Governments at the state and local level provide direct and daily impact to the public. Over the last two years, they had to quickly address and respond to COVID-19 testing, contact tracing, mask mandates, and vaccine distribution. These challenges were compounded by tight budgets, resources, and the possibility of social unrest.

Many government IT leaders turned to digital technologies to help combat the pandemic-fueled disruption and better serve the public. These efforts have shown some initial returns—but our research shows the opportunity for greater progress remains.

In 2021, NTT DATA and Oxford Economics launched the “Innovation Index: Digital Strategies for an Era of Constant Disruption,” a survey of 1,000 North American business and IT executives—100 of which came from state and local government—to find out how organizations are approaching digital transformation initiatives.

Current strategies mirror challenges

State and local respondents put a premium on four cornerstones: citizen satisfaction, efficiency and productivity, cybersecurity, and fulfilling a broader mission.

Most respondents (71%) identified constituent satisfaction as their top organizational priority over the next two years.

Since government agencies are often expected to do more with less, operating efficiently is crucial to meeting goals. Yet, most state and local agencies surveyed (60%) rate themselves as above average in performing productively, and more than two-thirds of respondents (68%) plan to prioritize process efficiency and productivity improvements over the next two years. Governments at the state and local level, particularly municipalities, have been the targets of relentless and damaging cyberattacks that show no sign of letting up. As a result, respondents are also focusing on strengthening security, improving cyber defense, and allaying constituents’ concerns over the security of their data, with 63% prioritizing the reduction of cybersecurity risk going forward.

With so many current and pressing priorities, preparation for continued disruption remains a challenge for state and local agencies. In fact, only half of the respondents surveyed have plans in place to mitigate disruption.

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Fig. 1: Long term planning helps prepare for future disruption.

57% of state and local government respondents say their organization’s strategic planning is increasingly long-term...

32% say their organization is proactive in setting an agenda for the marketplace...

42% feel equipped to deal with constant, rapid change
Innovation Index: How state and local government IT leaders are preparing for an era of constant disruption

Just 24% of state and local executives feel prepared to handle continued disruption from health crises and natural disasters in particular. State and local respondents are also twice as likely as other industries to believe social movements will disrupt operations over the next two years (72% vs. 36% total). Their ability to prepare is further hindered by slow processes—just 25% say they can act quickly.

Acute focus on constituents

Most state and local leaders believe they have made good on their goals to better serve the public. Almost all (98%) say they are average or above average in satisfying constituents. Like their peers in federal agencies, many state and local executives (63%) believe they are providing the service quality that constituents demand.

Just half of those we surveyed, however, say constituent demand is the primary driver of strategic change. And few are prepared for what comes next—only 10% say they are prepared for the disruptions that social movements may bring, and only 46% feel prepared for the coming changes in public policy.

Fig. 2: State and Local officials are securing information for their constituents.
“How effectively does your agency deliver the following to constituents?” “Highly effective” responses only.
Innovation Index: How state and local government IT leaders are preparing for an era of constant disruption

Data-driven opportunities

**Fig. 3: How effectively does your agency do the following? “Highly effective” responses only.**

- Prevent data security breaches: 58%
- Keep up with changing data regulations: 55%
- Maintain customer/patient/constituent trust in privacy and security: 50%
- Navigate differences in global data regulations: 46%
- Use data to inform decision-making: 43%
- Share data internally: 42%
- Share data with partners: 5%

A portion of state and local agencies have seen success in making data-driven decisions that translate into actionable insights, but there are opportunities for improvement. Only 43% are effectively using data to serve the public, while 51% say data determines the ways in which their agency interacts with constituents, and 50% feel they can maintain trust in privacy and security.

Although data is driving decisions around constituents, a significant number of agencies have yet to apply these insights throughout their operations. For just over half (55%), data dictates decisions around supply chain sourcing, and for a slightly smaller group (52%), data is behind process design.

Efforts to adequately use data are bogged down by increasing regulatory issues (38%) and inaccurate data from third parties (31%)—obstacles that government bodies must conquer as policies and regulations shift.

The state of the workforce

While constituent satisfaction is a top priority for state and local agencies, our research indicates that employees are not a major focus. Only 15% of those surveyed say improving employee retention and engagement is a top goal for their agency.

Providing flexible work options along with updated tools and technology are relatively low priorities for respondents. However, state and local agencies appear to outperform their federal counterparts and all other industries when it comes to cultivating a positive culture and management style (58%) and creating a sense of organizational purpose (46%)—two issues important to employee retention.

**Fig. 4: How effectively does your agency deliver on the following? “Highly effective” responses only.**

- Positive culture and management: 58%
- Provide a sense of organizational purpose: 46%
- Communication: 45%
- Product and service quality: 42%
- Sustainable and ethical operations: 42%
- Use of updated tools and technologies: 26%
- Speed (of decision-making, product introductions, etc.): 25%
- Flexible working options: 25%
State and local government respondents do not feel they have the technology resources needed to achieve their goals or support strong data practices. Their investment levels in foundational technologies such as ERP (56%) and CRM (46%) rival those of the private sector, but on the whole their investment levels are lower in other established and emerging technologies.

While agencies show a keen interest in artificial intelligence, with 57% having implemented AI, only 33% have invested in machine learning and just 17% in virtual assistants. These resources could be critical to serving the public during periods of disruption while also streamlining processes such as contracting for goods, supplies, and services.

Tight budgets may account for some of their technology challenges, and most respondents do not feel prepared for future shifts in technology (64%).

Similar to their federal counterparts, state and local agencies have strong cybersecurity systems in place. They have prioritized securing operations and safeguarding data, and 100% of state and local respondents say they have implemented cybersecurity in at least some functions. These investments will not only help protect them from potential cyberattacks, but they will also go a long way in building trust among constituents.

Our research suggests that leaders in state and local governments would do well to increase their focus on technology investments, workforce needs, and strategy—because these things pay off.

A select group of our total respondent pool (about 6% of the sample) have invested in artificial intelligence, developed culture and organizational purpose for their workers, and ensured all strategic and operational changes put stakeholder needs first. These leaders are 85% more likely to keep up with rapid changes in data regulation, report a 56% increase in productivity, and are 33% more likely to provide higher-quality products and services.
The takeaways for state and local government decision-makers are clear: lean into successes satisfying constituents and operating more efficiently—areas where significant strides have already been made—and take the next step toward digital transformation. Use data and emerging technology to better prepare for disruptions to come from health crises and natural disasters. Leverage the technology infrastructure in place so employees can deliver valuable experiences to constituents.

To review how North American organizations are prioritizing and valuing their digital investments in the wake of constant disruption, read the full Innovation Index at https://us.nttdata.com/en/engage/innovation-index.