



# DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

## Business Plan

**Fiscal Years: 2021 and 2022**  
(10/1/2020 through 9/30/2022)

Approved by:

  
\_\_\_\_\_  
Jimmy Morales  
Chief Operations Officer/Interim DTPW Director

Date

4/16/21

# TABLE OF CONTENTS

DEPARTMENT OVERVIEW .....3

    Department Mission .....3

    Our Customer.....3

    Table of Organization.....5

    Strategic Alignment Summary.....6

    Alignment of Selected Scorecard Measures to Resilience ..... 19

KEY ISSUES ..... 19

PRIORITY INITIATIVES .....21

FUTURE OUTLOOK.....28

ATTACHMENT 1 – BUSINESS REPORT .....29



## **DEPARTMENT OVERVIEW**

### **Department Mission**

“Plan for, operate, and maintain a clean, safe, reliable, and convenient transportation system that effectively enhances mobility in Miami-Dade County.”

### **Our Customer**

The Department of Transportation and Public Works (DTPW) is responsible for managing the entire Miami-Dade County-operated public transportation system that serves our community. From all functions of transit planning, operations, and maintenance, to the management of traffic signals and signs countywide, DTPW provides access to opportunities for employment, education, healthcare, and recreation for all Miami-Dade County residents, businesses, and visitors.

Our public transportation system exists to provide social and economic connections and so that riders can easily take advantage of opportunities offered by increased mobility. The Department recognizes its passengers’ expectations for a safe, reliable, courteous, and user-friendly service; therefore, our objective is to provide an excellent transportation system that delivers these services to all riders.

DTPW’s Construction and Road, Bridges and Canal Divisions continue to effectively operate and maintain all County-owned transportation rights-of-way infrastructure; and ensuring that all rights-of-way are available, accessible, safe, and effective for all residents, contractors, roadway travelers, bicycle community advocates, developer’s consulting firms, governmental agencies, and other county internal departments.

Another DTPW division of vital importance is Traffic Signals and Signs (TSS), whose customers are all residents of, or visitors to, Miami-Dade County who travel public streets via car, bus, bike, foot, etc. They all require and deserve a transportation system that maximizes both their mobility and their safety. By reducing traffic congestion and improving traffic flow, and by preserving and maintaining the existing roadway infrastructure, DTPW strives to reduce commuting time, increase roadway safety, and minimize accidents. Successful performance of duties maximizes the quality of life and minimizes accidents, fatalities, injuries, incidents, complaints, damage to property, and liability.

The Transportation Strategic Planning division aims to bring mobility innovation into our community. While often confused with technology, innovation is about changing the way we address the problems at hand. One of Miami-Dade County’s biggest challenges is safety on our streets for bicycles and pedestrians. To address this important factor, DTPW is collaborating with other County departments and local municipalities for the development and implementation of a Vision Zero Plan. Vision Zero is dedicated to eliminating deaths and serious injuries from the transportation network and has been implemented in numerous cities throughout the world.



**Departmental Business Plan and Outlook**  
**Department Name: Transportation and Public Works**  
**FY2020-21 & FY2021-22**

It is a systematic approach to implement safety countermeasures and policies to reduce, and ultimately eliminate fatalities and serious injuries related to mobility in Miami-Dade County.

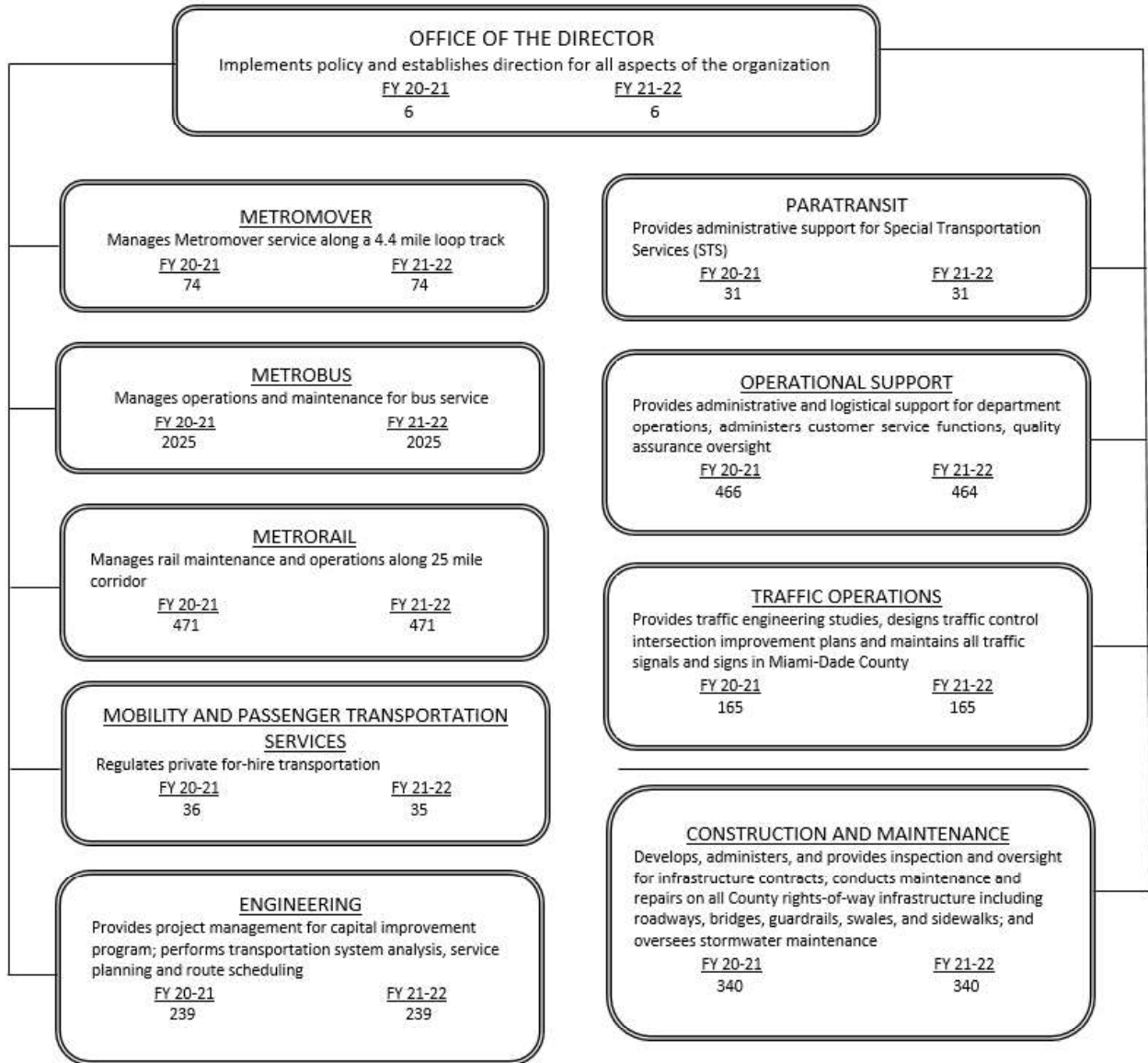
In Fall 2020, DTPW completed four (4) workshops with policymakers, planners, engineers and reviewers from County, State, municipalities, and transportation related partners regarding Vision Zero. The intent of the workshops was to educate, encourage and assign shared responsibility to all in order to achieve the Vision Zero goal. The workshop included what is Vision Zero, why it is important, the County goals, shared data findings, included subject-matter and peer experts lessons learned, and interactive activities.

Technology still plays a role in bringing mobility innovation. By joining efforts with technology companies and new mobility providers, the Department is ensuring a future-proof approach towards meeting our community's needs. Introducing a rewards program that incentivizes better travel behaviors, exploring on-demand transportation and curating the arrival of autonomous vehicle technology are instrumental steps towards better mobility options for our community.

The private sector is a very important customer category that utilizes DTPW's services for permitting and other development related reviews and approvals. The Department has collaborated with the Builders Association of South Florida (BASF) which has yielded considerable benefits. Through collaboration with BASF, DTPW has been able to decrease review times for maintenance of traffic (MOT) requests and in October 2019 introduced a new online application portal for construction permitting. This innovative shift proved most resourceful during the global pandemic that began in 2020.



**Table of Organization**



## Strategic Alignment Summary

### **Strategic Area: Transportation and Mobility (TM)**

- **TM1-1: Promote efficient traffic flow on Miami-Dade County roadways**

DTPW Traffic Signals and Signs Division is upgrading traffic signals to the next generation traffic signal controllers (2070LX). The upgrades of the traffic controllers, along with the installation of new vehicle detection technologies enables the traffic signals to adapt to ever-changing traffic conditions. The adaptive controls, also referred to as Smart signals, allow the timing of the signals to better serve traffic demands in real-time. 347 signals have already been upgraded on 12 corridors producing an average 10.9%-time savings in the AM and 12.94% during the PM peak hours. The Smart signal technology has also allowed for the introduction of Transit Signal Priority (TSP) on the South-Dade Transitway allowing for the reduction of travel time between Florida City and the Dadeland South Metrorail station by 15 minutes (25%). The next phase for the upgrade of the signalized intersections throughout Miami-Dade County has been initiated; In May 2020, the Board of County Commissioner's awarded the Countywide Advance Traffic Management System contract to Siemens. The remainder of the 2,900 traffic signals in the County will begin to see upgrades in the Spring of 2021.

The first two phases of the modernization of the 1976 Traffic Control Center (TCC) have been completed, with upgrades in computing equipment and a state-of-the-art video wall. The TCC which once could only accommodate 8 employees, now allows for up to 23 traffic engineers and staff.

The 12-mile stretch of US-1, and 10 other major congested corridors, underwent active arterial management where Closed-Circuit Television (CCTV) cameras were installed, and traffic engineers re-timed signals based on travel patterns. These efforts have led to significant time-savings. Engineers in collaboration with the Florida Department of Transportation (FDOT) have completed the re-timing of all the traffic signals along the State Roads within Miami-Dade County. Improved coordination of the traffic signals reduces travel time and improves traffic mobility. The deployment of over 150 CCTV cameras to critical intersections, along with FDOT cameras on State Roads allows Traffic Engineers to be able to monitor and improve the synchronization of signals in real-time.

Another major effort is the Strategic Miami Area Rapid Transit (SMART) Plan created in 2016, a groundbreaking multi-level mobility project that will drastically extend Miami-Dade's mobility options, therefore helping take cars off the road and improving traffic flow. This Plan consists of six rapid-transit corridors and the Bus Express Rapid Transit (BERT) network that are being considered for major transportation and public works upgrades. It is estimated that the approximately 1.7 million residents living within a 2-mile radius from the corridors' alignments will benefit from access to improved mobility.

The South Corridor Rapid Transit Project is one of the six SMART plan corridors, a 20-mile-long dedicated transit corridor connecting Florida City to the Dadeland South Metrorail Station.



It is the first of the six corridors to have a complete Project Development & Environment (PD&E) study. In August of 2018, the TPO selected Bus Rapid Transit as the Locally Preferred Alternative (LPA) and the project entered into the FTA Small Starts Project Development phase. The Florida Department of Transportation agreed to provide \$100 million in funding. In late 2020, DTPW was awarded a \$99.9 million grant from the Federal Transit Administration (FTA) for the South Corridor Rapid Transit Project. This was the first Federal Capital Investment Grant that Miami-Dade County has received since the Metromover extension in 1993 and the original South Miami-Dade Busway in 1999. The County issued a request for design-build services for the South Corridor Project in June 2019. In September 2020, the FTA executed the grant agreement with DTPW for the project development, design, and construction of the South Corridor Rapid Transit Project and the design-build contract was also awarded. This project moved through the process at a very fast pace and construction is anticipated to begin early 2021.

**DTPW will use existing Infrastructure for Short-Term Improvements:** Buses are currently subject to the same delays and congestion as all other vehicular traffic. Committed to improving transportation mobility in the region, we are focusing on small improvements that can be achieved within a short timeframe. We have initiated efforts to deploy transit-only lanes in corridors with high-vehicular traffic by repurposing existing right-of-way. These dedicated lanes, as successfully implemented in other cities, allow buses to bypass congestion, move faster and, as a result, provide better value and quality of life to commuters. The goal is to move more people, with less vehicular traffic. Other short-term improvements that we are actively pursuing are:

- Introducing bus lanes in high-traffic corridors.
- Deploying express bus route services.
- Utilizing available shoulders as bus-only lanes during peak periods.
- Turning existing private parking lots into temporary park-n-ride locations.
- Starting in April 2019, Transit Alliance and Miami-Dade County began a conversation with stakeholders, riders, community members and elected officials about revising the County's bus network, to make it useful for more people to go to more places all over the County. The County's fleet of over 750 buses serves two out of every three transit trips in Miami-Dade. While Metrorail is a key part of the County's transit network, buses are the most flexible component of a transit system and have the highest potential for immediate improvement. If Miami-Dade wants to improve "access to opportunity by transit" quickly, changing the bus network is the fastest way to make a difference.
- The Recommended Better Bus Network is the design that resulted from the year-long planning and public conversation process. If the County can fund the level of service it was operating before the pandemic, this is the network it should operate.
- The Resilience Plan addresses what to do if the pandemic, and related changes in the economy prevent the County from returning to the pre-pandemic level of service. The Resilience Plan sorts the Recommended Network into tiers of priority, specifying which services must be retained if service is reduced.



The novel coronavirus (COVID-19) has presented many challenges as well as altered ridership patterns. DTPW suspended 9 express routes and contracted to provide over 100 hundred additional buses in service to increase bus frequency and accommodate physical distancing restrictions.

Due to severely reduced overnight ridership and the shortage of buses and operators during the heavier ridership daytime hours, to address physical distancing and capacity constraints, DTPW replaced overnight service with the “Go Nightly Service.”

The “Go Nightly service” program was immediately implemented to ensure that those transit riders who are using the system between midnight and 5 a.m. can continue to rely on DTPW’s transit system to get where they need to go safely.

- Rides are available between the hours of midnight and 5 a.m., nightly
- Riders hail rides via their smartphone or by calling a dedicated number
- Trips can only originate along select late-night service routes
- Trips are to/from destinations within ¼ mile buffer from the select route alignment
- Trips are limited to two trips per night per user
- Trips will mirror one route; cannot be used for trips longer than the specific route

### **On-Demand Transit (Go Connect)**

In an effort to evolve traditional fixed-route transit, DTPW has deployed and is testing innovative service delivery models to improve first-and-last mile access to Metrorail and South Miami Transitway stations and increase travel possibilities for commuters and riders traveling to popular destinations within service zones. This dynamically routed, on-demand, mobile app-based transit service model uses smaller vehicles to provide shared nearly door-to-door rides. The initial deployments are in the Dadeland area (South Miami, Dadeland North and Dadeland South stations), and were followed by the Town of Cutler Bay municipal area in November 2020, and the Civic Center Metrorail station and West Kendall areas in February 2021. The on-demand transit service provider is Via Transportation, a TNC company. (Contract awarded in July 2020).

### **WAZE Carpool**

DTPW partnered with Waze Carpool to help alleviate congestion in Miami-Dade County. Waze offered free Carpool rides during the five weekdays of September 23-27, 2019 to help users get started. Beyond this free workweek, DTPW partnered with Waze Carpool to provide subsidized rides to carpoolers riding within Miami-Dade County. The program lasted until February 2020.





• **TM1-2: Expand and improve bikeway, greenway and sidewalk system**

**The Underline:** Miami-Dade County's first true mobility corridor uniting all modes of transportation enhancing accessibility to eight Metrorail stations within its path and the neighboring communities. Once completed by DTPW, the Underline will be maintained and operated by Friends of the Underline and will serve 107,000 residents within a 10-minute walk, and will provide access to public transportation to one University and 24 schools, two hospitals, three urgent care facilities, four major malls and over 10,000 businesses. The Underline will transform 120 acres of Miami-Dade County owned land below the existing Metrorail guideway, from the Miami River (Downtown) to the Dadeland South Metrorail Station, into a world-class multimodal corridor. The 10-mile corridor will provide separated pedestrian and bicycle paths, improvements to over 30 intersections, access to public transportation, lighting, and wayfinding. In addition to the transportation components, recreational features will include butterfly gardens, playgrounds, exercise equipment, basketball and volleyball courts, soccer fields, picnic areas, dog parks and more. Construction of the Underline will significantly enhance connectivity for area residents and businesses for safer accessibility to jobs, businesses, residential and commercial districts, and schools. The Underline will be built in segments, and each segment will demonstrate Miami-Dade County's commitment to improving and enhancing connectivity and an emerging focus on integrating all modes of transportation.

The Underline will be built in 3 segments:

- Segment 1, better known as the Brickell Backyard, was completed and open to the public on February 26, 2021. This segment extends from the Miami River to SW 13<sup>th</sup> Street (Coral Way) and is 1/2 mile long.
- Segment 2 has been awarded to a Design-Build Team and the design is currently underway. Construction is scheduled to start in Spring 2021. Its completion date is estimated as mid-2023; it is 2.14 miles long extending from SW 13<sup>th</sup> street (Coral Way) to SW 19<sup>th</sup> Avenue.
- Segment 3 extends from SW 19th Avenue to Dadeland Boulevard. It is approximately 7.46 miles long and traverses portions of the City of Miami, City of Coral Gables. City of South Miami and Unincorporated Miami-Dade County. DTPW was awarded the federal BUILD Grant which completes the funding required to build the project. On August of 2020, DTPW awarded a contract for the development of the Design Criteria Package which will constitute the 30% documents required for procurement and execution of the BUILD Grant Agreement. Currently working on procurement for the design-builder that will design and construction Phase 3.

Completion of the 10 miles is expected no later than Spring 2026.

**Separated and Protected Bicycle Facilities:** In an effort to improve safety and level of comfort for bicycle riders as well as users of other MicroMobility solutions such as e-bikes and e-scooters, the Department has developed plans for a network of separated and protected bike lanes in urban areas. In early 2021, DTPW will begin construction of its first parking protected



bicycle lanes and protected intersections within the urban environment. The initial corridors are Miami Avenue from South 1<sup>st</sup> Street to North 11<sup>th</sup> Street and East 1<sup>st</sup> Avenue from South East 1<sup>st</sup> Street to North East 11<sup>th</sup> Street.

**Bicycle Facilities:** DTPW will enhance bicycle facilities at Metrorail Stations, and other facilities to improve transit connections for cyclists. These efforts include: expanding the bikeshare program, installing bicycle racks and corrals, and re-evaluating the installation of bike-rails at select Metrorail stairways to improve access to and from the platforms.

Our highway bridge engineering division has current projects that include enhancements to bridge projects for widening to provide bike lanes or shared use paths. We currently have eight funded projects in design for construction to begin in FY 21.

**Ludlam Trail:** DTPW will continue to work closely with PROS in the development of the PD&E Study for the Ludlam Trail. The purpose of the Ludlam Trail is to provide a new shared-use trail in Miami-Dade County that will include safe, dedicated, direct pathways for walking, running, and cycling; to encourage active lifestyles and the use of green, non-motorized modes of transportation; and to enhance overall connectivity and accessibility between schools, parks, transit stops and residences, workplaces, and shopping.

• ***TM1-3: Provide reliable, accessible, and affordable transit service***

DTPW is committed to providing realistic bus schedules which improve on-time performance and schedule adherence. DTPW has begun the process of replacing its rolling stock and modernizing its infrastructure in order to increase vehicle mean distance between failures. As of the end fiscal year 2020, DTPW completed integrating into direct service the purchase of 420 forty-foot Compressed Natural Gas (CNG) Buses with 140 more by April 2021 providing for Miami-Dade County to have one of the newest bus fleets in the country. DTPW will be receiving 33 electric buses in the first half of 2022 with an option to acquire up to a maximum of 75.

For the first time since Metrorail opened its doors to passengers in 1984, DTPW placed its first new train into service on November 30, 2017. This first new Metrorail train ushered in a new era of modern, high-tech trains that are helping to improve service reliability and the overall riding experience. The entire Metrorail fleet of 136 train cars is expected to be replaced by the end of 2021.

Miami-Dade County now has real-time passenger count information on bus routes to monitor passenger loads and adherence to new reduced capacity due to physical distancing requirements related to COVID-19.

***Open Payment***

DTPW continues to prioritize using technology to bring all modes of transportation under a seamless experience where the users can plan, book, and pay for their personalized trip right from their smart phones. This is possible through the development of an account-based system



and open back-end integration. In 2019, DTPW introduced Open Payment for its EASY Card transit fare system. Open Payment technology allows Miami-Dade travelers to easily tap and pay for their journeys using their contactless-enabled Visa and Mastercard bank cards, American Express credit cards, and digital wallets (such as Apple Pay and Google Pay) via their mobile phones or wearable devices. Miami-Dade County is the fourth transit agency in the United States to pioneer Open Payment.

DTPW has an open invitation for all third parties with a Mobility as a Service (MaaS) solution to join Miami-Dade County's efforts.

### **Transit Rewards**

Miami-Dade County is the first transit agency in the Country to adopt Cubic Interactive's loyalty and rewards program, which enables transit agencies to incentivize travel on public transportation. One of the many new features of the rewards program is that travelers using public transportation can engage with advertising content, earning them loyalty points they can later redeem for value. The platform provides the building blocks that can help increase the use of transit and reduce roadway congestion. As the program evolves, Cubic Interactive will allow transit agencies to build custom loyalty programs that reside within mobile transit apps to help shift peak transit patterns, ease the pressure on the transit network, and promote smarter and healthier mobility choices.

#### **• *TM1-4: Expand public transportation***

It is DTPW's mission and vision to connect people to places and provide an efficient mass transit system that meets the travel needs of the growing population. Transit Signal Priority (TSP) on key corridors will allow buses to increase average travel speeds and reduce overall passenger travel time.

DTPW is re-structuring its bus network to provide a more streamlined regional service. Based on the results of the Better Bus Project, DTPW will be re-aligning routes to maximize our customer's accessibility to job opportunities. Changes are anticipated to improve reliability, which in turn will increase and support the demand for expansion of service.

Another major improvement effort is the Strategic Miami Area Rapid Transit (S.M.A.R.T.) Plan, a groundbreaking multi-level mobility project that will drastically extend Miami-Dade's mobility options. This plan consists of six rapid-transit corridors and the Bus Express Rapid Transit (BERT) network that are being considered for major transportation and public works upgrades. It is estimated that the approximately 1.7 million residents living within a 2-mile radius from the corridors' alignments will benefit.

DTPW is improving the accessibility of alternative modes of transportation at transit facilities in order to promote personal first and last mile transportation. Safe walking, bicycling, and scooting to Metrorail or bus stations is necessary to expand the reach of transit. Micromobility-friendly infrastructure, such as covered parking and repair stations are being installed at Metrorail and other transit facilities.



An important aspect of public transportation is to provide amenities and features that attract the public to its use. Through a new procurement for the Bus Passenger Shelter program for Unincorporated Miami-Dade County, DTPW will be providing 360 additional bus shelters, with the first 20 being installed in December 2020.

The construction of the Dolphin and Tamiami Park-n-Ride lots will provide access to express bus service to commuters that live in the western portions of Miami-Dade County. Once completed, the Tamiami Station will feature many amenities for passengers, including: free Wi-Fi, seven bus bays, and digital screens with real-time bus arrival information. Additionally, the Tamiami Station will have 458 parking spaces and electric vehicle charging stations. The Dolphin Park-n-Ride which opened to the public in March of 2020 provides for the following project elements: 849 long-term parking spaces and 20 short-term parking spaces, 12 bus bays and 10 bus layover bays, a transit hub with passenger waiting areas and accommodation for retail, a driver's break lounge, landscaping, signage, fencing, and lighting, and "Kiss-and-Ride" drop off areas. Express bus service from each of these facilities will use the dedicated inside shoulders on SR 836 that have been painted red and designated for "bus use only" providing passengers a considerable time advantage since their vehicles will not be in congested highway lanes during rush hour.

**• *TM1-5: Facilitate connectivity between transportation systems and providers***

Metrorail interfaces with the Metromover System, which serves an extensive area of Downtown Miami. Additionally, Miami-Dade County Metrobus provides feeder routes to Metrorail stations throughout the County, express routes to Broward and Monroe Counties, to Miami International Airport, and to Miami Beach, an international vacation destination. The Metrorail is an integral component of the economic welfare and quality of life for the region.

DTPW continues to coordinate mass transit planning with local municipalities in an effort to facilitate transit service connectivity. Additionally, DTPW's Transit Centers facilitate multimodal transportation options. For example, at the Miami Intermodal Center, DTPW provides connections between the Airport, the Metrorail and the Tri-Rail. Future connections to Greyhound buses and Amtrak trains are anticipated to come on board in the near future.

Another project that facilitates connections between modes is the All Aboard Florida Brightline. This is a private express passenger rail service that will connect Miami-Dade with Central Florida in an unprecedented way, bringing with it new tourism opportunities, less congestion on our roads and a new affordable way to travel. Brightline is connecting to Miami-Dade County's Metrorail, Metromover, and bus systems from Downtown Miami allowing our residents and tourists to have fast, safe, and easy travel options throughout the County and South Florida. Additionally, DTPW and Brightline broke ground on the all-new Aventura Station located adjacent to Aventura Mall at the 19800 block of West Dixie Highway on Thursday, September 3, 2020.



The Aventura Station is approximately 17,500 feet. The site will include an 860-foot platform located inside the Florida East Coast Railway/Brightline right-of-way and the construction of a new pedestrian bridge over the railroad right-of-way and Biscayne Boulevard. The station also includes 240 parking spaces, a bus drop-off for Miami-Dade Transit passengers, and newly landscaped and hardscape areas.

Construction of the Aventura Station is expected to be completed by fall of 2021. Construction of this station complements the work and coordination that took place to include two extra platforms in the Brightline's Miami Central (downtown terminal next to the Overtown Transit Village Metrorail Station). Both of these stations make it possible to move towards the next step of having commuter rail service on the FEC tracks (Northeast Corridor).

**Create Mobility Hubs:** Mobility hubs are transit access points with frequent transit service, high development potential and a critical point for trip generation of transfers within the transit system. In order to make these highly active pedestrian areas into safe zones, our goal is to elevate them to enable seamless transfers between transportation modes. Mobility Hubs improve accessibility for all users, increase connectivity among transportation systems, maximize transit ridership, reduce average travel times, promote new development, minimize the overall cost of travel, reduce accidents, and provide options for non-motorized travel.

**Data Collaboration:** DTPW is also looking to technology to facilitate the integration of service providers on the back end. Since convenience is one of our customer's top priorities, DTPW is pursuing options that allow customers to use any and all transportation mobility options in a seamless fashion. This will require common coding language and the development of data sharing standards. During 2019, DTPW joined several collaborative initiatives to participate in the development of data sharing standards, including the Open Mobility Foundation (OMF) and the SAE's Mobility Data Collaborative. It also held workshops with all Miami-Dade municipalities to obtain feedback about the needs of cities. Through 2021, DTPW will continue leading this effort through the creation of a roadmap and the development of a sandbox style testing area where municipal circulator, micromobility, and county transit data will be gathered and analyzed.

**Waterborne Transportation as a commuter service:** This initiative is another mobility solution that will assist in reducing traffic congestion along those municipalities near Biscayne Bay. For the last two years, DTPW has been working to determine the best approach for the deployment of these services. Earlier last year, a resolution by Miami-Dade County Board of Commissioners authorized DTPW to negotiate on behalf of the County for an East-West route aimed at decongesting traffic between the Cities of Miami and Miami Beach, during the construction of I-395. A brand-new service started operations in November 2020 between the James L. Knight Center/Hyatt Regency in the Miami River (City of Miami) and the Bentley Bay Marina, directly North of I-395 (City of Miami Beach). This service is 100% private and is not receiving subsidies from governmental agencies. The new service will act as a commuter service between 6:00 am and 7:00 pm – Monday through Friday. During commuter service times, residents with a valid ID will be able to travel across the bay for a fare of \$3.00 one way. This fare is comparable with Metrobus fares at \$2.65.



• ***TM2-1: Promote traffic and roadway safety***

DTPW's goal is to provide its passengers and employees and those who come into contact with the transportation system, with the highest degree of safety that is available. The Office of Safety and Security (OSS) Audit & Compliance Section conducts periodic surveys to assess and enhance the overall organizational safety culture through educating employees on safety goals, policies, and procedures.

The OSS has dedicated personnel (OSS Audit & Compliance Team) to conduct an annual Internal Safety Audit. The audit team reviews all elements of the System Safety Program Plan within a three-year cycle. The benefits of DTPW's Internal Safety Audit Program are: identification and mitigation of problems prior to them becoming a major issue which improves the overall safety of the system; facilitation of opportunities for continuous improvement; and fostering of sustainability of safety efforts.

The OSS Audit and Compliance Team ensures that Corrective Action Plans (CAPs) in response to recommendations from all deficiencies/non-compliant items identified in audits are developed, submitted and addressed in a timely manner by the respective divisions. The OSS Audit and Compliance team tracks the status of all recommendations from all sources (i.e. audits, accidents, incidents, drills, etc.) and reports the progress of CAPs on a monthly basis to the State Safety Oversight Agency through full implementation and closure. The team also reviews closed CAPs for sustainability to ensure continuity and sustainability of efforts.

OSS conducts periodic inspections of all locations, identifies and reports problem areas, issues recommendations, briefs appropriate managers, and follows up on all inspection recommendations for compliance.

• ***TM2-2: Improve safety for pedestrians and bicyclists***

Approximately 887 School Speed Zone Flashers (SSZFs) have been installed in the County's elementary and middle school speed zones over the past two decades. These SSZF are programmed using pager technology. An effort to upgrade the SSZF scheduling and communications system is underway that will allow for yearly scheduling as well as remote monitoring of the flasher operations.

Fixed-Time or Pre-Timed traffic signals are preferable in urban areas to increase the predictability of signal patterns and ensure consistent opportunities for pedestrian to cross the roadway. In Downtown Miami, we are exploring the use of pre-timed traffic signals in areas of high pedestrian activity.

Short Signal Cycles: Signalized intersections with short cycle lengths are ideal for urban areas with high pedestrian traffic. They allow urban cores to function as a complete street network rather than a series of major corridors. The increased turnover, and reduced waiting times, improves pedestrian compliance and reduces traffic congestion on surrounding streets. We are evaluating shortening the cycle length of traffic signals in dense urban centers with high



pedestrian activity in order to encourage walking, and reduce overall pedestrian wait times and vehicular delays on side streets.

**Vision Zero Program:** DTPW is collaborating with County departments and local municipalities for the development and implementation of a Vision Zero Plan. Vision Zero is dedicated to eliminating deaths and serious injuries from the transportation network and has been implemented in numerous areas throughout the world. It is a systematic approach to implement safety countermeasures and policies to reduce, and ultimately eliminate fatalities and serious injuries related to mobility in Miami-Dade County.

This program proposes the total elimination of all traffic-related deaths and serious injuries by the year 2030, which recognizes that progress will take time. Some efforts may not yield visible results immediately. In October 2020, the department held two workshops for Vision Zero Champions and Implementors.

**Vision Zero Projects Prioritization:** The Vision Zero Implementation Plan develops a list of projects based on serious injuries and fatalities, roadway jurisdiction, transit connections and community facilities. It prioritizes the intersections and roadway segments with a high number of injuries. This list also considered opportunities to connect or leverage currently funded projects within the County to achieve the goal of Vision Zero.

**Vision Zero engineering toolbox:** The Vision Zero engineering toolbox consists of a menu and criteria for selecting the appropriate engineering, educational, and enforcement solution based on variables such as crash type, location, cost, context, and user needs. The purpose of the toolbox is to create a go-to document for the application of the appropriate countermeasure based on specific bicycle, pedestrian, and micro-mobility user safety issues. The most appropriate countermeasure will be selected based on their relative potential to reduce crashes and safety performance functions. These are categorized in short-term, long-term, and future solutions. The toolbox will promote a uniform application of countermeasures within the County.

**Safer transit connections for multimodal and non-motorized access to bus stop matrix:** The Vision Zero implementation plan will develop a bus stop access matrix. The matrix will identify the roadway elements necessary to support safe non-motorized access to bus stop and transit. The measures will consider bicycles, pedestrians, the Americans with Disabilities Act (ADA) and micro-mobility connections.

**Vision Zero evaluation criteria:** A benchmarked evaluation metric is key to communicate success backed with data-based metrics. The evaluation criteria may indicate that further improvements may be necessary to achieve the project goals. The Vision Zero Implementation Plan will develop a comprehensive vision zero evaluation criteria which allows flexibility toward tailoring for specific goals of each project. The evaluation criteria will include before and after metrics to measure project success or need for further improvements.

• ***TM2-3: Ensure the safe operation of public transit***



There is a significant emphasis placed on uniformed, armed security personnel maintaining a presence throughout the system in order to prevent and eliminate crime events. DTPW utilizes uniformed and plain-clothed County law enforcement to work along with DTPW's contracted security personnel to prevent acts of crime and apprehend offenders at scheduled County events. DTPW also partners with our law enforcement agencies, who utilize their K-9 resources to locate explosives, weapons and drugs hidden from view.

DTPW also continues to manage the TRANSIT WATCH telephone line and the TRANSIT WATCH App (which has been fully integrated into the Go Miami Dade app), which enables callers and mobile device users to contact security dispatchers directly and advise them of incidents. This allows a security officer to be dispatched to the incident/event to mitigate the action. DTPW cameras on the Metromover now have a live feed to the Miami-Dade Police Department (MDPD). DTPW is working with MDPD and City of Miami PD to increase security. DTPW is also looking into a new Artificial Intelligence (AI) technology to help monitor our 1,200 cameras throughout the entire MDT system.

DTPW has signed a Memorandum of Understanding (MOU) with MDPD, allowing MDPD's Real Time Crime Center (RTCC) to have real-time viewing capability of DTPW's Closed-Circuit Television (CCTV) system. MDPD can also view real-time CCTV footage from all twenty-six (26) Metromover cars. DTPW security dispatch has added a direct radio talk channel with MDPD dispatch to enhance communication and response time. DTPW will continue collaborating with MDPD to allow for real-time viewing capability of all Metrorail car CCTV footage.

DTPW has continued to grow its Structural Inspection Drone Program. In early 2018, DTPW Structural Inspection Division acquired an inspection drone and has also increased the use of drone consultants. Utilizing drones minimizes staff exposure to hazards in the field and it allows staff to analyze the drone-inspected areas using high-definition video. In the future, staff will be able to also acquire infrared imagery for temperature differential and other uses.

At the start of the unprecedented COVID-19 pandemic, DTPW quickly took action to ensure the safety of its employees and riders. The department immediately increased its cleaning and disinfecting cycles on all vehicles and stations in early March 2020. When ridership started to decline, action was taken to adjust schedules/frequencies in order to be able to continue to provide essential services. To further ensure the safety of operators and riders, fares were suspended, and we initiated rear door boarding for Metrobus. DTPW also began converting existing operator cabin partitions on all Metrobuses into full-enclosure polycarbonate shields, to limit unnecessary interactions between operators and passengers. Hand sanitizer dispensers were installed in all Metrorail, Metromover and Metrobus vehicles. Additionally, replenishment service to the preexisting hand sanitizer dispensers at all Metrorail and Metromover stations was increased.





DTPW partnered with Velocia, Inc. to roll out an innovative rewards program aimed at ensuring safe, trusted ridership on Metrobus and Metrorail. Riders on all routes get rewards for answering a daily survey promoting protective face coverings and social distancing measures that DTPW has in place on all Miami-Dade Metrorail and Metrobus vehicles. A second rewards campaign encourages riders on the busiest Metrobus routes to travel outside peak demand hours (6-8AM and 3:30-5:30PM) to ensure sufficient seats for essential workers so that they are not left behind by limited-capacity buses.

**• *TM3-2: Provide well-maintained, attractive, and modern transportation facilities and vehicles***

DTPW will partner with Neat Streets Miami and the Downtown Development Authority to implement landscape improvements at Metrorail and Metromover Stations.

Other programs such as the nationally recognized Miami-Dade County Art in Public Places has installed artworks in several Metrorail and Metromover stations, enriching and enhancing these public spaces, as well as contributing to our multicultural heritage.

In 2016 DTPW launched its Transit Loves the Arts Program, collaborating with several local artists by wrapping buses with their artwork. In November 2019, the program took another step by collaborating with local artist David Anasagasti to conduct a live painting of a Metrobus. His design was also featured on limited edition EASY Tickets, released across all TVMs during Miami Art Week. The program has resulted in positive exposure to our public transportation system and the artists and has helped establish a new sense of community pride in the transit system.

Enhance Passenger Amenities: We plan to improve convenience for passengers by increasing the number of bus shelters and making the transit experience more inviting by adding amenities, such as:

- Ceiling fans or climate control, when feasible
- Improved lighting fixtures
- Next bus real-time information signs
- Expanding the Wi-Fi network and making it accessible to the general public

Next Train arrival signs have been added at our Metromover stations, and the Metrorail Platform Screen Modernization Project is currently in progress with an expected completion date of September 2021. Outfront Media Group, LLC is in the process of introducing new digital infrastructure throughout the Transit Metrorail Stations at no cost to the County. The new displays will provide advertising, next train arrival and other system information. Once installed, Outfront will provide maintenance and content management for the displays.

DTPW will continue to provide Quality Assurance oversight to monitor the overall condition of both our transit vehicles and our transit facilities to ensure that they are well maintained.



• ***TM3-3: Promote clean, attractive roads and rights-of-way***

DTPW has implemented two corridors with light emitting diode (LED) streetlights and has actively worked with the County's Internal Services Department to develop and advertise a Request for Proposals (RFP) to upgrade all County-maintained roadway lights. This contract should be awarded during 2021 resulting in a Smart Lighting and Smart City Program. The County seeks to partner with a team to provide a fully integrated suite of streetlights, sensors, networks, and data / analytics platforms that will result in the County becoming the first true Smart County in the world. This RFP will leverage the existing roadway lighting infrastructure to provide for new and emerging Smart County technology to improve mobility, accessibility, and safety. The County is seeking a cost-neutral revenue producing and a financing structure for the proposed upgrades.

**Maintaining Our Infrastructure:** Miami-Dade County is responsible for a robust roadway network that ensures safe and efficient vehicular and pedestrian traffic flow. In addition to ensuring the safety of our traveling public, one of the most important factors for addressing mobility is the proactive maintenance of our infrastructure. Not following sound infrastructure maintenance policies can lead to accelerated deterioration, resulting in costly repairs and reconstruction projects, which negatively impact mobility and drain financial resources.

Our approach has shifted from merely identifying infrastructure needs to a proactive evaluation system that identifies condition states and deficiencies to schedule and prioritize maintenance activities and improvement projects. This new approach, which is modeled after FDOT's Maintenance Repair Program (MRP), will allow us to achieve a uniform infrastructure level of service that meets our objective of enhancing the quality of life of our residents and visitors through the planning, design, construction, operations, and maintenance of a safe and aesthetically pleasing physical environment.

***Strategic Area: Neighborhood and Infrastructure (NI)***

• ***NI2-2: Provide well maintained drainage to minimize flooding***

The Stormwater Management Program supports the Miami-Dade County's Comprehensive Development Master Plan process, as well as the engineering and evaluation of improvements to meet the County's flood protection and water quality level of service, and the county's local and regional efforts in climate change, sea level rise and adaptation planning.

With increased urbanization, permeable areas are lost due to development. As a result, surface areas lose their ability to absorb rainwater. As a mitigation measure, one of the most common best management practices used to handle stormwater is the French drain system, also referred to as an exfiltration trench. They replicate natural percolation, are a cost-effective solution, and have low environmental impact. Stormwater runoff passes through the exfiltration trench directly into the shallow aquifer allowing direct recharge of the aquifer, thereby making this approach a greener infrastructure.



**Alignment of Selected Scorecard Measures to Resilience**

<b>Scorecard Measures</b>	<b>Resilience Driver</b>
<i>Traffic Signals Service Requests Completion (Signal Maintenance) Total Number of Traffic Control and Street Name Signs Installed, Repaired and or Replaced</i>	IE2: Ensure Continuity of Critical Services
<i>Ontime Performance (Metrobus and Metrorail modes) Preventive Maintenance Adherence (Metrobus, Metrorail and Facilities)</i>	IE3: Provide Reliable Communication and Mobility

**KEY ISSUES**

- Identify funding through public/private partnerships, state, and federal funding sources particularly for the Infrastructure Renewal Program (IRP).
- Continue working with the Federal Transit Administration and the Florida Department of Transportation to secure funding for the North, Beach, East-West and Northeast corridors as well as identifying additional funding partners including but not limited to municipalities, CRA’s and private parties through transit-oriented development opportunities.
- Adjust schedules with adequate running time and recovery time to accommodate for changes in our community such as congestion due to population growth in specific cities or municipalities.
- DTPW continues fleet replacement. The fleet remains functional through repair and/or replacement of sub-system component(s). To extend the life-cycle of transit assets and ensure safe and reliable service requires the maintenance and replacement of a diverse set of components: track, signals, electrical and communications equipment, rolling stock, support facilities and vehicles, and stations and customer parking facilities.
- Labor agreements through Section 13C of the Transit Act restricts the recruitment of candidates based on qualifications for certain critical technical positions from outside (non-TWU) sources. The lack of minimum qualifications for some technical classifications leads to very extensive training requirements in order to ensure technical competency. For the past two years, DTPW has been working with the Transit Workers Union (TWU) to incorporate minimum qualifications for the recruitment of safety sensitive positions and to recruit Miami-Dade County employees who are not necessarily transit workers. DTPW is providing additional training as required by the Public Transportation Agency Safety Plan (PTASP). As a result of these discussions, one type of position was released for hiring to non-TWU employees. Union members were given priority as long as they met the requirements established by DTPW. We continue the process of reviewing positions with TWU for other safety-sensitive roles as dictated by the Florida Department of Transportation.



## Departmental Business Plan and Outlook

Department Name: Transportation and Public Works  
FY2020-21 & FY2021-22

- Attracting and retaining “choice” riders on public transportation via targeted marketing efforts to educate the public on DTPW’s variety of services such as Metromover, Metrorail, Bus Rapid Transit, Express Bus Services and Multi-Modal Coordination. This is a growing challenge since concerted efforts will be required to reattract patrons that may have stopped using the system due to COVID-19 related concerns.
- DTPW needs to ensure future viability of aging infrastructure including bridges, traffic signals, street lighting, equipment, and facilities. It continues to deal with challenges such as performing basic critical repairs that are required to maintain a safe and effective roadway infrastructure.
- Focus on continued maintenance of the Metrorail system and meeting all preventative maintenance requirements. During the reduced Metrorail service due to the COVID-19 pandemic, DTPW staff used the increased track availability to replace more than 50,000 track fasteners and shims on the south end of the Metrorail tracks (1 and 2) from Dadeland South Station to Vizcaya Station. This project is critical for maintaining the Metrorail System in a State-of-Good-Repair and adhering to the FTA track standards. DTPW also was able to focus on maintenance of the traction power and train control equipment, and equipment with the support of the Quality Assurance Division in monitoring and assisting in improving the inspection process. DTPW is now current with regard to all preventative maintenance requirements.
- DTPW should continue to fiscally support the Office of Safety and Security’s incorporation of Miami-Dade Police Department resources in order to augment the current security contract personnel and target trending criminal activities. In accordance with the federal safety requirements outlined in the Moving Ahead for Progress in the 21st Century Act, (MAP-21) and the Fixing America’s Surface Transportation (FAST) Act, DTPW converted from the current System Safety Program Plan and implemented a Public Transportation Agency Safety Plan (PTASP) in July 2020. The PTASP is the system-wide governing safety document for all transit modes operated by DTPW.
- The Quality Assurance (QA) Division is working with the Office of Safety and Security to convert from the current System Safety Program Plan to the Public Transportation Agency Safety Plan (PTASP). The QA Division also has established an agency-wide Quality Management System (QMS) to ensure that projects, products, and services are in compliance with federal, state, and local requirements.
- In 2015, DTPW began working to develop the Complete Streets Design Guidelines for Miami-Dade County, which were later adopted in 2017. These guidelines go hand-in-hand with the County's Vision Zero Plan, which aims to identify and complete projects that can improve the safety of transportation networks and eliminate deaths and serious injuries on County roads. As part of this effort, projects that have been implemented to improve pedestrian, cyclist, and motorist safety on local roads include: reducing the speed limits on local roads to 25 miles per hour (which required state legislation); making improvements to popular bicycle routes, such as Old Cutler Road; and introducing Leading Pedestrian Intervals (LPI) at 40 locations.



Recently held Vision Zero workshops are helping create a framework for continued identification and implementation of these improvements to help improve pedestrian and bicyclist safety.

- As a result of COVID-19, effective March 22, 2020, DTPW suspended all transit fares and offered free parking at Metrorail stations; this in conjunction with decreased ridership creates a revenue gap that may be addressed through Federal relief packages. The Adopted FY 20-21 budget suspends fares through the end of calendar year 2020.

## **PRIORITY INITIATIVES**

### **IMPROVE LEVEL OF SERVICE:**

**Metromover Comprehensive Wayside Overhaul:** The Metromover began passenger service in April 1986. Throughout the Metromover's 35-year history, the system has expanded and the vehicle fleet has been replaced, however, many major subsystems that make up the system have not been replaced or refurbished and have now reached the end of their design life. These subsystems include the Automatic Train Control (ATC) System, Data Transmission System (DTS) with Supervisory Control and Data Acquisition (SCADA), several Power Distribution System (PDS) elements (e.g. low voltage breakers, protective relays, ground switches, etc.), guideway switch equipment and the Central Control equipment. To maintain good equipment reliability and an overall high Metromover System service availability, these major subsystems need to be replaced or refurbished. This project will include the design, supply manufacture, installation, testing and commissioning of the APM System into a fully functional, safe and reliable Metromover System. The project will also address reverse flow operations with switches that will help have an improved travel time for the Beach Corridor from Government Center. Procurement of this project should be completed by mid-2021.

**Expanded Metrorail Fleet – 6 Car Trains.** Having a new fleet with 136 Metrorail cars, it is now possible to run 6-car trains. Track infrastructure and power supply improvements have been made during 2020 that will allow for 6-car Metrorail trains to operate once ridership demand is appropriate. This infrastructure work has also improved system reliability overall.

**Additional Elevators at the Dadeland North Metrorail Station:** Due to high ridership at the Dadeland North Metrorail Station, the existing bank of elevators (four (4) elevators) does not provide an acceptable level of service during peak hours. In FY 21 DTPW is adding two (2) elevators to the existing parking facility at the north end of the garage. The project was advertised in January 2021. Notice to Proceed to the Design-Build Firm is expected for Spring 2022.

**Metrorail Station Improvements:** The Metrorail stations were constructed over 35 years ago and now need to be enhanced and refurbished in an effort to extend the life of the asset. DTPW initiated a series of inspections of all 23 Metrorail stations and their surroundings, documenting



**Departmental Business Plan and Outlook**  
**Department Name: Transportation and Public Works**  
**FY2020-21 & FY2021-22**

deficiencies and possible opportunities for enhancement in an effort to improve safety, comfort and convenience of the traveling public. Stations have been prioritized as part of this project for enhancements and refurbishments that include re-roofing and lightning protection, refurbishment of existing skylights, replacement of existing fire suppression systems, station lighting upgrade, replacement of metal ceiling slats, replacement of expansion joints, replacement of doors /louvers, removal of ADA barriers, replacement of emergency staircases, replacement of handrails, wayfinding signage, landscape improvements, drainage improvements, industrial cleaning of floor tiles, pressure cleaning with painting & stucco repairs.

Dadeland South Intermodal Station Project plans to improve and enhance the infrastructure, operations and safety at the Dadeland South Station (the Station). The Station is the southernmost of the existing Metrorail system and is the northern terminal station of the South Dade Transitway (the Transitway), which was selected to operate as the County's first BRT system by the County's Transportation Planning Organization in 2018. Upon Project completion, the Station shall seamlessly integrate the BRT operations with the existing transit services (Metrorail and local bus service). In addition, having opened for revenue service in 1984, many Station elements have undergone several years of wear and deterioration, resulting in the need for improvements throughout to maintain the Station in a state of good repair. Notice to Proceed to the Design-Build Firm is expected for the Spring 2022.



## **INCREASE INTEGRATED LAND-USE DEVELOPMENT TO DECREASE DEPENDENCY ON AUTOMOBILES:**

Transit Oriented Development (TOD) is the creation of compact, walkable, pedestrian-oriented, mixed-use communities centered around our Transit system. This makes it possible to live, work and play without depending on a car for mobility.

TODs are a fast-growing community development trend that includes a mixed-use of housing, office, retail and/or amenities integrated into walkable neighborhoods and located within a half-mile of public transportation. TODs provide better access to jobs and housing for people of all ages and incomes. Below is a list of recently completed, under construction and up and coming TOD projects throughout our County:

### *TOD's Recently Completed*

- ✓ Motion at Dadeland North Metrorail Station:  
This project is market rate rental community with 294 units and ground floor retail. Motion is the 4<sup>th</sup> and final phase of the Dadeland North Station.
- ✓ Caribbean Village Phase I on the South-Dade TransitWay:  
This mixed-use project recently completed phase one of two phases with 123 affordable housing units and 100 TransitWay patron parking spaces.
- ✓ Northside Phase 2 Metrorail Station:  
The project includes 129 affordable housing units and 250 dedicated ground-floor Metrorail parking spaces in a multi-level parking garage.
- ✓ 1010 Brickell at Tenth Street Metromover Station:  
Station rehabilitation which included new walkways, ramps, improved lighting, new hardscape, signage, bicycle racks and elevator rehabilitation.



*TOD's Under Construction*

- Court House at Government Center Metrorail Station:
  - ✓ New Miami-Dade civil courthouse.
  
- VOX SOMI at South Miami Metrorail Station:
  - ✓ This project consists of two phase, 194,000 square feet of office space and 102 student housing building built above the existing west garage.
  
- Grove Central at Coconut Grove Metrorail Station:
  - ✓ This mixed-use TOD includes retail, residential tower, parking garage with Metrorail station upgrades and improvements. Target and Total Wine stores will be coming to this Metrorail Station.
  
- Link at Douglas Metrorail Station:
  - ✓ This TOD consists of 4 phases. Phase IA is 312 residential units and IB is 374 residential units both towers include ground floor retail and are under construction. Proposed Phases 2, 3 and 4 are residential towers and an office building soon to follow. Completion expected 2031 of all phases. This project includes several Station upgrades and improvements which are underway.
  
- Miami Worldcenter Park West Metromover Station:
  - ✓ Station remodeling to include renovations to the rehabilitation of stairways and escalator, new elevator, new tiles, and lighting.

*TOD's Forthcoming*

- Metro Grande at Okeechobee Metrorail Station:
  - ✓ This mixed-use project consists of 202 elderly affordable housing units, 84 luxury work force units and 10,225 sqft of retail.
  
- Dolphin Station on the East/West Corridor: 45 acres Multimodal TOD currently in the Request For Proposal (RFP) procurement process.
  
- Quail Roost on the South-Dade Transitway: Proposed 500 residential affordable and market rate units, 10,000 sqft of retail and 261 Park and Ride facility.
  
- Vizcaya Metrorail Station: Residential building with incidental retail space including 100 transit parking spaces. TOD currently in the RFP procurement process.
  
- Block 45 at Overtown Transit Village Metrorail Station: Proposed 600-unit residential tower with 60% workforce and affordable units, ground floor retail and station improvements.





## Departmental Business Plan and Outlook

Department Name: Transportation and Public Works  
FY2020-21 & FY2021-22

- Miami Intermodal Center at Miami International Airport Station: 14 acres of TOD development focused on uses consistent with the Airport and the multimodal station. RFP under development.
- Earlington Heights Metrorail Station: Proposed 600 plus workforce units with community ground floor space. Recently executed.
- Martin Luther King, Jr. Metrorail Station: Redevelopment of surface space into a new TOD to include the replacement of existing garage. RFP under development.

**MIAMI-DADE COUNTY SMART PLAN:** On April 21, 2016, the Transportation Planning Organization (TPO) Governing Board officially adopted and endorsed the proposed SMART Plan. The Plan intends to advance six of the People's Transportation Plan Rapid Transit Corridors, along with a network of BERT service, to implement mass transit projects in Miami-Dade County. Implementation of the SMART Plan Corridors will help commuters save time when compared to existing transit service, or to driving. The Plan will have a positive impact on the economy and population growth of the South Florida region. Studies for most of the SMART Plan corridors are complete; and in a major step forward, the Miami-Dade County TPO Governing Board voted on the Locally Preferred Alternative (LPA) for the South, North, East-West and Beach Corridors. **Miami-Dade County has reached major milestones on five of the six corridors in an expedited time-frame. FDOT will soon present the sixth and final corridor to the TPO for selection of an LPA.**

### SMART PLAN RAPID TRANSIT CORRIDORS

– Beach Corridor: is an 11.5-mile long corridor connecting the Miami Design District through Downtown Miami along MacArthur Causeway to the Miami Beach Convention Center. A Project Development and Environment (PD&E) Study received the Notice to Proceed (NTP) on May 26, 2017. Immediately after the NTP, the team started data collection and public engagement efforts. The team conducted public kick-off meetings in July 2017, at two different locations along the corridor. Through numerous stakeholder meetings and several public meetings and workshops, the project team identified the recommended alternative of Elevated Rubber Tire in November 2019 and presented to the TPO Governing Board in January 2020 for the unanimous approval of the Locally Preferred Alternative (LPA): Automated People Mover or Monorail for the Trunkline between downtown Miami and South Beach; Metromover Extension for Design District Extension; and bus/trolley in dedicated lanes on Washington Avenue. The project received an Environmental Assessment (EA) as the National Environmental Policy Act (NEPA) Class of Action (COA) from the United States Coast Guard (USCG) and is expecting to finalize NEPA document in Summer 2021.

The County received an unsolicited proposal from a consortium of firms in May 2019 to design, build, finance, operate and maintain a Monorail system for the Beach Corridor Trunkline



between the mainland (Downtown Miami) and Miami Beach along the MacArthur Causeway. In July 2019, the Board of County Commissioners (BCC) gave the County approval to publish a solicitation for the same project purpose as the unsolicited proposal for a rapid transit system for the Beach Corridor. The County issued a RFP for a Rapid Mass Transit Solution for the Beach Corridor Trunk Line in September 2019 and received a proposal in March 2020. After being recommended by the selection committee to proceed with negotiation, the County negotiated with the selected team for an Interim Agreement (IA). The IA was presented to the Board of County Commissioners and was approved in October 2020.

– East-West: is an 11-mile long corridor connecting Tamiami Station to the Miami Intermodal Center at Miami International Airport. The East-West Corridor PD&E study team received NTP on April 13, 2017. Through the technical analysis and public input process, four (4) viable build alternatives were identified as Bus Rapid Transit (BRT), Heavy Rail Transit (HRT), Commuter Rail Transit (CRT) and a hybrid combination of BRT and CRT. The project's recommended alternative was presented to the Miami-Dade TPO Governing Board in October 2020 for selection of a LPA. The BRT alternative was unanimously selected as the LPA. The final NEPA document is expected to be completed in mid-2021.

– North Corridor: is a 10-mile corridor connecting the Dr. Martin Luther King, Jr. Metrorail Station to NW 215<sup>th</sup> Street along NW 27<sup>th</sup> Avenue. FDOT initiated the PD&E study in June 2016. In December 2018, the TPO Governing Board selected an Elevated Fixed Guideway transit system as the LPA for the North Corridor. In October 2019, the TPO Governing Board selected Heavy Rail Transit as the preferred transit technology, with a directive for the TPO Executive Director to coordinate with FDOT and County staff to further refine the analysis for the various technological modes to include localized financial, operations and maintenance data. DTPW reported the findings of the analysis to the TPO Governing Board during its March 2020 meeting. In addition, per directives from the BCC, County staff issued an RFP to design, build, operate, and maintain an elevated fixed guideway transit system for the North Corridor. Proposals are expected to be due in December 2020.

– Northeast Corridor: is a 13-mile corridor connecting Miami Central Station in Downtown Miami and West Aventura Station in the City of Aventura. This corridor is Miami-Dade County's portion of the Tri-Rail Coastal Link. FDOT District 4 initiated the Tri-Rail Coastal Link study in mid-2000. The NEPA study for this corridor was about 30% completed before it was put on hold. In June 2020, a BCC passed a Resolution directing the County to start negotiations with Brightline on the implementation of commuter rail service for the Northeast Corridor. Since the adoption of the resolution, the County has been in extensive negotiations and is in the process of developing an Interim Agreement with Brightline for commuter rail service between Aventura and Downtown Miami. In October 2020, the BCC designated station locations for the corridor and directed the issuance of a solicitation for potential station sites and transit-oriented developments in the designated station areas. This process will help identify the best locations for station placement to attract the maximum number of riders to the system.

– South Dade Transitway (South Corridor): Also known as the South Dade Transitway, this is a 20-mile-long dedicated transit corridor connecting Florida City to the Dadeland South Metrorail Station. The South Corridor PD&E study team received Notice to Proceed (NTP) on



April 13, 2017. Immediately after the NTP, the team started data collection and public engagement efforts. The team conducted a public kick-off meeting in May 2017, four (4) Project Advisory Group meetings between October 2017 and June 2018, three (3) public corridor workshops in Fall 2017, and three (3) public alternatives workshops in Spring 2018. On August 30, 2018, the (TPO) selected Bus Rapid Transit as the Locally Preferred Alternative (LPA) and the project entered into the FTA Small Starts Project Development phase in October 2018. The project team submitted a Small Starts Package to the FTA requesting \$100 million FTA Capital Investment Grant Program funding in August 2019. In late 2020, DTPW was awarded a \$99.9 million grant from the Federal Transit Administration (FTA) and \$100 million from the Florida Department of Transportation for the South Corridor Rapid Transit Project. This was the first Federal Capital Investment Grant that Miami-Dade County has received since the Metromover extension in 1993 and the original South Miami-Dade Busway in 1999. The County issued a request for design-build services for the South Corridor Project in June 2019. In September 2020, the FTA executed the grant agreement with DTPW for the project development, design, and construction of the South Corridor Rapid Transit Project and the Design-Build contract was also awarded. DTPW issued Notice to Proceed to the Design-Build Firm on February 2, 2021.

**SMART Bus Express Rapid Transit (BERT) Routes:** is a component of the SMART Plan. The BERT Network connects the SMART rapid transit corridors on limited access facilities. The BERT Network includes the following routes;

- Route a - Flagler Corridor\*: Connecting Tamiami Station/SW 147th Avenue to Downtown Miami. The project will also connect Dolphin Station to Downtown Miami and the Panther Station to Downtown Miami.
- Route b - South Miami-Dade Express: Connecting SW 344 Street. Transitway Station to the Dadeland North Metrorail Station.
- Route c – NW Miami-Dade Express: Connecting I-75/Miami Gardens Drive Park-and-Ride Station to the Palmetto Metrorail Station with future stop at American Dream Mall Station.
- Route d – SW Miami-Dade Express: Connecting the Miami Executive Airport to the Dadeland North Metrorail Station
- Route e1 – Florida's Turnpike Express (South): Connecting the 344 St. Transitway Station to the Panther Station and the Dolphin Station.
- Route e2 – Florida's Turnpike Express (North): Connecting the FIU Panther Station to Unity Station with intermediate stops at Dolphin Station, the Miami Gardens Station and the American Dream Mall Station.
- Route f1 – Beach Express North: Connecting the Golden Glades Multimodal Transportation Facility to the Earlington Heights Metrorail Station, Mount Sinai Transit Terminal and the Miami Beach Convention Center.
- Route f2 – Beach Express Central: Connecting the Civic Center Metrorail Station to the Miami Beach Convention Center
- Route f3 – Beach Express South: Connecting the Miami Central Station to the Miami Beach Convention Center



DTPW is the lead on the NEPA study and infrastructure for the BERT network. The BERT network PD&E study received an NTP in March 2019. The BERT study is scheduled to be completed by the end of 2021.

## **FUTURE OUTLOOK**

**Waterborne Transportation:** In addition to the East-West Commuter Route, the operator is evaluating North-South Routes. DTPW, in conjunction with the TPO and PROS have been evaluating the potential for extending the new route to Blackpoint Marina to the South and Haulover Marina to the North. There are several challenges associated with these locations as related to Article 7 of the Miami-Dade Code.

**The Underline:** Phase 1 was completed in February 2021. Phase 2 is scheduled for completion in the middle of 2023 and the rest of The Underline needs to be completed and closed out by no later than June 2026.

**Better Bus Project:** Miami-Dade County partnered with local public transportation advocacy group Transit Alliance to launch the Better Bus Project with the goal of designing a new bus network that will connect more people to more places. Since the Board of County Commissioners accepted the report presented in October 2020, a full revamping of the necessary routes will be presented to the Board for approval so the plan can be implemented fully in 2021.

**Post-COVID 19:** The COVID-19 crisis necessitated the rapid implementation of solutions to address safety, disinfection requirements, social distancing and other needs as they arose. DTPW is working to develop strategies to attract riders back to the system. As the pandemic began, fares were suspended to allow for rear-door boarding, clear polycarbonate doors were added to the bus operators' compartments, all vehicles are disinfected several times a day and 120 supplemental vehicles have been added to accommodate passengers with social distancing which has improved frequencies considerably on the most heavily traveled routes. It will be important to determine how to maintain improved frequencies and disinfecting practices into the future to ensure that the public does feel safe returning to our system.



Departmental Business Plan and Outlook  
 Department Name: Transportation and Public Works  
 FY2020-21 & FY2021-22

**ATTACHMENT 1 – BUSINESS REPORT**

As Of => 03/09/2021												
Business Plan Report Department of Transportation and Public Works												
Prospective Name	Objective Name	Grand Parent Objective Name	Parent Objective Name	Milestone Name	Details	Responsible Dept	As of	YR Flag	Actual	Target	FY2020-21 Annualized Target	FY2021-22 Annualized Target
Customer	TMI-3 Provide reliable, accessible and affordable transit service (MOT-PW)	TMI-3 Transportation system, but enhance mobility	TMI-3 Provide reliable, accessible and affordable transit service	On-Time Performance (OTIS)	==	IC-3 Provide Reliable Communication and Mobility	Jan '21	▲	91.00%	85.00%	85.00%	85.00%
				On-Time Performance/Schedule Adherence - Weekday-Bus (Overall System)	==	IC-3 Provide Reliable Communication and Mobility	Dec '20	▼	82.80%	76.00%	76.00%	76.00%
				% of Targeted Sidewalk Stalls in Bus Stops Identified for ADA Access (Cumulative)	✓	IC-3 Provide Reliable Communication and Mobility	'20 FQ4		1%	n/a	n/a	n/a
	TMI-5 Facilitate connectivity between transportation systems and providers (MOT)	TMI-5 Transportation system, but enhance mobility	TMI-5 Facilitate connectivity between transportation systems and providers	Number of vehicles parked at Metrolink Station	==	IC-3 Provide Reliable Communication and Mobility	Jan '21	▼	0	117,000	1,404,000	1,404,000
				Total Monthly Activity (Metrolink - Airport)	==	IC-3 Provide Reliable Communication and Mobility	Jan '21	▼	35,130	81,333	966,996	966,996
	TMI-3 Ensure the safe operation of public transit (MOT)	TMI-3 Safe transportation system	TMI-3 Ensure the safe operation of public transit	Fleet Preventable Accident Rate per 100,000 miles (Bus)	▼	IC-3 Provide Reliable Communication and Mobility	Nov '20	▲	1.81	1.50	1.50	1.50
	TMI-2 Provide well-maintained, attractive and modern transportation facilities and vehicles (MOT)	TMI-2 Well-maintained, modern transportation facilities and vehicles	TMI-2 Provide well-maintained, attractive and modern transportation facilities and vehicles	Mean Distance Between Failures (Bus) MP	==	IC-3 Provide Reliable Communication and Mobility	Jan '21	▲	4,581	4,000	4,000	4,000
				Preventive Maintenance Adherence (Bus)	==	IC-3 Provide Reliable Communication and Mobility	Dec '20	▲	98.7%	90.0%	90.0%	90.0%
				Mean Distance Between Service Disruption (Rail) MP	==	IC-3 Provide Reliable Communication and Mobility	Dec '20	▼	29,207	30,000	30,000	30,000
				Preventive Maintenance Adherence (Rail)	==	IC-3 Provide Reliable Communication and Mobility	Dec '20	▲	100.0%	90.0%	90.0%	90.0%
				Preventive Maintenance Adherence (Motor)	==	IC-3 Provide Reliable Communication and Mobility	Nov '20	▲	97.3%	90.0%	90.0%	90.0%
				Mean Distance Between Failures (Motor)	==	IC-3 Provide Reliable Communication and Mobility	Nov '20	▲	7,212	6,000	6,000	6,000
				Excavator Availability (Metrolink & Metrorail)	==	IC-3 Provide Reliable Communication and Mobility	Dec '20	▲	97.1%	95.0%	95.0%	95.0%
				Elevator Availability (Metrolink & Metrorail)	==	IC-3 Provide Reliable Communication and Mobility	Dec '20	▲	99.3%	98.0%	98.0%	98.0%
				Bus Stop Inspectors	==	IC-3 Provide Reliable Communication and Mobility	Feb '21	▲	404	300	300	300
TMI-4 Expand public transportation (MOT)	TMI-4 Transportation system, but enhance mobility	TMI-4 Expand public transportation	Total monthly boardings (Bus)	==	IC-3 Provide Reliable Communication and Mobility	Jan '21		3,082,746	n/a	n/a	n/a	
			Total number of revenue miles (Bus)	==	IC-3 Provide Reliable Communication and Mobility	Dec '20	▼	1,849,190	2,396,773	28,793,271	28,793,271	
			Total number of revenue miles (Rail)	==	IC-3 Provide Reliable Communication and Mobility	Dec '20	▼	407,215	734,451	8,913,467	8,913,467	
			Total monthly revenue miles (Motor)	==	IC-3 Provide Reliable Communication and Mobility	Nov '20	▼	90,427	96,000	1,152,000	1,152,000	
			Total monthly boardings (Rail)	==	IC-3 Provide Reliable Communication and Mobility	Jan '21		798,119	n/a	n/a	n/a	
			Total monthly boardings (Motor)	==	IC-3 Provide Reliable Communication and Mobility	Jan '21		255,968	n/a	n/a	n/a	
			Total monthly boardings (STS)	==	IC-3 Provide Reliable Communication and Mobility	Jan '21		97,828	n/a	n/a	n/a	
TMI-2 Expand & improve bikeway, greenway and streetscaping system (PW)	TMI-2 Transportation system, but enhance mobility	TMI-2 Expand and improve bikeway, greenway and streetscaping system	Miles of Streetscaping Aided/Rehabilitated	==	IC-3 Provide Reliable Communication and Mobility	'19 FQ3	▲	4,777Miles	2,500Miles	10,000Miles	10,000Miles	
			Total Number of Traffic Control & Signal Name Signs Installed, Replaced and or Replaced	==	IC-3 Provide Reliable Communication and Mobility	Jan '21	▼	1,694Signs	2,700Signs	32,400Signs	32,400Signs	
GG1-1 Provide easy access to transportation information (PW)	GG1-1 Accessible, fast and available information	GG1-1 Provide easy access to information and services	All complaints per 100K boardings for Bus	✓	IC-3 Provide Reliable Communication and Mobility	Dec '20	▲	14.49	15.00	15.00	15.00	
GG1-2 Develop a customer-oriented organization (MOT)	GG1-2 Accessible, fast and available information	GG1-2 Support a customer-oriented organization	All complaints per 100K boardings for Rail	▼	IC-3 Provide Reliable Communication and Mobility	Jan '21	▲	1.25	1.50	1.50	1.50	
			All complaints per 100K boardings for Motor	▼	IC-3 Provide Reliable Communication and Mobility	Jan '21	▲	0.66	0.50	3	3	
TMI-1 Promote efficient traffic flow on Miami-Dade County roadways (MOT-PW)	TMI-1 Transportation system, but enhance mobility	TMI-1 Promote efficient traffic flow on Miami-Dade County roadways	Percentage of Traffic Signal Outlets to the ATMS	==	IC-3 Provide Reliable Communication and Mobility	Jan '21	▲	98.9%	95.0%	95.0%	95.0%	
			Traffic Signal Service Requests Completion (Signal Maintenance)	✓	IC-3 Provide Reliable Communication and Mobility	Jan '21	▲	100.0%	100.0%	100.0%	100.0%	
			Percentage occupancy P&R 348th	==	IC-3 Provide Reliable Communication and Mobility	Feb '21	▲	92%	40%	40%	40%	
GG0-1 Encourage creation of new small businesses (TPW)	GG0-1 Encourage creation of new small businesses	GG0-1 Encourage creation of new small businesses	Number of Active Firms (Increase in MDC (Transportation related)	==	HW-2 Support Livelihood and Employment	Dec '20		11,546	n/a	n/a	n/a	
PS-3 Ensure security at airports, seaport and on public transit (MOT)	PS-3 Effective measures and disaster preparedness	PS-3 Protect life, assets and infrastructure assets in high-traffic areas	Security Post Inspections	==	CS-2 Ensure Social Stability, Security, and Justice	Dec '20	▲	1,270	800	11,400	11,400	
			NTD Reportable Part I Crimes (Sexual)	==	CS-2 Ensure Social Stability, Security, and Justice	Dec '20	▲	3	10	10	10	
			Number of incidents at MOT Parking Facilities	==	CS-2 Ensure Social Stability, Security, and Justice	Dec '20	▲	0	52	144	144	
			NTD Reportable Part II Crimes (Public)	✓	CS-2 Ensure Social Stability, Security, and Justice	Dec '20	▲	3	3	60	60	
			Number of uniformed and/or plain-clothed, police details completed for the month	==	CS-2 Ensure Social Stability, Security, and Justice	Dec '20	▲	179	50	600	600	
Financial	Meet Budget Targets (TPW)	GG4-2 Effectively allocate and manage resources to plan, execute and deliver services, and control costs	Expans Total (TPW)	✓	LS-1 Promote Leadership and Effective Management	'21 FQ1	▼	\$144,691K	\$137,960K	\$51,875K	n/a	
			Positions Full-time Filled (TPW)	==	LS-1 Promote Leadership and Effective Management	'21 FQ1	▼	3,214	3,852	3,852	3,852	
			Revenue Total (TPW)	▼	LS-1 Promote Leadership and Effective Management	'21 FQ1	▼	\$121,545K	\$137,960K	\$51,875K	n/a	
Internal	MS-2 Provide well-maintained drainage to minimize flooding	MS-2 Provide well-maintained drainage in	MS-2 Provide well-maintained drainage in	Citizen Requested Drain Clearing Response	==	IC-3 Provide Reliable Communication and Mobility	Feb '21	▼	98.0%	100.0%	100.0%	100.0%



**Departmental Business Plan and Outlook**  
**Department Name: Transportation and Public Works**  
**FY2020-21 & FY2021-22**

Perspective Name	Objective Name	Grant Parent Objective Name	Parent Objective Name	Measure Name	Details	Responsible Director	As of	VR Flag	Actual	Target	FY2020-21 Annualized Target	FY2021-22 Annualized Target
Internal	IG-2 Provide well-maintained drainage to minimize flooding (PW)	<a href="#">IG-2: Continuity of services, safety and emergency services, emergency response</a>	<a href="#">IG-2: Provide well-maintained drainage to minimize flooding</a>	Proactive Arterial & Local Road Storm Drainage Maintenance	==	IS-2: Provide Reliable Communication and Mobility	Jan '21	🔴	440Crews	1,000Crews	21,000Crews	21,000Crews
	IG-1 Promote mixed-use, multi-modal, well designed, and sustainable communities (PW)	<a href="#">IG-1: Safe, healthy and accessible communities and sustainability</a>	<a href="#">IG-1: Promote better and overall performance</a>	Number of Roadway Miss Swept	==	IS-3: Provide Reliable Communication and Mobility	Jan '21	🔴	54Misses	82Misses	0,560Misses	3,900Misses
				Pothole Repair Response	⬇️	IS-3: Provide Reliable Communication and Mobility	Feb '21	🟢	234.9%	100.0%	n/a	n/a
				Percentage of Loadzone with Damaged Vehicle Detection Loops Replaced by In-House Crews with 30 Days	⬆️	IS-2: Provide Reliable Communication and Mobility	Jan '21	🔴	38%	90%	90%	90%
Learning and Growth	GG-2 Promote employee development and leadership (MST)	<a href="#">GG-2: Employee development and leadership</a>	<a href="#">GG-2: Promote employee development and leadership</a>	Percentage of Roadway Dept-Of-Trans Maintenance Response	⬇️	IS-2: Provide Reliable Communication and Mobility	Feb '21	🔴	36%	100%	n/a	n/a
				Number of Communications for Blue Operation, Incumbency	==	LS-1: Promote Leadership and Effective Management	Jan '21	🔴	29	50	600	600

**Initiatives**  
 There are no Objectives associated to the initiatives.

