2019

**TARRANT COUNTY
INFORMATION TECHNOLOGY DEPARTMENT**

BUSINESS IMPACT REPORT

▶ Abstract

The relevance of Information Technology (IT) is born in the power of IT – enabling business transformation. Every year, the Tarrant County IT Department (ITD) publishes the Business Impact Report for our business departments and the community. This is a review of how technology enables and provides opportunities for Tarrant County to fulfill our mission to the community.

ENJOY READING! ▶

▸ Our Vision

Our vision is to be the best IT organization in state and local government within the United States.

▸ Our Mission

Our mission is to provide cost-efficient, high-quality IT solutions to Tarrant County departments, residents and corporate and government partners.

▶ Drivers For Success

Strategic Goals

1 Ensure financially sound investments in provisioning technology solutions.

2 Implement governance and standards to optimize operational efficiencies.

3 Equip Tarrant County staff with the skills and expertise to meet the needs of rapidly evolving business, technologies and citizen expectations.

4 Improve departmental business outcomes through technology enablement.

5 Enable the delivery of information and services anytime, anywhere.

6 Deliver information, resources and services to enable partnerships for a digital government infrastructure.

Guiding Principles

1 Quality

2 Stewardship

3 Teamwork

4 Integrity

5 Customer Service

Executive Summary

Improving the satisfaction of the residents and businesses of Tarrant County through the effective and efficient provision of services is at the core of the Tarrant County mission. Accomplishing this at the pace of citizen expectations would not be possible without the contribution of technology. Our ranking among the Top 10 Digital Counties by the Center for Digital Government in 2019 shows that Tarrant County is doing the "right" things, the "right" way.

As we go into 2020, the Information Technology Department (ITD) celebrates the transformation brought by our Vision 2020 Strategic Plan across the entire organization and way of working. However, we are not content to rest on our laurels. "Business First, Technology Second" will remain our mantra and the embodiment of our core Guiding Principles. As such, our next strategic plan, 2025 Blueprint for Service Delivery, is under development and focuses on transforming ITD service delivery and the customer experience. The four pillars of this blueprint are customer centricity, a focus on speed of service delivery, a culture of quality and a culture of cybersecurity.

Finally, we will continue our steadfast commitment to innovation. We are embracing the transformational capabilities of analytics and data science to unlock the potential of the data already held in the myriad of systems that ITD supports. One of the many ways this has been demonstrated is through executive dashboards providing unprecedented insights to jail population trends.

We are also beginning our utilization of Artificial Intelligence and Machine Learning to augment department operations and enable our business department partners to meet increasing demands for service from a growing population without dramatic increases in headcounts or costs. Through the application of chatbots and analytics, we have significantly reduced response times to residents' questions that come in via county web services. We plan to expand these applications, continue our push to innovate and carry the organization forward.

None of these achievements would be possible without the dedicated effort of every ITD employee, and I am extremely thankful to have the privilege of leading this outstanding team. On behalf of the Tarrant County Information Technology Department's employees and its leadership team, it is my distinct honor and privilege to present the Business Impact Report for fiscal year 2019.

Thank you for your partnership and support in serving our community!

CHRIS NCHOPA-AYAFOR
CHIEF INFORMATION OFFICER

▶ Awards, Appointments and Recognitions

Awards

Our excellence in innovation and leadership continues to be recognized by industry organizations. We are honored to receive these recognitions and are committed to providing the best customer service experience possible.

- Dallas CIO of the Year ORBIE Award

- The Center for Digital Government presents Tarrant County with the 2019 Best of Texas Award for WAZE Alerts in the category of Most Innovative Use of Citizen Engagement

- The Center for Digital Government (CDG) and the National Association of Counties (NACo) recognize Tarrant County as one of the "2019 Top Ten Digital Counties" in the nation in the 1,000,000 or more population category

- NACo presents Tarrant County with the 2019 Achievement Award for WAZE Alerts

- NACo presents Tarrant County with the 2019 Achievement Award for Work Order Application

CIO Appointments

- Vice-Chair NACo Information Technology Standing Committee

- NACo International Economic Development Task Force

Employee Recognition

ITD gathers twice a year for our ITD All Hands Meeting and to recognize the achievements of our team as well as award high performing team members. Nominations for awards are received from peers, managers and, most importantly, customers. Winners are then selected by the Awards and Recognition Committee. We believe these awards and recognitions are positive motivation and representation of our service excellence.

159
EXTRAORDINARY PERFORMANCE AWARDS

25
EXCEPTIONAL PERFORMANCE AWARDS

10
PEAK PERFORMANCE AWARDS

1
EXCEPTIONAL PERFORMANCE OVER AN EXTENDED PERIOD AWARD

Jan Allred

Presented with a Leadership Award for creativity, coordination and commitment to getting local, state and national recognition of Tarrant County and the Information Technology Department. Under Jan's leadership, Tarrant County has secured 14+ awards over the past three years.

TEAM AWARDS

Twenty eight employees were recognized for successful completion of a significant project.

Will Allen, Kelly Wigley, Kristine Torres, Misti Melder, Davin Moore, Carl Luskey, A.B. Alldredge and Richard DeRoche

Presented with a Team Award for resolving a multitude of issues in specific clinics. The team was praised by the customers for teamwork, the willingness to go above and beyond and being kind and patient throughout the process.

Jorge Calzada, Dr. Eduardo Alvarez, Linwood Joyner, Theresa Lee and Dr. Eric Metcalf

Presented with a Team Award for the time and effort invested to develop the business cases completed prior to deadlines and ensuring the quality of content required to ensure smooth conversations within all governance discussions throughout the budget process.

Richard DeRoche, Anupam Ghimire, Richard Porter, Angela Jones, Hammad Hassan, Mark Bloodworth, Robert Miller, Chris Peterson, Jackie Harlos, Will Allen, Enett Daniels, Sijith Velayudhan, Janie Zhao, Keith Hughes and Frances Coffee

Presented with a Team Award for the successful implementation of a Public Health Laboratory Management System designed to significantly improve current operations processes.

▶ Investing in People

Technology changes rapidly, which requires ITD to innovate with new ideas to advance the business of Tarrant County. As a department, we continue to learn industry-leading technology and best practices to deliver value to our customers.

Our priority is the investment in providing learning opportunities, as we know quality of service depends on people with the right knowledge.

Career Advancement and Recruitment

4

PROMOTIONS

5

RECLASSES

18

NEW HIRES

10

RETIREMENTS
(224 combined years of service)

19 IT Professional Certifications

IT DEPARTMENT PROFESSIONALS ACHIEVED A VARIETY OF INDUSTRY-LEADING CERTIFICATIONS ACROSS ALL OF OUR DOMAINS.

Other Training Opportunities

A variety of learning resources are available online for ITD employees as well as in-class training, such as Tarrant County's Management Development Institute (MDI), so knowledge and skillsets are continuously updated.

For Fiscal Year 2019:

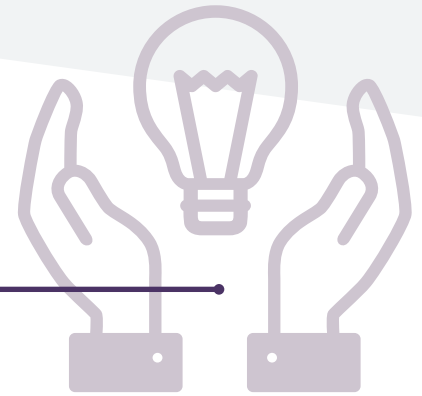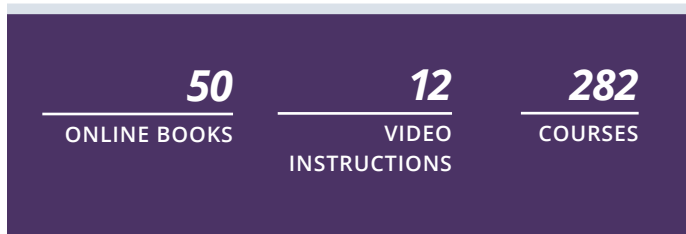### Internal In-Class Training

IT Technical Classes

109	**232**
ITD EMPLOYEES	CLASS ATTENDANCE

MDI Classes

138	**522**
ITD EMPLOYEES	CLASS ATTENDANCE
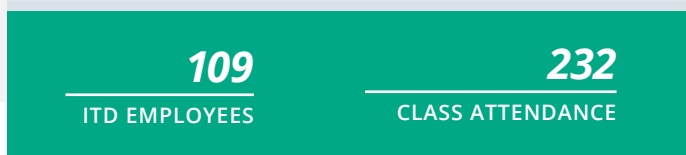
Online Training and Resources

53 ITD employees took personalized trainings

Number of Educational Materials

50	**12**	**282**
ONLINE BOOKS	VIDEO INSTRUCTIONS	COURSES

Time for Learning

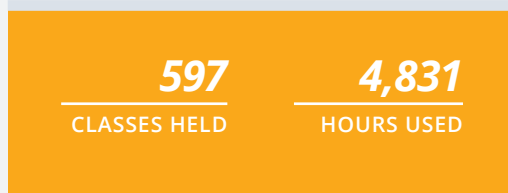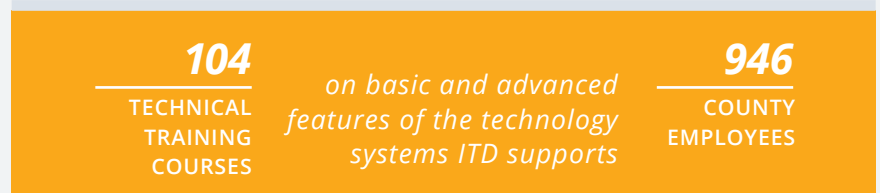| **239 HOURS**	**5 HOURS**
SPENT BY ITD EMPLOYEES TAKING ONLINE TRAINING	AVERAGE TIME SPENT PER PERSON FOR ONLINE TRAINING COURSES

Education Resources for County Employees

We provide IT training to our customers so they can take full advantage of the technology available to them.

IT Education Resource Center Laboratory

597	**4,831**
CLASSES HELD	HOURS USED

Educational Offerings

| **104**	*on basic and advanced features of the technology systems ITD supports*	**946**
TECHNICAL TRAINING COURSES		COUNTY EMPLOYEES

▶ Security Awareness

Security awareness training is a critical method to reduce the risk of cyberattack against Tarrant County.

By the end of Fiscal Year 2019, we **enrolled 2,914 Tarrant County employees** in Online Security Awareness training. This training takes approximately one hour to complete. By the end of **September 2019, a total of 2,707 employees had completed this awareness training.**

93%

participation across all Tarrant County Departments.

SECURITY TRAINING

5%
NOT STARTED

2%
IN PROGRESS

93%
COMPLETED
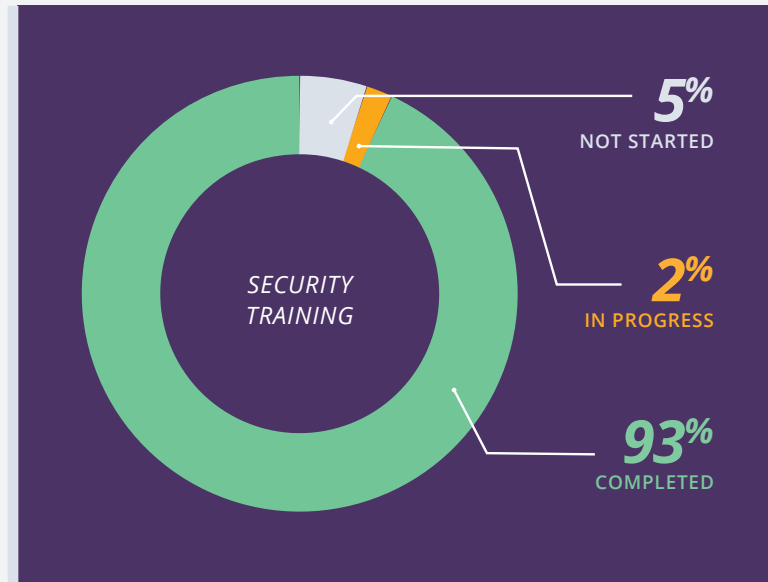
THE FOLLOWING DEPARTMENTS ACHIEVED

100%

COMPLETION OF SECURITY TRAINING.

We appreciate your commitment to be prepared for unexpected security threats!

DEPARTMENT
- Auditor's Office
- Budget
- County Archives
- County Clerk
- County Judge
- Domestic Relations Office
- Fire Marshal
- Juvenile Services
- Precinct 4
- Purchasing
- Resource Connection
- Veteran Services

Constables
- Precinct 1
- Precinct 2
- Precinct 3
- Precinct 6

Justice of the Peace
- Precinct 1
- Precinct 2
- Precinct 3
- Precinct 4
- Precinct 6
- Precinct 7
- Precinct 8

# ▶ Service Performance Summary

IT Is Responsive

ITD is committed to the concepts embedded in continuous improvement. We strive to improve our processes to provide a faster, richer customer experience.

Customer Care Center Metrics

Implementing password reset services is the type of self-service that helps our customers and reduces resolution time.

We continue to work on self-serving process automation and knowledge base development to meet our customers' needs by analyzing incident and requests trends. The results are evident in this downward trend in service tickets year over year:

Tickets and Problems

Outages resolved within 8 hours

89.8%
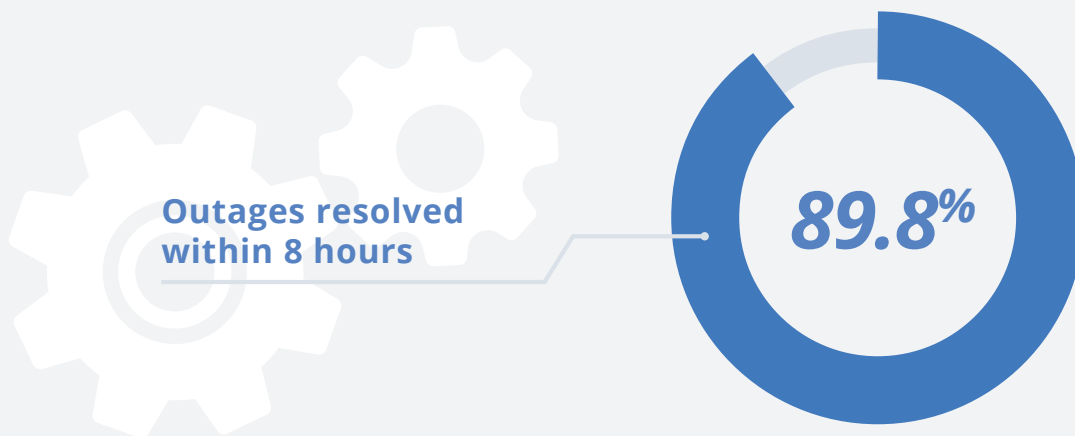
Fiscal Year	# of Tickets	# of Problems
2016	61,610	206
2017	59,657	159
2018	55,815	109
2019	51,206	76

Problems Include Production Outages

One of the great cost-efficient initiatives that we introduced in 1995 was remote access to court records. We won two statewide "Best Practices" Awards from the Texas Association of Counties and special recognition from the Texas Legislature for this service that allows citizens to look up court records for a modest fee set by the Commissioners Court.

Instead of coming to the courthouse or mailing records requests, a subscriber can do their own self-service research and print copies if they wish, available 24 hours a day, 7 days a week, year round.

Today, we have over 1,400 subscribers that include businesses, title companies, law firms, non-profits and information vendors.

THOMAS WILDER
DISTRICT CLERK

▶ Investing in Community

Our service impact to not only employees of the county, but also residents of the county.

Tarrant County Public Website

During 2019 Fiscal Year

6,460,026
TOTAL VISITS

3,261,257
UNIQUE VISITORS

17,247,633
TOTAL PAGE VIEWS

Web Based Access Service – Civil and Family Law Computer Records

In partnership with the District Clerk, ITD continues to drive innovation that contains cost and creates better citizen engagement. In an effort to further reduce costs and enhance user experience, ITD implemented a new web access system. The new system has a mobile-friendly user experience while providing additional features such as enhanced security and online payments

To date, web access has received more than 18 million page views and continues to be an example of ITD's commitment to leverage innovation to drive efficiency and lower costs.

Resource Connection Work Order Application

The Resource Connection Work Order Application was first implemented in 2018 and won a NACo Accomplishment Award in 2019. This ticketing system was requested by the Resource Connection leadership team to improve management of maintenance requests submitted by the campus-based organizations. On average, **118 tickets were submitted per month.**

Event Registration for the Commissioners' Community Outreach Event

ITD developed an Event Registration Service to support the staff within the County Judge's Office and the Commissioners' offices who coordinate Community Outreach Events.

Tarrant County Main Telephone Line Operation

The ITD Reception Desk continues to play a key role for Tarrant County. The ITD Reception Desk assists residents and members of the public by taking calls, answering questions and directing callers to the appropriate department when calling the County's main phone line: **817-884-1111**.

Fiscal Year 2019 Tarrant Count Main Line

34,635
TOTAL NUMBER OF CALLS

▶ IT is Innovative

We're developing new solutions to solve old problems.

Waze Data Integration - Precinct Maintenance

Geographic Information Systems (GIS) Center of Excellence (CoE) added another data integration between Waze and Cartegraph. All pothole, road kill, hazard on shoulder (animal) or missing sign reports submitted via Waze on a county-owned road will now automatically generate and send a daily report to the appropriate precinct maintenance staff for inspection and follow-up.

The notification will include the Cartegraph road segment ID, date and timestamp, coordinates, and reliability rating of the Wazer. This will further reduce response times by precinct maintenance staff for these types of reports.

Paperless ITD Asset Transfer Sheet

The implementation of Paperless ITD Asset Transfer Sheets allows ITD to streamline the process of filing and tracking of ITD assets. This initiative also increases accuracy and an improved audit trail by providing real-time review of the Transfer Sheet.

Mainframe Self-Service Password Reset

Tarrant County needed a Self-Service Password Reset (SSPR) feature for users that access online systems running in the mainframe environment currently hosted and maintained by Data Management.

We implemented the SSPR, and delivered as a component of Data Management's existing mainframe hosting service. Service delivered include application installation, configuration, testing, software support, maintenance, documentation and all related artifacts.

Case Tracks

Case Tracks is now live. This is a small but significant step in the eventual implementation of a full Court package.
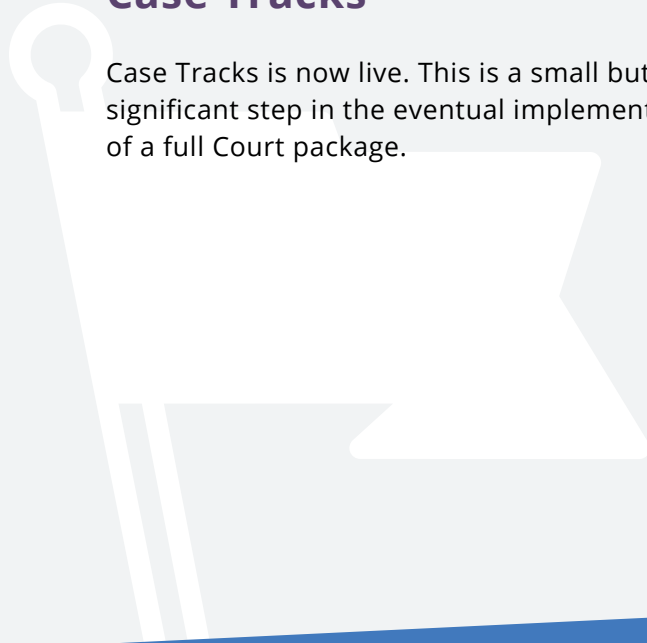
County Clerk Live Chat

Recognizing an opportunity to innovate and provide exceptional service to customers, the County Clerk's Office introduced Live Chat service for web visitors. This new service allows customers to utilize self-service features 24/7/365, provides access to a trove of frequently asked questions and allows customers to engage directly with clerks across all divisions during business hours.

Live Chat has been very successful and cost effective. As expected, the phone call volume has decreased significantly.

First Month Activity Generated

1,000	**1,500**	**45%**
ENGAGEMENTS THAT REQUIRED CLERK ASSISTANCE	SELF-SERVICE REQUESTS	WERE COMPLETED WITHOUT CLERK ASSISTANCE

★★★★☆ **IT RECEIVED A 4.3 OVERALL SATISFACTION RATING** above average to highly satisfied.

"Success with technology requires a strong partnership with ITD and the Department. I would like to thank everyone across the two organizations who made this project successful."
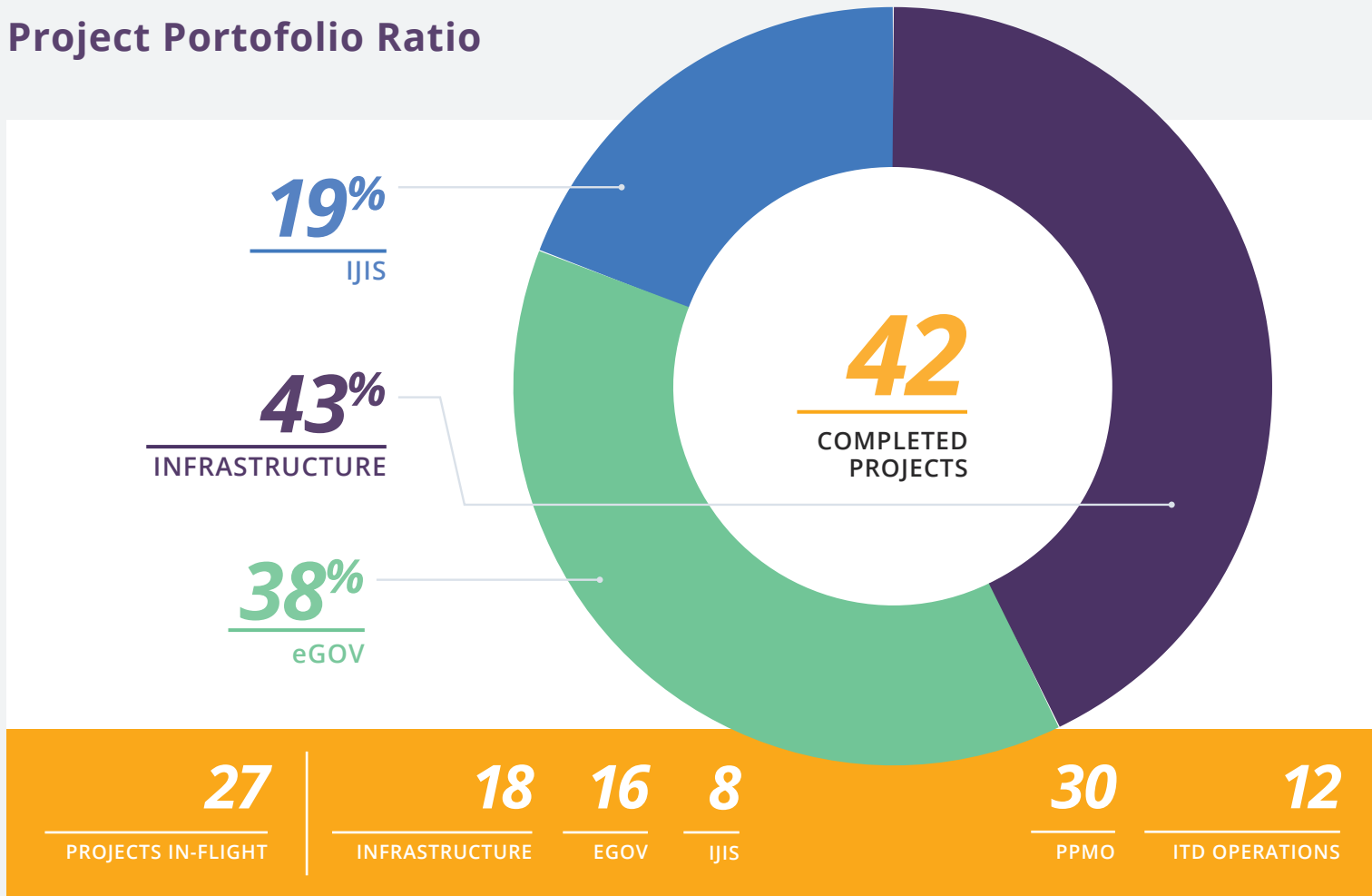
MARY LOUISE NICHOLSON
COUNTY CLERK

▶ Initiatives

Changes are necessary to evolve new technology and systems to align with business strategies, to maintain updated technology standards as well as implement solutions to identified incidents. Proactive changes are the key to maintaining quality of service.

Project Portofolio Ratio

19%
IJIS

43%
INFRASTRUCTURE

38%
eGOV

42
COMPLETED
PROJECTS

27	**18**	**16**	**8**	**30**	**12**
PROJECTS IN-FLIGHT	INFRASTRUCTURE	EGOV	IJIS	PPMO	ITD OPERATIONS

100%
COMPLETED
WITHIN BUDGET

Noteworthy Initiatives for 2019 Fiscal Year:

20 18

OCTOBER

- Hyper-Converged Infrastruture
- Data Replication and Backup
- Network Improvement
- 2018 Tax Year Rollover
- Backup Optimization
- PaperVision Replacement
- County Clerk - Mercantile Inventory

NOVEMBER

- Mailroom TekCore
- TechShare Prosecutor Appellate
- ME LIMS - Procurement

DECEMBER

- Downtown Network Fiber Redundancy
- Radio Encryption Upgrade
- Waze Data Integration for Precint Maintenance
- Electronic Poll Books
- Microsoft IIS Upgrade and Clustering
- Fiber Redundancy

20 19

JANUARY

- IV-D Court No 3 Equipment
- Remote Video Magistration: Green Bay Facility

FEBRUARY

- Imagery Partnership
- Project Online
- Printer Management System

MARCH

- Jury Management Update
- TechShare Case Tracks
- Enterprise Umbrella Security
- Mainframe Self-Service Password Reset
- 2019 Elected Official Changeover
- AD Security Cleanup

APRIL

- Public Health Vector Surveillance Update
- VxRail Data Erasure
- Sub-Courthouse Active Redundancy

MAY

- Voter Lookup Website Update
- TechShare Defense Portal DME API
- Enterprise Disease Surveillance and Management System
- Adobe AEM Upgrade
- FileMaker Pro 17 Upgrade

AUGUST

- Public Health Horizon
- Mass Billing 2018 Upgrade

SEPTEMBER

- County Clerk - Live Chat
- DMZ - Plaza

▶ IT is Responsible

We're striving to become more efficient while improving effectiveness.

Robotic Process Automation for Quality Assurance

The ITD Quality Assurance (QA) team is committed to delivering excellent service to our communities of business.

Focusing on what we deliver, how we deliver and having the right resources was vital to the success of the quality platform. Additional QA Analysts and a QA Manager have been onboarded to support the demand, which includes two Certified Testers. In addition, we recently incorporated automation capabilities into an all-manual testing environment.

The inception of new automation tools provides intuitive reporting on system performance, analyst testing completion and more.

This new and evolving process gives Tarrant County the assurance to know that quality products and services are being delivered to our businesses. Quality is key, and by benchmarking this design, we set a level of expectation to keep the future state of QA stable as well as progressive.
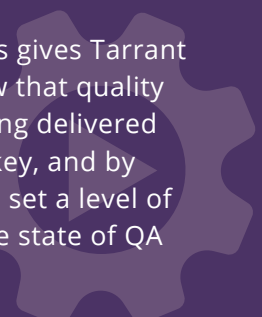
Repurposed Computers to the Sheriff's Office

ITD provided several retired desktop computers to the Sheriff's Office for use by jail inmates who were participating in high school equivalency examination classes. The computers allow inmates to access a skills assessment program, which provides the Fort Worth Independent School District instructors more accurate information on the proficiency levels of each inmate, allowing more individualized and effective instruction in the class.

▶ *Disaster Management Business Continuity (DMBC):*
The Next Iteration

The initial DMBC program focused on the development of Continuity of Operations Plans and the technology transformation required to enable true operational resilience in our Information Technology systems.

While these tasks have been successfully completed, the program itself continues to enhance the services and capabilities we provide, renew the tools and techniques used to support and recover, and transform the technologies we use to provide resilient and cost-effective services to our customers.

DMBC Network on Wheels (DMBC NOW)

Carts with prepositioned network equipment to enable rapid activation of recovery locations without excessive overhead or cost.

UCaaS

Unified Communications as a Service, the transformation of how voice communications are provided throughout the County, will enable dramatic upgrades in how resilient communications function in event of disasters.

Continuity of Operations Plans

Updating these plans will capture evolutions and changes in County operations and technology.

SQL Database Always On

A shift to "always-on" functionality in newer versions of our core database software enables even more rapid and seamless recovery.

Cloud

Use of Software as a Service (SaaS) services with built-in service resilience will increase, as will use of resilient cloud providers for IT-developed services.

▶ **Improving Stewardship**

- Developed new financial trackers designed to provide better insight into the ITD budget, allowing Senior ITD Management to make more informed financial decisions.

- Use of SAP to reduce off-line schedules for real time reporting.

- Reduced processing time for Purchase Requisitions and Invoices by 500 recurring hours.

- Created standardized dashboard reporting to visualize spend for each departmental GL account.

- Produced standardized process documentation related to travel policy for insertion into all ITD contracts. This ensures all contractors are aware of County travel policy guidelines.

- Enforced standard practice with all vendors to ensure uniform and consistent submission of invoices to the County with the goal of reducing invoice review efforts by both ITD and Accounts Payable.

- Implemented a standardized timesheet template for non-ITD employees to improve traceability and accuracy of timekeeping and reporting.

▶ Summary and Plan

ITD stands ready to implement Blueprint 2025.

In real-world, practical steps, we intend to review as many processes as possible to make doing business with ITD simpler and more effective. We are already working behind the scenes to develop meaningful metrics and reporting across our activities and operations.

We believe that we can't improve what we do not measure, and what we measure should be meaningful to our customers.

Over time, the effects of measuring ourselves and transparently communicating these measures will lead to increased urgency in resolving issues and highlight which processes need to be reviewed next.

By embracing a culture of continuous improvement, implementation of Blueprint 2025 for service transformation will become ingrained across all of ITD. We are excited about this next step in our development and hope you are as well.

RUSS SCOTT
DEPUTY CHIEF INFORMATION OFFICER

▶ Your ITD Team
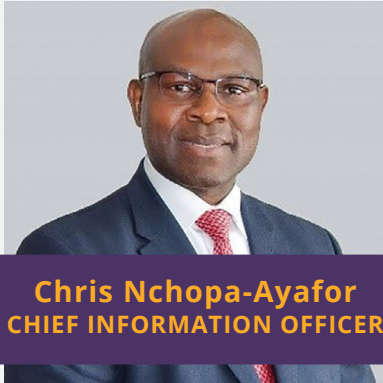
Chris Nchopa-Ayafor
CHIEF INFORMATION OFFICER

Kimberly Knott
EXECUTIVE ASSISTANT TO THE CIO

Russ Scott
DEPUTY CHIEF INFORMATION OFFICER

Darren May
INFORMATION SECURITY OFFICER

Jorge Calzada
PROJECT PORTFOLIO MANAGEMENT
OFFICE DIRECTOR

Anthony Jackson
NETWORK & DATA CENTER
INFRASTRUCTURE

Keith Hughes
CUSTOMER RESOURCE
CENTER DIRECTOR

Michael Webb
BUSINESS APPLICATION DEVELOPMENT
& SUPPORT DIRECTOR

LET US KNOW

HOW WE CAN HELP YOU!

TARRANT COUNTY
INFORMATION TECHNOLOGY DEPARTMENT

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