Gaining Ground on Digital Equity

Building holistic strategies to improve the lives of all residents
**Introduction**

State and local government leaders want to help all residents fully participate in today’s digital world. The challenge is converting laudable intentions into actionable impact — improving the lives of people who need the most help and have the hardest time accessing and using modern technology.

“Digital equity means more than simply providing connectivity and devices,” said Cathilea Robinett, CEO of e.Republic, the parent company of Government Technology, which hosted a virtual summit on digital equity in state and local government in September 2023. “It means making sure all individuals and communities have the technology capacity required to access essential services and fully participate in democracy, society, the economy, and lifelong learning.”

The summit convened public and private sectors leaders who outlined a five-point strategy for helping state and local agency leaders bring their hopes into reality:

- **Inspiration:** Understanding why diversity, equity, and inclusion are pivotal goals of public service.
- **Outreach:** Dismantling silos and overcoming obstacles.
- **Recruitment:** Nurturing diverse talent pipelines.
- **Analytics:** Putting data to work to uncover actionable insights.
- **Design thinking:** Using human-centered design to build inclusive public services.

Government Technology and summit sponsor Amazon Web Services (AWS) challenged public sector leaders to make their employees agents of digital equity. “If you change the workforce, you can change your results,” said Laura Avent, executive government advisor with AWS. “It’s important your workforce mirrors the constituents you serve.”
Making It Work: Three Pillars of Digital Equity

Everybody needs access to today’s digital economy. That starts with high-speed internet connectivity.

“Your ZIP code or your socioeconomic status should not determine whether you have access to a basic necessity,” said Angela Thi Bennett, digital equity director with the National Telecommunications and Information Administration (NTIA).

Digital equity requires an ethic of inclusion that transcends broadband access. Bennett encouraged state and local leaders to ask themselves: “How can we show up and not take up space, but honor and hold space for marginalized communities to speak their truths, to reimagine their futures, and be that change for their communities?”

Inclusive digital equity programs should be:

1) **Comprehensive.** Digital equity must be viewed as an initiative beyond the broadband office or the CIO. It requires holistic collaboration within and across agencies and public private partnerships. Organizations must come together and create a comprehensive strategy across agencies and partners. Success requires a holistic, deliberate, and systemic approach at all levels of the digital continuum. Bennett noted the federal government is spending $48 billion on broadband expansion and $2.75 billion in training funds to help more Americans participate in the digital economy. That will not be enough: Funding sources must include more than federal grants.

2) **Collaborative.** Digital equity must extend beyond the broadband office or the CIO. It requires holistic collaboration within and across agencies and public-private partnerships with technology providers. Communities must help co-design solutions to ensure alignment with real-world needs, said Bennett. “If we connect 100% of Americans to affordable, reliable, high-speed internet and do not improve quality of life, then what have we really achieved?”

3) **Cloud-enabled.** Cloud’s flexibility, economy, and scale make it an essential part of increasing digital equity. “Cloud technologies play a critical role in digital equity delivery,” said Avent of AWS. “From providing satellite broadband to underserved populations, to enabling government agencies to rapidly innovate service offerings and, if successful, to scale them as needed to other business groups or user communities.” In addition, many cloud services offer chatbots or virtual assistants to give constituents additional support or provide content in their preferred language.

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Breaking Down Silos: Case Studies from Texas and Hawaii

Ideally, diversity, equity, and inclusion (DEI) would be part of all government efforts to improve the lives of underserved residents. But agency silos make it difficult to unite around common goals.

Overcoming silos requires:
- Educating leaders on the value of DEI goals.
- Rallying stakeholders around mutual objectives.
- Bringing in leaders from the private sector, higher education, nonprofits, and other government agencies.
- Lining up funding from multiple sources.
- Communicating directly to the public about goals and initiatives.

Digital equity programs in the city of San Antonio and the state of Hawaii demonstrate that silos are made to be busted.

San Antonio Digital Connects. Libraries are an important resource for the second-most populous city in Texas. However, these vital information hubs, and the communities they serve, struggled to keep pace with the rapid rise of digital technologies. “[Library employees] saw the digital divide start to happen right before their eyes,” said Rhiannon Pape, digital inclusion administrator with San Antonio’s Office of Innovation.

In 2017, the library system launched a digital inclusion summit, pulling together city departments like Public Works and Human Services with schools, nonprofits, internet service providers, and residents. When COVID-19 revealed digital divide issues across the city, “we needed an agile, lean team of people who could go in and help us move quickly,” Pape said.

That need inspired the creation of a public-private partnership called SA Digital Connects in January 2021 to address digital divide issues. Pape added that San Antonio leaders are committed to change: They fully funded the city’s digital inclusion program in late 2022.

Hawaii Broadband Hui. Hawaii has many digital equity projects that focus on goals like providing laptops to students and deploying fiber-optic infrastructure. These projects require interactions among multiple public agencies, private companies, and individual residents.

Burt Lum, coordinator of the Hawaii Broadband and Digital Equity Office, said these disparate initiatives posed a vexing question: “How do you unify these efforts toward a common mission?”

Hawaii’s answer was a grassroots effort called Broadband Hui, which hosts weekly online videoconferences to help people confront digital divide challenges. “We’ve got folks from the far reaches of Hawaii, from Kauai all the way to the Big Island,” Lum said. “It’s a great way to bring people together.”
Developing Your Talent Pipeline

Agencies need a pipeline that funnels diverse talent to their hiring managers. Indeed, a talent pipeline can help agencies compete with aggressive recruiting from private sector employers who are committed to investing in DEI.

Pipeline development tips:

- **Start at the top** and fold old DEI into performance evaluations and management objectives.
- **Encourage inclusivity** with current staff so diverse hires feel welcome.
- **Get out of the office** and talk to communities you hope to hire from.
- **Collaborate with colleges and universities** on internships and mentorship programs and make sure the talent pipeline mirrors the constituents you serve.
- **Create programs** for upskilling and training.
- **Consider relaxing college degree requirements** and instead focus on technology certifications and experience.
- **Increase DEI efforts** within your current workforce with formalized programs.

“Research shows that diversity and inclusion help us make the most effective, high-impact decisions about the types of technology and services the public relies on,” said Sarah Consuelo Hernandez, senior manager with the Colorado Office of Information Technology, Equity, Diversity, and Inclusion.

In Colorado, a commitment to diverse staffing extends from the governor and CIO to managers across the state. “Anyone who is a manager has an inclusive leadership goal. It’s also built into our performance evaluations,” Consuelo Hernandez said. “It’s about building teams that are inclusive and where people feel comfortable bringing their true selves to work, because that’s where the research shows true innovation occurs.”

Developing a talent pipeline requires intention. “It doesn’t just automatically happen,” said Liana Bailey-Crimmins, state chief information officer with the California Department of Technology. “It takes a focused effort.”

Bailey-Crimmins pointed to data from CompTIA revealing her state has 1.5 million private sector technology jobs, with 3% held by African Americans, 12% by Hispanic and Latinos, and 26% by women.

Government agencies may do somewhat better, Bailey-Crimmins said, but they still have a long way to go on the DEI front. Getting there requires developing a diverse pipeline of skilled people who are interested in working for state and local government.
Expanding the pipeline should start early when children are developing an interest in technology. Ensuring accessibility to people with disabilities is also essential. “You can’t just sit in your office, look at the research, and develop it on behalf of your community,” Bailey-Crimmins said. “You need to actually go out into the community” and find out what it takes to move more people into your pipeline.

Consider starting mentorship programs that attract people who might otherwise get overlooked. “Maybe they don’t have a college degree,” she added. They could come from humble beginnings; some might have criminal records and are trying to re-enter the workforce. “Sometimes you have to be comfortable with being uncomfortable.”

“We also have over 40 million people in the United States who started college, who were part of a pipeline, and who actually haven’t completed college,” said Lev Gonick, enterprise chief information officer at Arizona State University (ASU).

These people represent a potentially substantial expansion of the talent pool, a point that Arizona’s leadership acknowledges. Gonick noted that he serves on Arizona Gov. Katie Hobbs’ IT Advisory Commission and frequently recommends ASU students for internships, job placements, or participation in projects. He either funds these through his own office or co-funds them with other state agencies.

State and local government leaders should heed this example for widening the talent pipeline to include people from low-income families or disadvantaged backgrounds. “It’s critically important they have public sector experiences as part of their journey through college to position them for an opportunity,” Gonick said. “We’ve had remarkable success.”

Gonick’s shares the following advice for public sector hiring managers angling for an edge in securing talent: “The best and only strategy is to get in early and offer folks a chance to be mentored, supported, and to understand the mission of public service — why it matters and why it can be a fabulous career.”

**Driving Action with Data: Insights from Indiana**

Measurable results start with reliable data. The ability to link various data sources helps ensure corrective actions are targeted to constituent needs. Documenting the impact of digital equity projects will also give them more staying power.

**Tips for gathering actionable data:**
- **Survey your staff** to gauge their sentiments. Reach out to anchor institutions in the private sector and higher education.
- **Appoint a chief data and strategy officer** and data governance team to build data infrastructure.
- **Develop key performance indicators**, document progress, and identify resource gaps.
- **Leverage cloud technologies** to link, store, and add visualization tools to make data actionable.

Indiana, for instance, uses data to make informed decisions when setting DEI policy, developing a strategy, and funding multiple initiatives. “If we use the data to set the foundation for the direction we want to go with this work, then we’ll have tangible outcomes we’re trying to get to,” said Karrah Herring, Indiana’s chief equity, inclusion, and opportunity officer.

Herring and her colleagues built the state’s first equity data portal to document efforts in public safety, social services, education, and the workforce. The portal initiative started during the COVID-19 pandemic, which triggered a hunger for reliable data.

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*Lev Gonick, Enterprise Chief Information Officer, Arizona State University*
“We wanted to understand what our most vulnerable populations, and even our populations that were doing really well, were experiencing,” Herring said.

The equity portal includes data on infant mortality, diabetes, hypertension, smoking, and other health threats. This data can be compared to national data to give leaders a well-rounded appreciation of the state’s health challenges.

A robust data program has three foundations: strategy, governance, and infrastructure. Agency leaders can use key performance indicators to track their progress on establishing these foundations and measuring authentic gains across the population.

Acquiring data-driven knowledge requires substantial quantitative skill. “You have to have data experts and systems within your state government that speak to one another in a way that helps us set strategy and policy to ensure we are supporting our most vulnerable residents,” Herring said.

Herring’s goal is to make sure future administrations have all the data tools they need to protect a diverse population: “I believe Indiana has set a great precedent for how we approach disparate impact, touching on inequities in a way that is substantive and gets us to tangible outcomes.”

**Building Inclusive Services with Human-Centered Design**

Agencies must use human-centered design principles to craft equitable, inclusive services that make life better for everyone who uses them. “The most successful and impactful public services begin with customer obsession and the discipline to work backwards from constituent needs,” said Avent of AWS.

### Practical service design suggestions:

- **Create personas** that represent your users.
- **Survey target demographics** to discover their real-world needs. Use a social vulnerability index to target those in greatest need. Incorporate users’ lived experiences into design decisions.
- **Identify people who lack access** to computers/smartphones and give them incentives to sign up for services. Ensure accessibility for people with disabilities and other challenges.
- **Map out the entire service journey** and use chatbots to gather feedback on design flaws.

Human-focused digital equity efforts must start with the reality that many people lack basic digital essentials. Data from North Carolina, for instance, shows that 400,000 households lack a desktop or laptop computer, said Annette Taylor, director of her state’s Office of Digital Equity and Literacy.

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Karrah Herring, Chief Equity, Inclusion, and Opportunity Officer, State of Indiana
“A human-centered design involves getting to know these individuals, connecting with them, understanding what the challenges have been,” Taylor said. For example, are devices too expensive or too difficult to use? Taylor noted that graduate students at Duke University in Durham, North Carolina, are using a human-centered design approach to understand how people use the internet and the obstacles they face.

North Carolina also hosts “deep-listening sessions” to gather informed feedback about the causes of gaps in digital equity. “We’re talking to every type of marginalized population, and we’re working with grassroots organizations,” Taylor added.

User-focused design requires understanding people’s journeys through the digital landscape, said Megan Seeds, chief digital officer with Hennepin County, Minnesota — home to Minneapolis and its nearby suburbs. “We’re not necessarily at a point where every service can be completely digital,” Seeds said.

This reality highlights the need for careful planning when implementing advanced public services like single sign-on for identity verification. “We still just want to make sure it’s as easy and seamless as possible for residents to get from point A to point Z and successfully complete their journey,” Seeds said. Designers must acknowledge the impact of various touchpoints along the user journey. Changing one item might have unexpected downstream effects.

Seeds noted that Hennepin County is using chatbots to gather feedback on the usability of its digital services and to get insight on opportunities to automate services. These efforts help residents and the county employees who serve them. “This is a way we can improve the backend business process and demonstrate to employees that we can find ways to best leverage their time and expertise,” Seeds added.

**Democracy Needs Everybody’s Participation**

Every government agency has unique needs, so there’s no single solution to improving digital access and keeping everybody connected. But one principle applies across the board: Connectivity and access are no longer options in society. They are mandatory.

“Digital equity must be an overarching priority,” Avent of AWS said. “It’s not just an IT or a broadband office issue. It must be a holistic strategy across various agencies and business units.”

Agencies stand the best chance of turning goals into real improvements for residents if they thoughtfully merge customer obsession, strategy, data, and design while using modern technology. Avent urges stronger partnerships with technology companies that can supply much-needed skills. She also suggests strengthening alliances with internal experts in areas like economic and workforce development and health and human services.

“The most effective digital equity programs are also forging new public-private partnerships to help scale digital equity efforts for constituents,” Avent said. “Ultimately, governments must embed digital equity in every technology process and service to ensure all of us can participate fully in society, the workforce, and the world.”

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Laura Avent, Executive Government Advisor, AWS
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