State of the States 2022: 
Driving Digital Acceleration

State and Local 2022 Tech Forecast: Opportunities for Growth
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@NASCIO
STATE CIO TOP 10 PRIORITIES
2022 Strategies, Policy Issues and Management Processes

1. Cybersecurity and Risk Management - #1 for nine consecutive years. On the top ten list since 2006
2. Digital Government/Digital Services - Steadily moving up the list. Pandemic impact
3. Broadband/Wireless Connectivity - #4 in 2021 - on/off list for a decade. Pandemic impact
4. Cloud Services - Major force of change. In top three since 2013
5. Legacy modernization - Pandemic impact! On the list since 2011
7. Workforce - A continuing priority. Back on the list
8. Enterprise Architecture: governance - New to the list in 2022
9. Data and Information Management - On the list since 2016
10. Consolidation/Optimization - CIO priority each year. Frequently #1 since 2007
Fiscal impact of pandemic: increased state revenues and spending - increased IT spending? Impact of ARPA and IIJA funding for state IT? $1B State and Local Cybersecurity Improvement Grant funds - $200M in FY2022

State IT organization transition continues: CIO as broker business model, evolution from owner-operator to more managed services, outsourcing and multi-supplier initiatives

Elevated cyber threats during pandemic, nation state and criminal attacks, more focus on enterprise cybersecurity models, whole-of-state collaboration, ransomware mitigation

Focus on digital government services: user centric design, improved customer experience, security, automation, citizen identity management

13 state CIO transitions in 2021. What to expect in 2022?
Rank the top five business processes, practices or investment changes that you believe will continue post COVID-19 pandemic?

1. Increased attention on digital government services/citizen experience (#3 in 2020 survey)
2. Expanded work from home/remote work options (#1 in 2020 survey)
3. Investments in broadband expansion/ adoption (#4 in 2020 survey)
4. Expanded use of collaboration platforms/remote meetings (#2 in 2020 survey)
5. Increased priority and investment in legacy modernization (#5 in 2020 survey)
What digital services and work practices instituted during the pandemic do you expect to retain? (select all that apply)

- Remote work as a regular rather than occasional occurrence
- Enhanced security and fraud detection around web-based services
- Deployment of additional web-enabled internal and external services
- Evaluate enabling tools and methodologies geared towards rapidly delivering services
- Greater emphasis on human-centered design and design thinking concepts to designing solutions
- Simplified procurement procedures to efficiently acquire services and products
How has the COVID-19 pandemic impacted the demand for digital government services?

- Increased/accelerated dramatically 53%
- Increased/accelerated somewhat 41%
- Stayed about the same 6%
What is the biggest driver to expanding digital services?

- Better online experience for citizens (74%)
- Increased public participation and engagement (10%)
- Optimizing operations and lowering costs (10%)
- Empowering frontline government employees to collaborate and increase productivity (employee engagement) (4%)
- Better collaboration among state agencies (2%)
What emerging IT area will be most impactful in the next 3-5 years?

1. Low-code/no-code
2. Artificial intelligence (AI)/Machine learning
3. Mass personalization/citizen personas
4. Robotic process automation (RPA)
5. Internet of things (IoT)
6. Remote work technology
“The biggest take-away is that we can deliver solutions and services faster than ever before. There is a greater focus on working together as an enterprise and we have implemented platforms and technologies that support that.”

-State CIO
Based on the impact of the COVID-19 pandemic, what cybersecurity initiatives will receive more attention in the next 2-3 years? (select all that apply)

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Adoption/expansion of enterprise identity and access management solutions</td>
<td>83%</td>
</tr>
<tr>
<td>Continuous enterprise cybersecurity assessment</td>
<td>69%</td>
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<tr>
<td>Endpoint detection</td>
<td>67%</td>
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<tr>
<td>Introducing or expanding a zero trust framework</td>
<td>67%</td>
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<tr>
<td>Increased due diligence with vendors and third-party providers</td>
<td>63%</td>
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<tr>
<td>Improved anti-fraud capabilities and services</td>
<td>60%</td>
</tr>
<tr>
<td>Cybersecurity awareness training</td>
<td>56%</td>
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<tr>
<td>Increased use of behavioral analytics</td>
<td>50%</td>
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State Cyber Issues to Watch

- Talent crisis: recruitment, retention, compensation
- Increasing threats with remote work?
- Whole-of-state cybersecurity resilience
- Support and partnerships with local governments
- More centralized operating model for cybersecurity
What are the biggest roadblocks with broadband deployment or implementation in your state? (choose top three)

- **Topography**: 46%
- **Coordinating funding approach**: 44%
- **Affordability**: 44%
- **Accurate/current data and mapping**: 44%
- **Understanding of the federal grant process and compliance**: 17%
- **Carrier advocacy/incumbent protection**: 15%
- **Lack of public-private partnership opportunities**: 13%
- **Lack of agency coordination**: 9%
- **Understanding of the state grant process and compliance**: 4%
Does your organization have a strategy to migrate legacy applications to the cloud?

- 49% have a cloud smart strategy for all new applications deployed to the cloud (when feasible)
- 18% have a cloud first strategy for all new applications deployed to the cloud (when feasible)
- 16% there is a statewide cloud migration strategy planned
- 8% there is no statewide cloud migration strategy planned
What are your top three priorities in driving your cloud strategy forward?

78%  Scalability/Flexibility
57%  Security
43%  Investment optimization

41%  Disaster recovery/Risk management
27%  Application rationalization
20%  Staff training
10%  Mobility
10%  Extending catalog of cloud services
4%  Procurement reform to terms and conditions
How has your legacy modernization strategy changed due to COVID-19 and the related stimulus and infrastructure funding?
Which of the following major business lines will have significant capital investment (as defined in your state) for legacy modernization efforts in the coming two years?

1. Human services/public welfare - 75%
2. Labor and employment - 69%
3. Health services - 60%
4. Administration/finance/workforce - 58%
5. Revenue and tax - 48%
6. Transportation and infrastructure - 42%
State Trends to Watch in 2022

- Improved fiscal health with large spending increases, state decisions on ARPA funds, IIJA funding: $1B for SLTT cybersecurity grants
- Future of the IT workforce: Sustaining the remote work environment? Recruitment/retention/resignation, adaptation, skills transformation
- Huge investments in broadband; more granular data for better decisions; addressing affordability issues
- Prioritizing IT and application modernization, accelerated deployment, cloud migration
- Pressure to improve program integrity: identity verification, anti-fraud solutions, data sharing
- 36 gubernatorial elections in November 2022. Transition impacts?