

How To Create a Thriving, Tech-Forward State

TechNet encourages state leaders to adopt smart, adaptive, and long-range strategies that foster innovation, enhance global competitiveness, promote job growth and retention, build highly-skilled workforces, create the energy and transportation systems of the future, invest in information technology, and provide improved services to constituents with successful, consumer-oriented models. Here are policies that policymakers should embrace to create a thriving, tech-forward state that is stronger and more prosperous:

Education and Workforce Development

Students must be prepared to be a successful part of a global, interconnected, and technology-driven economy. This includes:

- ▶ Classroom infrastructure: Focusing finances, partnerships, and strategies to close the digital divide to ensure that all schools have sufficient infrastructure and secure network connectivity with the necessary speed, capacity, flexibility of choice, and reliability to support “smart” classrooms and provide sustained IT support to maintain and upgrade systems.
- ▶ STEM teachers: Prioritizing addressing the shortage of qualified STEM, computer science, and IT teachers and develop a sustainable pipeline of talent.
- ▶ Professional development: Dedicating funding for sustained and robust training for high-quality STEM and computer science teachers, both pre-service and in-service.
- ▶ Underrepresented students: Focusing on engaging and providing opportunities for low-income students, women, and people of color in STEM subjects, computer science, and IT.
- ▶ Early and broad exposure: Integrating principles of computer science, IT, computational thinking, communication, and STEM skills into other subjects of K-12 instruction.
- ▶ Making computer science count: Ensuring that a qualified computer science course may fulfill a core science or math high school graduation requirement.

Innovation-Friendly Policy Frameworks

Innovation-friendly policy frameworks encourage, enable, and advance American leadership in innovation and bolster the development of entrepreneurship and new technologies. States should promote research, development, and investment in smart infrastructure and avoid passing regulations that favor one particular type of technology over others, as technology inevitably moves more quickly than the legislative process.

Smart Infrastructure

Legislators should support policies that close the digital divide, expand access to the internet and technology, provide a safe and secure consumer experience, and promote strong private sector competition and investment. Legislators should focus on:

- ▶ Supporting efforts to increase and expand high-speed broadband deployment to currently unserved areas and increase adoption by encouraging private investment and making government funding competitively available to providers for those hard-to-serve areas where private investment on its own is not sufficient.
- ▶ Modernizing outdated IT systems, accelerating the sound adoption of state-of-the-art technologies, and strengthening state governments' cybersecurity defenses. Citizens deserve modern, citizen-centric services that keep pace with private sector innovation.

Cybersecurity

Policymakers should encourage good cyber hygiene, modern technology, leading industry practices, and high-skilled cyber workers. Market-based incentives or safe harbors should be used to encourage companies to actively manage risks in accordance with widely accepted industry standards and best practices.

Resilient and Reliable Clean Energy

Innovation in clean energy supply and demand is essential for a sustainable climate. Technology is a significant driver of efficiencies and innovative solutions for solving a wide range of environmental issues, so it should be fostered through technology-neutral policy, research and development funding, and stable tax policies that provide industry and consumers with long-term clarity to support the investment in and deployment of clean energy technologies.

Tax Policies That Promote Growth

Tax policies should promote innovation and foster an economic climate that enables companies to compete, thrive, invest, and expand. Policymakers should adopt tax credits, such as research and development, employment credits for job creation, angel investors, venture capital, and technology investment/development tax credits, that can spur growth, incentivize economic activity, and help companies make decisions regarding where to expand their operations.

Financial Technology

Policymakers should remove regulatory barriers to financial access and literacy, economic growth, and job creation. Regulatory systems should remain technology-neutral and regulate new technologies, including digital currencies and alternative banking, using a balanced approach that encourages fair competition.

Autonomous Vehicles

To encourage the safe deployment of autonomous vehicles on public roads, legislators should support policies that promote the growth of and investment in AV operations. State laws and regulations should be updated to remove legal barriers to driverless deployment of AVs on public roads, including vehicles with novel designs.