What are states doing to future-proof their unemployment systems?

PLUS:
Online Services for All
Government gets creative in working with unbanked citizens.
Spreading Best Practices & Spurring Innovation.

ATTEND/SPONSOR: govtech.com/events
March 2021
CONTENTS

COVER STORY
14 / All Eyes on UI
The number of unemployed Americans skyrocketed due to COVID-19. What did the surge reveal about the state of UI systems across the country?

22 / Upgrading the Enterprise
How three jurisdictions navigated their ERP modernization plans through COVID-19.

30 / Unbanked
As government goes digital, what happens to those without bank accounts?

DEPARTMENTS

36 / Ramping Up
Taking cues from the federal vendor verification portal FedRAMP, StateRAMP aims to make working with third parties simple and secure for state and local governments.

42 / In .gov We Trust
Legislation passed at the end of 2020 shifted oversight of .gov domains and made them more accessible for state and local governments.

44 CIO Central
Career changes across tech-driven roles in state and local government.

48 Spectrum
More research, more science, more technology.

COLUMNS

4 Point of View
Some people don’t embrace digital norms. Government still has to serve them.

7 Becoming Data Smart
Data is the key to recovery.

10 Four Questions
ConnectMaine Executive Director Peggy Shaffer on getting broadband across the state.

38 An Apology to COBOL
Is old tech really the problem?

43 Data Points
Having data is great, but it must be equitable to be effective.

50 signal:noise
The case for public affairs television.

NEWS

6.govtech.com/extra
Updates from Government Technology’s daily online news service.

12 Big Picture
A floating data center offers a cost-saving alternative in San Joaquin County, Calif.

44 CIO Central
Career changes across tech-driven roles in state and local government.

IN OUR NEXT ISSUE:

GovTech’s Top 25 Doers, Dreamers and Drivers
Meet the class of 2021.

State of the States, Tech Edition
Our annual review of which governors are making tech a priority.

Cover Image: Shutterstock.com
March 2021
www.govtech.com
For the People

According to Consumer Intelligence Research Partners, 126 million Americans had Amazon Prime memberships as of September 2020. That’s an increase of 8 million over the number of Prime members in March 2020, when the pandemic began to encourage more time at home. Shopping, paying bills and otherwise conducting life online became the norm for most Americans in 2020. Most, but not all.

But what about the people that haven’t increased their online activity in the past year? What about those that are offline altogether? Big retailers can afford to focus their efforts on the connected majority. But government must serve everyone.

Among the lofty list of government priorities are issues like ensuring domestic tranquility, providing for the common defense and promoting the general welfare. Adapting that last one: it means making sure unemployment benefits get delivered and that residents can access other elements of the social safety net.

In Unbanked (p. 30), GT Associate Editor Zach Quaintance looks at another segment of the population that can be harder for government to interact with: those without traditional bank accounts. And while benefits cards can connect unbanked people with services they’re eligible for, what about those who need to conduct business with government?

For much of the country, property taxes are a major source of revenue for local government — such a significant amount, in fact, that revenue agencies couldn’t afford to let the pandemic derail their collection efforts. How then could they continue to meet their basic obligations to citizens for things like filling potholes, staffing emergency services and picking up trash?

As was the case with so many services, efforts to digitize revenue collection ramped up to overdrive last year, with many existing plans fast-tracked. But making online payment options available doesn’t help taxpayers who prefer to pay cash.

Federal Reserve estimates from 2018 indicate that 22 percent of American households include unbanked or underbanked adults. And while many are from immigrant communities and fall into lower income categories, their reasons for avoiding traditional banking institutions can be as varied as the areas of the country they live in and their individual backgrounds. And while service counters at government buildings are set up to take cash payments under normal circumstances, COVID-19 limited the availability of these services.

Our story frames several challenges governments face in reaching this segment of their constituency, and explores some creative partnerships that are helping close this access gap. It further looks at how this is increasingly viewed as an equity issue, as unbanked or underbanked people are likely reliant on high-fee services for check cashing or money orders for paying bills, exacerbating economic disadvantages they may already face.

Elsewhere in this issue, I hope you get a chance to read our detailed look at how states are working to adapt their unemployment systems, starting on p. 14, as well as local jurisdictions that haven’t let the pandemic get in the way of needed upgrades to their ERP systems (p. 22).

Finally, Associate Editor Ben Miller offers his Apology to COROL on p. 38, suggesting some of us might be too quick to dismiss and discount technology that could be called “legacy.” Even in the world of technology, just because something is old doesn’t mean it isn’t the right tool for the job.
PROTECT THE NETWORK

The network of the future requires a better understanding of cybersecurity threats and a new way of thinking about security solutions.

Hear from experts—download the Guide.

bit.ly/SecurityNOF

©2021 AT&T Intellectual Property. All rights reserved. AT&T and the AT&T logo and are trademarks and service marks of AT&T Intellectual Property.
Online Justice
Arizona launched a virtual court system with the goal of making hearings run more efficiently by having all case-related information available in one place. The Digital Evidence Center is a cloud-based platform that allows courts to facilitate virtual and hybrid hearings, while providing all parties within a case the opportunity to organize and present documents, multimedia exhibits and evidence. The platform is initially operating in six courts, and will eventually expand to all 180 in the state.

TRAFFIC JAM
The U.S. Department of Energy’s Argonne National Laboratory is examining traffic data from across the Los Angeles metro region in order to develop strategies to reduce traffic congestion. Supercomputers are able to take a year’s worth of traffic data gathered from 11,160 sensors across Southern California, as well as movement data from mobile devices, to build forecasting models. They can then be applied to simulation projects.

Biz Beat
While mass COVID-19 vaccination has been slower than the U.S. government hoped it would be, Grancus is rolling out several free tools to help state and local government talk to the public about vaccines, including tools for placing overlays on websites, and text-to-subscribe campaigns, as well as analytics to determine effectiveness. But there’s also a big focus on helping governments share effective strategies with each other, like highlighting best practices from participating jurisdictions, plus AI tools for streamlining the creation of new content.

WHO SAYS?
“I would no sooner tell you to put fiber in the Sahara than I would tell you to address New York Metro with satellite.”

govtech.com/quotemarch2021

MOST READ STORIES ONLINE:
StateRAMP to Offer State, Local Government Secure Vendor Pool
Former Interim New York CIO, Jeremy Goldberg Heads to Microsoft
Massive Federal Hack Raises Questions About the Way Forward
$100M Contract Is Largest in Tyler Technologies’ History
Colorado to Implement New Tech to ID Unemployment Fraud
In This Town, the Assessor Uses Tech to Look Into Backyards

55%
The percent increase in local government meetings about marijuana regulation since March 2020, according to Fyllo, a company that makes compliance software for highly regulated industries.

25k
The number of documents Louisville, Ky., offices completes with DocuSign each month.

898M
The funding 27 Texas agencies have requested from the state Legislature to address cybersecurity and legacy system modernization.

75
The horsepower of an e-tractor coming soon to Oregon farms.
Data Is the Key to Recovery

Using data wisely will be essential to working with tighter budgets post-pandemic.

For our country to get back on track, it’s time to roll up our sleeves and prioritize essential public services with restricted budgets. Even with federal stimulus funds to state and local government, budgets will be stretched — mayors and their key staff have told us they need to cut their budgets by anywhere from 15 to 40 percent next year. How can public officials bridge these gaps? The best strategy is to use data as a tool — to identify what works, find operational efficiencies and identify the areas with the greatest need.

Government’s responses to COVID-19 have been significantly enhanced where there were prior investments in data. For example, in Boston a multi-year citywide data warehouse project meant Chief Data Officer Stefanie Costa Leabo was able to provide her mayor with a real-time integrated COVID-19 dashboard in a matter of days. And yet, unfortunately, data is not typically front and center for public officials, because, as one data leader said, “there’s no ribbon cutting for a data warehouse.”

Recently, we surveyed chief data officers in 20 U.S. cities and asked what big trends they noticed in 2020. Their answers presented a contradiction: 1) massive increases in uses for data, and 2) less funding for the infrastructure that creates value from that data. As Mike Sarauti, chief innovation officer for Miami, said, “The appetite for data has tremendously increased and data insights are becoming the norm. This presents both opportunities and challenges to city staff. We have the support and enthusiasm to evolve our data hub and expose the data through internal and external user-friendly interfaces.” Yet Philadelphia CIO Mark Wheeler worries that “budget reductions will eliminate new initiatives and impact some ongoing operations”.

For a public official or budget officer to lead through the cost-cutting years looming years ahead, they should elevate and expand data operations, not diminish them. This ethos is well described by Denver CDO Paul Kresser: “I’m anticipating an even greater demand for data services in 2021 as our agencies look to leverage data to help compensate for reductions to their operating budget.”

City budget officials who consider all expenses the same, without adjusting for those expenditures that produce value, miss the big opportunity. In fact, because of budget, data offices need to expand and become central players in the recovery effort.

The consulting firm McKinsey estimates that, globally, government could capture $1 trillion of value by using data analytics both to identify revenue not collected and to recoup payments made in error, and estimates that using data analytics to eliminate waste, fraud and abuse in government can have returns as high as 10 to 15 times their cost. We have seen in our own network of data leaders that the return on investment can be as high as five to one when data teams solve public problems.

To make data the center of pandemic recovery efforts, states, cities and counties need to consistently invest in data capacity — the talent and resources internal to government — and, just as important, foster a culture that respects the power of data to unlock insight. In planning for next year’s budgets, public officials should be able to answer the following five questions in the affirmative:

1. Is there a public scorecard for each project that shows expense and return both measured in terms of customer service and dollars saved? 2. Does the city have a predictive analytics component in its statistics program? 3. Does the city make widespread use of layered data and spatial analytics in order to identify trends, causal relationships and different results across the city? 4. Does the city use data to identify revenue opportunities either by a service area or other important variable? Or does the city use pattern recognition to identify areas in need of revenue audits, like examining trends in unpaid fees? 5. Does the city have an internal data literacy initiative with its employees that increases the daily use of data and applications such as GIS that will produce a broad flow of regular savings?

These questions can help governments increase their commitment to data-informed and results-oriented service delivery, and can prioritize department projects and requests for additional funding that will produce better service delivery. This can improve government both in the recovery from the pandemic and for years to come.

Jane Wiseman, a former appointed government official, consultant and financial adviser, co-authored this column.
For government IT teams, the urgency of digital transformation means increased pressure to integrate applications and data, as well as streamline workflows with process automation. However, the application programming interfaces (APIs) and point-to-point system connections traditionally used for integration are increasingly problematic. These methods too often create security risks, redundant work efforts and data errors.

“Government organizations need to integrate data and automate processes that are no longer combined in a single system,” says Andrew Graf, chief product officer at TeamDynamix. “But today this means relying on consultants or a handful of employees who know how to build and maintain these integrations.”

The issues of traditional system integrations are a hindrance to government efforts toward digital transformation. What’s needed is a new, foundation-level approach to system integration. The TeamDynamix Integration Platform as a Service (IPaaS) solution offers this approach with a library of prebuilt connectors and a visual flow builder.

### CHALLENGES AND RISKS OF SYSTEM INTEGRATIONS

Direct system connections are prone to errors and breakdowns that disrupt automated processes. APIs pose significant security risks, such as when a misconfiguration unintentionally opens access to hackers for a system attack or data breach. IT may not know about all APIs or webhooks in use, or spend a large amount of time trying to track and manage these integrations. Because APIs are developed and maintained individually, often by different engineers, this work is often repetitive and redundant. Without the integration platform, workflow development can’t begin.

### AN INTEGRATION PLATFORM WITH WORKFLOW IS THE WAY FORWARD

An integration and workflow platform allows IT organizations to securely build and maintain integrations and process automations without requiring skilled users who can write system-specific code. Instead, standard connectors in the platform library can be used to connect to ERP and CRM systems, ticket management, reservation systems, maintenance applications, fleet management, GIS applications, Office365, Active Directory and more. Non-technical users can create their own automations in a visual, drag-and-drop workflow builder tool. Imagine creating a workflow to onboard a new employee, change a name or process a permit request.

Hosted in the cloud, a single integration platform can transform and harmonize data across hundreds of APIs, systems and applications. A central hub for API and connector management maintains better control over system integrations. “With an integration platform, business users can start to capture opportunities for data and process improvements without having to code up the connectors and workflows,” says Graf. “Integration starts to become core to the thinking around business processes because people realize they can create integrations on their own.”

### EMPOWERING IMPROVEMENTS IN HOW GOVERNMENTS WORK

Any government organization that wants to accelerate digital transformation can gain several benefits from an integration platform.

- **Efficient integration management.** Managing numerous APIs and system connectors can be complex and time consuming if done manually. An integration platform enables IT and development teams to manage system integrations more efficiently and effectively, which can lead to time and cost savings.

---

### Integration Platform Use Cases

- Employee onboarding and offboarding
- User permissions management
- Name changes
- Consolidated information for a resident, client or business
- Automated reminders, alerts and notifications
- Information opt-out processing
- Screening emails and online forms for sensitive data

---

**ADVERTISEMENT**

**GT21 CASE STUDY Team Dynamix.indd** 3

---

**1/27/21 11:40 AM**
Improved data access. Authorized users can build connectors to directly access data that helps improve operations and service delivery.

Central data hub. An agency can store all data in a single location and set parameters for how it is organized and accessed. These parameters reduce the potential for data errors and can improve compliance.

Stronger system security. IT can specify how connectors are authenticated in order to prevent unauthorized access to data. Capabilities such as intrusion alerts and fraud detection help minimize the risk of security breaches that can result from unauthorized or malicious connector use.

Increased internal efficiency. A library of prebuilt, reusable connectors supports faster, more efficient integration development.

Additionally, using an integration platform for digital transformation benefits all stakeholders:
• IT reduces workloads when business users develop their own connectors, which also allows developers to focus on system design for increased business value.
• Business users can create secure workflows on their own with no need to write code.
• Operational activities and service delivery benefit when users no longer need to wait for IT to pull data or automate workflows.
• Leaders can plan organizational strategy based on new digital services that are delivered more quickly with better use of IT’s time.

“Small things that used to take 10 minutes here or five minutes there can save a lot of time when automated.”

Nic Hayes, Lead Technical Analyst, WesternU

PUTTING iPaaS INTO ACTION

At the Western University of Health Sciences (WesternU), IT staff knew they could better serve users if more tasks could be integrated and automated. By using TeamDynamix, they can now automate workflows for both routine tasks and to detect special needs. For example, if an employee computer device is rebuilt or repaired.

By 2022, Gartner predicts that API assaults will top the list of web application attack sources resulting in data breaches.1 Need this warning by adopting integration platform technology to control APIs and mitigate risk.

“Small things that used to take 10 minutes here or five minutes there can save a lot of time when automated,” says Nic Hayes, lead technical analyst at WesternU.

HOW TO GET STARTED

With so many possibilities for automation and integration, it can be hard to know where to start. Looking at the possibilities from two perspectives can help identify the right first choices.

One perspective is to identify the workflows or management activities that have the most need for improvement. A survey of key stakeholders will uncover these needs, such as frequent tasks that can be streamlined with better system integration. Another need might be creating a central hub that automatically accesses the latest data from multiple systems.

The second perspective is to assess the potential rewards of accelerated integrations against their budget justification. Criteria for this assessment may include the ability to implement a much-needed new system because the associated integrations can be enabled rapidly.

ESSENTIAL CONNECTIONS FOR TRANSFORMATION

Digital transformation will deliver full value only when systems and data can fully connect. And that transformation can achieve a faster and farther reach if the integration tools are easy to use for both IT and employees. The TeamDynamix iPaaS solution offers a platform to enable the system integrations that in turn drive powerful digital transformation.

This piece was developed and written by the Government Technology Content Studio, with information and input from TeamDynamix.


© 2021 e.Republic. All rights reserved.
Can you describe your role and the work it entails? ConnectMaine was created in 2006 by the Legislature to expand broadband — both connectivity and use — statewide. We run two grant programs. One is a community planning grant, providing money to help communities expand broadband access. Then, we have a program to actually build out that access and infrastructure. It helps service providers to either expand their network or work with communities to build out an entire community network.

That’s the job of ConnectMaine. I’m the executive director. I’m a state employee. The program part of me responds to the ConnectMaine Authority Board, but my direct supervisor is the commissioner of the Department of Economic and Community Development.

What unique circumstances are there in Maine? Our challenges are distance, density and poverty. Even if we bring a connection to your house, if you can’t afford it, you can’t access it. In Maine, we have a lot of small Internet service providers. We had a lot of small, consolidated telephone companies. The problem is their networks weren’t made to talk to each other. Revamping that so that it’s a bigger network is difficult and expensive. We find it’s very hard for the incumbent provider to upgrade that service. It’s a significant capital investment, and you’re not gaining new customers or revenue. In Maine, we also go from mountains to coast. We have lots of islands. Many have bridges, but when you get to the edge of a road, there’s nowhere for it to go. That again presents a cost challenge.

How has the pandemic changed your work? It’s done a couple things. It’s overtaxed upload speed. People who had a connection adequate to watch Netflix suddenly have kids at home while they’re also trying to work, and their upload is not cutting it. So, there’s been more attention on upload speed. The other piece is that when we first shut down last March, suddenly we had thousands of kids who didn’t have any access to the Internet. We had a crisis. The Department of Education responded by buying Wi-Fi devices. Those Wi-Fi subscriptions ran out, and those kids are still home. We’re trying to get people to understand that infrastructure doesn’t happen overnight and it’s not cheap. That has been a major difference in the conversation.

We’ve been around since 2006, and we got our first major funds infusion this year. The Legislature approved a $15 million bond, and voters approved that by 75 percent. Now, that is more than we’ve spent in 14 years combined, and it’s still a drop in the bucket. We guess it’s somewhere around a $600 million hole to meet need and demand. This cannot be only the states’ or communities’ or providers’ problems. It requires a partnership between states, communities, providers and the federal government.

What projects are you working on right now? We’re currently using CARES Act money to connect students. We put out $5.6 million for it, and we can continue that program through the funding we have. We are also working on a project with our Department of Health and Human Services to provide free service to low-income parents until June. We’re asking providers to come in with a bulk price. We know there are about 25,000 households with kids that we could hook up. Finally, the biggest project this year will be the actual distribution of the $15 million we have. We’ve had the same grant process since 2006, and we’re in the process of revamping that. — Zack Quaintance, Associate Editor
Download your free copy here: www.govtech.com/5ghandbook
Staying Afloat

Fall 2020 saw the arrival of a new resident at the Port of Stockton, east of the San Francisco Bay: a 250-foot barge set to become the backup data center for San Joaquin County, a fast-growing jurisdiction now home to more than 760,000 residents.

Nautilus Data Technologies, based in Pleasanton, Calif., refurbished the former freight barge in nearby Vallejo and navigated it through the San Joaquin River to Stockton. The floating Tier III data center offers 99.9 percent availability and less than two hours of downtime annually. It is powered by turbines running off the water on which it floats, and also uses the water to cool the servers, making it 80 percent more efficient than a traditional land-based data center, with 30 percent lower operating costs.

SOURCE: TECHWIRE.NET
The number of unemployed Americans skyrocketed due to COVID-19. What did the surge reveal about the state of UI systems across the country?

By Jed Pressgrove
During the first quarter of 2020, the U.S. Department of Labor told an unforgettably story with its unemployment insurance claim numbers. In the week that ended on March 21, UI claims across the country amounted to about 3 million, dwarfing the previous week’s count of roughly 250,000 claims nationwide.

“This marks the highest level of seasonally adjusted initial claims in the history of the seasonally adjusted series,” a DOL press release robotically pointed out.

The absurd volume of claims brought about a time of reckoning for state UI systems, 48 percent of which, according to 2018 Center for Digital Government* data, were considered legacy systems or, to use a less flattering phrase, old and broken. Jobless Americans, who were already dealing with the anxiety that comes with a historic health crisis, had to endure busy signals, unresponsive websites, late payments and sheer uncertainty as they waited for benefits.

Of course, the public servants behind state UI programs knew the situation was far from sufficient and adapted systems as quickly as they could. The addition of new federal programs, such as Pandemic Unemployment Assistance, complicated the goal of swift technological improvements. Even near the end of 2020, state UI services continued to struggle. At the start of November, “only three states, North Dakota, Wyoming and Rhode Island, met the federal standard of getting benefit payments out within three weeks for 87 percent of applicants,” as reported by Pew Trusts publication Stateline.

“They’re trying to bail out the boat while more water is coming in,” said Andrew Stettner, senior fellow with The Century Foundation, which published a detailed UI modernization report in September. “They got flooded, they’re trying to bail it out, but there’s still lots and lots of people filing new [claims], so [they’re] having to deploy people to deal with that. And then they’re also getting this onslaught of fraudulent claims to defend against. I’m talking organized crime going after them, which they have not been consistently able to deflect.

Because of that, they are still just struggling to deal with everything. Some of that’s technology and some of that’s just business process challenges.”

Scott Jensen, director of the Rhode Island Department of Labor and Training, isn’t cocky about his state being one of the fastest at paying out claims. If he had to give Rhode Island a grade for UI services in 2020, it would only be a B-minus. In any case, he attributes the state’s success to “a little bit of technology and a little bit of management.”

“Rhode Islanders were not treated with a legacy UI system. In the first half of the 2010s, Indiana rolled out new technology for its UI program. Chief Information Officer Tracy Barnes, who took his current job only weeks after COVID-19 rattled the nation, noted that the on-premises solution had been in development for about a decade.

“It’s a pretty current client service technology, but it is not a current cloud technology,” Barnes pointed out. “So it was more modernized, but not extremely current. But it was very well constructed.”

Although the system was able to sustain the historic load of claims reasonably well, the state ran into issues related to processing and back-end activities. Using the AppDynamics tool from Cisco, Indiana was able to identify and correct code insufficiencies for improved performance.
Barnes said the state extended its call center footprint as well with the help of a local partner and added a couple hundred agents to help field front-line calls. “We also made some additional code changes to allow interaction with telephones, voice response processing, so that we didn’t have to have folks individually answering calls and having to work through the system,” Barnes said. “It allowed the system to respond and provide data back to the users and constituents through a telephone line and such.”

Barnes feels Indiana’s UI system is now in a decent spot technology-wise, meaning that the state plans to ride with its current setup unless certain variables start to change. The majority of the state’s UI issues involve combating illegitimate traffic and fraud. More recently, the state implemented Shape, a traffic-blocking solution from F5, and ID.me, a tool for identity verification. Barnes admits it’s easier to prevent unwanted traffic than it is to stop fraudsters who use stolen information without lengthening the wait time for actual unemployed citizens.

“It’s a very difficult world when you try to go from that pay-and-chase model to that prevention model to keep the money from getting out the door,” Barnes said of the battle against fraud. “It’s a very fine line and a difficult balance in trying to make sure that you’re holding back as much as possible without negatively impacting... folks that we know need the funds, and our goal is not to keep money from them, it’s to try and keep funds from going out the door that can never be claimed back in. But unfortunately some folks do get caught in the crossfire there.”

Another challenge for the state is getting timely responses from businesses about the validity of jobless claims. Barnes stated that closures and the increase of remote work among private organizations can slow down responses to requests for information about laid-off employees. Indiana is still searching for the answer to this communication issue. While technology may be part of the answer, Barnes has his doubts, as automation may only do so much.

Texas

In February 2020, the Unemployment Insurance Division of the Texas Workforce Commission (TWC) received an average of 13,000 UI claims each week. By the middle of March, Texas saw well over 100,000 weekly claims. During one week in April, the number exceeded 400,000.

Given this enormous shift, Texas, which has a legacy UI system, had to make several tech-related changes, said TWC CIO Heather Hall. The TWC website was moved to the cloud. Web servers were doubled in March and again in April. Mainframe capacity had to be increased by 200 percent. The UI department expanded its call center capacity by deploying interactive voice response with help from Google and Genesys and doubling its call centers from four to eight through local partnerships.

Then came the new federal programs that Texas had to implement. UI Director Clay Cole said the state was one of the first to start issuing Federal Pandemic Unemployment Compensation, which initially added $600 to an eligible individual’s UI benefits. Cole credited this achievement partly to the fact that his team had recent experience adapting to the effects of multiple hurricanes.

“You talk about small businesses,” Barnes said. “They don’t all have levels of technology that are needed to do system-to-system interactions. There’s usually somebody on the other side that has to have ownership of providing that feedback.”

Texas

In February 2020, the Unemployment Insurance Division of the Texas Workforce Commission (TWC) received an average of 13,000 UI claims each week. By the middle of March, Texas saw well over 100,000 weekly claims. During one week in April, the number exceeded 400,000.

Given this enormous shift, Texas, which has a legacy UI system, had to make several tech-related changes, said TWC CIO Heather Hall. The TWC website was moved to the cloud. Web servers were doubled in March and again in April. Mainframe capacity had to be increased by 200 percent. The UI department expanded its call center capacity by deploying interactive voice response with help from Google and Genesys and doubling its call centers from four to eight through local partnerships.

Then came the new federal programs that Texas had to implement. UI Director Clay Cole said the state was one of the first to start issuing Federal Pandemic Unemployment Compensation, which initially added $600 to an eligible individual’s UI benefits. Cole credited this achievement partly to the fact that his team had recent experience adapting to the effects of multiple hurricanes.

“You talk about small businesses,” Barnes said. “They don’t all have levels of technology that are needed to do system-to-system interactions. There’s usually somebody on the other side that has to have ownership of providing that feedback.”

Texas

In February 2020, the Unemployment Insurance Division of the Texas Workforce Commission (TWC) received an average of 13,000 UI claims each week. By the middle of March, Texas saw well over 100,000 weekly claims. During one week in April, the number exceeded 400,000.

Given this enormous shift, Texas, which has a legacy UI system, had to make several tech-related changes, said TWC CIO Heather Hall. The TWC website was moved to the cloud. Web servers were doubled in March and again in April. Mainframe capacity had to be increased by 200 percent. The UI department expanded its call center capacity by deploying interactive voice response with help from Google and Genesys and doubling its call centers from four to eight through local partnerships.

Then came the new federal programs that Texas had to implement. UI Director Clay Cole said the state was one of the first to start issuing Federal Pandemic Unemployment Compensation, which initially added $600 to an eligible individual’s UI benefits. Cole credited this achievement partly to the fact that his team had recent experience adapting to the effects of multiple hurricanes.

“You talk about small businesses,” Barnes said. “They don’t all have levels of technology that are needed to do system-to-system interactions. There’s usually somebody on the other side that has to have ownership of providing that feedback.”

Texas

In February 2020, the Unemployment Insurance Division of the Texas Workforce Commission (TWC) received an average of 13,000 UI claims each week. By the middle of March, Texas saw well over 100,000 weekly claims. During one week in April, the number exceeded 400,000.

Given this enormous shift, Texas, which has a legacy UI system, had to make several tech-related changes, said TWC CIO Heather Hall. The TWC website was moved to the cloud. Web servers were doubled in March and again in April. Mainframe capacity had to be increased by 200 percent. The UI department expanded its call center capacity by deploying interactive voice response with help from Google and Genesys and doubling its call centers from four to eight through local partnerships.

Then came the new federal programs that Texas had to implement. UI Director Clay Cole said the state was one of the first to start issuing Federal Pandemic Unemployment Compensation, which initially added $600 to an eligible individual’s UI benefits. Cole credited this achievement partly to the fact that his team had recent experience adapting to the effects of multiple hurricanes.

“You talk about small businesses,” Barnes said. “They don’t all have levels of technology that are needed to do system-to-system interactions. There’s usually somebody on the other side that has to have ownership of providing that feedback.”

Texas

In February 2020, the Unemployment Insurance Division of the Texas Workforce Commission (TWC) received an average of 13,000 UI claims each week. By the middle of March, Texas saw well over 100,000 weekly claims. During one week in April, the number exceeded 400,000.

Given this enormous shift, Texas, which has a legacy UI system, had to make several tech-related changes, said TWC CIO Heather Hall. The TWC website was moved to the cloud. Web servers were doubled in March and again in April. Mainframe capacity had to be increased by 200 percent. The UI department expanded its call center capacity by deploying interactive voice response with help from Google and Genesys and doubling its call centers from four to eight through local partnerships.

Then came the new federal programs that Texas had to implement. UI Director Clay Cole said the state was one of the first to start issuing Federal Pandemic Unemployment Compensation, which initially added $600 to an eligible individual’s UI benefits. Cole credited this achievement partly to the fact that his team had recent experience adapting to the effects of multiple hurricanes.

“You talk about small businesses,” Barnes said. “They don’t all have levels of technology that are needed to do system-to-system interactions. There’s usually somebody on the other side that has to have ownership of providing that feedback.”

Texas

In February 2020, the Unemployment Insurance Division of the Texas Workforce Commission (TWC) received an average of 13,000 UI claims each week. By the middle of March, Texas saw well over 100,000 weekly claims. During one week in April, the number exceeded 400,000.

Given this enormous shift, Texas, which has a legacy UI system, had to make several tech-related changes, said TWC CIO Heather Hall. The TWC website was moved to the cloud. Web servers were doubled in March and again in April. Mainframe capacity had to be increased by 200 percent. The UI department expanded its call center capacity by deploying interactive voice response with help from Google and Genesys and doubling its call centers from four to eight through local partnerships.

Then came the new federal programs that Texas had to implement. UI Director Clay Cole said the state was one of the first to start issuing Federal Pandemic Unemployment Compensation, which initially added $600 to an eligible individual’s UI benefits. Cole credited this achievement partly to the fact that his team had recent experience adapting to the effects of multiple hurricanes.

“You talk about small businesses,” Barnes said. “They don’t all have levels of technology that are needed to do system-to-system interactions. There’s usually somebody on the other side that has to have ownership of providing that feedback.”
Hall, Larry had provided 11 million answers to 2.5 million users. Texas plans to replace its legacy UI technology this year. This step toward modernization was in the works before the arrival of COVID-19. “We had already started a system replacement project and secured the necessary funds and released an RFD and actually had the RFD responses back,” Hall shared. “Although it’s been slightly slowed down because of the pandemic, we are still on the course to replace our unemployment insurance system with more modern technology. While … we have been able to pivot quickly during the pandemic, we definitely feel this has really brought it home that we were on the right track prior to the pandemic.”

The goal is to procure something that can “stand a COVID test.” In particular, Texas has looked at modern security solutions, such as multifactor authentication, to make it easier for citizens who have struggled with the current password and PIN system. “Some of our users hadn’t been on unemployment in seven, eight, 10 years, and didn’t remember what email address they signed up with back in the day or what PIN they used,” Hall said. “A lot of our calls and questions came in about that combination of security layers … they were needing our help. They were needing to get into our system quickly, and they couldn’t understand why we just couldn’t let them get in.”

Cole mentioned that the state lacks a common system across the board for the three main business areas of UI: benefits, appeals and taxes. A consistent system architecture would give everyone a similar understanding of the technology and allow the UI program to be even more nimble when changes need to be made. Looking ahead, Texas also wants to further capitalize on the success of Larry the chatbot, who is now learning Spanish. “A natural next step as we move into a new system is looking at how we can integrate authenticating from the chatbot into the UI system to let people check the status of their claim, request their payment, use some of those basic functions through the chatbot rather than having to get out of it and go into another system and log in” Hall said. “We’ve also been talking about integration of live chat, kind of seamlessly transferring a user over from a chat instance to a live agent for certain questions.”

**Hawaii**

Hawaii once had one of the lowest unemployment rates in the country. But COVID-19 devastated the state’s tourism-based economy, putting Hawaii among the states hit hardest by unemployment over the last year. Adjusting to this new status quo has been grueling for the Hawaii Department of Labor and Industrial Relations.

“Unemployment was at 2.4 percent prior to the pandemic hitting,” said Anne Perreira-Eustaquio, director of DLIR. “Our staffing here at the unemployment insurance office was at our lowest staffing ever because the U.S. Department of Labor funds you on workload … Once you don’t have a baseline staff that you can count on, ramping up people to understand these requirements and these statutes is very difficult and takes time. So when you have an emergency like this, you don’t have those subject matter experts available.”

To make matters worse, the technological backbone of the state’s UI program is an antiquated mainframe system that runs on a Natural database language. According to reports from Honolulu Civil Beat, thousands of claimants expressed frustration with the unresponsive UI system. Some even sent death threats to a user over from a chat instance to a live agent for certain questions.”

“**It’s a very fine line and a difficult balance in trying to make sure that you’re holding back as much as possible without negatively impacting … folks that we know need the funds.**”
All Eyes on UI

Prior to the pandemic, Hawaii had one of the lowest unemployment rates in the U.S., at just 2.4 percent. That made the onslaught of claims in spring 2020 even harder to handle.

"If you modernize and you don't do it well, and that system isn't flexible, and you don't really know how to adapt it, when you're faced with the giant challenge that we were during the worst parts of the early pandemic, you can't adapt."

From," Perreira-Eustaquio said. The state created an online form that allowed claimants to file their claims on a 24-hour basis outside of the stressed mainframe. Unfortunately, the form bypassed fraud-preventing validation processes for personal information, which led to a lot of "rubbish data" that had to be cleaned out on the back end.

More successful was the replicated database that was developed to reduce hits to the mainframe and speed up claim processing. After this change, Hawaii went from taking around 1,000 to about 10,000 claim certifications per hour.

A nagging limitation persists, however. The outdatedness of the legacy system makes federal programs like Pandemic Emergency Unemployment Compensation and Extended Benefits a chore for everyone involved.

"This is a very fragile system, and we wanted to make sure that we balanced being able to service our community as well as get these applications up and running," she explained. "Both applications are automated on the front end, so claimants can come on, they can file through the automated process, but once it hits our mainframe, everything's manual. That manual process is a strain on the staff here as well as a strain on the community, because since each individual claim is manual and each one has to be touched prior to a claim being paid out, it backs up the system in every way."

Before the health crisis, Hawaii thought its UI program would start moving toward the cloud during summer 2020. The state was $1 million away from being able to pay Idaho to migrate Hawaii's UI data to Idaho's cloud-based system, according to the Honolulu Civil Beat.

The pandemic put an end to that idea. "I can tell you that Idaho has decided to move on, and they won't be providing assistance to states like they had anticipated prior to the pandemic... They were great partners, and they would have continued to be great partners if we did go down that path, but this year has changed everything," Perreira-Eustaquio said. Hawaii still has its eye on the cloud in 2021. Perreira-Eustaquio is hopeful, notwithstanding the drastically different economy caused by COVID-19.

"Yes, [the] budget's very tight," she admitted. "The governor announced furloughs here in Hawaii. So we are seeing tough times in Hawaii right now, but I think the legislators understand the importance of upgrading the mainframe."
Rhode Island

How’s this for shocking news: Rhode Island didn’t necessarily see legacy technology as a bad thing for a UI system, and it even thinks modernization can be a mistake. “Pew Trusts had an article out recently: Rhode Island paid quicker during the pandemic than almost any other state,” said Scott Jensen, director of the Rhode Island Department of Labor and Training. “And the way we did that, in large part, was we hadn’t modernized yet. We do have this old COBOL-based mainframe system, but fortunately, our IT team knows how to use that. If you modernize and you don’t do it well, and that system isn’t flexible, and you don’t really know how to adapt it, when you’re faced with the giant challenge that we were during the worst parts of the early pandemic, you can’t adapt.”

For the foreseeable future, Rhode Island will keep its mainframe, as Jensen thinks it’s too risky to rebuild an entire system in waterfall fashion. Instead, the state mimicked its application for Pandemic Unemployment Assistance in the cloud where customers could apply, later, that customer data is pumped into the mainframe. Second, the state installed a cloud-based call center so that it could take more phone calls.

Jensen also revealed two improvements that the state will implement in 2021. With the assistance of Amazon Web Services, Rhode Island will transition its entire front-facing UI interface for citizens to the cloud. The project, a native cloud solution, is called the “pizza tracker” and is funded by DOL money. “When you order a pizza, you know where that pizza is the whole way,” Jensen said. “Similarly, when you’re interacting with our new front end, the idea is that you’ll know where your claim is the whole way, the whole time.”

In 2021, Rhode Island will add a “pizza tracker” function that will let people track claims throughout the process.

Moreover, the pizza tracker will ask questions and remind claimants when they need to provide documents. Perhaps most importantly to users, the interface will allow people to, with the press of a button, skip to the front of the service line when their claim has been processed. “It will allow you to call in and get right to the front of the queue, because you’ve waited a week,” Jensen detailed. “That kind of integration and sort of communication between claimants and… the whole system is possible if you build a native cloud solution, rather than sort of an old-fashioned system that is simply on the cloud.”

The other new addition is related to a bot named Skipper that Rhode Island has already launched. Skipper is essentially a platform that mines user data and labor market information for job and career matching. In 2021, another bot named Hope will appear on the UI application. Hope, who was made possible by CARES Act funds, will be an aid to users as they deal with UI claims. “At certain points in the certification process, Hope will hand you off to Skipper, and Skipper will appear on the UI application in the certification field and say, ‘Hey, are you interested in looking for a job? Click here,’” Jensen said. “You’ll now have a relationship with Skipper. Skipper will have your UI data. If you decided, for example, that you have found a job you’re interested in applying for, Skipper can fill out the application for you online, so pretty straightforward ability for a bot to do that, but what a help. No more spelling mistakes. You can apply to a lot of jobs and get help in very practical ways like that.”

*The Center for Digital Government is part of e.Republic, Government Technology’s parent company.*
There are career paths that you might not know about. Whether you’re making a change or just starting out, you have more options than you think. Get started at FindSomethingNew.org
It’s no small feat to overhaul a major government system. And an enterprise resource planning (ERP) system is at the heart of an organization’s operations, fundamental to smooth day-to-day functioning. An ERP upgrade can take six months to a year, Oracle reports. It requires significant time and resources to modernize systems that bring together financial and human resources information from across disparate sources.

COVID-19 makes it all the more difficult. Just at a time when it is essential to get functions such as finance and budgeting onto cloud-based platforms, government IT hasn’t been able to collaborate shoulder to shoulder. Tech leaders have had to balance the urgent need for change against the constraints of remote work.

Despite the hurdles, some jurisdictions have succeeded in pushing through large-scale modernization programs, even in the midst of the pandemic. They’ve implemented creative new training programs; increased the quality and frequency of cross-team communications; and found ways to reallocate budgets to maintain momentum.

Here, we’ll take a look at how IT leaders in three jurisdictions were able to push through on major systems upgrades despite the impacts of COVID-19.

**A LOGICAL FIT**

Rolling into 2020, Maricopa County, Ariz., CIO Ed Winsfield had a major initiative on the way: a project with tech vendor CGI to upgrade the county’s financial systems. “As part of the upgrade, they were also refreshing all the hardware and databases on our behalf, along with the actual core software,” he said.

The program was slated to take nine months. “Any time you touch the finance

ERP systems are foundational to efficiently run government organizations. Here’s how three jurisdictions navigated their modernization plans through COVID-19.
system it is a fairly big endeavor. You have to make sure all the functionality is correct and you have tested it thoroughly.” Winfield said.

When COVID-19 hit, project leadership immediately regrouped to assess the potential impact.

“The project team, the executive steering committee and the vendor representatives, we all had a number of conversations about how to keep the project moving,” he said. “Are we feeling comfortable? Are we able to move the project to a telework scenario and still continue forward, or should we stop?”

The team concluded that because the effort was already at a relatively advanced point, they would be able to continue moving ahead even in the absence of physical team meetings.

“We were at a stage in the project where we were focused on testing and final configuration, so we could convert to telework,” he said. “We switched over to a telework scenario and used the various platforms, [Microsoft] Teams and the document-sharing platforms, to support that work.”

While the pandemic could have potentially slowed the work, Winfield noted that the nature of modernized systems actually made telework a logical fit.

“In the past, a major systems upgrade would have required a lot of in-person time. “Those days, you are already doing a lot of the work online or remote, even without the COVID considerations,” he said. “With cloud-based systems it is easy to set up your test environments, your sandboxes. There are also good tools that allow us to collaborate online fairly easily.”

Shifting to remote communications demanded a more willful engagement effort, however.

“The project team — including the project manager, the technical team and the subject matter experts — would telemeet routinely throughout the week. And a monthly executive steering committee meeting helped keep things aligned.”

“With COVID, we had to be sure that everyone knew how to present their documents, how to collaborate in that virtual space,” Winfield said. “There was a higher level of preparedness needed to make those online meetings go seamlessly, so it could be less about using the collaboration technology and more about just having the meeting.”

With the project already relatively far along at the start of the pandemic, the IT team was able to leverage remote testing capabilities and frequent tele-meetings to bring it across the finish line on time. Even with many conventional government functions disrupted, the new system went live in July.

**COMMUNICATION IS KEY**

In Tamarac, Fla., technology leadership has been working for almost four years to upgrade key systems, including a vintage 1997 ERP running in the AS400 environment.

Four years ago, a business process review examined every core function within city government. “We thought about the feature sets we would expect in a new ERP solution. We set the baselines, the road map and the specifications for our next ERP solution,” said Director of Information Technology Levent Sucuoglu.

Initially planned on a two-year timeline, that project hit some roadblocks early on when the city’s long-term technology partner — now called CentralSquare Technologies — replaced its original software offering with something more robust. “It’s good for us, because they acquired some best-of-breed products around certain city operations. But it meant we had to wait for some level of integration of those new products into the product line,” he said.

The lessons learned over the course of that process proved valuable when it came time to address the challenges of COVID-19. Specifically, the IT team has learned to put a heavy emphasis on communication. When the vendor announced its software changes, “we made sure that our implementation team was completely aware of the challenges, the timelines, the expectations,” Sucuoglu said.

“We put the facts on the table … so that each person who was impacted by this would be part of the bigger picture, would know exactly where things stood. We made them part of the project calls and project updates, so everything was clear to everybody,” he said.

When COVID-19 came on the scene, these habits proved helpful, especially as the IT team sought to relink the need around end-user adoption of a system that by definition touches nearly all aspects of government operations.

“Our traditional method of implementation includes a lot of training, and our workforce is used to doing that in person, in class,” Sucuoglu said. With COVID-19, the team has shifted to virtual training, leveraging...
its experience with multidisciplinary communication to ensure that all users are getting the information they need.

“We’ve had to work to make people feel comfortable with virtual training,” he said. “To do that we’ve increased our training sessions tremendously. For our enterprise asset management tools, for example, we went from three training sessions to 10 sessions, working in smaller groups, trying to replicate as much of the traditional in-class training as possible.”

This strong communications strategy has helped keep the project on target. In the coming months, Sucuoglu plans to bring online a “community applications” module, a huge application that manages building permitting, code enforcement, business licenses, and planning and zoning. After that he expects to go live with the finance enterprise applications including general ledger and accounts payable.

A stable budgeting process, meanwhile, has likewise helped to ensure the ERP upgrade crosses the finish line on time, despite the financial impacts of the pandemic.

“We knew this wasn’t going to happen in a single fiscal year, so we budgeted these funds in capital accounts, so they were not tied to the fiscal year timeline,” he said. “Our finance team did a great job of providing us with that flexibility. They put the funding in the right place so we didn’t have to worry about that at all.”

STAYING ON TARGET

COVID-19 has likewise not impacted the pace of modernization in Suffolk County, N.Y.

“We have a number of major projects in the hopper,” said IT Commissioner Scott Mastellon. “We’ve recently upgraded our budget planning toolset using [the cloud platform] OpenGov to support that. We are also in the process of implementing a human capital management [HCM] system from Workday — a new payroll, time and attendance, HR system.”

With 9,000 employees — including some 4,500 law enforcement personnel whose HR needs include lots of overtime and leave — the old HCM just wasn’t cutting it. “There was a significant amount of paper involved, not even spreadsheets but paper timesheets. The overtime and leave time scheduling and approval processes were also paper-based,” he said.

Top-level support has helped the IT team to swap out that clunky apparatus even in the midst of the pandemic. “Executive leadership and sponsor-ship at the county executive level has been key,” Matellon said. “Steve Bellone, our county executive, has been a huge sponsor and proponent of modernization and of moving these things forward.”

It helped, too, that the IT shop had made some significant pre-pandemic personnel moves. “Before COVID we had created a number of positions in the IT department at a senior level to support our modernization initiatives,” Matellon said. “So we already had a number of key people in place.”

When it came time to put the new systems in place, IT didn’t have to go it alone. Because modernized systems are designed to empower the end user, the technologists were able to share the burden of standing up new tools. This helped to keep the process moving forward through COVID-19.

“I have a few users in our budget department, for example, who could take away significant portions of the activity because the software was so ‘point-and-
Halfway through a yearlong ERP upgrade, COVID-19 had delayed Suffolk County, N.Y.’s timeline by just two weeks.

click’ in its nature,” he said. “Having non-IT people within the budget department who could help out with that transition meant the lift to implement wasn’t nearly as heavy as we have seen in the past.”

The county signed a contract for its new HCM system in early March 2020, just as business-as-usual was shutting down, and as a result the team did lose some time. “It cost us about two months,” Matellon said. “We needed time to get ourselves settled in the COVID setting, to get our bearings in terms of the processes we needed to support the shift to remote work.”

The Workday implementation began in May and by late fall, six months into a projected 12-month implementation, the effort was a mere two weeks off schedule, a relatively minor slip under the circumstances.

In Suffolk County, as elsewhere, the tools of remote work have been key to keeping the upgrades moving along in a timely way. “We are embracing Zoom and Teams as our communication platforms, and we have communicated effectively in that way,” he said. “We have 25 departments in the county and I have monthly briefings with all the department heads to keep them up to date on the HCM project, because it impacts all of them.”

If anything, the pandemic has made those outreach efforts even more effective. “In the past, I couldn’t have brought all those people together in a room,” he said. “With remote connectivity, ‘there’s actually been more input and more involvement in the process.’

Another COVID-enabled bonus: The county freed up half a million dollars in travel costs by not having the contractor onsite. That being said, the absence of in-person encounters can present new challenges. “People put you on mute, you don’t always know if they are there. You are not always getting the appropriate feedback from everyone,” Matellon said. “But the fact is, if that person was sitting in the room, you might not be getting any more or better feedback.”

The bottom line: “We are making the right decisions, we are on time and moving forward, so I have to assume it’s working well,” he said.

In terms of budgets, the county did reapportion some funding to support critical needs, especially in the early months of COVID-19, but the major modernization efforts were unscathed. “There were other things that fell by the wayside as money got redirected to support COVID-related things, but we didn’t take money away from these critical projects,” he said.

A COMMON THEME

In Matellon’s experience — and it holds true across all the jurisdictions cited here — the sheer urgency of the need was perhaps the greatest factor helping to keep large-scale modernization efforts on track in the midst of the pandemic. While COVID-19 may present some logistical challenges to a major transformation effort, those IT leaders agree, those concerns are far outweighed by the urgent need for greater government efficiency through modernized tools.

“We have a lot of frustrated people who want something better,” Matellon said. “They are sick and tired of doing things the old way, and they are very much on board with doing something new.”

adam.stone@newsroom42.com
 awkward and counter-intuitive, making it frustrating to report. All of these factors leave agencies gra
ever. At the same time, the federal government is advocating the use of evidence-based practices and
data from the notes into a case ma
text, a caseworker can capture data
take handwritten notes
employees can access applications,
dictating a narrative. The system ca
does a poor job of supporting human services
for the same citizen, depending on when that person
addresses, family arrangements or health situations
to address because
services sooner.
employees complete their work fas
Instead of taking handwritten notes
dictating a narrative. The system ca
visually can mo
that's hard to address because
InCIOs
transformations to hybrid and multicloud environments.
IT leaders also envision a bright future for the cloud
qualities, government
hy: clou
con
hy 17 percent
ve there.
hy
hy 17 percent
hy

DELAWARE LEVERAGES THE CLOUD TO HELP CITIZENS DURING COVID-19 PANDEMIC

Delaware leverages the cloud to help citizens during COVID-19 pandemic.

Delaware leverages the cloud to help citizens during COVID-19 pandemic.
Like many states, Rhode Island has searched for ways to overcome a critical economic challenge: how to close the skills gap between what employers need and what job seekers offer.

The COVID-19 pandemic only intensified the hunt for answers. Since March 2020, tens of thousands of Rhode Islanders have filed for unemployment assistance, many of whom were already among the state’s most vulnerable workers and families. In response, Rhode Island officials doubled down on technology innovation. They launched “Back to Work RI,” an initiative designed to relieve pandemic-related workforce disruptions and create a foundation for connecting workers to new or better jobs for years to come.

“Sometimes you need a catalytic event to really jumpstart innovation, and COVID-19 has definitely been that catalyst,” says Sarah Blusiewicz, assistant director of workforce development services for Rhode Island’s Department of Labor and Training (DLT). “We are harnessing the urgency arising from desperate circumstances to stand up new data solutions in a matter of weeks. The goal is to take people beyond filing for unemployment and get them into their next career.”

The centerpiece of the effort is the Virtual Career Center (VCC), a jobs clearinghouse and counseling site powered by the cloud, artificial intelligence, and a digital bot that encourages workers to reimagine their careers and connects them with state and private services to help them reach their goals. The VCC is a model that shows how a combination of cloud technology and creative thinking can modernize government services.

Personalizing Career Opportunities

The first step in getting Rhode Islanders back to work and addressing skills gaps is a meeting with Skipper, an interactive digital assistant developed by the technology for social good nonprofit Research Improving People’s Lives (RIPL).

“We designed Skipper to make the VCC a welcoming place rather than another complicated government website,” Blusiewicz says.

The bot leverages VCC’s underlying data management and analytics infrastructure to pull together information that traditionally has lived in separate, disconnected databases. The information includes current job postings from the state’s Workforce Exchange website and commercial job boards. Wage data reported by the state to the U.S. Social Security Administration tells Skipper what individuals earned in previous jobs. The bot also uses demographic information that residents provide when they register for the VCC, and it checks if they applied for unemployment insurance. Skipper then asks job seekers to complete a career skills survey.
created by RPL. Prospective employers complete similar surveys to
detail the types of skills they are seeking.

Using the VCC’s advanced data-crunching algorithms, Skipper
advises workers about relevant reskilling opportunities and new
career paths.

“People notoriously struggle with learning what’s out there in the
job market and what types of new jobs they may be good at,” says
DLT Director Scott Jensen. “It’s important to expand people’s horizons,
especially during such an upheaval like the pandemic.”

Armed with Skipper’s analytical foundation, job seekers then
schedule a videoconference with a VCC job counselor who can tap
into a large network of public services and employer-sponsored
training programs, as well as relevant resources from educational
institutions and nonprofits.

“People who successfully complete a training program have an
improved chance at finding a job and perhaps even a new career
with better benefits,” Jensen says. “In addition, the lack of affordable
transportation and childcare can derail employment success even if
someone has sought-after skills. We’re putting a team of support around
each job seeker to give them a much greater likelihood of success.”

“The Virtual Career Center is designed
to bring crucial services together
at the right time and in the right place
to help a person pursue a potentially
dramatically life-changing opportunity. It makes
that happen without a lot of red tape that otherwise might make people drop
out of the search process.”

— Scott Jensen, Director, Rhode Island Department of Labor and Training

The VCC uses cloud-based collaboration tools to connect job
seekers with representatives from other public, private and nonprofit
organizations for help with overcoming hurdles to employment. For
example, if applicants need childcare or advice about food stamps
or public transportation, VCC counselors can direct them to the
appropriate resource and even schedule appointments.

“The Virtual Career Center is designed to bring crucial services
together at the right time and in the right place to help a person pursue
a potentially life-changing opportunity,” Jensen explains. “It makes that
happen without a lot of red tape that otherwise might make people drop
out of the search process.”

“The cloud offers a multitude of services that support the sheer scale
of demand we’re seeing,” says Amelia Roberts, director of data and
performance at DLT. “We built a number of tools in the cloud to address
the many Rhode Islanders who need help.”

As of November, more than 39,000 Rhode Island residents
were unemployed and actively seeking work. The state’s current
unemployment rate is 7.3 percent, more than double the year-earlier rate.

A Model for Government Modernization

The full set of capabilities envisioned for the VCC will launch in early
2021, but preliminary iterations of the rollout are already receiving
positive reviews. For example, users say Skipper is intuitive to use and
successfully connects them with practical career information.

“One of the other features come online, we believe the VCC is going
to change the face of how we conduct our business and how we’re
able to serve people,” Blusiewicz says. “But Rhode Island is a starting
point, not the end of the story. This approach could change the way
that job searches and the support around those efforts are conducted
nationwide, across many agencies and organizations.”

To hear more about Rhode Island’s story, watch COVID-19 Recovery:
Getting Rhode Islanders Back to Work now available on-demand
from the Google Cloud Public Sector Summit 2020. This piece was
developed and written by the Government Technology Content Studio, with
information and input from Google Cloud.
Unbanked

As government goes digital, what happens to those without bank accounts?

By Zack Quaintance
During an ordinary year in Pulaski County, Ark., five public offices are open for people to pay taxes owed on assets, from land to cars to mobile homes. And folks in Pulaski — which is home to the state’s biggest city, Little Rock — tend to be pretty good about paying what they owe, doing so in the 95th percentile, which yields roughly $530 million for the county government.

But 2020, of course, was no ordinary year.

In 2020, tax books opened on March 1 as always, but then, in what felt like a blink of an eye, the COVID-19 pandemic erupted, halting the flow of daily life the world over. All 53 employees of the Pulaski treasurer’s office were soon working from home, and all five of the public offices where payment could typically be rendered in person were ordered shuttered to slow the virus.

As with many local governments, Pulaski County has increasingly enabled residents to do business with its offices online, and that includes paying taxes. This modernization enabled a number of residents to pay as usual amid the pandemic. But questions arose for other groups: What about those who prefer to pay in cash? What about others who lack computer skills to pay online? And what about members of the community who do not have viable bank accounts, a status known as being under- or unbanked?

“Pulaski County — like so many local governments across the country — had to address those concerns, with the stakes being tax funding for vital services such as education, hospitals, fire response and police. “When you have $530 million of taxes to collect,” said Pulaski County
March 2021  //  www.gotech.com

New Payment Options for the Unbanked

With a sizable chunk of public funding at stake, Pulaski County needed to find ways for folks to pay in person, Buckner recalled, and they needed to do it now. After the pandemic showed no sign of dissipating by June 2020, Buckner said it became clear the county needed to act.

The treasurer’s office turned to a long-time partner in the private sector, NIC Inc. Buckner, who has been in office 20 years, has worked with NIC her entire time in public service. She describes them as a “go-to vendor,” one with a history of creating solutions customized specifically for her office, including payment methods such as paying online and by phone.

Together, the treasurer’s office and NIC developed a way for people to pay county taxes at the same places they were already buying necessities like food, water and fuel. They gave people the option to pay taxes at grocery stores, which in Little Rock often means Walmart. It was a system that had been in place for utility payments for years, and now it was being modified to include county taxes that other residents have started to pay online.

“It was just a couple of weeks, literally, and it went from an idea to implemented,” Buckner said. “We had a looming deadline and we were desperate for a new solution.”

That new solution involved enabling CheckFreePay — an existing payment system available in more than 30,000 places across the country, most of them retail stores — to work for government. Pulaski was a beta site for this, and the way it works is that residents can go to these stores and render payments for a flat $3 fee. The beta was live in mid-September, with radio spots letting listeners know it existed, paired with email blasts and newspaper ads.

By the end of 2020, Pulaski County had taken in $419,000 of taxes through CheckFreePay, totaling 1,400 individual payments. Buckner says it is now here to stay, noting that for many residents it is easier to pay taxes at a 24-hour grocery store than to go in person to government offices during normal business hours. There are 53 CheckFreePay locales in the Little Rock area, with others in cities nationwide, enabling displaced Pulaski residents to pay from a distance.

NIC has also added CheckFreePay to its portfolio of government offerings across the country, said Sloane Wright, vice president of payments at NIC. With so many other solutions in government, Wright said that enabling residents to pay this way, often with cash, was something NIC had been looking into even prior to the pandemic.

“One thing we really wanted to solve for is we didn’t want a resident or citizen who was unbanked or underbanked to have to go to a drugstore or other retailer to purchase a prepaid card just to go online and transact with their government,” Wright said.

So, they enabled them to do it directly at retailers for the $3 fee, which stays flat regardless of how much tax one pays. Yet some say cash payment options such as this CheckFreePay are just one tool, rather than a full solution to how government should serve the under- or unbanked. Equitable banking advocates point out that progress can be made in other ways too, ultimately lessening the number of citizens who don’t use banks, or, depending on the approach, removing banks from the payment process altogether.

Understanding the Under- and Unbanked

While there are some residents in every community who simply prefer to use cash, there are others who don’t really have another option because they don’t use banks, or they use banks in ways that do not enable easy bill payment.

To put the prevalence in context, Aaron Klein, a senior fellow in economic studies with the Brookings Institution, pointed to research that shows that about 5 percent of American households lack even a single bank account. That number is much lower among white Americans and much higher for other groups, standing at about 12 percent for Latinos and roughly 14 percent for Black households, making it an issue that disproportionately affects populations long underserved in other ways.

Add to that the 15 percent of American households that are underbanked — meaning an individual has a bank account but has also in the last year used a payday lender, a check cashier or a wire transfer service — and the population that lacks equitable banking gets larger. Research also shows, Klein noted, that about 8 percent of American households lack a single bank account.
American households have paid more than $300 in overdraft fees in the past 12 months. There are inherent challenges to not having a usable bank account or other access to digital money, including having to spend more for services or cards with attached fees, and these challenges can make life more expensive for people who don’t have a lot of money.

This is a challenge that has been exacerbated during the pandemic. “You can’t use cash with Amazon, and the pandemic has increased the value of buying things online,” Klein said. “If you don’t want to go to the store to avoid COVID, and you want to buy online, you have to be able to access digital money.”

There are ways for the federal government to alleviate some of the problem, he added. If the United States were to move to a real-time payment system — one that eliminated the time recipients must wait for cashed checks to clear — that would help, as would forbidding overdraft fees. Another move would be to require banks to provide a free, no-overdraft basic account, which is a thing that exists but is not available at every bank. These are moves at the federal level that could proactively make banking more accessible, as opposed to putting the burden of picking safe accounts on individuals.

Klein compared it to actions taken in the past to increase safety in other industries. “We created a system in America where we eliminated the sale of unsafe meat,” he said. “We didn’t create a system in America where we tried to teach everyone which meat was rotten.”

Another solution is to eliminate the role of banks in digital payments altogether, said Vance Smiley, founder of BankWorx, a company working to help form new ways of digital finance. Although it is still likely a ways off, Smiley believes the future of equitable banking in the country is establishing a trusted way to move money across systems independent of paper notes altogether.

Basically, the vast majority of digital payments today are tied to a contract that money will be moved from one bank account to a company or vice versa. The system Smiley and others envision is a digital cash system, one that involves public blockchains and trusted cryptocurrency. But without agreement on how to establish that, progress will remain slow.

“Until we all start rowing in the same direction,” Smiley said, “until there’s a consensus on how to solve it, all we have is little isolated pods of success, and those don’t get you to the right place.”

How Can Government Support Banking Equity?

The question next becomes this: What can state and local government do to ensure that those who struggle to obtain equitable banking are not left behind by public-sector efforts to digitize payments? There is certainly a major role for services like CheckFreePay, especially in the coming months as the pandemic continues to make in-person business difficult. Another option is widespread advocacy and awareness work around
safe banking, which is something already being done in cities across the country by a network called Bank On. Bank On today has 90 local member coalitions, the stated goal of which is “to ensure that everyone has access to a safe and affordable bank or credit union account.”

As a principal at the Cities for Financial Empowerment Fund, David Rothstein leads the Bank On initiative, and he said that a key thing the group has done is establish a set of features that accounts must have to be Bank On certified, meaning in basic terms that they don’t make life more expensive for low-income individuals.

And while federal action could solve problems, Rothstein said Bank On supports localized actions. “We are very intentional about believing that cities, counties and even state government can play a positive and important role in banking in general,” he said.

To that point, roughly 40 percent of the Bank On coalitions are led by local government in their respective areas. Bank On itself was actually born in local government in San Francisco. Amanda Fried is chief of policy and communications for San Francisco’s Office of the Treasurer and Tax Collector, which has been led by Treasurer José Cisneros since 2004. Fried said helping the unbanked and underbanked gain equitable financial access has been a major area of focus over those years.

The office has worked to convene local bank leadership, create the initiative that grew into Bank On, and launch public awareness campaigns that involve multilingual efforts as well as financial coaches that work directly with individuals.

The crisis also provided an area of opportunity to make progress with this issue. The federal stimulus payments specifically motivated some residents to move toward digital banking so that they could obtain that money through direct deposit, rather than waiting on a check in the mail, said Darrin Williams, CEO of Southern Bancorp, a designated Community Development Financial Institution that works on these issues with underserved communities.

“We approach this issue by trying to meet people where they are,” Williams said. And in these odd pandemic times, that has meant finding them at the grocery store or when they take their first steps toward banking online to get their stimulus checks.

“You can’t use cash with Amazon, and the pandemic has increased the value of buying things online. If you don’t want to go to the store to avoid COVID, and you want to buy online, you have to be able to access digital money.”
News & Insights on Where Government is Going

THE FUTURE OF STATES AND LOCALITIES

Get Our Free Daily Newsletter  governing.com/newsletters
State and local governments challenged with navigating the cybersecurity posture of the many vendors they do business with have a new resource to turn to. StateRAMP, made up of a consortium of public- and private-sector cybersecurity officials, is a new organization charged with vetting the cybersecurity structure of third-party vendors, much like the Federal Risk and Authorization Management Program (FedRAMP) already accomplishes for technology contracts with the federal government.

“It was how can we help government through a public-private partnership to solve an identified problem, an identified need, knowing that we couldn’t do it alone;” he added, as he recalled some of the initial thinking behind the formation of an organization dedicated to serving as a sort of cybersecurity clearinghouse for government agencies. Government agencies are under constant threat of cyberattacks, vulnerabilities that only increase as more governments at all levels turn to third-party cloud technologies and handle an increasing level of personal data for residents and businesses. It is generally left to each state agency to vet the cybersecurity soundness of the vendors they do business with. StateRAMP positions itself as a structure for verifying certain minimum security thresholds.

StateRAMP’s aim is to “help bring state and local government together to create that common method, and assist state and local governments in managing the third-party service providers, when it comes to cloud security and cybersecurity,” said Leah McGrath, executive director for StateRAMP.

For the eighth year in a row, the National Association of State Chief Information Officers (NASCIO) listed managing third-party risks and cybersecurity as a top concern. The rise of cybersecurity has gained added attention in the wake of high-profile data breaches like the recent far-reaching hacking of federal government agencies by Russian operatives.
“I think it reflects our role as stewards of the peoples’ information,” said Ted Cotterill, chief privacy officer for the state of Indiana and a member of the StateRAMP board of directors, remarking on the rise of cybersecurity concerns among a wide cross-section of tech officials. “There’s got to be an expectation from our citizens, from across the U.S., that we’re getting it right in government.”

It might be easy to say vendors ought to simply go through the FedRAMP vetting process for working with local and state government. However, a number of vendors will simply never work with the federal government, said Bielawski.

“We have taken what we think are the really great things that are replicable, but yet we’ve created what we think is flexible and understanding for the need to serve local government and state government,” he added.

As StateRAMP gets geared up, next steps will be adoption by states. Organizers say they anticipate generally favorable adoption. “I sense, without being overly optimistic, that we’ll see an adoption that is fairly quick in the coming years,” said Bielawski.

“Operationally, providing that single point of contact for our cybersecurity needs for all the vendors that we drive through this process, that’s a big win;” he added.

StateRAMP can help to smooth out the contract negotiation process, as well as the procurement process, say officials, adding that the organization will bring a uniform application of heightened standards. “That’s a really big deal for us in government, and ensuring that we’re all on that level playing field,” said Cotterill.

“To be able to offer a solution to this challenge that state and local governments have been facing is something that we’re really proud of, and hopeful for in 2021,” said McGrath.

Moving your voice systems to the cloud has never been more important, or more difficult.

WE’LL GUIDE YOU THROUGH THE STORM

COVID-19 Response • Cyberattacks & DDoS • User Experience • Secure Teleworking Support • IT Spend Reduction • Leadership Demands

Ribbon makes it easy. We’ve done it for hundreds of federal agencies and we can do it for you. Let us show you how we can take your voice needs to the cloud for better security, teleworking support and cost savings, integration with industry-leading conferencing and collaboration tools to better support your mission and retention of mission-critical voice functions on your premise.
An Apology to COBOL

It’s easy to rag on a programming language built in 1959, but is old tech really the problem?

In April 2020, New Jersey’s governor, Phil Murphy, stepped up to a microphone and told journalists that he was amazed the state still ran its unemployment system on COBOL — a 60-year-old programming language. The state was having trouble keeping up with the massive surge of unemployment insurance applications coming in amid pandemic lockdowns, and it needed volunteers who knew that archaic language to use its own decrepit technology!

I wrote a story about it for our website, and it climbed to the top of our chart. But it was more than that: Major news outlets were covering it. Public relations firms were sending me links to my own story in email pitches. It was everywhere, and we all gleefully dunked on COBOL because — well, this is technology we’re talking about. How could we still be running such important systems on such old code?

Never mind that spokespeople for the state later gently suggested that they did, in fact, have enough programmers to run the system — maybe, sort of, perhaps implying that the governor was mistaken. That’s not the point.

The point is this: Too many people were itching to attack COBOL because it’s old. And not only is that itch wrong, it’s also a far-too-pervasive attitude that distracts from more urgent needs.

William Malik, vice president of infrastructure strategies at Trend Micro and a longtime veteran of COBOL and enterprise technology, puts it this way: “[New Jersey is] probably running a machine that’s 10 to 15 years old, for pretty much the same reason that I drive a 2006 Audi: It gets me where I need to go, I don’t need to go any faster, it’s perfectly safe, I keep it maintained and I know how to drive it.”

What likely caused the problems in New Jersey, Malik argues, was unrelated to programming languages, but rather was about processing power or memory. In other words, this was about supply and demand. The system was built to handle a normal number of unemployment claims, but it existed in a moment that was anything but normal.

Before we go any further, let’s lay down some basic facts. COBOL was developed around 1960 as an early programming language that dealt in abstractions. That is, it allowed developers to give commands to computers in plain language. It’s oriented toward business functions and still runs on mainframe and Python, what have you.

If there are security concerns about COBOL applications, they have more to do with IT architecture and workforce than with the fact that they’re written in COBOL. If there are security concerns about COBOL applications, they have more to do with IT architecture and workforce than with the fact that they’re written in COBOL. It gets me where I need to go, I don’t need to go any faster, it’s perfectly safe, I keep it maintained and I know how to drive it.”

Another agreement: COBOL is not much of a security concern.

“COBOL doesn’t present any security problems because it doesn’t really talk to any resources,” Malik said. “It’s just text.”

For this article, I sought out the counsel of several experts in addition to Malik. I talked with Marianne Bellotti, a U.S. Digital Service alumna who now works for the tech firm Rebellion Defense; Phase Change Software CTO Steve Avakian. They had much to share, and I wish I could put it all down here.

In lieu of a transcript, here are some things they agree on: Despite its age, COBOL is still the right choice for some tasks.

Another agreement: COBOL is not much of a security concern.

“COBOL doesn’t present any security problems because it doesn’t really talk to any resources,” Malik said. “It just says ‘read’ or ‘write.’”

Ben Miller is the associate editor of data and business for Government Technology. His experience includes breaking news, business, community features and technical subjects.

March 2021 // www.govtech.com
COBOL, can include applying security updates and modern approaches to data encryption and authentication, such as multi-factor authentication,” Avakian wrote in an email. “Additionally, IT staff skilled in these technologies and software have become increasingly scarce in the workforce, making them riskier to maintain and update.”

And yes, let’s talk about workforce. Every year or two the Internet cycles through headlines about surveys talking about how such-and-such percentage of the people who know COBOL are approaching retirement age. The problem, as Bellotti points out, is that the average age of COBOL programmers actually doesn’t change that much over time — in 2006, a survey from Computerworld found that the average age of COBOL programmers was 45 to 55, and in 2020 a survey from Micro Focus found that the average age of COBOL programmers was 50. Gartner estimates that the total number of COBOL programmers is decreasing each year, and yet companies like Micro Focus and IBM are training thousands annually on the language.

There is a serious issue with retiring talent, but again, it’s not unique to COBOL. The issue is institutional knowledge — when the people who wrote an application 20 years ago leave, the remaining people often don’t know the application with anything close to the same intimacy. And since the time they first wrote the program, often it has metastasized — grown new functions, filled new use cases, entered new agencies. So it’s a lot bigger and more complex, and the people who understood it all just walked out the door.

“The developer that understands a programming language, if they’re dealing with a very small amount of code, they can fix the problem and they can fix it pretty easily,” said Brothers, whose firm works on this exact problem. “The problem is when you’re dealing with millions of lines of code and nobody even knows where to start looking.”

So what does it actually cost us to focus too much on COBOL? Largely, time and resources that could have been better spent elsewhere. Here’s a thought experiment from Malik: Say an IT agency takes a COBOL app and re-creates the whole thing in another language.

“If you take a piece of working code and you rewrite it in another language, you now have to retest the whole smash,” he said. “And at the end of the day, what you now have is a new program that does exactly the same thing as the old program, and you sit down and you say, ‘Why did I spend my money on that project? Didn’t I have any users that wanted a new interface? Didn’t I have any business units that were pounding on the door for a new application?’”

Meanwhile, we have cybersecurity breaches happening all across the country at every level of government, shutting down public services, costing money and handing intelligence to foreign governments. And citizens still have a hard time navigating benefit applications. And manual entry still contributes to human error in much government work. So before inventorying your COBOL catalog — have you thought about security flaws in your supply chain? Your middleware? How’s that patching program coming along? Are you running unsupported technology?

And yeah, there are times when it makes sense to move something off COBOL. But if you’re going to do that, it’s probably better to think holistically, along the lines of transforming architecture. As Bellotti puts it, the question you might want to ask yourself is: If you were to do it today, how would you do it?

“‘I really heavily emphasize user utility and value add with modernization projects,’ she said. ‘We don’t just move off technology because it happens to be old; we move off technology because there is a better tool to do the job we need done.’ Just because it’s old doesn’t mean it’s bad — ain’t that the truth.
How the Pandemic is Driving Digital Transformation in the Public Sector

78% said they plan to increase their use of digital platforms for information sharing over the next 12 to 24 months.

84% of survey respondents said improving citizen experience will be their top post-pandemic technology priority.

79% of states and 66% of counties and 27% of cities and towns said no-touch services is emphasizing the need to improve the citizen experience overall.

4 out of 5 state and local leaders say digital transformation has become either more important or mission critical since the COVID-19 pandemic, according to a recent Government Technology/AST survey.
Governments expect digital transformation to enhance citizen experience in a number of key ways:

- **Greater access to services**: 75%
- **Improved customer experience**: 69%
- **Better use of taxpayer dollars**: 58%

However, increased digital services aren’t just safer and more convenient for citizens—they’re a key part of helping governments prepare for future crises.

44% of agencies at all levels of government said more digital services will help them prepare for the next disruptive event.

And public-sector leaders expect digital transformation will even improve internal operations in several important areas:

- **Ability to work remotely**: 58%
- **Streamlined workflows**: 53%
- **Greater job satisfaction**: 32%

Of agencies at all levels of government said more digital services will help them prepare for the next disruptive event.
In.gov We Trust

Legislation passed at the end of 2020 shifted oversight of .gov domains and made them more accessible for state and local jurisdictions.

By Andrew Westrope / Managing Editor, Education

Congress passed a new spending bill with pandemic relief just before the end of 2020, and buried within it was the DOTGOV Online Trust in Government Act, a bipartisan attempt to make it easier for government agencies to set up official websites with a .gov domain, as opposed to other options such as .com or .org. If the bill works as intended, it could help combat fraud and add credibility to government websites, and proponents of the measure consider it a step in the right direction for cybersecurity.

Introduced in 2019 by two Democratic and two Republican senators, the DOTGOV Act shifts responsibility for administering official Web domains from the General Services Administration to the Department of Homeland Security’s Cybersecurity and Infrastructure Security Agency (CISA). It also requires CISA to come up with an outreach strategy and offer resources to local governments looking to migrate to .gov domains.

One of the bill’s main proponents, the National Association of State Chief Information Officers (NASCIO), applauded the new legislation in a news release in early January as a cybersecurity measure for state and local government websites. NASCIO Director of Government Affairs Matt Pincus told Government Technology that a .gov domain is advantageous mainly because it signals to users that they’re dealing with a secure, legitimate website or email address — one that’s harder for scammers to co-opt and use to rip people off. The other benefit is for CIOs and CISOs, who have ever-increasing responsibilities for the security of their networks, as this is one small measure that could make their jobs easier.

Pincus was adamant that a .gov domain isn’t fraud-proof, but it’s an improvement over a .com address, and less than 10 percent of eligible governments have one. “It’s definitely not an accident that DHS CISA felt this was an important thing to have under their purview,” he said. “It’s showing that website domain registration isn’t an IT issue, it is a cybersecurity issue.”

While all 50 states use .gov domains, local governments have been slow to adopt them. A review of available data in 2020 by Government Technology found that 22 percent of counties use a .gov domain, most of them larger counties. Pincus said some smaller jurisdictions don’t have the expertise for handling the transition process of password resets, changing points of contact for domains, two-step authentication, domain name system updates and other technical services, but GSA offered support for them, and CISA will do the same.

“One thing that we’ve heard a lot about is the 24/7 help desk that the .gov program office ran. Anything from technical assistance to patching, the GSA office did a great job of this,” he said. “These are all things that, at the state level, state IT agencies are more than equipped to do this, but when you’re talking about smaller local and municipal who don’t have a dedicated IT person, this is a game changer for them. They don’t have to worry about this. Everything is essentially automatic. They have a contact in the .gov office if they need someone or there’s an issue with their website.”

Another hurdle for .gov domain adoption has been a financial one. Pincus said it comes with an annual $400 registration fee, which some small jurisdictions find hard to justify when they can pay GoDaddy or another website registration service $10 for a .com address. The new bill aims to answer that with two changes: one is outreach, as GSA wasn’t mandated to proactively work with local governments on registering them for these domains. The other is by giving the CISA director — currently held in an acting capacity by Brandon Wales, as of press time, President Biden had yet to name a permanent appointment to the role — broad latitude to waive the registration fee.

“One of our goals, and the goals of the government associations that we partner with, is to make sure that CISA has an appropriations plus-up so that they can provide all funding to local governments that want to be on .gov,” Pincus said. He said the fee will likely stay in place for state and federal agencies, but some hope to see the federal government fund registration costs for local governments.
Toward a More Equitable Union

Biden’s initial actions on equitable data provide a road map for state and local governments.

On his first day in office, President Biden issued a flurry of administrative actions to reverse a number of President Trump’s policies and address the ongoing coronavirus pandemic. One of these included an executive order to advance racial equity and provide support for underserved communities. Notably, the order recognizes that achieving this goal will be difficult, if not impossible, without better data. This is a lesson that many state and local governments should take to heart by revisiting their collection policies to ensure data is equitable.

The executive order establishes that it is the policy of the Biden administration to “pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.” To that end, the order dedicates a section to establishing an interagency working group on equitable data tasked with identifying inadequacies in federal data collection policies and programs, and recommending strategies for addressing any deficiencies.

An inability to disaggregate data prevents policymakers from identifying disparate impacts of government programs on different populations in a variety of areas including health care, education, criminal justice, workforce and housing. Indeed, the U.S. Commission on Civil Rights has found that “data collection and reporting are essential to effective civil rights enforcement, and that a lack of effective civil rights data collection is problematic.”

This problem has repeatedly been on display throughout the COVID-19 pandemic. For example, at the outset of the pandemic last year, nearly half of states did not report data on race or ethnicity on those who were tested, hospitalized or died of COVID-19. And while the government has tried to take a data-driven response to the COVID-19 pandemic, a lack of data about different groups means that their needs are often hidden from policymakers.

Consider disability data: Data from New York and Pennsylvania shows that adults with intellectual and developmental disabilities have contracted and died from COVID-19 at higher rates than the rest of the population. Multiple factors may contribute to this outcome, such as pre-existing health conditions, living in a group home or other caregiving setting, or relying on public transportation. But many states do not collect and report information about disability in their COVID-19 data. As a result, government leaders have only partial visibility into the toll of the pandemic on people with disabilities, which has resulted in worse outcomes. For example, a number of states have overlooked people with disabilities in their coronavirus vaccine distribution plans, delaying access for this at-risk group.

Or consider sexual orientation and gender identity (SOGI) data: National, state and local advocacy groups have repeatedly called for COVID-19 data collection programs to include SOGI demographic data because of the unique vulnerabilities of the LGBTQ community. California issued emergency regulations last July requiring health providers to include this data on patients when reporting communicable diseases, including COVID-19, to state public health officials. However, months later, despite state legislators passing a law to codify the requirements of the emergency regulations, California still was not collecting the information. Part of the problem is that the data standard created for reporting COVID-19 health data does not include SOGI fields, so even if health providers collect it, they cannot report it.

The Biden administration does seem committed to tackling data equity for public health. President Biden signed an additional executive order calling for improved data collection and collaboration to respond to public health threats, such as COVID-19. In this order, President Biden authorized his administration to collect, analyze and share “key equity indicators” related to the pandemic across the whole of government.

While top-down leadership on these issues is welcome, there are still countless state and local data collection efforts that will need similar scrutiny. Sometimes these changes will be as simple as adding a new field to a form, while others will require more substantial work. Regardless, it is time for state and local leaders to take up this challenge to advance equality for underserved communities.
Read full reports and breaking news about career changes across tech-driven roles in government at govtech.com/people.

Longtime Utah CIO Steps Down
Utah CIO Mike Hussey—who has held the state’s top tech position since 2015—has stepped down, noting that while his future is uncertain, he’s eying retirement goals. Hussey announced his departure from the state in late 2020, leaving a lengthy track record that includes bolstering the state’s cybersecurity. His departure coincides with a new governor taking office. The state has not yet named a replacement.

Wake County, N.C., CIO Departs for Private Sector
Wake County, N.C., Chief Information and Innovation Officer Bill Greeves has stepped down from the position to join international software company SAP. This marks the end of an eight-year stint in the CIO position for Greeves, who during that time established the county’s innovation office. The move to SAP caps his 20-year career in local government service.

California Governor Appoints Permanent Cyberleader
Vitaliy Panych was named California chief information security officer in January, a position he’d held in an acting capacity since his predecessor’s departure in 2019. Panych has worked in the state government since 2003.

Biden Administration Names Federal CISO
Former Michigan CISO Chris DeRusha, who left state work in July 2020 to work for Joe Biden’s presidential campaign, was named chief information security officer for the Office of Management and Budget. DeRusha also served as a White House cybersecurity official during the Obama administration.

San Diego Names First Chief Innovation Officer
San Diego has named Kirby Brady as the city’s first chief innovation officer. Before being tapped for the new role, Brady was director of the city’s Performance and Analytics Department, and she will retain that position as well moving forward.

Granicus Hires Former Georgia CIO as Vice President
Patrick Moore, who served as Georgia’s CIO about 10 years ago, has taken a job as a vice president with Granicus, a private company that provides digital services and communications tools for government. Moore made Government Technology’s Top 25 Doers, Dreamers and Drivers list in 2011.
Former Interim New York CIO Heads to Microsoft

Jeremy Goldberg, a veteran of state and local government, has left the public sector for a position with Microsoft, having most recently served as New York state’s interim CIO. Goldberg will work with Microsoft’s Worldwide Public Sector group, which is focused on digital government and critical infrastructure. He joins a growing list of former CIOs to take positions with the tech giant since September, including James Collins of Delaware, Stephen Elkins of Austin, Texas, Kirk Lonbom of Illinois, and Yessica Jones of Arkansas.

NYC Analytics Officer Departs

Kelly Jin announced via Twitter that she was leaving her position as chief analytics officer with the New York City Mayor’s Office of Data Analytics for a position with the Knight Foundation as vice president for communities and national initiatives. Jin was with the city for three years.

Miami-Dade County Names Interim CIO

Margaret Brisbane took the helm of IT in Miami-Dade County, Fla., as interim CIO in February following the retirement of Angel Petisco. Brisbane has been with the county, Florida’s largest, for 16 years, including 14 years as assistant IT director.
Becoming a Future-Ready, Digital Government

An enterprise content services platform helps government transform processes, continue business operations and enhance service delivery in times of disruption.

STREAMLINING OPERATIONS AND DRIVING INNOVATION

As state and local government leaders continue to respond to COVID-19 and prepare for what is next, they understand the importance of technology that allows employees to work remotely and provide digital services to citizens. Yet moving work processes and citizen services online is just the first step. To meet constituent expectations of an uninterrupted digital experience and unlock the benefits of technology, governments must continue to embrace digital transformation.

Many public sector leaders recognize that a modern content services platform (CSP) is a key technology to make this change. In a Center for Digital Government (CDG) survey, more than two-thirds of respondents said a CSP will help their agency or department improve productivity and enhance the delivery of essential citizen services.

WHAT IS A CSP?

The role of a CSP is to centralize, modernize and automate how a government manages its information and associated workflows. Laserfiche describes a CSP as an evolution of enterprise content management, which represents a major shift in how organizations get work done and operationalize content. For governments, content services focus on solving multiple business process challenges with integrated solutions to modernize citizen services, increase productivity and enhance collaboration.

With all documents and data stored in a central repository and managed by a CSP, an agency benefits from stronger data security. Employees have secure access to the digital documents and workflows they need, whether working in the office, in the field or from home.

By implementing a CSP as an enterprise-wide system, a government agency can:

- Transform mission-critical service delivery
- Enhance the citizen engagement and experience
- Manage and operationalize information with strong security and access controls
- Maximize agency resources with seamless integration with core government systems

Government agencies are finding a great value in flexible solutions to meet dynamic and unpredictable demands for services, especially in a time of uncertainty. CSP characteristics like interoperability will help them better prepare for the next disruption or community emergency response.

HOW GOVERNMENTS RESPONDED TO THE PANDEMIC

Numerous government agencies have used a CSP for COVID-19 response in ways that can be adapted for future emergencies and community needs.

For example, Cowlitz County, Wash., created a business process to obtain daily status information from local long-term care facilities about their supply of personal protective equipment (PPE) and testing capacity. The process saves time by eliminating daily calls by a county employee and allows the incident management team to easily see status and trends on a data dashboard. Another recently implemented process allows constituents to submit noncompliance inquiries with stay-at-home and other public health orders, reducing the burden on the 911 center previously inundated with requests.

In the tourism-oriented town of Silverthorne, Colo., leaders allocated funds for emergency grants when small businesses were negatively impacted during the pandemic-related shutdown. Silverthorne staff were able to automate the entire application process and award grants to 92 businesses in two weeks.

Agencies throughout Oneida County, N.Y., are using a CSP platform to identify needs and provide assistance to keep the community safe and healthy. For example, one process helps IT staff determine the readiness and resource needs of remote operations.

Becoming a Future-Ready, Digital Government

An enterprise content services platform helps government transform processes, continue business operations and enhance service delivery in times of disruption.
employees. In the health department, employees use a form to collect test data and contact COVID-positive citizens to provide advice and assistance. And at the county planning department, staff gather input from local businesses on revenue impact and employment levels as well as reopening plans.

But the COVID-19 pandemic is far from the only emergency that has or will disrupt government agencies. When Hawaii County, Hawaii, experienced a prolonged volcano eruption, residents and visitors needed an easy way to obtain up-to-date, official information. By using its CSP, the county was able to present relevant and timely information to keep their communities safe.

Fifty-nine percent of CDG survey respondents noted that a CSP would help them better deliver information during an emergency, especially to mobile devices.

59% of CDG survey respondents noted that a CSP would help them better deliver information during an emergency, especially to mobile devices.

TODAY’S LANDSCAPE FOR A FUTURE-READY, DIGITAL GOVERNMENT

In some jurisdictions, a solution for electronic document management or automated processes may already exist in a few departments or agencies. But a CSP offers greater impact when it is implemented enterprise-wide because it facilitates collaboration, preserves records integrity, and balances efficiency with security. Benefits include:

- Opportunities for broad and continuing efficiency gains, cost savings and citizen service improvements
- Flexibility for rapid response to unpredictable constituent needs and fast-changing conditions
- Ability to deploy and scale processes to more departments, users, operations and citizen services
- Data collection, communication and collaboration tools that are already in place and familiar to users before a disruption or emergency occurs

In the CDG survey, respondents cited improved interoperability, enhanced citizen and employee experiences, and optimized costs as their top reasons for adopting a CSP by the end of 2021. All these factors will benefit both routine and emergency government operations.

THE WAY FORWARD: A CATALYST FOR DIGITAL TRANSFORMATION

The COVID-19 crisis has emphasized the need for governments to modernize service delivery, rethink digital strategies and digitally transform operations to prepare for the next big disruption. A CSP is at the center of this modernization, enabling the continuity and adaptability that will keep government working and ready to serve, no matter what the future holds.

This paper was produced by the Center for Digital Government Content Studio, with input from Laserfiche.

Where to Find the Funding

To cover the costs of a CSP, consider these tips.

Tip #1. Review CARES Act funding based on implementing a CSP for long-term telework and expanded online service delivery.

Tip #2. Look across all budgets for expenditures planned before the pandemic that can now be redirected to an enterprise-wide CSP.

Tip #3. Ask for help and insights from a trusted partner when building the business case that can justify a CSP solution as a priority for limited IT budgets.

Sample factors to make a strong business case:

- Cost savings for paper supplies, storage cabinets and facilities, and processing when converting to digital forms and documents, especially for information capture
- Higher levels of readiness and resiliency for internal operations and public services
- Improvements in mission-critical processes that effectively incorporate new technologies in the 21st century
- Better delivery of citizen services and increased capabilities for the next big disruption
- Increased citizen engagement and empowerment
- Communication and collaboration tools that are already in place and familiar to users before a disruption or emergency occurs

For: Laserfiche

Laserfiche enables government agencies to innovate how they manage information, modernize processes and enhance the citizen experience. Leading government organizations use Laserfiche’s powerful workflows, electronic forms, document management, Department of Defense 5015.2 compliant records management and analytics to transform service delivery. To learn more about government solutions from Laserfiche, visit: https://www.laserfiche.com/sg.
A QUEEN’S GAMBIT:
Humans haven’t beat computers at chess since 2005, but a new AI engine is designed to change that. Maia, a chess bot based on research from Cornell University, the University of Toronto and Microsoft, was trained on moves from millions of online chess games played by humans, and its goal isn’t necessarily to win. Instead, multiple versions of Maia were trained at different human skill levels, from novice to strong amateur. When Maia launched in December, it played more than 40,000 games in its first week. SOURCE: ENGADGET

Many are looking at low-orbit satellites as a potential answer to expanding broadband Internet to rural and underserved areas, with companies like SpaceX’s Starlink grabbing headlines. A competitor called OneWeb aims to up its stake in the game, with a goal of expanding its current fleet of satellites to 648 by the end of 2022. That would add more than 500 low-orbit satellites to its roster, an ambitious goal for a company that declared bankruptcy in March 2020, before the U.K. and India’s Bharti Global bought a 45 percent stake. SOURCE: ENGADGET

Renewables, chiefly solar and wind, provided 38 percent of electricity in the European Union in 2020, edging out fossil fuels (37 percent) for the first time. While the trend is a positive one, experts say renewable energy will need to grow at a faster rate to prevent climate change from causing more natural disasters. The remainder of the EU’s 2020 energy came from nuclear plants. SOURCE: THE VERGE

Fossilizing Fossil Fuel
Renewables, chiefly solar and wind, provided 38 percent of electricity in the European Union in 2020, edging out fossil fuels (37 percent) for the first time. While the trend is a positive one, experts say renewable energy will need to grow at a faster rate to prevent climate change from causing more natural disasters. The remainder of the EU’s 2020 energy came from nuclear plants. SOURCE: THE VERGE

648

Rivian, maker of “electric adventure vehicles,” raised $2.65 billion in January, bringing its total valuation to $27.6 billion. The new funding round will go toward this summer’s production of Rivian’s all-electric pickup truck and SUV, as well as expanding its EV charging network and building 100,000 commercial delivery vans for Amazon. SOURCE: TECHCRUNCH

Send Spectrum ideas to Managing Editor Lauren Harrison, lharrison@govtech.com
A cannon was built to safely transport what?

**Answer:** Fish.

Man-made barriers, like dams, in waterways may be great for humans, but they're not so great for the animals that live in those waterways. That's why Seattle-based Whooshh Innovations built the viral “salmon cannon” a couple of years ago. Similar to hyperloop technology, the system involved a long tube that gently, but quickly, transported fish around barriers and safely back into the water.

Now, Whooshh is back with a new and improved salmon cannon. In the original version, humans had to get in the water with the fish, catching and examining them before feeding them manually into the tube. But the new Whooshh Passage Portal relies on AI called the FishL Recognition system to remove all human interaction with the fish. When the fish enters the system, it takes 18 high-definition photos that are then analyzed by AI to determine the fish's size and species, as well as if it's wild, from a hatchery or an invasive species. It can also tell if the fish is injured. All of this happens in just a few seconds, after which the fish is routed down the appropriate tube.

This drone is made out of what part of a pineapple?

**Answer:** The leaves.

Typically, at the end of each farming season in Malaysia, farmers often burn their leftover pineapple leaves. This not only causes air pollution but is also a waste of a valuable building material for drones.

A research team at Putra University in Malaysia, led by Professor Mohamed Thariq Harvian, has discovered that pineapple leaves contain a strong fiber that is perfect for drone construction. They created a bio-composite material from those fibers that they then used to build a drone frame. Not only is this pineapple leaf-based building material lighter and cheaper than synthetic-based alternatives, it also has a higher strength-to-weight ratio and is biodegradable. The team's current prototype can fly for 20 minutes between charges and go as high as 3,280 feet (1,000 meters).

How is COVID-19 affecting the accuracy of weather forecasts?

**Answer:** By causing fewer commercial flights.

If you feel as though the weather forecasts of late have not been quite up to the standard of accuracy that you've become accustomed to, you're not alone, and it turns out that COVID-19 may be the culprit.

According to the European Centre for Medium-Range Weather Forecasts (ECMWF), commercial aircrafts play a notable role in supplying important data for weather forecasting. But, since COVID-19 has caused many, many people to avoid taking flights, there have been noticeably fewer planes in the air. And fewer planes means less weather data being gathered and reported to forecasters.

The ECMWF estimates that removing all commercial aircraft from the skies would result in a 15 percent degradation in wind and temperature forecast accuracies. That's a significant reduction in an accuracy that was not guaranteed to begin with. Even though the reductions we’re currently seeing aren’t quite that large, they are still enough to have a noticeable impact.
Watch What Happens

The vital, if often overlooked, role of public affairs television in volatile times.

A
fter a year marked by a pandemic, recession, contentious elections, racial tensions, the sacking of the U.S. Capitol and threats against state capitols, public affairs television is providing a COVID-friendly infrastructure for supporting public institutions and even helping to protect democratic processes.

“This instrument can teach,” said legendary CBS broadcaster Edward R. Murrow in 1958. The instrument in question is television and Murrow held out hope that TV’s signal could overcome the noise of then-contemporary society, complete as it was with “evidence of decadence, escapism and insulation from the realities of the world in which we live. We are currently wealthy, fat, comfortable and complacent.” Smithsonian magazine put it another way: “Before it became known as the ‘idiot box,’ television was seen as the best hope for bringing enlightenment to the American people.”

Public television was heralded as the exception that proved the rule. As was C-SPAN when it launched in 1979. The Cable-Satellite Public Affairs Network (C-SPAN) was conceived as a nonprofit public service by the cable television industry, providing live gavel-to-gavel coverage of congressional and other hearings of federal government agencies. It now holds a quarter million hours of such coverage in its archives.

The 1990s brought with them a nascent effort to bring C-SPAN-like services to states. The one in my home state of Washington was originally pitched as Wash-PAN before its backers settled on a simpler and more sustainable set of initials, TVW. Its founding creed was to “dare to be boring.” And it delivered hour after hour of the minutia of state government uncut to your living room.

Most state C-SPANs (as they became commonly known) were creatures of their respective legislatures. Others like TVW were independent nonprofits, and still others were extensions of public broadcasting authorities. Some state-level public affairs channels were broadcast terrestrially and many were able to leverage a section of the federal Communications Act that requires cable operators to set aside channels for public, educational or governmental (“PEG”) use. The rise of both audio and video streaming technology allowed the services to expand coverage from the house and senate chambers to committee hearings, arguments before state supreme courts and most any meeting on “matters of public concern.”

The National Conference of State Legislatures maintains an online inventory of those state-level public affairs services and their component parts. NCSC, now matter-of-factly notes, “Due to the COVID-19 pandemic, many state legislatures have been meeting remotely and have been live-streaming floor sessions and committee hearings to ensure public access.”

Indeed, public access is an especially important role served by public affairs TV during the pandemic era, but it is not the only one. Mashed up with Zoom and other commercial video services, public affairs channels are broadcasting public testimony on matters ranging from epidemiology and public health to race, homelessness, school closures and economic hardships.

Wall-to-wall video, complete with the capacity to interact, provides a reliable means to hold government to account and gives voice to residents who can seek redress from elected and appointed officials during this difficult time. But this instrument can still teach. At a time when public discourse has been infected by snippets of speech taken out of context as part of calculated disinformation campaigns, unedited gavel-to-gavel coverage of what was said, when and by whom makes public affairs TV the public record of record. This holds at least the promise of putting important public conversations in context where complex issues can be discussed and understood while, at the same time, countering disinformation by providing an accurate (and early) accounting of the coded musings of the conspiracy minded.

Often overlooked, public affairs television took on increased importance when fences were erected around capitol campuses across the country in January after police and intelligence agencies identified credible safety threats to public officials and the institutions they occupy. Here again, cameras and microphones remained where members of the public could no longer go — allowing us to bear witness to policy deliberations and decisions being made in our name.

Unedited and unblinking public affairs TV attracts only a small audience compared to commercial channels. But, Murrow said, “This instrument can teach. It can illuminate ... it can even inspire, but it can do so only to the extent that humans are determined to use it to those ends. Otherwise it is merely wires and lights and a box.”

By Paul W. Taylor

March 2021 // www.govtech.com
HARNESSING THE POWER OF COLLABORATION:
HOW STATE AND LOCAL GOVERNMENTS CAN WORK TOGETHER TO STRENGTHEN CYBERSECURITY

DOWNLOAD YOUR FREE COPY HERE:
GOVTECH.COM/CYBERSECURITYGUIDE
Rising to the Challenge.

Across the country and in every community, special districts showed us the art of resiliency, acts of courage, and how to drive transformation from crisis.

Read their stories: govtech.com/districts