

RESPONSE TO FDOT TECHNICAL ASSISTANCE COMMENTS
2020 Comprehensive Plan Update
October 1, 2020

NOTE: THE CHANGES TO THE GOALS, OBJECTIVES AND POLICIES MADE IN RESPONSE TO THESE COMMENTS ARE HIGHLIGHTED IN GREEN IN EXHIBIT "A" OF THE ADOPTION ORDINANCE.

Following are specific areas for improved coordination in the Comprehensive Plan:

Complete Streets Coordination:

Technical Assistance Comment #1:

Policy 02.03.10 of the Transportation Element (TE) promotes the City's involvement in bicycle planning programs and including bicycle and pedestrian ways in all transportation planning. These programs would be enhanced by FDOT coordination.

Recommendation for Technical Assistance Comment #1

- FDOT recommends the City note the opportunity to expand this policy to include participation in FDOT opportunities to implement complete streets, including discussions on context classification for corridor segments and contributing information for FDOT consideration in scoping transportation projects.

RESPONSE: Policy 02.03.10 was modified as suggested.

Transit-Oriented Development (TOD) Coordination:

Technical Assistance Comment #2:

Objective 01.17.00 and associated policies under the Objective note the TOD land use category design criteria and could be enhanced using FDOT's guidance documents.

Recommendation for Technical Assistance Comment #2

- FDOT recommends that the City utilize the Florida TOD Guidebook¹ which provides model comprehensive plan goals, objectives, and policies designed to advance transit and TOD planning, and outlines a process for local governments to effectively plan for TOD. In addition to the TOD Guidebook, the South Florida Regional Planning Council offers several reports and publications related to TOD roles and responsibilities, framework, and implementation².

RESPONSE: Resources are noted. The City is implementing two TOCs (the East TOC and the Downtown TOC) formed under this objective and policies and the design is being guided by the zoning codes specifically written to implement the city's vision for these districts. The City is comfortable with our policy framework as presented.

¹ Florida TOD Guidebook: <https://planfortransit.com/wp-content/uploads/2013/02/FloridaTODGuidebook.pdf>

² <http://sfregionalcouncil.org/tod-reports/>

Strategic Intermodal System Coordination:

Technical Assistance Comment #3:

The TE does not address through policy the need for coordination with FDOT to specifically address impacts and coordination regarding the SIS. Enhanced coordination regarding these facilities is important to maintaining mobility by identifying and reducing potential impacts.

Recommendation for Technical Assistance Comment #3

- Under Objective 02.01.00, FDOT recommends the City consider adding a Policy and the following policy language to benefit City and FDOT project development coordination and help to identify various strategies to minimize impacts of development on the SIS:

‘The City will notify and coordinate with FDOT, including the District Strategic Intermodal System Coordinator, on preserving the functional integrity of Strategic Intermodal System facilities in the City through enhanced coordination in an effort to identify and implement strategies to eliminate, reduce or mitigate impacts from development on Strategic Intermodal System (SIS) facilities.’

RESPONSE: Policy 02.01.20 was added to include this language as suggested.

Bicycle/Pedestrian Coordination:

Technical Assistance Comment #4:

Policy 02.01.16 notes coordinating with Broward County and the MPO on bike and pedestrian infrastructure as part of all roadway improvement projects. Policy 04.04.02 states to develop additional bicycle facilities and cooperate with Broward County in the provision of bicycle facilities. FDOT can enhance this coordination by becoming a partner in the improvement process.

Recommendation for Technical Assistance Comment #4

- FDOT recommends that the City reference FDOT as a partner in discussions to incorporate bicycle and pedestrian infrastructure as part of all roadway improvement projects.
- FDOT also recommends that the City coordinate with the FDOT District Four Pedestrian and Bicycle Safety Specialist regarding community outreach activities, high visibility enforcement (HVE) efforts with local law enforcement agencies, and resources available to address pedestrian and bicycle safety education and enforcement.

RESPONSE: The suggested language was added to policy 02.01.16.

Commuter Services/Connections Coordination:

Technical Assistance Comment #5:

Objective 02.03.00 discusses the development of the City's multimodal transportation system and Policy 02.03.29 discusses the operation of the Community Shuttle Bus and promoting connections. The City can further this Objective and Policy by referencing and leveraging the commuter service resources available to the City.

Recommendation for Technical Assistance Comment #5:

- In support of Objective 02.03.00, FDOT encourages the City to coordinate with the South Florida Commuter Services team regarding implementation of Transportation Demand Management (TDM) strategies. FDOT offers commuter services³ in metropolitan areas throughout the State and in the South Florida region, with resources that promote additional travel choices to facilitate mobility, sustain the quality of the environment, preserve community values, and reduce energy consumption. The commuter services program includes several links that can aid the City in achieving its goal of reducing single-occupant automobile use.

RESPONSE: Noted. Thank you for the information.

Safe Routes to School (SRTS) Coordination:

Technical Assistance Comment #6:

Policy 01.12.04 addresses implementation of the “safe routes” program to make schools and parks more accessible. This can be enhanced with collaboration with FDOT.

Recommendation for Technical Assistance Comment #6:

- FDOT recommends that the City consider enhancing this policy to include supporting further collaboration with FDOT and the School District in funding SRTS improvements. Please refer to <https://www.fdot.gov/safety/2a-programs/safe-routes-funding.shtm> for additional information.

Vision Zero Coordination:

Technical Assistance Comment #7:

FDOT applauds the City for incorporating Policy 02.03.06 into the Comprehensive Plan related to reducing accidents and pedestrian injury/fatalities and offers the following recommendation for enhancing this policy and for developing a new policy focusing on Vision Zero initiatives.

Recommendation for Technical Assistance Comment #7:

³ <https://www.commuterservices.com/> and <https://1800234ride.com/>

- FDOT recommends that the city develop a new policy and the following policy language under Objective 02.03.00 to enhance the coordination efforts between the City and FDOT on reducing accidents and pedestrian injury/fatalities:

“The City will coordinate with FDOT, including the District Champion for Pedestrian and Bicycle Safety, on efforts to reduce injury and fatalities for pedestrian and bicyclist in the City.”

RESPONSE: This language was added to policy 02.03.06.

- FDOT encourages the City to coordinate with the FDOT District Four Pedestrian and Bicycle Coordinator to utilize the many FDOT resources adopted by the Department aimed at reducing the number of transportation-related fatalities and serious injuries on roadways in the City. FDOT has developed the following plans for addressing this issue:
 - FDOT adopted its own version of Vision Zero called, “Driving Down Fatalities,” in 2012. The Strategic Highway Safety Plan (SHSP) is the statewide plan focusing on how to accomplish the vision of eliminating fatalities and reducing serious injuries on all public roads. The SHSP has 15 Program Areas addressing safety that can assist the City to target specific actions for a more comprehensive approach.
 - The Florida Transportation Plan (FTP) includes objectives and policies geared towards preventing transportation-related fatalities and injuries for vulnerable road users such as pedestrians, bicyclists, and aging road users.
 - The Florida Pedestrian and Bicycle Safety Strategic Plan (PBSSP), adopted in 2013, identifies engineering, education, enforcement, and evaluation related countermeasures to help eliminate pedestrian and bicyclist fatalities and injuries on the state roadway network. The implementation of the PBSSP included the launching of the Alert Today Florida initiative and the campaign message “Safety Doesn’t Happen by Accident”
 - FDOT has specific coalitions that help address safety concerns, including the Safe Mobility for Life Coalition that addresses the specific needs of Florida’s aging road users.

RESPONSE: Noted. Thank you for the information.

Technical Assistance Comment #8:

FDOT applauds the City for incorporating Policy 02.03.12 into the Comprehensive Plan related to reducing accidents and pedestrian injury/fatalities and offers the following recommendation for enhancing this policy.

Recommendation for Technical Assistance Comment #8:

- FDOT encourages the City to coordinate with the FDOT District Four Pedestrian and Bicycle Coordinator to utilize the many FDOT resources adopted by the Department aimed at reducing the number of transportation-related fatalities and serious injuries on roadways in the City. FDOT offers funding for local law enforcement agencies to conduct HVE operations in priority counties with the highest representation of traffic crashes resulting in serious or fatal injuries to pedestrians and bicyclists. The Broward County Sheriff's Department would be eligible for HVE funding which could be a critical component of reducing the City's injuries and fatalities.

RESPONSE: Noted. Thank you for the information.

Transportation Element

Technical Assistance Comment #9 – Objectives/Policies Organization

The TE has a wide list of policies for the eight objectives given. The Department has no major comments on the policies themselves and commends the City on several of the areas. The issue is that the organization of policies under objectives makes it difficult for the reader to review all similar type of policies together. Also, these objectives tend to be at a high level and often more like goals than measurable objectives.

Recommendation for Technical Assistance Comment #9

- FDOT recommends that the City update the Objectives and Policies under Goal #2 in the TE to better reflect common themes and policies. For example, there are 30 policies under Objective 02.03.00 and separating environmental/energy items from complete streets may help to provide more focus on each. Objective 02.01.00 discusses coordination activities with Broward MPO, FDOT, and other agencies, yet policies under this Objective discuss land development activities and regulations, impact fee and tax revenue improvements, bridge openings, new transportation technologies, and transit programs. Safety is another area where policies are distributed across objectives and could potentially be located under a safety objective.

RESPONSE: Noted. No changes are being made at this time.

Technical Assistance Comment #10 – Planning Horizon

The Broward Metropolitan Planning Organization (MPO) adopted its 2045 Metropolitan Transportation Plan (MTP) in 2019. Municipalities in Broward County often rely on the Broward MPO for technical data and analysis and FDOT uses the data too in its planning efforts. Aligning the City's transportation planning with that of the Broward MPO will support implementation of transportation infrastructure investments.

Recommendation for Technical Assistance Comment #10

- FDOT recommends that the City update the Plan's transportation long-term planning horizon to be consistent with the MTP and use available data. For

example, the Traffic Volumes and Level of Service shown in Tables 2-3 and 2-4 show 2040 data, contrary to 2035 (15-year horizon).⁴

RESPONSE: Noted. No changes are being made at this time.

Technical Assistance Comment #11 – Access/Interchange Management

Policy 02.01.04 of the Transportation Element (TE) states land development regulations will include provisions to control access points and minimize curb cuts on arterial and collector roadways, provide safe and convenient on-site traffic flow, and provide sufficient on-site parking for motorized and non- motorized vehicles. FDOT congratulates the City on including this policy in the Plan.

Recommendation for Technical Assistance Comment #11

- FDOT notes that Department approval is required for any access or access modifications to State/SIS roadways. For reference, Florida Administrative Code 14-96 and 14-97 provide standards for the State Highway System Access Control Classification System and Access Management. Additional information is available on the State’s Access Management Guidelines⁵ website, which includes the FDOT 2019 Access Management Guidebook⁶. FDOT also recommends that the City coordinate directly with the FDOT District Access Management Manager regarding any proposed modifications to roadway access at the initial stages of a development application.

RESPONSE: Noted.

Technical Assistance Comment #12 – Transportation Level of Service (LOS)

The TE includes inaccurate reference to FDOT LOS “Standards” on SIS and SHS roads under Policy 02.02.01.

Recommendation for Technical Assistance Comment #12

- FDOT no longer establishes LOS “Standards” on the SHS. Per FDOT Topic No. 000-525-006-c (Level of Service Targets for the State Highway System, effective April 19, 2017), FDOT instead uses a LOS “Target” of D for roadways under the SHS in urbanized areas. FDOT recommends that the City Adopt LOS Service Level D, consistent with FDOT LOS Targets on the SHS.

RESPONSE: Policy 02.02.01 was amended to all the “target” language for LOS “D”.

⁴ *Note: In Table 2-4: Please note Blount Road (North of Coconut Creek Parkway) is shown to have 4-lanes by 2040, yet no committed improvement is documented

⁵ <http://www.fdot.gov/planning/systems/programs/sm/accman/>

⁶ https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/systems/documents/fdot-access-management-guidebook_november_19.pdf?sfvrsn=fd5db8d4_2

Transportation Element Data, Inventory, & Analysis

The section provides detailed data information, as such, the City should consider using the most recent, available, and consistent data to ensure consistency with other transportation planning agencies.

Technical Assistance Comment #13 – Means of Transportation to Work

In Section 1. Introduction the City provides data on means of transportation to work based on American Community Survey data from 2008 to 2015 where newer information exists.

Recommendation for Technical Assistance Comment #13

- FDOT encourages the City to use the current 2011-2015 data set in order to more accurately measure Pompano Beach's means of journey to work, understand if current objectives and policies are sufficient, and determine if there have been any changes in this data. For example, has "drive alone" decreased based on policies enacted by the City?

RESPONSE: No changes are being made to the Data and Analysis which reflects the data available at the time it was completed by our consultants.

Technical Assistance Comment #14 – Section VIII. Improvement Programming

This section references the 2040 LRTP (adopted 12/11/2014) and FY 19/23 TIP (adopted 00712/2018) where newer information exists.

Recommendation for Technical Assistance Comment #14

- FDOT encourages the City consider updating the Transportation Element with the latest adopted documents. Broward's 2045 LRTP was adopted 12/12/2019 and the FY 20/24 TIP was adopted 7/11/2019 and the latest one for FY 21/25 was adopted 7/9/2020 and will take effect on 10/01/2020.

RESPONSE: No changes are being made to the Data and Analysis which reflects the data available at the time it was completed by our consultants.

Resiliency General Comments

Technical Assistance Comment #15 – Resilience Organization

FDOT noted that some development-oriented policies are in somewhat unexpected elements and to ensure developers and City staff are aware of these policies it might be appropriate to reconsider in which element they are located. For example:

- Objective 10.09.00 about Flood Protection in the Conservation Element has policies that direct (re)development to meet certain base flood elevation

requirements. These might be more helpful in the Land Use and Transportation section of the Climate Change Element (in addition to in the Future Land Use Element).

- Policy 04.10.03 in the Recreation and Open Space Element discusses repetitive loss properties. Including it in the Stormwater Sub-Element is another possibility.
- Stormwater Sub-Element Policy 08.08.07 addresses the transportation and stormwater relationship. Including a similar policy in the Transportation Element might help ensure transportation infrastructure projects address stormwater needs, including from sea level rise and other water related climate change impacts.

Recommendation for Technical Assistance Comment #15

- FDOT recommends that the City revisit the locations of resiliency/sustainability policy language to best facilitate implementation.

RESPONSE: Noted. No changes are being made at this time.

Technical Assistance Comment #16 – Unified Sea Level Rise Projection

It is clear the updated Comprehensive Plan intends to use the Unified Sea Level Rise Projection for Southeast Florida developed by the Southeast Florida Regional Climate Change Compact. It is unclear which one (2015 update or 2019 update) and how from a review of objectives and policies across the elements. For example, an objective and policies in the Future Land Use Element refer to 2.5 feet of sea level rise by 2060 while an objective and policies in the Conservation Element refer to 2 feet of sea level rise by 2060. Objectives and policies in other elements speak to use of the latest Unified Sea Level Rise Projection, which as updated in 2019, shows 2.9 feet of sea level rise by 2060 and 3.3 feet of sea level rise by 2070. Broward County is in the process of updating the Planning Priorities for Sea Level Rise Map in its Land Use Plan using 3.3 feet of sea level rise by 2070.

Recommendations for Technical Assistance Comment #16

- Stormwater Sub-Element Policy 08.08.01 refers to the Unified Sea Level Rise Projection recently updated to 2070. FDOT recommends that the City clarify use of the Unified Sea Level Rise Projection across elements and purposes (planning, base flood elevation, crown of road elevation, adaptation strategy support, etc.).
- FDOT recommends that the City consider future infrastructure's life span when identifying the planning horizon year to accommodate the impact from sea level rise.

RESPONSE: Policy 07B.01.01 explains the intent to use the most recent SLR projections. Policy 08.08.01 commits to the adoption of the most recent SLR

projections and, in fact, the city just adopted the 2020 projections on July 28, 2020. All policies referencing the 2' of SLR by 2060 have since been updated.

Resiliency Comments on the Transportation Element

Technical Assistance Comment #17 – Resilient Multimodal Transportation Service

The Resilient Multimodal Transportation Service does not mention policy to increase the resiliency of roadway transportation system, such as improved stormwater or green infrastructure, raised elevations, or detour strategies. With a multimodal transportation system, addressing heat impacts on active transportation or transit travelers should be considered, such as tree plantings and shade/cooling locations.

Recommendation for Technical Assistance Comment #17

- FDOT recommends that the City identify policies that increase the infrastructure and operational resiliency of roadway transportation system against flooding and other climate hazards.

RESPONSE: This concept is already addressed in Policy 02.03.22, however, additional Policy 02.07.16 was added as suggested.

Resiliency Comments on the Coastal Zone Management Element

Technical Assistance Comment #18 – Unified Sea Level Rise Projection

Policy 11.06.12 states that the City will continue to utilize the 2015 "Unified Regional Sea Level Rise Projection for Southeast Florida", authored by the Southeast Florida Regional Climate Change Compact ("Compact"), as may be amended from time to time and updated based on best available data, as the basis for sea level rise adaptation planning activities.

Recommendation for Technical Assistance Comment #18

- FDOT recommends that the City adjust this text to reflect the 2019 update of the Unified Regional Sea Level Rise Projection for Southeast Florida developed by the Southeast Florida Regional Climate Change Compact.

RESPONSE: Thank you. This has been updated throughout the plan.

Resiliency Comments on the Climate Change Element

Technical Assistance Comment #19 – Sustainability Strategies

Policy 12.01.02 describes Vulnerability Assessment and Adaptation Action Areas.

Recommendation for Technical Assistance Comment #19

- FDOT recommends that the City work with FDOT, Broward County, and the Broward MPO to also consider the impacts of climate change on the operation of existing transportation infrastructure, such as the potential increase of bridge openings due to the decrease of bridge clearance and potential flooding impacts on AirPark access and operations.

RESPONSE: Noted.

Technical Assistance Comment #20 – Public Outreach, Communication and Coordination

FDOT notes that Policy 12.04.06 states that the City shall support the efforts of State, regional and County environmental and planning agencies to jointly develop, assess, and recommend a suite of planning tools and adaptation strategies for local municipalities to maximize opportunities to adapt and protect from the impacts of climate change.

Recommendation for Technical Assistance Comment #20

- As identified in the Map Appendix comments below, transportation agencies also are active partners in resilience and sustainability planning. These agencies may be included in the proposed text; however, it might be clearer to state that FDOT and Broward MPO have performed analyses and have data that may be useful to the City.

RESPONSE: The requested language has been added to Policy 12.04.06.

Technical Assistance Comment #21 – Unified Sea Level Rise Projection

The data, inventory and analysis for the Climate Change Element (page 312) includes information about the 2015 “Unified Regional Sea Level Rise Projection for Southeast Florida.

Recommendation for Technical Assistance Comment #21

- FDOT recommends that the City add information on the 2019 update of the Unified Regional Sea Level Rise Projection for Southeast Florida, which can be found at: <https://southeastfloridacclimatecompact.org/unified-sea-level-rise-projections/>

RESPONSE: The city already adopted these projections on 7-28-2020.

Resiliency Comments on the Map Appendix

Technical Assistance Comment #22 – Future Groundwater Elevation

The Broward County Board of Commissioners approved the Future Conditions Average Wet Season Groundwater Elevation Map in 2017, which is the first map in Broward County’s future conditions map series being created to aid in the design of infrastructure

to be resilient with anticipated climate change effects. Note the County will be updating this map.

Recommendation for Technical Assistance Comment #22

- FDOT recommends that the City consider including Broward County's Future Conditions Average Wet Season Groundwater Elevation Map
<https://www.broward.org/waterresources/Documents/futuregwlev.pdf>

RESPONSE: The County uses their maps in drainage permitting in the city. The city can use this resource without it being adopted in the Comprehensive Plan.

Technical Assistance Comment #23 – Other Available Data Sources

As noted in the data, inventory and analysis for the Climate Change Element, the Southeast Florida Regional Climate Change Compact completed an analysis of vulnerability to sea level rise for Southeast Florida in 2012 (<https://southeastfloridacclimatecompact.org/wp-content/uploads/2014/09/vulnerability-assessment.pdf>). FDOT District Four has compiled and used data and maps from subsequently completed vulnerability assessments focused on transportation infrastructure in the region and has begun compiling and using data relevant to planning, designing, constructing, and operating and maintaining transportation infrastructure from additional sources as they become available (e.g., Broward County future conditions maps). The compiled data and maps are summarized in the table below and largely available in GIS form as a resource available to the City and others for resilience planning.

Recommendations for Technical Assistance Comment #23

- FDOT recommends that the City coordinate with transportation agencies on the availability and use of resilience-related data and maps involving transportation infrastructure.
- FDOT recommends that the City also consider other available tools and data sources, including the Sea Level Scenario Sketch Planning Tool which is being updated (e.g., to add local roadways) by the UF GeoPlan Center for FDOT.

RESPONSE: Noted.

Subject	Maps	GIS Avail.	Notes
	1-2. Current 100-Year Floodplain (1% chance return interval) and 500-Year Floodplain (0.2% chance return interval) ^[1]	Yes	Contains the current adopted 100-Year Floodplain and 500-Year Floodplain and the percentage of roadways impacted. The data is was created from the FEMA Flood Insurance Rate Map (FIRM) in 2015. Floodplains in the conservation areas are not evaluated.

Subject	Maps	GIS Avail.	Notes
Flood	3-4. Current and Future Flooding Hotspots ^{[2], [3]}	Yes	Data on current (100-year) and future (500-year) flooding hotspots is from the FHWA-funded South Florida Climate Change Vulnerability Assessment and Adaptation Pilot Project (2015). Current flooding hotspots are roadway segments that are severely impacted by the 100- year flood zone, considering both the percent of the segment inundated and the average depth of inundation. Future flooding hotspots are segments that are very close to, but not impacted by, the 100-year flood zone, and with elevation not much higher than the flood level.
Flooding, Storm Surge, and Sea Level Rise	5-7. South Florida Climate Change Vulnerability Assessment and Adaptation Pilot Project - Vulnerability Ratings, Adaptive Capacity, and 3 Feet Sea Level Rise Inundation ^{[2], [3]}	Vulnerability Ratings only	The Vulnerability Ratings of regional roadways were obtained from this Pilot Project. Five categories of vulnerability are included in the ratings. In addition to potential impacts from events, the vulnerability score includes adaptive capacity – the amount of redundancy available.
Storm Surge and Sea Level Rise	8-10. FDOT D4 Storm Surge, Sea Level Rise, and Transportation Network Disruption Study ^[4]	Yes	The data includes combined areas of inundation and impacted roadways for three storm surge events (Andrew 1992, Delray Beach 1949, George 1947) plus sea level rise (2040 USACE high projection, 14.52 inches) scenarios. Inland areas were not evaluated.
Flood and Storm Surge	11-13. Inundated areas and roadways by 2040 (0.75 ft) & 2070 (1.62 ft) SLR based on MHHW IPCC RCP 8.5 SLR Scenario, 2040 (1.23 ft) & 2070 (2.87 ft) SLR based on MHHW, USACE High SLR Scenario, and 100-Year Storm Surge based on Current & RCP 4.5 Scenario ^[5]	Yes	This follow up study to the South Florida Climate Change Vulnerability Assessment and Adaptation Pilot Project determined vulnerability for additional transportation facilities in Broward County and identified a set of potential projects to improve long-term resiliency of transportation system.

Subject	Maps	GIS Avail.	Notes
Storm Surge	14. Storm Surge Zones ^[6]	Yes	The inundated areas by storm surge zones are obtained from the Florida Sea Level Scenario Sketch Planning Tool. The underlying data is created by the Florida Division of Emergency Management and Regional Planning Councils.
	15-19. Percentage of Road Segments Affected by Category 1, 2, 3, 4, and 5 storms ^[7]	Yes	The shapefiles of percentage of each roadway located in each storm surge zone were obtained from the Florida Sea Level Scenario Sketch Planning Tool.
Evacuation	20. Evacuation Routes (Statewide) ^[8]	Yes	The data of Florida Statewide evacuation routes was obtained from the Florida Division of Emergency Management GeoPortal.
Sea Level Rise	21. 2050 Sea Level Rise based on the USACE High Curve referenced in the 2015 Southeast Florida Regional Climate Change Compact Unified Sea Level Rise Projection	Yes	<p>To approximate the 2045 sea level rise based on the NOAA Intermediate High curve referenced in the 2019 Southeast Florida Regional Climate Change Compact Unified Sea Level Rise Projection, the 2050 sea level rise based on the USACE high curve (2015 projection) in the Florida Sea Level Scenario Sketch Planning Tool (Version 2) was used.</p> <p>Additional timeframes and projection curves are available in the Florida Sea Level Scenario Sketch Planning Tool. which is currently being updated to include the Compact's 2019 projections. 2045 is latest horizon year for FDOT Strategic Intermodal System long range plans and metropolitan planning organization long range transportation plans.</p>

Subject	Maps	GIS Avail.	Notes
Groundwater Elevation	22. Broward County Future Conditions Average Wet Season Groundwater Elevation ^[9]	Yes	This map represents expected future average wet season groundwater elevations for Broward County. It is the first map in the County's future conditions map series created to aid in the design of infrastructure to be resilient with anticipated climate change effects. The map is based on model outputs for the months of May through October over the period of 2060-2069 with inputs of precipitation and sea level rise. The future precipitation pattern is based on the COAPS downscaled CCSM global model and represents an increase of 9.1% rainfall from the base case of 1990-1999 (53.4 in/yr. to 58.2 in/yr.). Sea level rise was based on the USACE NRC3 curve which equates to an increase of 26.6 to 33.9 inches to the future period from 1992 levels.

[1] Federal Emergency Management Agency (FEMA), 2015. Obtained from the Florida Sea Level Scenario Sketch Planning Tool. A 2019 Preliminary FEMA map for Broward County is available and updated information should be used once finalized.

[2] South Florida Climate Change Vulnerability Assessment and Adaptation Pilot Project, Broward MPO, 2015 (<https://browardmpo.org/images/WhatWeDo/SouthFloridaClimatePilotFinalRpt.pdf>).

[3] An entire roadway segment is identified as potentially vulnerable although only a portion is impacted.

[4] Storm Surge, Sea Level Rise, and Transportation Network Disruption, FDOT District 4, 2016 (<https://camsys-my.sharepoint.com/:b:/p/yhuang/ETdybhQbyBChTYZZuUsbpbkBO9AxZjAgJvAA1ib3lv-mkA?e=54xyHy>).

[5] Extreme Weather and Climate Change Risk to The Transportation System in Broward County, Florida, 2016 (https://www.browardmpo.org/images/WhoWeAre/Final_Report_-_4-6-2020.pdf).

[6] Florida Division of Emergency Management and Regional Planning Councils. Obtained from the Florida Sea Level Scenario Sketch Planning Tool.

[7] Florida Sea Level Scenario Sketch Planning Tool (<https://sls.geoplan.ufl.edu/>).

[8] Florida Division of Emergency Management.

[9] Future Conditions Average Wet Season Groundwater Elevation Map, Broward County, 2017.

Contacts for more information:

1-2, 8-10, 14-21 : Lois Bush, FDOT District Four, lois.bush@dot.state.fl.us, 954-777-4654

3-4, 5-7, 11-13: Buffy Sanders, Broward MPO, sandersb@browardmpo.org, 954-876-0046

22: Samantha Danchuk, Broward County, sdanchuk@broward.org, 954-519-1295

Thank you for providing FDOT with the opportunity to review and comment on the City's proposed Comprehensive Plan text update. If you have any questions, please contact me at (954) 777-4663 or larry.hymowitz@dot.state.fl.us.

Sincerely,

A handwritten signature in blue ink, appearing to read "Larry Hymowitz". The signature is fluid and cursive, with a prominent "L" and "H".

Larry Hymowitz
Planning Specialist – Policy Planning & Growth
Management
Planning & Environmental Management -
FDOT District Four