



CompTIA.

2020 SOLUTIONS AWARDS





2020 SOLUTIONS AWARDS

WINNERS

Data and Performance Metrics

Under 50,000

CITY OF WILLIAMSBURG, VA

Taking our Performance Management System Full Circle

The City of Williamsburg has long been a leader in the area of local government performance measurement. Our journey began back in 1994 with the advent of performance metrics in our budget document and has seen many iterations, including the addition of monthly operating reports for City Council and public-facing performance dashboards.

Even with our success in this area, we knew that we were missing a critical component to our overall performance management strategy. To take our performance management program full circle, we knew we needed to do this:

1. Connect the work being performed as part of City Council's Goals, Initiatives and Outcomes (GIOs).
2. Display the current status of initiatives to City Council, citizens, and staff.
3. Tie each of these together through the National Citizen Survey

We were determined to accomplish these goals, however, doing so was going to require some very introspective work by staff. This work was also going to require a software partner that could be as nimble as we needed them to be. We believe we now have a solution that checks all of these boxes, bringing our Performance Management System full circle.

Emerging Technologies Applications

(Artificial Intelligence, Blockchain, Autonomous Vehicles, Drones, 3d Printing, Etc.)

50,000 to 249,999

CITY OF BELLEVUE, WA

MyBellevue Chatbot for COVID-19

In order to augment city resources' ability to provide timely and accurate answers to the public's questions amid the COVID-19 pandemic, the City of Bellevue developed a chatbot from ideation to launch in under a month. Through AI technologies, the chatbot allows users to use phrases they are familiar with. In addition, the City is able to continuously improve support based on the questions users have asked that are not getting answered.

Web Services, E-Government and Mobile Apps
Over 250,000
COUNTY OF ALAMEDA, CA
COVID-19 Chatbot

As with many organizations the world over, Alameda County is doing its best to take care of its constituents and employees during this pandemic. From new services to new procedures, every step has been to help the citizens of the County to get through this with as much help and safety as possible. We've found that one of the most helpful things we can do for people is to simply be able to answer questions. Our citizens come to us through every channel available – social media, email, phones – and it takes up a large amount of staff's time help them with their questions, even common ones that almost everyone asks. The answers may be routine for those, but the time it takes to help isn't any less. The County decided to create a chatbot that could help our community with some of these routine questions, and with that CACHE was born. CACHE stands for County of Alameda Community Helper. By allowing people to access self help via the chatbot, our staff can focus their efforts on the more complicated questions and issues we are presented with.

Web Services, E-Government and Mobile Apps
Over 250,000
COUNTY OF ALAMEDA, CA
Virtual Marriage Ceremony Project

The State of California is under shelter-in-place due to the COVID-19 pandemic. Due to restricted public access to the County Clerk-Recorder's building, marriage licenses could not be obtained by the public through typical methods, and the County ceased performing any marriage ceremonies. On April 30, 2020, Governor Newsom issued Executive Order N-58-20 permitting County Clerks to issue marriage licenses and perform marriage ceremonies using electronic signatures and video conferencing technology. Alameda County Clerk-Recorder partnered with Alameda County Information Technology Department to set up the process and all the necessary infrastructure to be able to conduct marriage ceremonies by Monday, May 4.

The joint Clerk-Recorder/ITD team worked through the weekend and implemented a fully paperless process, allowing the parties to submit an application, participate in the ceremony via videoconference and receive and sign a marriage license, all completely online without entering the county office. On May 5, 2020, the County successfully issued its first marriage license online and performed its first virtual marriage ceremony.

Customer Service (External and or Internal)

Over 250,000

FRANKLIN COUNTY, OH

COVID-19 Rapid Response

What do you do when your County government of 4,500 people in 40+ agencies -- culturally and technologically oriented toward on-premise work -- suddenly decides it needs to send most employees home to keep vital operations for 1.4 million residents running in the middle of a global pandemic? And what if you can't buy laptops because they're sold out and the supply chain is shut down? How will you help an employee with a personal iPad get connected to their desktop PC at the office? Or how do you hold legally-required public meetings while keeping COVID-19 at bay?

Now imagine you're the new CIO, hired just 1 year before the crisis, and 25% of your team is even newer than you are. Oh, and most of your new hires have never worked in local government.

The result? The most challenging 11 weeks of your IT career.

Welcome to Franklin County Data Center (FCDC): the IT organization at the heart of Ohio's most dynamic county that found clarity in the COVID-19 chaos. We spent Spring 2020 building new capabilities for our clients and their missions. We kept the lights on, too.

Cybersecurity

(Awareness, Planning, Breach Protocol, Practices)

Over 250,000

FRANKLIN COUNTY, OH

Identity Federation and Management

User identity management is a common problem across all organizations. With each new system that is added they often come with their own set of credentials for authentication. This creates confusion for users and on-boarding and off-boarding issues for the IT teams. Through careful implementation of 4 different identity practices and solutions the county was able to improve the user experience, gain efficiencies, and increase the security posture of the county.

Data and Performance Metrics

Over 250,000

FRANKLIN COUNTY, OH

Collaboration Leads to Modern Data Analytics and Data Visualization

With the explosion of data available to governments today comes the challenge of knowing what data can be used and for what uses, how to present and analyze the vast amount of data and how to use the information for data-driven decisions that provide more impactful services.

Working as a team to bring modern technology to the serviced of the County, Franklin County, Ohio retired legacy business intelligence applications, implemented a modern, cost-effective and scalable solution that allows employee self-service to reports and data visualization that allows both better communication of information and the opportunity to make data-driven decisions. This modern technology also posies Franklin County for the development of an Enterprise data repository to facilitate data sharing within the County and beyond.

GIS (Geospatial Information Systems)

Over 250,000

MONTGOMERY COUNTY, MD

Leveraging GIS Data to Enhance Public Safety

The Montgomery County, Maryland Department of Technology Services - Geographic Information Systems (DTS-GIS) team, in cooperation with the Montgomery County Fire and Rescue Service (MCFRS), developed an ArcMap GIS based “Driveways” data set that assists in routing Police, and Fire and Rescue personnel and vehicles to public safety incidents in a timely manner. Data from the past was only useful in routing vehicles to the nearest street, but the nearest street was not always the fronting street, and thereby didn’t always provide direct access to buildings. In response to this defect, driveways were created to assist navigating public safety vehicles to an incident’s location, directly, saving time and possibly life.

Telecommunications and Information Technology

(I.T. Management, Operations and Infrastructure).

Over 250,000

MONTGOMERY COUNTY, MD

Improved Department Specific PC Imaging Solution

The Montgomery County Government, Department of Technology Services (DTS) Device Client Management (DCM) program provides a customized Personal Computer (PC) imaging solution in order to meet the configuration needs of the County Departments that it supports. DCM has integrated tailored installation instructions into its imaging solution that allows for onsite field technicians to review the necessary steps to be taken in order to complete the PC refresh process. This was done in response to the need to provide County end-users with a seamless transition when experiencing a PC refresh and to alleviate some of the backend work that fell on the shoulders of the local IT staff within each County operating Department. The custom task sequence applied provides County employees with the necessary applications preinstalled in order to complete their job and also defines any additional steps required by field technicians to finalize the PC configuration. With this solution, users are afforded a seamless transition when receiving a new PC with minimal downtime to their work.

Sustainability

(Energy, Including Energy Assurance Planning; Environment, Public Works, Transportation)

Over 250,000

DURHAM COUNTY, NC

Increase Visibility to Lower Greenhouse Gas Emissions

Durham County Government adopted a greenhouse gas emissions (ghgs) reduction plan in 2007 calling for government operations to reduce emissions by 50% by 2030. In order to measure our progress towards this goal, it was necessary to track electricity and natural gas use in our facilities. Being able to analyze the data allows us to identify waste, prioritize actions to reduce that waste, and measure the impact of our actions.

The Sustainability Manager began by tracking and analyzing data in spreadsheets but this could only happen once a year because the workload of manually entering in data from hundreds of utility bills. To improve this process, the Sustainability Manager turned to commercially available data tracking and analysis software but found them expensive and they still required manual uploading of bill data so keeping them up to date with limited staff was very difficult.

DCo has partnered with a local energy management software startup to create an on-line platform for consolidating and analyzing utility data for all of our facilities, including waste water treatment. The data are automatically pulled into the system from the utilities so they are always up to date with no staff time required.

The creation of this new tool was innovative because we created a custom platform through a public-private partnership. Over the years, the County has continued to provide new ideas and feedback to the developer who then creates solutions to meet the needs of the County.

Web Services, E-Government and Mobile Apps
50,000 to 249,999
COUNTY OF ROANOKE, VA
Scanned Plans Application

Roanoke County, Virginia's Scanned Plans Application is a customized solution that addresses the County's need to empower their citizens to locate and retrieve scanned building and site plans and obtain information about projects based on the following search criteria such as project name, street name or scan number. The Scanned Plans app was created from the ground up with accessibility in mind, and an emphasis was placed on integrating the latest technologies to ensure mobile compatibility and the use of location services.

The Scanned Plans app offers government transparency to its citizens, by including road construction plans, sewer construction plans, water construction plans, county owned construction plans, drainage and stormwater construction plans and maps in an easy-to-use and mobile solution. Citizens and staff are no longer tied to desktop computers, as the Scanned Plans app can be used on a variety of mobile devices, from any location.

This increased ease-of-use helps streamline the day-to-day operation of staff while giving citizens access to County data whenever, and wherever, they choose. Please click on the following link to launch the Scanned Plans application <https://scannedplans.roanokecountyva.gov/ScannedPlans.aspx>.

Customer Service (External and or Internal)
50,000 to 249,999
SPOTSYLVANIA COUNTY, VA
Spotsy GeoHub Initiative

The Spotsy GeoHub was created as a way for the GIS team to display apps, maps, and data in a way that would be easily usable for those not familiar with GIS. This authoritative information offers a way for stakeholders to collaborate in order to address goals, initiatives and challenges.

The Spotsy GeoHub which is a one-stop shop for customers (internal and external) to access the county's GIS information for their uses.

As Information Services has transitioned away from legacy systems to ESRI's local government platform the GIS team is able to :

1. Significantly Upgrade the User experience with its own internal users, such as FREM, Sheriff's Office, Planning, Economic Development and various other departments
2. Improve Service Delivery to the public and staff
3. Allows for much faster turnaround in the development and delivery of GIS applications.
4. Turn data into meaningful user friendly information

Telecommunications and Information Technology
(I.T. Management, Operations And Infrastructure).
50,000 to 249,999
SPOTSYLVANIA COUNTY, VA
The Fiber Connection

The County initiated a multi-year plan to run fiber connectivity strategically throughout the county. By collaborating with the schools along existing fiber routes and conduit, the County's \$2.2 million capital investment has provided stability and redundancy to 30+ County-owned facilities, and has allowed the additional implementation of advanced technology to improve operations and save annual costs. Through a phased scheduled approach, county facilities, including fire and rescue stations, water tanks, communication towers, community buildings, and other ancillary locations, are now fiber connected back to the County's primary network operating center, which has resulted in a reduction of overall operational costs by approximately \$357,000 per year.

The implementation of critical public safety tools has been one of the major resulting success factors; this project has led to a successful implementation of a new digital alert notification system, enhanced online in-

station first responder training, and access to general county solutions that were previously not available. More importantly, with the expansion of fiber throughout the county, community centers now have public wireless access, for general public use. Additionally, in collaboration with the Central Rappahannock Regional Library, the County's fiber vendor and several local Ruritan clubs, library stops with computers, books, and other library services have been made available in rural areas of the county where neither library nor broadband service is not readily available to residents.

The total \$2.2million investment in this project was originally planned to have a return on investment (ROI) of approximately seven years; however, the ROI was surpassed at year 5. This fiber project has not only improved the County's ability to provide expanded services to its internal users, but has also provided expanded services to its citizens, and reduced the total cost of telecommunications required for needed delivery of services.

Public Safety and Emergency Management, Community Resiliency
50,000 to 249,999
CITY OF ALEXANDRIA, VA
Remote 911 Call Taking

The Nation's 911 professionals are on the front lines of emergencies every day and play a vital role in keeping our communities safe and secure. When the City of Alexandria's 911 Center had to respond to the physical distancing requirements brought about by the COVID-19 pandemic, staff got creative. Staff understood the best way to protect the health of their workforce was to provide telework capabilities to their call-takers. But this had never been done before at a 911 Center. The challenge was to enable call-takers to work remotely from home, with no degradation in services provided to the public and first responders. With innovative tools, a willingness to try new approaches, and capable technologists, the staff from the City's Department of Emergency and Customer Communications (DECC) 911 Center were able to successfully support telework for their call-takers - a first of its kind in the U.S.

Sustainability

(Energy, Including Energy Assurance Planning; Environment, Public Works, Transportation)

50,000 to 249,999

CITY OF BELLEVUE, WA

Smart Water Enterprise Data Integration Platform and Analytics Dashboard

The Information Technology Department is partnering with other city departments and partners outside the city to help achieve the City Council's vision of a smart city, with services continually shifting from reactive to proactive and predictive. Bellevue's Smart City Strategy focuses on partnerships in six areas including Smart Water. The Smart Water initiative seeks to proactively improve water reliability and conservation through the implementation of:

- Advanced Metering to improve customer service and conservation
- Proactive timely detection of leaks that is not feasible with manual meters
- Improved reliability, capacity, and water quality through predictive operations

Currently, water meter readers visit homes and businesses to manually record water usage every two

months. With advanced meters, water usage will be transmitted wirelessly to the City daily. This secured, encrypted data will be accessible to customer service representatives and to customers through an Online Customer Portal. Instead of every two months, customers will be able to monitor their water usage in near-real time, adjust their usage if desired and detect leaks.

Achieving this level of water reliability and conservation, requires a seamless integration between multiple IT systems including asset and work order management, Geographic Information Systems (GIS) and customer information and billing. This project developed a Smart Water Enterprise Data Integration Platform to ensure the continuity of water meter data and usage from ground installation to customer. The Smart Water Analytics Dashboard detects and displays data quality issues.

GIS (Geospatial Information Systems)

50,000 to 249,999

CITY OF BELLEVUE, WA

911 Dispatch Integrated Mapping Application

As part of the City of Bellevue's smart city plan, the Information Technology Department (ITD) developed a mapping application to integrate real-time 911 dispatch data with traffic operations, video monitoring, and incident archiving. The application provides a seamless process to efficiently manage 911 data for immediate response to traffic incidents and post-event assessment by city traffic engineers. Previously response to traffic incidents was delayed or no action was taken because of the lengthy multi-step process required to verify and assess an alert originating from the 911 dispatch center. The integrated application has transformed how the city manages and processes traffic incidents to provide the best possible operations to benefit the general public. It is an innovative tool that saves lives, money, and time.

Public Safety and Emergency Management, Community Resiliency
Over 250,000

TRAVIS COUNTY, TX

Collaborative Data Visualization

The information Technology departments from the City of Austin and Travis County worked together to build a shared collaborative environment to host complex data sets and interactive dashboards to provide decision makers within the Emergency Operations Center (Police, Fire, EMS, Public Health, and local healthcare providers) and Executive management (County Judge, Mayor, and City Manager) with the necessary data to make strategic COVID-19 response plans and manage day-to-day operations.



2020 SOLUTIONS AWARDS

Honorable Mentions

Web Services, E-Government and Mobile Apps
Over 250,000
MONTGOMERY COUNTY, MD
Board of Elections Mobile App

The Montgomery County Government Department of Technology Services (DTS), in partnership with the County's local Board of Elections (BOE), has successfully developed and published a mobile app - "MoCo Votes" - which enables County voters to obtain vital election related information. During calendar year 2020, Montgomery County, Maryland, will have both a Primary and General election, and voter turnout is anticipated to be exceptionally high for both. The MoCo Votes mobile app has been successfully published to the Apple and Google app stores and is available for download by County constituents.

The realized goals of this program include the following:

- Making information easily available to County voters on mobile devices
- Potentially reducing the need for voters to file Provisional Ballots
- Improved voter outreach
- Ease of use and interactivity
- Compliance with the Americans with Disabilities Act
- Multilingual capability
- Integration with existing Enterprise systems
- Low Cost of implementation

Customer Service (External and or Internal)
Over 250,000
MIAMI-DADE COUNTY, FL
PW Permit Process Improvement Project

The Department of Transportation and Public Works (DTPW) needed a new system to allow citizens to apply for permitting applications electronically. The current process involved extremely manual, in-person, sequential and repeated iterations at the Public Works office. The DTPW Permits system was developed to address these needs and improve timely processes. With this new system, citizens can now log into the portal, submit new electronic applications, upload one set of plans and make online payments without having to leave their homes or offices. At the same time, the internal process of reviewing these plans were transformed from being a linear process, with paper documents, to a concurrent one. Now that the permitting applications are submitted electronically, they can be reviewed by staff concurrently. Finally, transparency was achieved by giving the citizens an in-depth look into the status of their applications, as well as transparency in the approval process for said applications. This transparency has minimized the number of phone calls Public Works field from the public daily.

GIS (Geospatial Information Systems)

Over 250,000

MIAMI-DADE COUNTY, FL

Parks Signage GIS/EAM Inventory

Miami-Dade County Park's system is the third largest and most diverse urban park system in the nation. It includes over 270 parks comprising of about 13,800+ acres. Every year County parks have more than 25 million residents. Miami-Dade County's Parks, Recreation and Open Spaces (PROS) Department is responsible for maintaining over ten thousand signs located within park territories. They include traffic, informational, directional, rule, and marquee and entrance signs.

Miami-Dade County's Information Technology Department (ITD) in conjunction with PROS instituted a complete suite of mobile and desktop GIS solutions for the signage inventory collection, verification of existing signs and their synchronization with Infor Enterprise Asset Management System (EAMS). These solutions replaced a heavily manual and resource intensive process, automated paper intensive workflows and introduced innovative technologies such as real-time field collection and "live" dashboards.

Sustainability

(Energy, Including Energy Assurance Planning; Environment, Public Works, Transportation)

Over 250,000

MIAMI-DADE COUNTY, FL

Transportation Disadvantaged Tracking System

The Department of Transportation and Public Works (DTPW) Transportation Disadvantaged (TD) Program is a state-funded program that provides free transportation passes to qualifying Non-Profit Agencies/Programs for use by their Miami-Dade County resident clients who qualify as "Transportation Disadvantaged". The "Transportation Disadvantaged" are defined as the disabled, the poor (income level at or below 150% of the Federal Poverty Guidelines), homeless, adults and children at risk and unemployed needing job training in Miami-Dade County. At the beginning of the month, transit passes (TD EASY Tickets) are provided to the agencies and, based on the client's needs, they can issue a one month pass, a seven day pass, a one day pass or a one trip pass to the client. At the end of the month all passes that have not been distributed are returned to the County.

The Transportation Disadvantaged (TD) Tracking System is an in-house developed web application that automates the recording of TD EASY Ticket serial numbers, the distribution of tickets to the agencies, the issuance of transit passes to clients, the reconciliation of unused tickets, and the reporting required by the state.

GIS (Geospatial Information Systems)
Under 50,000
CITY OF WILLIAMSBURG, VA
Fire Station Location Allocation Analysis

Location, location, location! In the city of Williamsburg, we value providing high quality service to our residents; in this project, we gleaned value from location. The GIS department, fire department and tax assessor's office collaborated to provide the city council with a data driven recommendation for the location of a second fire station to best serve our residents in a timely manner. In accounting for the city's priorities, our approach factored in cost per acreage, as well as historical data points by aggregating emergency response calls in key areas over the course of 5 years. After establishing costs and demand, we leveraged ESRI network analysis algorithms to compare the suitability of every potential property in the city to ultimately pinpoint the mathematically derived location -- all thanks to GIS!!

Telecommunications and Information Technology
(I.T. Management, Operations And Infrastructure).
Over 250,000
DURHAM COUNTY, NC
Ransomware and COVID-19 Response

On Friday, March 6 2020, as Durham County Government and neighboring organizations were instituting COVID-19 work-from-home protective practices, Durham County Government suffered a crippling ransomware attack. DCo had no network or infrastructure to smoothly conduct our contingencies. All employee laptops/devices, all Microsoft solutions, SAP, all domain specific software/tools were disabled as a preventative measure to ferret out remnants of the ransomware. Without County email and computers, most employees were working on-site until we successfully built a short-term contingency infrastructure based on personal devices and contacts.

From March 7, until almost the end of the month, there were IS&T teams working on site on a 24-hour, 7-days a week basis. Utilizing our project management office, leadership conducted daily roundup meetings to determine progress through a well-organized work-breakdown-structure.

Now, though not normal, we have completed more than 90% restoration (and cyber-fortifying our infrastructure) while enabling the DCo workforce to work from home.

Customer Service (External and or Internal)
50,000 to 249,999
COUNTY OF ROANOKE, VA
GIS Cityworks Integration Project

In November 2019, Roanoke County launched a new asset management, permitting, and land development suite called Cityworks. The software suite serves as an intake system for the submission of development projects, trade permit applications, and VSMP/MS4 permit administration. Cityworks creates workflows to review, inspect, and monitor these projects. Cityworks does, however, fall short in two categories. This first is that it lacks the ability to automatically create new child parcels with corresponding IDs from parent parcels. This was a functionality that was available in the County's previous land management system, LDO, and is still needed today. The second short coming is in reporting. Cityworks came with Crystal report templates, which is suitable if you need a snapshot excel sheet. However, if that report needs to be a map or a live dashboard then you will have to find other means, and that is where the GIS Cityworks Integrations Project comes in.

GIS (Geospatial Information Systems)
50,000 to 249,999
COUNTY OF ROANOKE, VA
Business License Dashboard

Roanoke County shares many of its issues with other localities across the state and nation. One of those issues comes in the form of data silos and the disparate data between datasets within various County departments. The County's authoritative address data is housed within the Geospatial Information Systems (GIS) department, whereas the business licensing data is held by the Commissioner of the Revenue within Tyler Munis. We faced the challenge of comparing and correcting mismatched addresses within the systems. The solution needed to be interactive, real-time, and easy to use.

Emerging Technologies Applications

(Artificial Intelligence, Blockchain, Autonomous Vehicles, Drones, 3d Printing, Etc.)

50,000 to 249,999

CITY OF BELLEVUE, WA

Robotic Process Automation Cloud Conversion

The City of Bellevue Information Technology Department (ITD) embraces technology innovation with pilot projects. This solution is the first implementation of robotic process automation (RPA).

Bellevue's Development Services department leverages the industry-leading plan review software Bluebeam Revu and collaboration platform Bluebeam Studio. The Bluebeam Studio collaboration platform contains over 2,500 active plan review sessions and is hosted on-premise. To leverage Bluebeam's lower-cost, higher resilience Bluebeam Studio Cloud, the City had to migrate 2,500 plan review sessions to the new platform. Unfortunately, there was no vendor support through APIs or other automation to move the sessions from on-premise to cloud.

The manual process was both time consuming and error prone. Existing staff did not have the capacity for this body of work. Nor did they have an easy method to validate the quality of the data migration.

Robotic process automation (RPA) technology simulates a virtual user of the software. Using RPA, complex manual processes can be run programmed and run virtually. IT was able to automate the migration resulting in a process that runs 10 times faster than a manual migration. In addition, the migration ran outside of regular business hours and did not disrupt the day to day business of the department.

Public Safety and Emergency Management, Community Resiliency

Over 250,000

MONTGOMERY COUNTY, MD

SnowIQ Mobile AVL System

The Montgomery County Department of Transportation (MCDOT) led a collaborative effort in the development and release of a new robust Snow Management Application known as SnowIQ. MCDOT has now developed an integrated initiative that combines contemporary AVL technology with metrics technology, navigation technology, and surface mapping technology - all delivered through an Application that runs on everyday handheld devices. The County's Departments of Transportation (MCDOT) designed and commissioned the development of SnowIQ with outsourced assistance by Eastbanch Technologies to bring this initiative to everyday handheld devices through a mobile Application. SnowIQ is a holistic snow management system that serves two vital functions; (i)internal for robust resource management and (ii)external for providing real-time storm clean-up information to the public. Internally, SnowIQ provides for robust resource management functionality (personnel, equipment, contractors, and materials) while simultaneously providing an external array of real-time information to the public to make informed travel decisions in the midst of disruptive winter storms. The core functionalities of SnowIQ are built to leverage and operate on a cloud platform, Microsoft Azure and run on any Android or iOS platform regardless of the device manufacturer or cellular carrier. This enables county personnel, private contractors assisting in the clean-up effort, and residents alike to simultaneously access information with practically any everyday handheld device. A demo of system can be accessed at the following URL: <http://youtu.be/m214g7cVhmQ>.