Latah County upgraded the phone system and added the functionality of mobile phone service. This allows the county employee to use a phone app on their cell phone or on their desktop computer and appear as if they are in the office sitting at their desk.

City of Bryan, TX
Cybersecurity Awareness Program (Cyber Warrior)

Developed a comprehensive cybersecurity awareness program for employees, and elected and appointed officials through significant and comprehensive culture change.
The City of Hopewell move to a web-based customer incident management solution (Tyler 311) that effectively manages nonemergency inquiries, complaints, and service requests. Moving to a decentralized customer service systems allowed the city to establish common service requests with pre-defined workflow, ensuring that citizen reports and requests are properly routed and resolved as quickly as possible. It also allows citizens to submit their own requests and check incident history via a mobile app or a public portal. Tyler 311 reduces citizen use of 911 emergency call systems for non-emergency calls. These calls clog 911 lines, are costly, and can cause life-threatening delays in emergency service. Tyler 311 also features reporting for management to track, monitor, and analyze the handling and processing of requests. By collecting and analyzing these results, the city are now able maintain better control of internal processes, more easily assess staff performance, and gain insight into their citizens’ needs.

Alameda County’s 10-year Innovation Journey is a central element of its long-term Strategic Vision, Vision 2026, bringing innovation to County programs and services. With 2020 being an extraordinary year, the County found ways to provide services virtually. From introducing new services to setting procedures for existing services, every step was to help residents get through the pandemic.

The COVID-19 pandemic accelerated the adoption of remote work by county employees and the effective delivery of virtual services through technology and other innovative initiatives. In 2020, the Board of Supervisors (BOS) adopted the Guidance for Remote Work Arrangements and Virtual First Service Delivery to its Vision 2026. The Information Technology Department (ITD) responded by developing the Virtual First program.

Virtual First supports the mindset that all departmental operations run by County employees and services that support our customers can be provided virtually. ITD led this initiative by working closely with departments to reengineer and automate operations and services that require customers or staff to come onsite. Great examples were Virtual Marriages, Virtual Board Room, Property Tax Payments, Project RoomKey, and a Chatbot for COVID-19 questions.

Rapid Development Tools like DocuSign, Microsoft Forms, and Salesforce were used to enable quick delivery. New tools implemented, such as Virtual Desktop Infrastructure (VDI) and Always-On, allowed easy and secure access to County assets. Voice Modernization Initiative (VMI) replaced legacy desk phones with soft phones.

Virtual First resulted in the employees of Alameda County working remotely quickly and safely and customers obtaining the services they needed remotely.
Alameda County Social Services Agency (SSA) receives Client Concern inquiries related to the following programs: Medi-Cal, Emergency Services, CalFresh, CalWORKs, General Assistance, Immediate Need, CalLearn, Welfare to Work, Foster Care, and/or IHSS. Pre-COVID-19, the amount of Client Concern inquiries was manageable, but these submissions increased 3-fold after the statewide Shelter-in-Place order. It was imperative to find a solution that provides a faster response to the community during these unprecedented times.

In this project, Alameda County Information Technology Department (ITD) collaborated with the Alameda County Social Services Agency (SSA) to successfully launch a new version of the Client Concerns “online form” that features new fields to help reduce the processing time of each inquiry. In addition, a new internal Client Concerns web application was successfully launched to provide tools to manage, orchestrate, and follow up the life cycle of each inquiry.

Customer Service (External and or Internal)
Population 50,000 to 249,999
CITY OF ALEXANDRIA, VA
COVID-19 Rent Relief Assistance Program

In only 18 short days, City of Alexandria staff developed and deployed the COVID-19 Rent Relief Assistance Program to assist Alexandria renters experiencing housing insecurity and financial hardship due to COVID-19 related loss of income. Once federal relief funds were made available by City Council, staff from the Department of Information Technology Services and the Office of Housing partnered together to design a system consisting of a user-friendly portal (using the city’s Alex311 customer relationship management system), a virtual contact center, and secure file exchange, to process requests for emergency assistance efficiently and equitably. The cloud contact center was configured to ensure multi-lingual agents were available to assist callers through the process. The contact center design enables callers to select their language needs then be matched with the proper agent to offer assistance. Secure file exchange provides a means to ensure all necessary application paperwork could be viewed and approved by City agents who are teleworking. Requestors can sign up to receive updates as their application is moved through the multi-stage approval process, reducing stress and reoccurring phone calls to the city.

Customer Service (External and or Internal)
Population 50,000 to 249,999
CITY OF ALEXANDRIA, VA
COVID-19 Rent Relief Assistance Program

The Client Concerns Online Form is a mobile friendly online application that is accessible to the public anywhere. Once a concern is submitted, the information is stored in a secure data center with controls and security elements in place to protect external access to Personally Identifiable Information (PII). As a result, the internal Client Concern application displays all new records in real time and allows SSA to keep track of all Client Concerns safely and securely.

Customer Service (External and or Internal)
Population Over 250,000
ALAMEDA COUNTY, CA
Optimizing Client Concern Inquiries and Processing

Alameda County Social Services Agency (SSA) receives Client Concern inquiries related to the following programs: Medi-Cal, Emergency Services, CalFresh, CalWORKs, General Assistance, Immediate Need, CalLearn, Welfare to Work, Foster Care, and/or IHSS. Pre-COVID-19, the amount of Client Concern inquiries was manageable, but these submissions increased 3-fold after the statewide Shelter-in-Place order. It was imperative to find a solution that provides a faster response to the community during these unprecedented times.

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As the COVID-19 pandemic began impacting local businesses, the City of Scottsdale identified a need to support local businesses by sharing their open status and providing citizens with this information. To meet the need, it was decided that the City of Scottsdale would create an application to show those businesses that were open and provide an easy way for businesses to enter their data and for citizens to view and search that data.

This new tool serves as a liaison between consumers and companies in terms of communicating their availability. With the Scottsdale Good to Go Business Interactive Map citizens can use their location to scroll through the map to see what restaurants, retail shops or hotels are open around them.

The city’s dashboard hosts the latest resources, maps and information about the coronavirus (COVID-19) outbreak in the greater Williamsburg community: the city, as well as, James City and York County. The city streams data from the Virginia Department of health as well as chart data from vaccination clinic so that citizens have a one stop shop for all things COVID-19. As the city moves into phase two of vaccination, the city has also started to include a weekly memo and YouTube video so that citizens can hear directly from the city’s infectious disease personnel.
At the onset of the COVID-19 pandemic, as populations worldwide scrambled to understand the nature of the virus and its impact on our daily lives, the Alameda County Information Technology Department (ITD) Geospatial Information Systems (GIS) Team (herein, Alco GIS) mobilized to implement data sharing and application development strategies to inform and serve the public during one of the most challenging years for local government. With little time to act, Alco GIS formed multidisciplinary teams to produce Alameda County’s COVID-19 Dashboard—a website with graphs and maps depicting the County’s COVID-19 infection status, the COVID-19 Resources Map—a web application that assists members of the public with locating vital services such as food banks and testing sites, and various COVID-19 related tables and GIS layers offered on the County’s Open Data Hub. The solutions to deliver these products, conceived during an unprecedented crisis under the auspices of a new strategy rolled out by Alco GIS (termed Develop, Deploy, and Empower, or DDE), can now be used in multiple facets of local government and are jurisdictionally generalizable with improved workflows and data products that are always authoritative and up to date.

In June 2020, Miami-Dade County reported close to 40,000 positive COVID-19 cases and 1,000 deaths, both totals the highest in Florida. To help flatten the curve and stop the spread of infection, County government formed Strategic Unified Response to Guideline Education (SURGE) Outreach Teams made up of community volunteers and County employees. SURGE Teams were tasked with visiting residents and business owners in hotspot and vulnerable population areas throughout the County to provide information of the importance of maintaining social distancing, handwashing and wearing masks. The Teams also handed out kits with sanitizer and masks. With Miami-Dade County being the most populated county in the state with a population of 2,700,000 and the third largest in area with 1,946 square miles, a strategy had to be implemented to identify the vulnerable areas to visit and plan how to make the best and most efficient use of the SURGE Teams. A series of processes were developed using Geographic Information Systems (GIS) to identify the areas to visit, create walkable routes, interactively assign routes to SURGE Teams and track progress. When the program ended in January 2021, 8 million residences and businesses had been visited by the SURGE Teams, a huge undertaking.
In February, 2021 the City of Rancho Cucamonga conducted its first emergency management exercise specifically focused on a catastrophic data breach. The exercise was specifically geared towards the City’s Executive non-elected leadership (City Manager, Deputy City Manager, and Department Heads) to simulate their roles and responsibilities and to bring awareness to the unique considerations and challenges inherent to cybersecurity events. The exercise was developed over the course of a year in partnership with the Public Technology Institute (PTI), including review of our existing policies and procedures, examination of our leadership structure, and in-depth discussion of the focus areas and outcomes from the exercise. The project included development of the 90 minute exercise (hosted virtually due to COVID-19 restrictions), a 30 minute debrief, and an after-action report with observations and recommendations derived from the exercise. PTI also facilitated having two Chief Information Security Officers (CISOs) from agencies that had experienced a data breach similar to our scenario act as independent evaluators as well as providing real-time assessment and feedback to executive leadership and DoIT staff during the exercise.

Colorado became one of the first states to quickly pass a senate bill 20-217 in June of 2020 to Enhance Law Enforcement Integrity in the wake of the George Floyd killing and numerous other high profile officer-involved interactions with the public. The law put in place requirements for reporting for all Colorado Peace Officers. The requirements do not go into effect officially until 2023 and there was no funding provided by the state to cover the cost of the shift in operations or to provide a technical solution.
With Covid-19 shutting down in-person recreation classes, Greenbelt’s Recreation department reached out to IT to find a way to create and broadcast virtual classes for citizens. IT quickly ramped up and created infrastructure, including additional WiFi access points along with laptops and iPads. Recreation created innovative content to supplant in-person classes.

Early in the pandemic, the National Capital Region (NCR) recognized the importance of sharing cross-jurisdictional healthcare resource utilization information for situational awareness, planning, and decision-making. To support this need, Johns Hopkins University Applied Physics Laboratory (JHU/APL) leveraged the backbone of the data agnostic dependency modeling tool Dagger, to build a regional capability for monitoring healthcare resource utilization.

Dagger aggregates healthcare resources data from each jurisdiction, and presents views at the regional, sub-regional, local, and individual provider level-based on customizable dependency models. Dagger provides intuitive visualization to quickly gauge the resource use status of a given region or facility. It allows calculations to be modified to fit the needs of the user, unique data source, or scenario. Visualizations include summary and layered views, historical trend charts, and data tables. High-level users access summary views with minimal navigation to get broad situational awareness. Others use drill down features for detailed information. Additional capabilities allow “What-if?” scenarios to prepare for best or worse case outcomes.

To implement successfully, it was critical to assure data quality and user trust, and flexibility to accommodate data in any format. Early in the project, the Metropolitan Washington Council of Governments (COG) partnered with JHU/APL to convene a community of users, data providers, subject matter experts, and decision makers to come together to harmonize disparate data fields across NCR regions and accurately represent cross-regional views. Dagger was enhanced to ingest automated or manual data with mechanisms to verify completeness and validity. Today, JHU/APL is continuing to develop automated visualization cues to ensure users have full awareness of the quality of data for every data point displayed.
In early March 2020, when the world was faced with a global shutdown due to the coronavirus pandemic, Miami-Dade County ramped up its emergency response efforts to keep our community safe and slow the spread of the virus. The County quickly mobilized to set up testing sites, schedule appointments, assist members of our community in finding testing sites near them, and develop a business intelligence strategy to keep track of testing data throughout the County. Through collaboration between Miami-Dade County’s marketing, customer experience and IT teams, a comprehensive and multilayered COVID-19 Testing Program was created that included three key functions: Appointment Scheduling, a GIS enabled Testing Site Finder and Business Intelligence. This program, combined with a robust public education and community engagement effort, helped deliver vital services and information aimed at keeping our community safe and informed.

Roanoke County, Virginia’s Public Access Portal for Online Permitting application is a customized solution that addresses the County’s need to empower their citizens to 1) Apply for Permits or Licenses; 2) Upload Plans; 3) See Review Status; 4) Schedule Inspections; 5) See Inspection Results and 6) Pay Fees. The Public Access Portal for Online Permitting application 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 Public Access Portal for Online Permitting application app offers government transparency to its citizens, by eliminating paperwork and streamlining the permitting and inspection processes in an easy-to-use and mobile solution. By providing a Public Access Portal, Public Access empowers residents and contractors to apply for logins, submit and view work activities, generate reports, schedule inspections, and pay fees from a flexible online interface. Citizens and staff are no longer tied to desktop computers, as the Public Access Portal for Online Permitting application 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.
In 2020, the Office of Innovation and Technology’s (OIT) SmartCityPHL team worked with the Streets Department to solicit proposals for technology that could improve the efficiency of road inspection. Previously, the Streets Department conducted inspections manually. The intensive personnel hours required to perform this work meant that only a few dozen of the city’s 2,400+ miles of road were inspected each year.

SmartCityPHL selected GoodRoads, a company based in North Carolina, as the vendor and partner for a 1,200-mile pilot project in Philadelphia. GoodRoads supplied affordable, portable devices to capture images of the streets and then analyzed them using artificial intelligence (AI) to identify needed repairs. The partnership included training GoodRoads’ AI to analyze additional features of the roadway that require maintenance, like signs and pavement markings.

The Streets Department’s goal is to allow data to drive decision-making—and not just decisions regarding pavement conditions. A comprehensive look at road conditions city-wide, when combined with demographic and socioeconomic data, will help the City of Philadelphia to address historical disparities by including considerations of equity in prioritizing its resources.

Taken together, data about pavement conditions, signs and markings, and Philadelphia’s neighborhoods are informing a more equitable approach to investing in Philadelphia’s infrastructure.
Cyber Security events have become much more prevalent in the country over the last 10-15 years targeting private sector businesses and intellectual property across many industries. In the last few years however, Cyber Threat Actors have been specific about targeting local government agencies who have traditionally been under resourced and vulnerable to wide scale disruptive attacks. On March 6, 2020 two weeks before Covid-19 related lock down orders, the City of Durham had become, like many others in the country, a victim of a Cyber Security Event. Unlike some other local government agencies that were either crippled for several months, or were forced to pay exorbitant ransom fees, the City of Durham was able to restore all core business systems including but not limited to: the 911, 311, ERP, utility billing systems, etc. within 5 business days!

The following investments were in place when we were attacked that led to a much faster recovery time:

• Robust next generation backup system
• Annual Security Audits
• Adopted NIST Security Standard
• Program funded and cyber security tools procured
• Recruited Senior Cyber Security Analyst
• Based on security audit, built strategies for improvement
• Updated TS department Strategic Plan
• Virtual Chief Information Security Officer (vCISO) services procured
• Security Operations Services (SOC) Services procured
• Next Generation Firewalls (Palo Alto, Fortinet)
• Cyber Security Insurance in place

These investments paid off substantially when we had the Cyber Security Event on March 6th.
Immediate configuration and implementation of virtual public hearings due to the onset of the COVID-19 health crisis.

With our rapidly growing City, the City of Avondale wanted to provide its citizens with opportunities to quickly identify our services and provide a contact for those services. For citizens of Avondale, determining who to contact at the City for our different services can be a daunting task. Through a city-wide collaboration, Avondale implemented a Citizen Request Management System. This central platform has been the foundation to unifying citizen requests and communications.
ArcGIS Pro, Collector App, and ArcGIS Online replaced time-consuming manual tasks of managing and notifying the weed abatement violations. Before this solution, the inspector used a paper form to collect field data and manually searched for the property information one site at a time. The Collector App replaced the paper form. ArcGIS Pro automatically searched for property information and generated the mailing list for creating the violation notice letter.
The Miami-Dade County Elections Department (Elections) oversees voting functions for over 1.4 million registered voters. It is the most populous county in Florida and the seventh-most in the United States. To better serve the constituents, Miami-Dade’s Supervisor of Election runs an Early Voting (EV) period of 14 days, prior to the official election day. As such, twenty-two Early Voting Sites, spread geographically throughout the county, are assembled and staffed during county-wide elections. The sites handle over half-a-million voters who take advantage of the early voting period.

The Bellevue Map Viewer (BMV) is a web-based mapping application that contains a set of layers useful to Bellevue residents, visitors, developers and others. The map includes layers focused on property, community, COVID-19 resources, transportation, utilities infrastructure and more. The application is also meant to be a flexible platform to share topical data related to current developments or events in Bellevue.

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The City of Bellevue, Washington experiences intermittent weather events that include snow, severe winds and flooding. These events can compromise the ability of response vehicles to navigate the City and perform essential services. Public safety is critical. The City maintains a set of response protocols and fleet of vehicles to clear and service roads during these events. For many years, this process was manual and labor-intensive. Incomplete and stale data impacted response actions and decision-making. Post-event, compiling the data to respond to citizen information requests was difficult.

The implementation of Automated Vehicle Locator (AVL) hardware and software from Geotab eliminated manual processes with real-time vehicle location and mapping and provided near-real time data to inform actions and decision-making. The software also stores event data enabling internal and citizen information requests to be answered with minimal effort and high confidence in the data quality. The goals of Response Management Improvement and Post Event Reporting were met.

During the Covid-19 Pandemic, Bellevue IT’s Geographic Information Systems (GIS) team met a variety of needs to communicate time sensitive information to its residents, businesses, students and visitors via a series of public facing GIS on-line web maps and printed hardcopy maps for distribution. Concurrently, the IT GIS team also provided internal support tools and maps to help City staff manage Bellevue’s response to the pandemic, especially as many City staff moved to a work from home model. The pandemic brought new and unique information needs to be met, as well as constraints that had to be overcome to allow the city to work together remotely and support City staff and the public from a distance. The city also learned how to work with its regional partners on common needs, and to build geo-spatial applications useful to everyone in the region, including residents, students, businesses and staff of the City of Bellevue, and beyond.

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At the beginning of COVID, public health departments were faced with a once in a generation challenge with an under resourced and limited infrastructure to address this global pandemic.

Each state continues to work hard to address the vast challenges - from healthcare, to political, to community resilience - with the hopes of a new normal on the horizon.

States handled the response quickly and effectively, but ultimately developed different platforms and strategies, making the exchange of information across jurisdictions an enormous task. Specifically, the inconsistent means of exchanging contact tracing information was the top challenge identified by the chief epidemiologists in Maryland, DC, and Virginia in May 2020.

The Metropolitan Washington Council of Governments (COG) engaged state public health staff not only in Maryland, DC, and Virginia - but expanded to West Virginia, Pennsylvania, and Delaware to standardise a secure and daily way to exchange contact tracing information through a partnership with the Association of Public Health Laboratories (APHL).

The success of this project not only standardized how this information is shared, it greatly decreased the time and effort on the already stretched public health staff, and built a network of peers who continue to convene weekly to address the many challenges of their work.

Citizens of the City of Avondale are now able to pay their water bills with one tap - thanks to a new Electronic Bill Presentment and Payment Platform called InvoiceCloud. No more walking a voided check into City Hall, no more filing your paper bills. Pay from your couch, pay with Apple Pay, sign up for autopay while in line at the grocery store! As the pandemic worsened, and every day tasks became more of a concern, the City of Avondale was able to help citizens get rid of one headache - figuring out how to pay their water bill. Streamlining the account signup process for online payments and integration with our ERP means that customers can get and pay their bills faster, and in the most convenient way for them.
With over 45,000 residents disposing Household Hazardous Waste (HHW) material such as paint, light bulbs, needles, etc. every year, Alameda County offers multiple free, convenient options for properly and safely disposing hazardous waste. It allows County residents to drop off at three HHW facilities located in Oakland, Hayward, and Livermore. In addition, HHW holds multiple one-day annual events at other accessible locations.

In June 2020, Environmental Health launched the state-of-the-art HHW Scanner system at all facilities eliminating an inefficient, paper-intensive process. The new system was developed in one year as an integrated three-part system comprised of an Android application (app) for scanner devices, web services for syncing scanned data to county databases, and a web application for HHW Program administrators to manage the system.

The new system was a huge success as it streamlined and automated the process, eliminated paper, improved data security, reduced staff time, centralized data, and generated accurate and timely reports. During the pandemic, it eliminated the use of high-touch items like pens and clipboards and assisted in social distancing. By using NASCAR-style processing, the system improved customer service, allowed speedy check-ins, shorter customer wait times, and allowed HHW staff to safely serve more customers.

The new system has assured safety during the pandemic by providing no-touch processing capabilities and by allowing for social distancing. With shorter processing times (just minutes) in 2020, the HHW program was able to process highest number of customers ever.

Franklin County Department of Job and Family Services Family Stabilization Unit, in conjunction with the Franklin County Data Center, created a Microsoft Dynamics application serving boys and young men of color in Franklin County. The focus of the program is to support boys and young men who have been involved with the justice system to determine services and resources they need to thrive and prevent recidivism.

To accomplish this goal, Franklin County leveraged customer relationship functionality within Microsoft Dynamics to holistically assess not only the young men, but their entire family. The team has chosen the Economic Mobility Pathways (EMPath) Model to assess current housing and family security, physical and mental health, financial management, educational goals, and household earnings. The EMPath model combines neuroscience with CRM tools to help participants develop and strengthen their own skills by setting goals, documenting those goals, and working toward achievement.

To achieve the Customer Relationship Management (CRM) functionality required to execute these areas within Microsoft Dynamics, Franklin County partnered with a solutions provider to develop specific code functionality. This code is scalable and can be shared with other agencies. The County went one step further to display key metrics on a Power BI dashboard readily available to County leadership.

Sustainability
Population Over 250,000
ALEMEDA COUNTY, CA
Household Hazardous Waste Scanning