



Information Technology Department Business Plan

Fiscal Years: 2019 and 2020
(10/1/2018 through 9/30/2020)

Approved by:

A black ink signature of Angel Petisco, consisting of a large, stylized loop at the top and several horizontal strokes below.

Angel Petisco, Chief Information Officer/
Department Director

A blue ink signature of Ed Marquez, featuring a large, stylized "E" and "M" followed by a long, sweeping horizontal stroke.

Ed Marquez, Deputy Mayor

Plan Date: 2/20/19

Delivering Excellence Every Day



TABLE OF CONTENTS

| | |
|-----------------------------|----------------|
| DEPARTMENT OVERVIEW | Page 2 |
| Departmental Mission | |
| Table of Organization | |
| Strategic Alignment Summary | |
| Our Customer | |
| KEY ISSUES | Page 5 |
| PRIORITY INITIATIVES | Page 6 |
| FUTURE OUTLOOK | Page 16 |



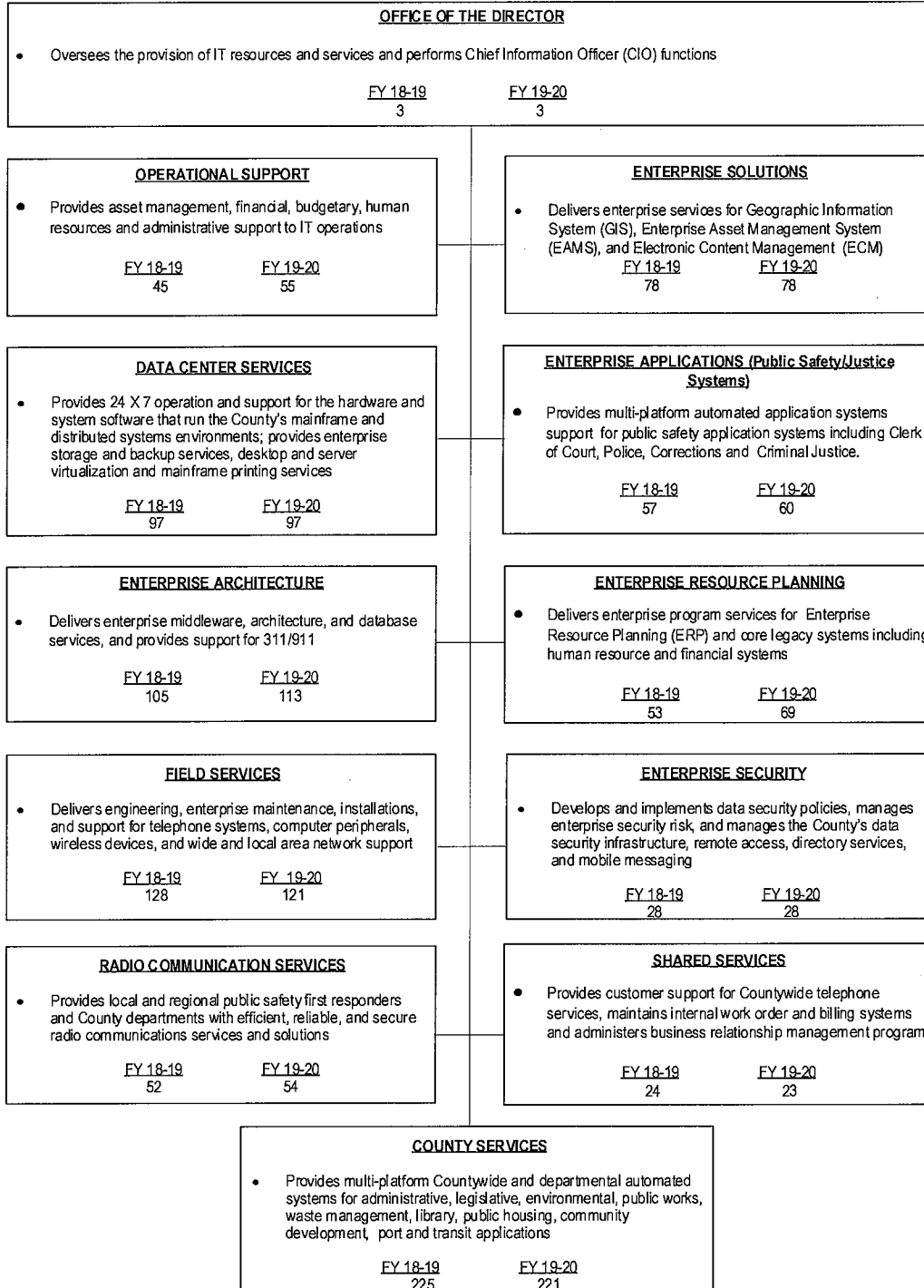
DEPARTMENT OVERVIEW

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. ITD provides information technology services that enable and support operations of 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 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. The department is able to achieve this level of support by leveraging technology which provides 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, visitors, and the public that visits the County’s website worldwide.

Table of Organization



The FY 2018-19 total number of full-time equivalent is 922 FTEs.



Strategic Alignment Summary

ITD directly or indirectly supports virtually every objective in the County's Strategic Plan. The objectives which ITD supports most directly include:

| | |
|--------------|--|
| GG1-1 | Provide easy access to information and services |
| GG1-2 | Develop a customer-oriented organization |
| GG3-1 | Ensure available and reliable systems |
| GG3-2 | Effectively deploy technology solutions |
| GG3-3 | Improve information security |
| GG4-2 | Effectively allocate and utilize resources to meet current and future operating and capital needs |
| GG5-3 | Utilize assets efficiently |
| GG2-2 | Develop and retain excellent employees and leaders |
| GG2-4 | Provide customer-friendly human resources services |

Our Customer

ITD's principal internal customers are the County's departments and agencies. External customers include local and municipal entities, many of whom are public safety agencies, the State of Florida, the federal government, and the citizen population of Miami-Dade County. Our citizens have increasingly made use of technological avenues to obtain information and to perform business using the County's readily available technology and information. Miami-Dade County residents expect reliable, secure websites for conducting business with the County. Departments expect a readily available and secure computing and networking infrastructure to support their respective business. In addition, 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.

The County's departments manage a myriad of unique businesses resulting in different requirements and needs. ITD continually evaluates the industry best practices for the technologies available and implements enterprise systems to meet the needs of customers. As systems and business processes evolve, ITD continually evaluates opportunities for modernizing the portfolio and implementing best practices.

A comprehensive map of IT Services, performance metrics, IT billing and service rates are available to ITD customers online including digital approval of Memorandums of Understanding (MOU) and associated 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 allowing the opportunity to gauge satisfaction with ITD

services and adjust to better serve customer needs, and ensure the alignment of customer business priorities with Countywide IT strategy. In continuing to improve services, ITD will maintain a service catalog which clearly describes ITD's various lines of business and rates.

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 county-wide 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.

KEY ISSUES

Representation from all divisions contributed to identifying key issues facing the department by performing a SWOT analysis. ITD has made significant progress and continues to work on its strengths, weaknesses, opportunities and threats.

Strengths

- Enterprise infrastructure technology investments
- Business process knowledge
- Employee commitment and longevity
- Established customer relationships
- Enhanced cost effectiveness and efficiencies as a result of IT consolidation
- Established customer Memorandums of Understanding (MOU)
- Leveraging cloud service solutions for seamless deployment of IT resources
- Experienced and talented employees

Weaknesses

- Advanced customer service skills – addressed with *on-going training*
- Lack of metrics to compare to industry standards
- Limited documentation of business processes to assess enhancement opportunities
- Advancement of metrics and measures to track operational goals, efficiencies, and success factors
- Development of Succession planning strategy due to recruitment procedural rigidity



- Limited marketing of departmental services and products
- Limited implementation of contemporary IT classifications/skills
- Loss of institutional knowledge through attrition and retirement

Opportunities

- 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

Threats

- 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 and global adoption of IOT
- Limited governance to prioritize competing business initiatives
- Rapidly changing technology advancements
- Change in political and regulatory environments
- Ability to attract and retain IT talent in a competitive market

PRIORITY INITIATIVES

Scaling the Bi-Modal Organization

ITD has made significant advances in the adoption of the Bi-Modal IT organization model which postulates that the IT enterprise organization structure would support two modes of operation – one to preserve the foundation and structure that maintain existing core disciplines focused on stability and efficiency, the other mode will respond to the new innovating, emerging and changing technology demands focused on time-to-market, rapid application evolution, and tight 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.

IT Consolidation

During FY2018-19 and FY2019-20, ITD will continue to execute the Mayor's initiative to implement information technology best practices into a consolidated environment to utilize the maximum efficiency of systems, staff and resources available to Miami-Dade County. From launch of consolidated efforts, IT functions in the following County departments have been consolidated under ITD: Regulatory and Economic Resources (RER), Internal Services (ISD), Animal Services (ASD), Transportation and Public Works (DTPW), Department of Solid Waste Management (DSWM), Police (MDPD), Corrections and Rehabilitation (MDCR), Seaport (SP), Parks and Recreation and Open Spaces (PROS), Library (LB), Public Housing and Community Development (PHCD) and Communications (GI), Community Action and Human Services (CASHD), Finance (FN), Water and Sewer (WS). Upcoming departments that will be consolidated are Medical Examiner (ME), Fire Rescue (FR), Aviation (AV), and Elections (EL).

As the IT consolidation initiative progresses, County departments will continue to be analyzed and consolidation recommendations implemented to obtain not only additional cost savings and cost avoidances to the County, but also achieving simplification of processes and standardization of products and IT methodologies. This ongoing effort will produce operational efficiencies, expanded capabilities, improved continuity of operations, and better collaboration and information sharing.

In addition, information technology contract consolidation is ongoing, allowing the County to leverage its procurement volume to achieve more favorable pricing terms and lower operational costs. Under this state, ITD manages the contracts countywide for the purchase of IT products and services. Departments with an existing allocation under a current contract term will continue to issue purchase orders against their existing allocations until they exhaust their allotment for that term.

Enterprise Resource Planning (ERP)

ERP systems include a suite of fully integrated financial, procurement and 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.

The County selected the Oracle PeopleSoft, Hyperion, and Business Intelligence products as its ERP platform and implemented the ERP financial and procurement modules in the Water and Sewer and Aviation Departments. The goal for County-wide ERP implementation is to improve organizational effectiveness through process efficiency and self-service, and to facilitate improved talent acquisition and staff retention. A governance structure has been established to support the ERP project and to ensure that the County remains current as the ERP software evolve. The phased implementation is planned over a four-year timeframe and began in FY2017-18.

Enterprise Portfolio Management Office

ITD has effectuated positive change with the provision and centralization of the County's technology service, by establishing the Enterprise Portfolio Management Office (EPMO), focusing on understanding the needs of the County's IT initiatives, prioritizing and ensuring strategic IT projects are aligned with current technology and project standards, and endorsing the appropriate monitoring of resources for the quality delivery of strategic IT projects. EPMO is currently in operations. The EPMO will continue to focus on bringing contemporary project management methodologies like Agile within Miami Dade County and bring more maturity to the traditional project management methodologies like Waterfall, along with the provision of providing the project / program management resources to the large IT strategic projects like ERP, Criminal Justice System modernizations etc., as well as providing strategic enterprise project management services like ITD Project's Health Dashboard, IT Project Portfolio Management, etc.

Business Relationship Management (BRM)

As part of ITD's continuous improvement strategy, the BRM team works directly with customers to further strengthen the relationship between technology and business stakeholders. Overall, the BRM team will collaborate with customers to shape technology initiatives, make sure that IT services meet customer expectations, discuss key IT risks/vulnerabilities or issues with operational areas to achieve negotiated resolutions, promote standards, provide guidance to business units on IT matters, and enable and advocate for IT changes. Moreover, BRMs will add value to customers with the review of their technology portfolio, track performance and assess financial standing while developing 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. Service level agreements (SLAs) within these MOUs are continuously reviewed and renewed with customers.

IT Service Management

The IT Service Center is the foundation of a comprehensive plan to deliver quality IT services which will enhance, promote and strengthen customer IT Support Programs and relationships. As part of the ongoing IT consolidation initiative, ITD resumed direct responsibility of the IT Service Desk, the first phase in a planned expansion for an enterprise IT service center with greater emphasis for customer reliance on self-service with the launch of a new IT Service Management tool. The initiative, sanctioned by the ITLC, is for an enterprise service center for all IT services, with a focus in providing quality services while building customer relationships. Working together with the BRM team, ITD continues to provide customer communications and service opportunities to improve the overall customer experience.

The new Remedy On Demand system continues its maturity process. New services will continue to be added to the MyIT service portal; enhancing the service request intake process with the provisioning of a self-service portal and catalog for customers. The intake of IT services continues being consolidated to the Remedy On Demand system with re-engineered processes for increased responsiveness and improved resolution time. Customers continue to be onboarded in MyIT and informed of the services available via the self-service portal and have access to service delivery performance reporting.

IT Service Catalog

The IT services catalog defines the services ITD provides in terminology that is comprehensible and meaningful to County departments as part of their businesses. As a web based, self-service portal, the catalog provides the means by which customers can understand the specifics of any IT service, make a request to receive that service, inquire on the progress of the processes needed to deliver the service, and provide feedback on the experience. The expanded service catalog has been redesigned for greater ease in locating desired IT services along with their associated workflows for fulfillment. The catalog is integrated with back office technology solutions to achieve greater efficiencies through automation and ensure that all the information about a request for service is most current. As County departments and customers refine their business operations and make IT requests, ITD can identify trends that can impact operations and address these in the most efficient manner. The services catalog continues to be developed through the Remedy system and augmented as the IT consolidation process continues and departments provide ITD with specific service needs.

Enterprise Content Management (ECM)

Expansion of the Enterprise Content Management (ECM) initiative that 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 exists to enable the searching of public documents over the Internet as well as the ability to integrate 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 and seeks to improve efficiencies and set standards in areas of asset and inventory management, work management, preventive maintenance, materials management, work request and call center management. The Infor EAM environment will be upgraded to v11.4 during this year. Also, services that will continue to be enhanced in the upcoming fiscal period include automation of inspections on mobile devices for field personnel, continued expansion of the GIS/EAMS configuration for location analysis, configuration of condition assessments for asset reliability, and use of the Open Cad module for providing graphical representation of building plans related to asset location.

In collaboration with WASD, ITD will enhance EAMS implementation to support CMOM/Consent Decree initiatives, new maintenance management approaches, and inventory management requirements. Additionally, ITD will continue to work along WASD Administration to support the WASD Asset Management Framework initiative.



Artificial Intelligence (AI) Solutions

ITD will continue to expand the existing IBM Watson AVA (Automated Virtual Assistant) solution in use by the Water and Sewer Department. Possible expansion of AVA for the 311 Call Center will be evaluated. Exploration into other AI platforms and augmented reality technology opportunities will be conducted as partnerships with departments.

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 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. Plans are to continue to develop, interface, and integrate GIS services through the County's technical portfolio enabling the use of spatial analysis. Continue to enhance operations for field crews to capture and update both tabular and spatial information via smartphones and tablets using the built-in GPS capabilities of the device, or by simply tapping on a map. Provide support for the new CAD 911 selection and implementation. Expand automated synchronization for integrations with EAMS and eBuilder to reduce processing time, eliminate manual work, and improve data integrity. Empower management thru the use of operational dashboards that provide data visualization and real-time analytics of services, people, and events. 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, GIS will facilitate outreach to residents and further transparency in such areas as resiliency, sustainability, urban and transportation planning.

Miami-Dade 3-D Base layer

The planned continued enhancement of the GIS 3D buildings layer. The layer was incorporated by TPO into the SMART plan study enabling the vertical spatial analysis of land use and zoning along the corridors. It is being used by the Office of Resiliency for modeling climate change and sea level rise. 3D brings GIS data to a new level of accuracy and in the coming year will be used to vertically enable base layers such as Addresses, Streets, Zoning, and Land Use. 3D layers will be updated with new

Lidar data. The 3D layer is currently available in the centralized data repository for all county employees to consume.

Adapting GIS public facing solutions to Cloud Technology

The planned continued migration of web-based applications specifically GIS viewers geared to enhance the public's interaction with the County's 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.

Leveraging Spatial Analysis

Continue to leverage Spatial 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.

Jail Management System (JMS)

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 through 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 2 ½ years. The implementation will follow a phased approach with Phase 1 scheduled to be implemented early 2020.

Criminal Justice Information System (CJIS) Modernization

The modernization of the Criminal Justice Information System (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 manner in which information is delivered to all justice partner agencies and constituents. A modern system when fully deployed 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



- Reporting capabilities

Recreational Management System (RMS)

The Information Technology Department will be leading the implementation of the new Recreational Management System that will provide 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 the current and future County financial systems, including, but not limited to the County payment gateway.

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 plan 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 and City of Miami. ITD will continue to collaborate with RER to expand the program further.

Enterprise Permitting & Code Enforcement Modernization

ITD will be executing the implementation plan for an enterprise land use management, licensing, permitting, plan review, inspections, and code enforcement solution. The solution will be used county-wide for land use management, 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.

Digitizing Public Works Permitting/Plans Review Process

In FY19-20, in support of the Department of Transportation and Public Works Digital Roadmap, ITD is to work with the department to enable the digitizing of the Public Works plans review/permitting process retiring legacy systems. 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.

Automating Seaport's and Public Work's Construction Management Process

In FY18/19, in support of the department's Construction program there is an immediate need to implement a construction management solution that will allow the departments to improve the workflows, billing, management, processing and controls of the program.

Enforcement Inspections and Investigation Module for DSWM

- 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 Request for Proposal (RFP) for a multi-discipline Public Safety Computer Aided Dispatch (CAD) system was advertised and proposer responses are being evaluated. 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.

Laboratory Information Management System (LIMS)

The implementation efforts of the Laboratory Information Management System (LIMS), STARLIMS to support MDPD's Forensic Services Bureau (FSB), Crime Scene Investigative Support Section (CSISS), and Property and Evidence Section (PES) is in progress. The system will be used by all County law enforcement agencies and external municipal, State, and Federal agencies. STARLIMS is a vendor solution that manages the collection, processing, storage, retrieval, and analysis of information generated in laboratories, at crime scenes, and property warehouses. The software improves the reliability of sampling processes, supports compliance with regulations and industry standards, and provides comprehensive reporting, monitoring, and analysis capabilities. Go-live is expected during 2019.

Crime Analysis System (CAS) Modernization

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). This is a mandate that needs to be in place by January 2021.

Electronic Subpoena System

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

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.

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 of the project 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 migrating Miami Dade Courts, MDPD Miami Gardens, MDPD Special Patrol and updating MDPD HQ Core System in FY2018-19 and FY2019-20.

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 center 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 RER Miami-Dade Permitting and Inspection Center. ITD will continue migrating service by moving the County Courts in FY2018-19 and FY2019-20. Avaya System Core update and WASD Call Center application update are scheduled for FY2019-20.

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, 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.

Transportation

Transit Mobile Ticketing and Mobile Pay

In FY 18-19 an enhanced EASY Pay mobile application update was released that allows riders to purchase mobile tickets for the bus and rail directly from their mobile device. The upgrade included a new look and feel; integrated digital account management; single pay source; purchase EASYCard stored value and passes through autoloading; 1 day and 7 days passes available; and view trip history. Subsequently, additional enhancements will be enabled for Open Payments through ApplePay, AndroidPay and bank issued nearfield credit cards. In FY19-20 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.

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 FY 18-19, the County's Automated Traffic Management Systems was modernized by installing Adaptive Signal Control Technology on 300 Smart Signals along 10 of the County's major corridors, adapting to real-time conditions to improve the flow of traffic and reduce travel times. In FY19-20, ITD will partner with the Department of Transportation and Public Works 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

The Department of Transportation and Public Works in collaboration with the Information Technology Department and the Florida Department of Transportation targets to partner with a firm to convert 26,000 street lights 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 solicitation 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.

Digitizing Road and Traffic Related Service Request Activities

Service Requests modernization includes self-serve submission via mobile and desktop. Status and Closure notifications sent via SMS text or email service. The overhaul will enhance the Citizens' engagement and experience when soliciting services for Road and traffic related Services.

Seaport Performance Dashboards

PortMiami Dashboards will be implemented for the Cruise, Crane and Cargo operational areas to display the Port's business performance. The Dashboards contain performance metrics such as Number of Passengers, Number of Containers, Cargo Tonnage, Crane Hours, Crane Container

Movements, Crane Downtime, Cruise Revenue, Cargo Revenue, Crane Revenue, Total Revenue and Total Expenses.

Seaport Parking System

Purchase of on-going monthly maintenance, repair services to include upgrades of hardware and software for an integrated, PCI compliant Seaport parking control system.

Solid Waste Scale House Payment Processing, and Disposal Systems Improvements

PCI compliant EMV chip credit card reader will be implemented at the 12 Scale Houses to facilitate secure payment processing. Additionally, ITD is performing network infrastructure and video surveillance upgrades at 4 Disposal facilities while also procuring an updated replacement scale house debris processing solution that will be efficiently used for the next 10 years. This Disposal system will have a direct General Ledger interface to the County's finance system as well as possess a fully integrated Accounts Receivable and Billing system.

Solid Waste's Collections Accounts, Billing System and Schedule Functions

Solid Waste Accounts and Billing System will include Customer Account set up, Customer Billing and Invoice process, Lien Process, Legal functions, Customer Care module and Reporting. In Addition, the Service Schedule Functions Services will be added to the current Solid Waste Citizen Mobile Application to grant citizens greater access to their service requests and account history. Lastly, ITD will provide Solid Waste customers with access to the same mobile app that their Bulky Trash crews will use to measure the amount of trash in a pile. The function will provide Waste customers with the same estimate cost of their potential Bulky overage fees as the Bulky Trash crews and reduce billing disputes.

Solid Waste Trash and Recycling Center (TRC) Application

This system eliminates Solid Waste's current outdated Wi-Fi handheld Windows Mobile device at all of their 13 TRCs. Additionally, it will provide new functions such as customer visits history, cellular connectivity, real-time account validation and other key functions. The current paper coupon payment process for their TRC Landscaper customers will also be eliminated. Landscapers will be able to purchase their TRC visits at Solid Waste's MLK facility or via the online/mobile payment application. Landscapers will be provided with a permanent RF barcode sticker that will be scanned at each TRC visit.

Solid Waste Inspections and Investigation Module

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.

Solid Waste Citizen Bulky Pile Calculator and Overages Electronic Signature

For FY 19-20, we will implement a system to reduce the amount of time that the Bulky Trash crews spend at their pickup location as well as eliminate the need for the Enforcement staff to manually measure trash pile. In addition, the Bulky Trash crews' mobile tablets will be equipped to provide real-time customer approvals for bulky trash overage pickup fees. Currently, this process requires the customer to sign and mail back a paper form to the Accounting division, which delays the bulky trash pile pick up.

Cyber-security Services

ITD's 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. ITD 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. ITD 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. The ESO also facilitates the adoption of secure development processes and application vulnerability testing for both agile and traditional development projects for both on premises and existing or planned cloud hosted systems and services.

Radio Systems Enhancement Initiatives

The objective of the radio systems enhancement initiatives are to increase radio communication capabilities within Miami-Dade County. The 800 MHz modernization project was completed which 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 include 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 FY2019-20 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 public safety agencies within Miami-Dade. Furthermore, by adding additional transmit sites at Palms Springs North and Trail Glades on System A, public safety will be provided an increased level of redundancy to support countywide responses.

Water & Sewer e-Builder and Capital Construction Project Management Solutions

e-Builder is a cloud-based, project management information system that allows owners to manage and measure every step of the capital project lifecycle process – initiation, planning, design, procurement, construction, and closeout. In FY17-18, e-Builder was implemented at WASD to support the processes and transactions associated with utility developments that connect to our infrastructure and are donated to the department. In FY18-19 and FY19-20, ITD continues to work with WASD to complete the implementation of eBuilder to manage the projects, programs, and processes that are part of the Capital Improvement Programs (CIP), including Consent Decree, Ocean Outfall Legislation, Pump Station Improvements, and projects managed internally. In addition, we will develop new integrations to other systems, leveraging the deployment of eBuilder to drive efficiencies and allow for enhanced quality control within projects. The primary users for e-Builder will be the divisions under the Deputy Director of Capital & Improvement Programs and Regulatory Compliance. It is anticipated that all projects or requests budgeted in the capital plan will also be processed through e-Builder, expanding the user base to all divisions that have requests in the capital plan. Furthermore, access to e-Builder will be extended to all project team members or responsible parties, internal or external to WASD. Other departmental areas need capital construction management technology solutions. ITD will evaluate eBuilder as well as other viable solutions which must integrate with the PeopleSoft Project Costing module being implemented as part of the ERP rollout.

Advanced Metering Infrastructure (AMI)

As WASD embarks in the implementation of an Advance Metering Infrastructure (AMI) System, ITD will work alongside the department to ensure the technical aspects of the implementation are carried out using the best technology fit available and leveraging existing infrastructure whenever possible. Advanced metering infrastructure (AMI) is an architecture for automated, two-way communication between a smart utility meter and a utility company. Implementing AMI will allow WASD to remotely collect meter reads and potentially start/stop service remotely for over 480,000 accounts county-wide. WASD has identified several important goals for the implementation of this project: customer service improvements, enhanced leak detection capabilities, identification and reduction of non-revenue water loss, as well as conservation and sustainability.

WASD Customer Self- Service Application

ITD continues to augment the portfolio of features available to WASD customers on the Self-Service Application. Each new feature added to the portal represents system automation which translates into faster service and lower call volume. Some of the next features to be made are High Bill Investigation, Start Service and Transfer Service.

Big Data / Business Intelligence

ITD will continue to utilize Business Intelligence tools and Big Data implementation to streamline and create efficiencies within the WASD divisions. This includes collaborating with WASD Business operations to assist in the creation of dashboards in support of Business plan initiatives such as CMOM/Consent Decree. The goal is to support WASD operations to transition from reactive/proactive to predictive operations.

FUTURE OUTLOOK

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 as 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.

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 County-wide roll-out of ERP, which will replace FAMIS, ADPICS, Time and Leave, Human Resource, and Payroll applications with an integrated solution that will streamline 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
- Migration of the current AIX EJ Ward Fuel Management system to the latest release of the Ward 4 Fuel Management System. The upgrade entails upgrading communications infrastructure at the 29 fuel islands, deployment of new fuel terminals and installation, configuration, testing and user training for the new software
- ITD will spearhead the development of a new replacement Legislative Tracking System. This modernization effort will include the integration of document management, departmental participation in the agenda process, mobile access, robust public interaction capabilities, real-time notifications, detailed reports for county staff and the public, and seamless integration with the Directives system
- 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 in order to comply with Florida statutes on confidentiality will be enhanced and processes standardized in order to facility 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 also eliminate duplicate entries with paper and clerical staff for asset tracking, work orders and inspections. Explore interfaces using 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.

Infrastructure Initiatives

ITD will continue to 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. Successful implementation of expanded cloud services should yield significant savings and cost avoidance benefits, as well as increase the County's ability to leverage its investment in its cloud infrastructure to generate incremental revenue from external sources.

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.

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 |
|--|------------|-----------|----------------|-----------|------|-------------|--|
| Consolidation - Phase 1 (PE, ID, AD) | n/a | n/a | | 3/14/2018 | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |
| Consolidation - Phase 2 (SW, MT, PD, CR, SP) | n/a | n/a | | 3/14/2018 | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |
| Consolidation - Phase 3 (PR) | n/a | n/a | | 3/14/2018 | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |
| Consolidation - Phase 4 (LB, HD, CO, GI, FN) | n/a | n/a | | 3/14/2018 | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |
| Enterprise Asset Management | 10/1/2016 | 3/20/2018 | Strategic Plan | 3/1/2019 | 80% | In Progress | Lopez, Jose L. (ITD) |
| Enterprise Content Management | n/a | n/a | Strategic Plan | 2/27/2019 | 95% | In Progress | Lopez, Jose L. (ITD) |

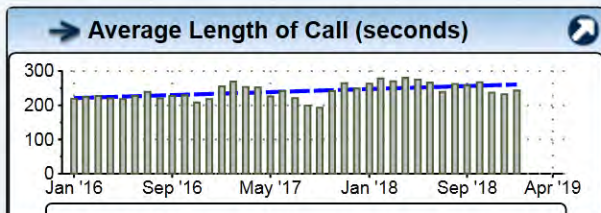
1 Customer

| Objective | Description | Owners |
|--------------------------------|-------------|--------------------|
| Improve Customer Service (ITD) | | Perez, Rosie (ITD) |

| Grandparent Objectives | Description | Owners |
|---|-------------|-------------------|
| GG3 Efficient and effective service delivery through technology | | Miami-Dade County |

| Parent Objectives | Description | Owners |
|---|-------------|-------------------|
| GG3-1 Ensure available and reliable systems | | Miami-Dade County |

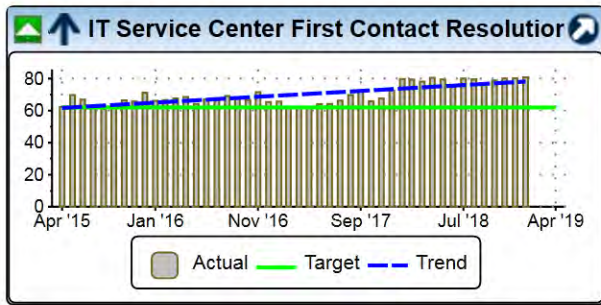
| Measures Linked to Objective | Period | Actual | Target | Variance | Owners |
|----------------------------------|---------|--------|--------|----------|---|
| Average Length of Call (seconds) | Jan '19 | 243 | n/a | n/a | Kaimchan, Kawal (ITD); Vespe, Cristina (ITD) |



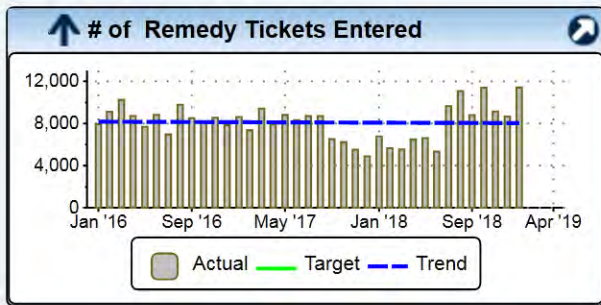
— Trend Actual — Target — Lower Target
— Upper Target

Business Plan Report - Information Technology Department

IT Service Center First Contact Resolution ▲ Jan '19 81% 62% 19% Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)

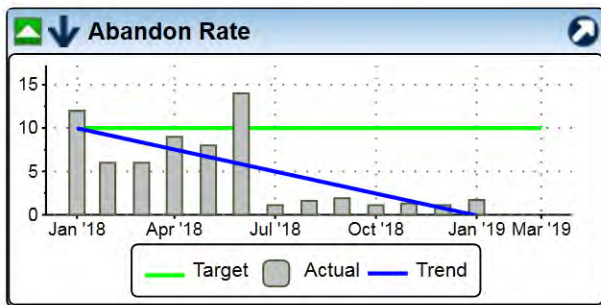


of Remedy Tickets Entered Jan '19 11,397 n/a n/a Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)



| Child Measures | Period | Actual | Target | Variance | Owners |
|----------------|---------|--------|--------|----------|--|
| Work Orders | Jan '19 | 2,458 | n/a | n/a | Vespe, Cristina (ITD) |
| Incidents | Jan '19 | 8,939 | n/a | n/a | Kaimchan, Kawal (ITD); Vespe, Cristina (ITD) |

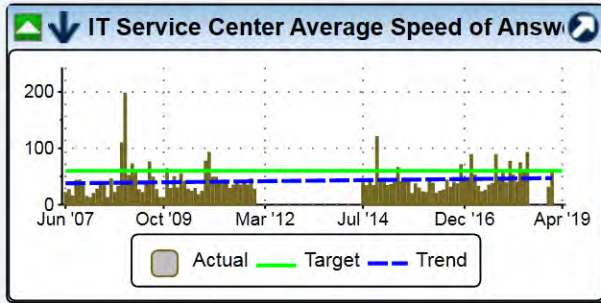
IT Service Center Call Abandon Rate ▲ Jan '19 2% 10% n/a Vespe, Cristina (ITD); Kaimchan, Kawal (ITD)



ITD Customer Satisfaction Level based on survey per service request completed Jan '19 n/a 85% n/a Kaimchan, Kawal (ITD); Vespe, Cristina (ITD)

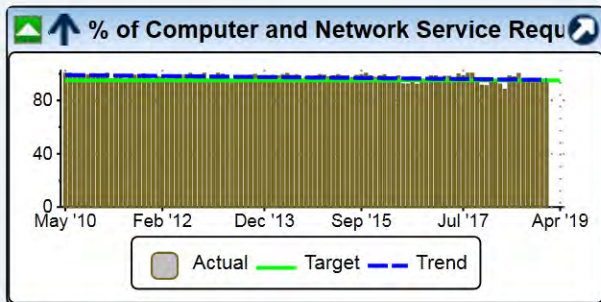
Business Plan Report - Information Technology Department

| Child Measures | Period | Actual | Target | Variance | Owners |
|---|---------|--------|--------|----------|---|
| ITD Customer Satisfaction Level based on survey after IT service request completion | Jan '19 | n/a | 95% | n/a | Kaimchan, Kawal (ITD); Vespe, Cristina (ITD) |
| IT Service Center Total Incoming Calls | Jan '19 | 7,852 | n/a | n/a | Vespe, Cristina (ITD); Kaimchan, Kawal (ITD) |
| IT Service Center Average Speed of Answer (Seconds) | Jan '19 | 58 | 60 | 2 | Vespe, Cristina (ITD); Kaimchan, Kawal (ITD) |



| Objective | Description | Owners |
|---|-------------|-----------------------------------|
| Resolution Response (ITD) | | Information Technology Department |
| Grandparent Objectives | Description | Owners |
| GG1 Friendly government | | Miami-Dade County |
| GG3 Efficient and effective service delivery through technology | | Miami-Dade County |
| Parent Objectives | Description | Owners |
| GG1-2 Develop a customer-oriented organization | | Miami-Dade County |
| GG3-1 Ensure available and reliable systems | | 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 '19 | 95% | 95% | 0% | Aguirre, Juan (ITD) |



Business Plan Report - Information Technology Department

% of Computer and Network repairs completed within 48 hours from the time recieved.

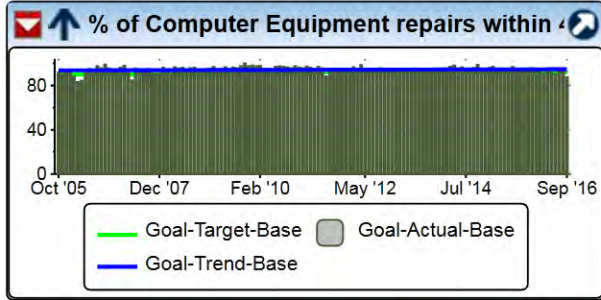


Jan '19

79.00%

92.00%

-13.00% Aguirre, Juan (ITD)



% of Telephone Equipment repairs within 48 hours from the time received.

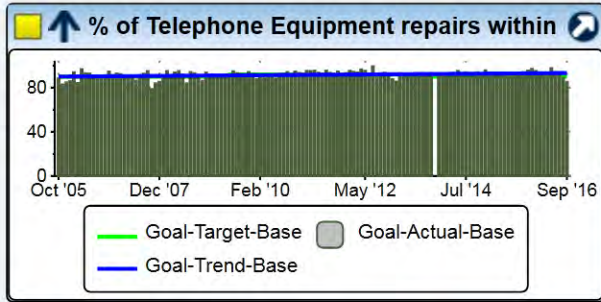


Jan '19

88.00%

90.00%

-2.00% Aguirre, Juan (ITD)



% of Telephone Repair Calls assigned within 4 hours from the time reported by customer

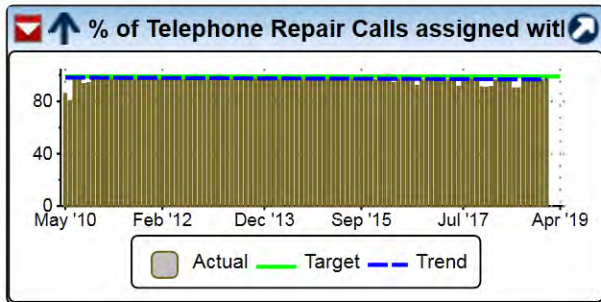


Jan '19

98%

99%

-1% Aguirre, Juan (ITD)



% of Computer and Network Repair Calls assigned within 4 hours from the time reported by customer



Jan '19

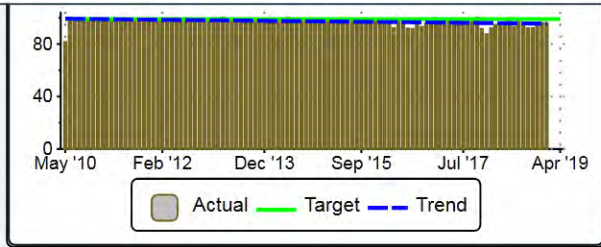
96%

99%

-3% Aguirre, Juan (ITD)

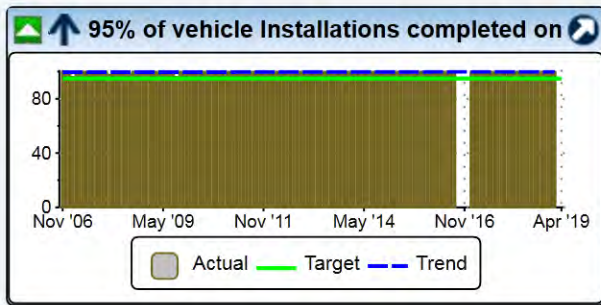


Business Plan Report - Information Technology Department

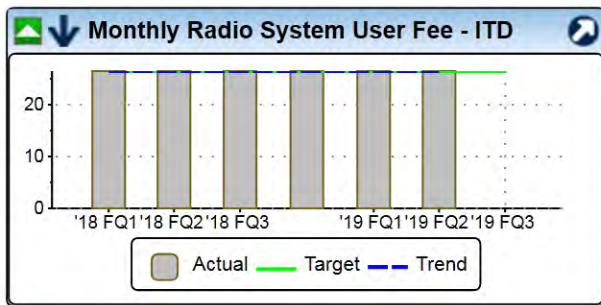


| Objective | Description | Owners |
|--|---|-----------------------------------|
| IT Industry Service Comparables to ITD Service Costs | Quarterly Comparison of ITD Service costs to similar services provided by other public and private entities | Information Technology Department |

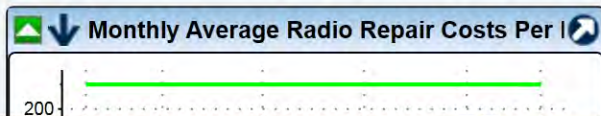
| Measures Linked to Objective | Period | Actual | Target | Variance | Owners |
|--|---------|--------|--------|----------|--------------------|
| 95% of vehicle Installations completed on time | Feb '19 | 100% | 95% | 5% | Smoak, Allen (ITD) |



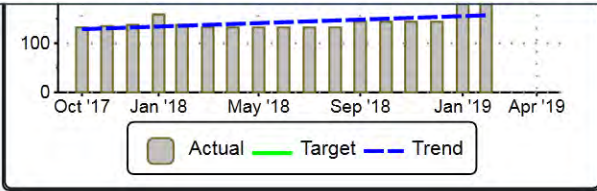
| | | | | | |
|-------------------------------------|---------|----|----|---|--|
| Monthly Radio System User Fee - ITD | '19 FQ2 | 27 | 27 | 0 | Smoak, Allen (ITD); Cast, Cindy (ITD); Gross, Thomas (ITD) |
|-------------------------------------|---------|----|----|---|--|



| | | | | | |
|---|---------|-----|-----|----|--|
| Monthly Average Radio Repair Costs Per Device - ITD | Feb '19 | 180 | 250 | 70 | Cast, Cindy (ITD); Smoak, Allen (ITD); Gross, Thomas (ITD) |
|---|---------|-----|-----|----|--|

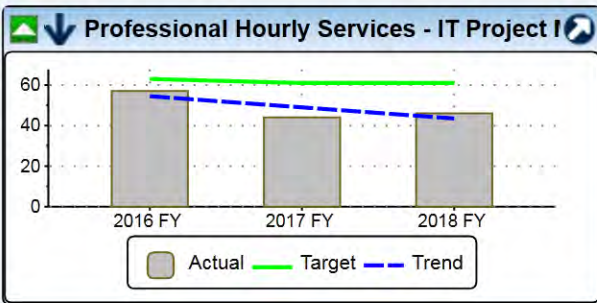


Business Plan Report - Information Technology Department

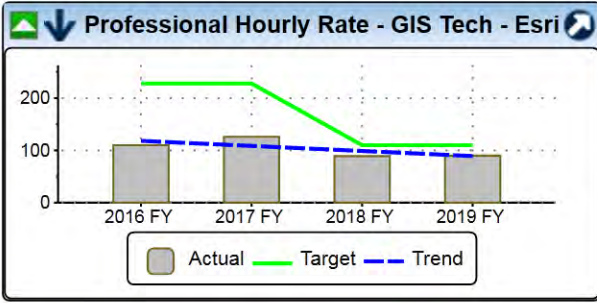


| Objective | Description | Owners |
|--|--|-----------------------------------|
| IT Industry Professional Services Hourly Rates Comparable to ITD | Annual Professional Hourly Rates comparable to ITD professional hourly rates charges | Information Technology Department |

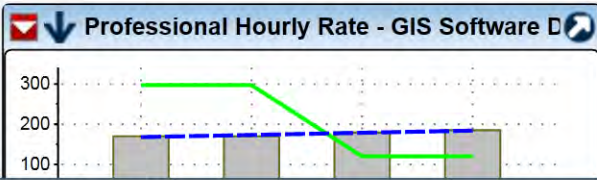
| Measures Linked to Objective | Period | Actual | Target | Variance | Owners |
|---|---------|--------|--------|----------|--------------------|
| Professional Hourly Services - IT Project Management (under \$10m) - Source: Project Management Institute | 2018 FY | \$46 | \$61 | \$15 | Arora, Rishi (ITD) |



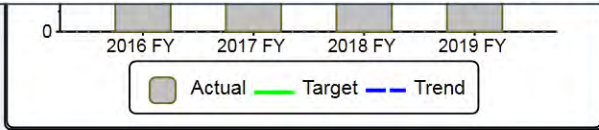
| | | | | | |
|--|---------|------|-------|------|----------------------|
| Professional Hourly Rate - GIS Tech - Esri | 2019 FY | \$90 | \$110 | \$20 | Lopez, Jose L. (ITD) |
|--|---------|------|-------|------|----------------------|



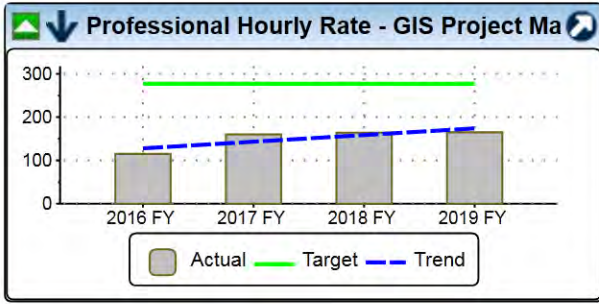
| | | | | | |
|--|---------|-------|-------|-------|----------------------|
| Professional Hourly Rate - GIS Software Developer - Esri | 2019 FY | \$185 | \$120 | -\$65 | Lopez, Jose L. (ITD) |
|--|---------|-------|-------|-------|----------------------|



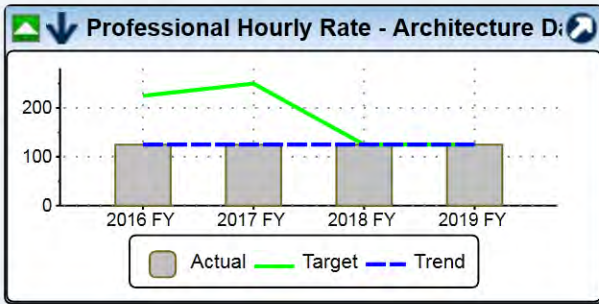
Business Plan Report - Information Technology Department



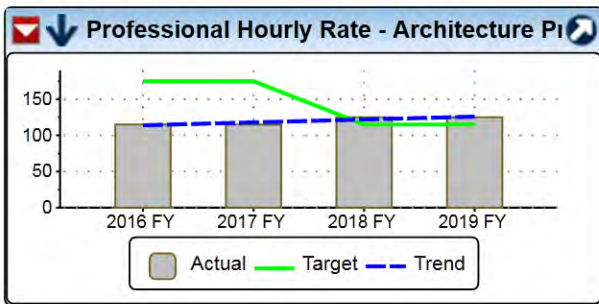
Professional Hourly Rate - GIS Project Manager - Esri ▲ 2019 FY \$165 \$277 \$112 Lopez, Jose L. (ITD)



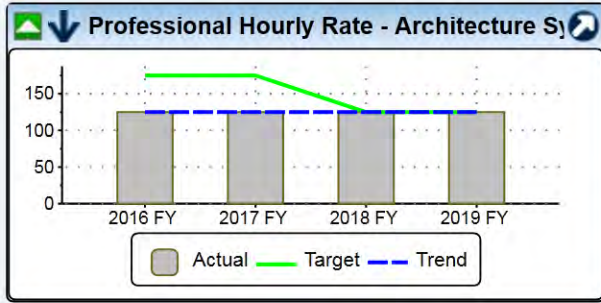
Professional Hourly Rate - Architecture Data Conversion - Tyler Tech ▲ 2019 FY \$125 \$125 \$0 Camner, Sue (ITD); Suarez, Carmen (ITD)



Professional Hourly Rate - Architecture Project Manager - Tyler Tech ▼ 2019 FY \$125 \$115 \$-10 Camner, Sue (ITD); Suarez, Carmen (ITD)



Professional Hourly Rate - Architecture Systems Configuration & Dev - Tyler Tech ▲ 2019 FY \$125 \$125 \$0 Suarez, Carmen (ITD); Camner, Sue (ITD)



Professional Hourly Rate - IT Project Management (Above \$10m)- Source: Project Management Institute

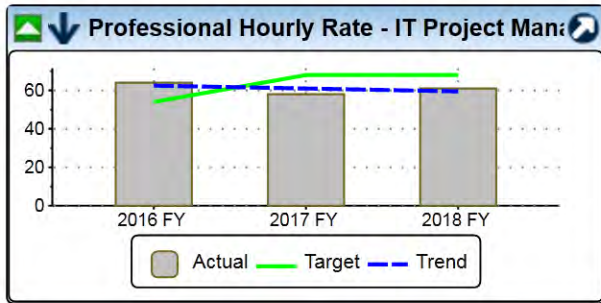


2018 FY

\$61

\$68

\$7 Arora, Rishi (ITD)



| Objective | Description | Owners |
|---|--------------------|-----------------------------------|
| 1.2 Provide Innovative Customer Solutions | | Information Technology Department |
| Grandparent Objectives | Description | Owners |
| GG3 Efficient and effective service delivery through technology | | Miami-Dade County |
| GG3-1 Ensure available and reliable systems | | Miami-Dade County |
| Parent Objectives | Description | Owners |
| GG3-1 Ensure available and reliable systems | | Miami-Dade County |
| Systems Availability (ITD) | | n/a |

| Objective | Description | Owners |
|---|--------------------|-----------------------------------|
| Customer Project Initiatives | | Information Technology Department |
| Grandparent Objectives | Description | Owners |
| GG3 Efficient and effective service delivery through technology | | Miami-Dade County |
| Parent Objectives | Description | Owners |
| GG3-2 Effectively deploy technology | | Miami-Dade County |

Business Plan Report - Information Technology Department

| 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) |

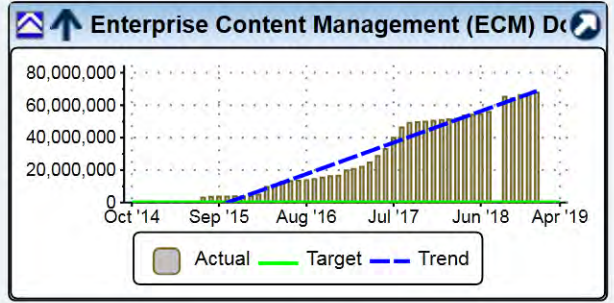
| Objective | Description | Owners |
|---------------------------|-------------|-----------------------------------|
| Enterprise Programs (ITD) | | Information Technology Department |

| Grandparent Objectives | Description | Owners |
|---|-------------|-------------------|
| GG3 Efficient and effective service delivery through technology | | Miami-Dade County |

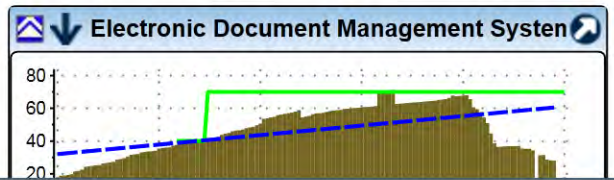
| Parent Objectives | Description | Owners |
|---|-------------|-------------------|
| GG3 Efficient and effective service delivery through technology | | Miami-Dade County |
| GG3-2 Effectively deploy technology solutions | | Miami-Dade County |

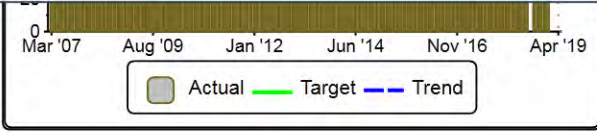
| Initiatives Linked to Objective | Est. Start | Est. End | Type | As Of | % | Status | Owners |
|--|------------|-----------|----------------|-----------|-----|-------------|---|
| Enterprise Content Management | n/a | n/a | Strategic Plan | 2/27/2019 | 95% | In Progress | Lopez, Jose L. (ITD) |
| Enterprise Video Management & Analytics Consolidation | n/a | n/a | | n/a | n/a | | Aguirre, Juan (ITD); Concepcion, John (ITD) |
| Enterprise Asset Management | 10/1/2016 | 3/20/2018 | Strategic Plan | 3/1/2019 | 80% | In Progress | Lopez, Jose L. (ITD) |
| Voice Over IP Enterprise Telephony | 10/1/2015 | 9/30/2019 | Strategic Plan | 3/1/2019 | 85% | In Progress | Aguirre, Juan (ITD) |
| Enterprise Project Management Office Full Implementation | 10/1/2015 | 9/30/2020 | Strategic Plan | 2/27/2019 | 80% | In Progress | Arora, Rishi (ITD) |

| Measures Linked to Objective | Period | Actual | Target | Variance | Owners |
|---|---------|------------|--------|------------|-----------------------------------|
| Enterprise Content Management (ECM) Documents | Jan '19 | 67,744,685 | 50,000 | 67,694,685 | Crowley, Chris (ITD); Chin, Donna |

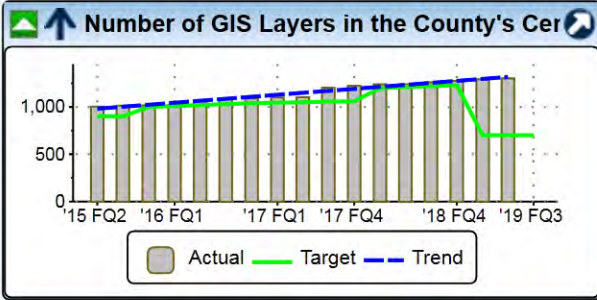


| | | | | | |
|---|---------|-------------|-------------|--------------|--|
| Electronic Document Management System (EDMS) Documents - Legacy | Jan '19 | 27.5million | 70.0million | -42.5million | Crowley, Chris (ITD); Chin, Donna; Fuentes, Mary (ITD) |
|---|---------|-------------|-------------|--------------|--|

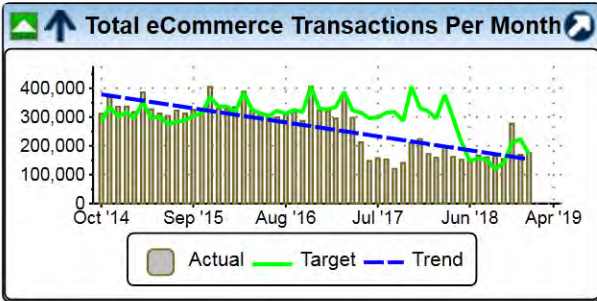




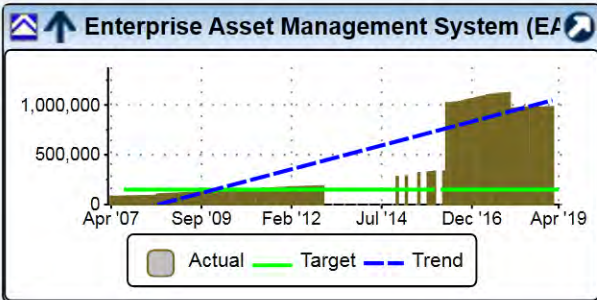
Number of GIS Layers in the County's Central Repository ▲ '19 FQ2 1,301 700 601 Fuentes, Mary (ITD); Grassi, Karen (ITD)



Total eCommerce Transactions Per Month (Credit Cards and eChecks) ▲ Jan '19 175,807 171,757 4,050 De La Cruz, Angela (ITD); Feldmann, Gladys (ITD); Mcclasley, Maritza (ITD)



Enterprise Asset Management System (EAMS) - Total Number of Assets ▲ Feb '19 980,509 150,000 830,509 Lopez Genao, Suzan (ITD); Fuentes, Mary (ITD); Crowley, Chris (ITD); Chin, Donna



Business Plan Report - Information Technology Department

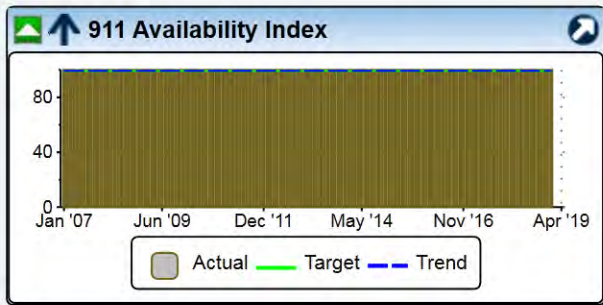
| Objective | Description | Owners |
|--|-------------|-----------------------------------|
| 1.3 Provide Reliable and Secure Technology Systems | | Information Technology Department |

| Objective | Description | Owners |
|----------------------------|-------------|-----------------------------------|
| Systems Availability (ITD) | | Information Technology Department |

| Grandparent Objectives | Description | Owners |
|---|-------------|-------------------|
| GG3 Efficient and effective service delivery through technology | | Miami-Dade County |

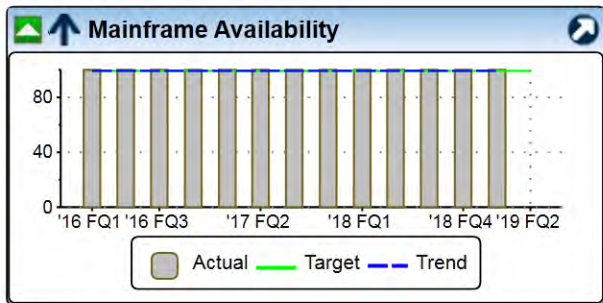
| Parent Objectives | Description | Owners |
|---|-------------|-------------------|
| GG3-1 Ensure available and reliable systems | | Miami-Dade County |

| Measures Linked to Objective | Period | Actual | Target | Variance | Owners |
|------------------------------|---------|---------|--------|----------|---|
| 911 Availability Index | Jan '19 | 100.00% | 99.90% | 0.10% | Gomez, Erick (ITD); Aguirre, Juan (ITD) |

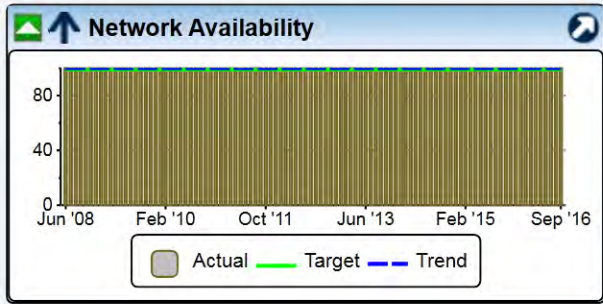


| Child Measures | Period | Actual | Target | Variance | Owners |
|---|---------|---------|--------|----------|---|
| 911 Availability - Network | Jan '19 | 100.00% | 99.90% | 0.10% | Gomez, Erick (ITD); Aguirre, Juan (ITD) |
| % of 911 Telephone System 24/7/365 Availability | Jan '19 | 100.00% | 99.90% | 0.10% | Aguirre, Juan (ITD) |

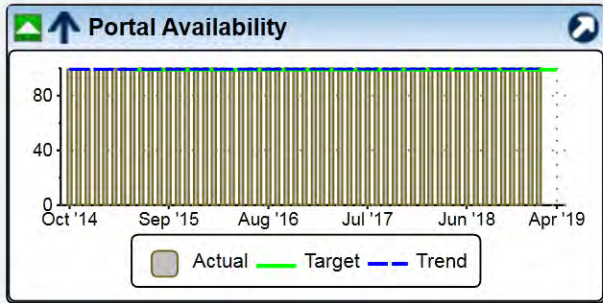
| | | | | | |
|------------------------|---------|---------|--------|-------|---|
| Mainframe Availability | '19 FQ1 | 100.00% | 99.90% | 0.10% | Suarez, Reinaldo (ITD); Mederos, Jorge E. (ITD); Garcia, Juan (ITD) |
|------------------------|---------|---------|--------|-------|---|



| | | | | | |
|----------------------|---------|--------|--------|-------|---|
| Network Availability | Jan '19 | 99.90% | 99.00% | 0.90% | Gomez, Erick (ITD); Aguirre, Juan (ITD) |
|----------------------|---------|--------|--------|-------|---|

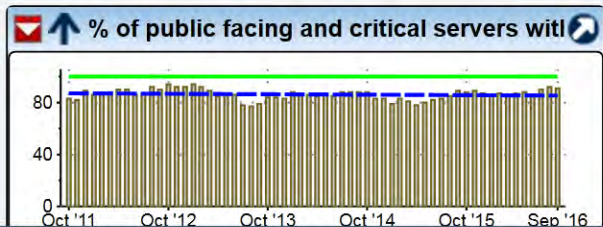


| | | | | | | |
|---------------------|--|---------|---------|---------|-------|--|
| Email Availability | | Mar '19 | 100.00% | 100.00% | 0.00% | Mederos, Jorge (ITD); Schmekel, Lars (ITD); Arteaga, Cliff (ITD) |
| Portal Availability | | Feb '19 | 100.00% | 99.00% | 1.00% | Suarez, Carmen (ITD); Rajaballey, Maureen E. (ITD) |



| Objective | Description | Owners |
|---|-------------|----------------------|
| Enhance Cyber Security (ITD) | | Schmekel, Lars (ITD) |
| Grandparent Objectives | Description | Owners |
| GG3 Efficient and effective service delivery through technology | | Miami-Dade County |
| Parent Objectives | Description | Owners |
| GG3-3 Improve information security | | Miami-Dade County |

| Measures Linked to Objective | Period | Actual | Target | Variance | Owners |
|--|---------|--------|--------|----------|--|
| % of public facing and critical servers with current patches installed | Dec '18 | 90% | 100% | -10% | Schmekel, Lars (ITD); Bain, Sherrilyn (ITD); Gray, Gary A. (ITD) |



Business Plan Report - Information Technology Department

Actual Target Trend

% of machines with up to date Antivirus software compliance

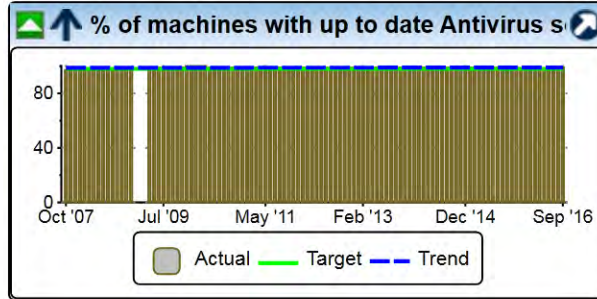
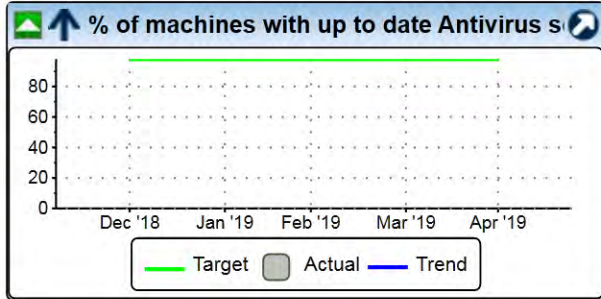


Aug '18

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 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) | '19 FQ1 | \$72,568K | \$52,673K | \$-19,895K | Petisco, Angel (ITD); Majekodunmi, Yinka (ITD) |
| Child Measures | Period | Actual | Target | Variance | Owners |
| Expenditure: Personnel Costs (ITD) | '19 FQ1 | \$30,142K | \$30,239K | \$-97K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Court Costs (ITD) | '19 FQ1 | \$0K | \$0K | \$0K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Contractual Services (ITD) | '19 FQ1 | \$514K | \$315K | \$199K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Other Operating (ITD) | '19 FQ1 | \$20,988K | \$13,998K | \$6,990K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Charges for County Services (ITD) | '19 FQ1 | \$2,664K | \$3,922K | \$-1,258K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Grants to Outside Organizations (ITD) | '19 FQ1 | \$0K | \$0K | \$0K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |

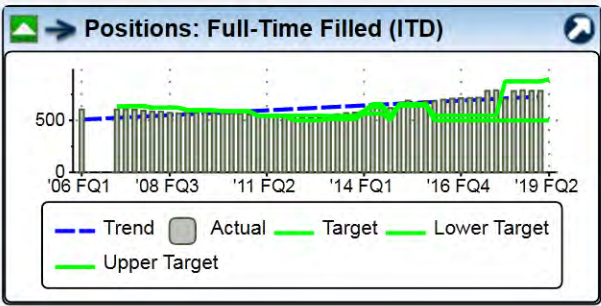
Business Plan Report - Information Technology Department

| | | | | | | |
|--|---|---------|-----------|----------|-----------|---|
| Expenditure: Capital (ITD) | ▲ | '19 FQ1 | \$723K | \$1,407K | \$684K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Transfers Out (ITD) | ▲ | '19 FQ1 | \$0K | \$130K | -\$130K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Distribution of Funds in Trust (ITD) | ▲ | '19 FQ1 | \$0K | \$0K | \$0K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Debt Service (ITD) | ▲ | '19 FQ1 | \$0K | \$434K | -\$434K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Depreciation, Amortization, Depletion (ITD) | ▲ | '19 FQ1 | \$0K | \$0K | \$0K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Reserves (ITD) | ▲ | '19 FQ1 | \$0K | \$0K | \$0K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Expenditure: Intradepartmental Transfers (ITD) | ▼ | '19 FQ1 | \$17,537K | \$2,228K | \$15,309K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |

| | | | | | | |
|---------------------------|---|---------|-----------|-----------|----------|---|
| Revenue: Qtly Total (ITD) | ▲ | '19 FQ1 | \$61,866K | \$52,673K | \$9,193K | Petisco, Angel (ITD); Majekodunmi, Yinka (ITD) |
|---------------------------|---|---------|-----------|-----------|----------|---|

| Child Measures | | Period | Actual | Target | Variance | Owners |
|--|---|---------|-----------|-----------|-----------|---|
| Revenue: Carryover (ITD) | ▼ | '19 FQ1 | \$0K | \$1,477K | -\$1,477K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Revenue: General Fund (ITD) | ▼ | '19 FQ1 | \$0K | \$675K | -\$675K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Revenue: Proprietary (ITD) | ▼ | '19 FQ1 | \$165K | \$1,119K | -\$954K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Revenue: Federal (ITD) | ▲ | '19 FQ1 | \$0K | \$0K | \$0K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Revenue: Interagency/Intradepartmental (ITD) | ▲ | '19 FQ1 | \$61,701K | \$49,402K | \$12,299K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |
| Revenue: State (ITD) | ▲ | '19 FQ1 | \$0K | \$0K | \$0K | Petisco, Angel (ITD); Majekodunmi, Yinka (OCA) |

| | | | | | | |
|-----------------------------------|---|---------|-----|--------------------|-----|--|
| Positions: Full-Time Filled (ITD) | ▲ | '19 FQ1 | 784 | 875 (500 - 875) | -91 | Mazzorana, Shanda (ITD); Petisco, Angel (ITD) |
|-----------------------------------|---|---------|-----|--------------------|-----|--|



3 Internal

| Objective | Description | Owners |
|------------------------------------|-------------|-----------------------------------|
| 3.1 Improve Efficiency of Internal | | Information Technology Department |

Business Plan Report - Information Technology Department

| Procedures | | | | | | | | | | | | |
|---|------------|-----------|----------------|-----------|--|--|--|--|--|------|-------------|--|
| 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); Collins, Michael (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 | 3/14/2018 | | | | | | 30% | In Progress | 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 | Collins, Michael (ITD); Salazar, Mariaelena (ITD) |
| MOUs PHASE 2 (SW, MT, PD, CR, SP) | n/a | n/a | | 3/14/2018 | | | | | | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |
| MOUs PHASE 3 (PR) | n/a | n/a | | 3/14/2018 | | | | | | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |
| MOUs PHASE 4 (LB, HD, CO, GI, FN) | n/a | n/a | | 3/14/2018 | | | | | | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |
| MOUs PHASE 1 (PE, ID, AD) | 10/1/2012 | 12/31/2013 | | 3/14/2018 | | | | | | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |
| MOUs PHASE 5 (WS, ME, FR, AV, EL) | n/a | n/a | | 4/3/2018 | | | | | | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (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); Collins, Michael (ITD) |
| Consolidation - Phase 2 (SW, MT, PD, CR, SP) | n/a | n/a | | 3/14/2018 | | | | | | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |
| Consolidation - Phase 5 (WS, ME, FR, AV, EL) | 8/25/2016 | 9/1/2026 | | 3/14/2018 | | | | | | 20% | In Progress | Collins, Michael (ITD); Salazar, Mariaelena (ITD) |
| Consolidation - Phase 1 (PE, ID, AD) | n/a | n/a | | 3/14/2018 | | | | | | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |
| Consolidation - Phase 3 (PR) | n/a | n/a | | 3/14/2018 | | | | | | 100% | Complete | Salazar, Mariaelena (ITD); Collins, Michael (ITD) |

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

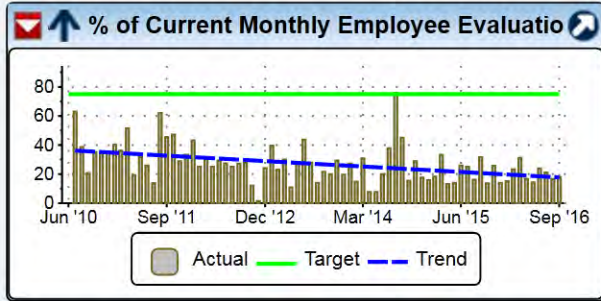
| Parent Objectives | Description | Owners |
|------------------------------------|-------------|-------------------|
| GG2 Excellent, engaged workforce | | Miami-Dade County |
| GG4 Effective management practices | | Miami-Dade County |

| Measures Linked to Objective | Period | Actual | Target | Variance | Owners |
|------------------------------|--------|--------|--------|----------|--------|
| | | | | | |

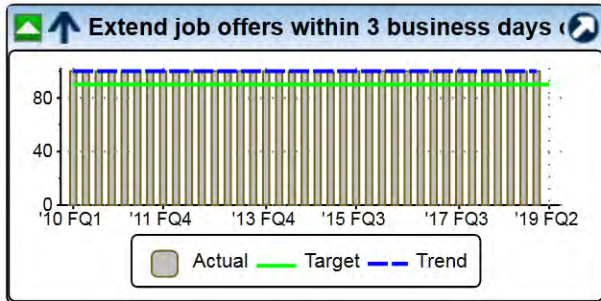
Business Plan Report - Information Technology Department

% of Current Monthly Employee Evaluations received on time ▼ Feb '19 27% 75% -48% Mazzorana, Shanda (ITD); Arocho, Lylliam (ITD)

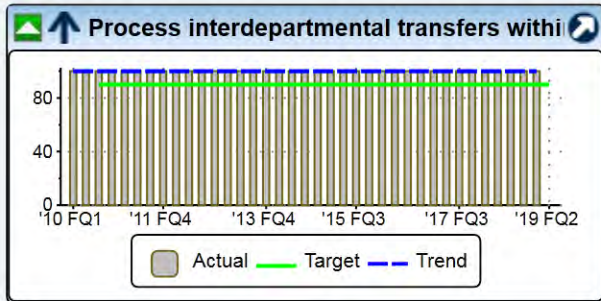
| Date | VR Comment | Author |
|----------|--|-----------------------|
| 3/1/2019 | 27.27 % of evaluations were received on time for the month of February, 2019 | Arocho, Lylliam (ITD) |



Extend job offers within 3 business days of HRD approval and receipt of back-ground checks ▲ '19 FQ1 100% 90% 10% Mazzorana, Shanda (ITD)



Process interdepartmental transfers within 5 business days ▲ '19 FQ1 100% 90% 10% Mazzorana, Shanda (ITD)



4 Learning and Growth

| Objective | Description | Owners |
|-----------|-------------|--------|
|-----------|-------------|--------|

| Measures Linked to Objective | Period | Actual | Target | Variance | Owners |
|---|---------|--------|--------|----------|--|
| 4.1 Human Resources Conduct quarterly safety committee meetings and maintain minutes | '19 FQ1 | 100% | 100% | 0% | Mazzorana, Shanda (ITD) |
| | | | | | |
| ITD Mentorship Program - Number of Mentees | 2019 FY | 14 | 14 | 0 | Malcolm, Mari (ITD); Brisbane, Margaret (ITD) |
| | | | | | |
| Process tuition refund requests within 5 business days of receipt of completed packages | '19 FQ1 | 100% | 90% | 10% | Mazzorana, Shanda (ITD) |
| | | | | | |