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Information Technology Department Business Plan

Fiscal Years: 2020 and 2021

(10/01/2019 through 9/30/2021)

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Delivering Excellence Every Day

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BUSINESS PLAN REPORT

DEPARTMENT OVERVIEW

Department Mission

"At ITD, we provide technology, information, and business solutions that exceed customer's expectations and enhance the quality of life in our community"

The Information Technology Department (ITD) is the central technology provider for Miami-Dade County. The Department provides information technology services that enable and support the operations of County departments, external governmental agencies and residents alike. As a custodian of data and innovation, the Department strives to make information and services easily accessible to customers and visitors of Miami-Dade County. As technology has evolved, a central priority focuses on the development and management of a reliable and secure IT infrastructure, including network, radio, telephony, hardware and software platforms that support countywide applications and services. ITD partners with County executives, departments, and industry providers to implement and maintain modern solutions that enable efficient operations and delivery of County services. Further, ITD collaborates and coordinates the Information Technology Leadership Council (ITLC) to set IT priorities, policies and innovative practices that cut across departments within the County. The Department establishes business process improvements and countywide training to socialize IT standards, security mandates, and project management concepts in line with industry best practices. Therefore, the Department is able to achieve this level of support by leveraging technology providing innovation and continuity of operations. Key stakeholders include all County departments, Miami-Dade County municipal governments, local, state, and federal agencies, elected officials, Miami-Dade County residents, businesses, and visitors that visit the County's website worldwide.

Our Customer

ITD's internal customers are County departments and agencies. External customers include local and municipal entities, many of which are public safety agencies, the State of Florida, the federal government, and the residents of Miami-Dade County. Our customers have increasingly made use of interoperable technology channels to obtain information and conduct business using the County's readily available digital solutions. As such, Miami-Dade County residents expect reliable, secure websites and mobile apps. Moreover, customer departments expect a readily available and secure computing and networking infrastructure to support their respective business functions. They seek cost-effective and timely solutions to address their business needs and communities of interest. Additionally, the use of self-service solutions through all channels of access is a priority for all customers.

County departments manage diversified business services resulting in unique requirements and needs. ITD continually evaluates industry best practices for new technologies and implements enterprise systems to meet customer demand. As systems and business processes evolve, ITD is persistent in seeking opportunities for modernizing the portfolio and implementing best in class technology solutions.

A comprehensive listing of IT services, service level metrics, and associated rates are made available to ITD customers online including digital approval of Memorandums of Understanding (MOU) and cost detail documents. The provisioning of services is assessed by the Business Relationship Management (BRM) team throughout the fiscal year to ensure adherence to agreed-upon service levels and service effectiveness creating the opportunity to gauge satisfaction with ITD services and adjust to better

serve the customer. Further, the BRM team works closely with customer business units to identify needs leveraging existing solutions or emerging trends that ensure the alignment of customer business priorities with countywide IT strategy. Together with the customer, ITD will take innovative steps to not only enhance existing systems, but for creating new sources of value that will change the way government interacts with residents.

Emerging customer trends include increased demand for self-service functionality, data analytics to enhance decision making, mobility, transparency, and enhance channels to simplify, integrate and streamline service delivery. ITD will continue to implement information technology best practices into a consolidated environment, utilize the *maximum* efficiency of systems, staff and resources available to Miami-Dade County; consolidation of IT infrastructures and redundant functionalities countywide is well underway. ITD continues to work with customers to identify opportunities to realize additional efficiencies and savings through technology.

ITD adheres to federal, state and local government regulations, including the federal Communications Commission (FCC), Health Insurance Accountability and Portability Act (HIPAA), Florida Department of Law Enforcement's (FDLE), U.S. OMB Circular A-87, National Incident Management System (NIMS) for Emergency Response, Florida statutes for the Public Records and Government in Sunshine laws, Payment Card Industry (PCI), NEIM (National Information Exchange Model) and with Criminal Justice Information System (CJIS) requirements.

Table of Organization

OFFICE OF THE DIRECTOR

- Oversees the provision of IT resources and services and performs Chief Information Officer (CIO) functions

FY 19-20	FY20-21
3	4

OPERATIONAL SUPPORT

- Provides asset management, financial, budgetary, human resources and administrative support to IT operations

FY 19-20	FY 20-21
46	51

FIELD SERVICES

- Delivers engineering, enterprise maintenance, installations, and support for telephone systems, computer peripherals, wireless devices, and wide and local area network support

FY 19-20	FY 20-21
121	126

GEOSPATIAL TECHNOLOGIES

- Delivers ability to enable location intelligence, spatial analysis & data science, mapping, imagery, real-time and temporal visualizations & analytics, and data maintenance services.

FY 19-20	FY 20-21
111	78

ENTERPRISE RESOURCE PLANNING

- Delivers enterprise program services for Enterprise Resource Planning (ERP) and core legacy systems including human resource and financial systems

FY 19-20	FY 20-21
69	51

SHARED SERVICES

- Develops IT multi-platform capabilities for the Water and Sewer Department providing for continuous business improvement. Drives strategic IT direction Countywide through the Business Relationship Management program

FY 19-20	FY 20-21
74	74

TRANSPORTATION SERVICES

- Provides innovation, mobility capabilities and multi-platform departmental automated systems for public works, waste management, seaport and transit business needs

FY 19-20	FY 20-21
62	62

SERVICE MANAGEMENT

- Provides centralized services and support to County Departments through the IT Service Desk, telephone services, and service management. Maintains internal incident, work order and billing systems

FY 19-20	FY 20-21
34	34

DATA CENTER SERVICES

- Provides 24 X 7 operation and support for the hardware and system software that run the County's mainframe and distributed systems environments; provides enterprise database, storage and backup services, desktop and server virtualization and mainframe printing services

FY 19-20	FY 20-21
151	146

RADIO COMMUNICATION SERVICES

- Provides local and regional public safety first responders and County departments with efficient, reliable, and secure radio communications services and solutions

FY 19-20	FY 20-21
54	54

ENTERPRISE APPLICATIONS (Public Safety/Justice Systems)

- Provides multi-platform automated application systems for the support of public safety applications for the Clerk of Courts, Police, Corrections and Rehabilitation and other criminal justice partners

FY 19-20	FY 20-21
60	63

ENTERPRISE SECURITY

- Develops and implements data security policies, manages enterprise security risk, and manages the County's data security infrastructure, remote access, directory services, and mobile messaging

FY 19-20	FY 20-21
28	29

ENTERPRISE ARCHITECTURE

- Delivers services for enterprise middleware, architecture, business intelligence, Smart Cities operations, and development support for 311 Answer Center and RER applications portfolios

FY 19-20	FY 20-21
77	86

CITIZEN SERVICES

- Provides multi-platform Countywide and departmental automated systems for administrative, legislative, parks, property appraiser, public housing, and community action needs

FY 19-20	FY 20-21
38	36

COUNTY ENTERPRISE SYSTEMS

- Provides industry leading technology that can be utilized by all county departments and services County citizens. These county systems include Asset management, Content management, Commerce and Tax Collection.

FY 19-20	FY 20-21
0	42

The FY 20-21 total number of full-time equivalent is 936 FTEs.

Strategic Alignment Summary

The Department primarily supports the following objectives from the General Government portion of the Miami-Dade County Strategic Plan:

GG1-1	Provide easy access to information and services
GG1-2	Support a customer-focused organization
GG2-1	Attract and hire new talent
GG2-2	Promote employee development and leadership
GG2-3	Ensure an inclusive and diverse workforce
GG3-1	Deploy effective and reliable technology solutions that support Miami-Dade County services
GG3-2	Ensure security of systems and data
GG4-2	Effectively allocate and utilize resources to meet current and future operating and capital needs

In addition, ITD indirectly supports many goals and objectives outlined in the County's Strategic Plan as part of the service the Department provides to customers.

Alignment of Selected Scorecard Measures to Resilience

Below are the measures from the Department scorecard that can be associated to one of the 12 Resilience Drivers described in the County budget as part of the Rockefeller Foundation's 100 Resilient Cities Program.

Scorecard Measures	***Resilience Driver*** (Chosen from list below)
GG3-1 Measure: Increase in Number of GIS Layers in Open Data	LS2: Empower a Broad Range of Stakeholders
GG3-1 Measure: 911 Availability Index	IE3: Provide Reliable Communication and Mobility
GG3-3 Measure: % public facing and critical servers with current patches installed	IE3: Provide Reliable Communication and Mobility

Resilience Drivers:

LS1: Promote Leadership and Effective Management
LS2: Empower a Broad Range of Stakeholders
LS3: Foster Long-Term and Integrated Planning
HW1: Meets Basic Needs
HW2: Supports Livelihoods and Employment
HW3: Ensures Public Health Services
ES1: Promote Cohesive and Engaged Communities
ES2: Ensure Social Stability, Security, and Justice
ES3: Foster Economic Prosperity
IE1: Provide and Enhances Protective Natural and Man-Made Assets
IE2: Ensure Continuity of Critical Services
IE3: Provide Reliable Communication and Mobility

KEY ISSUES

The following SWOT identifies key issues facing the department as weaknesses and threats.

Strengths	***Weaknesses***
• Enterprise infrastructure technology investments • Business process knowledge of County operations • Established customer relationships • Enhanced cost effectiveness and efficiencies as a result of IT consolidation • Business transparency through digital contracts, centralized billing database and portfolio business planning • Leveraging cloud-based service options for expanded technology solutions • Experienced and talented employees for commitment to technology and innovation • Enhanced government transparency to constituents through the open portal	• Advanced customer service skills – addressed with *on-going training* • Limited documentation of internal business processes to assess enhancement opportunities • Advancement of metrics and measures to track operational goals, efficiencies, and success factors • Execution of Succession planning strategy due to recruitment procedural rigidness • Limited marketing of departmental services and products • Limited implementation of contemporary IT classifications/skills • Loss of institutional knowledge through attrition and retirement
Opportunities	***Threats***
• Customer's business process re-engineering via implementation of best business practices • Coordinated investment in enterprise solutions • Increased adoption of ecommerce, internet, and mobile services by citizens, visitors, and businesses • Increased use of self-service technologies • Streamline and strengthen vendor management and partnerships • Providing technology solutions to municipalities and other government agencies • Expand customers' involvement in the adoption of Agile Framework • Established project governance and methodologies	• Future economic and fiscal environment • Loss of customer's institutional business process knowledge due to attrition and retirement • Lack of County coordination for strategic priorities of IT modernization efforts • Rapidly changing cybersecurity threat landscape • Limited customer governance to prioritize competing business initiatives • Change in legislative and regulatory environments • Ability to attract and retain IT talent in a competitive market • Impediments to innovation spending in a rapidly changing technology environment due to procurement procedural rigidness

County departments will continue to address issues associated with aging infrastructure and legacy technologies in their respective budget submissions. Department Business Relationship Managers (BRM) work with customers to ensure key issues that include innovation and modernizations are planned in upcoming budget cycles to address *Key Issues* associated with technology across the County organization.

PRIORITY INITIATIVES

Scaling the Bi-Modal Organization

The Department has made significant advances in the adoption of a Bi-Modal IT organization model, which assumes that the IT enterprise organizational structure would support two modes of operation – one to preserve the foundation and structure that maintain existing core disciplines focused on stability and efficiency, and the other mode to respond to the new innovating, emerging and changing technology demands focused on time-to-market, rapid application evolution, and close alignment with business units. ITD will continue to evolve by scaling the bi-modal organization into one that is in a continuous improvement mode which anticipates changing technology expectations to provide innovative digital government technology solutions.

During FY2019-20 and FY2020-21, the Department's charge to execute the Mayor's initiative to implement a centralized IT environment will be near completion leveraging maximum efficiency of systems, staff and resources across Miami-Dade County. Four departments are pending consolidation to bring the initiative to a close. They are Medical Examiner (ME), Fire Rescue (FR), Aviation (AV), and Elections (EL).

In the spirit of this ongoing initiative, County departments will be further analyzed. The goal is to achieve cost savings, leverage the Bi-Modal model, find efficiencies in process, and establish standardization of products and IT methodologies.

Below are high level initiatives that will support this model ensuring expanded IT capability, organizational effectiveness, and actionable synergies among departments across Miami-Dade County supporting innovation and new ways of conducting business.

Enterprise solutions focused on stability and efficiency

- **Enterprise IT Procurement:** Contract consolidation allows the County to leverage its procurement volume to achieve more favorable pricing terms and lower operational costs.
- **IT Service Management:** In upcoming fiscal cycles, the key emphasis will focus on customer self-sufficiency, situational awareness, increased productivity and efficiency following the IT Service Management (ITSM) tenets for continuous improvement and enhancement of the overall customer experience. Central to this effort is a streamlined IT Service Center with priorities of transparency, available IT Service Catalog and a Communication Service team that transforms the customer experience.
- **Business Relationship Management (BRM):** The BRM team works directly with customers to strengthen the relationship between the IT provider and its business stakeholder. Together with customers, the BRM team shapes innovation demand, leverages technology, and ensures IT services meet customer expectations. Internally, the BRM team serve as change agents discussing key issues with operational areas. They achieve negotiated resolutions, promote standards, and initiate IT business process improvement. Added value for the customer results in a vested BRM that understands the core of their business, reviews their technology portfolio, tracks performance, and assesses financial standing to leverage new opportunities. The BRM team establishes a Memorandum of Understanding (MOU) for all ITD customers on an annual basis along with detailed key accomplishments, major projects planned for the following year, and cost projections.

- **Enterprise Portfolio Management Office:** The EPMO endorses the appropriate monitoring of resources for the quality delivery of enterprise IT projects that have a large impact across the County. The EPMO will continue to focus on bringing contemporary project management methodologies, like Agile, within Miami-Dade County and further mature traditional project management methodologies such as Waterfall. Large-scale IT projects include ERP, Criminal Justice System modernizations and new countywide software implementations. The team provides strategic enterprise project management services like ITD Project's Health Dashboard, IT Project Portfolio Management and internal collaborative opportunities to communicate these efforts.
- **Enterprise Resource Planning (ERP):** ERP systems include a suite of fully integrated financial, procurement, human capital management, and business analytic applications that will replace disparate legacy systems currently used within the County. The ERP solution will deliver substantial efficiencies, increased accountability and responsiveness for the County. A fully implemented ERP system will improve transparency of business, enable streamlined B2B (Business to Business) transactions for Citizens and Vendors, enhance financial planning, and improve management approval processes and reporting. ERP solutions manage end to end business processes including "procurement to payment", and "hire to retire", employment life cycle and "Bill to Cash"; allowing for financial transactions traceability and reporting.
- **Ecommerce:** Ecommerce works to establish an enterprise cashiering ecosystem to facilitate the payment processing for County departments such as Code Enforcement, Animal Services (fee collections) and Tax Collector.
- **Cyber-security Services:** The Enterprise Security Office (ESO), is accountable for securing the County's critical infrastructure systems in support of Police, Fire Rescue, Elections, Port Miami, Aviation, Multi-modal Transportation, Water & Sewer, and 911 Emergency Services. ITD is responsible for ensuring the trust and availability of the County's business systems, citizen data, and web presence. This is accomplished through continual improvement of the County's cyber-security technologies, standards, and risk reduction processes. ESO utilizes multiple technologies designed to provide a defense-in-depth approach and employees continuous monitoring, diagnostics and mitigation methodologies including vulnerability assessment and penetration testing and security awareness training. The Department is charged with ensuring ongoing compliance with ever evolving security standards including Payment Card Industry (PCI), Criminal Justice Information Systems (CJIS), the Health Information Portability and Accountability Act (HIPPA), and industry best practices. Ongoing improvements address modernization of MDPD and Enterprise security architecture and continued improvements of Elections and other Federally recognized Critical Infrastructure Sectors' cyber security capabilities. Additionally, ITD continues to enhance security for accessing County assets by way of Identity and Access Management, multi-factor authentication, and the continued modernization, standardization and management of the County desktop computing environment.
- **Enterprise Content Management (ECM):** The program enables the automated capture, management, redaction, retrieval and retention of documents under a unified, enterprise platform. Customers in the industries of public safety, legislative, human resource, financial, election, and environmental use the technology to categorize document types and develop new systems that will facilitate seamless access to content. Capabilities include integration of ECM with other enterprise applications such as asset management, financials and geographical. For the upcoming year, this technology will continue to enhance the public facing presence, implement solutions in the mobile platform and establish standards for additional content formats such as CAD drawings.

- **Enterprise Asset Management (EAM):** The Enterprise Asset Management (EAM) houses over 1 million assets, providing access to approximately 7,200 users on a shared infrastructure. It promotes collaboration, seeks to improve efficiencies and set standards in areas of asset and inventory management, work management, preventive maintenance, materials management, work request, condition assessment/reliability of assets, project costs and call center management. Upcoming plans include an upgrade that enhances functionality to enable studies in the lifecycle of assets to include equipment ranking, reliability and capital planning. This will include EAM interfacing to the new County ERP system for financials that impact asset values, work orders, project costing, inventory, and more. In collaboration with WASD, ITD will enhance EAMS implementation to support CMOM/Consent Decree initiatives, new maintenance management approaches, and inventory management requirements.
- **Enterprise Call Center and Interactive Voice Response (IVR) Consolidation:** ITD implemented an enterprise telephony solution to address future needs of all County departments. The implementation of the Avaya Voice Portal platform standardized administrative telephony requirements throughout the County for Call Center and IVR services leveraging the County transport layer that rides the redundant County fiber optic infrastructure. The goal of the project is to consolidate all County call centers and IVR applications under one (Avaya) enterprise solution. Present tenants on the system are 311 Answer Center, Elections, Animal Services, Transit, Finance, Public Housing and Community Development Departments, Property Appraiser's Office, State Attorney's Office, Water and Sewer Department, Public Defender Office, and the Regulatory and Economic Resources (RER) Miami-Dade Permitting and Inspection Center. ITD will implement Avaya System Core update and Water and Sewer (WASD) Call Center application updates in FY2019-20 and FY2020-21.
- **Enterprise Video Management & Analytics Consolidation:** There is a diversity of video management systems (VMS) being used in the County without standardization that are installed for security surveillance, traffic surveillance, MDPD Real Time Crime Center, or other video related service. ITD will continue the enterprise initiative for a video management system, which will serve as the foundation for the County going forward. This platform can be expanded in the future by adding needed additional servers, disk storage and user licenses to implement customer requests to support standardized video cameras, and recorders. To streamline, ITD will research ways to consolidate existing VMS with the accepted (Genetec) VMS and define a strategy to strive to consolidate all video resources into one solution that can be accessed from mobile devices over the network by public safety and other users granted access to specific video resources when a major incident or disaster occurs. With this solution, ITD can integrate video when new technology solutions are designed to improve the efficiency of customers' operations, as well as, the safety and security of County citizens. ITD will be updating the Genetec VMS system in FY2019-20 and FY2020-21.
- **Enterprise Permitting & Code Enforcement Modernization (Gold Key):** ITD will continue executing the implementation plan for an enterprise land use management, licensing, permitting, plan review, inspections, and code enforcement solution as. Phase 2 is in progress to be followed by future phases. The solution will be used countywide for licensing, permitting, plan review, inspections, and code enforcement business processes that will leverage the existing GIS infrastructure, provide mobile technology for remote work in the field, provide a workflow-based user interface for administrative and support staff usage, and a citizen portal that will streamline these business processes for the public. The solution will expedite the business processes and facilitate data sharing and reporting, including modernization and expansion of existing ePermitting Application, additional permit types with programmatic review to be added including Accordion shutters, Windows, Doors, Metal roofs, etc. and providing on-line payment capability for customers to pay on-line for license renewals for consumer

protection. Energov is being expanded to retire Platting Legacy Application to provide citizen self-service portal for filing and tracking of applications.

- **Municipal Plans Review:** This ongoing joint venture initiative between ITD and RER enables time and cost savings to the economic development community by reducing the time needed to travel between County facilities and municipalities to conduct plan review and permitting business. The municipalities access existing vendor contracts to convert plans to digital format allowing multiple review areas to review the plans concurrently by leveraging existing MDC computer applications/services. Digital plans review enables efficiencies in the review and permitting process offering the County's shared customers (developers, design professionals and citizens) a more streamlined process. Deployment has been completed with the municipalities of Miami Lakes, Doral, Miami Beach, Cutler Bay, North Miami Beach, City of Miami, Miami Gardens, Homestead, and Pinecrest. ITD will continue to collaborate with RER to expand the program further.
- **Legislative Management System:** The new comprehensive Legislative Management System will include the integration of document management and routing, departmental participation in the agenda process, mobile-centric system access by the public, public subscription with real-time notification of agenda publication and changes, role-based security for County users, robust auditing capabilities, full text search, and seamless integration with the Directives system.
- **Geographic Information System (GIS):** The County's GIS services include, but are not limited to the provisioning of the County's central repository of geographic information, maintenance of base layers, such as streets, addresses, parcels, imagery, 3D building, administration of GIS infrastructure, Cloud services provisioning and administration, routing and field work solutions, mobile development, system integration, project management, vendor management, and GIS portal administration. The GIS Center of Excellence (CoE) maintains a base street foundation presently containing over thousands of layers of information, addresses, sub-addresses, and street segments. The competency center researches and evaluates new GIS technologies and environments including Cloud development strategies, 3D imagery usage and alignment in support of vertical zoning, land use, resiliency, public safety and NG 911, supports the GIS user's group and promotes countywide Location Intelligence and Spatial Analysis education via presentations, events and its GIS portal presence on miamidade.gov. The GIS CoE continues to expand the geographic based Open Data site delivering readily accessible live spatial information and map services that provide location centric government data via web self-service. The CoE continues to promote the real-time collection of data and its immediate sharing through GIS web based, mobile, and cloud solutions.
- **Open Data, Collaboration and Transparency:** GIS is a technology used to engage and communicate with residents for reporting of problems, locating services, and supporting initiatives through ArcGIS Hub, ArcGIS Urban, StoryMaps and web scenes and the enhancement of our 3D multidimensional base layer. Along with Communications, GIS will facilitate outreach to residents and further transparency in such areas as resiliency, sustainability, urban and transportation planning. The CoE will continue to use these tools to foster collaboration with municipalities and local utilities to improve level of services provided to residents and visitors, eliminate silos or duplication of data, and build efficiencies between local government partnerships potentially building a Super Region throughout Miami-Dade County.
- **Expansion of Virtualization Services:** ITD will continue to augment its catalog of virtualization services by further developing the infrastructures that support desktop, server, and application virtualization with solutions that focus on delivering highly flexible and scalable environments that are accessible from any device and location. With fewer physical equipment

and IT hardware, the expected results are reduced real estate, reduced maintenance costs, and reduced power and cooling requirements for better overall management.

- **Voice over IP Enterprise Telephony (Voice Gateway Expansion):** ITD implemented an enterprise telephony solution to address future needs of all County departments. The implementation of the Cisco IP telephony platform standardized administrative telephony requirements throughout the County by creating a telephony transport layer that rides the redundant County fiber optic infrastructure. The goal is to consolidate all County voice service on the Cisco enterprise system. The expansion of the IP voice infrastructure allows the County to take advantage of the Voice over Internet Protocol (VoIP) technologies in the replacement of legacy phone systems as defined by the County's strategic objectives. ITD will be updating Stephen P. Clark Center (SPCC) Core System, Internal Services Department (ISD) Fleet Shops, and Miami-Dade County Permitting and Inspection Center (MDPIC) in FY2019-20 and 2020-21.

- **Jail Management System (JMS):** The Miami-Dade County Corrections and Rehabilitation (MDCR) Department operates the eighth largest jail system in the nation and includes seven detention facilities. Inmates housed in these facilities are awaiting trial or serving sentences of 364 days or less. MDCR currently utilizes legacy mainframe platform applications, as well as numerous vendor and County developed applications in different technologies to maintain their facilities and supervise their inmates. An effort is underway to implement a vendor package for a Jail Management System (JMS) that will automate the intensive manual processes throughout MDCR and interface to existing vendor applications to record, verify, inspect and evaluate operational aspects of the facilities, including inmates. The JMS will also comply with regulatory and legislative mandates; the project is estimated to take approximately 3 years.

- **Recreational Management System (RMS):** Implementation of a new RMS for Parks, Recreation and Open Spaces (PROS) that will provide enhanced functionality to administer Facilities Reservations, Program Management, Membership Management, Point of Sale to include Inventory, Event Ticketing and Permitting Software Solution. The Solution will include a robust back-end account management module, social media integration and shall provide the ability to integrate with County financial systems.

- **Solid Waste Accounts and Billing System (SWABS):** A phased deployment of this initiative is planned for FY2019-20 and FY2020-21 to streamline and automate Waste Collections System functions into integrated components starting with the customer accounts and billing function, which includes account maintenance, billing and invoicing, payment application, lien process, legal functions, customer care module and reporting. This system will interface with several other pivotal applications and functions such as GIS, Tax Collectors, Property Appraisal, RER, ERP PeopleSoft, Enforcement functions, 311 Service Desk and Department of Solid Waste Management's (DSWM) Service Request processing applications.

- **Value Adjustment Board (VAB):** The Value Adjustment Board's (VAB) purpose is to hear appeals regarding property value assessments, denied exemptions or classifications, ad valorem tax deferrals, portability decisions, and change of ownership or control. Taxpayers or their representatives file petitions with the VAB, an agency of the Clerk of Courts (COC) Office. The modernization of the VAB legacy IDMS application to an off-the-shelf solution is scheduled to be implemented during the second quarter of FY2019-20.

- **Laboratory Information Management System (LIMS):** The implementation efforts of the LIMS to support MDPD's Forensic Services Bureau (FSB), Crime Scene Investigative Support Section (CSISS), and Property and Evidence Section (PES) will be used by all County law enforcement agencies and external municipal, State, and Federal agencies. The STARLIMS

solution will manage the collection, processing, storage, retrieval, and analysis of information generated in laboratories, at crime scenes, and property warehouses. Improvements include reliability of sampling processes, supports compliance with regulations and industry standards, and provides comprehensive reporting, monitoring, and analysis capabilities.

- **Office of Elevator Safety Online Services:** In support of the Internal Services Office of Elevator Safety Division, ITD is leading the effort in providing a browser agnostic solution that will be available across all devices with capabilities for Citizens, Property Owners, Elevator Companies, and Elevator Inspectors to view the Elevator/Unit Inspections, Certifications, Submit Permits and Inspection Reports Online. Additionally, this service will allow these parties to make payments for Certificate of Operation and Permitting and Inspection fees.
- **Public Housing and Community Development (PHCD) Dashboard:** The continued expansion of this suite of applications will include additional key business performance metrics for the Public Housing divisions aligned with HUD standards and performance indicators. Public Housing Agencies (PHAs) are scored based on four indicators (Physical Condition, Financial Condition, Management Operations, and Capital Fund Program) and associated point values. The performance of each individual project or development that comprises the overall properties portfolio is assessed to determine the PHA's overall performance and designation of High Performer, Standard, Substandard, Troubled, or Capital Fund Troubled. The expansion of the existing dashboard will focus on the Management Operations (MASS) component which will measure Tenant accounts receivable, Occupancy rate, and Accounts Payable.
- **Automation of Elderly Services:** The Community Action and Human Services Department (CAHSD) is implementing an integrated software suite used to manage and track various services offered to the elderly. This paperless solution automates route optimization and driver direction for home delivery meals, electronic verification of home care visits, and provides an electronic data interchange (EDI) with the State system (CIRTS). Phase 2 of the implementation will focus on the Home Care mobile application, Adult Daycare data management using touchscreen technology and the utilization of bar code technology for congregate meals sites. The implementation of this customer-oriented technology solution will enhance the availability and accessibility of services for Citizens of Miami-Dade County.
- **CaseManager – NewGen:** ITD be leading the implementation of the State mandated NewGen system. This web-based system is a client and project tracking tool. This software is designed as a client-centric tracking solution to support Florida's Low-Income Home Energy Assistance Program (LIHEAP), the Community Services Block Grant Program (CSBG), and the Weatherization Assistance Program (WAP). The new system will allow LIHEAP, CSBG and WAP sub-recipients to collect client data, provide benefit services, and document outcomes as well as track, assess and determine eligibility for a variety of services. This implementation will include a web module that allows clients to submit an application for services online.

New Innovation and Emerging Technologies

- **Artificial Intelligence (AI) Solutions:** The field of artificial intelligence (AI) has progressed rapidly in recent years, matching or, in some cases, even surpassing human accuracy at tasks such as image recognition, reading comprehension, and translating text. The GIS CoE will implement deep learning techniques like image classification, object detection, semantic segmentation, and instance segmentation to identify changes from imagery after meteorological events, to identify changes in properties not linked to permits, and creating

digital maps by automatically extracting features like road networks and building footprints. In addition, ITD will continue to expand the existing IBM Watson AVA (Automated Virtual Assistant) solution currently in use by the Water and Sewer Department. Possible expansion of AVA for Animal Services, COC, and RER are under evaluation. Exploration into other AI platforms and augmented reality technology opportunities will be conducted as partnerships with departments.

- **GIS and Augmented Reality (AR):** The GIS CoE will build augmented reality (AR) applications for use with smart devices that will superimpose digital information through the camera lens of smart devices. The service content will be geospatially referenced, include labels, images and other information to be used by County personnel to locate assets, locations, and incidents. Plans are being developed to use AR at PROS to allow park visitors to easily find attractions, view StoryMaps of points of interest, make reservations, and purchase Augmented Memories to memorialize special moments with StoryMaps and images. With GIS AR users will be able to see hidden objects, pull up related attributes, open drawings and images, tap into real-time sensors and much more. Along with drone imagery, AR objects can also be used to provide the public a virtual reality (VR) experience of to any location prior to the visit.

- **Adapting to Cloud Technology:** The planned continued migration of web-based applications, specifically GIS viewers, is geared to enhance the public's interaction with the County's various lines of business. ESRI's Cloud technology provides responsive, fast, and reliable access to applications. Their suite of solutions is easily configurable and allows the County to leverage migration schedules and the latest technological advances. This platform allows for the continuous use of the applications regardless of events such as maintenance downtime or infrastructure failure.

- **Street Network Migration to Roads and Highways Model:** The GIS CoE plans to enhance the existing street network with the deployment of ArcGIS Roads and Highways to facilitate the implementation of DTPW capital projects work program, its roadways characteristics inventory, integration with EAMS using a linear referencing system (LRS) to achieve a Maintenance Rating Program (MRP) score of in all their measuring categories, and improved CAD 911 location-based services.

- **Indoor Navigation and Wayfinding:** The GIS CoE plans to implement ArcGIS Indoors, a complete indoor mapping system for wayfinding and smart building management throughout County facilities. It will provide 3D floor-aware maps and focused apps to support a variety of workplace and facility users, including operators, maintenance and service personnel, security staff, employees, and visitors. Indoors will allow navigation from facility to facility, directly to a floor, room or asset using a smart phone, tablet, computer, and even building kiosks. Along with Indoor Positioning System (IPS), Indoors wayfinding will operationalize workplace data, track capital asset location, and help to build a safer and more secure workplace.

- **CAD to GIS System:** ITD is developing a series of solutions to help WASD streamline the As-Built submittal process by incorporating advanced GIS tools within AutoCAD. CAD to GIS is the process to seamlessly import CAD engineer drawings (As-Built) to GIS using ESRI tools. The engineer of record will use a WASD template to create all the As-Builts that will be submitted for a project and once submitted to WASD, a series of validation process will be initiated for identifying potential issues early on. Once fully implemented the process should significantly reduce the time and labor for updating the GIS and As-Built rejects. This will set the foundation bring CAD to GIS services to other County departments; thus improving plans review, data integrity and GIS digitization process.

- **Adaptive Signals and Traffic Signal Priority:** The County currently operates approximately 2,800 traffic signal intersections with an incremental rate of approximately 30 intersections annually. During FY2019-20 and FY2020-21, ITD will partner with the Department of Transportation and Public Works (DTPW) to implement and upgrade all signalized intersections countywide. The new technology will leverage advanced video detection and travel time measurement to support adaptive signalization. Additionally, Transit vehicles and corridors will be equipped with Transit Signal Priority technology allowing for improved performance in bus services and Traffic Preemption technology for Fire Rescue vehicles.
- **LED Street Lighting and Smart City:** During FY2019-20 and FY2020-21, in collaboration with the ITD and the Florida Department of Transportation (FDOT) target to partner with a firm to convert 26,000 streetlights to LED Smart Lighting with a Smart County Program component. The goal is 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 solution will leverage the existing roadway lighting infrastructure to provide for new and emerging Smart County technology to improve mobility, accessibility, and safety. This endeavor is a cost-neutral revenue producing program.
- **GIS Meter Reading Solutions:** The GIS CoE will continue to help departments optimize driving and walking routing to improve safety and precision routes that will enhance safety, balance workloads, reduce costs and create efficiencies. DSWM trash pickup routes will continue to be optimized, while WASD embarks on an aggressive district and cycle meter rerouting initiative using RouteSmart. Coupled with home-grown mobile solutions, drivers and walk-by readers will have turn by turn functionality and provide ability to capture asset reads, condition, location and image. This will help with future "can't finds".
- **GIS Applications and Data Modernization (RER):** Legacy GIS solutions will continue to be modernized across all departments, to include ArcGIS Desktop, ArcGIS Pro, ArcGIS Online (AGOL), web application, web services and GIS integration with other enterprise systems. GIS Modernization will help ensure data integrity and security and enable better collaboration throughout the departments within the GIS ecosystem.
- **Cloud 3-D Geospatial Data:** New technologies continue to be implemented to facilitate the update and enhancement of the GIS 3D base layer. The incremented use of drones from multiple departments like MDFR, DTPW, and PROS is adding valuable information to create updated 3D references to buildings, parks and projects. All data is shared using the Cloud infrastructure with all County departments.
- **Enhanced Transportation Mobile Solutions:** The Transportation and Economic Development strategic areas are looking at phased implementation of mobile apps that serve land, sea and air. In Seaport, Cargo and Cruise customers will have services at their fingertips including available transportation options to get to and from the Port, Parking Information, Mobile Parking Payment, Cruise Line/Gate information, Port News, Web Cams, and a Customer Survey. The Transit mobile will consolidate Transit Tracker, EASY Pay and Transit Watch. Enhancements will include a Transit Store website redesign, an improved Real-Time Tracker, Journey Planning, and Transit Watch, a Loyalty and Rewards program, Mobile Bar Codes, Push Notifications, Complaints/Feedback Digitization, and introduction of an Ambassador program. Additional enhancements to the EASY Pay mobile application will be enabled to include Account Management, Open Payments through ApplePay, AndroidPay and bank issued nearfield credit cards, Virtual EASY Cards, and contactless payment on International cards. The Automated Fare Collection System will be expanded to support regional partners in the mobile application. Riders will have the ability to travel the region using one form of payment.

- **Digitizing Public Works Permitting/Plans Review Process:** During FY2019-20, in support of the Digital Roadmap, ITD will enable the digitizing of the Public Works plans review/permitting process. The Public Works plans review/permitting modernizing efforts will also provide an online payment option for Citizens to review and pay for the applicable fees for plans review and permits applications rather than the current method of walk-ins for the payments. This will also include integrated processes with other County departments.
- **Water and Sewer Technology Initiatives:** In alignment to the County's Smart-City vision, the Department works closely with WASD Business Units, partner County departments and various specialized vendors, to continually introduce innovative solutions and technologies that expand WASD's IT capabilities to serve its customers. As such, IT serves as a central solution-based resource to increase productivity, efficiency, and enable better data analysis. This in turn helps improve decision-making; foster continued data and system enhancements via mobile and cloud solutions; promote proactive infrastructure management and diversify customer service communication channels. These efforts have shaped how WASD conducts business today. Among these transformative innovations are enhanced CAD to GIS enablement tools to streamline the business process; capital construction and project management solutions allowing the business owner to manage and measure every step in a project lifecycle; advanced metering infrastructure (AMI) allowing for automated, two-way communication between a smart utility meter and a utility company; GIS meter reading to augment mobile meter reading applications; business intelligence solutions via dashboards in support of departmental initiatives such as the Consent Decree; asset management mobile solutions to support field and warehouse operations; and digital self-service solutions to provide customers with quick and easy access to services.
- **Neighborhoods Innovation:** The Departments of Solid Waste Management in collaboration with DTPW and ITD will procure and implement a Driver Safety and Improvement initiative. This hardware and software implementation will have an integrated video camera solution that will be used for Waste and Bus driver training, coaching, supervisor reporting as well as to reduce accidents therefore reducing departmental liability. This solution will integrate with each department's driver database systems as well as with GPS, GIS, 311 and other future applications. In addition, a new mobile app will release with capability that measures the amount of trash in a pile, to reduce the time that Bulky Trash crews spend at a pickup location as well as eliminating the need to manually measure trash piles. Additional enhancements to the Solid Waste mobile application will include Waste Payments, Account Services Alerts and Notifications, and Where's My Garbage Truck to make it easier for customers to obtain Solid Waste information and manage their accounts.

FUTURE OUTLOOK

Business Analytics and Augmented Analytics: The next evolution of the foundation built by Business Analytics and Big Data comes the convergence of business intelligence and emerging technologies such as artificial intelligence (AI) and machine learning (ML). Smart City data is ever growing as the reliance on analytics to make decisions is now a standard in Miami-Dade County. The logical and innovative next step is Augmented Analytics that combines many emerging technologies to a platform that delivers insights at a previously unheard-of speed and level of accuracy. This will impact every level of service that is provided to residents and will change the face of government as we know it today. ITD will immerse resources to explore and implement these solutions at a pace that is afforded in the Bi-modal organizational model. Dashboard and data visualization will become commonplace to enable data-driven decisions. ITD has made great strides to socialize these efforts at an enterprise level. This has required significant manual preparation from various departments. With

Augmented Analytics, the Department is seeking to find advancements in AI and ML that will automate what is now a manual aggregation of data delivers a level of efficiency and accuracy only available via computer processing.

Enterprise Applications Initiatives: ITD will continue to work toward simplification of the County's applications portfolio by implementing enterprise and contemporary technologies and upgrading and augmenting skill sets to support current and future County applications. This will be accomplished through the growth of enterprise solutions, or through development or acquisition of new ones. This modernization effort will also require updating the skill sets of the IT professionals in emerging applications technologies while simultaneously ensuring adequate ongoing support for legacy systems until these systems can be modernized. Reducing complexity in the applications portfolio, leveraging technology and expanding the availability of self-service components will enhance County staff and citizen access to data in a more timely and cost-effective manner. Specific areas of application modernization include:

- Continue Full countywide roll-out of ERP, which will replace FAMIS, ADPICS, Time and Leave, Human Resource, and Payroll applications with an integrated solution that will stream-line business processes, and automate electronic approval workflows throughout the County.
- Electronic payments utilizing eCommerce platforms will be expanded, and updates will continue to support evolving PCI compliance requirements with special attention to the evolution of Crypto Currency and Block chain technologies.
- Implement Phase 2 of the Jail Management System (JMS) for the Miami-Dade County Corrections and Rehabilitation (MDCR) department to streamline processes through automation, reduce paperwork and increase safety throughout the facilities with available comprehensive information for decision making. Phase 2 includes the following functionality: incidents, inclusion of case and charge information, Rapid ID at onset of intake process to preliminarily identify inmates and inmate tracking.
- Enhancement of the County's eCommerce capabilities with the addition of Interactive Voice Response (IVR) applications, using the enterprise Avaya infrastructure. The new service will improve and automate the County's payment processes even further, as it will provide functionality to our residents and payers to submit payments via telephone, following voice prompts. The IVR applications will interface with the County's Payment Gateway to complete the payment process, and will accept credit card and eCheck payments.
- Introduce GIS industry best practices across all major County departments to assist departments realize their strategic goals. This will include GIS integration with enterprise and other mission critical system; mobile data collection and viewers; geospatial business intelligence; continue expanding 3D presence - vertical and underground; increase data sharing and collaboration with external entities; increase data creation and maintenance opportunities; and implement data validation tools and process across geodatabases to assure enterprise data integrity.
- Explore ECM best practices and develop a 5-year roadmap to satisfy increasing content management needs across the County. In the short term, expand ECM into the cloud for the public facing portal to offer transparency to more departments using ECM internally; implement tools for redaction to comply with Florida statutes on confidentiality will be enhanced and processes standardized to facilitate the functionality; and expand the use of on-line forms and workflows for business process improvement.

- Implement EAM mobile capabilities of the Infor Suite to address the real-time capture of data from field personnel and eliminate duplicate entries with paper and clerical staff for asset tracking, work orders and inspections. Explore interfaces using Internet of Things (IoT) for capturing thresholds, setting preventative maintenance and sending alerts to enforce reliability of assets. In addition, there will be a concentration of efforts towards evaluation of condition assessments of assets.

Service Management Initiatives: As the County continues with IT consolidation, the importance of having a comprehensive, evolving and on-going plan is crucial. As ITD modernizes and implements innovative technologies, the Department has addressed the manner in which business is conducted and has begun restructuring and redesigning its customer service business strategy to improve service delivery management while working with customer departments and agencies to provide better services. As ITD expands its services countywide, the IT service center will become the central gateway for customers to strategically plan and order IT services. Embracing IT consolidation effectively within a complex organization such Miami-Dade County will challenge ITD for a more centralized and better managed IT environment that will support a more customer-oriented service delivery strategy for the future. ITD will continue to establish value-added relationships and communications with its users/customers to improve its insight of business requirements, allowing for the establishment of standards to promote consistency, allocation and matching of costs to specific business units, and increasing awareness and visibility for IT service provisioning, as well as, maximizing existing and future investments by leveraging enterprise solutions.

Communication Services: For FY2020-21, the Communication Services team looks to further enhance its Telecom Expense Management (TEM) solution to manage all services, inventory and expenses in one centralized system of record, ensuring County departments are billed at the most cost-effective rate to support budgets and reduce costs. Carrier performance and accountability will be a major focus that will be easily managed and tied to carrier contract compliance.

Leveraging Spatial Analysis: IT continues to leverage Geospatial Analysis to detect and quantify patterns, finding best locations and paths, determining how places are related and how to leverage the science of location. The use of near spatial analysis was instrumental in the assignment of County employees, based on location, to manage Evacuation Centers. This same analysis can be utilized in various other areas such as Poll worker assignments, etc.

Integration of GIS with Miami-Dade's web portal: ITD continues to leverage the GIS datasets available in the Open Data Hub to improve the efficiency of storing and retrieving the locations (addresses) of County facilities and services presented in Miami-Dade's web portal, miamidade.gov, which eliminates the need to store location information in multiple systems. Through a customizable API, developed in house, locations are dynamically retrieved from the Open Data Hub and displayed in miamidade.gov in an ADA compliant format. Interactive mapping applications are also available to portal visitors using the same location datasets, avoiding data discrepancies. The GIS CoE plans to develop Artificial Intelligence (AI) algorithms to interact with the County's Open Data datasets and facilitate citizen interaction with County services.

Construction Management Process: ITD in collaboration with the Internal Services Department will release a Request for Proposal (RFP) for a cloud-based Capital and Construction Management solution that will allow the department to improve the workflows, billing, management, processing and controls of the program Capital Planning and Construction

Enforcement Inspections, Investigations and e-Ticketing System: Solid Waste Management, in collaboration with ITD, will release an RFP for an Enforcement Inspections, Investigations and e-Ticketing solution to modernize the DSWM enforcement process. This system will have an interface with the Clerk of the Courts SEFA system, allowing for e-ticketing, citations and warning letters, enforcement service request interfaces to 311 and case history and account status feature.

Crime Analysis System (CAS) Modernization: The Crime Analysis System (CAS) is an in-house development of a solution that will allow law enforcement, investigators and analysts to collect data related to an event or incident to build a case. Data from multiple reports, photos and sources are compiled into a single master case record to provide a historical context of a case. As cases are processed, detectives are assigned to investigate, and financial assets are consumed related to each event. The CAS system will provide the foundation for managing resources assigned to each case, allow management oversight in real time, and a repository of information for administrative reporting. The CAS solution will also be compliant with the Florida Department of Law Enforcement's (FDLE) direction to change crime reporting from summary to detail-based reporting, National Incident-Based Reporting (NIBRS).

Criminal Justice Information System (CJIS) Modernization: The modernization of CJIS will create an integrated criminal justice solution for the 11th Judicial Circuit of Florida that will serve the information needs of all justice partner agencies; the initial requirements gathering phase was completed; the next phase will consist of advertising a solicitation and planning project activities. Through the implementation of a contemporary court case management system, the County will streamline operations, automate criminal court and judicial administration business processes, and transform the way information is delivered to all justice partner agencies and constituents. The modernized system will address key strategic business objectives sought by the County and the project's principal stakeholders, namely:

- Improve the efficiency of operations across all justice partner agencies
- Facilitate operational decision-making, business intelligence, and caseload management
- Reduce reliance on paper and paper-based business processes with electronic form creation, storage and dissemination
- Enhance the timeliness and availability of justice information while employing strong security measures
- Improve the integrity and currency of data by improving cross agency integration and eliminating redundant information silos

Computer Aided Dispatch (CAD): The RFP for a multi-discipline Public Safety Computer Aided Dispatch (CAD) system was advertised and proposer responses were evaluated and negotiations with the highest ranked vendor are underway. The goal is to procure a next-generation 911 (NG911) system to take advantage of emerging capabilities such as text and video messaging to support both the Miami-Dade Fire Rescue (MDFR) and Police (MDPD) Departments.

Radio Systems Enhancement Initiatives: The objective of the radio systems enhancement initiatives is to increase radio communication capabilities within Miami-Dade County. The 800 MHz modernization project transitioned Miami-Dade County to new state of the art P25 digital networks servicing all County agencies, municipalities, state and federal agencies. The continuation of these initiatives includes enhancing communications coverage with a focus on improving the areas of historically low coverage. New radio infrastructure sites have been implemented in northeast Miami-Dade, Industrial Communications, and in western Miami-Dade County, Trail Glades. In FY2020-21 and beyond, the focus of our initiatives will be a total system upgrade to enhance the radio platform to the most current software release. This will allow greater levels of interoperability within all first

responder agencies within Miami-Dade. Furthermore, by adding additional transmit sites at Palms Springs North, Trail Glades and Industrial Communications on System A, public safety will be provided an increased level of redundancy to support countywide emergency responses.

Parking Access and Revenue Management Solution: ITD, in collaboration with ISD and Seaport, will publish an RFP for a long-term, comprehensive, and state-of-the-art Parking Access and Revenue Management System solution. This solution will leverage smart detection devices to improve the County's Parking Operations and Contact Center tools as well as expand to include Open and Contactless Payments through various providers. This solution will integrate with an ongoing effort by the Seaport to upgrade their parking solution to strengthen Payment Card Industry (PCI) compliance. Implementation of this system is projected to commence in FY2020-2021.

Electronic Subpoena System: The electronic subpoena system is an in-house development of an electronic subpoena management and court notifications solution to be used by 70+ law enforcement agencies required to subpoena officers for court appearance within the County's Eleventh Judicial Circuit. Major objectives are to send electronic transmission of subpoenas and court notices; obtain acknowledgement/confirmation; track day-of-court attendance; and provide reporting capabilities.

Law Enforcement Records Management System (LRMS): A Law-Enforcement Records Management System (LRMS) is an agency-wide 24/7 mission critical system that provides for the storage, retrieval, retention, manipulation, archiving, and viewing of information, records, documents, or files pertaining to law enforcement operations. The LRMS should provide the basis for managing records created during the agencies core operations and should allow data to be entered once and referenced and reported on in multiple ways.

Infrastructure Initiatives: ITD continues to modernize and expand Data Center Services to include additional capabilities that are consumed from cloud providers which have partnered with Miami-Dade County. These additional capabilities provide us with the capability to service non-County entities including municipalities, state and federal agencies operating within Miami-Dade County. Leveraging existing software, platform, and infrastructure services offered by cloud service partners results in both cost savings and cost avoidance benefits, as well as increasing the County's ability to quickly react and adopt to new emerging technologies.

In addition, network infrastructure investments will result in a robust, stable environment and flexible for the implementation of new technologies that will integrate with major systems including Biometrics and Security Camera systems.

Enhanced Security Systems: As new cyber-security technologies are implemented, existing technologies refreshed and migrated to a shared environment, ITD will continue to provide guidance to enable secure access to these resources. Working with departments, internal stakeholders, and the IT Leadership Council, ITD will continue to improve security through the implementation of technology, policy and standards to ensure the County's risk exposure is minimized.

The Department works every day to keep systems stable and safe while working with customers to dream and make those dreams a reality. Together across the enterprise, the drive to innovate and rethink the way the County delivers services is resoundingly forward thinking. At ITD, the team strives to make the "Art of the Possible" something customers can envision and implement. It is what IT delivers every day.

Business Plan Report - Information Technology Department

Scorecard	Description	Owners
Information Technology Department	The Information Technology Department (ITD) is the central technology provider for MiamiDade County. ITD provides information technology services that enable and support the operations of all County departments, external governmental agencies, residents and the public at large, including making information and services easily accessible to citizens and visitors of Miami-Dade County. ITD plans, develops, manages, and maintains a reliable and secure information technology infrastructure, including network, radio and hardware/software platforms, to support countywide and departmental.specific applications and services. ITD partners with other County departments, management, and key technology providers to implement and maintain technology solutions that enable efficient operations, delivery of County services, and coordinates with the Information Technology Leadership Council (ITLC) on IT policy and practices. The Department establishes business processes to ensure that IT standards, methodologies, security, and project management are implemented in accordance with best practices. Key stakeholders include all County departments, Miami-Dade County municipal governments, local, state, and federal agencies, elected officials, Miami-Dade County residents, businesses, visitors, and the public that visits the County's website worldwide.	Petisco, Angel (ITD)

Initiatives Linked to Scorecard	Est. Start	Est. End	Type	As Of	%	Status	Owners
EPMO - Enterprise Portfolio Management Office	10/1/2019	9/30/2025	Strategic Plan	1/14/2020	75%	In Progress	Arora, Rishi (ITD)
Consolidation - Phase 1 (PE, ID, AD)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
Consolidation - Phase 2 (SW, MT, PD, CR, SP)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
Consolidation - Phase 3 (PR)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
Consolidation - Phase 4 (LB, HD, CO, GI, FN)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
Enterprise Asset Management	10/1/2016	3/20/2018	Strategic Plan	8/1/2019	100%	Complete	Lopez, Jose L. (ITD)
Enterprise Content Management	n/a	9/30/2025	Strategic Plan	2/7/2020	99%	In Progress	Lopez, Jose L. (ITD)

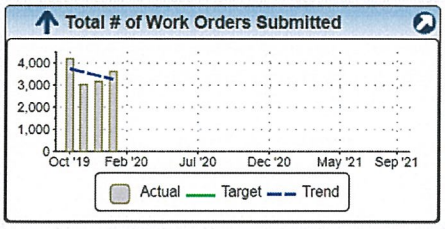
1 Customer

Objective	Description	Owners
Improve Customer Service (ITD)		Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)

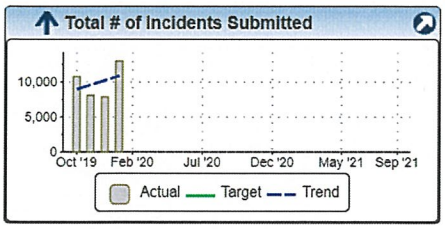
Grandparent Objectives	Description	Owners
GG3: Optimal internal Miami-Dade County operations and service delivery		Miami-Dade County

Parent Objectives	Description	Owners
GG3-1: Deploy effective and reliable technology solutions that support Miami-Dade County services		Miami-Dade County

Measures Linked to Objective	Period	Actual	Target	Variance	Owners
Total # of Work Orders Submitted	Jan '20	3,622	n/a	n/a	Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)

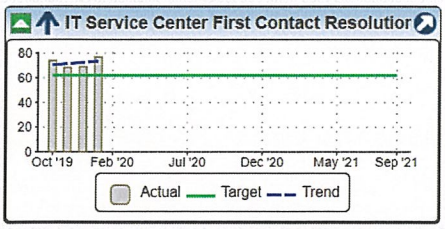


Child Measures	Period	Actual	Target	Variance	Owners
Total # of Work Orders Created via Web Request	Jan '20	2,198	n/a	n/a	n/a
Total # of Work Orders Created by Service Desk Staff	Jan '20	306	n/a	n/a	n/a
Total # of Work Orders Created by Non Service Desk Staff	Jan '20	1,118	n/a	n/a	n/a
Total # of Incidents Submitted	Jan '20	12,978	n/a	n/a	Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)

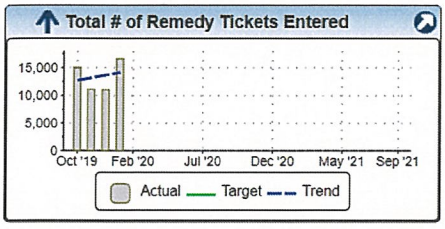


Child Measures	Period	Actual	Target	Variance	Owners
Total # of Incidents received via Web Requests	Jan '20	2,261	250	2,011	Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)
Total # of Incidents Created by Non Service Desk Staff	Jan '20	1,896	n/a	n/a	n/a
Total # of Incidents Created by Service Desk Staff	Jan '20	8,821	n/a	n/a	n/a

IT Service Center First Contact Resolution	Jan '20	77%	62%	15%	Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)

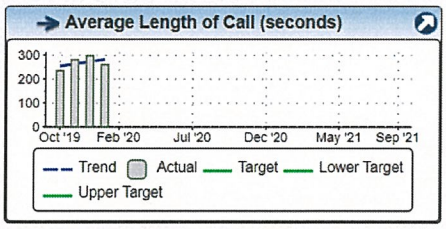


Total # of Remedy Tickets Entered	Jan '20	16,600	n/a	n/a	Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)

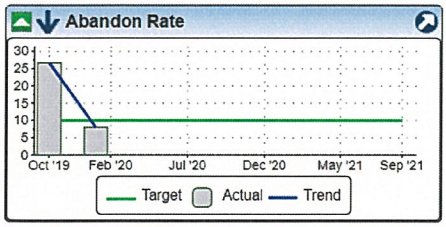


Child Measures	Period	Actual	Target	Variance	Owners
Total # of Work Orders Submitted	Jan '20	3,622	n/a	n/a	Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)
Total # of Incidents Submitted	Jan '20	12,978	n/a	n/a	Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)

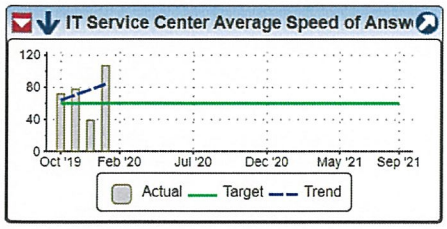
Average Length of Call (seconds)	Jan '20	261	n/a	n/a	Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)



IT Service Center Call Abandon Rate	Jan '20	8%	10%	n/a	Vespe, Cristina (ITD); Kaimchan, Kawal (ITD)



IT Service Center Total Incoming Calls	Jan '20	10,873	n/a	n/a	Vespe, Cristina (ITD); Kaimchan, Kawal (ITD)
IT Service Center Average Speed of Answer (Seconds)	Jan '20	107	60	-47	Vespe, Cristina (ITD); Kaimchan, Kawal (ITD)

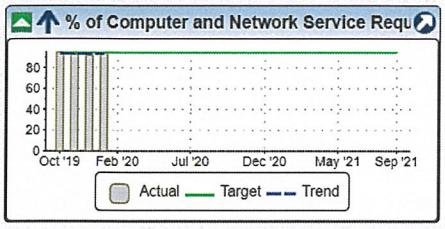


Objective	Description	Owners
Resolution Response (ITD)		Information Technology Department

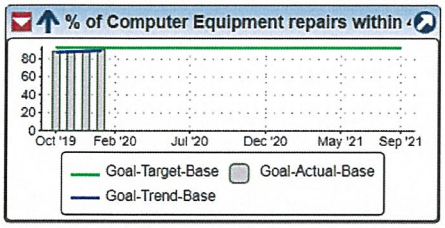
Grandparent Objectives	Description	Owners
GG1: Accessible, fair and responsible government		Miami-Dade County
GG3: Optimal internal Miami-Dade County operations and service delivery		Miami-Dade County

Parent Objectives	Description	Owners
GG1-2: Support a customer-focused organization		Miami-Dade County
GG3-1: Deploy effective and reliable technology solutions that support Miami-Dade County services		Miami-Dade County

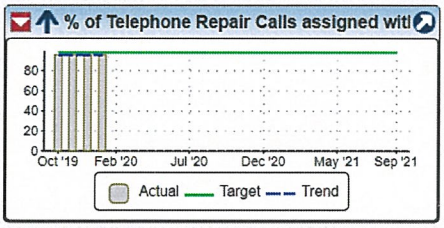
Measures Linked to Objective		Period	Actual	Target	Variance	Owners
% of Computer and Network Service Requests assigned within one business day from the time received.	▲	Jan '20	95%	95%	0%	Aguirre, Juan (ITD)



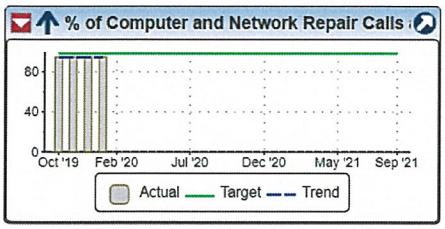
% of Computer and Network repairs completed within 48 hours from the time recieved.	▼	Jan '20	90.00%	92.00%	-2.00%	Aguirre, Juan (ITD)



% of Telephone Repair Calls assigned within 4 hours from the time reported by customer	▼	Jan '20	96%	99%	-3%	Aguirre, Juan (ITD)

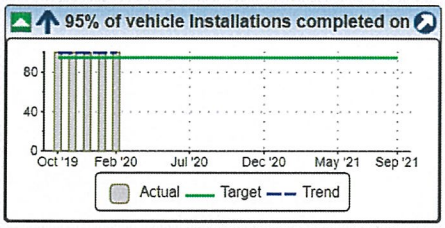


% of Computer and Network Repair Calls assigned within 4 hours from the time reported by customer	▼	Jan '20	95%	99%	-4%	Aguirre, Juan (ITD)



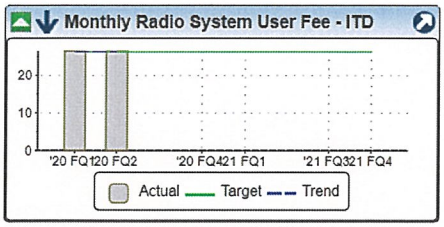
Objective	Description	Owners
IT Industry Service Comparables to ITD Service Costs	Quarterly Comparison of ITD Service costs to similar services provided by other public and private entities	Information Technology Department

Measures Linked to Objective		Period	Actual	Target	Variance	Owners
95% of vehicle Installations completed on time	▲	Feb '20	100%	95%	5%	Gross, Thomas (ITD)

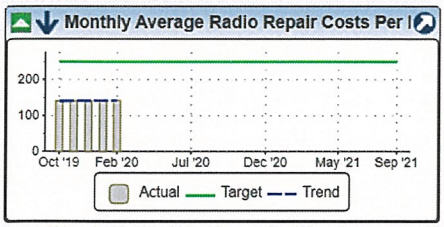


Monthly Radio System User Fee - ITD	▲	'20 FQ2	27	27	0	Smoak, Allen (ITD); Cast, Cindy (ITD);

Gross, Thomas (ITD)

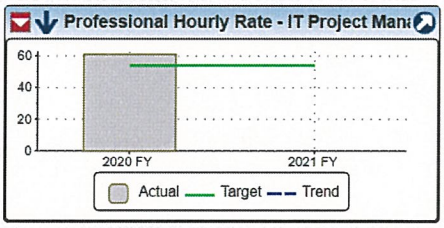


Monthly Average Radio Repair Costs Per Device - ITD		Feb '20	142	250	108	Cast, Cindy (ITD); Smoak, Allen (ITD); Gross, Thomas (ITD)



Objective	Description	Owners
IT Industry Professional Services Hourly Rates Comparable to ITD	Annual Professional Hourly Rates comparable to ITD professional hourly rates charges	Information Technology Department

Measures Linked to Objective		Period	Actual	Target	Variance	Owners
Professional Hourly Rate - IT Project Management (Above $10m)- Source: Project Management Institute		2020 FY	$61	$54	$-7	Arora, Rishi (ITD)



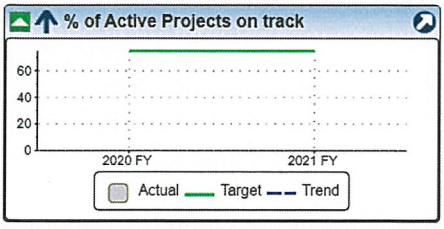
Objective	Description	Owners
1.2 Provide Innovative Customer Solutions		Information Technology Department

Grandparent Objectives	Description	Owners
GG3: Optimal internal Miami-Dade County operations and service delivery		Miami-Dade County
GG3-1: Deploy effective and reliable technology solutions that support Miami-Dade County services		Miami-Dade County

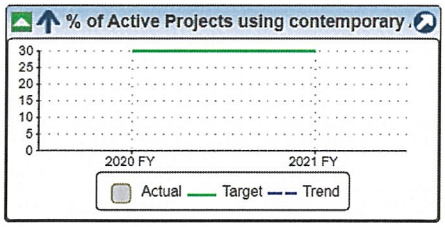
Parent Objectives	Description	Owners
GG3-1: Deploy effective and reliable technology solutions that support Miami-Dade County services		Miami-Dade County
Systems Availability (ITD)		n/a

Initiatives Linked to Objective	Est. Start	Est. End	Type	As Of	%	Status	Owners
EPMO - Enterprise Portfolio Management Office	10/1/2019	9/30/2025	Strategic Plan	1/14/2020	75%	In Progress	Arora, Rishi (ITD)

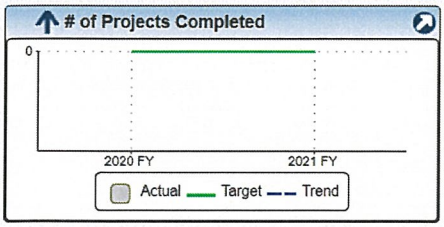
Measures Linked to Objective		Period	Actual	Target	Variance	Owners
% of Active Projects on track		2019 FY	94%	75%	19%	Asbert, Eleyn (ITD); Arora, Rishi (ITD)



% of Active Projects using contemporary Agile Methodology	2019 FY	44%	30%	14%	Asbert, Eleyn (ITD); Arora, Rishi (ITD)



# of Projects Completed	2019 FY	35	n/a	n/a	Asbert, Eleyn (ITD); Arora, Rishi (ITD)



Objective	Description	Owners
Customer Project Initiatives		Information Technology Department

Grandparent Objectives	Description	Owners
GG3: Optimal internal Miami-Dade County operations and service delivery		Miami-Dade County

Parent Objectives	Description	Owners
GG3-1: Deploy effective and reliable technology solutions that support Miami-Dade County services		Miami-Dade County

Initiatives Linked to Objective	Est. Start	Est. End	Type	As Of	%	Status	Owners
Municipal Plans Review	10/2/2013	n/a	Improvement	2/27/2019	100%	Complete	Suarez, Carmen (ITD); Camner, Sue (ITD)

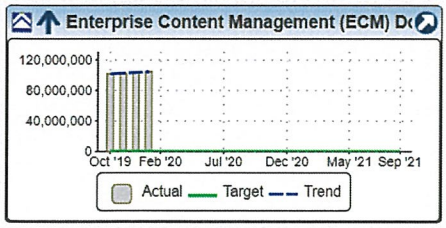
Objective	Description	Owners
Enterprise Programs (ITD)		Information Technology Department

Grandparent Objectives	Description	Owners
GG3: Optimal internal Miami-Dade County operations and service delivery		Miami-Dade County

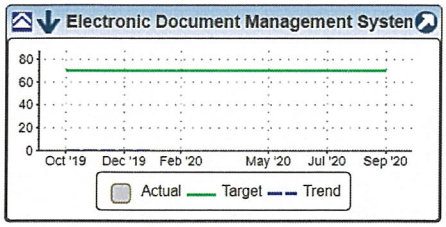
Parent Objectives	Description	Owners
GG3-1: Deploy effective and reliable technology solutions that support Miami-Dade County services		Miami-Dade County

Initiatives Linked to Objective	Est. Start	Est. End	Type	As Of	%	Status	Owners
Enterprise Asset Management	10/1/2016	3/20/2018	Strategic Plan	8/1/2019	100%	Complete	Lopez, Jose L. (ITD)
Voice Over IP Enterprise Telephony	10/1/2015	9/30/2019	Strategic Plan	2/10/2020	95%	In Progress	Aguirre, Juan (ITD)
Enterprise Project Management Office Full Implementation	10/1/2015	9/30/2020	Strategic Plan	2/10/2020	85%	In Progress	Arora, Rishi (ITD)
Enterprise Content Management	n/a	9/30/2025	Strategic Plan	2/7/2020	99%	In Progress	Lopez, Jose L. (ITD)

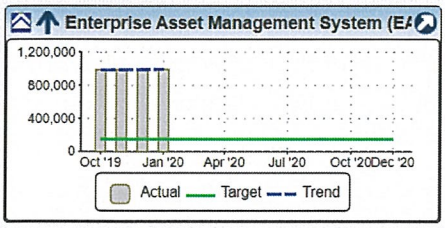
Measures Linked to Objective	Period	Actual	Target	Variance	Owners
Enterprise Content Management (ECM) Documents	Jan '20	104,405,004	50,000	104,355,004	Crowley, Chris (ITD); Chin, Donna



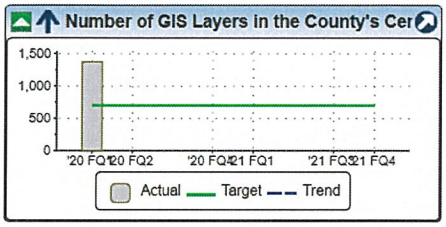
Electronic Document Management System (EDMS) Documents - Legacy	Jan '20	0.0million	70.0million	-70.0million	Crowley, Chris (ITD); Chin, Donna; Lopez, Jose L. (ITD)



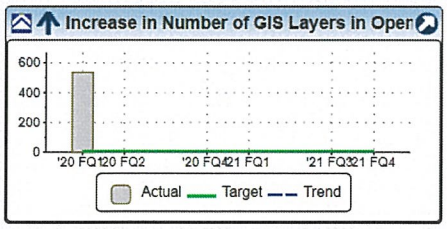
Enterprise Asset Management System (EAMS) - Total Number of Assets	Jan '20	993,208	150,000	843,208	Hernandez, Odilia B. (ITD); Lopez, Jose L. (ITD)



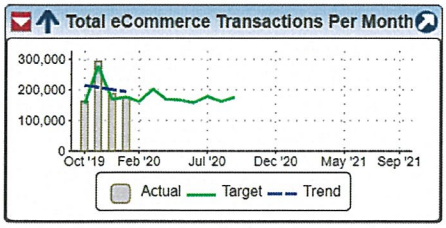
Number of GIS Layers in the County's Central Repository	'20 FQ1	1,374	700	674	Lopez, Jose L. (ITD); Rodriguez, Jose R (ITD)



Increase in Number of GIS Layers in OpenData	'20 FQ1	536	5	531	Rodriguez, Jose R (ITD)



Total eCommerce Transactions Per Month (Credit Cards and eChecks)	Jan '20	175,152	175,807	-655	De La Cruz, Angela (ITD); Feldmann, Gladys (ITD); Mcclaskey, Maritza (ITD)



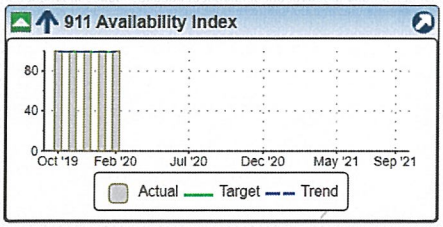
Objective	Description	Owners
1.3 Provide Reliable and Secure Technology Systems		Information Technology Department

Objective	Description	Owners
Systems Availability (ITD)		Information Technology Department

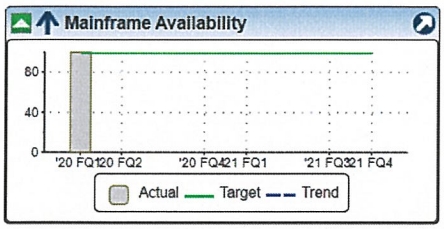
Grandparent Objectives	Description	Owners
GG3: Optimal internal Miami-Dade County operations and service delivery		Miami-Dade County

Parent Objectives	Description	Owners
GG3-1: Deploy effective and reliable technology solutions that support Miami-Dade County services		Miami-Dade County

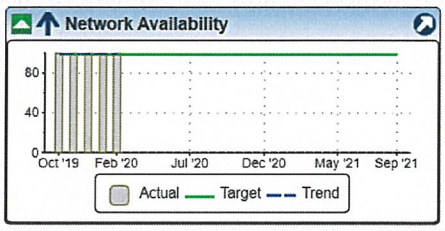
Measures Linked to Objective		Period	Actual	Target	Variance	Owners
911 Availability Index		Feb '20	100.00%	99.90%	0.10%	Aguirre, Juan (ITD)



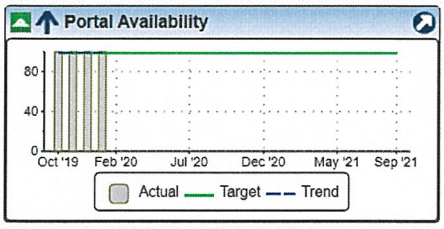
Child Measures		Period	Actual	Target	Variance	Owners
911 Availability - Network		Feb '20	100.00%	99.90%	0.10%	Aguirre, Juan (ITD)
% of 911 Telephone System 24/7/365 Availability		Feb '20	100.00%	99.90%	0.10%	Aguirre, Juan (ITD)
Mainframe Availability		'20 FQ1	100.00%	99.99%	0.01%	Suarez, Reinaldo (ITD); Mederos, Jorge E. (ITD); Garcia, Juan (ITD) ; Toyos, Ramon Jr. (ITD)



Network Availability		Feb '20	99.90%	99.00%	0.90%	Aguirre, Juan (ITD)



Email Availability		Jan '20	100.00%	100.00%	0.00%	Mederos, Jorge (ITD); Schmekel, Lars (ITD) ; Arteaga, Cliff (ITD)
Portal Availability		Jan '20	100.00%	99.00%	1.00%	Suarez, Carmen (ITD); Camner, Sue (ITD); Hilpold, Thomas (ITD)

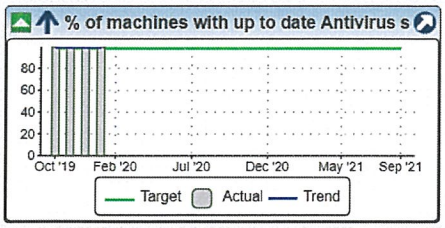


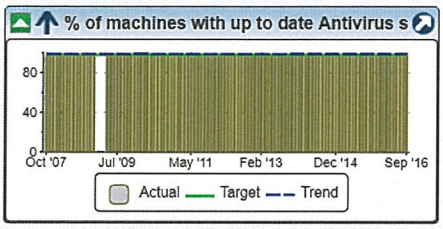
Objective	Description	Owners
Enhance Cyber Security (ITD)		Schmekel, Lars (ITD)

Grandparent Objectives	Description	Owners
GG3: Optimal internal Miami-Dade County operations and service delivery		Miami-Dade County

Parent Objectives	Description	Owners
GG3-2: Ensure security of systems and data		Miami-Dade County

Measures Linked to Objective	Period	Actual	Target	Variance	Owners
% of machines with up to date Antivirus software compliance	Jan '20	99%	98%	-1%	Schmekel, Lars (ITD); Eirea, Maria (ITD); Gray, Gary A. (ITD); Montoya, Beatriz E. (ITD)





2 Financial

Objective	Description	Owners
2.1 Meet Budget Targets (ITD)		Petisco, Angel (ITD)

Grandparent Objectives	Description	Owners
GG4-2: Effectively allocate and utilize resources to meet current and future operating and capital needs		Miami-Dade County

Parent Objectives	Description	Owners
Meet Budget Targets (All Miami-Dade County)	This is the parent objectives to all departmental "Meet Budget Targets" objective. This is the child objective to the County's Strategic Plan Objective, "GG4-2: Effectively allocate and utilize resources to meet current and future operating and capital needs."	Moon, Jennifer (OMB)

Measures Linked to Objective	Period	Actual	Target	Variance	Owners
Expen: Qtly Total (ITD)	'20 FQ1	$75,404K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)

Child Measures	Period	Actual	Target	Variance	Owners
Expenditure: Personnel Costs (ITD)	'20 FQ1	$29,187K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Court Costs (ITD)	'20 FQ1	$0K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Contractual Services (ITD)	'20 FQ1	$1,813K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Other Operating (ITD)	'20 FQ1	$17,874K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Charges for County Services (ITD)	'20 FQ1	$5,853K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Grants to Outside Organizations (ITD)	'20 FQ1	$0K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Capital (ITD)	'20 FQ1	$1,150K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Transfers Out (ITD)	'20 FQ1	$0K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Distribution of Funds in Trust (ITD)	'20 FQ1	$0K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Debt Service (ITD)	'20 FQ1	$0K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Depreciation, Amortization, Depletion (ITD)	'20 FQ1	$0K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Reserves (ITD)	'20 FQ1	$0K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Expenditure: Intradepartmental Transfers (ITD)	'20 FQ1	$19,527K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)

Revenue: Qtly Total (ITD)	'20 FQ1	$113,690K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)

Child Measures	Period	Actual	Target	Variance	Owners
Revenue: Carryover (ITD)	'20 FQ1	$627K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Revenue: General Fund (ITD)	'20 FQ1	$0K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Revenue: Proprietary (ITD)	'20 FQ1	$165K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Revenue: Federal (ITD)	'20 FQ1	$0K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Revenue: Interagency/Intradepartmental (ITD)	'20 FQ1	$112,898K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)
Revenue: State (ITD)	'20 FQ1	$0K	n/a	n/a	Petisco, Angel (ITD); Belmonte, Melissa (ITD)

3 Internal

Objective	Description	Owners
3.1 Improve Efficiency of Internal Procedures		Information Technology Department

Initiatives Linked to Objective	Est. Start	Est. End	Type	As Of	%	Status	Owners
Create a billing portal to access unified IT Services Bills	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
Implement a County-wide standardized and simplified IT Services Billing Process	n/a	n/a		4/3/2018	100%	Complete	Salazar, Mariaelena (ITD)
IT Innovations Center	10/1/2015	9/30/2018	Strategic Plan	7/29/2019	100%	Complete	Suarez, Carmen (ITD); Camner, Sue (ITD)

Objective	Description	Owners
3.2 Business Relationship Management	Provide a comprehensive map of all IT services, performance metrics and cost to monitor the overall business-IT engagement. This function ensures the integration of IT strategy and priorities into the business strategies.	Salazar, Mariaelena (ITD)

Initiatives Linked to Objective	Est. Start	Est. End	Type	As Of	%	Status	Owners
Establish BRM Program	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
MOUs PHASE 2 (SW, MT, PD, CR, SP)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
MOUs PHASE 3 (PR)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
MOUs PHASE 4 (LB, HD, CO, GI, FN)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
MOUs PHASE 1 (PE, ID, AD)	10/1/2012	12/31/2013		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
MOUs PHASE 5 (WS, ME, FR, AV, EL)	n/a	n/a		4/3/2018	100%	Complete	Salazar, Mariaelena (ITD)

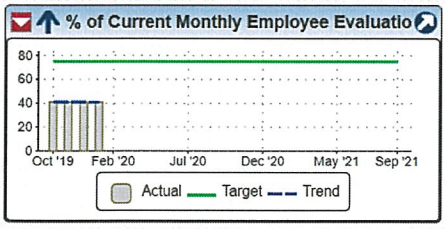
Objective	Description	Owners
3.3 IT Consolidation	Implement information technology best practices into a consolidated environment to utilize the maximum efficiency of systems, staff, and resources available to Miami-Dade County.	Salazar, Mariaelena (ITD)

Initiatives Linked to Objective	Est. Start	Est. End	Type	As Of	%	Status	Owners
Consolidation - Phase 4 (LB, HD, CO, GI, FN)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
Consolidation - Phase 2 (SW, MT, PD, CR, SP)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
Consolidation - Phase 5 (WS, ME, FR, AV, EL)	8/25/2016	9/1/2026		2/10/2020	40%	In Progress	Salazar, Mariaelena (ITD)
Consolidation - Phase 1 (PE, ID, AD)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)
Consolidation - Phase 3 (PR)	n/a	n/a		3/14/2018	100%	Complete	Salazar, Mariaelena (ITD)

Objective	Description	Owners
3.4 Resource Management (ITD)		Information Technology Department

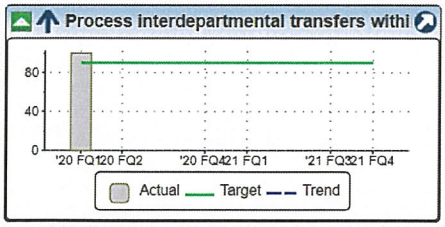
Parent Objectives	Description	Owners
GG2: Excellent, engaged and resilient workforce		Miami-Dade County
GG4: Effective leadership and management practices		Miami-Dade County

Measures Linked to Objective	Period	Actual	Target	Variance	Owners
% of Current Monthly Employee Evaluations received on time	Jan '20	41%	75%	-34%	Arocho, Lylliam (ITD)



Extend job offers within 3 business days of HRD approval and receipt of back-ground checks	'20 FQ1	100%	90%	10%	n/a

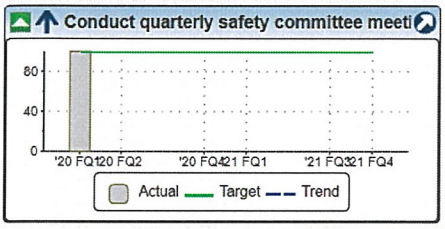
Process interdepartmental transfers within 5 business days		'20 FQ1	100%	90%	10%	n/a



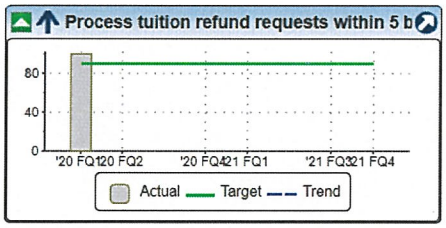
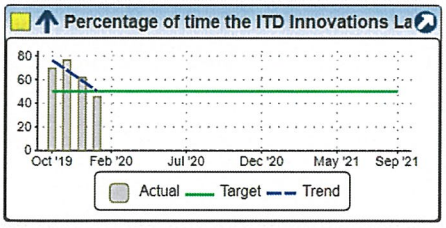
4 Learning and Growth

Objective	Description	Owners
4.1 Human Resources		n/a

Measures Linked to Objective		Period	Actual	Target	Variance	Owners
Conduct quarterly safety committee meetings and maintain minutes		'20 FQ1	100%	100%	0%	n/a



Process tuition refund requests within 5 business days of receipt of completed packages		'20 FQ1	100%	90%	10%	n/a



Percentage of time the ITD Innovations Lab is in use for trainings		Jan '20	45 (10 / 22)	50	-5	Suarez, Carmen (ITD); Camner, Sue (ITD); Fernandez, Jorge A. (ITD); Perez, Jose (ITD)