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**Independent Transportation Surtax Oversight Board  
Municipal Capital Project Questions and Answers  
May 22, 2020 Oversight Board Meeting**

**Douglas Coolman, Vice Chair, Land Use and Urban Planning**

Based on the list of City Projects that I was able to review, I noticed and understand how Bus Shelters, Complete Street Projects, Wayfinding, Bicycle Paths, Street Lighting, Emergency Signals and Drainage improvements, meet our charge that projects need the ability to alleviate traffic congestion and enhance connectivity!

With this said, I am having some difficulty understanding where projects like: LLAKE-003 Digital Gateway Signage, WILT-013 Electronic Message Boards, WILT -007 Parking and TAMA -018 charging Stations meet this criteria.

**Response:**

**LLAK-003, Lauderdale Lakes Digital Gateway Signage / Community Gateway System**

The project consists in the installation of a gateway sign system with messaging board at key entry points within the City. While this project might not have a direct impact on traffic congestion and connectivity, information posted on the proposed messaging boards such as traffic detour, road closure information, etc., will provide better traffic management and might help traffic flow and reduce congestion. In addition, due to the City of Lauderdale Lakes proximity with the City of Lauderdale and also the similarity with the names, it is current for visitors to wander within the City of Lauderdale Lakes looking for City of Lauderdale facilities. The Gateway signs will help visitors, which might in turn reduce the congestion at the intersection of Oakland Park Blvd and SR-7, one of the busiest intersections in the County. Response prepared by Ronald Desbrunes, P.E., City of Lauderdale Lakes Public Works Director.

**Response:**

**WILT-013, Wilton Manors Electronic Message Boards**

This project is a true Wayfinding Program (not just message boards) consisting of signage throughout the City. Getting around the City, especially the highly visited arts and entertainment district, can be challenging for visitors who struggle with where to park or what street to take to get to their final destination. This issue and difficulties navigating between different forms of transportation often result in more cars on the roads and greater gridlock and slower traffic. Wayfinding is a practical tool which will help people get around and improve commutes by providing consistent information in an immediately recognizable format at every stage of the journey. Branded signage will help tourists and residents alike get around faster. The program will also help ensure that everyone, not just those who have access to digital technology, can move through the City with confidence. For example, fewer people will need to stop and park at City Hall for the purpose of asking directions to other facilities/locations. Tourists won't be driving too slowly on the single lane Wilton Drive, looking for a way to park or route to another location. Wayfinding signage reduces congestion and strengthens connections between different forms of transportation as well. This program will help indicate the locations of all forms of transportation-related facilities including bus stops, parking areas, trails, greenways, and blueways. Response prepared by Todd DeJesus, Capital Projects and Grants Manager, City of Wilton Manors.

**Response:**

**WILT-007.1, Wilton Manors Parking**

Colohatchee Park is one of the busiest recreational areas in the City. It was redeveloped in 2019 and now hosts a walking trail loop and one of the region's best dog parks. Within 6 months there have been over 300 permits issued for the dog park alone (up from 50 in 2018). It is located adjacent to one of the area's major roadways, NE 15<sup>th</sup> Avenue. There is an existing dedicated bike lane on NE 15<sup>th</sup> Avenue and a bus stop steps from the park entrance. There is a trail that leads from the existing parking area, through a mangrove, to the upland, usable portion of the park. The park has a new loop trail in addition to a regionally used dog park. The proposed project will provide an additional parking area and new connection to and extension of the existing trail. A trail head will be constructed on the site with informational signage. This will provide a new access point to the trails and allow users to exit the park more easily and more readily connect to the NE 15<sup>th</sup> Avenue bike lane or nearby bus stop. This project will turn an in-out trail into a loop system. Due to the increased demand of the park, the existing parking area on NE 15<sup>th</sup> Avenue is often at capacity and results in increased congestion, as users look for alternate parking locations. The proposed parking area/trailhead will be on a side street off NE 15<sup>th</sup> Avenue. The new facility will remove traffic off the main roadway and provide ample parking for park users. The trailhead will also provide connectivity to our State Designated

Blueway System. There will be a Middle River canoe/kayak access point adjacent to the proposed facility. Another function of this proposed parking facility is its use as a connection to transit. There are no public parking facilities in the vicinity and this will allow users to park, walk the trails, bike on the dedicated bike lane system, and/or take the bus. Lastly, the additional parking may also benefit those utilizing the adjacent Colohatchee Park Boat Ramp property. Response prepared by Todd DeJesus, Capital Projects and Grants Manager, City of Wilton Manors.

**Response:**

**TAMA-018, Tamarac Electric Vehicle Charging Stations**

Although traffic congestion tends to be an issue managed at the regional level, the City of Tamarac seeks to mitigate the impacts of congestion by promoting and providing access to a cleaner fuel option for its residents, visitors and commuters. Alleviating Traffic Congestion emissions is a transportation priority both at the State and County levels; and the provision of infrastructure for electric charging stations is sited in the Broward MPO Metropolitan Transportation Plan - Commitment 2045.

In addition, Objective 2 of the Transportation Component of the City's Comprehensive Plan states that the City will coordinate transportation improvements with the plans and programs of the BCMPO. The use of clean vehicles is a transportation improvement to our congested motorways, by means of reducing emissions. Charging stations are needed to support this initiative. They also enhance connectivity for commuters by allowing them to recharge their vehicles, thereby encouraging the expanded use of cleaner transportation. Response prepared by Michael Gresek, Grants Administrator, City of Tamarac.

**Additionally, the cost of emergency traffic signals for approximately 500,000.00 each seem very excessive. (TAMA -014 and Coral Springs)**

**Response:**

**TAMA-014, Tamarac Emergency Traffic Signals**

The cost provided is a conservative estimate based primarily on information the City of Tamarac received from the City of Coral Springs, derived from the installation of their Emergency Traffic Signals. Since these signals were installed recently (2016/2017—see attached email), these costs were analyzed with information derived from recently bid City of Tamarac projects to form a current and practical estimate. Response prepared by Michael Gresek, Grants Administrator, City of Tamarac.

**Response:**

**CORA-115.1, Coral Springs Emergency Traffic Signals**

Two Emergency Traffic Signals have been designed and construction ready plans are completed.

1. Fire Station #71 is located at 11800 NW 41<sup>st</sup> Street, west of Coral Ridge Drive in the Corporate Park. The emergency traffic signal will be constructed at the intersection of NW 41<sup>st</sup> Street and Coral Ridge Drive to assist emergency vehicles entering Coral Ridge Drive.
2. Fire Station #80 is located at 2825 Coral Springs Drive. The emergency traffic signal will be constructed at the intersection of Coral Springs Drive and NW 28<sup>th</sup> Court and would assist emergency vehicles entering Coral Springs Drive.

Review of the Broward County Highway Construction and Engineering Division has been completed for both locations and letters of approval are attached.

The answer below is from Freddie Vargas P.E., Senior Traffic/Transportation Manager for Carnahan, Proctor and Cross, the engineering firm that completed the design plans for the City.

The cost estimate we prepared for the project is consistent with current cost data. The cost estimate prepared followed the Broward County Traffic Engineering Division cost estimate spreadsheet and submitted together with the plans and approved by BC Engineering. Our original design consisted of two double arms poles; however; BCTED requested additional poles which increased to construction cost:

FS #71 – Total construction cost estimate:	\$244,838.00
Required 3 Signal poles one of them a double-armed	- <u>\$133,000.00</u>
Excluding the signal poles, the cost is -	\$111,838.00
The original design included two signal poles.	
FS #80 - Total construction cost estimate:	\$252,077.86
Required 3 Signal poles one of them a double-armed	- <u>\$131,000.00</u>
Excluding the signal poles, the cost is -	\$121,077.86

Signal mast arms are in high demand; therefore, the cost has been increasing over time.

The cost data below is from FDOT data based on previous projects already constructed. Our estimates are consistent with these numbers.

0649 21 6 3	\$42,000.00	STEEL MAST ARM ASSEMBLY, F&I, 50'
0649 21 9 1	\$47,000.00	STEEL MAST ARM ASSEMBLY, F&I, 50'

Response prepared by Paul Carpenter, City of Coral Springs Transportation Planner, and Freddie Vargas, P.E., City's Project Engineer Consultant.

**Additionally, the roadway work requested by the City of Miramar, MIRA 001, 002, 003 and 004, for what appear to be new roads, need to be reviewed or evaluated as one plan which is difficult based on the information I provided.**

**Response:**

**MIRA-001, -002, -003, & -004, Miramar Pembroke Road & Miramar Parkway Extension**

These four projects (and also PPIN-031) relate to the expansion and extension of Pembroke Road and the extension of Miramar Parkway and will be implemented as a single project. The City of Miramar's Engineering Department is the lead agency for the design and construction for these projects on behalf of itself and the City of Pembroke Park. Broward County is providing technical support, as needed.

The attached Project Overview Sheets for these projects delineate the scope of work for each project segment and is summarized below:

MIRA-001 – Expand Pembroke Road from 2 to 4 lanes from SW 160 Ave. to SW 184 Ave.

MIRA-002 – Expand Pembroke Road from 2 to 4 lanes from SW 184 Ave. to SW 200 Ave.

MIRA-003 – Construct new 4-lane roadway from SW 200 Ave. to US-27.

MIRA-004 – Construct new 2 or 4-lane roadway from SW 192 Terrace to Pembroke Road.

Response prepared by Andrew Riddle, Broward MPO Surtax Services Manager.

**George Cavros, Environmental Sciences**

**Thank you for the opportunity to ask questions of each municipality regarding their projects beforehand. I apologize for my submitting a bit late. Putting aside the issue of whether this question is eligibility-related, I would like to provide the following question:**

**Please explain how seal level rise and flooding were considered and prioritized in the design of the project.**

**Response:**

**City of Margate:**

The City is approximately 7.5 miles from the ocean and its only tidal influence comes from the C-14 Canal.

**MARG-002, Winfield Blvd. Improvements:** This project will not affect the drainage on Winfield Blvd. because the area currently has no flooding issues. This project will be

designed for street scape and traffic calming to assist the pedestrians travel safely when crossing the intersections and help slow vehicular traffic down. There is no mention in the submitted documents about sea level rise or flooding.

**MARG-047**, City Bicycle/Pedestrian Greenway System: This project is to design a safe walking path for pedestrians to be connected from the requested bridge connecting Winfield Blvd. to the Greenway System. This will provide a safe way for the residents who live on the East side of the One Mile Canal to be able to use the Fire Fighters Park as well as provide a safe route for the students who live in that same area to get to the Coral Springs School. The Greenway System will be designed to travel within a grassy area where rainwater can flow to dry retention areas and slowly flow through the ground to the aquifers below. There is no mention in the submitted documents about sea level rise or flooding.

**MARG-033**, Firefighters Pk-Winfield Blvd. Bridge: This project is the link between the first two projects. This project is to be designed to allow pedestrians to ride bikes, jog or walk from Winfield Blvd. and the surrounding residential community over the One Mile Canal to Fire Fighters Park and the Greenway System. There is no mention in the submitted documents about sea level rise or flooding.

#### **City of Coconut Creek:**

The City has adopted Broward County's Unified Sea Level Rise projections and both projects will be designed using this information. Further, both projects are multi-modal improvements that provide alternative means of transportation beyond the single occupancy vehicle, thus reducing our overall carbon footprint.

**COCO-024**, New Bus Shelters/Replacement Bus Shelters

**COCO-016**, Sample Road Multi-Purpose Path

#### **City of Cooper City:**

**COOP-024**, Storm Water Drainage Improvement

Mitigating the effects of sea level rise and flooding are the primary purposes of this project. Stirling Road, between SW 100 Avenue and Hiatus Road, currently does not adequately address storm water drainage and the primary purpose of this project is to design and construct drainage infrastructure improvements.

**COOP-042**, Storm Water Improvements

Mitigating the effects of sea level rise and flooding are the primary purposes of this project. Stirling Road, between Hiatus Road and Flamingo Road, currently does not adequately address storm water drainage and the primary purpose of this project is to design and construct drainage infrastructure improvements.

**COOP-036, Way Finding Signs**

Sea level rise and flooding were considered to have a negligible impact on this project and are not incorporated into the design.

**COOP-035, City Entry Signs And Features**

Sea level rise and flooding were considered to have a negligible impact on this project and are not incorporated into the design.

**Town of Southwest Ranches:**

The Town of Southwest Ranches has strongly considered flood staging when conceptualizing and designing the projects referenced above. Mitigation of flood staging is the primary objective of all capital projects we submitted for surtax consideration. While the Town does not have an actual Stormwater Master Plan or Facilities Plan that incorporates hydrologic and hydraulic modeling that accounts for the increased groundwater levels resulting from sea level rise, we do consider many of the accompanying impacts. The Town has also partnered with the South Broward Drainage District (SBDD) to conceptualize all of the aforementioned projects. SBDD has jurisdiction over the drainage aspects of SWRA-021, SWRA-022, SWRA-032, and SWRA-037. It's important to mention SBDD because although their Facilities Plan does not include sea level rise parameters, they have the infrastructure in place that resembles models being used to combat sea level rise throughout South Florida. One of the main components of their system, specifically referring to these proposed surtax projects, is that there is a pump station (S-8) that regulates water control elevations and discharge rates to the C-11. Having pumps in place allows SBDD to effectively discharge within the limits of their operating permit while doing so with higher tailwater conditions. Pumps are being proposed and installed throughout South Florida as one of the main defenses against sea level rise in part for this very reason. Additionally, SBDD and Town staff have reviewed the County's preliminary 100-year maps that account for sea level rise. There are maps in SBDD's Facilities Plan within the Town of Southwest Ranches jurisdictional limit that show assumed 100-year stages that are higher than the stages shown on the County's revised flood maps. This results in flood protection conditions within SBDD's plan that are more conservative than the County's. Comprehensively, both the Town and SBDD take a holistic approach to flood protection. Physically through the development of drainage systems and investments into stormwater infrastructure, and also theoretically through the assessment and comparison of adopted 100-year stages with the County's newly proposed 100-year stages.

**SWRA-032, Drainage Project: SW 50 Street and SW 182 Avenue Drainage**

**SWRA-021, Drainage Project: SW 61st Court**

**SWRA-022, Drainage Project: Green Meadows**

**SWRA-037, Drainage Project: Dykes Road and SW 51st Manor**

### **City of North Lauderdale:**

The City of North Lauderdale is not a coastal community being located in central Broward County. North Lauderdale lies in a mostly X shaded (500 year flood plain) flood zone according to the most recent FEMA flood maps except for the Eastern most portion of the City which includes the spring bank park and broadview/pompano park subdivision. That being said our projects do include drainage improvements though the enhancements of medians, swales and curbing types to help improve the flow of water in the event of flooding. Finally, North Lauderdale enjoys proximity to many man-made lakes and canal water ways that ultimately drain to it's North and South to larger canals that run all the way to the ocean.

**NLAU-007.1**, Neighborhood Traffic Calming Program

**NLAU-007.2**, Neighborhood Traffic Calming Program

**NLAU-008**, Sound Walls SW 64 Ter Sidewalks, Traffic Calming

### **City of Miramar:**

The City provided the following responses:

**MIRA-004**, Miramar Parkway Extension to Pembroke Road

Project is located within the South Broward Drainage District (SBDD) and SFWMD and will be designed according to SBDD's design standards, which require designs to meet certain flood criteria. SBDD is currently working in conjunction with Broward County to revise the 10-yr and 100-yr flood maps to take sea level rise into account.

**MIRA-002**, Pembroke Road Expansion from SW 184th Avenue to 200th Avenue

Project is located within the South Broward Drainage District (SBDD) and SFWMD and will be designed according to SBDD's design standards, which require designs to meet certain flood criteria. SBDD is currently working in conjunction with Broward County to revise the 10-yr and 100-yr flood maps to take sea level rise into account.

**MIRA-001**, Pembroke Road Expansion from SW 160th Avenue to 184th Avenue

Project is located within the South Broward Drainage District (SBDD) and SFWMD and will be designed according to SBDD's design standards, which require designs to meet certain flood criteria. SBDD is currently working in conjunction with Broward County to revise the 10-yr and 100-yr flood maps to take sea level rise into account.

**MIRA-003**, Pembroke Road Expansion from SW 200th Avenue to US-27

Project is located within the South Broward Drainage District (SBDD) and SFWMD and will be designed according to SBDD's design standards, which require designs to meet certain flood criteria. SBDD is currently working in conjunction with Broward County to revise the 10-yr and 100-yr flood maps to take sea level rise into account.



**MIRA-020, Bus Shelter Improvement**

Scope of this project (bus shelter improvements) does not impact roadway drainage and the shelters themselves will be built on high ground relative to the adjacent roadway. Because of its limited scope and negligible effect on drainage, this project does not require flooding/sea level rise consideration.

**MIRA-025, Pembroke Road Bike Lane**

Project is located within the South Broward Drainage District (SBDD) and SFWMD and will be designed according to SBDD's design standards, which require designs to meet certain flood criteria. SBDD is currently working in conjunction with Broward County to revise the 10-yr and 100-yr flood maps to take sea level rise into account.

**City of Lauderdale Lakes:**

The City provided the following responses:

**LLAK-003, Citywide Community Gateway System**

This project does not include drainage but information can be posted on the proposed digital electronic system to inform the public about rising sea level.

**LLAK-015, NW 36 Terrace Improvements**

This project will not be impacted by rising sea level as the drainage system is not connected to any tidal water body.

**LLAK-018, NW 36 St Improvements**

The proposed drainage system will be designed to avoid flooding from rising sea level.

**City of Wilton Manors:**

The City provided the following responses:

**WILT-006, Roadway Median landscape improvements – No/Not Applicable**

**WILT-012, Complete Streets –** The potential impacts of sea level rise will not be considered since no new drainage structures are proposed. This is a traffic calming and sidewalk project.

**WILT-007.1, Parking –** The City will consider constructing a sea wall on the City-owned shoreline. Additionally, sea level rise concerns are being considered during design due to the inclusion of new drainage infrastructure. The proposed drainage infrastructure is being designed and permitted utilizing the new Future Groundwater Elevation Map, which was developed by Broward County to consider the projected future sea level rise.

**WILT-013, Electronic Message Boards / Wayfinding – No/ Not Applicable**

**WILT-003**, Complete Streets – Sea level rise will be reviewed in design. If the area is believed to be impacted by sea level rise, then the road and sidewalk elevations may be raised to the point where it doesn't adversely affect adjacent properties.

**City of Fort Lauderdale:**

The City provided the following responses:

**FORT-122**, Safety Improvements: NW 15th Ave Mobility Improvements – This project is in design. Sea Level Rise and flooding are considered during the design of projects within Fort Lauderdale. The City considers areas with elevations of less than 2.5 NAVD are considered areas of concern for tidal and sea level rise impacts. NW 15<sup>th</sup> Avenue is located near I95 and is not within one of these areas however the staff always takes into considerations of flooding identified by residents during the design of all roadway projects. None were identified during the public outreach or design of this project.

**FORT-162**, Street Lighting: NW 15th Avenue – See Above. The lighting will be upgrades to LED lighting through this project to limit energy consumption while still improving safety.

**FORT-104**, Sidewalks: Sidewalk Program - New Construction – This project is for the design of sidewalk connections. During the design of these project vulnerable areas prone to flooding are addressed and evaluated. Preliminary review of the areas of critical concern as compared to the priority sidewalk list show that there are not any projects that fall in major areas of critical concerns. The city considers areas that have elevations less than 2.5 feet NAVD as areas of concern for tidal and sea level rise impacts.

**City of Oakland Park:**

The City provided the following responses:

**OAKL-099**, Landscape Improvement The improvements in this project have been designed such that they will both survive and combat flood events. This effort include the following:

- Choosing native plants that can live with their roots submerged for extended periods of time.
- Avoiding placing plants with roots that grow above ground, that would interfere with stormwater flow. Additionally, by removing existing impervious areas, this work will enhance natural drainage.
- Diversifying the species of plants used to both absorb excess precipitation & stormwater runoff and remain drought tolerant.
- This project is in compliance with the two overarching goals of the City's Joint Climate Action Plan, undertaken with the City of Wilton Manors, to mitigate the effects of climate change by reducing greenhouse gas emissions and increase resilience of our communities while minimizing impacts to efficiency and cost-effective business operations.

**OAKL-023**, City-Wide Mast Arm Conversion Sea-level rise and climate change have been documented to both increase the number of hurricanes experienced in a season and increase the severity of the hurricanes that make landfall. Based on this logic, replacing existing span wire signal systems with more wind resistant mast arm assemblies, will provide a greater level of protection and will allow for the safe and ordered flow of vehicular and pedestrian traffic, both during and after a major storm event. Also, during a major storm event span wire has the potential to break free leaving energized lines on the ground creating a safety concern for pedestrians and motorists. If you couple live wires with flooding that tends to occur during major storm events, then a potentially deadly situation has been created. Mast arms remove this danger; thereby, creating much safer post storm conditions.

Additionally, as part of the anticipated work, pedestrian signals will be included to allow pedestrians to safely traverse intersections, promoting non-vehicular travel which will have a positive effect on greenhouse gases emitted. Lastly, as part of the overall intersection work, where possible, impervious areas will be removed to combat flooding and allow for natural percolation of stormwater.

#### **City of Deerfield Beach:**

The City provided the following responses:

**DEER-003**, Citywide Pedestrian Street Lighting Improvements - The City of Deerfield Beach is committed to being a sustainable and resilient community. The city is in the process of converting its street lights to all LED to reduce energy use and the City's carbon footprint. The proposed pedestrian street light improvements will install energy efficient LED lighting consistent with these goals.

**DEER-007**, FAU Research Blvd. Roadway Improvements - The proposed project scope includes street widening for capacity improvements for a critical emergency evacuation route parallel to I-95. In accordance with this goal, the proposed project provides for the development of critical infrastructure to reduce vulnerability and offer long-term environmental resilience. With road reconstruction, sea level rise will be addressed in establishing the road a minimum of 1-foot above base flood elevation. The addition of sidewalks, bicycle, and transit facilities will encourage multi-modalism, energy efficiency, and contribute to sustainability and resiliency. Innovative intersection design such as a potential roundabout at the intersection of SW 11<sup>th</sup> Way and SW 15<sup>th</sup> Street will reduce dependence on the energy grid during emergencies and reduce long-term maintenance costs for traditional electrically powered signals. Improvements to stormwater infrastructure will address flooding from major storm events to ensure a reliable evacuation route from the City's Emergency Operations Center (EOC) located on this corridor at 145 SW 11<sup>th</sup> Way.

**DEER-005, Pioneer Grove Improvements-Pedestrian Lighting** - As previously noted, the City of Deerfield Beach is committed to being a sustainable and resilient community. The proposed pedestrian streetlight improvements will install energy efficient LED lighting consistent with these goals. This lighting improvement is a component of the larger Complete Street project for Pioneer Grove. The proposed project involves streetscape improvements that will adhere to the City's Complete Streets design standards. These standards enhance connectivity and multi-modal transportation to create a walkable community which serves as a stimulus for development while encouraging sustainability and resiliency.

**DEER-006, Pioneer Grove Improvements-Complete Streets** - The City is investing in infrastructure improvements in the Local Activity Center known as Pioneer Grove, which the City has prioritized for downtown redevelopment. Currently, Pioneer Grove does not comply with the City's Complete Streets guidelines adopted in August 2013. Its streetscape does not encourage multi-modalism and accessibility due to incomplete sidewalk segments, and a non-continuous pedestrian access route. The goal is to transition Pioneer Grove into a mixed use, connected, walkable downtown that will incentivize and attract redevelopment to the area. With road reconstruction, sea level rise will be addressed in establishing the road a minimum of 1-foot above base flood elevation. The addition of sidewalks, bicycle, and transit facilities will encourage multi-modalism, energy efficiency, and contribute to sustainability and resiliency. The establishment of a central storm water trunk line along this corridor will aid in the collection of storm water and provide positive drainage addressing stormwater quantity and water quality in accordance with county, state, and federal requirements.

### **City of Hallandale Beach:**

The City provided the following responses:

#### **HALL-019, NW/SW 8th Ave Complete Street Project**

- This project is not within the MPO's Tier 1-3 roadways per their 2016 study Extreme Weather and Climate Risk to the Transportation System in Broward County, Florida
- However, the roadway does intersect with future (2070) sea level rise inundation according to our forthcoming Vulnerability Assessment & Adaptation Plan (chapter and static map attached)
- As such, and per our Sustainable Practice Policy (attached) we will incorporate drainage needs and sea-level rise adaptation into the design of this project so that the roadway is resilient to sea level rise in the future.

#### **HALL-005, City-Wide Bus Shelter Improvements**

- This project does span MPO's Tier 1-3 roadways per their 2016 study Extreme Weather and Climate Risk to the Transportation System in Broward County, Florida

- The design of the bus shelters includes components similar to breakaways as part of a flood-resilient building design. This will allow for water to flow, even storm surge to certain extents, around and within the bus shelters without causing damage.

#### **HALL-026, City-wide Bus Stops Digital Signage**

- This project does span MPO's Tier 1-3 roadways per their 2016 study Extreme Weather and Climate Risk to the Transportation System in Broward County, Florida
- The digital signage will be installed on poles that will be elevated well above the base flood elevations
- The digital signage will be solar powered, allowing for them to continue functioning regardless of grid failures or outages

#### **City of Dania Beach:**

The City provided the following responses:

##### **DANI-001, West Dania Beach Blvd Bridge**

The City of Dania Beach has discussed the need to construct the W. Dania Beach Blvd bridge for at least 15 years. There are numerous reasons to construction the bridge:

- Better connectivity of the northwest neighborhood to commerce, shopping and transportation,
- Improved access for emergency vehicles
- Deteriorating condition of the NW 1<sup>st</sup> St bridge that underwent emergency reports a year ago after a chunk of concrete fell into a boat
- Ongoing issues with open ocean access, sea level rise and boat traffic
- Increased use of canal access for the marine industry
- Proximity to Dania Pointe.

The City is currently making major improvements to W. Dania Beach Blvd, including upgraded paving, parking and new development. The newly constructed road will be wider and permit increased traffic, albeit at a neighborhood speed.

The new proposed bridge would be of standard FDOT precast concrete beam, concrete piles, and concrete decking. All construction would comply with the 2020 Green Book. The bridge would be at a fixed elevation, spanning approximately 150 ft. of canal and road right-of-way to connect W. Dania Beach Blvd with Bryan Rd. Based on the City's climate actin plan (2010) sea level rise would need to be accounted for since the canal is open to the ocean via Port Everglades. This would mean the under-side of the bridge would be at least 10 ft. NAVD88, and perhaps 12 based on a 50 year life of the asset before renewal is needed. The detailed design of the bridge would account for this elevation because sea level could rise 12-18 inches from the current condition.

### **DANI-019, Stormwater Improvements**

Flooding issues were a main concern of the residents and City staff within this project location. The project includes improvements such as exfiltration trench and swales to assist with water quality and well as an interconnected pipe network to address water quantity. The recommended improvements will assist in alleviating flooding throughout the roadways identified within the project. Sea level rise was taken in account as the drainage model used Broward County's EPGMD high water table to identify the recommended improvements. The County recently implemented revised high water table elevations due to sea level rise observations.

### **DANI-017, SE Stormwater Drainage System**

The design of the Southeast Stormwater Improvements project will consider and address the impacts of sea level rise and flooding within the Project Limits. The project area is prone to flooding due to the high groundwater level. A sea level rise as projected for South Florida may raise groundwater levels, hence creating additional flooding problems within the project area. To address these issues, the drainage solution proposed will be based on the 72-hours 25-year storm event that will result in flooding duration of less than 6 hours, with less than 2 inches of flooding at the crown of the road. The groundwater elevation to be used for the model and recommended infrastructure, is based Broward County WM 2.1 – Future Conditions Map, which are modified to account for both precipitation and sea level rise (2060-2069). Regardless of the cause, the outstanding issue at the project area is related to the flooding of the local roads even during minor storm events due to the lack of a positive drainage system that can evacuate the water from those rain events. Higher tide levels cause water to flood into local streets even in absence of rain events as it has been reported by the area residents. Account for sea level rise on determination of present and future conditions for ground water, crown of the road and finish floor elevation will be included as part of the Hydraulic model.

It is anticipated that The Project will include two (2) stormwater pump stations, located at the two locations with the lowest relative elevation. The pump stations will be surface mounted flush with ground, but switchgear structure and electrical components, will be elevated to elevation 7 feet NAVD (+2 feet above the flood zone).

In addition, materials capable to withstand corrosive environment like seawater will be proposed. For example, High Density Polyethylene Pipe (HDPE) which is an inert material with a design life of more than 100 years would be used.

Other infrastructure that will be evaluated are the installation, of exfiltration trench and drainage injection wells within the area. No infrastructure will be installed on or near the West Lake Park Wetland which acts as a natural buffer for this coastal area during rainstorms and hurricane, since it absorbs precipitation and storm surge waters.

**Town of Davie:**

The Town provided the following responses:

**DAVI-003**, Davie Rd Improvements Phase 3 - The scope of work for this project concentrates on access management and pedestrian safety enhancements along with other streetscape enhancements. The corridor is increasing the pervious area of the corridor through the implementation of landscape medians associated with the access management improvements. The Town recently installed over \$18 million dollars in drainage, water and sewer infrastructure improvements in the surrounding neighborhood to addresses water quality and flood resiliency. The project also demonstrated the Town's environmental stewardship by the transition of 300+ residences and businesses from septic to sewer. Additionally, the existing crown elevation of the Davie Road meets the Broward County 10-Year Storm Event Map requirement.

**DAVI-001**, College Ave Phase 2 Widening - The project design includes drainage infrastructure improvements to address water quantity and quality for flood resiliency. The project meets all current Central Broward Water Control District and South Florida Water Management District water quality and quantity standards, and the crown of road satisfies the Broward County 10 year Storm Event Map requirement.

**DAVI-016**, Orange Dr Corridor Enhancements The design intends to address the water quality and quantity for flood resiliency per Central Broward Water Control District and South Florida Water Management District standards.

**DAVI-012**, SW 30th Street Improvements The design intends to address the water quality and quantity for flood resiliency per Central Broward Water Control District and South Florida Water Management District standards.

**DAVI-014**, Nova Dr Improvements The design intends to address the water quality and quantity for flood resiliency per Central Broward Water Control District and South Florida Water Management District standards.

**City of Weston:**

The City provided the following responses:

The City of Weston is served by Bonaventure Development District (BDD) and Indian Trace Development District (ITDD) master surface water management systems. The permitted water table elevations for the drainage basins vary from 4.5 feet NGVD to 5.00 feet NGVD. The adjacent wetland mitigation areas are controlled at relatively higher elevations. The existing pump stations of the master surface water management systems discharge into

SFWMD C-11 West Canal and North New River Canal. Broward County future water table maps indicate no significant change to existing water table elevations within City of Weston. The impacts of sea level rise are expected to be minimum for City of Weston for next 25 years horizon.

For projects in the design phase, site specific topography, pump operation schedule, and water tables will be evaluated and considered.

### **Lauderdale-By-The-Sea:**

The Town provided the following responses:

#### **El Mar Drive Improvements (LSEA-005):**

The stormwater management design for the El Mar Drive project will be required to meet the minimum surface water management permitting standards of the South Florida Water Management District and Broward County. The design must provide water quantity storage as it relates to Level of Service standards for rainfall runoff from the roadway; and also provide water quality treatment of the roadway runoff. Meeting these design and agency permitting standards go hand in hand with sea level rise and how the tides affect the ground water table. This is particularly important with the project proximity being near the ocean. Existing and projected sea levels will be considered.

#### **Bike Lanes (LSEA-035)**

Sea level rise will be considered in the final design of the project.

### **City of Coral Springs:**

The City provided the following responses:

#### **CORA-115.1 Emergency Traffic Signals**

The City reviewed the Sea Level Rise Viewer Map developed by NOAA to identify the potential impact of sea level rise within the project area. The simulation model indicates that at a sea level rise of 6 feet there will be no impact to the project area caused by high water level. The NOAA model is inaccurate for elevations greater than 6 feet, therefore it was not modeled.

#### **CORA-097, CORA-098, & CORA-102, Bus Shelter Repair and Replacement**

With this Surtax project the City of Coral Springs will install the Kaleidoscope Bus Shelter manufactured by Landscape Forms in Kalamazoo, Michigan. Landscape Forms, a specialty outdoor furniture company established in 1969, has been a supplier of bus shelters under contract with Broward County Transit for several years. The City of Coral Springs has 4 Kaleidoscope bus shelters installed in the vicinity of Sample Road and University Drive, the center of the City's Downtown Development of Regional Impact. The Kaleidoscope bus shelter is made of steel and is finished with a proprietary Panguard II polyester powder coat process that protects each unit with a hard yet flexible skin that resists rusting, chipping, peeling and fading.



The City reviewed the Sea Level Rise Viewer Map developed by NOAA to identify the potential impact of sea level rise within the project area. The simulation model indicates that at a sea level rise of 6 feet there will be no impact to the project area caused by high water level. The NOAA model is inaccurate for elevations greater than 6 feet, therefore it was not modeled.

The City of Coral Springs is located in the northwest corner of Broward County and is 10-14 feet above sea level. For this reason sea level rise will not be a major factor in the design of the bus shelter for the City of Coral Springs. The possibility of flooding due to sea level rise is remote. Because of the exceptional design characteristics and materials used in the manufacture of the Kaleidoscope Bus Shelter it is anticipated these bus shelters will be available for public use for many years to come.

### **City of Pompano Beach:**

The City provided the following responses:

#### **POMP-002, DIXIE HIGHWAY/ATLANTIC BOULEVARD IMPROVEMENTS PROJECT**

The City has identified areas in the public right-of-way where ponding conditions occur. Ponding is the result of insufficient drainage capacity and inadequate slopes on the pavement. Some of the locations that have been known to be prone to flooding include the southbound (inner) lane of Dixie Highway near the intersection of SW 9<sup>th</sup> Street and the northbound (inner) lane just north of the intersection of Dixie Highway and McNab Road, to name a few. The design also entertains provisions to address future sea level rising. The design plans will address ponding conditions by implementing suitable drainage solutions including, but not limited to, road regrading, addition of new receiving catch basins, possible installation of bioswales, etc. The main goal is to handle current and future capacity and anticipating impacts due to sea level rise and inadequate systems. Subject to Broward County Environment and Growth Management Division review and approval, the City's design team will carry out necessary improvements. Other alternatives might be the addition of exfiltration trenches, additional pipes, etc.

#### **POMP-011, POWERLINE ROAD IMPROVEMENTS PROJECT**

The City will retain a State Licensed Civil Engineer (P. E.) to prepare and identify areas in the public right-of-way where ponding conditions occur. Isolated ponding conditions is the result of insufficient drainage capacity and inadequate slopes on the pavement. The City has not identified areas in the public right-of-way where ponding conditions occur. This roadway is managed and operated by FDOT and there are no known conditions that merit retrofitting the system. However, the City's design team will be required to evaluate the drainage system and make provisions to address future sea level rising. The design plans will address seek to implement drainage solutions that increase capacity including, but not

limited to, road regrading, addition of new receiving catch basins, possible installation of bioswales, etc. In conjunction with FDOT staff, the City's PE will work on solutions and will address impacts due to sea level rise and any inadequacy in the drainage systems. Subject to Broward County Environment and Growth Management Division and FDOT's review and approval, the City's design team will carry out necessary improvements.

### **POMP-013, RIVERSIDE DRIVE IMPROVEMENTS PROJECT**

The City will retain a State Licensed Civil Engineer (P. E.) to prepare and identify areas in the public right-of-way where ponding conditions occur. Isolated ponding conditions is the result of insufficient drainage capacity and inadequate slopes on the pavement. The City has conducted an initial evaluation to identify areas in the public right-of-way where ponding conditions occur. This roadway is managed and operated by the City and there are known conditions that merit retrofitting the system, particularly to address future sea level rise. The City's design team will be required to evaluate the drainage system and make provisions to handle tidal backflow. The design plans will address seek to implement drainage solutions that increase capacity including, but not limited to, road regrading, addition of new receiving catch basins, installation of tidal control valves, bioswales, etc. Subject to Broward County Environment and Growth Management Division's review and approval, the City's design team will carry out necessary improvements

### **City of Pembroke Pines:**

The City provided the following responses:

#### **PPIN-021, Privacy Wall - Sheridan Street**

The area where this project is to be placed is not currently in a FEMA flood zone. The proposed FEMA FIRM maps continue to show the area is not in a flood zone. The wall would be designed such that it allows drainage to flow under the wall and through drainage cut outs in the wall. This wall is not in a regulatory floodway nor would it impact the roadway drainage system.

#### **PPIN-038, Pines Blvd-Ingress/Egress-Holly Lake**

Project would construct roadways above the base flood elevation and allow an additional evacuation route.

At this time, the City would like to request that Project PPIN-038 Additional Holly Lake Entrance Road, be removed from FY 2020 surtax funding consideration. We would, however, still like this project to be considered as part of the five year plan.

### **City of Parkland:**

The City provided the following responses:

#### **PARK-008, Construction of Bike Lanes On Parkside Drive**

**PARK-002**, Lox Road Improvements

**PARK-007**, Traffic Light - Hillsboro Boulevard And University DR

All improvements will be designed to ensure improvements do not adversely impact the surrounding areas in accordance with SFWMD requirements and sea level rise and flooding will be considered to the extent they are feasible.

**City of Sunrise:**

The City provided the following responses:

The City of Sunrise, as an inland Broward County community, has much less immediate vulnerability to sea-level rise and tidal flooding as compared to most coastal areas in the Southeast Florida region. However, the City is proactively planning for the wise use of resources and becoming more resilient to future climate impacts by integrally linking our transportation, water, and stormwater, master planning and decision-making processes with the implementation of the Sunrise Sustainability Action Plan (SAP).

Development of the Sunrise SAP incorporated a Vulnerability Analysis which led to the Vulnerability goals and recommendations in the Sunrise SAP. The Vulnerability Analysis was completed to: characterize the City's stormwater relationship to the regional system and potential future sea level rise impacts; review expected future flood risk and assumptions stemming from predicted precipitation patterns; identify road segments within FEMA-designated special flood hazard areas; and, identify the status of stormwater features, by Basin, that may require retrofits or further analysis. Each project is evaluated through the lens of the Sunrise SAP as to how the project fits in to the City's sustainability goals and the impacts in the future by a changing climate.

The proposed roadway projects have been determined to allow the City to maintain critical access, and the drainage improvements are necessary to maintain redundancy of the drainage system. In upland areas of Sunrise that have pervious land covers, the subsurface soils and limestone rock formations that are located above the groundwater table provide substantial amounts of stormwater storage capacity that functionally reduce peak runoff volumes into surface water drainage systems. The City will continue to work with the South Florida Water Management District to address sea level rise impacts on coastal structures and to understand the status and future of the drainage structures the City primarily relies on, and will also continue to engage in the Southeast Florida Regional Climate Compact's efforts to use new data (flood maps, groundwater maps, sea level rise projections, etc.) for proactive resiliency planning.

Review of the proposed projects:

- **SUNR-055** Pine Island Road Bicycle Lanes – No additional impervious area is expected to be created due to the repurposing of existing asphalt area, and the

narrowing of lanes to provide for the addition of a bike path. There is no document of unusual or nuisance flooding of the area. Increase in mobility, safety, equity, economic vitality and environmental stewardship are benefits of this project.

- **SUNR-061** Oakland Park Blvd Bicycle Lanes – No additional impervious area is expected to be created due to the repurposing of existing asphalt area, and the narrowing of lanes to provide for the addition of a bike path. There is no document of unusual or nuisance flooding of the area. Increase in mobility, safety, equity, economic vitality and environmental stewardship are benefits of this project.
- **SUNR-075** Oakland Park Blvd Multi-Use Path – This Broward County roadway was reviewed by the South Florida Climate Change Vulnerability and Adaptation Pilot Project as a “Future Flooding Hot Spot.” The roadway was determined to be in the “Low Vulnerability” Tier (347 ranking, 1.58 adaptivity index, 6.67 final score). Sunrise staff reviewed pervious area as related to the areas ability to drain to account for the impact on drainage in the design. No impact due to the additional impervious area is expected. Increase in mobility, safety, equity, economic vitality and environmental stewardship are benefits of this project.
- **SUNR-025.1** Various Drainage Improvements – Stormwater Pump Station #5 Replacement. This project proposes to replace an existing pump station, that is nearing the end of its useful life, in order to maintain redundancy of the stormwater system (for this drainage basin there are three pumps, with two used as primaries and a third available as redundancy and back-up, if there is necessary maintenance or one pump is down). Models indicate that the City’s Basin 5 performs well during the 10-year 1-day, and 25-year and 100-year 3-day storm events. This pump station upgrade is part of a city-wide effort for culvert upgrades; pump station replacements and upgrades; considerations for new pump stations; installing flap gates, drainage structures, and new culverts. In addition, the City is in the process of updating the Stormwater Master Plan which will incorporate climate change-driven hydrologic conditions modeling that integrates sea-level rise and more extreme precipitation scenarios.

### **City of Hollywood:**

The City provided the following responses:

**HOLL-064**, Industrial Park and Corridor Improvements The City of Hollywood incorporates current and estimated future sea level rise and water table level rise considerations in all drainage projects in accordance to Broward County Drainage Design Criteria.

The main purpose and priority one for the Washington Industrial Drainage project is to mitigate the flooding problems in this neighborhood.

**HOLL-035**, Complete Streets - Hollywood Blvd The drainage improvements were already addressed through previous phase of the project completed in 2020. There is a new

drainage system installed and cross section of the road was reconstructed to minimize flooding. This final phase includes landscape and irrigation installation.

**HOLL-036**, Complete Streets - State Rd 7 SR7 is not directly impacted by sea level rise, however, The drainage improvements were already constructed along this roadway through previous phases of the project. This phase involves installation of pedestrian lighting and transit improvements

**HOLL-056**, Transportation/Traffic Calming - Dist. 5 We will evaluate each location on a case by case bases and ensure that any flooding in the project area is addressed.

**City of West Park:**

The City provided the following responses:

The drainage calculations, during engineering design, account for flooding and sea level rise concerns, for the applicable projects below:

**WPRK-004**, SW 25 Street Complete Street Improvement

**WPRK-007**, SW 57 Ave & SW 20 Street Traffic Calming Improvement

**WPRK-002**, State Road 7 Pedestrian Lights

**WPRK-003**, SW 48 Avenue Complete Street

**WPRK-008**, SW 21St Street Complete Street Improvement

**City of Tamarac:**

The City provided the following responses:

**TAMA-018**, Electric Vehicle Charging Stations

**TAMA-003**, Traffic Calming

**TAMA-014**, Traffic Control Devices

The above referenced projects are located in the City of Tamarac, an inland community located approximately 12 miles from the Atlantic seaboard. As such, Tamarac is an inland community and not affected by impacts of sea level rise. In addition, the project locations are designed to be located outside of any applicable flood zone areas. Please note, Tamarac's Flood Zone map has recently changed, with most of the City no longer located within a flood zone.

## **Phil Allen, Finance**

**My questions or issues mostly do not go to the eligibility of specific projects but mostly focus on the methodology of setting priorities and how these projects may dictate future priorities.**

**Can you provide a brief discussion of what were the criteria for establishing the ranking methodology?**

**Response:** The municipal surtax capital project ranking evaluation criteria and points distribution can be found in the attached [chart](#). The chart includes an explanation of the criteria and a scale on how points are assigned.

Initial points were assigned based on how the project's Work Mix supports the Surtax Ordinance of alleviating congestion and enhancing connectivity. The Work Mixes of capacity increases, widening, and bridges received higher points and landscaping, signage, lighting, and resiliency projects were assigned lower points.

The location of each project was drawn (digitized) into a data-driven Geographic Information System (GIS) ranking tool which contains eight (8) criteria layers for analyzing each project and assigning points. These criteria include (from highest to lowest points): (1) Employment Density, (2) Population Density, (3) Transit, (4) Incident Delay, (5) Roadway Level of Service, (6) Connection to Existing Facilities, (7) Equity, and (8) Resiliency. Project Performance will be evaluated in future years once projects are implemented. (See attached Project Ranking Criteria & Points Distribution graphic.) The distribution of points are assigned based on how these criteria support the Surtax Ordinance factors of alleviating congestion and enhancing connectivity. The ranking criteria and points distribution for municipal capital surtax projects was developed by the Broward MPO Surtax Services in partnership with the municipalities in Broward County.

**What is the distinctions that separates the first 110 projects from the remanding 500 projects?**

**Response:** Projects #1-110 represent the MPO Surtax Services Prioritized List and are recommended for surtax funding. These projects consider construction readiness and utilized "rounds" to ensure equity among municipalities. Projects #111-510 have not been evaluated for funding readiness and require additional evaluation and analysis. They also include municipal requested "holds" and future "swap outs".

The projects in the Prioritized List (#1-110) include the projects that are broken down as follows:

Project priorities #1 – 33 are construction ready projects, which were evaluated by a Professional Engineer to confirm “shovel readiness,” and are ready for construction phase funding.

Project priorities #34 – 37 are recommended for design funding as they complete the Regional Corridors Network set forth in the 2045 Southeast Florida Regional Transportation Plan and are ready for design phase funding.

Project Priorities #38 – 110 are the top three highest ranked projects for each municipality (not construction ready). These projects are ready for either Planning or Design phase funding, which is necessary to ensure an adequate supply of future construction ready projects within the Five-Year Plan.

**In many of the project descriptions the applicants answered yes to the question of whether the project design was complete but then note a percentage of completion less than 100%. Are these projects truly construction ready?**

**Response:**

The construction phase projects (Priorities #1-33) were reviewed in early 2020 and were at various levels of design. The MPO Surtax Services Professional Engineer evaluated each project’s ability to be “ready” for a construction phase within the 2020 calendar year and considered factors such as: (1) the review of the design plans, (2) the status of the design plans and complexity of the project, (3) the design permits status, if needed, (4) detailed cost estimates, (5) bid status (was it bid or anticipated bid date), (6) project schedule, (7) project manager identified by the municipality, (8) anticipated construction date, and (9) duration of project / construction completion date. The information collected for priorities #1-33 formulated the engineer’s opinion that these projects have advanced enough to be considered for construction phase funding. (Please note, there were several projects that were removed from the list for construction phase funding during this review process because the engineer determined that the project would not be “ready” for construction phase within the 2020 calendar year).

**Several projects that are offered as construction ready appear to be phased projects since the recommended funding is significantly lower than the the estimated costs. Does this set a preference for continued funding as we move forward to establishing a 5 year plan?**

**Response:** With respect to eligibility, The MPO surtax staff was not tasked to perform an “eligibility review” for the capital projects in the original Surtax Plan that was approved by the County Commission in September 2018 and by the voters in November 2018. The “eligibility review” of these projects in the original Surtax Plan will be conducted by the

Surtax Oversight Board in consultation with the Surtax General Counsel, prior to being funded by the County Commission. The amended Surtax Ordinance requires MPO surtax staff to assist in the eligibility review for new and “swap out” capital projects beginning in February 2021. County staff and MPO surtax staff will be developing the new and “swap out” application process later this year. However, the County Commission must approve the new and “swap out” application.

With respect to specific projects in the priorities list that have current cost estimates below the Surtax Plan estimate, some of the projects within the Surtax Plan are actually “programs” of multiple projects. In other words, the project contains multiple-part projects that are at various levels of planning, design, and / or construction. These projects are denoted on the list with project identification numbers with “.x”. Each project within the multiple-part project is analyzed based on its work mix type and geographic location utilizing the GIS ranking tool. The multiple-part projects are evaluated no different than a single project and receive no prioritization or funding preference.

**Do projects that are recommended for design or planning funding in year one commit us to approving continuing funding in out years?**

**Response:** The MPO Surtax Services recommends that in order to ensure an adequate supply of construction ready projects in future years of the Surtax Five-Year Plan, it is important to begin projects that require planning and / or design phases in Cycle 1 (FY 2020). Similar to the state’s FDOT Work Program and the MPO’s federally required Transportation Improve Program, projects are programmed by phase (planning, design, right-of-way, and construction) over a five-year period based on projected revenues and funding availability. The MPO Surtax Services recommends the same programming approach for the Surtax Five-Year Plan.

**For projects that are clearly phases of larger projects, how does a city award contracts without full funding?**

**Response:** The projects are implemented (by municipal staff or bid and awarded) by phase in accordance with the Project Interlocal Agreements.

**There are several project requests that deal with fiber runs, bus shelters, or transit status boards. Should these be standardized across the county?**

**Response:** The following are responses to each of the project types referenced above:  
**Fiber:** No Fiber projects are prioritized. There are only five (5) fiber projects in the approved Surtax Plan and those fiber projects that request future funding consideration will require coordination / implementation at the county and / or state level.



Bus shelters: Municipalities are required to construct and maintain bus shelters within their jurisdiction. Broward County Transit (BCT) has minimum design requirements that all municipalities must follow when designing and constructing its city owned and maintained bus shelters.

Transit Status Board: Municipalities with these projects have indicated that they have or will be coordinating with BCT on required data feeds to ensure compatibility with BCT's technology on real-time bus location data (CAD / AVL), schedule timing, and other BCT user announcements. These status boards will also be used to display information for the community shuttle bus services operated by the municipalities.

**Anthea Pennant, Director of Broward College Office of Supplier Relations and Diversity**

**Can Broward County's GIS Team provide a list of Cycle 1 municipal capital projects by zip code?**

**Response:** Please see the following pages.

Note: Projects that intersect two or more zip codes will appear in each zip code separately

Projects in this table have not been evaluated for funding eligibility by the Independent Transportation Surtax Oversight Board

## Cycle 1 Municipal Surtax Capital Projects by Zip Code

Zip Code, City, and Project Name	Cycle 1 Funding Request
<b>33004</b>	
<b>Dania Beach</b>	
Se Stormwater Drainage System (DANI-017)	865,440
West Dania Beach Blvd Bridge (DANI-001)	480,000
<b>Hollywood</b>	
Transportation/Traffic Calming - Dist. 5 (HOLL-056)	100,000
<b>33009</b>	
<b>Hallandale Beach</b>	
City-Wide Bus Shelter Improvements (HALL-005)	2,977,563
City-wide Bus Stops Digital Signage (HALL-026)	513,600
NW/SW 8th Ave Complete Street Project (HALL-019)	180,000
<b>Hollywood</b>	
Transportation/Traffic Calming - Dist. 5 (HOLL-056)	100,000
<b>Pembroke Park</b>	
Bike Lane and Sidewalk Improvements (PPRK-010)	30,000
S.W. 25th St. Stormwater Impr. (Ph II) (PPRK-002)	1,075,115
<b>33019</b>	
<b>Dania Beach</b>	
Se Stormwater Drainage System (DANI-017)	865,440
<b>Hallandale Beach</b>	
City-Wide Bus Shelter Improvements (HALL-005)	2,977,563
<b>Hollywood</b>	
Transportation/Traffic Calming - Dist. 5 (HOLL-056)	100,000
<b>33020</b>	
<b>Dania Beach</b>	
Se Stormwater Drainage System (DANI-017)	865,440
<b>Hallandale Beach</b>	
City-Wide Bus Shelter Improvements (HALL-005)	2,977,563
City-wide Bus Stops Digital Signage (HALL-026)	513,600
NW/SW 8th Ave Complete Street Project (HALL-019)	180,000
<b>Hollywood</b>	
Complete Streets - Hollywood Blvd (HOLL-035)	700,000
Complete Streets - Johnson St (HOLL-038)	150,000
Transportation/Traffic Calming - Dist. 5 (HOLL-056)	100,000
<b>33021</b>	
<b>Dania Beach</b>	
Se Stormwater Drainage System (DANI-017)	865,440
<b>Hollywood</b>	
Complete Streets - State Rd 7 (HOLL-036)	120,000
Industrial Park and Corridor Improvements (HOLL-064)	5,000,000
Transportation/Traffic Calming - Dist. 5 (HOLL-056)	100,000
<b>Pembroke Park</b>	
Bike Lane and Sidewalk Improvements (PPRK-010)	30,000
<b>West Park</b>	
SW 48 Avenue Complete Street (WPRK-003)	420,000

Note: Projects that intersect two or more zip codes will appear in each zip code separately

Projects in this table have not been evaluated for funding eligibility by the Independent Transportation Surtax Oversight Board

## Cycle 1 Municipal Surtax Capital Projects by Zip Code

Zip Code, City, and Project Name	Cycle 1 Funding Request
<b>33023</b>	
<b>Hollywood</b>	
Complete Streets - State Rd 7 (HOLL-036)	120,000
Industrial Park and Corridor Improvements (HOLL-064)	5,000,000
Transportation/Traffic Calming - Dist. 5 (HOLL-056)	100,000
<b>Miramar</b>	
Bus Shelter Improvement (MIRA-020)	144,000
Pembroke Road Bike Lane (MIRA-021)	90,000
<b>Pembroke Park</b>	
52 Ave Complete Streets (WPRK-009)	144,000
Bike Lane and Sidewalk Improvements (PPRK-010)	30,000
County Line Road Storm Water Connection (PPRK-008)	90,000
<b>Pembroke Pines</b>	
City Wide Sidewalk Projects (PPIN-039)	132,938
<b>West Park</b>	
State Road 7 Pedestrian Lights (WPRK-002)	90,000
SW 21st Sreet Complete Street Improvement (WPRK-008)	240,000
SW 25 Street Complete Street Improvement (WPRK-004)	1,638,987
SW 48 Avenue Complete Street (WPRK-003)	420,000
SW 57 Ave & SW 20 Street Traffic Calming Improvement (WPRK-007)	163,519
<b>33024</b>	
<b>Cooper City</b>	
City Entry Signs and Features (COOP-035)	21,000
Storm Water Drainage Improvement (COOP-024)	288,000
<b>Hollywood</b>	
Complete Streets - State Rd 7 (HOLL-036)	120,000
Transportation/Traffic Calming - Dist. 5 (HOLL-056)	100,000
<b>Pembroke Pines</b>	
Privacy Wall - Sheridan Street (PPIN-021)	162,000
<b>33025</b>	
<b>Miramar</b>	
Bus Shelter Improvement (MIRA-020)	144,000
Pembroke Road Bike Lane (MIRA-025)	252,000
<b>Pembroke Pines</b>	
City Wide Sidewalk Projects (PPIN-039)	132,938
<b>33026</b>	
<b>Cooper City</b>	
City Entry Signs and Features (COOP-035)	21,000
Storm Water Drainage Improvement (COOP-024)	288,000
Storm Water Improvements (COOP-042)	192,000
Way Finding Signs (COOP-036)	30,000
<b>Pembroke Pines</b>	
City Wide Sidewalk Projects (PPIN-039)	132,938
Privacy Wall - Sheridan Street (PPIN-021)	162,000

Note: Projects that intersect two or more zip codes will appear in each zip code separately

Projects in this table have not been evaluated for funding eligibility by the Independent Transportation Surtax Oversight Board

## Cycle 1 Municipal Surtax Capital Projects by Zip Code

Zip Code, City, and Project Name	Cycle 1 Funding Request
<b>33027</b>	
<b>Miramar</b>	
Bus Shelter Improvement (MIRA-020)	144,000
Pembroke Road Expansion from SW 160th Avenue to 184th Avenue (MIRA-001)	2,270,000
<b>Pembroke Pines</b>	
City Wide Sidewalk Projects (PPIN-039)	132,938
<b>33028</b>	
<b>Pembroke Pines</b>	
City Wide Sidewalk Projects (PPIN-039)	132,938
<b>33029</b>	
<b>Miramar</b>	
Miramar Parkway Extension to Pembroke Road (MIRA-004)	760,000
Pembroke Road Expansion from SW 160th Avenue to 184th Avenue (MIRA-001)	2,270,000
Pembroke Road Expansion from SW 184th Avenue to 200th Avenue (MIRA-002)	1,510,000
Pembroke Road Expansion from SW 200th Avenue to US-27 (MIRA-003)	1,390,000
<b>Pembroke Pines</b>	
Pines Blvd-Ingress/Egress-Holly Lake (PPIN-038)	276,000
<b>33060</b>	
<b>Pompano Beach</b>	
Dixie Highway/Atlantic Boulevard Improvements Project (POMP-002)	2,983,200
Kendall Lake Neighborhood Stormwater Improvements Project (POMP-006)	3,741,868
<b>33062</b>	
<b>Deerfield Beach</b>	
Citywide Pedestrian Street Lighting Improvements (DEER-003)	800,000
<b>Lauderdale-By-The-Sea</b>	
Bike Lanes (LSEA-035)	360,000
<b>Pompano Beach</b>	
Bay Drive Neighborhood Stormwater Improvements Project (POMP-004)	1,174,741
Riverside Drive Improvements Project (POMP-013)	711,452
<b>33063</b>	
<b>Coconut Creek</b>	
New Bus Shelters/ Replacement Bus Shelters (COCO-024)	432,000
Sample Road Multi-Purpose Path (COCO-016)	330,600
<b>Margate</b>	
City Bicycle/Pedestrian Greenway System (MARG-047)	120,000
Firefighters Pk-Winfield Blvd. Bridge (MARG-033)	24,000
Winfield Blvd. Improvements (MARG-002)	20,880
<b>33064</b>	
<b>Deerfield Beach</b>	
Citywide Pedestrian Street Lighting Improvements (DEER-003)	800,000
FAU Research Blvd. Roadway Improvements (DEER-007)	480,000
<b>Lighthouse Point</b>	
Sidewalk Construction (LHP-011)	22,500
Sidewalk/Bike Lane Construction (LHP-010)	15,000
Traffic Calming (LHP-009)	30,000
<b>Pompano Beach</b>	
Dixie Highway/Atlantic Boulevard Improvements Project (POMP-002)	2,983,200

Note: Projects that intersect two or more zip codes will appear in each zip code separately

Projects in this table have not been evaluated for funding eligibility by the Independent Transportation Surtax Oversight Board

## Cycle 1 Municipal Surtax Capital Projects by Zip Code

Zip Code, City, and Project Name	Cycle 1 Funding Request
<b>33065</b>	
<b>Coral Springs</b>	
Bus Shelter Repair and Replacement (CORA-102)	45,000
Emergency Traffic Signals (CORA-115.1)	496,917
New Sidewalk Construction (CORA-097)	600,000
New Sidewalk Construction (CORA-098)	600,000
<b>33066</b>	
<b>Coconut Creek</b>	
New Bus Shelters/ Replacement Bus Shelters (COCO-024)	432,000
Sample Road Multi-Purpose Path (COCO-016)	330,600
<b>33067</b>	
<b>Coconut Creek</b>	
Hillsboro Boulevard Sidewalk Improvements (COCO-020)	67,597
New Bus Shelters/ Replacement Bus Shelters (COCO-024)	432,000
<b>Coral Springs</b>	
Bus Shelter Repair and Replacement (CORA-102)	45,000
New Sidewalk Construction (CORA-097)	600,000
New Sidewalk Construction (CORA-098)	600,000
<b>Margate</b>	
City Bicycle/Pedestrian Greenway System (MARG-047)	120,000
<b>Parkland</b>	
Construction of Bike Lanes on Parkside Drive (PARK-008)	180,000
Lox Road Improvements (PARK-002)	312,000
Traffic Light - Hillsboro Boulevard and University Drive (PARK-007)	72,000
<b>33068</b>	
<b>North Lauderdale</b>	
Neighborhood Traffic Calming Program (NLAU-007.1)	1,998,187
Neighborhood Traffic Calming Program (NLAU-007.2)	360,218
Sound Walls SW 64 Ter (NLAU-008)	360,000
<b>Tamarac</b>	
Crosswalks (TAMA-021)	90,000
Multimodal Connectivity Plan (TAMA-001)	120,000
<b>33069</b>	
<b>Fort Lauderdale</b>	
Sidewalks : Sidewalk Program - New Construction (FORT-104)	360,000
<b>Pompano Beach</b>	
Powerline Road Improvements Project (POMP-011)	328,183
<b>33071</b>	
<b>Coral Springs</b>	
Bus Shelter Repair and Replacement (CORA-102)	45,000
Emergency Traffic Signals (CORA-115.1)	496,917
New Sidewalk Construction (CORA-097)	600,000
New Sidewalk Construction (CORA-098)	600,000
<b>Tamarac</b>	
Crosswalks (TAMA-021)	90,000
Electric Vehicle Charging Stations (TAMA-018)	436,546
Multimodal Connectivity Plan (TAMA-001)	120,000

Note: Projects that intersect two or more zip codes will appear in each zip code separately

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## Cycle 1 Municipal Surtax Capital Projects by Zip Code

Zip Code, City, and Project Name	Cycle 1 Funding Request
<b>33073</b>	
<b>Coconut Creek</b>	
Hillsboro Boulevard Sidewalk Improvements (COCO-020)	67,597
New Bus Shelters/ Replacement Bus Shelters (COCO-024)	432,000
Sample Road Multi-Purpose Path (COCO-016)	330,600
<b>Parkland</b>	
Lox Road Improvements (PARK-002)	312,000
<b>33076</b>	
<b>Coral Springs</b>	
Bus Shelter Repair and Replacement (CORA-102)	45,000
New Sidewalk Construction (CORA-097)	600,000
New Sidewalk Construction (CORA-098)	600,000
<b>Parkland</b>	
Traffic Light - Hillsboro Boulevard and University Drive (PARK-007)	72,000
<b>33301</b>	
<b>Fort Lauderdale</b>	
Safety Improvements : Andrews Ave (FORT-108)	150,000
Safety Improvements : SE 3Rd Ave (FORT-113)	45,000
Sidewalks : Sidewalk Program - New Construction (FORT-104)	360,000
<b>33304</b>	
<b>Fort Lauderdale</b>	
Safety Improvements : Andrews Ave (FORT-108)	150,000
Safety Improvements : SE 3Rd Ave (FORT-113)	45,000
Sidewalks : Sidewalk Program - New Construction (FORT-104)	360,000
<b>33305</b>	
<b>Fort Lauderdale</b>	
Sidewalks : Sidewalk Program - New Construction (FORT-104)	360,000
<b>Wilton Manors</b>	
Bus Benches and Shelters (WILT-009)	180,000
Complete Streets (WILT-003)	240,000
Complete Streets (WILT-012)	629,804
Electronic Message Boards (WILT-013)	639,650
Parking (WILT-007.1)	849,475
Roadway Median Landscape Improvements (WILT-006)	247,711
<b>33306</b>	
<b>Oakland Park</b>	
Oakland Park Blvd Gateway (OAKL-025)	396,000
<b>Wilton Manors</b>	
Complete Streets (WILT-003)	240,000
Electronic Message Boards (WILT-013)	639,650
<b>33308</b>	
<b>Fort Lauderdale</b>	
Sidewalks : Sidewalk Program - New Construction (FORT-104)	360,000
<b>Lauderdale-By-The-Sea</b>	
Bike Lanes (LSEA-035)	360,000
El Mar Drive Improvements (LSEA-005)	240,000
<b>Oakland Park</b>	
City-wide Mast Arm Conversion (OAKL-023)	945,000

Note: Projects that intersect two or more zip codes will appear in each zip code separately

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## Cycle 1 Municipal Surtax Capital Projects by Zip Code

Zip Code, City, and Project Name	Cycle 1 Funding Request
<b>33309</b>	
<b>Fort Lauderdale</b>	
Sidewalks : Sidewalk Program - New Construction (FORT-104)	360,000
<b>Lauderdale Lakes</b>	
Citywide Community Gateway System (LLAK-003)	1,378,000
Comprehensive Traffic Calming Program (LLAK-006)	25,500
NW 36 Terrace Improvements (LLAK-015)	863,663
<b>Oakland Park</b>	
City-wide Mast Arm Conversion (OAKL-023)	945,000
CSX and FEC Crossing Study (OAKL-007)	150,000
Landscape Improvement (OAKL-099)	330,000
Oakland Park Blvd Gateway (OAKL-025)	396,000
<b>Pompano Beach</b>	
Powerline Road Improvements Project (POMP-011)	328,183
<b>Tamarac</b>	
Crosswalks (TAMA-021)	90,000
Multimodal Connectivity Plan (TAMA-001)	120,000
<b>Wilton Manors</b>	
Intersection Improvements (Gateway Design) (WILT-015)	396,000
<b>33311</b>	
<b>Fort Lauderdale</b>	
Safety Improvements : Andrews Ave (FORT-108)	150,000
Safety Improvements : NW 15Th Avenue Mobility Improvements (FORT-122)	2,000,000
Sidewalks : Sidewalk Program - New Construction (FORT-104)	360,000
Street Lighting : NW 15Th Avenue (FORT-162)	996,668
<b>Lauderdale Lakes</b>	
Comprehensive Traffic Calming Program (LLAK-006)	25,500
NW 36 Terrace Improvements (LLAK-015)	863,663
<b>Oakland Park</b>	
City-wide Mast Arm Conversion (OAKL-023)	945,000
CSX and FEC Crossing Study (OAKL-007)	150,000
Landscape Improvement (OAKL-099)	330,000
Oakland Park Blvd Gateway (OAKL-025)	396,000
<b>Wilton Manors</b>	
Bus Benches and Shelters (WILT-009)	180,000
Electronic Message Boards (WILT-013)	639,650
Intersection Improvements (Gateway Design) (WILT-015)	396,000
<b>33312</b>	
<b>Dania Beach</b>	
Se Stormwater Drainage System (DANI-017)	865,440
<b>Fort Lauderdale</b>	
Sidewalks : Sidewalk Program - New Construction (FORT-104)	360,000
<b>Hollywood</b>	
Transportation/Traffic Calming - Dist. 5 (HOLL-056)	100,000

Note: Projects that intersect two or more zip codes will appear in each zip code separately

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## Cycle 1 Municipal Surtax Capital Projects by Zip Code

Zip Code, City, and Project Name	Cycle 1 Funding Request
<b>33313</b>	
<b>Lauderdale Lakes</b>	
Citywide Community Gateway System (LLAK-003)	1,378,000
Comprehensive Traffic Calming Program (LLAK-006)	25,500
NW 36 ST Improvements (LLAK-018)	120,000
NW 50th Avenue Improvements (LLAK-016)	500,000
<b>33314</b>	
<b>Dania Beach</b>	
Se Stormwater Drainage System (DANI-017)	865,440
Stormwater Improvements (DANI-019)	2,191,740
<b>Davie</b>	
College Ave Phase 2 Widening (DAVI-001)	1,000,000
Davie Rd Improvements Phase 3 (DAVI-003)	4,859,167
Orange Dr Corridor Enhancements (DAVI-016)	360,000
SW 30 Street Improvements (DAVI-012)	240,000
<b>Hollywood</b>	
Transportation/Traffic Calming - Dist. 5 (HOLL-056)	100,000
<b>33315</b>	
<b>Dania Beach</b>	
Se Stormwater Drainage System (DANI-017)	865,440
<b>Fort Lauderdale</b>	
Safety Improvements : Andrews Ave (FORT-108)	150,000
Sidewalks : Sidewalk Program - New Construction (FORT-104)	360,000
<b>33316</b>	
<b>Dania Beach</b>	
Se Stormwater Drainage System (DANI-017)	865,440
<b>Fort Lauderdale</b>	
Safety Improvements : Andrews Ave (FORT-108)	150,000
Safety Improvements : SE 3Rd Ave (FORT-113)	45,000
Sidewalks : Sidewalk Program - New Construction (FORT-104)	360,000
<b>Hollywood</b>	
Transportation/Traffic Calming - Dist. 5 (HOLL-056)	100,000
<b>33317</b>	
<b>Davie</b>	
College Ave Phase 2 Widening (DAVI-001)	1,000,000
<b>33319</b>	
<b>Lauderdale Lakes</b>	
Citywide Community Gateway System (LLAK-003)	1,378,000
Comprehensive Traffic Calming Program (LLAK-006)	25,500
NW 36 ST Improvements (LLAK-018)	120,000
NW 50th Avenue Improvements (LLAK-016)	500,000
<b>Sunrise</b>	
Oakland Park Blvd Bicycle Lanes (SUNR-061)	720,000
Oakland Park Blvd Multi-Use Path (SUNR-075)	390,000
<b>Tamarac</b>	
Crosswalks (TAMA-021)	90,000
Electric Vehicle Charging Stations (TAMA-018)	436,546
Multimodal Connectivity Plan (TAMA-001)	120,000



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## Cycle 1 Municipal Surtax Capital Projects by Zip Code

Zip Code, City, and Project Name	Cycle 1 Funding Request
<b>33321</b>	
<b>Tamarac</b>	
Bike Paths (TAMA-008)	135,000
Crosswalks (TAMA-021)	90,000
Electric Vehicle Charging Stations (TAMA-018)	436,546
Multimodal Connectivity Plan (TAMA-001)	120,000
Traffic Calming (TAMA-003)	528,902
Traffic Control Devices (TAMA-014)	445,817
<b>33322</b>	
<b>Sunrise</b>	
Pine Island Road Bicycle Lanes (SUNR-055)	540,000
Various Drainage Improvements (SUNR-025.1)	5,180,000
<b>33323</b>	
<b>Sunrise</b>	
Oakland Park Blvd Bicycle Lanes (SUNR-061)	720,000
Oakland Park Blvd Multi-Use Path (SUNR-075)	390,000
<b>Weston</b>	
City-Wide Wayfinding Signage Program (WEST-307.1)	232,739
<b>33324</b>	
<b>Davie</b>	
Nova Dr Improvements (DAVI-014)	336,000
<b>33326</b>	
<b>Weston</b>	
City-Wide Wayfinding Signage Program (WEST-307.1)	232,739
Indian Trace Elementary School (WEST-308)	319,086
Indian Trace Road Roadway Improvements (WEST-192)	33,600
Indian Trace Road Roadway Improvements (WEST-193)	336,000
Intersection Improvements Royal (WEST-224)	1,612,082
Weston Rd Corridor RRR (WEST-303)	588,000
<b>33327</b>	
<b>Weston</b>	
City-Wide Wayfinding Signage Program (WEST-307.1)	232,739
Indian Trace Road Roadway Improvements (WEST-192)	33,600
Indian Trace Road Roadway Improvements (WEST-193)	336,000
<b>33328</b>	
<b>Cooper City</b>	
City Entry Signs and Features (COOP-035)	21,000
Storm Water Drainage Improvement (COOP-024)	288,000
Storm Water Improvements (COOP-042)	192,000
Way Finding Signs (COOP-036)	30,000
<b>Davie</b>	
Nova Dr Improvements (DAVI-014)	336,000
SW 30 Street Improvements (DAVI-012)	240,000

Note: Projects that intersect two or more zip codes will appear in each zip code separately

Projects in this table have not been evaluated for funding eligibility by the Independent Transportation Surtax Oversight Board

## Cycle 1 Municipal Surtax Capital Projects by Zip Code

Zip Code, City, and Project Name	Cycle 1 Funding Request
<b>33330</b>	
<b>Cooper City</b>	
City Entry Signs and Features (COOP-035)	21,000
Storm Water Drainage Improvement (COOP-024)	288,000
Storm Water Improvements (COOP-042)	192,000
Way Finding Signs (COOP-036)	30,000
<b>33331</b>	
<b>Southwest Ranches</b>	
Drainage Project: Dykes Road and SW 51st Manor (SWRA-037)	36,000
Drainage Project: Green Meadows (SWRA-022)	5,160
Drainage Project: SW 50 Street and SW 182 Avenue Drainage (SWRA-032)	124,000
Drainage Project: SW 61st Court (SWRA-021)	12,000
<b>Weston</b>	
City-Wide Wayfinding Signage Program (WEST-307.1)	232,739
Intersection Improvements Royal (WEST-224)	1,612,082
Weston Rd Corridor RRR (WEST-303)	588,000
<b>33332</b>	
<b>Weston</b>	
City-Wide Wayfinding Signage Program (WEST-307.1)	232,739
<b>33334</b>	
<b>Oakland Park</b>	
City-wide Mast Arm Conversion (OAKL-023)	945,000
CSX and FEC Crossing Study (OAKL-007)	150,000
Oakland Park Blvd Gateway (OAKL-025)	396,000
<b>Wilton Manors</b>	
Bus Benches and Shelters (WILT-009)	180,000
Complete Streets (WILT-003)	240,000
Electronic Message Boards (WILT-013)	639,650
Intersection Improvements (Gateway Design) (WILT-015)	396,000
Roadway Median Landscape Improvements (WILT-006)	247,711
<b>33351</b>	
<b>Sunrise</b>	
Oakland Park Blvd Bicycle Lanes (SUNR-061)	720,000
Oakland Park Blvd Multi-Use Path (SUNR-075)	390,000
Pine Island Road Bicycle Lanes (SUNR-055)	540,000
Various Drainage Improvements (SUNR-025.1)	5,180,000
<b>Tamarac</b>	
Crosswalks (TAMA-021)	90,000
Electric Vehicle Charging Stations (TAMA-018)	436,546
Multimodal Connectivity Plan (TAMA-001)	120,000
<b>33441</b>	
<b>Deerfield Beach</b>	
Citywide Pedestrian Street Lighting Improvements (DEER-003)	800,000
FAU Research Blvd. Roadway Improvements (DEER-007)	480,000
Pioneer Grove Infrastructure Improvements-Complete Streets (DEER-006)	60,000
Pioneer Grove Infrastructure Improvements-pedestrian lighting (DEER-005)	240,000
<b>33442</b>	
<b>Deerfield Beach</b>	
Citywide Pedestrian Street Lighting Improvements (DEER-003)	800,000

Sources: Broward MPO FY2020 Municipal Projects Priorities (Cycle 1 Ranked Projects 1-110) and Broward County GIS  
 Created By: Broward County Planning and Development Management Division, Mobility Planning and Innovation Section