
Public Streets & Highway Lighting	10,369,923	kWh	5,126.40	0.41%
Other Sales	160,686	kWh	79.44	0.01%
Industrial Energy				
Industrial Electricity	4,549,221	kWh	2,248.92	0.18%
Transportation & Mobile Services				
Diesel Vehicles	456,914,972	VMT	38,055.77	3.05%
Gasoline Vehicles	456,914,972	VMT	182,323.55	14.62%
Water & Wastewater				
Combustion of Digester Gas	92,312	People	6.03	0.00%
Process N20 from Effluent Discharge	92,213	People	1,863.51	0.15%
Solid Waste				
Community Waste Generation	92,312	People	83,657.85	6.71%
2014 Community Wide				
Total Emissions			1,247,210.90	100.00%

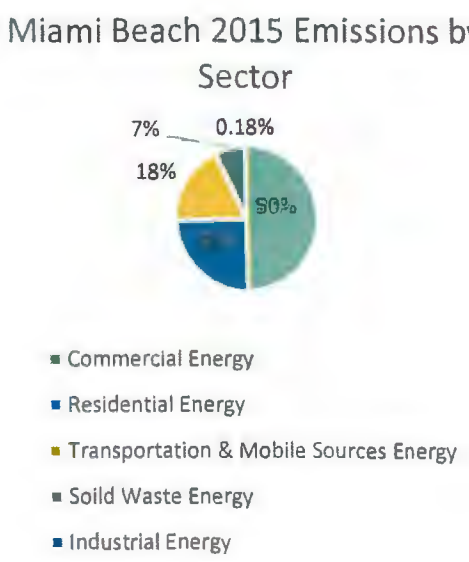
2015 Government Greenhouse Gas Inventory

[10] Miami Beach Greenhouse Gas Inventory, 2015

- In FY 2015, there were 35,238 MT CO_2e released through government operations and city-owned buildings and facilities which represents 2.8% of the community wide emissions.
- Buildings and facilities accounted for 65.8% of the emissions from the government inventory.
- The greatest source of emissions was grid-supplied electricity. It emitted 77% of the emissions from government building, facilities and operations.

Buildings, Facilities & Operations	Usage	Units	CO2e (MT)	% of Emissions
Building Electricity	46,117,521	kWh	22,798.33	64.70%
Buildings Natural Gas	72,714	Therms	386.52	1.10%
Public Street & Highway Lighting				
Street Lighting Electricity	8,438,928	kWh	4,171.81	11.84%
Vehicle Fleet				
Diesel Vehicles	133,541	Gallons	1,363.50	3.87%
Gasoline Vehicles	716,710	Gallons	6,292.70	17.86%
Transit Fleet				
City Trolley – NBT	25,610	Gallons	224.86	0.64%
2015 Governmental Operations				
Total Emissions			35,237.72	100.00%

Regional Emissions by County



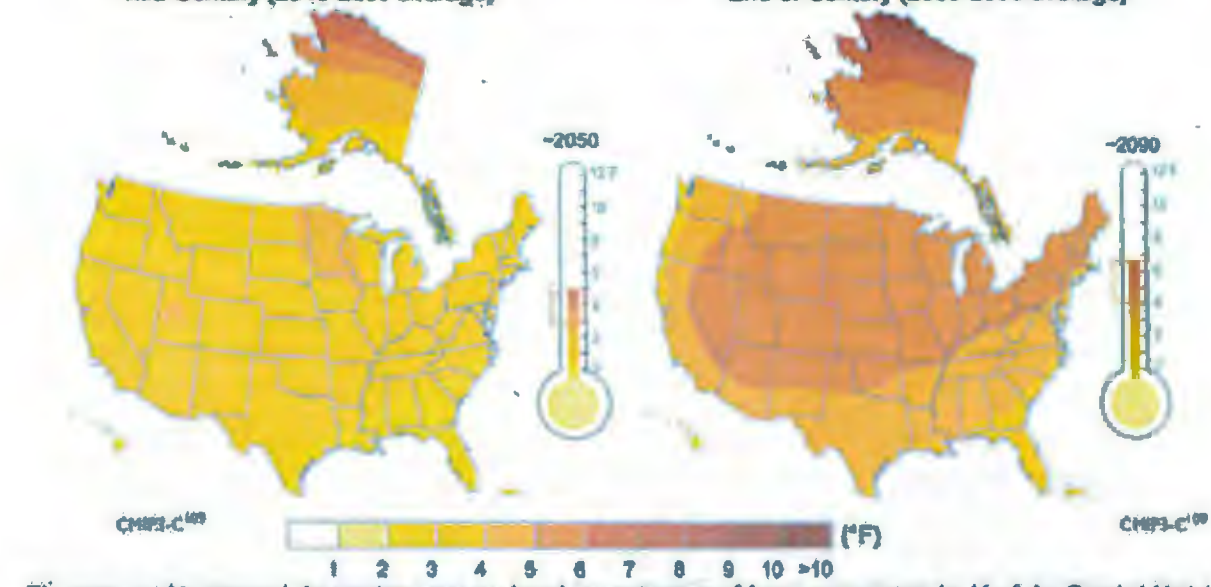
Source: U.S. Department of Agriculture

Higher Emissions Scenario[91] Projected Temperature Change (°F)
from 1961-1979 Baseline

Mid-Century (2040-2059 average) | End-of-Century (2080-2099 average)

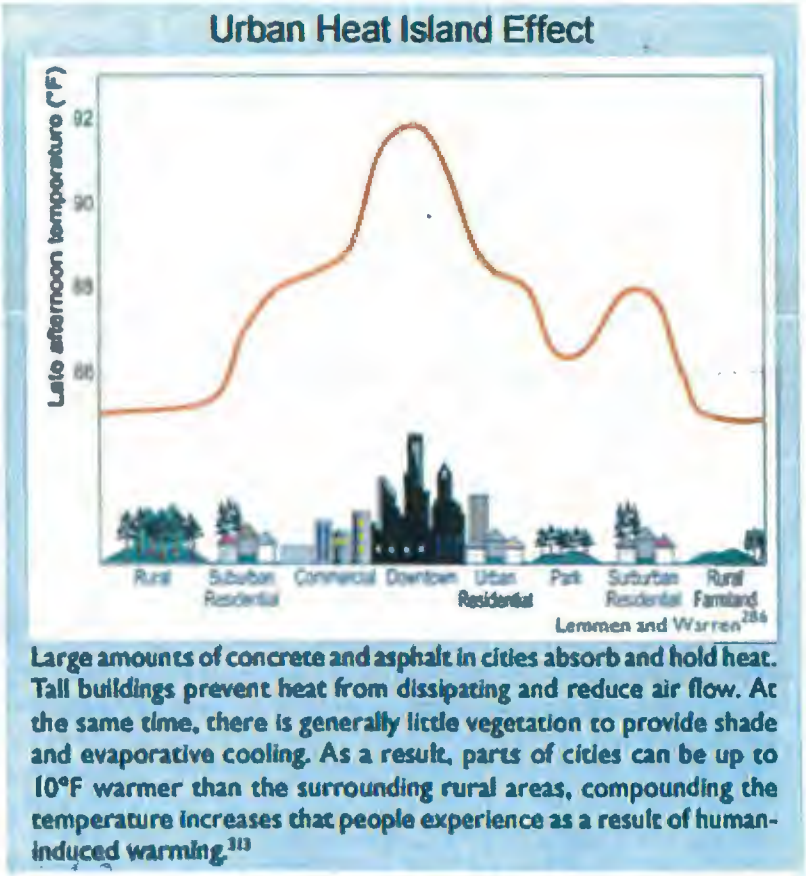
Lower Emissions Scenario[91] Projected Temperature Change (°F)
from 1961-1979 Baseline

Mid-Century (2040-2059 average) | End-of-Century (2080-2099 average)



The maps on this page and the previous page are based on projections of future temperature by 16 of the Coupled Model Intercomparison Project Three (CMIP3) climate models using two emissions scenarios from the Intergovernmental Panel on Climate Change (IPCC), *Special Report on Emission Scenarios* (SRES).[91] The "lower" scenario here is B1, while the "higher" is A2.[91] The brackets on the thermometers represent the likely range of model projections, though lower or higher outcomes are possible. Additional information on these scenarios is on pages 22 and 23 in the previous section, *Global Climate Change*. These maps, and others in this report, show projections at national, regional, and sub-regional scales, using well-established techniques.[110]

Source: Global Changes, Climate Impacts Report



Large amounts of concrete and asphalt in cities absorb and hold heat. Tall buildings prevent heat from dissipating and reduce air flow. At the same time, there is generally little vegetation to provide shade and evaporative cooling. As a result, parts of cities can be up to 10°F warmer than the surrounding rural areas, compounding the temperature increases that people experience as a result of human-induced warming.[313]

Source: Global Changes, Climate Impacts Report

Chapter 3 - Transportation Element

The Transportation Element (TE) outlines a proactive approach to moving residents, commuters, and tourists around the City of Miami Beach in a safe and accessible manner. This Element's policies are complimentary to the Goals, Objectives and Policies in the City's Resilient Land Use and Development Element and the Resiliency and Sustainability Element. The Element promotes mobility, economic growth and resiliency within the limited land area of the City, and supports the City's efforts in storm hardening and decreasing the City's carbon footprint.

Summary of Element Revisions:

- Improves internal consistency and clarity.
- Updates Goals, Objectives, and Policies to be consistent with changes in state law.
- Removes citations to obsolete Florida Statutes and Florida Administrative Code sections.
- Modifies the organization of the Element to improve usability.
- Incorporates polices to establish a transportation concurrency exception area and a mobility fee program.
- Removes references to transportation concurrency management areas and levels of service.
- Provides policies authorizing the City to create pedestrian priority zones.
- Incorporates additional policies to support the use of alternative modes of transportation.
- Incorporates policies to support the City's circulator trolleys.
- Provides policies to support the City's initiatives to improve bicycle infrastructure.
- Provides guidance and standards for the preparation of transportation analyses and mitigation plans.
- Provides policies to encourage the City to study freight loading patterns and mitigate the impacts of freight loading on the transportation network.
- Provides policies to encourage parking garages to be designed to be convertible to other uses.
- Provides polices to encourage resiliency through transportation infrastructure, such as pervious pavements, blue and green infrastructure, and reduction in the urban heat island effect.
- Updates references and departmental citations.

Supporting Studies and Master Plans

- Transportation Master Plan (2016)
- Street Design Guidelines (2016)
- Miami Beach Sidewalk Report (2017)
- Miami Beach Bicycle Pedestrian Master Plan (2015)
- Miami Beach Florida: Stormwater Management and Climate Adaptation Review, *Urban Land Institute* (2018)
- Miami Beach Blueways Master Plan (2017)
- Miami Beach Citemextrix Analysis Report (2016)

Supporting Data & Analysis

The City has adopted a Transportation Master Plan (TMP) in 2016 which is designed to provide future direction for the City's transportation system. It will be integrated into the City of Miami Beach

2025 Comprehensive Plan. In addition, the TMP recommends amendments to the Transportation Element of the Comprehensive Plan which will be considered in this update.

In recognition of the growth in population, future traffic and transit conditions will be forecasted into the year 2035. In an effort to provide guide for future transportation strategies, the TMP has generated a project list for the City of Miami Beach, composed of multi-modal projects, and will analyze new prospects for funding the future endeavors and potential policy. Below are the existing conditions for all modes of travel, as presented in the 2016 TMP.

Existing Conditions[1]

Bicyclists and Pedestrians

- 29.5 miles of bicycle network
- 7.0 miles of bicycle lanes
- 17.0 miles of bicycle lanes
- 4.8 miles of shared paths
- 11% of residents utilize biking and walking as their primary mode of transportation
- 3.5% of people ride bikes to work
- 9.9% of people walk to work
- 5 pedestrian bridges

Transit

- 119 transit routes
- Maximum of 17,046 daily boardings and alightings
- 3 stops reach that up to 950 daily boardings each
- 11% of residents using transit as primary mode of transportation
- 13.3% of people ride city transit to work
- Average transit speeds are as low as 5 MPH
- Three existing local transit routes:
    - North Beach Trolley Loop
    - South Beach Circulator
    - Alton-West Avenue Trolley Loop
- 362 transit stops
- 13 regional transit routes
- 3 local transit routes

Automobiles

- 22.6 miles of arterial roadways
    - 2 north-south arterials
    - 4 east-west arterials

[1] City of Miami Beach Transportation Master Plan (2016)

- SR A1A / Collins Avenue is the only road directly connecting the north and south ends of the City
- 8 major roads with a level of service "E" or worse
- Daily traffic volumes ranging up to 105,000 on MacArthur Causeway and Julia Tuttle Causeway

- 8,425 city-wide crashes from 2011-2013
  - 310 involved a pedestrian
  - 166 involved a bicyclist

Mobility Fee

The adoption of a Transportation Mobility Fee to replace the current Transportation Concurrency Fees is included in the transmittal packet as it is proposed for concurrent adoption with the EAR base amendments. Since the State's 2011 repeal of Transportation Concurrency, many cities have enacted alternative methods of funding transportation needs provided for in the Florida Statutes, Section 163.3180, "Concurrency".

Mobility Fees are an option that replaces concurrency and road impact fees. They function as a payment toward multi-modal improvements identified in a list of projects that are planned to accomplish the City's transportation objectives. Instead of using the common practice of road widening to increase vehicle capacity, the priority in Miami Beach is given to non-automobile modes of travel, making transit and rideshare more convenient, and increasing safety for bicycle and pedestrian travel.

Instead of the Concurrency Fee, developers would pay a fee that is based on the type of new use and customized for the unique character of Miami Beach's transportation mode share. The fee is calculated in a manner that takes into account the use of all modes of travel, including private automobiles, transit, pedestrian, bicycle and "other"; along with a thoroughly analyzed formula detailed in the technical analysis. The technical analysis to support the Mobility Fees is to be included by reference in the Land Development Code along with a fee schedule.

Chapter 4 - Housing Element

The Housing Element (HE) of the Comprehensive Plan serves as a guide to achieve an inclusive and vibrant community. The Goals, Objectives and Policies in the Housing Element work to provide equitable housing options to support the City's socio-economically diverse population and ensures that all residents of the City have access to quality, energy efficient housing.

Summary of Element Revisions:

- Improves internal consistency and clarity.
- Updates Goals, Objectives, and Policies to be consistent with changes in state law.
- Removes citations to obsolete Florida Statutes and Florida Administrative Code sections.
- Modifies the organization of the Element to improve usability.
- Incorporates policies to provide guidance on the location of affordable and workforce housing.
- Provides policies to provide for more energy-efficient housing within the City.

Supporting Studies & Master Plans:

- Miami Beach Sustainability Plan https://www.miamibeachfl.gov/wp-content/uploads/2017/12/City-of-Miami-Beach-Sustainabilty-Plan_FINAL.pdf
- Resilient 305

Supporting Data & Analysis:

The overview of housing needs summarizes the housing needs of the community over the next five years. The quantitative analysis identifies both the current housing need and projected future housing need for Miami Beach. The Housing Needs Analysis identifies the following critical needs:

- Approximately 49% of all households are at or below 80% AMI.
- About 19% of all households are at, or below 30% AMI, represented by a significant number of elderly residents.
- Almost half (46%) of the households at or below 30% AMI have a household member over 62 years of age, and 27% of those households have a member over 75 years of age.
- Hispanic households that have income of less than 30% AMI, represent nearly 64% of the households with at least one severe housing problem within that income category.
- Waiting list for Rebecca Towers South consists of 656 applicants, of which 38% are extremely low income.
- The waiting list for the Section 8 Housing Choice Voucher Program consists of 1204 applicant households
- Approximately 4,300 housing units have the potential of a Lead-Based Paint hazard.
- There is a total of 21,175 low to moderate-income households in Miami Beach.
- In 2009, 11,202 individuals living with HIV/AIDS in the County were in need of housing assistance, only 1,291 units were subsidized (Source: Miami-Dade County 5-Year Consolidated Plan).
- Approximately 73% of the housing units in Miami Beach were constructed prior to 1979.

Household Need

Household need is calculated by determining the number of households with any type of housing problem. For purposes of this analysis, housing problems are defined as any occupied units lacking complete kitchen facilities, lacking plumbing, having more than 1.01 persons per room (i.e. overcrowded) or costing more than 30 percent of the occupant household's income (i.e. cost-burdened).

Types of Households

- ***Family:*** Housing serving the general population (as well as special needs households) with qualifying income.
- ***Elderly:*** Units designated for those at least 62 years of age (or in some instances, 55 years and older).
- ***Disabled:*** Housing units servicing households where one or more person experiencing a physical or mental disability.
- ***Homeless:*** Housing assistance for the homeless.

Household Need by Income

Within this report, area median income refers to the median family income established annually by the U.S. Department of Housing and Urban Development (HUD). In 2018, the area median income for Miami-Dade County is $52,300.[2] According to HUD guidelines, low-income households earn less than 80% of the area median income (AMI).

- **Extremely Low-income:** At or below 30% AMI
- **Very Low-income:** Between 31% and 50% AMI
- **Low-income:** Between 51% and 80% AMI

The Comprehensive Housing Affordability Strategy (CHAS) information was used to identify housing problems within Miami Beach. The U.S. Department of Housing and Urban Development, in conjunction with the U.S. Census Bureau, provides a CHAS Analysis for all local jurisdictions. The tables below outline the households by income.

[2] **Source:** Miami-Dade County Website

Total Renter Occupied Households in Miami Beach by Income

Income	2010 Census	2016 Estimate	2040 Projection
Extremely Low-Income	6,241	6,735	8,456
Very Low-Income	4,831	5,155	6,229
Low-Income	5,235	5,542	6,166
Moderate to Upper Income	6,787	7,146	7,703
TOTAL HOUSEHOLDS	23,094	24,578	28,554

Source: Shimberg Center for Housing Studies
http://flhousingdata.shimberg.ufl.edu/comprehensive-plan-data/results?nid=4348

Total Owner Occupied Households in Miami Beach by Income

Income	2010 Census	2016 Estimate	2040 Projection
Extremely Low-Income	1,911	2,118	2,899
Very Low-Income	2,177	2,420	3,365
Low-Income	1,904	2,105	2,769
Moderate to Upper Income	4,657	5,099	6,339
TOTAL HOUSEHOLDS	10,649	11,742	15,372

Source: Shimberg Center for Housing Studies
http://flhousingdata.shimberg.ufl.edu/comprehensive-plan-data/results?nid=4348

Total Households in Miami Beach by Income

Income	2010 Census	2016 Estimate	2040 Projection
Extremely Low-Income	8,152	8,853	11,355
Very Low-Income	7,008	7,575	9,594
Low-Income	7,139	7,647	8,935
Moderate to Upper Income	11,444	12,245	14,042
TOTAL HOUSEHOLDS	33,743	36,320	43,926

Source: Shimberg Center for Housing Studies
http://flhousingdata.shimberg.ufl.edu/comprehensive-plan-data/results?nid=4348

Public and Assisted Housing[3]

The Public and Assisted Housing section reviews eligibility guidelines, identifies assisted housing inventory and outlines local government programs.

Eligibility Guidelines

Specific eligibility requirements and/or income restrictions for assisted housing facilities are determined by the program used to fund the project. While some developments target special needs populations such as the elderly, homeless or disabled, most housing programs provide assistance to individuals and families earning below 80% of the area median income. Each year, the U.S. Department of Housing and Urban Development (HUD) determines specific income

[3] **Source:** Department of Housing and Urban Development

limitations for extremely low-, low- and moderate-income families based on family size. The chart below illustrates the income limits for Miami Beach in 2018.

Miami Beach Income Limits (2018)[4]

Miami Beach 2018 Income Limits			
Household Size	Extremely Low 0-30% AMI	Very Low 31-50% AMI	Low 51-80% AMI
1	$16,550	$27,550	$44,100
2	$18,900	$31,500	$50,400
3	$21,250	$34,450	$56,700
4	$25,100	$39,350	$62,950
5	$29,420	$42,500	$68,000
6	$33,740	$45,650	$73,050
7	$38,060	$48,800	$78,100
8	$42,380	$51,950	$83,100

Assisted Rental Housing Inventory

Because this element largely deals with housing services, it is important to understand the varying types of housing arrangements. Below is a delineation of housing categories within the assisted housing inventory:

- **HOME Investment Partnership Program (HOME):** Projects targeting families earning less than 60% AMI can qualify for non-amortized, low-interest loans from the state for acquisition, construction or rehabilitation costs.
- **HUD Rental Assistance:** HUD provides rental subsidies to low-income families through its Section 8 voucher programs. Additional rental assistance programs are available for the elderly (Section 202) and persons with disabilities (Section 811).
- **HUD Section 207/223(f):** HUD insures mortgage loans to facilitate the purchase or refinancing of existing multifamily rental housing.
- **HUD Section 236:** HUD subsidizes the interest payments on mortgages for rental or cooperative housing owned by private nonprofit or limited-profit landlords and rented to low-income tenants.
- **Low-income Housing Tax Credits:** Both a non-competitive 4% tax credit and a competitive 9% tax credit program is available through the state for new construction, acquisition and rehabilitation of affordable rental housing households earning less than 60% AMI.
- **Predevelopment Loan Program (PLP):** State program provides below-market interest rate financing and technical assistance to non-profit organizations for pre-development activities to plan, finance and develop affordable housing.
- **State & Local Bonds:** Either the state or local housing authority may issue Multifamily Mortgage Revenue Bonds (typically tax-exempt) to finance below market rate units. While there may be set-aside and/or income requirements, there are no rent restrictions.

[4] **Source:** Miami-Dade County Income Limits **Note:** Area Median Income is $52,300.

- **State Apartment Incentive Loan (SAIL):** Funded through Florida's Housing Trust Fund, the program provides low-interest gap financing to affordable housing developers.
- **Community Development Block Grant (CDBG):** The City has prioritized CDBG funds to address significant needs in its residential affordable housing portfolio to ensure safe, decent and sanitary housing for the residents. The City has rehabilitated the London House (24-units) and in the process of rehabilitation the Lottie (9-units), Madeleine Village (16-units) and the Neptune Apartments (35-units)
- **State Housing Initiatives Partnership (SHIP)-** The City utilizes annual SHIP allocations to fund the following activities: Purchase assistance under the First Time Homebuyer Program, Homeowner Rehabilitation Assistance, Multi-Family Rental Rehabilitation (for income-eligible multi-family housing developments) and Disaster Recovery. In FY 16/17, the City assisted three income-eligible household with funds to purchase a unit and perform minimal improvements and provided funds to one multi-family rehabilitation project. In FY 17/18, the City assisted four households with funds to purchase a unit and perform minimal improvements and two households with homeowner rehabilitation assistance.

Financial assistance for the aforementioned programs is derived from the U.S. Department of Housing and Urban Development (HUD), Florida Housing Finance Corporation (FHFC), Miami-Dade County, and the City of Miami Beach.

Public Housing

According to the inventory of assisted rental housing compiled by the Florida Housing Data Clearinghouse, the City of Miami Beach has 1,913 rental units that have received some type of government assistance.

Subsidized Renter-Occupied Housing

Property Name	Address	Units
Funded by CMB		
Allen Apartments	2000 Washington Avenue	39
Crespi Park Apartments	1023 79 Street	16
Fernwood Apartments	935 Pennsylvania Avenue	18
Jefferson Apartments	542 Jefferson Avenue	27
Knightsbridge	7133 Bay Drive	2
London House Apartments	1965 and 1975 Washington Avenue	24
Lottie Apartments	530 75 Street	9
Madeleine Village	7861 and 7871 Crespi Blvd.	16
Madison Apartments	259 Washington Avenue	17
Meridian Place	530 Meridian Avenue	36
Michigan 530	530 Michigan Avenue	9
Michigan 532	532 Michigan Avenue	18
Neptune Apartments	1632 Meridian Avenue	35

Sabrina Apartments	1551 Pennsylvania Avenue	20
Shelbourne House	710 Jefferson Avenue	24
Steven E. Chaykin Apts	321 Michigan Avenue	30
Villa Maria	2800 Collins Avenue	34
Waterway Village	1945 Calais Drive	10
Westchester	516 15 Street	24
Allen Apartments	2000 Washington Avenue	39
	Subtotal	**408**
Non CMB Funded		
Ann-Ell Apartments	700 Euclid Avenue	44
Blackstone Apartments	800 Washington Avenue	130
Cielo Apartments	1930 Marseille Drive	18
Council Towers North	1040 Collins Avenue	125
Council Towers South	533 Collins Avenue	125
Douglas Gardens	1960 Park Avenue	22
Edward Apartments	935 Collins Avenue	112
Federation Towers	757 West Avenue	113
Four Freedoms House	3800 Collins Avenue	179
Harding Village Apartments	8500 and 8540 Harding Avenue	92
Lois Apartments	211 Collins Avenue	16
London Arms	727 Collins Avenue	24
Lulav Square	628 Lenox Avenue	140
Rebecca Towers North	200 Alton Road	200
Rebecca Towers South	150 Alton Road	200
Riviera	337 20 Street	56
Shep Davis Plaza	220 23 Street	49
Stella Maris	8638 Harding Avenue	136
Swezy	1200 Pennsylvania Avenue	10
Villa Matti	221 28th Street	36
1158 Marseille Drive	1158 Marseille Drive	4
1168 Marseille Drive	1168 Marseille Drive	4
405 76 Street	405 76 Street	4
841 80 Street	841 80 Street	4
Henderson Court	328 Jefferson Avenue	5
Leonard Turkel Residences	234 Jefferson Avenue	21
	Subtotal	**1869**
Under Development		
Section 8 Vouchers	Housing Authority Jurisdiction	3407
	Subtotal	**3407**

	Total	**5703**

Affordable Housing Programs[6]

- The City receives funds from the U.S. Department of Housing & Community Development (HUD) and the State Housing Initiative Program (SHIP) annually for a variety of programs including Public Services and Capital Improvements. However, for the past several years these awards have been declining.
- The Section 8 Program is operated directly by the Housing Authority of the City of Miami Beach. The number of units in Miami Beach receiving assistance from the Section 8 Program is estimated to be around 1100 and is not accepting applications.
- The Office of Housing & Community Services is now managing the Homeowner Rehab program being funded through the State Housing Initiative Program (SHIP).

Expiring Uses

Of the 1,913 assisted units, up to 486 are in danger of being lost in the next five years to contract expiration and expiring affordability periods. Still, many contracts are renewed on an annual basis and it is likely that many of these affordable units will not actually be lost.

Homeownership Programs

Similar to the rental development, there are a wide variety of homeownership programs. Most offer either direct assistance to the homeowner or land and financial contributions to the developer. Assistance can be in the form of a grant or a loan. Some of the more common programs offered in Florida include the State Housing Initiatives Program (SHIP), Florida Housing Ownership Assistance Program (HAP), Predevelopment Loan Program (PLP) and Community Workforce Housing Innovation Pilot Program (CWHIP). Additional subsidies are also offered through the private sector and local government entities.

While homeownership programs provide assistance for low- and moderate-income households and, in some instances workforce housing, they are not generally considered part of the assisted housing inventory. This is due to the fact that in the absence of resale restrictions, many of the affordable owner-occupied units are quickly lost to the market.

Miami-Dade County is the only county in Florida with a local Documentary Surtax Stamp Program[11] for affordable housing. Established in 1984, the surtax collects $0.45 on every $100 of recorded commercial property sales. The funds are used for a wide-range of housing programs that assist both rental and homeownership projects. From 1984 to 2011, the Surtax Program has provided the following:

- 7,128 low-to-median income families with low-interest second mortgages, allowing them to become first-time homeowners.

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[6] **Source:** City of Miami Beach Environmental Scan 2016

[11] http://www.miamidade.gov/housing/surtax.asp#0

- Homebuyer counseling, which has kept the mortgage default rate to less than 1.1% among Surtax Program participants.
- Low-cost construction financing that has allowed the County to partner with not-for-profit and for-profit affordable housing developers to produce over 15,000 affordable multi-family rental units.
- At least 50% of Surtax funds have benefitted low-income families.

The City of Miami Beach has also targeted funding from the Miami Beach Redevelopment Agency (RDA) for affordable and workforce housing (0-120% AMI). To date, the RDA has invested $13 million to purchase and rehabilitate Meridian Place Apartments, the Allen Apartments, Barclay Hotel, and London House. The rental development was managed by the Miami Beach Community Development Corporation. Meridian Place Apartments and the Allen Apartments is an affordable housing property for elderly residents currently owned and operated by MBCDC. In 2015, the City acquired the Barclay Plaza Apartments and the London House from MBCDC after a review of their projects and operations revealed a variety of operational and compliance lapses which jeopardized the projects and raised concerns regarding MBCDC's operational capacity. The London House has since been rehabilitated and is fully operational with a total of 24 affordable housing units. The City Commission directed the Administration to issue and RFP to identify a Public-Private Partnership to develop the Barclay Plaza Apartments as workforce housing. An RFP was issued in 2017, however the one applicant was deemed unresponsive. The City is currently working with a consultant to assist in the issuance of an RFQ to develop the Barclay as workforce housing.

The City has partnered with Mount Sinai Medical Center on a housing development to serve its workforce. The hospital received a $5 million grant from the Community Workforce Housing Innovation Program for the Lowenstein Building.

Housing Authority of the City of Miami Beach

The Housing Authority of the City of Miami Beach (HACMB) is a public housing authority created by Section 421.04, Florida Statues, and operates as an independent housing agency with a five-member Board of Commissioners appointed by the City of Miami Beach. The mission of HACMB is to provide those in need with quality, affordable housing in economically mixed settings while promoting resident self-sufficiency and fostering strong neighborhoods.

Currently, the HACMB oversees the City's public housing and private rental housing (Section 8) programs. In 1975, the HACMB constructed Rebecca Tower South, a thirteen-story elderly designated Public Housing building with 200 units (120 efficiencies and 72 one bedrooms, and 8 two bedrooms). The following year, the HACMB completed Rebecca Tower North, a thirteen-story elderly designated Section 8 New construction building constructed with 200 units (120 efficiencies and 80 one bedrooms). HACMB also owns a historic three-story building at 211 Collins Avenue. The 16 units (1 efficiency, 11 one bedrooms, 4 two bedrooms) are rented to Section 8 Housing Choice Voucher holders. In all, the HACMB administers 3,407 Section 8 vouchers. HACMB also administers Homeownership and Family Self-Sufficiency programs. HACMB is developing additional units of affordable rental or homeownership units. Their most recent developments include the 30 unit Steven E. Chaykin Apartments, the 21 unit Leonard Turkel Residences, and the five-unit Henderson Court historic building.

Improvements to Housing Authority
The HACMB recently completed its 5-year strategic plan and identified key goals.

To achieve its goals, the HACMB developed 51 new units for the elderly, rehabilitated a five-unit historic building, renovated Rebecca Towers, and is constantly improving Homeownership and Family Self-Sufficiency programs. In accordance with its Section 504 needs assessment, HACMB also updated Rebecca Towers to be ADA compliant.

HOUSING INVENTORY

While the housing supply represents the number of units available at any given time, the housing inventory refers to the total number of housing units found within the City limits. In 2016, there were approximately 69,771 housing units in Miami Beach. Originally built as a vacation resort and destination, most of the units in Miami Beach are small studio efficiencies and one-bedroom units, and nearly all of the housing in the City (92%) is multifamily units (from townhouses to high-rises). The table below identifies existing housing in Miami Beach.

The housing inventory in Miami Beach is diversified not only by housing type but also by the age of the housing units. There has been considerable new housing construction in the City since 2000 with 8,533 new units added. However, the majority of housing consists of older developments: approximately 56,000 housing units were built more than twenty-five years ago, half of which are more than fifty years old.

Substandard Housing
Substandard housing in the City of Miami Beach is predominately a matter of overcrowding rather than substandard physical conditions. The following table sets forth the number of substandard housing units, and the basis for such conditions, estimated in the American Community Survey.

Substandard Housing in Miami Beach[7]

Housing Condition	%	2016
Lacking complete kitchen/plumbing facilities	1.6%	2,710
Overcrowded	6.0%	2,663
Total Substandard	7.2%	5,373

More than half of the housing stock was built between 1950 and 1979 which suggests that rehabilitation is necessary, even in those properties that have been generally well-maintained throughout the years. This also suggests that there is a risk of lead-based paint existing in many of the properties as most of the City's residential buildings were constructed prior to the banning of lead paint.

[7] Source: U.S. Census Bureau, 2012-2016 American Community Survey, 5-Year Estimates

Definitions

Substandard Unit: A housing unit that does not meet local housing building codes and/or does not meet HUD Housing Quality Standards (HQS).

Substandard condition but suitable for rehabilitation: A substandard unit that based on reasonable cost of rehabilitation or historical significance, should be saved and rehabilitated.

Condition of Units

Condition of Units	Owner-Occupied		Renter-Occupied	
	Number	%	Number	%
With one selected Condition	7,508	46%	14,678	54%
With two selected Conditions	60	0%	1,401	5%
With three selected Conditions	0	0%	63	0%
With four selected Conditions	0	0%	0	0%
No selected Conditions	8,586	53%	11,016	41%
Total	***16,154***	***99%***	***27,158***	***100%***

Year Unit Built	Owner-Occupied		Renter-Occupied	
	Number	%	Number	%
2000 or later	1,331	8%	2,333	9%
1980-1999	3,141	19%	3,877	14%
1950-1979	8,020	50%	14,081	52%
Before 1950	3,662	23%	6,867	25%
Total	***16,154***	***100%***	***27,158***	***100%***

Inventory of Mobile Home Parks

There are no mobile home parks or subdivisions in Miami Beach.

Projected Demand for Housing

The overall housing need is to maintain the total number of housing units at a minimum of 69,771 which is an amount equal to the total number of households (plus an adequate vacancy rate) projected to reside in Miami Beach in 2040.

In 2016 there was an estimation of 69,771 housing units in the City of Miami Beach, a 2.6% increase from 67,966 in 2010. In 2016, there were 44,190 households living in Miami Beach, with an average household size of 2.05. Approximately 25,581units were vacant or second homes. Many property owners are renting out their properties through short term vacation rental businesses which have increased in popularity in the past few years. Housing unit information will be updated as the City's property tax roll from Miami-Dade County is received in July of each year.

Land Requirements for the Estimated Housing Need

The City of Miami Beach is 7.1 square miles in size, and is bounded by three other municipalities (Miami (west of Biscayne Bay), North Bay Village, and Surfside), Biscayne Bay and the Atlantic Ocean. It consists of a number of islands interconnected with bridges and also a portion of Fisher Island, which is separated by Government Cut and connected to the City via a ferry service from Terminal Island in the City proper. The City has not expanded in land area since the date of the last EAR and does not expect to expand in the future.

Currently, the City's estimated population is 91,784 persons[8] after a slow decline from 2000-2010, followed by a slow increase from 2010 to present. The City's population is projected to continue to slowly rise. Based on the U.S. Census, the City's population is estimated to rise to about 105,144 by 2040.

As noted above, the current number of existing housing units is estimated at approximately 69,771. These figures would suggest that units would need to be added during the 22 years between 2018 and 2040 to accommodate the expected population increase. While the City's land use data indicates that the City is virtually built out, there is some potential for redevelopment, and the small number of additional housing units projected to be needed could certainly be accommodated within this scenario by envisioning slightly more residential development in areas that permit mixed uses of both residential and commercial. Since the economic recession, development has recovered, and it continues to grow, along with construction.

Existing Housing Delivery System

The City of Miami Beach contains nominal vacant land and is considered a built-out community. Development of new housing is predominantly the result of rehabilitation of existing residential properties and/or the re-use of historic buildings such as former hotels. A significant amount of existing rental housing stock has been converted to condominium ownership in recent years. While the majority of housing is for owner occupants, a part of this inventory is made available to the rental market, particularly in the case of condominium units. The housing delivery system in the City of Miami Beach also includes private multi-family rental housing properties. There appears to be ample private sector capacity to satisfy anticipated demand for most housing. Non-profit affordable housing providers, particularly community development corporations, and the Housing Authority of the City of Miami Beach work closely with the City to address the housing needs of very low- to low-income households.

Private financing for acquisition, redevelopment and purchase of housing has been readily available in recent years. However, current economic conditions have severely tightened both commercial and residential lending in Miami-Dade County.

There are resources to assist qualified low-income homebuyers to purchase homes through local banks and government programs such as those offered by the Miami-Dade Housing Finance Authority and the Florida Housing Finance Agency. The City of Miami Beach reviews funding applications for housing initiatives. The Committee is a 7-member board that meets monthly, with the exception of August. City Commissioners appoint members of the Committee.

[8] Source: U.S. Census Bureau, 2012-2016 American Community Survey, 5-Year Estimates

Public Sector Funding Sources Available
The following funding sources support housing activities within the City of Miami Beach:

RDA- Redevelopment Agency Funds: Miami Beach Redevelopment Agency provides funding for affordable and workforce housing in target areas. The RDA has invested in four affordable housing projects since 2007.

CDBG- Community Development Block Grant: Federal funds are allocated to entitlement communities to improve housing conditions, infrastructure, and expand economic opportunities for low-income persons. The City's CDBG funds are used for, purchase assistance and affordable housing acquisition and rehabilitation.

HOME- Home Investment Partnership Funds: The City's federal HOME funds are used primarily for the rehabilitation of units. Funds will be set aside for a certified Community Housing Development Organization (CHDO) to undertake eligible HOME activities.

NSP I- Neighborhood Stabilization Program I: The City received HUD stimulus funds through the State of Florida's Department of Community Affairs to purchase and rehabilitate foreclosed or abandoned multi-family buildings for use as rental housing for income-qualified households.

SHIP- State Housing Initiative Partnership: Annual allocation of SHIP funds support owner-occupied housing rehabilitation, first-time homeowner assistance, and homeowner rehabilitation, as well as affordable rental housing renovation.

Additional Public Sector Leverage Resources
Housing developers can seek financing or subsidies for affordable housing from the following sources:

Miami Dade County Documentary Surtax Funds: Documentary stamp revenue collected by Miami-Dade County is directed toward housing-related projects throughout the County.

SAIL-State Apartment Incentive Loan Program: The state program provides low-interest loans on a competitive basis to affordable housing developers each year. This money often serves to bridge the gap between the development's primary financing and the total cost of the development. SAIL dollars are available to individuals, public entities, not-for-profit or for-profit organizations that propose the construction or substantial rehabilitation of multifamily units affordable to very low-income individuals and families.

Predevelopment Loan Program: The state program provides below-market interest rate financing and technical assistance to non-profit organizations for pre-development activities to plan, finance and develop affordable housing.

LIHTC-Low Income Housing Tax Credit Program and Tax Exempt Bonds: The LIHTC program provides an allocation of federal tax credits that are used for the construction or rehabilitation of rental housing that must remain affordable to low-income households for 15 years or more. Rent restrictions are also in place. Tax-exempt bonds provide below market-rate loans to nonprofit and for-profit developers who set aside a certain percentage of their apartments for low-income

households. The program requires that at least 20% of the units be set aside for households earning at or below 50% of the area median income. The developer may also opt to set aside 40% of the units for households earning at or below 60% of area median income.

Section 202 and 811 Programs: Federal programs designed to promote new construction or substantial rehabilitation of housing by non-profit organizations for the elderly or persons with disability.

Housing Sale Trends

In the first five years of the 21st century, the entire nation witnessed an unprecedented housing boom, with appreciation in South Florida drastically outpacing other regions of the country. As property values soared, the median price for a single family home in Miami-Dade County more than doubled in five years reaching a high of $401,100 in May 2007.

While there has been significant appreciation in the housing market since 2000, market stabilization began in 2006. With the recession in full force by 2010 and 2011, single family home and condominium prices were at a low. According to the Florida Housing Data Clearinghouse, the median sale price for a single family home in Miami Beach was as low as $825,000 in 2009, and the median sales price for a condominium dropped to $245,000 in 2011. Since these low points, the home values have been increasing. In 2017, the value for a single family home rose to $1,418,750 and the value for a condominium is $322,500.[9]

Housing Rent Trends[12]

The average rent rose from $581 in 2000 to $985 in 2013 - a 70% increase. Current HUD Fair Market monthly rents in Miami Beach are shown in the table below.

ZIP Code	Efficiency	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
33139	$1,310	$1,600	$2,030	$2,690	$3,260
33140	$1,240	$1,520	$1,930	$2,570	$3,110
33141	$1,020	$1,240	$1,580	$2,100	$2,540

The City of Miami Beach has also targeted funding from the Miami Beach Redevelopment Agency (RDA) for affordable and workforce housing (0-120% AMI). To date, the RDA has invested $13 million to purchase and rehabilitate Meridian Place Apartments, the Allen Apartments, Barclay Hotel, and London House. The rental development was managed by the Miami Beach Community Development Corporation. Meridian Place Apartments and the Allen Apartments is an affordable housing property for elderly residents currently owned and operated by MBCDC. In 2015, the City acquired the Barclay Plaza Apartments and the London House from MBCDC after a review of their projects and operations revealed a variety of operational and compliance lapses which jeopardized the projects and raised concerns regarding MBCDC's operational capacity. The London House has since been rehabilitated and is fully operational with a total of 24 affordable

[9] Source: Shimberg Center, Florida Housing Data Clearinghouse

[12] Source: City of Miami Beach Housing and Community Services

housing units. The City Commission directed the Administration to issue and RFP to identify a Public-Private Partnership to develop the Barclay Plaza Apartments as workforce housing. An RFP was issued in 2017, however the one applicant was deemed unresponsive. The City is currently working with a consultant to assist in the issuance of an RFQ to develop the Barclay as workforce housing.

The City has also partnered with Mount Sinai Medical Center on a housing development for its workforce. Mount Sinai received a $5 million grant from the Community Workforce Housing Innovation Program.

Obstacles

Obstacles for meeting underserved needs continue to be funded. With the increased value of housing and land, developing new affordable housing units will continue to be an obstacle. Additional obstacles include the availability and cost of housing, reduced State and Federal funds, as well as competition among the low-income and median-income workforce households.

Affordable Housing – Removing Barriers

The City of Miami Beach has implemented "the expedited processing of permits for affordable housing projects" and "an ongoing process for review of local policies, ordinances, regulations and comprehensive plan provisions that impact the cost of housing." This incentive gives priority to designated affordable housing projects when scheduling Pre-Design Conferences with all relevant agencies including but not limited to: Fire, Planning and Zoning, Building, Historic Preservation, Public Works, Americans with Disabilities Act (ADA), and the Housing and Community Development Division of the Office of Housing and Community Services. Also, when the plans are ready for permitting, first priority is provided.

In 2007, the City established the Cultural Arts Neighborhood District Overlay (CANDO) and committee. The mission of CANDO is to stimulate the creation of affordable housing (that meets Federal and State income guidelines) for cultural workers, encourage arts-related businesses to establish within the district and reverse the gentrification process whereby high rents and property values displace artists, art galleries and cultural activities from this area. The boundaries of the CANDO district are: 24th Street and North Lincoln Lane on the south and the Atlantic Ocean on the east.

The CANDO district crosses over several zoning districts with different development regulations. Because there are several zoning districts involved, the overlay district was developed with regulations and incentives that are applied to this district only, without changing the underlying development regulations. The CANDO district provides regulatory incentives for the creation of long-term (30 years) affordable housing units created within mixed use projects. The City of Miami Beach also has an ordinance that permits the relaxation of parking requirements for long-term affordable housing projects developed for the elderly and workforce.

The City Commission has directed Administration to proceed with a new parking garage development which will incorporate workforce and artist housing in the Collins Park neighborhood on the corner of 23rd Street and Liberty Avenue. The City is currently in discussions with Art Center South Florida and Miami City Ballet who have expressed interest in the development of workforce housing benefitting artists for their respective organizations.

As a recipient of Florida's SHIP funds, the City of Miami Beach was required to reinstate its Affordable Housing Advisory Committee (AHAC) in 2008. The AHAC is an 11-person advisory board that is charged with the responsibility of reviewing the City's processes, policies and ordinances to recommend monetary and non-monetary incentives for the development of affordable housing, including recommending actions or initiatives to encourage or facilitate the development or retention of affordable housing, while protecting the ability of the property to appreciate in value. Members are appointed by the Commission. The City is required to submit to the State the committee's updated policy review and recommendations every three years incorporated into the Local Housing Assistance Plan (LHAP). The LHAP for 2016-2019 was submitted to FHFC February 2017 and the City will begin the draft for the new report November 2018.

Land Use Regulations

Since 1996, the City has expedited permitting for affordable housing. Affordable housing projects are given priority when scheduling pre-design conferences with relevant City agencies including, but not limited to: Fire, Planning and Zoning, Building, Historic Preservation, and Public Works as well as when plans are ready for permitting.

In addition, prior to the adoption of any proposed policy, procedure, ordinance, development plan, regulation, or Comprehensive Plan amendment that might impact housing, the City evaluates its potential effect and cost of affordable housing.

On a triennial basis, the City of Miami Beach, through its Affordable Housing Advisory Committee (AHAC) and Office of Housing and Community Services, reviews its regulatory policies and procedures and develops strategies to encourage or facilitate affordable housing.
The City has made changes to ordinances and policies to eliminate barriers and encourage affordable/workforce housing development:

- Expedited permitting process for affordable housing projects
- Reduced minimum unit size for affordable housing
- Reduction in parking space requirements for affordable housing

Furthermore, the City is working with a Public-Private Partnership Consultant to assist the City with affordable/workforce housing efforts using otherwise underutilized City assets

Short-Term Vacation Rental Trends

Since approximately 2008, "short term vacation rentals", an alternative to commercial hotel lodging while travelling, has been growing in residential areas across the globe. This involves residential property owners renting out their entire space on a short-term basis, usually a weekend or a week at a time. They utilize a website or a smartphone application so there is no travel agent, Realtor, or any need for placing advertisements. The owners will not be present in the residence while the tenants stay. Most rental laws, including those in Miami Beach, do not permit rentals for a period of less than 6 months and 1 day (per Land Development Regulations Section 142-905(b)(5) and 142-1111 (a1)). Some exceptions apply, particularly in certain districts. The City requires prior approval of a short term rental, as well as a certificate of use. In addition, resort taxes are collected.

The issues experienced within the neighborhoods are that the permanent residents feel that these short-term rentals are diminishing their quality of life due to frequent noise disruptions and uncertainty of their safety. The State of Florida has pre-empted cities from enacting new local legislation on short-term vacation rentals a number of times, so as not to inhibit tourism options. However, many cities have enacted legislation prior to the State's pre-emption.

The proliferation of short-term vacation rentals in Miami Beach was so notable that, in 2016, the City passed an ordinance and set up a steep fine structure for violators of Land Development Regulations Section 142-905(b)(5) which refers to permitted accessory uses in single-family districts, and 142-1111, which applies to short-term rental of apartment units or townhomes. The fines begin at $20,000.

The City's intent to preserve the quality of life for permanent residents should be reflected further in the Housing Element of the Comprehensive Plan.

Chapter 5 - Historic Preservation Element

The Historic Preservation Element (HP) of the Comprehensive Plan supports the conservation of the unique character and heritage of the City by preserving historic structures, sites, and neighborhoods. The Goals, Objectives, and Policies of this element serve to protect the City's unique history and heritage through the preservation of structures and places, while supporting educational outreach, economic development, and resiliency and adaptation.

Summary of Revisions:

- Renumbers policies for internal consistency.
- Directs the City to establish resiliency guidelines for the preservation of historic buildings.
- Authorizes the City to establish neighborhood conservation districts and resiliency districts that incorporate the preservation of essential characteristics and adaptation to sea-level rise.
- Adds tools to incentivize preservation.
- Educational programs were introduced

Supporting Studies and Master Plans:

- Washington Avenue Vision and Master Plan (2016)
- North Beach Master Plan (2016)

Supporting Data & Analysis:

The presence and recognition of historically significant properties in Miami Beach continues to be part of the charm of the City. For about 4 decades, the City has supported the initiative through policy, incentives, and City staff. The City's first Historic Preservation Ordinance was adopted in 1980.

Currently, there are 2 City staff members dedicated to Historic Preservation in the Planning Department, as well as a 7 member Historic Preservation Board. The City offers reduced permit fees as an incentive to developers who apply to renovate historic structures.

Historically Significant Properties in the City include:[1]

- 14 Local Historic Districts
- An inventory of 1,888 contributing buildings within existing Local Historic Districts and a total number of 2,611 buildings located within the existing Local Historic Districts
- 15 individually locally designated historic sites
- 31 individually locally designated single family homes
- 4 National Register Historic Districts
- The Miami Beach National Register Architectural District designated in 1979 (commonly known as the Art Deco District)
- The Normandy Isles National Register Historic District designated in 2008
- The North Shore National Register Historic District designated in 2009

[1] The City of Miami Beach Environmental Scan, 2016

- The National Register Collins Waterfront Architectural Historic District designated in 2011
- 7 individually designated National Register listings:
    - Beth Jacob Social Hall and Congregation listed in 1980
    - The Venetian Causeway listed in 1989
    - The Ocean Spray Hotel listed in 2004
    - The Cadillac Hotel listed in 2005
    - The Fontainebleau Hotel listed in 2008
    - Lincoln Road Mall listed in 2011
    - Giller Building listed in 2018

Survey of Historic Properties

Calendar Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of Buildings classified as Contributing within Local Historic District	1534	1549	1549	1549	1549	1549	1549	1549	1549	1549	1888
Number of Individual, Local Historic Preservation Sites Designated	12	13	13	13	13	13	13	14	15	15	15
Number of Single Family Homes locally Designated	8	10	19	22	26	27	28	30	31	32	31
Number of Districts locally Designated	11	12	12	12	12	12	12	12	12	12	14
Number of National Register Districts Listed	2	3	4	4	4	4	4	4	4	4	4
Number of National Register Individual Sites Listed	5	5	5	6	6	6	6	6	6		7

The City has made great improvements in implementing historic preservation policies and regulations. Going forward, it is recommended that the City continue to increase the total number of structures designated as historically significant whenever possible and feasible.

The City should also focus on increasing community awareness, interest, and support for the continued success for the City's historic preservation efforts in building a sustainable, vibrant and economically vital urban environment.

Chapter 6 - Recreation and Open Space Element

The Recreation and Open Space Element (ROS) of the Comprehensive Plan addresses the needs for active and passive parks, recreational facilities, open space, and access to waterways. The ROS element supports other elements within the Comprehensive Plan to help ensure that development continues to provide areas for recreation and open space uses for permanent and seasonal residents of all ages. The City's level of service requirements for recreation and open space are located in the Capital Improvement Program Element (CIE).

The 2009 Comprehensive Plan has directed many new facilities that promote access to the waterways, and several projects have been completed. The policies directing improved access to the waterways have been updated to focus on completion of the project as well as continue to maintain the facilities. These include pedestrian walkways, beach parking, and the requirement of public access to the waterfront and shoreline with non-residential property development. Also added is adherence with the recommendations in the Blueways Master Plan. Within the LOS standards, the standards for Basketball Courts and Tennis Courts have been increased.

Summary of Element Revisions:

- Incorporates policies to enhance the development of linear parks.
- Provides clarifications to policies regarding access to the waterfront and shoreline.
- References the Capital Improvements Element for parks and recreation levels of service.
- Improves internal consistency and clarity.
- Updates Goals, Objectives, and Policies to be consistent with changes in state law.
- Removes citations to obsolete Florida Statutes and Florida Administrative Code sections.
- Modifies the organization of the Element to improve usability.

Supporting Studies and Master Plans

- City of Miami Beach Blueways Master Plan (2015)

Supporting Data & Analysis:

Existing Level of Service

There are 1,156 acres of recreation and open space Citywide. This total includes ornamental open space and ocean beach conservation area.

Adequacy of Existing Facilities

The above Level of Service figure is considerably higher than the commonly used national standard of 3.0 acres per 1,000 persons. Therefore, qualitative assessment becomes more significant than quantitative. The principal need is adequate facilities and maintenance at the existing parks.

Future Needs

With no signification population increase projected, the existing park acreage will be adequate. Again, the future need will continue to be primarily that of upgrading existing facilities as noted in the Problems and Opportunities statements for each park in the facilities inventory.

Number of Existing Miami Beach Facilities

Number	Facility Type/Site
2	Municipal Regulation Golf Courses
1	Par Three
6	Staffed Parks (North Shore Park and Youth Center, Muss Park, Flamingo Park, Normandy Isle Park & Pool, South Pointe Park and North Shore Open Space)
18	Active Parks (including staffed parks: Beachview Park Fisher Park, Maurice Gibb Memorial Park, Polo Park, Crespi Park, Fairway Park, LaGorce Park, Muss Park, Flamingo Park, Normandy Isle Park, Normandy Shore Park, North Shore Park & Youth Center, Stillwater Park, Tatum Park, Lummus Park, Palm Island Park, South Pointe Park and North Shore Open Space)
19	Passive Parks (Collins Park, Indian Beach Park, Marjory Stoneman Douglas Park, Pinetree Park, Belle Isle Park, Sunset Island II Park, Sunset Island IV Park, Triangle Park, Allison Park, Altos Del Mar Park, Brittany Bay Park, North Shore Bandshell, Parkview Island Park, Hibiscus Island Park, Pier Park, Pancoast Park, Poinciana Park, Buoy Park and Washington Park)
3	Youth/Community Centers (SRYC, NSPYC & 21st street)
3	Pools (SRYC, Flamingo & Normandy Isle)
1	Ice Rink
6	Tennis Sites (Flamingo, Polo, Normandy Shores, NSPYC, Palm and Fairway)
42	Tennis Courts (Flamingo: 17, Polo: 4, Normandy Shores: 4, North Shore Park : 12, Palm: 3 and Fairway: 2)
4	Bark Parks (Pinetree Park, Flamingo Park, Belle Isle Park, South Pointe Park, Bark Beach, North Beach Oceanside Park, and Washington Park)
19	Playground Tot-Lots (Muss, Flamingo, Crespi, Fisher, LaGorce, Lummus, Maurice Gibb, Marjory Stoneman, Normandy Shores, Palm, Polo, Stillwater, Tatum, Fairway, South Point Park, Beach View Park – 53rd Street, North Shore Open Space, North Shore Park & Youth Center & Normandy Isle).
1	Football Stadium and Track
1	Baseball Stadium
7	Sports Fields (Flamingo: 2, Fairway: 1, Normandy Isle: 1, NSPYC: 2 and Polo: 1)
21	Rental Sites (North Shore Open Space/Ice Rink/Youth Centers, 21st Street Recreation Center, any and all tot-lots)
15	Basketball Courts (Flamingo: 2, Fairway:1, NSPYC: 1, Stillwater: 1, Polo Park: 4, Tatum Park: 1, SRYC: 1, Palm: 1, Normandy Isle: 2 and Crespi: 1)
6	Bowling Lanes
2	Dance Floors (21st Street & NSPYC)
12	Computers for Public Use

The National Recreation and Parks Association has published Park Metrics which provides benchmark data and insight for park and recreation staff. The typical park and recreation agency offers one park for every 2,114 residents served, with 10.1 acres of park land per 1,000 residents. Since all municipalities are unique, including Miami Beach, the data is used to compare the city to similar areas, to gain more funding support, improve operations and better serve their communities.[1]

- 50 recreation and open space sites throughout the North, Mid, and Southern Districts of the city.
- 726.83 acres of recreational open space.
- Special purpose parks comprise over 365 acres or approximately 50% of total park system.
- The South District, which is currently providing only 2.86 acres per 1,000 population, does not meet the city's LOS minimum standard for open space.
- The Mid-Beach District has the largest amount of recreation space of any district at over 376 acres, or just over 15 acres per 1,000 population.
- The North District is currently meeting the city's LOS standard at 6.74 acres for open space per 1000 population.
- The City of Miami Beach suffers from a lack of large open field space. There is currently only one regulation baseball field and one regulation softball field within the city limits.
- With more children under 18 living in the City of Miami Beach than ever before, it has been necessary to re-asses the needs of the community and its respective populations accordingly.

[1] **Source:** https://www.nrpa.org/publications-research/ParkMetrics/

Chapter 7 - Infrastructure Element

The Infrastructure Element (INF) of the Comprehensive Plan addresses the services of potable water, sanitary sewer, drainage, and solid waste. The Goals, Objectives, and Policies in the Infrastructure Element establish the level of service and maintenance standards of infrastructure within the City of Miami Beach. The INF element supports other elements within the Comprehensive Plan to help ensure that development continues to be adequately served by utilities while conserving water and protecting floodplains.

The Infrastructure Element is updated to provide additional policies furthering the goals of other Elements, particularly in regards to stormwater management, sea level rise, and resiliency. In addition, State requirements for peril of flood have prompted a policy in regards to FEMA requirements for new construction. Educating the public on water conservation has also been added to bring more attention to resources. Policies have been removed if the new projects they directed in the 2009 Comprehensive Plan have been completed, such as the Stormwater Management Master Plan.

Summary of Revisions:

- Provides policies that direct infrastructure to be provided that furthers the goals of the Climate Resiliency and Sustainability Element.
- Updates requirements for infrastructure to incorporate the City of Miami Beach Freeboard previously adopted by ordinance.
- Improves internal consistency and clarity.
- Updates Goals, Objectives, and Policies to be consistent with changes in state law.
- Removes citations to obsolete Florida Statutes and Florida Administrative Code sections.
- Modifies the organization of the Element to improve usability.

Supporting Studies and Master Plans

- Miami Beach Florida: Stormwater Management and Climate Adaptation Review, *Urban Land Institute* (2018)
- South Florida and Sea Level: The Case of Miami Beach, *Harvard Graduate Study* (2017)
- Transportation Master Plan (2016)
- Miami Beach Sustainability Plan https://www.miamibeachfl.gov/wp-content/uploads/2017/12/City-of-Miami-Beach-Sustainabilty-Plan_FINAL.pdfs

Supporting Data & Analysis:

The Public Works Department is a large, full service organization providing planning, design, construction, maintenance, repair, and operation of City infrastructure including utility systems and City buildings and facilities. The Department is also responsible for City cleanliness and manages the Solid Waste Collection and Disposal Program. The Department is represented by a professional, semi-professional and licensed disciplines working in the Infrastructure, Sanitation, Engineering, and Greenspace Divisions on a $152.8 million annual budget.

The City infrastructure managed by the Public Works Department is comprised of:

- 96 municipal buildings;

- 23 city owned bridges: monuments; water fountains; swimming pools;
- 1.8 miles of Boardwalk;
- 2.87 miles of Beachwalk; playground equipment; parking garages; street furniture;
- 180 miles of water piping;
- 23,000 water valves;
- 717 fire lines;
- 1,009 fire hydrants;
- 86 water crossings;
- 4 water storage tanks with total storage capacity of 14 million gallons;
- 6 water pumping stations;
- 13,526 water meters;
- 152 miles of sewer piping;
- 3,293 sewer manholes;
- 23 sewer pump stations;
- 110 miles of stormwater pipes and valves;
- 367 stormwater outfalls;
- 172 drainage basins;
- 6,100 catch basins; 2,688 stormwater manholes;
- 7,300 feet of seawall;
- 140 miles of City street;
- 242 miles of sidewalks;
- 200 miles of curb and gutter;
- 34 stormwater pump stations;
- 33 miles of alleyways;
- 7,200 street lights;
- 263 miles of underground wiring; and
- 1,200 landscape up-lights.

Sanitary Sewer

The Miami-Dade County Water and Sewer Department (WASD) is responsible for the treatment of sewage. The system serves the entire City so the existing land use data in the Future Land Use Element applies. All uses must tie into the sanitary sewer system as a matter of policy.

The City's sewage is currently being treated at the Central District Wastewater Treatment Plant. The adopted Level of Service is 140 average gallons per capita per day. The City's collection system currently has adequate capacity to meet current needs and is deemed to continue to be adequate as it is replaced and upgraded as needed.

Potable Water

The City's Public Works Department is responsible for 180 miles of water piping; 23,000 water valves; 717 fire lines; 1,009 fire hydrants; 86 water crossings; 4 water storage tanks with total storage capacity of 14 million gallons; and 6 water pumping stations. The Department is also responsible for the safe and efficient distribution of 7.6 billion gallons of water annually and to

minimize the distribution system water loss. The Miami-Dade County Water and Sewer Department is responsible for the water supply and treatment. The entire City is served by the City distribution system.

The City of Miami Beach is served by the Hialeah-Preston sub-area water treatment plants. The treatment plants are interconnected and act as a single system. The plants operate under a Title V Florida Department of Environmental Protection permit number 02502810005-AV. Both of these treatment facilities obtain raw water from the Biscayne Aquifer under consumptive use permit number 13-00017-W and utilize the same basic process for water treatment. The treatment process includes lime softening, chlorination, ammonization, fluoride, filtration and air striping.

In addition to these plants, Miami-Dade WASD also operates the Alexander Orr, Jr. Water Treatment Plant and other minor water treatment plants servicing the southern portion of the County. The Alexander Orr, Jr. plant utilizes the same water treatment process as the Hialeah-Preston plants with the exception of the air striping. The City is within Miami-Dade County WASD service area which provides potable water and sanitary sewer services. As discussed the potable water and sanitary sewer systems have adequate capacity to meet the needs of current and future residents.

The adopted Level of Service for Potable Water consumption is 140 average gallons per capita per day, with a peak of 168 gallons per capita per day.

The City adopted a 10-Year Water Supply Facilities Work Plan, which is hereby incorporated for reference. The Water Supply Plan contains data and analysis for the Potable Water section of the Infrastructure Element.

Wellfields
There are no wellfields within the municipal boundaries of Miami Beach
https://www.miamidade.gov/environment/library/maps/wellfield-protection-areas.pdf

Miami-Dade County Water Wholesale Customers
The City of Miami Beach is a MDWASD wholesale water customer. Maps and other supporting data and analysis related to the treatment and connections of the City's bulk water supply are located in the 2014 County's water supply work plan:
https://www.miamidade.gov/planning/library/reports/planning-documents/2014-water-supply-plan.pdf

WASD Water Allocation Map – Water Concurrency
Miami-Dade County provides an interactive GIS based map of all water concurrency for development approvals within Miami Beach and the WASD greater service area.
https://gisweb.miamidade.gov/iWASDAllocation/

Solid Waste
The City contracts with private haulers for collection of solid waste from residential and non-commercial areas. The Miami-Dade County Public Works Department operates the collection of recyclable solid waste, the transfer stations and disposal facilities. The entire City is served by the above system.

State Statue obligates the County Solid Waste Management System to collectively maintain disposal capacity sufficient to accommodate waste flows committed to the System through long-term interlocal agreements or contracts with municipalities and private waste haulers, and anticipated non-committed waste flows, for at least five years. The citywide Level of Service standard for solid waste generation is 1.275 tons per capital per year. This is the minimum that shall be able to be accommodated.

County disposal facilities have adequately handled the solid waste that has been generated by the City of Miami Beach as a customer. Disposal facilities, along with transfer stations and Trash and Recycling Centers, exhibited sufficient capacity and provision for future demand or needs is being provided by the County. Household Hazardous Waste and Electronic Waste/Recycling is also available to Miami Beach residents.

Stormwater

The Public Works Department is responsible for operation of a system of storm sewers. The City faces two kinds of drainage problems. One is that if certain high tide patterns coincide with a heavy rain, backup can occur in certain sections of the storm sewer system. This is further discussed in the Sustainability and Resiliency Element. Secondly, the nature of the soil composition of the City, mainly fill, means that natural infiltration can be slow.

The City of Miami Beach is one of 33 municipalities that entered into an Interlocal Agreement with Miami-Dade County, authorizing Miami-Dade County to be the lead permittee in submitting a National Pollutant Discharge Elimination System (NPDES) Stormwater Permit Application. One condition of the Interlocal Agreement requires Miami Beach to develop a Stormwater Management Master Plan (SWMMP) that is consistent with Miami-Dade County's Master Plan. The Citywide Stormwater Management Master Plan was also directed to be prepared in the 2009 Comprehensive Plan. In 2012, the SWMMP was completed and focuses on best operation and management of stormwater. The City is currently undergoing a more current update to the stormwater master plan that will use an integrated water management approach in dealing with stormwater management, climate change, sea level rise, and environmental challenges.

Chapter 8 - Intergovernmental Coordination Element

The Intergovernmental Coordination Element (ICE) of the Comprehensive Plan establishes standards for coordination with the plans of other government agencies at the Federal, State, Regional, and Local levels, including adjacent municipalities. Such coordination is necessary for the provision of services as well as ongoing maintenance of infrastructure and to provide a regional approach to climate resiliency to support the quality of life in the City of Miami Beach.

Summary of Revisions:

- Updates department and document citations.
- Updates to policy numbering for internal consistency with new format.

Supporting Studies and Master Plans:

- Resilient 305

Strategic Partners:

The following provides a list of the entities with which Miami Beach coordinated in implementing this Plan. The Analysis section outlines the nature of the intergovernmental relationship and the City office with prime responsibility for the coordination.

Adjacent Municipalities:
Miami
North Bay Village
Surfside

Miami-Dade County:
Planning Department
Department of Environmental Resource Management (DERM)
Water and Sewer Department
Office of Emergency Management
Miami-Dade Transit
Public Works
Metropolitan Planning Organization
Biscayne Bay Shoreline Department Review Committee

Regional:
South Florida Regional Planning Council
South Florida Water Management District

State:
Department of Economic Opportunity
Department of Education
Department of Environmental Protection
Department of State; Division of Historical Resources
Department of Transportation

Others:
Miami-Dade County School Board
The Housing Authority of Miami Beach
Miami Beach Community Development Corporation
Miami Design Preservation League
Florida Trust for Historic Preservation
Dade Heritage Trust
U.S. Department of Housing and Urban Development

Supporting Data & Analysis:
The following provides an analysis of the intergovernmental coordination process for the various elements to show nature of the relationships and office with responsibility.

Resilient Land Use and Development Element
The Planning Department implements the Land Development Regulations of the City Code in its review of minor (i.e., signs, fences, paint, etc.) and major (i.e., new construction or complete restoration or renovation) building plans.

The Planning Director, and a Historic Preservation Manager staff member coordinate with prospective developers to provide guidance relative to new or redevelopment projects. The Department coordinates with outside agencies such as Miami-Dade DERM, FDOT, Miami Beach Community Development Corporation, and others as necessary.

Transportation Element
The Transportation Element was developed and will be updated based on recommendations in the Transportation Master Plan and coordinated with the Planning Department and the Transportation Division of the Public Works Department. These two departments coordinate with Miami-Dade County Public Works, the Metropolitan Planning Organization (MPO), as well as Miami-Dade Transit and FDOT as necessary. The MPO is responsible for coordinating local and state transportation plans and programs and produces the Transportation Improvement Program (TIP), which it evaluates and updates periodically.

Housing Element
The Housing and Community Development Division administers State and Federal funding to develop decent, safe and sanitary affordable housing and revitalize urban neighborhoods through community and economic development in Miami Beach. The Division also strengthens efforts of the continuum of care for homelessness by providing emergency shelter and other support services for homeless individuals and families, and/or interim assistance for the prevention of homelessness. The Division has developed and established a variety of housing and community development programs to address the specific needs of the low- and moderate-income residents of Miami Beach as a vibrant, tropical, historic community and is part of the City's Neighborhood Planning Division.

The main programs administered by the Division are the federal Community Development Block Grant (CDBG) Program and the Home Investment Partnerships (HOME) Program, and the State of Florida-funded housing program, known as the State Housing Initiatives Program (SHIP). The

Division also administers other special initiative programs targeted at income eligible recipients, and frequently relating to housing opportunities.

Annually, the City of Miami Beach receives approximately $900,000 in CDBG funds from HUD[13]. Not less than 70 percent of CDBG funds must be used for activities that benefit low- and moderate-income persons. In addition, each activity must meet one of the following national objectives for the program: benefit low- and moderate-income persons, prevention or elimination of slums or blight, or address community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community for which other funding is not available.

The Housing & Community Services Department is the office with primary responsibility for coordination with other City departments as well as with the Housing Authority, HUD, Miami Dade County and other external agencies. The Housing Authority of the City of Miami Beach (HACMB) is responsible for administering the Section 8 program in the City.

Infrastructure

The Public Works Department is the office of primary responsibility to coordinate issues regarding Sanitary Sewer, Solid Waste, Drainage, and Potable Water. The Miami-Dade County Water and Sewer Department (WASD) is responsible for the treatment of sewage. All uses must be connected to the City's sanitary sewer system.

The Public Works Department is a large, full service organization providing planning, design, construction, maintenance and repair, and operation of City infrastructure, including utility systems and City buildings and facilities and manages the solid waste collection and disposal program. The Department also includes the Water, Sewer, Stormwater and Sanitation Divisions. It is also responsible for the operation, repair and maintenance of City's water distribution system.

The water section focuses on preventative maintenance programs with the goal of reducing water leaks, water main breaks and fire hydrants out of service. This includes 180 miles of piping, 23,000 water valves, 717 fire lines, 1,009 fire hydrants, 86 water crossings, 4 water storage tanks (14 million gallons total), 6 water pump stations, and 13,526 water meters.

The Sewer Section is responsible to operate and maintain a reliable sanitary sewer system that protects public health and safety and complies with all federal, state, and local regulations. The Division installs, maintains the City's sewer collection and conveyance system and its appurtenances. This includes 152 miles of sanitary sewer pipes, 3,293 sewer manholes and 23 sewer pump stations. It is responsible for the efficient collection and conveyance of approximately 26 million gallons of sewer per day, including the waste water from four neighboring cities in the north.

The Storm Water Utility Section is responsible for operating and maintaining a reliable stormwater collection and conveyance system that protects public health and safety and complies with all federal, state and local regulations. This includes 59 miles of drainage pipes,

[13] 2016 Environmental Scan

82 gravity drainage wells, 4 injection wells, 367 stormwater outfalls, 172 drainage basins, 6,100 catch basins and 2,688 stormwater manholes. This division is responsible to reduce and eliminate polluted storm water run-off; complying with National Pollutant Discharge Elimination System (NPDES) permit requirements; and relieving flooding conditions. In 2012, the City completed a Citywide Comprehensive Stormwater Management Master Plan (SWMMP) in order to evaluate and update stormwater management practices, infrastructure, funding, and regulatory practices[14]. It is an update and expansion to the original SWMMP as a condition of the 1993 Interlocal agreement with Miami-Dade County.

The project created a model of the existing stormwater system and has identified the basins that are experiencing reduced Levels of Service (LOS). The model has allowed the City to evaluate cost-effective stormwater infrastructure improvements, remediate excessive flooding, prioritize stormwater basins, and ensure continued compliance with regulatory agencies.

The SWMMP is intended to be a guide for improving the City's stormwater management system flood control and water quality performance for the next 20 years, with considerations of potential sea level change over 20-years of stormwater infrastructure and a 50-year planning horizon for sea wall heights. Sea level change, to the extent it occurs, will worsen flooding potential in the City by raising the tide levels and water table and by making it more difficult to discharge stormwater out of the area[15].

The Department coordinates as necessary with the following outside agencies:

- Miami-Dade County Water and Sewer
- Miami-Dade County Environmental Resource Management
- Florida Department of Environmental Protection

Resiliency and Sustainability Element

The City of Miami Beach is a unique mix of ultra-urban meets the natural environment. There are many natural resources including; canals, waterways, sand dunes, 26 parks and green spaces, and just over 7 miles of white, sandy beaches. Miami Beach is a natural nesting habitat for endangered sea turtles, butterflies, and is home to several endangered plant species including the Biscayne Prickly Ash, Beach Cluster Vine and the Beach star.

With regard to sea turtles, in September 2006 the City adopted regulations in the City code to reduce the impacts of artificial coastal lighting on threatened and endangered sea turtles that nest on the beaches of Miami Beach by restricting artificial lighting and other activities that disorient turtle hatchlings, causing them to crawl toward land rather than toward the ocean. One such regulation pertains to the criteria for lighting located east of the Coastal Construction Control Line (CCCL) or lighting that directly illuminates the beach and interferes with turtle nesting.

[14] Citywide Comprehensive Stormwater Management Master Plan, 2012

[15] Citywide Comprehensive Stormwater Management Master Plan, 2012

Several different agencies are responsible for varying aspects of the beachfront conservation area. FDEP approves coastal construction; the Bureau of State Lands owns the beach; and Miami-Dade County DERM.

Additionally, as the City is a Coastal High Hazard Area, evacuation is mandatory. The City's Emergency Manager in the Miami Beach Fire Department has the primary responsibility of coordinating the mandatory evacuations. The Emergency Manager coordinates with the Miami-Dade Office of Emergency Management, Miami-Dade Transit, public safety personnel from the City as well as the County and Mount Sinai Hospital, which is the only hospital located in the city. The evacuation routes for the City are located in the Comprehensive Plan Map Series.

Recreation and Open Space Element

The City has adequate land devoted to recreation and open space. In addition, the City collaborates with the Miami-Dade School Board for the mutual utilization of City parks and School facilities. Further, since 2003, the City is a party of the Interlocal Agreement for Public School Facility Planning in Miami-Dade County, later amended and reinstated in 2008.

Historic Preservation Element

The Planning Department is responsible through its Design and Preservation area for the implementation of the Land Development Regulations with regard to the rehabilitation and review of historic preservation projects, and the compliance with the U.S. Secretary of Interior Standards.

The City contains the largest concentration of Twentieth Century resort architecture in the United States. It has also expanded the preservation vision of architectural districts in North Beach which have been inscribed in the National Register of Historic Places – the North Shore Architectural District and the Normandy Isles Architectural District.

In going forward the City should focus on increasing community awareness, interest, and support for the continued success of the City's historic preservation efforts in building a sustainable, vibrant and economically vital urban environment.

Chapter 9 - Public School Facilities Element

The Public School Facilities Element (PSF) of the Comprehensive Plan corresponds with the interlocal agreement requirements established between Miami-Dade County Public Schools and municipalities in Miami-Dade County to provide for adequate public education facilities for the current and future students in Miami Beach.

Summary of Revisions:

- Renumbers policies for internal consistency.

Supporting Data & Analysis:

The element is consistent with the County interlocal agreement and no substantive changes were required. The policies were renumbered consistent with the updated format of the Comprehensive Plan for ease of use. Details on the County's school concurrency management system can be found at: http://pdfs.dadeschools.net/schoolboard/archives/022210/FINALIMR2-19-10.pdf

Chapter 10 -Capital Improvements Element

The Capital Improvement Program Element (CIP) of the Comprehensive Plan addresses the level of service and funding of the City's capital facilities. The Goals, Objectives and Policies in the Capital Improvement Program Element support other elements within the Comprehensive Plan to help ensure that development and redevelopment does not commence without adequate capital facilities in place.

The Level of Service Standards throughout other Elements of the Comprehensive Plan have relocated throughout other Elements of the Comprehensive Plan have been relocated to the Capital Improvements Program Element. The City is also concurrently processing a proposed amendment to adopt a Mobility Fee Program in lieu of the existing Transportation Concurrency Management system, the revised element reflects these proposed concurrent changes.

Summary of Element Revisions:

- Updates polices regarding the City's capital facilities planning and procedures.
- Revises Recreation and Open Space Levels of Service to be consistent with improved parks facilities.
- Authorizes the City to explore replacing Recreation and Open Space Levels of Service with a Parks Impact fee to provide for additional flexibility.

Supporting Studies and Master Plans:

- 5-Year Capital Improvement Program

Supporting Data & Analysis:

Adopted 2018 G.O. Bond Program

The voters have adopted a $439 million General Obligation Bond program as part of the City's CIP on November 6, 2018. A General Obligation Bond is a form of debt financing payable solely from property taxes, backed by the pledge of the City's "full faith and credit" or taxing power, and is used to finance capital projects.

Three separate ballot questions will encompass the capital projects included in the G.O. Bond program:

- Parks, Recreation Facilities & Cultural Facilities: $169 million
- Neighborhood and Infrastructure: $198 million
- Police, Fire, and Public Safety: $72 million

The City currently is paying toward the $46,380,000 outstanding balances from the Series 2003 and Series 2011 General Obligation bonds.

FY 2019-2023 Capital Improvement Plan by Program

Attached as Appendix A.

KEITH & SCHNARS
ENGINEERS | PLANNERS | SURVEYORS

MEETING SUMMARY

LOCATION: City Commission Chambers

DATE: Monday, January 28, 2019

TIME: 6:00 P.M. – 8:00 P.M.

SUBJECT: City of Miami Beach Comprehensive Plan Update

STAFF PRESENT:

Heidi Siegel, AICP	Keith & Schnars – Planning
Erin Sita, AICP	Keith & Schnars – Planning
Kristen Nowicki, AICP	Keith & Schnars – Planning
Thomas Mooney, AICP	City of Miami Beach – Planning
Rogelio A. Madan, AICP	City of Miami Beach – Planning
Frank Arbelaez, AICP	City of Miami Beach – Planning

The community meeting held January 28, 2019 for the update of the Miami Beach Comprehensive Plan was an opportunity to gather public input.

OPENING PRESENTATION:

Commissioner John Elizabeth Aleman provided a welcome to the attendees, and introduced Planning Director Tom Mooney to discuss the importance of the City's Comprehensive Plan, as well as the City's commitments to sustainability, multi-modal transportation, and historic preservation. A Power Point presentation was given by Heidi Siegel of K&S to provide a background on the Comprehensive Plan amendment process and the work that the City has done since the last Comprehensive Plan update.

There were approximately 28 attendees. Two members of the City Commission, Commissioner John Elizabeth Aleman and Commissioner Joy Malakoff, were also in attendance.

DISCUSSION / KEY COMMENTS:

Many community members asked questions or provided comments about concerns in their neighborhoods and the City. The major takeaways are noted below:

- Additional consideration of the needs of single family neighborhoods
- Preservation of single family neighborhoods
- Concern regarding streets being raised causing pollution in Lake Surprise
- Resolving conflict between resiliency and single family neighborhoods
    - This subject was mostly in reference to addressing sea level rise without major impact to the character of the neighborhood
- Transfer of Development Rights to create more parks

- Need to identify appropriate areas to encourage redevelopment vs. preservation (focus on the more valuable contributing properties)
- A need for real incentives to get workforce housing units built
- A need for an "inclusive threshold" to ensure that the workforce housing incentive is to scale with the size of the project
- Inclusivity in regard to public amenity provision (such as benches, sun shelters).
- 41st Street Master Plan
- Resiliency & Sea Level Rise
- Business development on Washington Avenue
- Biscayne Bay – houseboats or housing at the marina to address future population growth
- Solar energy – incentives/promotion desired
- Ask Federal government for assistance to sea level rise issues
- Alternative energy sources, such as windmills
- Consider sound mitigation in the Intergovernmental Coordination Element to address the sounds from the new, taller, cruise ships docked at the Port of Miami
- Water pollution and seagrass decline
- Support for Citywide tree planting program
- Address seawall height and raising them for resiliency, citywide.
- Include PACE programs in the Comprehensive Plan, including seawalls, to support legislative agenda

NEXT STEPS:

- Complete the amendments

- City of Miami Beach
  - Local Planning Agency (Planning Board) – Public Hearing
  - City Commission Transmittal Hearing – Public Hearing
    - Transmit to the Florida Department of Economic Opportunity

- State issues Objections, Recommendation and Comments Report (ORC)

- City of Miami Beach
  - City Commission Adoption Hearing– Public Hearing