





DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

Business Plan


Fiscal Years: 2022 and 2023
(10/1/2021 through 9/30/2023)

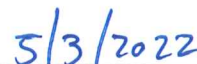


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DEPARTMENT OVERVIEW

Department Mission

“Miami-Dade’s Department of Transportation and Public Works, through its employees, will enhance the quality of life of Miami-Dade County residents, businesses, and visitors by delivering safe, clean, efficient, reliable, sustainable and equitable public transportation infrastructure and services.”

Department Description and 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 supports the economy by providing access to opportunities for employment, education, healthcare, and recreation for all Miami-Dade County residents, businesses, and visitors.

Our public transportation system supports equity by providing social and economic connections 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 to ensure 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 greatest challenges is safety on our streets for bicyclists 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



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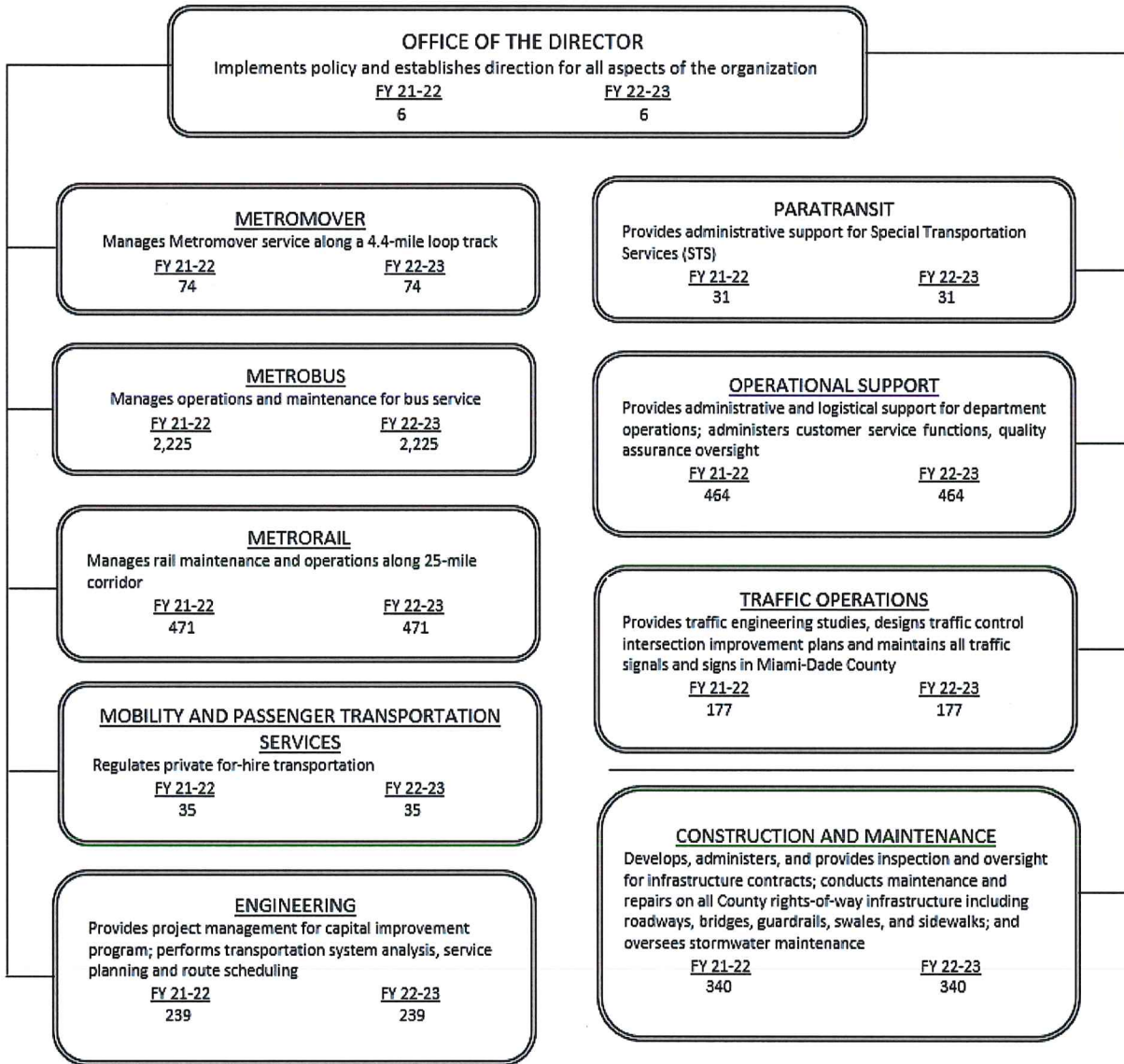
injuries from the transportation network and has been implemented in numerous cities throughout the world. It is a systematic approach to implement safety countermeasures and policies to reduce and ultimately eliminate fatalities and serious injuries related to mobility in Miami-Dade County.

Technology still plays a role in bringing mobility innovation. By joining efforts with technology companies and new mobility providers, DTPW 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 Traffic Engineering Division (TED) provides services to ensure submitted plans and studies comply with corresponding regulations. The Division performs in-house assessments and designs to improve traffic safety and operations as well as evaluate citizen's requests. In 2016, a new permit process to review special events was implemented to improve coordination, traffic flow, public safety, and organization during an event. A new process is being developed for play streets to facilitate a way for the community to utilize the road right of way as a temporary public recreational space.



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, enable 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 morning and 12.94% during afternoon peak hours. Smart Signal technology has also enabled the introduction of Transit Signal Priority (TSP) on the South-Dade Transitway, which will reduce 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 Commissioners awarded the countywide Advance Traffic Management System contract to Siemens. Upgrades to the remainder of the 2,900 traffic signals in the County began in Spring 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 heavily congested corridors underwent active arterial management in which 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 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, the SMART Plan is a groundbreaking transportation project that will drastically extend Miami-Dade's mobility options, helping to 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 under consideration for major transportation and public works upgrades. It is estimated that the approximately 1.7 million residents living within a 2-mile radius of the corridors will benefit from access to improved mobility.

One of the six SMART Plan corridors is the South Corridor Rapid Transit Project, a 20-mile-long dedicated transit corridor connecting Florida City to the Dadeland South Metrorail Station. The South Corridor is the first of the six corridors to have a complete Project Development &



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Environment (PD&E) study. In August of 2018, the TPO selected Bus Rapid Transit (BRT) as the Locally Preferred Alternative (LPA) and the project entered into the Federal Transit Administration FTA (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 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. DTPW issued Notice to Proceed (NTP) to the Design Build Firm on February 2, 2021. This project has moved rapidly through the process and is anticipated to begin revenue service in 2023.

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 are exploring the feasibility of creating transit-only lanes in corridors with high vehicular traffic by repurposing existing right-of-way. These dedicated lanes have been successfully implemented in other cities to allow buses to bypass congestion, move faster and provide better value and quality of life to commuters. DTPW's goal is to move more people, with less vehicular traffic improving the environment. Other short-term improvements that we are actively pursuing include:

- 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-and-ride locations.

The Resilience Plan addresses what to do if the COVID-19 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. DTPW has put the Resilience Plan into action to address the challenge of retaining and recruiting enough operators to run the existing service. Five express routes were suspended in November 2021 and four additional routes were fully or partly suspended in January 2022.

The COVID-19 pandemic presented many challenges as well as altered ridership patterns. Between the start of the pandemic and the end of 2021, 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.

In addition, a new mobility concept emerged out of the emergency. Due to severely reduced overnight ridership and the shortage of buses and operators during the heavier ridership



daytime hours, and 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. could continue to rely on DTPW’s transit system to get where they need to go safely.

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

Go Nightly operated alongside the other emergency supplemental service, from the beginning of the pandemic through to and concluded with the November 2021 lineup. After the Mayor lifted the emergency declaration in June, social distancing requirements were relaxed and there was no longer a need for the supplemental service.

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, South Miami Transitway stations, and Kendall Bus Terminal and to 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), followed by the Town of Cutler Bay municipal area in November 2020, and the Civic Center Metrorail station and West Kendall area in February 2021. The on-demand transit service provider is Via Transportation, a TNC company. In the first year of operation (October 2020-September 2021), the program served approximately 34,500 passengers and about 5,000 daily passengers with an average waiting time of 10 minutes or less.

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

The Underline: The Underline is 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. The Underline will serve 107,000 residents within a 10-minute walk, and will provide access to public transportation to one University and 24 schools,



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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, flexible sports facilities, 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, the Brickell Backyard, was completed and open to the public on February 26, 2021. This segment extends from the Miami River to SW 13th Street (Coral Way) and is 1/2 mile long.
- Segment 2 has been awarded to a Design-Build Team and the project is currently under construction. Construction started December 2020 and it is scheduled to be completed in July 2023. This segment is 2.14 miles long extending from SW 13th street (Coral Way) to SW 19th Avenue.
- Segment 3 extends from SW 19th Avenue to the Dadeland Metrorail Station Kiss-and-Ride Facility. It is approximately 7.36 miles long and traverses portions of the Cities of Miami, Coral Gables, South Miami and Unincorporated Miami-Dade County. DTPW was awarded the federal BUILD Grant which completes the funding required to build the project. In August 2020, DTPW awarded a contract for the development of the Design Criteria Package, which constitutes the 30% documents required for procurement and execution of the BUILD Grant Agreement. The Design Criteria Package was completed in 2021. DTPW is currently developing the 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 2021, the Department began the construction of protected bicycle/micromobility facilities in Downtown Miami in order to improve safety, reduce vehicular speeds, and promote mode split. The project, which initially entails construction of bicycle lanes only in Downtown Miami, will be progressively expanded in a cohesive manner to other areas of Miami-Dade. The project includes several safety features, such as the installation of physical separators, high emphasis crossings and markings, Americans with Disabilities Act (ADA) ramps and green paint at conflict areas. The initial network to be completed during 2022 will include Miami Avenue from South 1st Street to North 11th Street, East 1st Avenue from Southeast 1st Street to Northeast 11th Street, North 5th St and North 6th St from I-95 to Northeast 2nd Ave. This initial project will be fully functional by June 2022.



Bicycle Facilities: DTPW will enhance bicycle facilities at Metrorail Stations and other County buildings to improve the user experience of bicyclists while using transit. 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. In 2021, DTPW began requiring the installation of green paint at conflict points on all submitted plans showing existing or proposed bicycle lanes on arterial or collector roadways. DTPW approves the installation of continuous green paint on existing or proposed bicycle lanes as long as an interested agency executes an agreement for maintenance. DTPW considers repurposing of vehicular lanes to bicycle infrastructure on roadways with an acceptable Level of Service. DTPW evaluated and adopted a traffic loop to be used at signalized intersection to allow bicycles to actuate signals.

Our highway bridge engineering division has current projects that include enhancements to bridge projects for widening to provide bike lanes or shared use paths.

Ludlam Trail: DTPW will continue to work closely with Parks, Recreation and Open Spaces (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 2021, DTPW completed integrating into direct service the purchase of 560 of the newest bus fleet in the county. DTPW is scheduled to receive 33 electric buses in the first half of 2022 and 42 more during the last half Fiscal Year 2022.

For the first time since Metrorail opened its doors to passengers in 1984, DTPW placed its first new Hitachi 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 have been replaced with Hitachi rail cars.

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. The next steps for Open Payment are as follows::

- Virtualize DTPW transit passes on Easy Card into a Digital Wallet format.
- Integrate with regional partners for seamless fare payment interoperability for public transportation within the South Florida region.
- Enable travelers to tap and pay for their journeys using the transit pass in their digital devices.

DTPW has an open invitation for all third parties with a Mobility as a Service (MaaS) solution to join Miami-Dade County's efforts. Mobility as a Service will allow seamless trip planning and fare payments of public transportation and on-demand mobility services.

Transit Rewards

To promote customer engagement, 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 through its employees to enhance the quality of life of Miami-Dade County residents, businesses, and visitors by delivering safe, clean, efficient, reliable, sustainable, and equitable public transportation infrastructure and services. Transit Signal Priority (TSP) on key corridors will allow buses to increase average travel speeds and reduce overall passenger travel time.

Another major improvement effort is the Strategic Miami Area Rapid Transit (SMART) 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 60 already being installed as of January 2022.

The construction of the Golden Glades Multimodal Transportation Facility is a project that the Florida Department of Transportation (FDOT) is managing on behalf of the County. The project is located at the southwest quadrant of the Golden Glades Interchange. It will include improvements to the existing site, including 14 saw tooth bus bays, 4 intercity bus bays, air-conditioned waiting areas, covered walkways, a new 6-level parking garage, bicycle storage, bicycle repair stations, landscaping, and public restrooms. This project will also include a new pedestrian bridge connecting the site to the existing Tri-Rail facilities and electric vehicle charging stations, as well as accommodate kiss-and-ride areas and transportation network carriers such as Uber or Lyft. Construction began in January 2019 and is slated to be completed in February 2022 and it will begin operation on January 24th, 2022.

The Tamiami Park-and-Ride lot, located at SW 8th Street and SW 14th Avenue, 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. 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 Count and 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 Brightline. Brightline 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 Metrobus systems directly from Downtown Miami, providing our residents and tourists with fast, safe, and easy travel options throughout the County and South Florida. Additionally, DTPW and Brightline broke ground on the new Aventura Station located adjacent to Aventura Mall at the 19800 block of Harriet Tubman Highway on Thursday, September 3, 2020.

The Aventura Station is approximately 17,500 square 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 summer 2022. 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 Florida East Corridor (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 public and private mobility services 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. In 2021, DTPW began assisting municipalities with the merging of GTFS data feeds, which facilitates reporting and integration of real time data of local circulators by the cities and allows better trip planning for the end-users. During 2022, DTPW will work to extend these services to all 34 municipalities.

Additionally, the Department is currently piloting the implementation of Mobility Data Standards for two-way communication between scooter companies and the County. Through this pilot, the County will better understand how the development of digital policy could improve the management and oversight of private mobility operation within the public right-of-way.

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 waterborne transportation services. Earlier last year, a resolution of the 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 water taxi service began 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 water taxi service is 100% private and is not receiving subsidies from governmental agencies. The new service will act as a commuter service between 6:00 a.m. and 7:00 p.m. 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 each way. This fare is comparable with Metrobus fares at \$2.65. A second route is being readied for deployment between the James L. Knight Center and Dinner Key Marina in Coconut Grove. The operator is currently working with the City of Miami.

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

DTPW's goal is to provide its passengers, employees, and others who come in contact with the transportation system with the highest degree of safety that is available. DTPW's governing document for system safety is the Public Transit Agency Safety Plan (PTASP) which establishes a formal structure and processes to identify, track, control, minimize, and resolve hazards associated with DTPW bus and rail systems. The Office of Safety and Security (OSS) has dedicated personnel (OSS Audit & Compliance Team) to conduct an annual Internal Safety Audit. The audit team reviews all elements of the PTASP within a three-year cycle to verify compliance to plan requirements and effectiveness of implementation. 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 (or other sources) 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 (audits, accidents, incidents, drills, etc.) and provides a monthly report on the progress of CAPs 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.

In addition, 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.

DTPW utilizes a Safety Management System (SMS) approach to prevent accidents, to reduce risk of injury and minimize damage to property and equipment. DTPW is committed to a positive safety culture and creating a workplace that is safe, healthy, and injury free. 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.



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

Approximately 1,012 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, which will allow for yearly scheduling as well as remote monitoring of the flasher operations.

A total of 6 Rectangular Rapid Flashing Beacons (RRFBs) and 2 mid-block crosswalks have been installed and 12 signal modifications (added pushbuttons and pedestrian signal heads) have been performed. Similarly, 36 School Flashers, 3 RRFBs, 4 mid-block crosswalks and 29 signal modification have been designed by TED and approved by TSS.

In 2020, DTPW strengthened the requirements for high emphasis crosswalks by adopting installation of this type of crosswalk on various high expected usage locations without the need for a traffic study and approval.

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. At present, 354 out of 3,109 County's signalized intersections are working with an all-exclusive pedestrian phase and 60 intersections have leading pedestrian intervals. The first installation of a scramble crosswalk within the County was completed in 2020 at the intersection of NE 2nd Street at NE 1st Avenue.

During the COVID-19 pandemic, several short-term streets closures were implemented by municipalities as a temporary maintenance of traffic closure to maximize pedestrian spaces and amenities for residents and businesses.

Vision Zero Program: DTPW is collaborating with County departments and local municipalities for the development and implementation of a Vision Zero Program 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 Program Plan developed a list of projects based on fatalities and severe injuries, roadway jurisdiction, transit connections and community



facilities. It prioritizes the intersections and roadway segments with a high number of fatal and severe 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.

The Program Plan developed a comprehensive Vision Zero evaluation criteria that 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 crimes. 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. 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 program, have 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 to the artists, helping to establish a new sense of community pride in the transit system.

To increase community engagement, DTPW will enhance passenger amenities, improving 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



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- 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 March 2022. 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 our transit facilities to ensure that they are well maintained.

DTPW will continue collaboration with the Office of Resilience and work diligently to develop sustainable and resilient infrastructure as we continue to improve and enhance our transit facilities. In 2017, Miami-Dade County passed a resolution to adopt the Envision® sustainable infrastructure framework and rating system for Miami-Dade infrastructure projects. Miami-Dade County's commitment to use the Envision framework has resulted in two Envision-verified projects to date.

The department received Envision® Bronze Award from the Institute for Sustainable Infrastructure (ISI) for the Miami-Dade County Dolphin Station Park-and-Ride/Transit Terminal Facility. This is Miami-Dade County's second Envision® award for a public project. In June 2020, DTPW received an Envision® Silver Award from ISI for the Miami-Dade County Tamiami Station Park-and-Ride / Bus Terminal Facility (Tamiami Station).

We will continue to expand the Sustainable Buildings Program by designing holistic, data-driven building and infrastructure projects that advance our goals to support healthy communities, the environment, and the economy.

• ***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 was awarded in November 2021. The County has partnered with Miami Dade Smart Lighting Partners, LLC 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 project 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. French drains 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.

KEY ISSUES

- Bus operator retention and recruitment. Staff are coordinating efforts with Marketing, HR, and Operations to attempt to recruit and retain more operators to be able to run existing service.
- 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



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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. With Swiftly data, Planning staff are able to review and modify routes at each lineup.
- DTPW continues to rejuvenate its infrastructure. The track remains functional through repair and/or replacement of sub-system components. 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 restrict the recruitment of candidates based on qualifications for certain critical technical positions from outside (non-union) 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 if they met the requirements established by DTPW. We continue the process of reviewing positions with TWU for other safety-sensitive roles as directed by the Florida Department of Transportation.
- Attracting and retaining 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. The department continues to face challenges such as performing basic critical repairs that are required to maintain a safe and effective roadway infrastructure.
- Funding for pedestrian and bicycle infrastructure improvements not linked to a roadway project need to be recognized.
- 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



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equipment, and equipment with the support of the Quality Assurance Division in monitoring and assisting in improving the inspection process. DTPW is now current regarding 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.
- 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.



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 makeup 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. The project was awarded to Alstom (formerly Bombardier) and is currently in the design phase. Construction is scheduled to begin in the third quarter of 2022.

Additional Elevators at the Dadeland North Metrorail Station: Due to high ridership at the Dadeland North Metrorail Station, the existing bank of elevators (four elevators) does not provide an acceptable level of service during peak hours. In FY 21 DTPW is adding two 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 Fall 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 deficiencies and possible opportunities for enhancement 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. Dadeland South 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 will 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 Fall 2022.

The Quality Assurance (QA) Division has established a DTPW Configuration Management Plan to ensure consistency of the performance, function, and physical attributes within the project phases of design, construction, and as part of the final as-built drawings, throughout the life of the DTPW assets.

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:

TODs 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 fourth 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 includes new walkways, ramps, improved lighting, new hardscape, signage, bicycle racks and elevator rehabilitation.
- **VOX SOMI Phase 1 at South Miami Metrorail Station:**



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The project consists of 2 phases. Phase 1 of this project has been completed and consists of 102 student housing units built above the existing west garage.

- Link at Douglas Metrorail Station:
This TOD consists of 4 phases. Phase IA of the project, “CORE Link at Douglas”, has been completed and consists of 312 residential units.
- Miami Worldcenter Park West Metromover Station:
Station remodeling to include renovations and rehabilitation of stairways and escalator, new elevator, new tiles, and lighting have been completed.

TODs Under Construction

- Courthouse at Government Center Metrorail Station:
New Miami-Dade civil courthouse.
- 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 1A is 312 residential units and 1B 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. All phases are expected to be complete in 2031. This project includes several Station upgrades and improvements which are underway.

TODs Forthcoming

- Upland Park at Dolphin Station on the East/West Corridor: Terra Group was selected from the RFP procurement process to develop a Multimodal TOD on 45 acres. The project will consist of 2,000 residential units, a school, a hotel, office space, retail space and a life science center.
- Metro Grande at Okeechobee Metrorail Station:
This mixed-use project consists of 202 elderly affordable housing units, 84 luxury workforce units and 10,225 sq ft of retail.
- Quail Roost on the South-Dade Transitway: Proposed 500 residential affordable and market rate units, 10,000 square feet of retail and 261 Park-and-Ride facility.



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- Vizcaya Metrorail Station: Residential building with incidental retail space including 100 transit parking spaces. TOD is currently being negotiated 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.
- 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 now complete. 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 timeframe. 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. Through numerous stakeholder meetings and several public meetings and workshops, the project team presented the recommended alternative to the TPO Governing Board in January 2020. The recommended alternative was unanimously approved and adopted as 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) for the Beach Corridor Trunkline from the United States Coast Guard (USCG) and is expecting to finalize the EA document in Spring 2022.



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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 Trunkline 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, MBM Partners, LLC (MBM), for an Interim Agreement (IA). The IA was presented to the Board for approval in October 2020. DTPW is currently working with the selected team to complete pre-development work and negotiation of the Project Agreement. The IA phase is anticipated to be completed Summer 2022.

– East-West is a 13.5-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 extensive public outreach process, the project team presented BRT as the recommended alternative to the Miami-Dade TPO Governing Board in October 2020. The recommended alternative was unanimously approved and adopted as the LPA. The East-West Corridor project team submitted the corridor NEPA checklist to FTA in March 2021 and is currently working with the FTA to obtain a NEPA Class of Action (COA). In August 2021, the County submitted to FTA a letter requesting entry into the Project Development (PD) phase under the FTA Capital Investment Grants (CIG) program for the East-West Corridor Rapid Transit Phase 1 Project. The project was accepted into the PD phase by FTA on October 26, 2021. DTPW is currently working on finalizing the NEPA documents, development of 30% plans and the FTA Small Starts Application process.

– North Corridor is a 10-mile corridor connecting the Dr. Martin Luther King, Jr. Metrorail Station to NW 215th Street along NW 27th 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. In June 2020, the County advertised a P3 Request for Proposal seeking a concessionaire to design, permit, construct/build, finance, operate and maintain full turn-key services for a rapid mass transit. Phase I submittals were received and shortlisted in Fall 2020. The solicitation is entering into its second phase. Phase II technical proposal are due Spring 2022, and Bid Opening and Selection are scheduled for Summer 2022.

– Northeast Corridor is a 13.5-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, the County began its effort in advancing the implementation the Northeast Corridor. In March 2021, the TPO Governing Board adopted commuter/passenger rail as the LPA for the Northeast Corridor. The project team submitted a NEPA checklist for the corridor in May 2021 and is currently working with FTA to obtain a NEPA COA. In August 2021, the County submitted to FTA a letter requesting entry into the Project Development (PD) phase under the FTA Capital Investment Grants (CIG) program for the Northeast Corridor Rapid Transit Project. The project was accepted into the PD phase by FTA on October 26, 2021.

– 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 Project Advisory Group meetings between October 2017 and June 2018, three public corridor workshops in Fall 2017, and three 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. This project moved through the process at a very fast pace and is anticipated to begin revenue service in 2023.

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 with BRT service. The project will also connect Dolphin Station to Downtown Miami and the Panther Station to Downtown Miami. The PD&E study for the Flager BRT project is led by FDOT.
- 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 F3 – Beach Express South: Connecting the Miami Central Station to the Miami Beach Convention Center; the only infrastructure improvement is on Washington Ave.

DTPW is the lead on the BERT network study. The BERT network study received an NTP in March 2019 and is anticipated to be completed by 2022.

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, has 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 July 2023 and the remainder of The Underline must be completed and closed out by no later than June 2026.

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 were added to accommodate passengers with social distancing and improve frequencies on the most heavily traveled routes. As the pandemic has continued, Metrobus has incorporated the daily cleaning and sanitizing of every bus in service into as a standard operational procedure. 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.



ATTACHMENT 1 – BUSINESS PLAN REPORT

Business Plan Report Department of Transportation and Public Works											
Respective Name	Objective Name	Grand Parent Objective Name	Parent Objective Name	Measure Name	Details	As of	VR Flag	Actual	Target	FY2021-22 Annualized Target	FY2022-23 Annualized Target
Customer	TM1-1 Promote efficient traffic flow on Miami-Dade County roadways (MDT-PW)	TM1- Transportation system that facilitates mobility	TM1-1 Promote efficient traffic flow on Miami-Dade County roadways	Percentage of Traffic Signals Online to the ATMS	⊖	Dec 21	🟢	89.3%	85.0%	85.0%	85.0%
				Traffic Signal Service Requests Completion (Signal Maintenance)	🟡	Dec 21	🟢	100.0%	100.0%	100.0%	100.0%
				Percentage occupancy PMR 244th	⊖	Dec 21	🟢	48%	40%	40%	40%
	TM1-2 Expand & improve bikeway, greenway and sidewalk system (PW)	TM1- Transportation system that facilitates mobility	TM1-2 Expand and improve bikeway, greenway and sidewalk system	Miles of Sidewalk Added/Rehabilitated	⊖	21 FQ4	🟢	3.35Miles	2.50Miles	10.00Miles	10.00Miles
				On-Time Performance (STS)	⊖	Dec 21	🟢	88.79%	85.00%	85.00%	85.00%
				Citizen Performance/Schedule Adherence - Weekday-Dam (Overall System)	⊖	Nov 21	🔴	69.30%	78.00%	78.00%	78.00%
	TM1-3 Provide reliable, accessible and affordable transit service (MDT-PW)	TM1- Transportation system that facilitates mobility	TM1-3 Provide reliable, accessible and affordable transit service	% of Targeted Sidewalk Seen to Bus Stops Retrofit for ADA Access (Cumulative)	🟡	21 FQ4		80%	n/a	n/a	n/a
				On-time Performance (Metrolink)	⊖	Nov 21	🔴	85.70%	85.00%	85.00%	85.00%
				Total monthly Boardings (Bus)	⊖	Dec 21		3,122,875	n/a	n/a	n/a
	TM1-4 Expand public transportation (MDT)	TM1- Transportation system that facilitates mobility	TM1-4 Expand public transportation	Total number of revenue miles (Bus)	⊖	Dec 21	🔴	2,038,782	2,380,773	20,785,271	20,785,271
				Total number of revenue miles (Rail)	⊖	Dec 21	🔴	714,278	734,451	6,813,407	6,813,407
				Total number of revenue miles (Mover)	⊖	Dec 21	🔴	89,723	96,000	1,152,000	1,152,000
Total monthly boardings (Rail)				⊖	Jan 22		831,130	n/a	n/a	n/a	
Total monthly boardings (Mover)				⊖	Jan 22		451,596	n/a	n/a	n/a	
Total monthly boardings (STS)				⊖	Dec 21		104,488	n/a	n/a	n/a	
TM1-5 Facilitate connectivity between transportation systems and providers (MDT)	TM1- Transportation system that facilitates mobility	TM1-5 Facilitate connectivity between transportation systems and providers	Number of vehicles parked at Metrolink Stations	⊖	Dec 21	🔴	7,870	117,000	1,404,000	1,404,000	
			Total Monthly Activity (Metrolink - Airport)	⊖	Jan 22	🔴	48,400	83,333	986,998	986,998	
TM2-3 Ensure the safe operation of public transit (MDT)	TM2- Safe transportation system	TM2-3 Ensure the safe operation of public transit	Fleet Preventable Accident Rate per 100000 miles (Bus)	🟡	Sep 21	🔴	1.51	1.50	1.50	1.50	
			PS3-3 Ensure security of airports, seaport and on public transit (MDT)	PS3- Effective emergency and disaster management and disaster management	PS3-3 Protected key infrastructure and enhance security in key sensitive places	Security Post Inspections	⊖	Dec 21	🟢	1,117	850
NTD Reportable Part I Crimes (Serious)	⊖	Dec 21				🟢	0	10	10	10	
Number of Incidents at MDT Parking Facilities	⊖	Dec 21				🟢	0	12	144	144	
NTD Reportable Part II Crimes (Petty)	🟡	Dec 21				🟢	0	5	60	60	
Number of uniformed and/or plain-clothed police details completed for the month.	⊖	Dec 21				🔴	45	50	600	600	
GG1-1 Provide easy access to transportation information (PW)	GG1- Accessible, fair and accessible government	GG1-1 Provide easy access to information and services.	Total Number of Traffic Control & Street Name Signs installed, Repaired and or Replaced	⊖	Dec 21	🔴	1,720Signs	2,700Signs	32,400Signs	32,400Signs	
			GG1-2 Develop a customer-oriented organization (MDT)	GG1-2 Provide a customer-focused organization	All complaints per 100K boardings for Bus	🟡	Dec 21	🔴	17.00	15.00	15.00
All complaints per 100K boardings for Rail	🟡	Dec 21			🟢	1.16	1.50	1.50	1.50		
All complaints per 100K boardings for Mover	🟡	Dec 21			🟢	n/a	0.50	5	5		
TM3-2 Provide well maintained attractive and modern transportation facilities and vehicles (MDT)	TM3- Well-maintained, modern transportation, infrastructure and assets	TM3-2 Provide well-maintained, attractive and modern transportation facilities and vehicles	Mean Distance Between Failures (Bus), KPI	⊖	Nov 21	🟢	5,281	4,000	4,000	4,000	
			Preventive Maintenance Adherence (Bus)	⊖	Nov 21	🟢	89.0%	80.0%	80.0%	80.0%	
			Mean Distance Between Service Disruption (Rail), KPI	⊖	Nov 21	🔴	23,343	38,000	38,000	38,000	
			Preventive Maintenance Adherence (Rail)	⊖	Nov 21	🟢	81.0%	80.0%	80.0%	80.0%	
			Preventive Maintenance Adherence (Mover)	⊖	Oct 21	🟢	84.9%	80.0%	80.0%	80.0%	
			Mean Distance Between Failures (Mover)	⊖	Oct 21	🔴	4,535	6,000	6,000	6,000	
			Elevator Availability (Metrolink & Metrosilver)	⊖	Nov 21	🟢	85.1%	85.0%	85.0%	85.0%	
			Elevator Availability (Metrolink & Metrosilver)	⊖	Nov 21	🟢	87.8%	86.0%	86.0%	86.0%	



Departmental Business Plan and Outlook
Department Name: Transportation and Public Works
FY2021-22 & FY2022-23

Respective Name	Objective Name	Grand Parent Objective Name	Parent Objective Name	Measure Name	Details	As of	VR Flag	Actual	Target	FY2021-22 Annualized Target	FY2022-23 Annualized Target
Customer	TM3-2 Provide well maintained, attractive and modern transportation facilities and vehicles (MDT)	TM3- Well-maintained, modern transportation, infrastructure and assets	TM3-2 Provide well-maintained, attractive and modern transportation facilities and vehicles	Bus Stop Inspections	=	Dec 21	🟢	433	350	350	350
	CO2-1 Encourage creation of new small businesses (TPW)	CO2- Entrepreneurial development opportunities within Miami-Dade County	CO2-1 Encourage creation of new small businesses	Number of Active For-Hire Licenses in MDC (Transportation related)	=	Oct 21		8,700	n/a	n/a	n/a
Financial	Meet Budget Targets (DTPW)	GG4- Effective leadership and management practices	GG4-3- Effectively allocate, and utilize resources to meet, permit and (if) any operating and capital needs	Open Total (DTPW)	👇	21 FQ3	🔴	\$145,005K	\$137,900K	n/a	n/a
				Positions: Full-time Filled (DTPW)	=	21 FQ4	🔴	3,500	3,853	n/a	n/a
				Revenue Total (DTPW)	👇	21 FQ3	🔴	\$22,746K	\$137,900K	n/a	n/a
Internal	NI2-2 Provide well maintained drainage to minimize flooding (PW)	NI2- Continuity of clean water and community sanitation services	NI2-2 Provide well-maintained drainage to minimize flooding	Citizen Requested Drain Cleaning Response	👇	Dec 21	🟢	100.0%	100.0%	100.0%	100.0%
				Proactive Arterial & Local Road Storm Drain Maintenance	=	Dec 21	🔴	248Drains	1,800Drains	21,000Drains	21,000Drains
	NI1-1 Promote mixed-use, multi-modal, well designed and sustainable communities (PW)	NI1- Safe, healthy and thriving neighborhoods and communities	NI1-1 Promote healthy and thriving neighborhoods	Number of Roadway Miles Swept	=	Dec 21	🟢	84 miles	825miles	9,900miles	9,900miles
				Pothole Repair Response	👇	Dec 21	🔴	85.6%	100.0%	100.0%	100.0%
				Percentage of Locations with Damaged Vehicle Detection Loops Replaced by In-House Crews within 30 Days	👇	Aug 20	🔴	16%	90%	90%	90%
			Percentage of Roadway Drop-Offs Maintenance Response	👇	Dec 21	🔴	86%	100%	100%	100%	
Learning and Growth	GG2-2 Promote employee development and leadership (MDT)	GG2- Excellent employee and customer workforce	GG2-2 Promote employee development and leadership	Number of Commendations for Bus Operator, monthly	=	Dec 21	🔴	29	50	600	600

Initiatives
 There are no Objectives associated to the initiatives.

