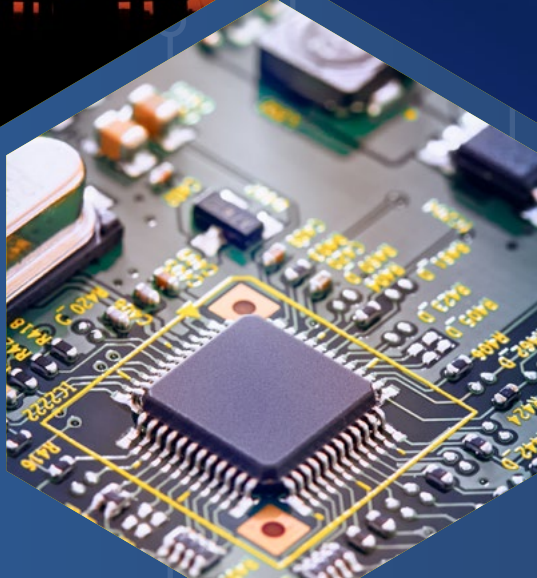


2020

PUBLIC POLICY GUIDE



ARIZONA
TECHNOLOGY
COUNCIL
a place to connect and grow

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The Arizona Technology Council is the principal advocate for science and technology-based companies in Arizona.

The Council continuously monitors federal, state and local legislation and policies that impact the sustainability and growth of Arizona's technology industry. Through the collective strength of its members, the Council informs and educates policymakers on issues that are important to Arizona's technology sectors.

From the U.S. Congress and the Office of the Governor to legislative committee rooms and city halls across the state, the Council serves as the voice advocating for a technology-based, pro-growth, business-focused agenda.

The Council and its Public Policy Committee hereby submit the 2020 Public Policy Guide. In creating this document, the Committee relied heavily on the Council's mission by preparing key ideas, goals and legislative initiatives to:

- ▶ Improve the business climate for technology-based companies
- ▶ Provide sources of risk capital that encourage entrepreneurship
- ▶ Create an environment that supports science and technology-related job retention and creation
- ▶ Attract, train, retrain and retain the talent required to compete in a global innovation economy

The Committee created a list of principles in a number of subject areas then established related positions to be used as the foundation of the Council's public policy efforts in 2020. In some cases, the positions will advance through development and advocacy of legislation that will be introduced during the Arizona Legislature's 2020 session. In other instances, the positions will be used on an ongoing basis as regulators introduce new regulations or changes to existing regulations pertinent to Council members. At all stages, the Committee will be engaged in various efforts to advance the position of Arizona's technology-based companies. The following principles and positions will aid elected officials and other stakeholders at all levels of government and business as they craft legislation and policies that will affect Arizonans and the Arizona economy for years to come.

ARIZONA TECHNOLOGY COUNCIL 2020 LEGISLATIVE PRIORITIES

- ▶ Ensure proven economic development programs such as the Angel Investment Tax Credit and current levels of the Research and Development Tax Credit are reauthorized past their sunset dates of 2021.
- ▶ Obtain state support of \$3 million annually for five years to cultivate a statewide Arizona STEM ecosystem. Focus on long-term, shared, sustainable and flexible STEM missions that bridge, integrate and strengthen the learning opportunities offered by organizations across sectors instead of isolated, independent entities. This will result in expansion of STEM business and education opportunities throughout rural and urban Arizona communities, fueling a strong, diverse talent pipeline prepared to meet the state's anticipated growth.
- ▶ Consistently and sustainably fund the state's education system, including pre-K, K-12, career and technical education (CTE), equitable access to dual enrollment, and postsecondary programs.
- ▶ Support Arizona tax system improvements to strengthen competitiveness, fairness and predictability, specifically establishing statutory clarification on taxation of digital goods and services.

AEROSPACE, AVIATION AND DEFENSE

PRINCIPLE

Arizona is a vital contributor to U.S. national security interests by fostering a pioneering spirit in aerospace, aviation and defense for generations. With more than 1,250 companies in aerospace and defense—including major prime contractors such as Raytheon, Honeywell, Boeing, Lockheed Martin, General Dynamics and Northrop Grumman—Arizona boasts thousands of highly skilled technology workers with high-paying jobs. Additionally, the state's military bases contribute nearly \$11.5 billion annually to the Arizona economy, according to the 2017 "Economic Impact of Arizona's Principal Military Operations" study commissioned by the Arizona Commerce Authority and prepared by The Maguire Company. The report also states the six military installations and four National Guard operations are responsible for creating more than 76,000 direct and indirect jobs.

State leaders and members of the Legislature must develop, publish and implement strategies that will maintain, strengthen and grow the aerospace, space, defense, aviation and unmanned-systems industrial base. In turn, this will provide Arizona a competitive edge as a top state supporting U.S. national security objectives.

POSITIONS

Defense Spending – Create an environment that enables sustainment and growth of total billing in defense contracting in the state. Arizona has incomparable aerospace and defense assets, as shown when PWC ranked the state No. 3 in U.S. aerospace manufacturing attractiveness in August 2017. As such, we must encourage through education an understanding of and appreciation for key military assets and their continuous economic impact on the state. These assets include the Barry M. Goldwater Range, the Buffalo Soldier Electronic Test Range, U.S. Army Yuma Proving Ground, Marine Corps Air Station Yuma, U.S. Air Force training and readiness at Luke Air Force Base for the F-35 and Davis Monthan Air Force Base for the A-10.

Also, we need to maintain and protect the state's unique environment that enables testing of key command and control, intelligence, communications, weapons and vehicle equipment without extraneous electronic or encroachment interference in Southern Arizona.

Arizona's Military Bases – Shield Arizona's six military bases from development interference. Ensure military airspace provides unfettered access from the bases to military test ranges in the state without restrictions due to overdevelopment.

Military Base Missions – Examine the future mission focus for all six military bases in Arizona. Work with local support groups and the Council to expand their mission profile in areas such as:

- ▶ Artificial intelligence
- ▶ Unmanned air and ground systems (offensive and counter operations)
- ▶ Robotics
- ▶ Cyber operations and defense
- ▶ Pilot training
- ▶ Space operations

Specifically, protect and increase the missions of Fort Huachuca, which include NETCOM's cyber defense, networks, unmanned aerial systems (UAS) training, intelligence and exceptional teaming with the U.S. Department of Homeland Security. Conduct research and seek additional missions such as special operations stationing and training for which Fort Huachuca is best suited in terms of job growth. Protect and promote continuation of the A-10 mission at Davis-Monthan Air Force Base and/or support an adequate mission replacement, including the F-35. Grow F-35 pilot training at Luke Air Force Base and Marine Corps Air Station Yuma. Enthusiastically promote and grow unmanned testing and development at U.S. Army Yuma Proving Ground. Embrace and promote the exceptional Arizona Army National Guard.

Unmanned Aerial Systems – Expand the capabilities of the largest UAS training center in the world at Fort Huachuca. Actively guard against the relocation of the training center to another state. Seek ways to cultivate strong ties and additional projects with Nevada, one of the six states in the nation selected as test sites for UAS, by leveraging existing assets statewide. In addition, support policies that encourage development and use of UAS technology for commercial applications. Also, seek new mission growth in the counter UAS area, which is just beginning at the U.S. Department of Defense. Promote the defense industry in the expansion of private and personal UAS.

Commercial Space Technology – Support, encourage and nurture development of commercial space applications in Arizona. Recommend Arizona leaders be first to develop the capabilities needed to support President Donald Trump’s Space Force proposal. With the global commercial space market valued at more than \$360 billion annually, the state plays a major role through established corporations including Boeing, Honeywell and Northrop Grumman, as well as newer technology companies such as World View Enterprises and Vector Launch. Add to that the high-profile research and development of programs such as OSIRIS-REx at The University of Arizona and Psyche Mission at Arizona State University.

SBIR/STTR – Continue to fund the Small Business Innovation Research (SBIR) program to fully leverage Arizona’s strengths across primary research, development, prototyping and early-stage manufacturing in support of national security objectives. Encourage industry/academia teaming for Small Business Technology Transfer (STTR) and collaboration for SBIRs to retain academic talent and graduates in Arizona.



BIOSCIENCE AND HEALTH CARE

PRINCIPLE

Advocate collaboratively with Arizona stakeholders to support the discovery, development, commercialization, delivery and availability of bioscience innovations.

POSITIONS

University Research Funding – Advance the research enterprise systemwide by working collaboratively with the Arizona Board of Regents. Proposition 301 funding allocations (described in detail in the Education, Workforce and Workplace section of this Guide) should be protected. Renewed investment will continue to accelerate Arizona’s economic base—and position as an innovation leader—in the growing biosciences fields. Specifically, funding levels for the Technology and Research Initiative Fund (TRIF), which provides essential research funding to Arizona’s public universities, must be reauthorized and maintained. Higher levels may be contemplated for the future.

Internships – Develop and fund a pilot program to support STEM internships for Arizona students at high schools, community colleges and universities.

Improve Health Care and Reduce Costs – Focus on cost-saving measures and total cost of care for the patient. Efforts should be made to ensure Arizonans have the opportunity to benefit from the lifesaving and life-changing innovations the biotechnology and medical technology industries can offer.

Association Health Plan Statutory Updates – Promote adoption of necessary statutory, guidelines, rules or agency positions allowing Arizona to leverage federal rulemaking so associations can provide technical enhancements of association health plan (AHP) legislation passed in 2019.

Support Arizona Biomedical Research Centre (formerly the Arizona Biomedical Research Commission) – Support the Arizona Department of Health Services in developing a statewide competitive proposal process for funding opportunities designed to identify and select high impact bioscience research, education and innovation projects specifically designed to benefit the people of Arizona today and in the future.



BIOSCIENCE AND HEALTH CARE: TELEHEALTH

PRINCIPLE

Telehealth and its integration into delivery of health care through electronic means should continue to be enabled throughout Arizona. That includes educating and advocating for uniform deployment and enforcement of the new telemedicine laws at state and local levels, as well as facilitating expansion of a robust statewide telehealth ecosystem.

POSITIONS

Telemedicine Bill Refinements – Support expanded telemedicine parity, licensure and electronic establishment of doctor/patient relationship laws that are driving Arizona telemedicine adoption and enhancing access to health care. Additional refinements include amending existing policies and rules for implementing the new telemedicine laws. Patients and health care providers are benefitting from initial policy and rule implementations. However, still lacking is uniform understanding of the new telemedicine parity and licensure laws that expanded service coverage and removed statutory and regulatory barriers. This lack of awareness, understanding and enforcement of the new telemedicine laws has resulted in a lag in provider participation, which negates providers' ability to reach their potential. We need to educate and advocate for uniform deployment and enforcement of the new laws at state and local levels. A significant aspect of this advocacy is building a strong working consensus among providers, payers and users of telemedicine and telehealth services.



CAPITAL FORMATION

PRINCIPLE

The most efficient way to continue making Arizona a technology destination is to attract more investors and their financial resources. This can be accomplished by understanding what the risk-capital industry needs to motivate such a move of capital to the state. Arizona has developed a successful Angel Investment Tax Credit program and has a research and development ecosystem second to none. Despite those programs, many firms seeking capital to enter the critical early stage of business development leave Arizona because crucial funding is scarce. Arizona needs to address this issue because it is losing out on this country's most coveted jobs.

POSITIONS

Angel Investment Recapitalization – Extend the Angel Investment Tax Credit for an additional 10 years instead of allowing it to sunset in 2021. The amount of angel investing in the state decreased significantly after the initial \$20 million in authorized funds was depleted in summer 2015. In the 2017 session, lawmakers authorized the Arizona Commerce Authority (ACA) to certify an additional \$2.5 million in tax credits each fiscal year for investments made in qualified small businesses. Any unused credit capacity is carried over from the preceding year. Re-authorization of the program beyond 2021 is necessary to continue the infusion of investment in the startup community.

Research & Development Tax Credit – Maintain current levels of the extremely successful Research & Development (R&D) Tax Credit program to continue encouraging companies to invest additional research and development monies here in Arizona. In 2008, the Legislature approved increasing the R&D tax credit value from 20% to 24% for the first \$2.5 million in qualifying expenses and increasing the rate for qualifying expenses in excess of \$2.5 million from 11% to 15%. Because these levels are set to sunset in 2021, they need to be extended for additional years. Additionally, an analysis should be done to determine ways that companies can utilize some of their unused credits and these levels should be extended permanently.

Early-Stage Venture Capital – Increase early-stage funding that is integral for startups and early-stage companies as they try to take their products to market. In the 2017 legislative session, the Arizona Competes Fund was modified to include grants that support and advance programs for “microenterprises.” Specifically, 30% or up to \$1 million of the annual grants in each fiscal year must be used for microenterprise development in Arizona. The statutory termination date of the fund also was extended until July 2026. The modifications are intended to reduce the number of companies recruited to surrounding states with seed and early-stage venture capital. Most states around the nation have created early-stage venture capital funds through which the states take on a role in supporting investments in these companies. Arizona needs to look at how to attract, encourage and incentivize early-stage funding of companies. Various funding models used in other states (e.g., Utah's fund of funds model, Maryland's insurance premium tax credits) need to be analyzed to determine which could be potentially viable methods in Arizona.

Coordination of Angel Investment Activity – Support the efforts of the ACA to:

- ▶ Coordinate and build a more robust angel investment community by working with existing angel investment groups and accelerators.
- ▶ Celebrate and publicize the success stories of the startup community.
- ▶ Develop an information clearing house for startup and early-stage companies so that information about these companies can be introduced to other members of the startup community, including potential investors who can learn about these companies and still comply with the applicable securities laws.

CYBERSECURITY

PRINCIPLE

With data moving into the cloud and the digital economy expanding, cybersecurity is now one of the most critical issues facing the nation. As we move deeper into the digital age, new threats and data breaches occur almost daily.

Cybersecurity is a top priority. Some reports put the number of monitored cyberattacks at 1.5 million per year in the United States, with up to 85% of data breaches undetected. Other reports estimate that approximately half of all cyberattacks target small businesses and the attacks will cause an estimated \$6 trillion in damages by 2021. There is no question we are in a cyberwar being waged globally, although primarily in the private sector. As a result, American businesses find themselves at the forefront of the battle, making cybersecurity improvements critical for businesses of all sizes and types. Arizona aims to be a national leader in the sector by attracting cybersecurity companies, working with higher education and creating the Arizona Cybersecurity Team through an executive order by the governor. In addition, the Arizona Technology Council will help by focusing on three core cybersecurity positions: awareness, education and regulation.

POSITIONS

Awareness – Prioritize awareness and intelligence about the risks that unfriendly groups and malicious individuals pose to businesses and the best practices for discerning and blocking attacks.

Education – Support and accelerate cybersecurity education for individuals from K-12 through senior citizens to help protect all Arizonans, and equip the current workforce and develop the next generation of protection and response professionals. Work with community colleges to support development of cybersecurity certificate and degree programs, and short-term training opportunities (e.g., bootcamps). Support state funding for community colleges looking to develop or significantly expand existing IT programs in order to expand the cybersecurity workforce.

Regulations – Promote responsible regulation that centers on reasonable and consistent privacy notice and breach-response requirements by working to keep public agencies educated and aware of the best cybersecurity practices.



ECONOMIC DEVELOPMENT

PRINCIPLE

Arizona must be able to compete with any state or country by having the most competitive economic tools possible while encouraging innovation, business attraction, retention and growth. Arizona is becoming a known tech hubs in the country after creating, attracting and growing many technology companies during the past decade due to its favorable economic climate. However, we must ensure we continue programs that assist with this, not adopt policies that could be detrimental to economic growth.

POSITIONS

ACA State Promotional Effort – Advocate for Arizona Commerce Authority's (ACA) continued funding and work to ensure it remains the platform for the state's economic development efforts. Encourage support for the many ongoing ACA initiatives focused on enhancing the Arizona's innovation ecosystem. An example is the Arizona Advanced Technology Network (AATN), a partnership between Pima Community College, Central Arizona College and the Maricopa County Community College District. AATN has worked with manufacturing companies such as Raytheon and Boeing to create a common curriculum in automated industrial technology that provides students and incumbent workers with competencies to maintain the increasingly automated 21st century manufacturing. The ACA's mission is to grow and strengthen Arizona's economy, and facilitate the creation of quality jobs for its citizens by expanding and attracting businesses in targeted, high-value base industries throughout the state. Support the Arizona Office of Economic Opportunity's mission to increase the quality of the workforce and business climate in the state through use of economic, demographic and regulatory data; policy development; and relationships with key partners.

Global Competitiveness – Support the increase of resources dedicated to Arizona's State Trade and Export Promotion (STEP) program from the ACA and U.S. Small Business Administration. This would help ensure small businesses are able to compete internationally on a level playing field. Also, the Council will participate in trade missions around the world in order to provide economic opportunities for its members. Encourage support for RevAZ, which is Arizona's Manufacturing Extension Partnership (MEP) center created through a partnership between the ACA and the National Institute of Standards and Technology (NIST). The goal of RevAZ is to become the central resource for technical assistance and all things manufacturing for Arizona's existing community of small and medium-sized manufacturers.

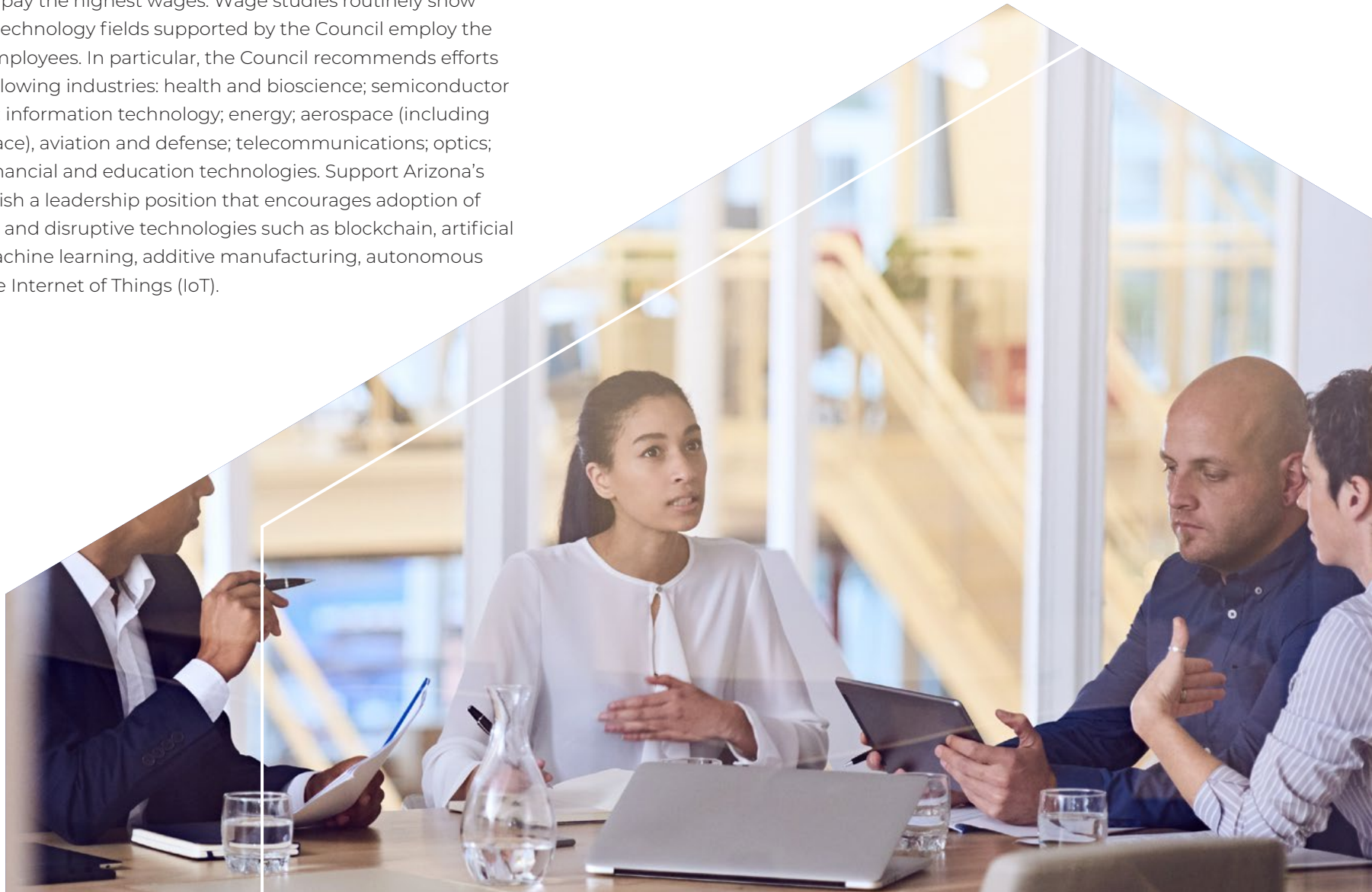
Infrastructure Investment – Support development of tools to facilitate public and private investment in infrastructure necessary to competitively enable high-tech manufacturing investments and growth.

Local Efforts – Ensure we foster local economic development by supporting local entrepreneurs who engage with the global economy to deliver goods and services around the world. Additionally, there are initiatives to make Phoenix, Tucson and other Arizona communities more supportive of startups and innovation. Those efforts need to be encouraged and supported where possible. Ensure local governments do not create ordinances or other roadblocks to doing business in their jurisdictions but instead support streamlined processes when available.

Fewer Regulations – Continue to reduce the number of regulations that discourage companies from relocating to or growing in the state. There has been increased focus over the last few years to get government out of the way of business and create an environment that fosters growth. There is continued support needed by the Legislature and business community

to reduce regulations and create policies that stimulate the economy instead of stifle it, especially in relation to new innovative and disruptive technologies that challenge some industries' ways of doing business.

Targeted Industries – Expend substantial public policy efforts and accompanying resources on creating, attracting and retaining those employers that pay the highest wages. Wage studies routinely show that the many technology fields supported by the Council employ the highest-paid employees. In particular, the Council recommends efforts to target the following industries: health and bioscience; semiconductor and electronics; information technology; energy; aerospace (including commercial space), aviation and defense; telecommunications; optics; and medical, financial and education technologies. Support Arizona's efforts to establish a leadership position that encourages adoption of new, innovative and disruptive technologies such as blockchain, artificial intelligence, machine learning, additive manufacturing, autonomous vehicles and the Internet of Things (IoT).





EDUCATION, WORKFORCE AND WORKPLACE

PRINCIPLE

The lack of skilled talent needed to meet demand continues to be a top challenge and barrier to business growth for Council members across industries and disciplines. A robust, aligned education and workforce development system must be developed and supported. At all levels, science, technology, engineering and math (STEM) education must be proactively supported. Workforce development and retention strategies and funding should be coordinated and aligned with targeted high-skill, high-wage, high-demand industry sectors.

Such a system of support will provide the foundation of a healthy Arizona technology community and innovation economy by:

- ▶ Focusing on increased graduation from high school, as well as credentials, certificates and degrees in high-wage, high-demand STEM jobs.
- ▶ Aligning with the needs of companies for STEM workers now and in the future.
- ▶ Enabling the attraction and retention of the talent—in-state or imported—needed for Arizona to thrive as a technology hub.

POSITIONS

Career and College Readiness – Increase Arizona youth and adults' attainment of credentials, certificates and degrees aligned with business needs, and accelerate economic development by championing support for improvements in pre-kindergarten through postsecondary education and workforce development. Major areas of focus should include supporting high expectations for all students, providing funding for career awareness and development in 7th and 8th grades,

understanding career pathways for students and adults to align with Arizona's targeted growth industries, leveraging industry engagement, and increasing work-based and work-like experiences provided through high school and postsecondary education. Support the development of relationships between K-12, community colleges and universities in order to diversify and expand career readiness options for Arizona youth.

Education Funding – Fund the state's public education system at all levels with consistent, dedicated and sustainable revenue sources. Specifically:

- ▶ Protect the Proposition 301 funding allocations extended by the Legislature in 2018.
- ▶ Support state finance formula changes by adding an "equity weight" to give struggling school districts resources necessary to close existing achievement gaps.
- ▶ Restore fourth-year career and technical education (CTE) funding for programs in key industries crucial to Arizona's continued economic development.
- ▶ Ensure funding for computer science teacher training, aligned with the new Arizona K-12 computer science standards.
- ▶ Update the state's expenditure limitation (EL) formula to reflect increased weighting for CTE enrollments and include short-term, non-credit training for incumbent workers in targeted high-wage job growth. This will help maximize full engagement of all current and future workers to support Strategic Vision 2030 and Achieve60AZ while providing work-ready employees for industries critical to the state's economic development without additional taxation.
- ▶ Support funding requests and projects initiated by community colleges, including CTE and large-scale programs that increase access to careers with high wages. Examples include funding for expanding aerospace and defense, cybersecurity, health science and other programs aligned with workforce and economic development priorities of the state. Arizona businesses have long advocated for expansion of the high-impact, next-generation workforce and CTE programs that community colleges are uniquely positioned to deliver. The state's current EL formula is a barrier to expanding these high-cost programs.

Other reforms should include equitable funding of K-12 education with a formula such as Proposition 301's that positions Arizona at minimum with mean-level funding among the 50 states.

Develop alternative ideas to appropriately fund pre- and full-day kindergarten, CTE expansion, equitable access to dual enrollment, and community colleges and universities in addition to K-12. Long-term comprehensive funding reforms should modernize and promote a 21st century delivery model of education focused on equity, performance and accountability.

Accountability – Drive attainment of the statewide goal Achieve60AZ by funding the strong support necessary to meet the accountability metrics set forth by Progress Meter and adopted by the governor's office. Support the implementation of meaningful and aligned accountability systems with appropriate resources and training.

Talent Gap – Align workforce development and education efforts with employer needs. Encourage companies to actively engage with educators to produce a workforce that aligns with employer needs in curriculum content, hands-on work experiences and multiple models of talent development. Support creation of curriculum content such as Pima Community College's Applied Technology Academy where Caterpillar engineers receive hands-on training in machining and other skills. Support and increase the use of business-friendly, work-like and competency-based work experience models and pathways to accelerate skills development in high-wage, high-demand and high-growth sectors. Examples include internships and apprenticeships, CTE, early college and career high schools, and utilizing technology for scale and implementation in rural and remote locations.

CTE – Support budgeting and programming for fourth-year CTE to maximize and accelerate acquisition of knowledge and skills—increasing certifications and credentials—in key high-demand industries such as engineering and manufacturing. Encourage CTE entrepreneurship and offset program costs by supporting statute amendments that allow sales of services in addition to products and items by a Career and Technical Student Organization program approved the Arizona Department of Education, and by removing revenue generating barriers.

Dual Enrollment – Increase implementation of early college and career high schools by removing the barriers to full participation in dual enrollment,

EDUCATION, WORKFORCE AND WORKPLACE (CONTINUED)

including raising the 25% cap on 9th and 10th grade enrollments and developing sustainable funding models. Additionally, ensure access to and equity in dual enrollment opportunities for all students to increase diversity and credential, certificate and degree completion.

Credit for Experience – Support legislation to allow high school credit for high-impact, work-based and work-like experiences. Leverage incentives, tax credits and apprenticeship grants to promote internships and apprenticeship programs. Work with community colleges to market and expand awareness of credit for experience granted through prior learning assessment programs.

STEM – Obtain state government funding of \$3 million annually for five years to cultivate a statewide STEM ecosystem. A 5-year STEM plan recently released by the White House stresses the importance of ecosystems to “focus on long-term, shared, sustainable and flexible STEM missions that bridge, integrate and strengthen the learning opportunities offered by organizations across sectors compared with isolated, independent entities.” The plan also encourages all federal agencies to fund cross-sectoral learning to encourage lifelong STEM literacy. Given Arizona is home to a flourishing STEM industry base and expected to significantly grow between 2017 and 2027, we must act now to take advantage of the momentum generated by the plan and leverage our state investment (likely three- to fivefold). This will result in expansion of STEM business and education opportunities throughout rural and urban Arizona communities, fueling a strong, diverse talent pipeline prepared to meet the state’s anticipated growth.

Teaching Computer Science/High School Computer Science Mandate – Ensure funding for computer science teacher training and programming is aligned with the new Arizona K-12 standards so all students in these grades have computer science education access in the next year. Support Gov. Doug Ducey’s participation in the Governors’ Partnership for K-12 Computer Science and any related recommendations from the governor’s Arizona Cybersecurity Team.

Broadband Access – Enable broadband availability for rural K-12 schools and libraries, as well as higher education. Drive online education applications and collaborative activities to improve learning delivery, and development of workforce skills and pathways. Continue contracting the buildout of new high-capacity broadband infrastructure such as fiber to provide connectivity at predictable, reasonable costs to rural schools and libraries, many of which remain unserved or underserved.

Build on progress of the special FCC E-rate program supporting rural infrastructure as it winds down. Have the Arizona Department of Education and Arizona State Library, Archives and Public Records work with the ACA’s broadband director to continue aggressively pursue ongoing E-rate support for telecom equipment and services, as well as other grants and industry programs. Engage all of them plus the Governor’s Office of Education, national organizations and industry partners to help form and assist coalitions of school districts, counties, and regions to successfully qualify and implement such projects to take optimum advantage of these opportunities.

E-Learning – Develop a coordinated strategy to promote and support adoption of innovative ideas and new technologies in libraries, K-12 and higher education. The list should include blended learning, flipped classrooms, digital curriculum, virtual online labs, makerspaces, robotics instruction, and competency- and outcome-based e-learning approaches. Drive increased use of digital curriculum, STEM programs, and consortiums to better prepare students for the jobs of the future and improve learning outcomes for diverse student populations and needs. A significant cluster of e-learning and innovative educational companies and institutions already here could assist, helping create the opportunity for Arizona to be a leader in innovation and transformation of education, educational outcomes and workforce development.

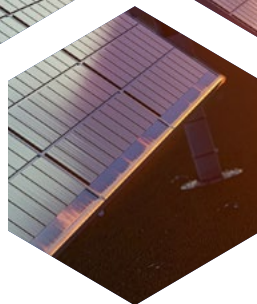
Workforce Development/Job Training – Create a new funding mechanism to ensure a job training program is available for companies to utilize. Arizona is one of the only states in the region without such a program after the repeal of the tax on businesses that had been funding it. Support efforts to

integrate workforce development programs and reinvigorate job training programs to help companies attract and retain needed talent, whether it is produced within Arizona or imported from other states and countries. Promote active company participation in bridging the talent gap. Engage business, K-12 and postsecondary education, and workforce and economic development communities in collaborative, integrated sector, and cross-industry strategies and implementation. Leverage programs and agencies charged with addressing skilled-workforce shortages in high-tech industry sectors. Promote practices and incentives that companies can actively participate in bridging the talent gap, including apprenticeships for students and re-careering adults, innovative onboarding programs, and an increased focus and support for employee development as a source of upward mobility and mid-tier talent development.

Job-Driven Financial Support/Assistance – Explore job-driven financial support models, including eligibility for unemployment benefits for underemployed individuals participating in intensive training programs for high-wage, high demand jobs; tuition waivers; and “last dollar” scholarships/ tuition assistance for adult learners to complete in-demand certificates or degree programs. According to the National Skills Coalition, these strategies could develop talent for the high-skill, high-wage, high-demand jobs critical to Arizona’s economy.

Employment Non-Discrimination – Encourage policy makers to embrace basic principles for non-discrimination that are critical for attracting and maintaining a competitive workforce, especially in the technology sector. Support non-discrimination statutes to be inclusive of gender, religion, sexual orientation, gender identity, nationality, disability and age. Employees should be judged on their merits instead of identities and employers should foster an environment of acceptance where innovation can thrive.





ENERGY

PRINCIPLE

The link between technology investment and energy is fundamental and unbreakable. To attract investment capital, as well as retain and grow its technology business sector, Arizona needs predictable and investable energy markets. Additionally, the state needs a secure and adequate water supply. Every key Arizona technology cluster—including aerospace and defense, semiconductor and electronics, health and bioscience, cloud/data centers, back-office processing and alternative energy technology—requires energy markets that are affordable, reliable and competitive. Policy and legislative choices that enable market forces to improve the status quo have historically been favored. There are a number of attractive policy options that would benefit Arizona technology businesses, job creation and economic productivity. Several trade organizations, including the Arizona Energy Consortium, continue to find ways to provide more certainty in developing the state's energy policy for the future. Many companies locating their facilities here are expecting their electricity to come from carbon-free resources.

POSITIONS

Diversification of Energy Supply, Utilization – Improve diversification of the state's energy mix by including cost-effective solar and other renewable energy resources. Enhance the state's integration of renewable resources and reliability through the use of flexible resource technologies. These policies would help hedge against short supplies or rising prices. Policymakers should enact laws that enable diversification of the energy supply and make certain the benefits of these improvements inure to all Arizona companies.

Natural Gas – Continue to take advantage of Arizona's natural gas resources to provide an attractive in-state, export-ready electricity supply. Intermittent renewable resources augmented by natural gas generation can provide a carbon-reduced, secure power source until other utility-scale renewable options with inherent or built-in storage become available. Adding modern, flexible natural-gas generation to existing fleets will be important to maintaining this synergy.

Nuclear Energy – Continue Arizona's utilization of the low-cost base load power of the Palo Verde Nuclear Generating Station to benefit the state's residents and businesses. As the largest nuclear power plant in the nation, Palo Verde is the primary energy hub of the Southwest, establishing Arizona as a key market for interstate generation suppliers. Importantly, this excellent source of base-load power is best suited for the steady, predictable power needs of always-on manufacturing, data hosting and bioscientific experimentation.

Renewable Energy – Seek ways to attract economic investment that takes advantage of the state's world-class solar energy attributes and other forms of renewable energy resources. For many companies, renewable energy is the future. Forward-thinking, eco-friendly businesses are increasingly demanding that their electricity comes from renewable sources. Economic development is a huge area of focus for Greater Phoenix and Arizona, so it's imperative to continue supporting the trajectory of business relocation and expansion. Arizona exhibits some of the best attributes for harnessing solar energy in the world. The state's ideal location, relatively inexpensive land, moderate climate, and proximity to substantial and in-place infrastructure provide real-world inputs for Arizona to establish itself as the leader of renewable energy generation and innovation.

Electric Transmission – Create and maintain a robust and growing transportation electrification market and electric vehicle charging infrastructure as Arizona continues to foster innovation and grows into a world-class technology hub. This is critical for the state's renewable energy transition. Beyond personal vehicles, electrifying delivery vehicles, 18-wheelers, public transit, school buses and ride-sharing services will result in cost savings for both the public and private sectors in Arizona. Continue to support transmission development that enhances Arizona's ability to participate in energy markets and more efficiently use the existing transmission system. Provide the regulatory climate necessary for Arizona to maintain its leadership role in the coordinated and strategic development of transmission lines, allowing the energy industry to continue to prosper and facilitate the influx of private capital into Arizona.

Energy Planning – Adopt a more robust regional approach to energy development. New generation is being required each year as Arizona continues to grow. With large, high-demand markets in the broader region and introduction of the California Independent System Operator's Energy Imbalance Market, Arizona has a tremendous opportunity to prosper through regional cooperation. Utilizing other states' high renewable-energy output, Arizona can save money by not building new, renewable-resources. Thus, an increased focus on a regional approach could drive an increase in economical and low-cost, renewable energy. Changing customer needs such as increased integration of electric vehicles can place new demands on the way utilities provide power, making regional cooperation more important than ever.

Storage Technology – Look for opportunities to explore storage technology that is rapidly developing and holds promise to be a significant companion to renewable energy. With substantial regional development of renewable resources, the Western Interconnection electric grid has periods of the year when generation resources and electric load are more difficult to match. A combination of storage technology and flexible natural gas generation may be key tools to successfully address this issue.

Technological Advances – Create a regulatory environment not just for today, but that encourages and embraces future technological advancement. There are growing trends towards smaller, highly efficient, distributed generation units, microgrids, smart grid and energy storage technology. To the extent that legal constraints and rate structures resulting from existing energy policies prevent Arizona businesses from adopting new technology or artificially increasing the costs of such adoption, such constraints and policies should be modified.

Water Challenges – Support the growth of technology-based industries that are developing innovative solutions to water challenges. This may include a focus on securing early-stage risk capital for these businesses, and involve collaborating with economic development entities at local and state levels to attract more businesses. Support collaboration between the public and private sectors to develop new technologies to conserve water and augment supplies.

FINANCIAL TECHNOLOGY

PRINCIPLE

Arizona's financial technology (fintech) sector is among the most promising and fastest growing in our technology community. The broad and robust fintech community offers a diverse range of products and services with the potential of disruption for traditional financial services companies. Arizona has shown leadership in breaking down regulatory barriers that could inhibit fintech innovation and emerging business models. To continue cultivating a fintech-friendly environment, our goal is to help drive state regulatory reform allowing use of virtual currency that meets the needs of Arizona's fintech sector where innovations primarily rely on this type of currency. Arizona must provide a robust, streamlined supervisory experience for virtual currency and non-bank firms that is transparent, provides a level playing field for businesses that doesn't favor larger players over small ones, and appropriately protects consumers from harm.

POSITIONS

Digital Signatures and Smart Contracts – Ease regulatory hurdles by updating Arizona statutes and regulations to enable broad adoption and use of digital signatures, as well as drive innovation in smart contract applications. Traditional paper contracts can be quite inefficient and prone to fraud, which is why digital contracts tied to immutable blockchains are emerging as an alternative. Lawmakers previously passed HB2417, the nation's groundbreaking legislation that amended the Arizona Electronic Transactions Act to include digital signatures recorded on a blockchain, enshrining their validity and enforceability for records or contracts. In 2018, the Legislature passed HB2603, empowering use of blockchain technology for state corporate filings. These regulatory innovations have helped Arizona emerge as a choice location for companies that develop applications utilizing blockchain and smart contract technology.

Fintech Regulatory Sandbox – Continue positioning Arizona as an innovative hub for financial technology while helping prove that lighter regulation and consumer protection can coexist. Fintech startups are particularly disadvantaged by the difficulties and costs of complying with conventional

state money transmission licensing regimens. Legislation adopted during the 2018 session created the nation's first state-level regulatory sandbox allowing limited access to Arizona's market for testing innovative financial products or services without first obtaining full state licensure or other required authorization. Innovative initiatives are allowed to germinate through creation of an on-ramp or regulatory sandbox with exceptions to licensing rules for new companies based on low volumes or limited business activities that pose a lower risk to consumers. Legislation adopted during the 2019 session provided important technical corrections and clarifications to the law to ensure efficient administration and robust oversight of the program. To date, 15 fintech sandbox applications have been submitted and seven applicants have been admitted to test a wide array of innovations.

The Council will work to publicize the sandbox to help attract new participants and leverage successful outcomes while supporting further efforts of Arizona's attorney general and Legislature to evolve and improve the program over time. For example, the fintech sandbox should be expanded to permit testing of select insurance offerings and other financial products and services that can benefit from technological innovation.

Proptech Regulatory Sandbox – Help improve and evolve the new property technology sandbox so Arizona can continue to take the lead in fostering innovation across the real estate industry. Continue to allow the Arizona Commerce Authority (ACA) to operate the proptech sandbox that enables companies to test innovative products or services in the real estate and smart-property industries in a lighter regulatory environment. HB2673 approved in the 2019 legislative session established the nation's first proptech sandbox. By reducing costly barriers to entry, the sandbox promotes the development of disruptive technologies affecting the way we rent, sell, buy, develop and manage commercial and residential property.

Blockchain Research Funding – Continue to let the ACA distribute the \$1.25 million in funds to support development of applied research supporting blockchain technologies and products that continue to help establish Arizona as a leader in this emerging technology sector. The funds allocated

by last session's HB2747 will be made available to applied research centers focusing on blockchain technology in support of defined products or services for commercial use.

Money Transmission Licensing (MTL) Regulation – Consider legislation on the application of Arizona MTL law to regulate digital tokens in concert with federal guidance and in cooperation with other states. The application of state MTL regulation should not hinge on the use of fiat currency to purchase a token. Instead, the sale of a digital token for fiat currency should be treated no differently than the sale of any other commodity. A number of states have acted to include or exclude cryptocurrencies or virtual currencies in their MTL laws using broad definitions that essentially include all digital tokens. In essence, this regulates the technology, not how it's used. Also, many tokenized projects currently may have a central issuer or administrator but will become a decentralized, user-run platform once operational, complicating the application of MTL and other state regulations. Pending federal actions regarding regulation of financial institutions should be closely tracked as they seek to clarify treatment of the wide array of digital tokens, optimizing Arizona's complimentary state MTL regulation evolution alongside that of the federal level.

Arizona Corporation Commission (ACC) – Encourage the ACC to work towards utilizing blockchain for corporate records and filings initiating trials and pilots to develop capabilities, gauge future direction, and, when appropriate, inaugurate full-scale initiatives. Examine the potential to issue and trade securities on a blockchain platform. The ACC has opened a docket to examine the use of blockchain technology in Arizona's energy industry to help manage the distributed power generation and storage, transactive energy, renewable energy credits, tokenization, IoT, cybersecurity, and other applications for distributed ledger technologies on the grid. The Council will work with the Energy Blockchain Consortium's Arizona Working Group, formed to provide guidance, direction and coordination of blockchain technology use for Arizona's utilities, communities and businesses in the energy industry, as well as to promote collaboration among stakeholders and drive needed regulatory reform.



FINANCIAL TECHNOLOGY (CONTINUED)

State Government Records – Examine potential use cases and drive the application of blockchain by the Arizona executive branch for the management and storage of state government records for cost, efficiency and security considerations; initiating trials and pilots to develop capabilities; gauging future direction; and, when appropriate, inaugurating full-scale initiatives. Offer leadership and assistance to Arizona's cities, counties and tribes in digitizing, normalizing and consolidating property records following best practices, and ensuring compatibility with other jurisdictions and open-data protocols.

Regulatory Reciprocity Between States – Join the 23 states already in the Multistate Licensing Agreement for Financial Services Companies to eliminate redundancies in state licensing of money service businesses, which streamlines cumbersome regulations relating to virtual currencies. Arizona stakeholders should engage with other state and national organizations working to establish common multistate MTL and virtual-money regulation

and licensure that would ensure legal and regulatory reciprocity between participating jurisdictions. Companies involved in virtual-currency activities are multi-jurisdictional by nature. Any artificial restraints on their ability to operate without regard to geographical boundary within the United States adversely impacts the significant cost-effectiveness and efficiencies that their business models offer to other companies and consumers.

Decentralized Corporate Structures – Follow progress in decentralized corporate structure innovations and continue to evolve regulatory constructs and safe harbors that support this sector while safeguarding business and consumer participants. Centralized corporate structures rely upon clearly defined lines of geographic entity jurisdiction, identity of ownership and locations of operation. Decentralized projects do not necessarily fit within traditional state corporate structures as they break many of the legacy tenets of traditional corporate structures, identity frameworks and governance constructs, and transcend legacy geographic boundaries.

OPTICS, PHOTONICS AND ASTRONOMY

PRINCIPLE

Optics, photonics and astronomy are important to Arizona. Combined, they add more than \$4.3 billion to the state's economy and support more than 19,000 jobs. As an enabling technology, optics applications are critical for many other industries, including medicine, mining, aerospace and defense, smart cities and autonomous vehicles.

The University of Arizona holds a worldwide leadership reputation for both optics and astronomy, and provides the academic prowess for related research and development. The two fields also attract and help retain world-class technical talent to the state. The output from optics R&D enables leading products and technologies that enable the many applications that drive robust Arizona companies. Astronomy assets also are heavily engaged in public outreach and informal STEM education for residents and tourists alike.

Pima Community College, in partnership with the Strategy1, is working extensively with industry partners to develop optics curriculum that will help support local industry partners and develop talent pipelines. Strategy1's effort is funded through a Small Business Administration contract.

Vital issues impacting optics range from protecting Arizona's celebrated dark skies, assuring world-class optics workforce readiness, and promulgating commerce-friendly export control reform that promotes global export revenue growth. Representation of the Arizona optics community is being accomplished by the Council's Optics Valley Committee, whose mission is to catalyze, convene and connect a more robust optics industry sector. The policy positions below are intended to support the goals of attracting future investments in optics, photonics and astronomy, and to grow a quality workforce.

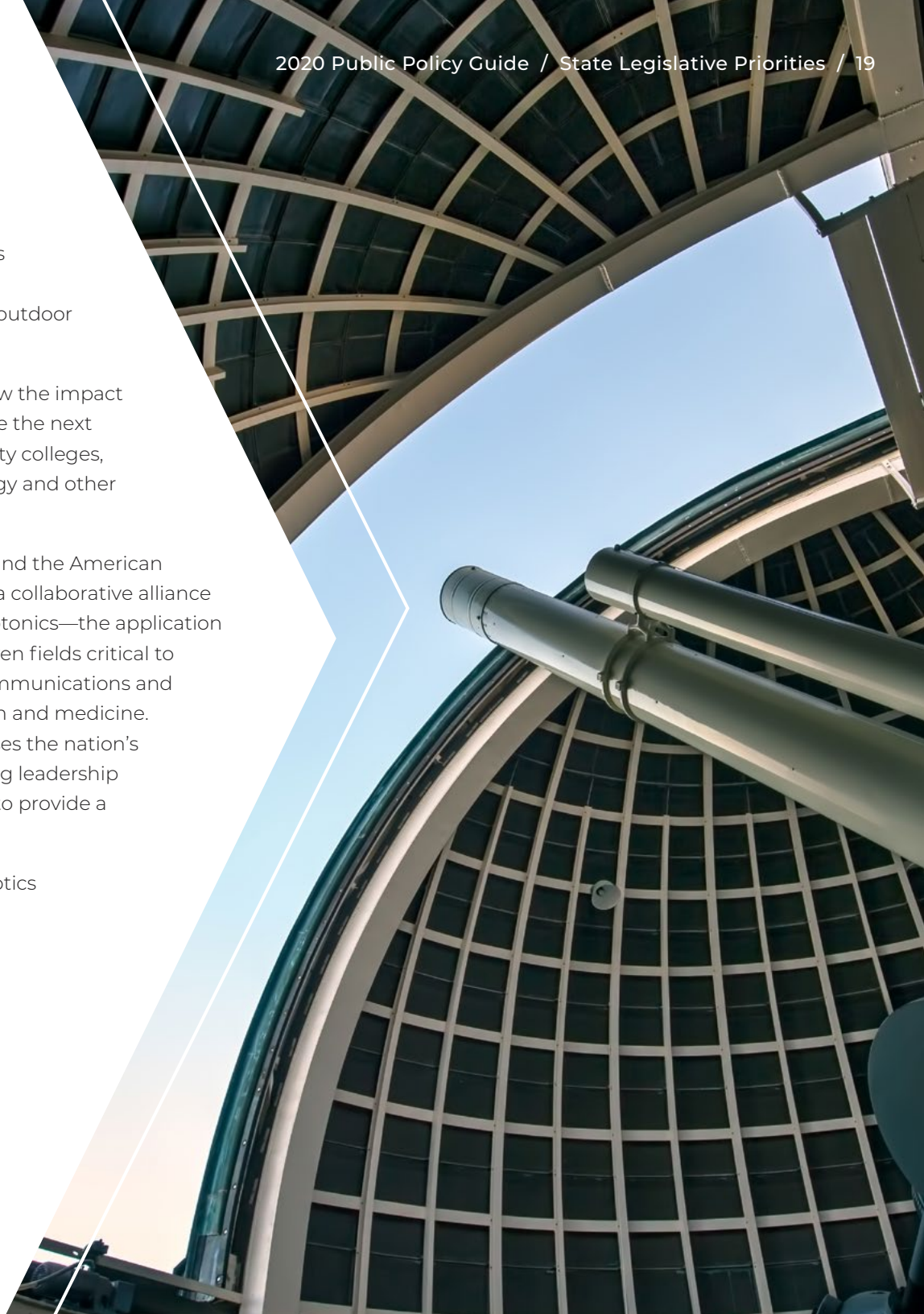
POSITIONS

Dark-Sky – Establish statewide dark-sky standards and support the state's \$4.3 billion optics, photonics and astronomy industry. Advocate for and encourage dark-sky sensitive and appropriate use of LED technology for outdoor lighting as its use becomes increasingly widespread.

University Research and Development – Strengthen opportunities to grow the impact of world-class research and development at Arizona's universities. Nurture the next generation of scientists by growing research partnerships with community colleges, where more than 50% of postsecondary students take introductory biology and other STEM courses.

NPI and AIM Photonics – Support the National Photonics Initiative (NPI) and the American Institute for Manufacturing Integrated Photonics (AIM Photonics). NPI is a collaborative alliance of industry, academia and government seeking to raise awareness of photonics—the application of light—and drive U.S. funding and investment in five key photonics-driven fields critical to U.S. competitiveness and national security: advanced manufacturing, communications and information technology, defense and national security, energy, and health and medicine. AIM Photonics is an industry-driven, public-private partnership that focuses the nation's premier capabilities and expertise to capture critical global manufacturing leadership in a technology that is both essential to national security and positioned to provide a compelling return on investment to the U.S. economy.

Export Reform – Ensure export reform policies support and encourage optics companies to engage in global commercial markets.



STATE BUDGET

PRINCIPLE

In 2019, Arizona once again had a structurally balanced budget. Revenues are projected to be \$694 million in additional money moving into the 2020 legislative session. However, about three-quarters of that is one-time revenue. Continuing the restoration of recession-era cuts to district and charter additional assistance funding in education is of utmost importance in the coming session while still meeting the other critical needs of the state budget.

Competitive, business-friendly states are those that provide a stable and predictable environment for commerce. Of particular importance is a state budget and process that is strategic and reliable. The state budget should continue to avoid debt financing for operating expenses or use of fiscally unsustainable accounting gimmicks, and ensure funding for Arizona's future. It should provide for the core needs of the state and reflect opportunities to leverage technology for greater efficiency and effectiveness of state government without sweeping funds from existing programs.

POSITIONS

Angel Investment Tax Credit Program – Protect the funding for the proven and highly successful Angel Investment Tax Credit, and extend the program for another 10 years beyond the sunset date of June 30, 2021.

Increase STEM Funding to Create Regional Ecosystem – Secure state funding of \$3 million annually for five years to cultivate a statewide Arizona STEM ecosystem. Focus on long-term, shared, sustainable, flexible STEM missions that bridge, integrate and strengthen the learning opportunities offered by organizations across sectors instead of isolated, independent entities. This will result in expansion of STEM business and education opportunities throughout rural and urban Arizona communities, fueling a strong, diverse talent pipeline prepared to meet the state's anticipated growth. Additionally, this will help attain additional federal funding for STEM in the state.

Support ACA Programs & Funding – Discourage the Legislature from sweeping any funds not used in a particular fiscal year by the Arizona Commerce Authority (ACA). This is destabilizing and tends to create a

use-it-or-lose-it mentality even when conditions warrant funds being carried over to the next fiscal year. Ensure flexibility as warranted within ACA's funding for programs to help it achieve its mission.

Education Funding – Fund the state's public education system at all levels—including pre-K, full-day kindergarten, K-12 and postsecondary—consistently and with accountability within a dedicated and sustainable revenue stream. Short-term reforms should include finding a sustainable and dedicated revenue source for education funding that does not endanger the state's economic climate. The reforms should include funding of K-12 education with a formula like Proposition 301's that positions Arizona at minimum with mean-level funding among the 50 states. Additionally, reforms should consider alternative ideas to appropriately fund pre- and full-day kindergarten, K-12, CTE, dual enrollment with equal access, universities and community colleges. Long-term comprehensive funding reforms should modernize and promote a 21st century delivery model of education that focuses on performance and accountability. Arizona should ensure a high-quality education system to attract and retain high-wage jobs and the kinds of businesses that drive the innovation economy.

Reinvest in Community Colleges – Recognize the critical role of community colleges in education and workforce development by supporting legislation that will reinvest in and restore state aid to all of Arizona's community colleges, and improve and expand the technical education offerings in community colleges. Explore opportunities to create partnerships between companies and community colleges to ensure industry needs are being met and the workforce develops the skills necessary for available jobs.



TAXATION

PRINCIPLE

Many taxes, especially those solely targeted at business, may have the effect of limiting potential growth in existing and new technology businesses. Policymakers should strive to institute tax policy that encourages existing businesses to expand; increases Arizona's competitiveness in business attraction, growth and retention; allows for a broad, stable tax base; and ensures similar businesses are treated fairly and equitably.

POSITIONS

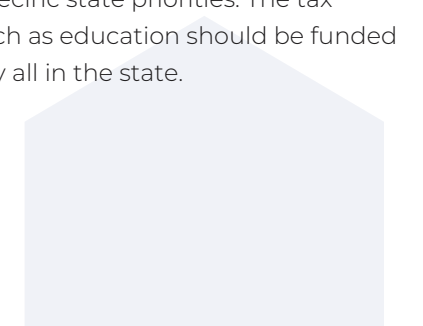
Business Property Tax – Pursue the eventual equalization of business and residential property taxes. Although Arizona has begun to reduce business property tax assessment ratios, businesses still faced property tax assessment ratios 80% greater than those of residential property owners.

Capital Gains – Increase the current capital gain deduction from 25% to 57% to help reduce the advantage enjoyed by other states that have tax systems more closely aligned with the federal government. In most instances, Arizona's tax system conforms with or closely mirrors that of the federal government except in capital gains.

Data Centers – Protect Arizona's tax advantages in the exemptions given to promote the retention and expansion of enterprise and colocation data centers, and continue to promote all levels of data center activity, including the migration of technology centers to Arizona.

Modernize Tax Code – Promote modifications in the tax code that reflect changing technologies and how products and systems are taxed. Special emphasis should be placed on software and hardware development, as well as digital goods and services that enable the Arizona tax code to remain updated with innovations in the marketplace.

Small Business Taxation – Promote a tax code that does not place an undue burden on small businesses to pay for specific state priorities. The tax structure should be fair, and priorities such as education should be funded through a reliable tax base and shared by all in the state.



TRANSPORTATION/DIGITAL INFRASTRUCTURE

PRINCIPLE

Arizona citizens benefit from improving safety, enhancing mobility, reducing travel time and bolstering commercial opportunities through multimodal corridors linking the state to Mexico, Canada, the Intermountain West and neighboring states. The corridors should include roadways and telecommunications pathways coupled with rail and energy rights-of-way when appropriate. Digital infrastructure is to the 21st century what roads and interstates were to the 20th century. Arizona's ability to sustain long-term growth depends on the ability to link citizens, businesses and institutions via high-capacity broadband, and transform and improve society through information technology and communications.

POSITIONS

Support Expansion and Retention of the Data Center Industry – Continue to support and evolve a business-friendly operating environment and economic development programs to further Arizona's data center attractiveness and growth. The advantageous operating environment promotes the retention and expansion of enterprise and colocation data centers, which has contributed to unprecedented growth in existing and planned data center inventory. Other favorable factors include affordable and robust power with renewable options, excellent weather, a lack of natural disasters, good workforce availability and diverse broadband access. Advances in 5G, IoT, autonomous vehicles, smart cities, artificial intelligence, distributed ledger technology, augmented reality and rich mobile-content delivery will drive edge-computing deployment and massive growth in data center computational and storage capabilities.



Broadband Regulatory Reform and Support Policies – Remove or reduce barriers generating unnecessary costs or delays and otherwise inhibiting expansion of privately funded, high-speed broadband infrastructure that meets the needs of all Arizonans. Broadband need not only be available but must also be robust, redundant and affordable to meet the critical requirements of telemedicine, rural community economic development, business operations, workforce attraction and retention, and public safety. Proactively coordinate with government at all levels to ensure rights of way are readily and affordably available, and support fair and predictable government permitting and oversight across jurisdictions to encourage private broadband investment and deployment.

Continue to ease regulatory burdens and simplify processes for deployment of wireless sites and vertical infrastructure, including micro-cellular transceivers and distributed access systems (DAS) for necessary densification, in light of the ever-increasing need for mobile connectivity, 5G infrastructure demands and other advanced wireless services. Overall, the policy for broadband should be pragmatic and recognize its unique economics: high fixed costs, spillover effects and modularity along with rapid technological change.

State Government Broadband Planning and Initiatives – Ensure a level playing field for incumbent and new entrant broadband providers. Ease the use of electric grid infrastructure and associated right-of-way by major utilities, as well as by electric cooperatives to enable and incentivize increasing use for fiber deployment. Develop a statewide strategy to enable Arizona communities, education institutions and nonprofit organizations access to Digital Equity/Digital Divide funding opportunities through the Federal Reserve Community Reinvestment Act. Ensure the Arizona State Land Department has fair valuation of right-of-way costs, and the Bureau of Land Management, Bureau of Reclamation, and other regional, state, federal and tribal landowners have timely and reasonable permitting processes. Advance and keep current prior broadband mapping capabilities to track current broadband coverage, detail community anchor institutions, and make the data available to the public through the AZGEO Clearinghouse and open sourcing.

The Arizona Technology Council will work with the Arizona Commerce Authority's (ACA) director of broadband, the Governor's Office, and Arizona Department of Administration to help implement their strategic plan for broadband deployment to rural areas, and help drive regional and local government policies that encourage investment including access to the use of right-of-way, infrastructure undergrounding requirements, mobile infrastructure expansion and expedited/blanket building permit issuance. The ACA and the state should continue recent broadband strategic planning efforts engaging providers, communities, institutions and other stakeholders to generate actionable strategies and develop specific broadband initiatives while managing and overseeing the statewide expansion of broadband. The ACA should support regional and local governments in their planning efforts, identify opportunities for increased private broadband investment and deployment, and encourage public-private partnerships where advantageous.

ACA and Other Broadband Grants and Their Leveraging – Award grants to local partnerships or ventures with clear and achievable plans to improve broadband services in one or more unserved or underserved rural areas while providing for community assessments or technical designs, matching funds for federal or other grants, or specific project implementation investments. The ACA will administer \$3 million this year to provide matching funds to offset planning and construction costs for expanding broadband services in unserved and underserved rural areas across the state. The ACA should track grant-supported projects and their success, seeking to expand and sustain the broadband grant program going forward.

As the special FCC E-rate program for rural infrastructure builds winds down, the ACA's director of broadband should help coordinate, maximize and leverage the use of E-rate funding alongside the Arizona Department of Education and State Libraries to bring broadband services to the many rural schools and libraries with unresolved broadband issues along with their surrounding communities to serve rural residences, businesses, local governments, health care facilities and public safety. ACA should act as a clearinghouse to identify and line up complementary broadband grants and other financial support. It also should cultivate public-private partnerships working towards an overall broadband infrastructure approach that meets the full range of needs for all rural communities in the most cost-effective manner, including policies and practices encouraging competition from multiple service providers in each community.

TRANSPORTATION/DIGITAL INFRASTRUCTURE (CONTINUED)

Arizona's Communities Role in Broadband – Activate broadband action teams to encourage local broadband deployment through streamlined and consistent processes for right of way use, planning and permitting to align with neighboring and municipal best practices from around the nation. Rural leaders must engage and incorporate all interested parties, including service providers, governments of different jurisdictions, residents, business owners, utility service providers, landowners, and other key parties to commit to and achieve common broadband goals. The Council supports the Arizona Broadband Stakeholder Network as it facilitates opportunities for collaboration, coordination, information sharing and communication among key public, private and nonprofit stakeholders.

Digital Government Best Practices – Adopt digital-government best practices for internal operations and delivery of citizen services while driving the increased use and adoption of high-capacity digital connectivity and technologies across major application sectors, including education, health care, public safety, e-commerce, e-government, remote work, and mobile enablement. State, local and tribal government should continue to migrate to cloud services and use infrastructure, platform and software as a service (SaaS) offerings to provide staff and operational efficiencies at lower cost while ensuring reasonable cybersecurity and data privacy protections are in place.

National Public Safety Broadband Network – Leverage new FirstNet-driven infrastructure improvements, including fiber extensions, tower construction and small cell deployment to facilitate broadband expansion in rural communities. The National Public Safety Broadband Network, more commonly known as FirstNet, was approved by all U.S. states and territories to provide interoperable public safety communications for first responders. The Council supports policies for cost-effective and timely FirstNet deployment through easing regulatory requirements such as permitting and right-of-way access, as well as broad adoption by public safety agencies to provide extended benefits to rural Arizona.

Modern Surface Transportation System – Support modernization of the state's transportation infrastructure to improve mobility, move freight to

market faster and advance international trade. The upgraded system should include federal and state funding for Interstate 11, which will enhance the state's connectivity by linking Phoenix and Las Vegas. I-11 should be extended south of Phoenix to create an important international freight corridor between Mexico and the Intermountain West. Modernize and add capacity to existing infrastructure through continuous improvements critical to keeping these key corridors fully functional. Encourage multimodal linkages with rail, telecommunications, and energy rights of way and facilities. Modernization should also include technology upgrades to support smart transportation systems and vehicles.

Intelligent Transportation – Use intelligent transportation systems (ITS) to help manage surface transportation traffic, maximize existing infrastructure, and minimize congestion and incidents. The general lack of transportation funding, however, will limit Arizona's opportunity to take maximum advantage of these new and improving technologies since funds to support ITS are generally from the same revenue streams as those that fund construction.

Transit – Support transit-related systems and development to enrich the quality of life for Arizona residents and visitors, reduce traffic congestion, improve air quality, and provide enhanced workforce mobility.

Vehicular Technologies – Continue to support a flexible and competitive environment for the testing and deployment of autonomous automobiles and other vehicular technologies in the state—particularly the Institute of Automated Mobility—to help make roads safer, increase mobility and establish Arizona as a test bed for many emerging technologies.

Transportation Funding Formula – Support reforming the formula to improve transportation funding needs across the state. The current formula is nearly 30 years old and today provides a fraction of the funding level originally intended. Rural communities and the highways connecting Arizona to the world outside of the urban areas have been particularly hit hard by the lack of a modern funding formula. The deteriorating condition of major highways indicates the lack of adequate funding to maintain and expand major corridors.

Arizona Ports of Entry – Focus on encouraging both infrastructure investments and process improvement for Arizona’s ports of entry along the southern border to better enable and optimize commercial transportation logistics. Despite being critical links, the ports of entry are frequent bottlenecks for smooth and timely logistics of cross-border transportation of goods. To help, the state should encourage:

- ▶ **Targeted Funding** – Identify funding streams to support the development and modernization of border infrastructure, particularly at our ports of entry. While there is a big push for the Donations Acceptance Program to support infrastructure needs at ports of entry, it is structured so U.S. Customs and Border Protection simply receives the contributions and excuses the federal government from its responsibilities at the border. The program should be more of a public-private partnership, not necessarily focused on donations or a fee structure, which discriminate against smaller ports in smaller communities.
- ▶ **Additional Staffing** – Fulfill the need for additional staffing desperately needed at our ports of entry. For Arizona, that means a full-time equivalent vacancy rate of 20%, or approximately 250 funded positions. U.S. Customs and Border Protection is unable to fill positions due to a burdensome vetting process and a polygraph test exceeding the standards of the U.S. Drug Enforcement Administration, CIA and FBI. It is impossible to ask for new positions until the current vacancies are filled. Support and promote efforts such as the Border Jobs for Veterans Act, which has created a mechanism for military to transition into these enforcement jobs.
- ▶ **Promote Border Jobs for Veterans Act** – Work with U.S. Customs and Border Protection and the U.S. Department of Defense to create a streamlined process for veterans to apply for Customs and Border Protection positions. The Border Jobs for Veterans Act has created a mechanism for military to transition into these enforcement jobs but the program is not well known and needs ongoing support and promotion. Veterans have the training and skills that make them ideal candidates for these jobs.

- ▶ **Access to Capital** – Provide border-based businesses with access to needed capital. Much has been made of the border flight by the three biggest U.S. banks—Chase, Bank of America and Wells Fargo, respectively—leaving many border-based businesses without access to working capital and lines of credit.
- ▶ **Recognition as Assets** – Recognize the U.S. border and ports of entry as valuable assets essential to the national and North American economies. Attention to the border as an economic engine provides the opportunity for investment, job creation and economic security.



TRANSPORTATION/DIGITAL INFRASTRUCTURE (CONTINUED)

- ▶ US-Mexico-Canada Agreement (USMCA) – Encourage Congress to support the ratification of the USMCA. An update to the North American Free Trade Agreement, the USMCA would enable the continued growth of U.S.-Mexico trade. According to the U.S. Census, the U.S. and Mexico traded \$309 billion worth of goods—just over 15% of all U.S. trade—in the first six months of 2019.
- ▶ Process Improvements – Continue to improve processes related to commercial carriers. For example, Unified Cargo Processing, which enables U.S. and Mexican customs inspectors to work side by side on the inspections process, has revolutionized the border. Launched in Arizona, the joint inspection program has drastically reduced time to cross the border. Similar improvements such as more collaborative truck inspections processes between Arizona Department of Transportation and federal authorities can reduce the need for physical infrastructure and improve crossing times.

Long-term planning – Work with executive and legislative leadership, as well as other key stakeholders, to develop long-term improvements in transportation funding, including consideration of fuel tax, license renewal fees, locally generated sales tax initiatives, public-private partnerships, and other components of a funding package.



UNIVERSITIES AND HIGHER EDUCATION

PRINCIPLE

The Arizona Technology Council actively works to support Arizona's universities and improve the technology infrastructure upon which they rely. Its members and the state rely heavily upon Arizona's universities and community colleges to provide a highly skilled and talented workforce.

In addition, the universities provide a world-class platform for research and development, which can be translated into commercial opportunities that include the transfer of technology to Arizona's private sector. The universities engage the communities throughout the state and rely upon technology to provide education, research and other valuable community services.

POSITIONS

Stable Funding, Enhanced Flexibility – Collaborate with the Arizona Board of Regents and the public universities to build upon the existing strengths of the university system and ensure world-class research capabilities, access for qualified students and excellent workforce preparation. Support the universities' state budget requests and legislative priorities, secure the state's financial relationship with the university system as one that is based on per resident student funding, and obtain support for critical capital.

Enterprise Model – Support an enterprise model of operations, which recognizes and advances each university and its differentiated mission. Allow the university system to negotiate its own health benefits to ensure it is only paying proportionally for its share of the state benefits plan.

Sun Corridor Network – Encourage policies to enable the Sun Corridor Network, the Arizona universities' research and education collaborative network, to flourish. A robust Sun Corridor Network enables discovery, innovation, and research outcomes among postsecondary researchers and educators. This infrastructure is critical to attracting world-class researchers and research funding to Arizona. A future-proofed K-20 education technology infrastructure is essential to enable modern digital-learning technologies and methods necessary for a workforce equipped for the knowledge-based economy.

Support the network's public-private partnership strategy to bring high bandwidth access to Internet2—the national education/research network and community—and the commercial Internet to the Arizona K-20 community. Support the network's leadership and participation in the Interstate 40 Corridor Project and other regional collaborations along with regional partners from California, Colorado, New Mexico, Nevada and Utah. This will facilitate establishment of new public-private partnerships that lead to the improvement of rural broadband network capacity and availability across the region, as well as improved regional research collaborations. Successful rollout of these strategies will enable the network and its member universities—Arizona State University, The University of Arizona and Northern Arizona University—to bring better and lower-cost Internet and Internet2 access to K-12 schools, community colleges, universities, tribal nations, government entities and other institutions by leveraging economies of scale and shared infrastructure while driving better broadband availability for all. Support the network's National Science Foundation grant-funded efforts to interconnect Arizona's community colleges in support of joint science-research drivers and STEM education initiatives.



ARIZONA TECHNOLOGY COUNCIL 2020 STATE LEGISLATIVE PRIORITIES

- ▶ Ensure proven economic development programs such as the Angel Investment Tax Credit and current levels of the Research and Development Tax Credit are reauthorized past their sunset dates of 2021.
- ▶ Obtain state support of \$3 million annually for five years to cultivate a statewide Arizona STEM ecosystem. Focus on long-term, shared, sustainable and flexible STEM missions that bridge, integrate and strengthen the learning opportunities offered by organizations across sectors instead of isolated, independent entities. This will result in expansion of STEM business and education opportunities throughout rural and urban Arizona communities, fueling a strong, diverse talent pipeline prepared to meet the state's anticipated growth.
- ▶ Consistently and sustainably fund the state's education system, including pre-K, K-12, career and technical education (CTE), equitable access to dual enrollment, and postsecondary programs.
- ▶ Support Arizona tax system improvements to strengthen competitiveness, fairness and predictability, specifically establishing statutory clarification on taxation of digital goods and services.

ARTIFICIAL INTELLIGENCE

PRINCIPLE

Artificial Intelligence (AI), computerized systems that perform tasks we normally associate with people, is science fiction no more. It is commonplace — think talk-to-text, web searches, photo tagging or fraud detection — growing and becoming increasingly sophisticated. AI can be applied in ways that help society tackle some of its biggest problems. It can be harnessed to make driving safer and medical diagnoses more accurate, fight human trafficking, counter cyberattacks, unleash scientific discovery, enable farmers to increase crop yields, help investors maximize returns, and help athletes prevent injury. Moreover, AI will augment human abilities in ways that increase productivity, which will foster widescale economic progress.

At the same time, AI will present new ethical challenges and automate broad categories of jobs, which will cause fundamental shifts in the ways people live and work. To make sure we can harness all of AI's benefits while easing any negative impacts, governments must pursue policies that enable the continued development of AI technologies, mitigate any impacts from increased automation, and protect individual rights and freedoms.

POSITIONS

Foster Innovation and Open Development – To better understand the impact of AI and explore the broad diversity of its implementations, public policy should encourage investment in AI research and development (R&D). Governments should support the controlled testing of AI systems to help industry, academia and other stakeholders improve the technology.

- ▶ **Fuel AI innovation** – Public policy should promote investment, make available funds for R&D, and address barriers to AI development and adoption.
- ▶ **Address Global Societal Challenges** – AI-powered flagship initiatives should be funded to find solutions to the world's greatest challenges such as curing cancer, ensuring food security, controlling climate change and achieving inclusive economic growth.

- ▶ **Allow for Experimentation** – Governments should create the conditions necessary for the controlled testing and experimentation of AI in the real world, such as designating self-driving test sites in cities.
- ▶ **Prepare a Workforce for AI** – Governments should create incentives for students to pursue courses of study that will allow them to create the next generation of AI.
- ▶ **Lead by Example** – Governments should lead the way on demonstrating the applications of AI in its interactions with citizens and invest sufficiently in infrastructure to support and deliver AI-based services.
- ▶ **Partnering for AI** – Governments should partner with industry, academia and other stakeholders for the promotion of AI and debate ways to maximize its benefits for the economy.

Create New Human Employment Opportunities and Protect People's Welfare – AI will change the way people work. Public policy in support of adding skills to the workforce and promoting employment across different sectors should enhance employment opportunities while also protecting people's welfare.

- ▶ **Encouraging Human Employment** – Governments should implement programs to mitigate AI's impact on jobs and devise policies that promote employment. These programs should particularly focus on the effectiveness of incentives in government funded infrastructure projects.
- ▶ **Retraining** – Governments should implement policies that support the upskilling and reskilling of the workforce. This is particularly true in job areas that are less likely to be automated, such as positions focused on person-to-person interaction and “guided computation” in which individuals direct and oversee the operation of the technology.

ARTIFICIAL INTELLIGENCE (CONTINUED)

Liberate Data Responsibly – AI is powered by access to data. Machine learning algorithms improve by analyzing more data over time. Data access is imperative to achieve more enhanced AI model development and training. Removing barriers to the access of data will help machine learning and deep learning reach their full potential.

- ▶ **Keep Data Moving** – Governments should eliminate unwarranted data localization mandates and enable secure international data transfers through international agreements and legal tools.
- ▶ **Open Public Data** – While protecting privacy, governments should make useful datasets publicly available when appropriate, and provide guidance to startups and small and medium businesses for its reuse.
- ▶ **Support the Creation of Reliable Datasets to Test Algorithms** – Governments should explore non-regulatory methods to encourage the development of testing datasets.
- ▶ **Federate Access to Data** – Governments should partner with industry to promote AI tools to access encrypted data for analysis while not requiring transfer of the data.

Rethink Privacy – Privacy approaches like the Fair Information Practice Principles and Privacy by Design have withstood the test of time and the evolution of new technology. But with innovation, we have had to rethink how we apply these models to new technology.

- ▶ **Adopt Robust Privacy Laws** – Based on the Organization for Economic Co-operation and Development (OECD) Fair Information Practice Principles.
- ▶ **Implement Privacy by Design** – Rethink privacy approaches to implement Privacy by Design into AI product and project development.
- ▶ **Keep Data Secure** – Policies should help enable cutting-edge AI technology with robust cyber and physical security to mitigate risks of attacks and promote trust from society.
- ▶ **It Takes Data for AI to Protect Data** – Governments should adopt policies to reduce barriers to the sharing of data for cybersecurity purposes.

Require Accountability for Ethical Design and Implementation – The social implications of computing have grown and will continue to expand as more people have access to implementations of AI. Public policy should work to identify and mitigate discrimination caused by the use of AI and encourage designing in protections against these harms.

- ▶ **Standing for Accountable Artificial Intelligence** – Governments, industry and academia should apply the Information Accountability Foundation's principles to AI. Organizations implementing AI solutions should be able to demonstrate to regulators that they have the right processes, policies and resources in place to meet those principles.
- ▶ **Transparent Decisions** – Governments should determine which AI implementations require algorithm explainability to mitigate discrimination and harm to individuals.

As AI continues to advance and become increasingly deployed and utilized, these principles and recommendations will continue to evolve. This is just the first step towards the Arizona Technology Council engaging in AI policy discussions with governments and other organizations regionally and nationally.





CYBERSECURITY

PRINCIPLE

Cybersecurity with resilience is a key priority at the global, federal, state and local levels. As our world grows increasingly interconnected and the functions of our governments, businesses and lives increasingly rely on connected systems, managing risk and building trust are essential. To that end, the Council supports a risk-based approach to cybersecurity policy that is rooted in partnership between public and private organizations and across sectors. We support frameworks that help entities identify, manage and communicate risk to foster a more resilient cyber ecosystem while enabling and incentivizing organizations to innovate cybersecurity solutions moving forward.

POSITIONS

Supply Chain Security – The Council supports U.S. government efforts to enhance the security and reliability of domestic networks through open and transparent partnership with the private sector.

- ▶ Executive order
- ▶ Federal Acquisition Security Council / U.S. Department of Homeland Security's Information and Communications Technology Supply Chain Risk Management Task Force
- ▶ Legislation (e.g., United States 5G Leadership Act of 2019)
- ▶ U.S. Department of Defense Cybersecurity Maturity Model Certification — circulate draft, track, schedule briefing

IoT Cybersecurity – The Council supports the development of a flexible, stackable baseline of IoT security requirements to be built upon and tailored to fit individual ecosystem needs and evolve as technology progresses.

- ▶ Support passage of the IoT Cybersecurity Improvement Act.
- ▶ Support development of the National Institute of Standards and Technology Core Cybersecurity Feature Baseline for Securable IoT Devices (NISTIR 8259) and C2 Consensus on IoT Security Baseline Capabilities.
- ▶ Support coordination with the Federal Trade Commission to deem conformance with the NIST baseline presumptively reasonable.
- ▶ Support international harmonization of IoT security practices.

5G Security – The Council supports rapid deployment of 5G infrastructure utilizing trusted sources of supply.

- ▶ Certified Information Systems Auditor strategic risk management
- ▶ Communications Security, Reliability, and Interoperability Council guidance on network security and reliability
- ▶ National Security Telecommunications Advisory Committee 5G and supply chain

Other

- ▶ Incentives and investment for cybersecurity R&D
- ▶ Monitoring European Union Agency for Cybersecurity

FINANCIAL TECHNOLOGY

PRINCIPLE

Distributed ledger technology (DLT), otherwise known as blockchain, is perhaps the most talked about yet most misunderstood emerging technology in the world today. Since its inception, secure DLT has widely been viewed through the lens of virtual currencies, particularly the hype surrounding the buying and trading of Bitcoin and other digital coin offerings. Indeed, surveys have shown that consumers are largely aware of what Bitcoin is but do not know about or understand the blockchain technology that powers it.

Blockchain has the potential to revolutionize many sectors of the U.S economy if the proper legislative and regulatory measures are taken to enable and foster its development. The technology brings significant efficiencies to not only currency and financial transactions but also asset ledgers, global supply chains, IoT data collection and decentralized social networking.

POSITIONS

The Arizona Technology Council suggests policymakers consider developing policies and regulatory structures for fintech and blockchain environments that encourage developers and market participants to continue innovating and providing solutions that will aid the public sector in achieving its mission and goals. To do so, policymakers should understand the promise, the uses and the questions that blockchain currently presents. The Council supports:

Securities Law Clarification – The linchpin for tokenized projects in the United States is the application of federal securities law to token sales. Initial coin offerings (ICOs) have arisen as forms of crowdfunding for blockchain projects through the sale of digital tokens, many without adherence to federal securities law. But if conducted properly, ICOs are



legitimate forms of crowdfunding. Additionally, not all initial token sales are ICOs but merely a means of getting a new good or service to the market. Unfortunately, the Framework for “Investment Contract” Analysis of Digital Assets issued by the U.S. Securities and Exchange Commission (SEC) in spring 2019 did little to clarify the circumstances in which a token sale will be treated by the agency as a security offering. While some in Congress have recognized that our antiquated securities laws simply do not fit the modern-day use of digital assets, little has been done to provide the legislative clarity the industry is desperately seeking. In the absence of such clarity, many innovators have left U.S. markets to launch their projects overseas.

Congress, the SEC and other financial regulators should work with stakeholders to create a responsible framework for regulating ICOs, as well as non-security token sales.

Regulatory Sandboxes – Following on the heels of Arizona’s groundbreaking Fintech Regulatory Sandbox, regulatory sandbox proposals have been introduced or enacted in 11 states. In addition, the Consumer Fraud Protection Bureau launched a sandbox for businesses subject to its regulations and the District of Columbia established the Financial Services Regulatory Sandbox and Innovation Council. The Council encourages additional state and federal blockchain and emerging technology regulatory sandboxes to reduce barriers to technological innovation, and create an agile environment for the testing and offering of fintech and blockchain applications. By fostering innovation, the U.S. can keep pace in dynamic international markets and develop many new use cases. Federal agencies should issue broad regulatory waivers for state sandbox participants and exemptions for transactions occurring within state regulatory sandboxes, exerting a light regulatory touch on nascent state blockchain initiatives. We also encourage adoption of an agency wide federal sandbox so innovators can take full advantage of this testing model nationwide and internationally, ensuring legal and regulatory reciprocity between participating jurisdictions.

Creation of a Federal Blockchain Stakeholders Working Group – The Council along with CompTIA and a broad coalition of national state, and regional technology councils strongly support the Blockchain Promotion Act of 2019 (H.R. 1361/S. 553) and urge Congress to pass this important legislation directing the U.S. Department of Commerce to establish a blockchain working group that recommends a consensus-based definition of the technology. The working group also would develop recommendations for the National Telecommunications and Information Administration and Federal Communications Commission to examine marketplace opportunities; support of current and future security requirements, standards and interoperability; and the potential impact of blockchain on spectrum policy, as well as promote the adoption of blockchain to promote efficiencies within the federal government.

Blockchain Pilot Toolkit – The Council recommends a relevant national trade organization champion the development and use of a pilot toolkit, providing standardized, effective methods to help incorporate blockchain technology in business processes and products. When considering the creation of such a toolkit, the focus should be on:

- ▶ Reasons why your organization would need blockchain.
- ▶ Workings of the blockchain protocol and technological framework options.
- ▶ Your organization’s information technology environment and product offerings.
- ▶ How to develop sophisticated applications with open source toolkits and resources.

Federal Government Records – Federal agencies and Congress should examine utilizing blockchain for the management and storage of government records for cost, efficiency and security considerations. Trials and pilots should be initiated to develop capabilities, gauge future direction and, when appropriate, inaugurate full-scale initiatives.

DATA BREACH NOTIFICATION

PRINCIPLE

There is currently no national standard for how a company must notify its customers in the wake of a data breach. Instead, companies must navigate a complex web of different, often conflicting, regularly changing notification laws for each state in the aftermath of a breach. With the increasingly mobile and decentralized nature of our economy, data storage and dissemination technologies, it can be nearly impossible for companies to determine which state laws apply when a breach occurs. The current regulatory landscape not only places an immense financial compliance burden on businesses but also delays the process of getting information into the hands of those who need it most: customers whose data was compromised.

POSITIONS

A national standard for data breach notification would provide consumers and businesses with consistency and predictability on how consumer notice must be provided. Until Congress passes a national standard, the Arizona Technology Council and its membership continue to advocate for the following in breach notice bills:

“Harm” Trigger for Acquired Data – The notification requirement should be triggered when there is a real risk of actual harm, not a theoretical concept that could lead to excessive notification about data breaches that really aren’t harmful.

No Private Right of Action – Individuals should not be able to sue companies that have suffered a data breach for actions covered by federal data security and data breach notification laws. Businesses that have suffered breaches are victims of criminal activity.

Narrow Definition of “Personal Information” – To avoid excessive notification of consumers and unnecessary costs, the definition of “personal information” in the legislation should not include information accessible through public records. For example, merely the combination of a name, address and birthdate should not qualify as personal information.

Preemption of State Laws – Any federal data security and data breach notification law should preempt state laws and requirements. Without strong preemption language, the compliance burden for small businesses would not be alleviated and the effectiveness of any law would be significantly undermined.

Exemption for Use of Technology that Renders Data Unusable or Unreadable Federal legislation should include an exemption from notification requirements for companies that utilize technologies to render data unusable or unreadable. This exemption should be technology-neutral.

Limits on Financial Penalties – Massive financial penalties are unwarranted and could force small businesses out of existence. Penalties should be reasonable and consider the size of the company that suffered the breach and the type of data accessed.

No Fixed Data Security Requirements – Data security requirements should not be specifically enumerated within the legislation. Benchmark security standards of today may become outdated over time, requiring companies to possibly maintain outdated systems because of government mandate.



DIGITAL GOODS AND SERVICES

PRINCIPLE

According to recent data, 88% of Americans are using the Internet and over 200 million internet users will make an online purchase this year alone. The digital economy continues to play a strong role in both the growth of the Internet and the ability for businesses to better deliver digital goods and services.

Given the importance of the digital economy to the Arizona Technology Council's member companies and the need to ensure we can continue to foster innovation and economic growth within this sector, the Council strongly supports the Digital Goods and Services Tax Fairness Act. This legislation will prevent hurdles to growth and create a much-needed tax framework that will provide certainty to consumers, providers and state/local governments while preventing duplicative and discriminatory taxes.

The Council opposes taxes on digital products. However, for those jurisdictions that have opted to impose these taxes, we recognize the need to provide consistency and simplicity across state borders. There should never be a situation when multiple jurisdictions can tax the same digital good or service, and a framework must be established to ensure that a single purchase is sourced in one state, not multiple states.

POSITIONS

The Council supports legislation such as the Digital Goods and Services Tax Fairness Act. This legislation would provide consistency in determining which jurisdiction can tax a transaction (at the appropriate sales tax rate) and prohibit unfair and unrelated discriminatory taxes. While the Council opposes taxes on digital products, we do support legislation that would provide consistent treatment across state lines when digital products are taxed by state or local jurisdictions. The Digital Goods and Services Tax Fairness Act addresses our concerns by accomplishing two key objectives:

- The legislation sources the purchase of a digital good or service to the consumer's home address, not the location of the consumer at the time of downloading a product or the location of the server. Therefore, only

one state would have the ability to tax the transaction — if that state chose to do so. Congress took a similar approach in 2000 when it passed the Mobile Telecom Sourcing Act, which essentially sourced wireless and mobile telecommunications services to the consumer's home address to eliminate confusion around which taxing jurisdiction had the right to tax wireless services.

- The legislation would prohibit discriminatory taxes. If a state decides to tax a downloadable song, for example, the rate should be the same as if that same song was purchased in a "brick and mortar" store. Prohibiting discriminatory taxes simply brings parity between digital products and their tangible counterparts.

Consistent with our support for the Digital Goods and Services Tax Fairness Act, the Council calls on states to reject new taxes on electronically transferred digital products and electronically delivered services such as data processing, hosting and related services. Such a broad expansion of the sales tax base to include electronically transferred goods and services, particularly those that are actually business inputs, is bad public policy and will result in multiple and discriminatory taxation.



IMMIGRATION REFORM

PRINCIPLE

Our current immigration system is broken and causing the United States to lag behind in a competitive global marketplace for talent. By not addressing the failings of our immigration system, we are threatening our future productivity, ingenuity and the competitiveness of key sectors of our economy, including and especially technology.

POSITIONS

Increase Green Cards for High-Skilled STEM Graduates – The Arizona Technology Council supports increased access to permanent resident, or green, cards for high-skilled STEM graduates by expanding the exemptions and eliminating the annual per country limits for employment-based cards.

Create New Visas for U.S. Educated Students and Entrepreneurs – These new visas will help fill the thousands of IT-related jobs currently open, furthering opportunities for starting and growing new businesses in the United States.

Market-Based Visa Caps – Using market-based caps on H1B visas are the best way to adjust to the supply and demand in the U.S. economy.

Growing Domestic Sources of Talent – The Council, our member companies and our affiliated Creating IT Futures Foundation are strongly committed to improving U.S. science, technology, engineering and mathematics (STEM) education and encouraging more young Americans to choose careers in those fields. Key to that effort is encouraging federal, state and local investment in STEM curriculum for students from kindergarten through high school with a structured pipeline to higher education. The Council is uniquely positioned at the intersection of innovation, education and economic growth. We support policies that expand lifelong education and promote a skilled workforce that spurs job growth and our ability to compete globally. Quality education, worker training — and retraining — will help ensure the availability of a skilled and competitive workforce.



INTERNET OF THINGS

PRINCIPLE

The Internet of Things (IoT) is a series of smart devices connected to one another and to analytics and hosting platforms via the Internet. As IoT continues to grow, challenges and opportunities will arise. Central to the continued growth of IoT are policy principles that are transparent on privacy issues, highlight security in the IoT lifecycle, and stress open standards. The Arizona Technology Council urges policy makers and regulators to tread lightly in this space, which is still in an early stage of development, so innovation and the attendant societal benefits will continue to flourish.

POSITIONS

Regulatory and Legislative Moderation – The Council supports a federal strategy for IoT that harmonizes guidelines for IoT devices across all agencies and industries. To accomplish this, Congress must pass legislation that will direct one agency to lead the discussion. The Developing Innovation and Growing the Internet of Things (DIGIT) Act, for example, would place the Department of Commerce in this role. Congress should, however, avoid broad legislation regulating IoT, particularly regarding privacy and data security practices. We already have federal and state privacy and data security laws on the books and passing IoT-specific legislation will only serve to stifle innovation in a nascent industry. Instead, multi-stakeholder groups involving actors from government and industry should work together to develop guidelines and industry best practices in this space based on existing privacy and data security laws and frameworks. The Council supports both the National Telecommunications and Information Administration (NTIA) IoT security multi-stakeholder process as well as the National Institute of Standards and Technology's IoT Cybersecurity Framework.



Broadband – The Council supports deployment of a robust broadband infrastructure to support the IoT. To accomplish this, we need support from federal, state and local governments to assist in facilitating broadband deployment.

Spectrum – To support the growth in IoT devices, the Council believes the federal government needs to make more spectrum available for both licensed and unlicensed use without placing technology-specific restrictions on how it can be used.

Regulatory Sandboxes – To incentivize more IoT innovation and experimentation, companies need to be assured that the risk/reward balance is favorable. To help manage risk, drive economic development and develop a strong regulatory regime, the Council recommends the federal and state governments consider creating IoT regulatory sandboxes. These sandboxes would provide a set of pre-approved, published rules that allow companies to test their products and business models. The rules would help limit exposure and provide innovative best practices and steps for testing them.

Privacy and Data Security – Congress should avoid broad IoT-specific legislation regarding companies' privacy and data security practices. A number of federal and state privacy and data security laws and guidelines are already on the books and provide a sufficient framework to regulate IoT at this time. That said, industry can and should lead with respect to "design by security" and risk mitigation to provide businesses, government and citizens with maximum trust in IoT.

Standards – We support a multi-stakeholder approach for setting voluntary IoT standards for interoperability. We are concerned that without agreed-upon standards, we could encounter a problematic piecemeal regulatory approach that stifles innovation in the industry.

Research and Development – We support a federal government position that emphasizes research and development in the form of federal grants to help facilitate public-private partnerships. Of particular interest are grants focusing on cyber-related IoT R&D.

Governance – A key component of the federal IoT ecosystem is a well-structured governance model. Following the Senate's DIGIT Act, we support a governance structure led by the Department of Commerce that incorporates all federal agency stakeholders.

OFFICE OF TECHNOLOGY ASSESSMENT

PRINCIPLE

For more than 20 years, Congress had the Office of Technology Assessment (OTA), an independent, bipartisan agency set up to provide unbiased information on technology and its potential impacts. However, the agency in 1995 was defunded, stripping Congress of the ability to access unbiased technology advisors as we entered the digital age. Today, as Americans are feeling the effects of emerging technologies—including issues involving data privacy and artificial intelligence—we are experiencing the repercussions of the decision to defund this vital piece of the congressional support system.

The Arizona Technology Council believes introduction of the Office of Technology Assessment Improvement and Enhancement Act in the House is an important effort as Congress strives to understand and anticipate the potential benefits and effects of emerging technologies such as AI, facial recognition and quantum computing in the private and public sectors. The measure includes funding to restore the OTA. This would be money well-spent, enabling Congress to better address the opportunities and challenges of emerging technologies.

POSITIONS

The Council supports the bill's introducing improvements to the existing OTA statute (2 U.S. Code §472) that would:

Provide expertise with shorter turnaround times by:

- ▶ Adding language to emphasize information should be provided as expeditiously, effectively and efficiently as possible.
- ▶ Adding Congressional Research Service-style deliverables to the OTA's function and duties such as providing briefings, informal conversations and technical assistance to members on science and technology issues without the need for Technology Assessment Board review, as well as objective policy options when requested.

- ▶ Requiring preliminary findings of ongoing technology assessments in addition to completed analyses.

Serve all members of Congress by:

- ▶ Enabling any member to request a technology assessment to be considered by the board.
- ▶ Updating board appointment so members are appointed by bipartisan party leadership in each chamber.
- ▶ Directing the OTA to be as open and transparent with members about the review request process as possible.
- ▶ Requiring at least one annual Member Day.

Enhance transparency by:

- ▶ Updating existing language to require final reports of assessments be made publicly available whenever possible.
- ▶ Requiring an annual report on requests received, assessments completed and ongoing, and other activities.

Maintain the OTA's forward-looking and rigorous approach by:

- ▶ Introducing a rotator program to hire experts from academia and industry modeled after the National Science Foundation's rotator program.

Complement existing legislative branch agencies including the General Accounting Office's (GAO) new Science, Technology Assessment, and Analytics team by:

- ▶ Requiring coordination with the Congressional Research Service and GAO to avoid duplication or overlapping activities.

PRIVACY

PRINCIPLE

Economic expansion in technology rests on the creation of new and innovative business models that leverage trusted, secure and accessible internet-based platforms. The Arizona Technology Council supports data policies that promote responsible use of consumer data so the technology experience can continue to expand and improve.

POSITIONS

- ▶ Advocate for the enactment of comprehensive federal privacy legislation that preempts state privacy laws and protects consumer privacy without hampering innovation.
- ▶ Advocate for the protection of platform website hosts from the liability of content posted by their users through the continuation of Section 230 of the Communications Decency Act.
- ▶ Support a national standard for data breach notification so entities can focus on notification and resolving the breach instead of compliance with myriad conflicting laws.
- ▶ Support continued innovation in encryption technologies, and working with Congress and law enforcement to establish frameworks for securing data while exploring collaborative approaches that help law enforcement keep Americans safe.
- ▶ Advocate for data policies that allow for technological advancements in emerging areas like artificial intelligence (AI), biometric technologies and geolocation.
- ▶ Promote innovation through the responsible and ethical design and deployment of data in AI systems.
- ▶ Advocate for interoperability and even enforcement of the European Union General Data Protection Regulation and continued renewal of the EU-U.S. Privacy Shield.
- ▶ Advocate for global data approaches in key international markets that do not discriminate or create prohibitive regulatory requirements for technology companies.



FEDERAL GOVERNMENT INVESTMENT IN RESEARCH AND DEVELOPMENT

PRINCIPLE

We are living in an era where innovation, agility and imagination are all essential in order to keep pace with exponential technological transformation taking place in our society. In government, federal agencies are playing catch-up from years of underfunded research and development (R&D) impacted by economic constraints and sequestration while other nations have increased their public and private R&D investments at a faster rate. There is a longstanding notion that R&D is the backbone of a globally competitive, knowledge-driven economy. In 2010, economist Gary Becker stated that “modern economies are based on the command of knowledge and information.” It is essential that the U.S. sustains its investment in R&D.

Michael D. Griffin, the Under Secretary of Defense for Research and Engineering, has placed an emphasis on emerging technology with supporting R&D budget. Griffin stated, “The reality is that we live in a time of global access to technology and global access to scientific talent. It is no longer preeminently concentrated here in America. Innovation will remain important, always, but given this global dispersion of technology and talent, greater speed in translating technology into fielded capability is where we can achieve and maintain our technological edge.”

This is good news as the government invests and partners in programs and solutions for some of our greatest challenges, including cybersecurity, smart cities, big data, quantum computing, space exploration, health and medicine, blockchain, artificial intelligence, and the Internet of Things.

Continued R&D investment will help drive innovation and spur competitiveness.

POSITIONS

The Arizona Technology Council supports increases in R&D funding that support advancements in big data, cloud computing, high performance computing, automation, artificial intelligence, biometrics, blockchain technology and cybersecurity (as it relates to emerging technologies and services). In particular, we support increases to the following federal R&D budgets:

Networking and Information Technology Research and Development Program – NITRD is a federally funded program designed to increase coordination, productivity and effectiveness among federal agency R&D efforts in networking and IT. This program can be successful in helping to drive innovation as long as it has an adequate budget.

Defense Advanced Research Projects Agency – DARPA has helped drive innovation on a number of issues, including connected vehicles, spectrum, cybersecurity, the Internet of Things and blockchain technology.

National Labs and Federally Funded Research and Development Centers – FFRDCs are the nation’s R&D incubators and have compiled a treasure trove of technologies and applications for defense and the civilian interests. The benefits of the labs’ role include experienced capability in rapid prototyping of new technologies ready for transitioning, showcasing and commercialization.

Small Business Innovation Research Program – SBIR enables small businesses to explore their technological potential and provides the incentive to profit from its commercialization.



REFORM THE ELECTRONIC COMMUNICATIONS PRIVACY ACT

PRINCIPLE

The Electronic Communications Privacy Act (ECPA) was originally passed in 1986 when email and text messaging were still nascent technologies and deemed all stored electronic communications over 180 days old to be “abandoned.” Under ECPA, law enforcement and government agencies can acquire these abandoned emails and text messages from a service provider without a warrant but simply with a subpoena to obtain access. The House unanimously passed the Email Privacy Act, an ECPA reform bill, in both April 2016 and February 2017 but the bill has repeatedly stalled in the Senate Judiciary Committee and hasn’t received a floor vote.

POSITIONS

The ECPA must be reformed to require government agencies and law enforcement to obtain a warrant to compel service providers to disclose the contents of emails, text messages, and other private communications stored by a service provider.

Specifically, the Arizona Technology Council supports:

Congress Should Pass the Email Privacy Act as Passed by the House in 2017

The Email Privacy Act, which unanimously passed the House in February 2017, was the product of a carefully negotiated compromise between industry, public interest groups and House Judiciary Committee staff. Despite overwhelming support for the bill, several members of the Senate Judiciary Committee have continued to hold up the bill with unrelated amendments opposed by both industry and the public interest community. Congress should pass this bill in 2019.

No Civil Agency Exceptions – Some civil agencies such as the SEC have asked for an exception to the warrant requirement because they do not have the ability to issue warrants. Such an exception would destroy the benefits gained by ECPA reform. It would erode privacy by codifying new powers for civil agencies that they do not already have. Civil agencies can still get access to emails and texts by serving subpoenas on users, not service providers.

No Emergency Exception – Under current practice, the government may request digital content from providers by declaring an emergency situation. Providers then may decide whether to comply based on the circumstances. However, there has been a push to require providers to comply any time the government declares an emergency. This has dangerous potential for abuse. Service providers don’t want to be responsible for derailing criminal investigations but requiring compliance with “emergencies” means the government simply needs to declare an emergency to get the information it wants.



SMART CITIES AND COMMUNITIES

PRINCIPLE

While cities and communities are making progress toward improving living standards, and social and environmental sustainability, the impact can be limited by narrow project scopes and obsolete systems. Cities and communities can accelerate and enhance the results of their efforts by adopting a smart cities and communities approach with supporting technologies.

POSITIONS

Federal investment in smart cities and communities will help drive economic growth and innovation, create jobs, promote citizen services, and increase adoption of smart technology products and services. The Arizona Technology Council supports the Smart Cities and Communities Act of 2017, whose primary focus is to help coordinate the various federal agency smart city initiatives, as well as create a technology demonstration grant program. The Council also supports the Smart Technology for Resilient, Efficient, Economic and Reliable Transportation in Cities and Communities (STREET) Act that will provide grants to small and medium-sized cities on a competitive basis. In addition, we support the creation and focus of the Congressional Smart Cities Caucus.

Additional Background: Smart cities and communities use information and communications technology to enhance their livability, workability and sustainability. They collect information using sensors, devices and other systems, and send the data to analytics systems to understand what's happening now and what's likely to happen next.

Most cities greater than 750,000 in population have at least one but usually multiple smart city projects underway in one sector or another. But few cities and communities have comprehensive, long-term, integrated plans. In fact, there are only a handful of cities worldwide well on their way to a full adoption of smart cities technology in an integrated way across all sectors. Also, many of the real-world smart city examples are typically much larger or smaller than how we traditionally define cities. They're either occurring on a more regional basis or as small neighborhood-by-neighborhood projects.

There is vast potential to provide smart city and community benefits to a larger number of citizens and those advantages are immense. First is the potential to empower citizens, allowing access to unparalleled services provided by local government. These services — spanning several different sectors including transportation, energy, water management and public safety — have the potential to be transformational to the citizen while creating significant efficiencies for the city and community.

Another possibility is the creation of new jobs. As cities grow their smart technology and services capabilities, there are several emerging employment opportunity sectors:

- ▶ **Infrastructure** – Cities will need to have large teams to help deploy the vast array of sensors that will constitute the Internet of Things (IoT) smart city and community ecosystem.
- ▶ **Cybersecurity** – With Internet-connected sensors, best-in-class cybersecurity solutions and applications are absolute necessities. A well-trained workforce will need to implement the cyber solutions across the infrastructure ecosystem.
- ▶ **Analytics** – An immense amount of data coming from IoT sensors will need to be analyzed. City governments will need to beef up their analytical capabilities to ensure their citizens gain the most benefits from the analyses.



FREE UP SPECTRUM FOR INNOVATION, RURAL BROADBAND, 5G AND IOT

PRINCIPLE

Wireless broadband use has skyrocketed in recent years, and demand for wireless data is expected to continue to grow exponentially in the coming years. Wireless speeds also are increasing, and in some rural areas, wireless broadband may be a better long-term solution to broadband access than wireline. However, there simply is not enough available spectrum to meet this coming demand, even as unlicensed spectrum begins to carry more and more of the wireless traffic. The growth of the IoT market is creating even more demand for data, and the number of IoT devices in use will continue to increase. 5G networks also will require use of a variety of different spectrum bands, combining low-, mid- and high-band spectrum.

Auctioning more spectrum licenses alone cannot meet the ever-growing demand for data. Unlicensed spectrum is an essential complement to licensed spectrum. As Congress, the Federal Communications Commission (FCC) and NTIA work to make new spectrum bands available for wireless use, some bands simply cannot be cleared and auctioned. Instead, they are usable only when shared with incumbent users in an unlicensed capacity. Unlicensed spectrum can be used for Wi-Fi, Bluetooth, offloading wireless traffic, and providing broadband in rural areas. It also allows companies that cannot afford to purchase spectrum licenses to use spectrum in new, innovative ways.

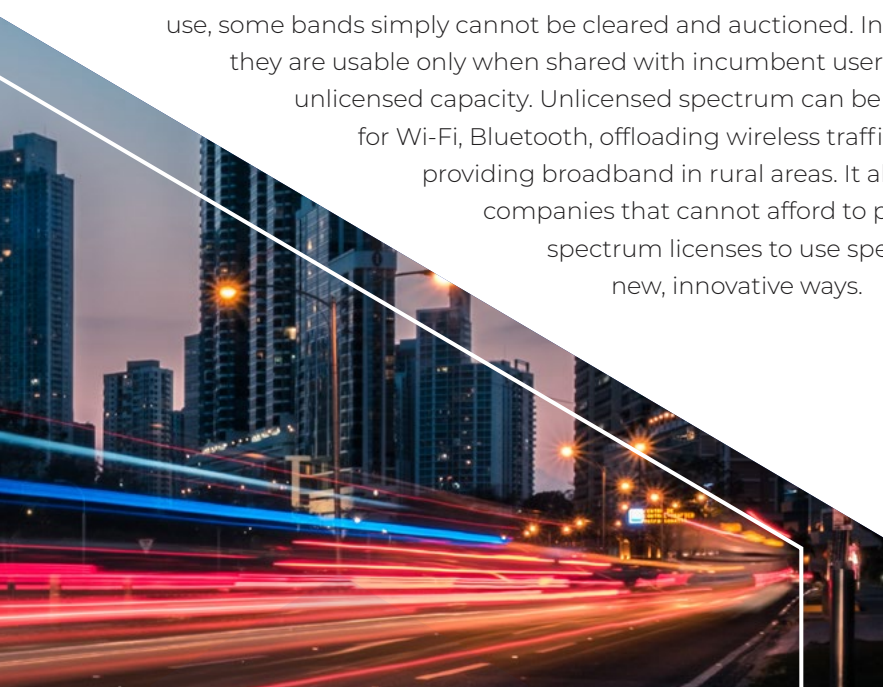
POSITIONS

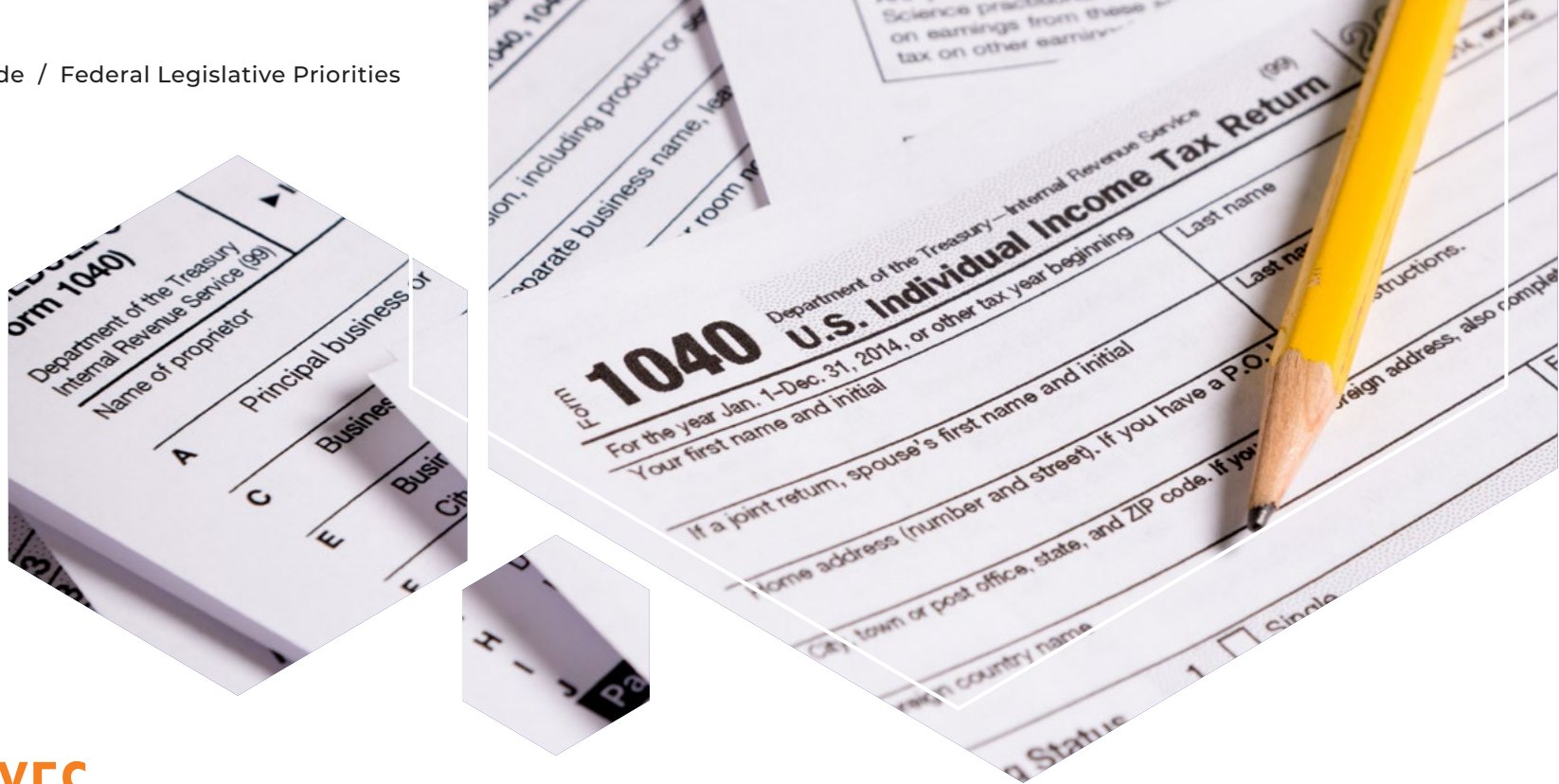
Congress, the FCC, NTIA and other government agencies must do everything within their power to make more spectrum available for licensed, unlicensed and lightly licensed use. Specifically, the Arizona Technology Council supports:

More Federal Spectrum Available for Both Licensed and Unlicensed Use Without Technology-Specific Restrictions on its Use – The federal government is the largest holder of spectrum suitable for wireless use, and even its officials would admit the government is not using the spectrum efficiently. Clearing and auctioning spectrum (as we saw in the Advanced Wireless Services (AWS) auction) is one effective way to get spectrum to market but it is too costly in many situations. We must come up with new, creative ways to get government spectrum in the hands of those who need it most, be it for licensed or unlicensed use, without placing technology-specific restrictions on how it may be used.

Moving Forward on 5 GHz – The FCC already has made great strides on freeing up unlicensed spectrum in the 5 GHz band, but it should continue to work towards making spectrum available for unlicensed use in the U-NII-4 band.

Continuing to Pave the Way for 5G – The FCC took a major step towards making 5G a reality with its Spectrum Frontiers Order, which opened up nearly 11 GHz of licensed and unlicensed spectrum for flexible-use wireless broadband. However, there is still work to be done. The FCC also has several ongoing proceedings focused on making mid-band spectrum available for both licensed and unlicensed use. We hope it continues to progress on the 3.7-4.2 GHz band and the 6 GHz band.





FEDERAL TAXES

PRINCIPLE

The Arizona Technology Council supports the advancement of tax and regulatory policies that spur innovation and grow our economy.

POSITIONS

Create a permanent and competitive tax code that incentivizes investment for businesses of all sizes:

- ▶ Improve access to capital and provide expanded support mechanisms for high-growth businesses.

Ensure simplicity and fairness in interstate taxation:

- ▶ Interstate sales tax legislation should not result in additional compliance burden to businesses, and any policies should include a small business exemption.

- ▶ Support policies that provide consistent, balanced and predictable sales tax treatment across international, state and local jurisdictions. These policies should prohibit unfair and unrelated discriminatory taxes. Specifically, the Council supports the Digital Goods and Services Tax Fairness Act (S. 765/H.R. 1725).
- ▶ Reduce compliance burdens on today's digital workforce by supporting legislation that simplifies nonresident employee and employer requirements to report and withhold state income taxes. Specifically, the Council supports the Mobile Workforce State Income Tax Simplification Act (S. 604).
- ▶ Support interstate tax fairness by treating digital products the same as tangible goods. Specifically, the Council supports the Business Activity Tax Simplification Act (H.R. 3063).

USE OF CONSUMER AND ENTERPRISE UNMANNED AERIAL VEHICLES

PRINCIPLE

Unmanned aerial vehicles (UAVs, also known as drones) offer immense opportunities for innovation, from cargo delivery to emergency response to simply photographing places where humans cannot travel. UAV innovation is occurring at a breakneck pace. However, regulations are not in place currently to allow UAV use in many innovative ways. The Federal Aviation Administration (FAA) released its Small UAS Rule in June 2016, which limits UAV use to visual line of sight during the day and away from people. While a great first step, these rules still prevent UAVs from being used for a number of enterprise purposes.

POSITIONS

The Arizona Technology Council supports a much broader use of UAVs than the FAA permits in its new rules. Congress and the FAA have demonstrated interest in crafting rules for enterprise uses of drones but there is much to be done before they are put in place. We believe Congress and the FAA should strive to establish flexible rules that allow enterprise UAVs to go beyond line of sight and above populated areas. Further, Congress and the FAA should work to continue to develop standards for airspace management to allow for safer, broader operation of UAVs.

The Council supports and advocates for policy changes that will not only embrace but encourage the growth of the UAV industry. These include measures to:

- ▶ Permit the operation of small UAVs beyond visual line of sight.
- ▶ Support the development of infrastructure to safely manage the widespread use of low-altitude airspace.
- ▶ Enable broader unmanned aircraft systems (UAS) access to commercial mobile services and unlicensed spectrum vital to the safe and widespread integration of UAS.

- ▶ Embrace the carriage and delivery potential of UAV technology in a wide array of capacities ranging from humanitarian aid to commercial operations.

The Council believes government must implement thoughtful regulations that reflect and anticipate the rapid growth of the industry. Ultimately, the Council supports policies that enable rather than hinder use of UAVs, and advocates for risk-based regulations that allow the safe and expedited integration of small UAVs into the national air space.



GLOBAL TRADE AND MARKET ACCESS

PRINCIPLE

Technology exports reached an estimated \$338 billion in 2018 and directly supported an estimated 885,000 American jobs. Further, exports account for approximately \$1 out of every \$4 generated in the nation's technology industry. For additional growth, market opportunities should be expanded worldwide, tariff and non-tariff barriers reduced, foreign direct investment encouraged, and U.S. technology advocated globally.

POSITIONS

The Arizona Technology Council supports trade policies that expand and open markets for the U.S. technology sector, prevent or eliminate trade barriers, and boost the global competitiveness of the industry.

USMCA – Advocate for congressional approval of the U.S.-Mexico-Canada Agreement.

China – Advocate our position on Section 301 and additional trade remedies and resulting tariffs. Advocate for stability between the U.S. and China, including de-escalation of the trade war, and a finalized agreement that achieves tariff removal to restore confidence and predictability in the trade relationship and global economy.

WTO – Advocate to make permanent the World Trade Organization moratorium on customs duties on electronic transmissions and advocate for an early agreement on e-commerce negotiations by promoting ambitious and inclusive digital trade rules.

Digital Trade – Promote a digital economy committed to the movement of data across borders and data privacy approaches that enable cross-border data flows.

Trade Agreements – Advocate for the rapid expansion of bilateral and multilateral free trade agreements with other nations. The immediate targets should be Japan, the European Union, and the United Kingdom; possible reentry into the Trans-Pacific Partnership; and possible additional agreements with Brazil and India. The advocacy focus should be to ensure inclusion of robust technology provisions in any agreements, including strong digital trade provisions.

Ex-Im Bank Reauthorization – Advocate for reauthorization of the Export-Import Bank of the United States charter to ensure the Ex-Im program remains an available tool to support Arizona's exporting companies. There should be a focus on small and medium-sized businesses, many of whom would be unable to de-risk and finance their export transactions without Ex-Im support.

Foreign Direct Investment – Promote a trade and regulatory environment that attracts foreign direct investment into the United States, particularly in areas that generate high wage job creation.

Reduction of Tariff and Non-Tariff Barriers to Trade – Promote development of trade policy positions that reduce the use of tariff and non-tariff barriers.

Market Access:

- ▶ Oppose prohibitive regulatory requirements as market access conditions, including cybersecurity mandates and source code disclosure requirements.
- ▶ Oppose barriers to trade such as tariffs on technology products, customs classification requirements for digitally enabled goods and services, unilateral digital tax measures, and prohibitive regulatory requirements.
- ▶ Engage in opportunities to enhance trading relationships in key markets for the industry, including India, Vietnam, Indonesia and Brazil. Ensure their citizens gain the most benefits from the analyses.

WORKFORCE

PRINCIPLE

A skilled workforce should be promoted by supporting policies that expand lifelong science, technology, engineering and math (STEM) learning.

POSITIONS

Support high-skilled immigration reform

- ▶ Increase green cards for high-skilled STEM graduates
- ▶ Create new visas for entrepreneurs
- ▶ Adopt market-based visa caps

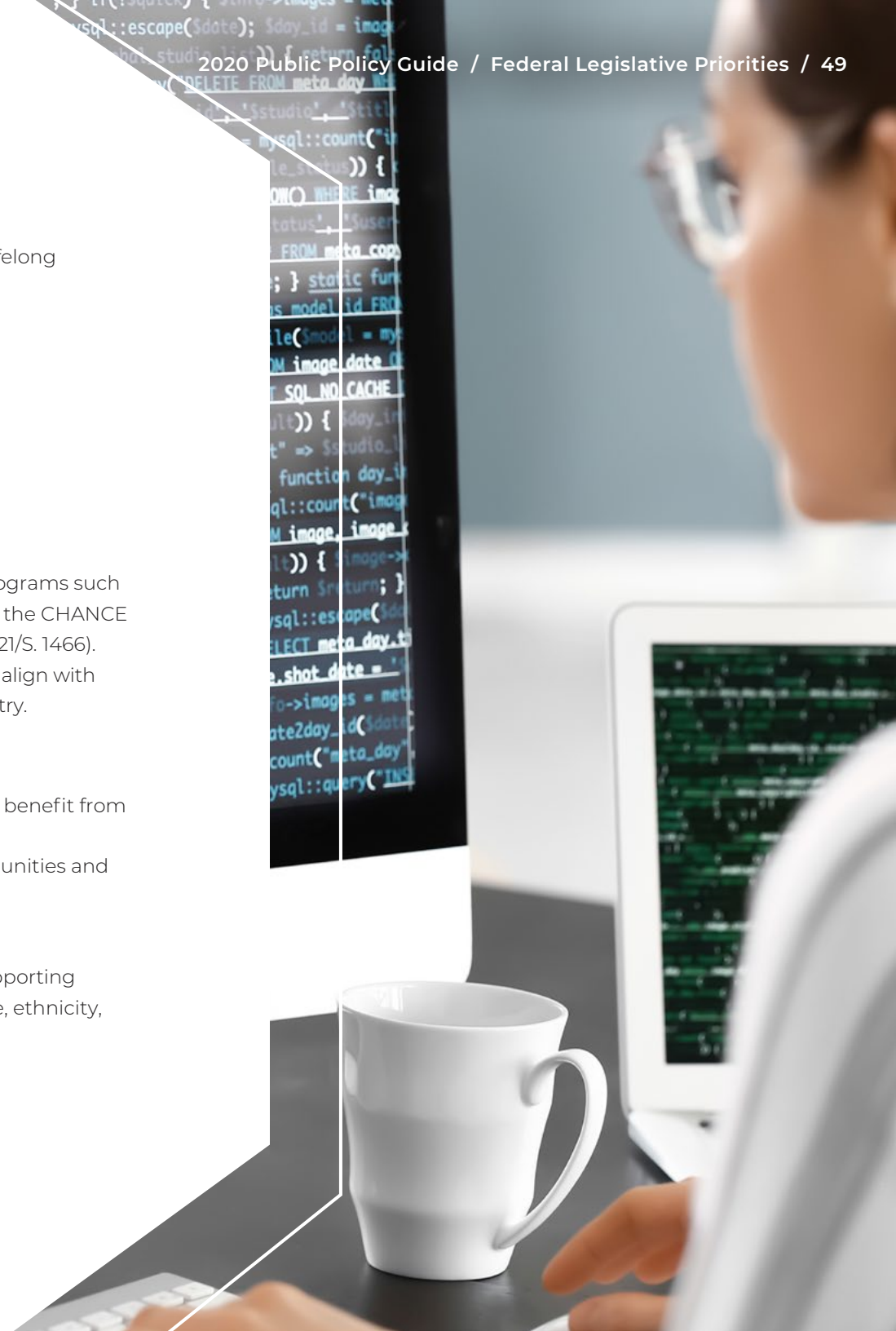
Modernize the workforce

- ▶ Increase alternative pathways into the workforce through work-based programs such as apprenticeships. Specifically, the Arizona Technology Council supports the CHANCE in TECH Act (H.R. 1733/S. 777) and the Cyber Ready Workforce Act (H.R. 2721/S. 1466).
- ▶ Increase the deployment and adoption of private sector-led initiatives that align with local and regional workforce demands, and developing trends in the industry.

Modernize the education system

- ▶ Make targeted P-20 STEM investments to ensure students of all ages can benefit from digital economy.
- ▶ Support and develop initiatives that encourage underrepresented communities and veterans to pursue IT career paths.
- ▶ Increase adoptions of experiential learning.

Recognize the ability to recruit and retain the strongest workforce means supporting an inclusive workplace—one that welcomes all people regardless of faith, race, ethnicity, sexual orientation or gender identity.





ABOUT THE ARIZONA TECHNOLOGY COUNCIL

The Arizona Technology Council is the driving force behind making our state the fastest growing technology hub in the nation, connecting and empowering Arizona's technology community. As Arizona's premier trade association for science and technology companies, the Council is recognized as having a diverse professional business community. The Council offers numerous events, educational forums and business conferences that bring together visionaries, leaders and innovators to make an impact on the technology industry. Council members work toward furthering the advancement of technology in Arizona through leadership, education, legislation and social action. These interactions contribute to the Council's culture of growing member businesses and transforming technology in Arizona. For more information about membership or attending an event, please visit aztechcouncil.org.

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