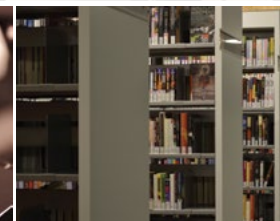
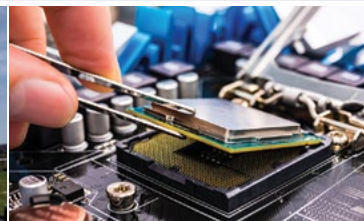




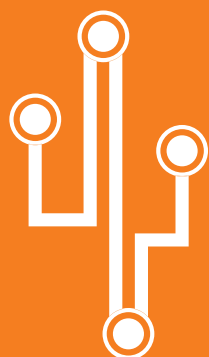
# ARIZONA TECHNOLOGY COUNCIL 2016 Public Policy Guide



ARIZONA  
TECHNOLOGY  
COUNCIL  

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a place to connect and grow



## Public Policy Guide 2016

The Arizona Technology Council is the principal advocate for science- and technology-based companies in Arizona. It 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 our members, the Council informs and educates policymakers on issues that are important to Arizona's technology-based industries.

From Congress and the Governor's office to legislative committee rooms and city halls across the state, the Council serves as the voice calling for a technology-based, pro-growth, business-focused agenda.

The Council and its Public Policy Committee hereby submit the 2016 Public Policy Guide. In creating this document, the Committee relied heavily on the Council's mission by preparing key ideas, goals and legislative initiatives that:

- Improve the business climate for technology-based businesses
- Provide sources of capital that encourage entrepreneurship
- Create an environment that supports science- and technology-related job retention and creation
- Attract and train 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 2016. In some cases, the positions will advance through the legislative process, including development and advocacy of legislation that will be introduced during the Legislature's 2016 session. In other instances, the positions will be used on an ongoing basis as regulators introduce new or change existing regulations pertinent to Council members. In any event, the Public Policy 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 affect Arizonans and the Arizona economy for years to come.

## Arizona Technology Council Legislative Priorities – 2016

- Recapitalize the Angel Investment Tax Credit
- Implement Dodd-Frank small fund exemption
- Appropriately fund the state's education system, including Pre-K, K-12, postsecondary, JTED and CTE programs
- Create and fund a job training program



# AEROSPACE, AVIATION & DEFENSE



## Principle

Arizona is a vital contributor to U.S. national security interests by having fostered a pioneering spirit in aerospace, aviation and defense for generations. With well over 1,200 companies in aerospace and defense—including all the major prime contractors such as Boeing, General Dynamics, Honeywell, Lockheed Martin, Northrop Grumman, Raytheon, and—Arizona boasts thousands of highly-skilled technology workers with high-paying jobs.

Additionally, the state's military bases contribute approximately \$9 billion annually to the Arizona economy. State leaders and members of the Legislature must continue to develop strategies that will maintain, strengthen and grow the aerospace, defense, aviation and unmanned systems industrial base that will provide Arizona a competitive edge as a top state supporting U.S. national security objectives.

## Positions

**Defense Spending** – Ensure Arizona not only continues to be among the top five states for aerospace and defense but also moves up in the rankings. We have incomparable assets in the state related to aerospace and defense. Encourage education about 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. Air Force training for the F-35 at Luke Air Force Base and other military aircraft, and a unique environment that enables testing of key command and control, intelligence and communications equipment without extraneous electronic interference in southern Arizona. Protect and increase the missions of the future focused capabilities and role of Fort Huachuca, which includes cyber defense, networks, UAS training and intelligence plus tremendous 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. Finally, protect the networks and cyber defense mission of U.S. Army NETCOM at Fort Huachuca. There are more than a few rumored initiatives that would move this world wide mission to the East coast. This would not be cost-effective and it would significantly degrade the synergy of all the C4ISR missions at the Fort.

# AEROSPACE, AVIATION & DEFENSE

## **Protection of Arizona's Military Bases –**

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

**Unmanned Aerial Systems** – Expand the capabilities of the largest unmanned aerial systems (UAS) training center in the world at Fort Huachuca. 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. Work to educate legislators and other key stakeholders that restrictions on the use of UAS as was proposed by a number of Arizona legislators in previous legislative sessions damage Arizona's ability to attract UAS related research, development and testing.

Instead, support a single federal standard for integrating UAS into the national airspace while balancing privacy concerns. If such state-level restrictions become law in a bid to protect privacy, the Council would work to create liability protection for manufacturers that may inadvertently record images during UAS testing. The current absence of such restrictions in Arizona provides a competitive advantage over Texas, California and other states that already have them in place.

**SBIR/STTR** – Continue to fund critical small business investment research to fully leverage Arizona's strengths across primary research, development, prototyping and early-stage manufacturing in support of national security objectives.

**Arizona Diversification Initiative** – The U.S. Department of Defense's Office of Economic Adjustment in conjunction with the Arizona Commerce Authority (ACA) piloted a program aimed at small businesses with significant defense business concentration that encourages diversification to customers in non-defense markets. In light of tighter defense spending that directly impacts small businesses with a focus on DoD clients, we believe this program can have much more significant impact and encourage its growth.



# BIOSCIENCES



## Principle

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

In addition, the Arizona Technology Council advocates at the state and federal level for a competitive regulatory and tax environment.

## Positions

**Medical Device Tax Repeal** – Protect Arizona’s growing medical device industry, which provides direct and indirect employment for nearly 20,000 Arizonans. The federal Medical Device Tax impacts innovation of medical devices and creates an excessive burden upon Arizona’s startup firms.

**Biosimilars** – Amend Arizona’s Pharmacy Act to include biosimilars. Proposed changes will not only increase patient access in the future and improve patient safety, the changes will spur continued education in this new age of precision medicine.

**University Research Funding** – Work collaboratively with the Arizona Board of Regents to advance the research enterprise systemwide. Support renewed investment in funding of research facilities at Arizona’s universities. In the year 2000, Arizona voters approved Proposition 300, which resulted in the investment of hundreds of millions of dollars in research and infrastructure.

The result was a tremendous improvement in Arizona’s competitive ability to attract and retain valuable private and public investment, commerce, and jobs. Renewed investment will continue to accelerate Arizona’s economic base in the growing bioscience fields.

**Internships** – Develop innovative funding sources to support science, technology, engineering and math (STEM) internships to further enrich Arizona’s educational environment and to attract and retain a highly talented bioscience workforce.

# CAPITAL FORMATION



## Principle

The quickest and most efficient way to make Arizona a “technology destination state” is to attract more venture capitalists and their financial resources to Arizona. This can be accomplished by understanding what the venture capital industry needs to motivate such a move of capital to our state. Arizona has developed and supports a successful Angel Investment Tax Credit program and has a research and development ecosystem second to none.

However, many firms seeking capital to enter the critical early stage of business maturation leave Arizona because crucial early-stage capital is unavailable here. All the surrounding states as well as Mexico have created state-supported early-stage venture funds. Arizona is losing out on this country’s most coveted jobs and that needs to change.

## Positions

**Improve the Accessibility of Risk Capital** – Work to create improved accessibility of risk capital for entrepreneurial growth in Arizona. Early-stage companies, especially when they are technology companies, have a harder time getting the financial capital to start, develop and grow. Unlike small businesses with physical assets to leverage for bank financing, these high-potential ventures focus on developing intellectual property that is not applicable to asset-based lending. Arizona needs to continue to improve the business environment and accessibility to venture capital investors. This is a multistage process that includes not only potential legislation but also educating, attracting and recruiting investors to come to Arizona through leveraging relationships and connecting these investors with companies. This aligns with Gov. Doug Ducey’s priority to attract and grow businesses in Arizona. Any realignment of priorities for the ACA should include an aggressive focus on attracting more risk capital to Arizona, and facilitating connections between investors and worthy early-stage companies.

**Recapitalization of the Angel Investment Tax Credit Program** (See State Budget Section – Page 10)

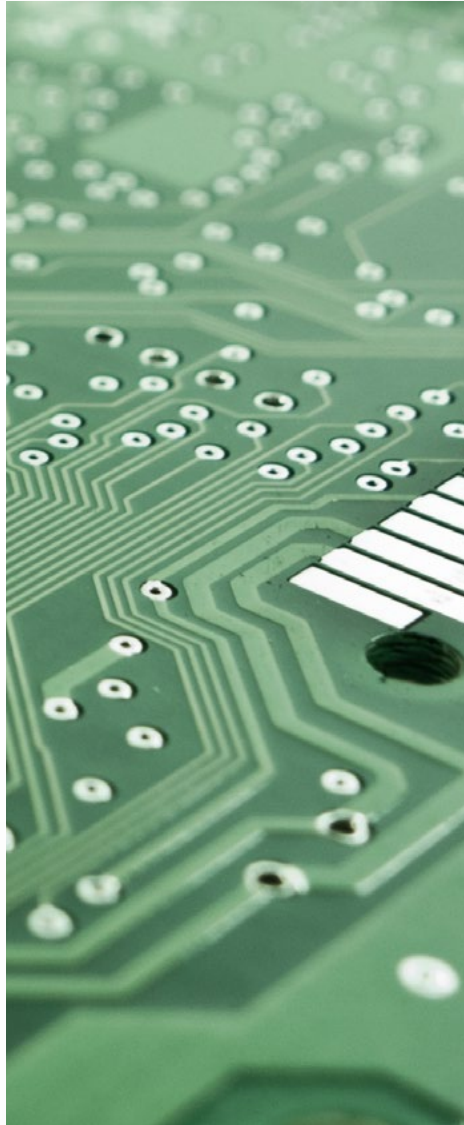
**Implement the Dodd-Frank small fund exemption** – Update Arizona’s investment adviser registration statutes to allow the private fund exemption. In 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act was signed into law and substantially changed federal



# CYBERSECURITY

financial services and securities laws, including the regulation of investment advisers. The previous exemption for investment advisers with fewer than 15 clients and who did not hold themselves out to the public as investment advisers was eliminated. It was replaced with a “reporting adviser” exemption for advisers who either solely advise venture capital funds or advise “qualifying private funds” with less than \$150 million in assets. Most states were able to update the exemptions for adviser registration by rule or order. However, Arizona’s registration exemptions are in statute and will need to be updated through legislation to remove the disincentive to this type of investment in Arizona.

**Expansion of the Refundable Research and Development Tax Credit** – Continue and expand the Refundable Research and Development (R&D) Tax Credit as a further inducement to Arizona companies raising early-stage capital. The R&D tax credit is a keystone to Arizona’s economic future through the continued growth of high-paying, knowledge-economy jobs. At its annual current cap of \$5 million per year, the existing credit has been an unqualified success. Technology companies with operations in Arizona that have used the credit have reinvested the funds through additional R&D and hiring talent in Arizona. Therefore, it is vital that the cap on the credit be expanded to meet the need in the future.



## Principle

With our data moving into the cloud and our digital economy expanding, cybersecurity is now one of the critical issues facing our nation. As we move deeper into the digital age, new threats and data breaches occur almost daily. We cannot ignore cybersecurity. Some reports put the number of monitored cyberattacks at 1.5 million per year in the United States as up to 85 percent of data breaches go undetected. There is no question that we are in a cyberwar being waged globally but primarily in the private sector. As a result, American businesses find themselves at the forefront of the battle. Improving cybersecurity has become critical for businesses of all sizes and types.

## Positions

**Awareness** – Prioritize the education of businesses on the risks posed by unfriendly countries and malicious individuals, and best practices in discerning and blocking attacks.

**Education** – Support cybersecurity education and the development of the next generation of protection and response professionals.

**Regulatory** – Promote responsible regulation that centers on reasonable and consistent requirements regarding privacy notices and breach responses.

# ECONOMIC DEVELOPMENT



## Principle

Arizona must be able to compete with any state or country by having the most competitive economic tools possible.

## Positions

**ACA State Promotional Effort** – Advocate to public policy decision makers for ACA's continuation at an appropriate level of funding with assurance that it remains as the platform for the state's economic development efforts. Encourage support to the many ongoing ACA initiatives that are focused on enhancing the Arizona innovation ecosystem. Created by the governor and Legislature in 2011, 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.

**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. Additionally, 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.

**Local Efforts** – Ensure we foster local economic development by supporting local entrepreneurs who engage with the global economy through broadband and the Internet to deliver goods and services around the world.

**Target Industries** – Spend substantial public policy efforts and accompanying resources on attracting and retaining those employers that pay the highest wages. Wage studies routinely show the highest-paid employees are in one of the many technology fields. In particular, the Council recommends these efforts target the following industries: health and bioscience, semiconductor and electronics, information technology, energy, aerospace, aviation and defense, telecommunications, optics and e-learning.

**Workforce Development** – Enable employers to attract and retain technology talent, whether produced within Arizona or "imported" from other states and countries. Educator and employer engagement is critical to align employer needs in curriculum development, and the creation of work-based and work-like experiences and pathways to accelerate skills development. These include career and technical education (CTE), and early college and career high schools. The state also should promote ways that companies can actively participate in bridging the talent gap, including apprenticeships and other innovative employee training and on-boarding programs.



# EDUCATION



## Principle

Education is the foundation for a healthy technology community in two ways: as an education system aligned with the needs of technology companies to train their future science, technology, engineering and math (STEM) workers; and as a high-quality education system that serves as an attractor for talented individuals to move to Arizona.

## Positions

**Appropriately fund the state's education system at all levels, including pre-kindergarten, K-12 and postsecondary** – Short-term reforms should include funding K-12 education according to the Proposition 301 formula as well as alternative funding ideas to restore K-12, university and community college funding. Over the long-term, comprehensive school funding reform is necessary.

**Maintain Support for Arizona's College and Career Ready Standards (or higher standards) and AZ Merit assessment with appropriate resources and training.**

**Develop infrastructure and a policy framework to support innovative learning.** Support legislation to provide innovative learning opportunities, including– and beyond–e-learning. Leverage technology infrastructure, support effective school administration and promote competency-based education.

**Support worklike and competency-based work experience models** – Increase the use of programs like career and technical education (CTE) and early college and career high schools in high-wage, high-demand, high-growth sectors. Support legislation to allow high school credit for high-impact, work-like experiences. Leverage renewed efforts by the federal government—including incentives, tax credits and/or apprenticeship grants—to promote apprenticeship programs.

**Support efforts to dramatically improve STEM education** – Access to highly qualified teachers in robust STEM classes for every student in Arizona.



## 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, Arizona needs a secure and adequate water supply. Every key Arizona technology cluster—including semiconductors, bioscience, cloud/data centers, back-office processing and alternative energy technology—requires affordable, reliable and competitive energy markets. 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 as described below. There have been several recent efforts to establish and improve the clarity of Arizona's energy policy. The Arizona Energy Consortium in November 2013 published the "Arizona Energy Roadmap," which was developed through input from a series of industry stakeholder meetings. Former Gov. Jan Brewer published "emPOWER Arizona: Executive Energy Assessment and Pathways" in February 2014 as a result of a collaborative effort by the Governor's Office of Energy Policy, ACA, Arizona Legislature, Arizona Corporation Commission and leading industry partners. Although the reports had slightly different approaches, the impetus behind both efforts was to provide more certainty to developing Arizona's energy policy in the future. Some of the key positions are summarized here.

## Positions

### **Diversification of Energy Supply, Utilization –**

Improve diversification of the state's energy mix by including solar and other renewable energy resources. This policy would help hedge against short supplies or rising prices in any one type of generation. 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** – Arizona should continue to take advantage of its natural gas generation resources to provide an attractive in-state, export-ready electricity supply. Intermittent resources augmented by natural gas can provide a carbon-reduced, secure power source until other utility-scale renewable options with inherent or built-in storage become available.

- **Nuclear Energy** – Arizona should continue its utilization of the low-cost "base load" of 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 is best suited for the steady, predictable power needs of always-on manufacturing, data hosting and bioscientific experimentation.
- **Solar Energy** – Arizona exhibits some of the best attributes for harnessing solar energy in the world. Recognizing Arizona's world-class solar energy attributes, the state should seek to attract solar investment. The state's ideal location, moderate climate, and proximity to substantial and in-place infrastructure provide real world inputs for Arizona to establish itself as the leader of solar energy generation and innovation.



**Electric Transmission** – Continue to support regional and interregional developments that enhance 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.

**Regional Focus on Energy Planning** – Adopt a more robust regional approach to energy development. Although in-state demand reduced due to the recession, load growth has been recovering since 2014. New generation, however, will not be needed until 2017. With large, high-demand markets in the broader region, Arizona has a tremendous opportunity to prosper through exportation of energy generated in-state. An increased focus on a regional approach could drive an increase in renewable energy generation without requiring modification of Arizona’s renewable energy standard (RES). With a regional approach to power generation and a grid that supports the regional transmission of power, other states and nations can benefit through the development of appropriately situated generation facilities. For instance, a state where it is more expensive to develop projects may be better served by supporting construction of generation projects in regions with lower development costs.

**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 and energy storage technology. To the extent that existing legal constraints and the rate structures resulting from existing energy policies prevent Arizona businesses from adopting new technology or artificially increase the costs of such adoption, these legal constraints and policies should be modified.

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





# STATE BUDGET



## Principle

Many tough decisions will need to be made during the state budgetary process to prevent a structural budget deficit in the face of decreasing revenues and a prospective court-ordered increase in education funding. However, 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 avoid debt financing for operating expenses or use of fiscally unsustainable accounting gimmicks. It should provide for the core needs of the state and reflect opportunities to leverage technology for greater efficiency and effectiveness of state government.

## Positions

### **Recapitalization of the Angel Investment Tax Credit Program**

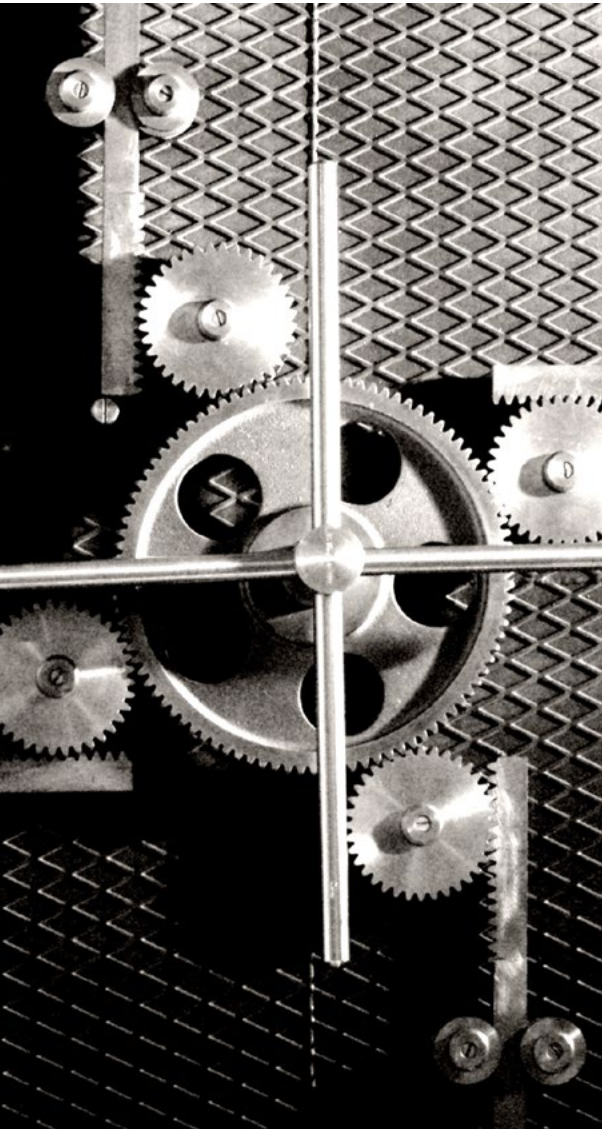
Re-fund the program at the level of \$20 million for the life of the program. In the 2014 legislative session, the Legislature extended the sunset date of the highly successful Angel Investment Tax Credit from 2016 to 2021. Though the bill extended the life of the program, there were no additional funds allocated to the program and the program has depleted the initial \$20 million authorized when the program was created.

**Budget Sweeps** – Discourage the Legislature from sweeping any additional funds not used in a particular fiscal year by the 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.

**Restore and Reform Education Funding** – Focus on building an Arizona that requires a high-quality education system to develop and maintain the workforce needed to attract and retain high-wage jobs. Appropriately fund the state’s education system at all levels, including pre-kindergarten, K-12 and postsecondary. Short-term reforms should include funding K-12 education according to the Proposition 301 formula as well as alternative ideas to restore K-12, CTE, university and community college funding. Long-term efforts require comprehensive funding reform to modernize and promote a 21st century delivery model of education that focuses on performance and accountability.

**Arizona’s Essential and Permanent Digital Records** – Support multi-year legislative funding for the Arizona State Library, Archives and Public Records’ initiative of the Electronic Records Repository. This would help preserve Arizona’s essential and permanent digital records as well as meet statutory mandates and challenges presented by an evolving digital world for government operations and content.

# TAXATION



## Principle

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

## Positions

**Capital Gains** – Increase the current capital gain deduction from 25 percent to 57 percent to help reduce the advantage enjoyed by other states with tax systems that more closely align 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.

**Continued Improvement of Business Property Tax Competitiveness** – Pursue the eventual equalization of business and residential property taxes. As recently as 2005, Arizona businesses faced property tax assessment rates 2½ times those of residents.

**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 Arizona Tax Code** – Promote modifications in the tax code that reflect changing technologies and how products and systems are taxed, with a special emphasis on software and hardware development that enables the Arizona tax code to remain updated with innovations in the marketplace.



## Principle

Telehealth, a part of telemedicine, and its integration into delivery of health care through electronic means should be enabled. That includes wireless devices and facilitating expansion of a robust statewide telehealth ecosystem.

## Positions

**SB1353 Telemedicine Parity Bill Refinements** – Expand the existing policy to include cities of Phoenix and Tucson as well as all medical specialties having accredited telemedicine standards and practice guidelines. Also, allow the doctor-patient relationship to be established electronically, and define limits of corporate practice of medicine and physician supervision of medical personnel relating to telemedicine.

**Interstate Medical Licensure Compact Bill** – Enable state-licensing of physicians for serving patients within the states (currently 11) that have adopted this compact (<http://www.licenseportability.org/>). This is a state-based alternative to national physician licensing, which is locally enforced by each state to protect that state's citizens. A key motivation is overcoming a shortage of physicians—to better serve Arizona patients—by accelerating availability of state licensing for physicians while preserving the rights of states to regulate professions.

Passage of this bill would enable expedited state licensure for qualified physicians seeking to practice in multiple states while preserving state authority. It does not change Arizona's existing medical practice act, supersede Arizona's autonomy and control over the practice of medicine, or preclude physicians who do not meet the compact standards from obtaining licensure through traditional Arizona processes.



# TRANSPORTATION/DIGITAL INFRASTRUCTURE



## Principle

Arizona citizens benefit from improving safety, reducing travel time and enhancing commercial opportunities by multimodal corridors linking the state to Mexico, Canada, the Intermountain West and neighboring states. The multimodal 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 new and existing businesses via high-capacity broadband.

## Positions

### **Continued Encouragement of Locating Data Centers in Arizona**

#### **Support Expansion and Retention of the Data Center Industry by Promoting New Innovations and Services That Expand Technology Opportunities In Arizona**

**Increase Broadband Availability, Affordability and Use by Supporting Initiatives** – Remove or reduce barriers that generate unnecessary costs or delays and otherwise inhibit expansion of privately funded, high-speed digital infrastructure that meet the needs of all Arizonans. 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 to encourage private broadband investment and deployment. Support regional and local governments in their broadband planning efforts to identify opportunities for increased private broadband investment and deployment. Increase the use and adoption of high-capacity digital connectivity and technologies across major application spectrums, including education, health care, public safety, e-commerce, e-government, remote work and mobile enablement. Support regional and local government policies that ensure a level playing field for incumbent and new entrant broadband providers alike, including, but not limited to, access to the right-of-way, infrastructure undergrounding requirements and expedited/blanket building permit issuance.

**Interstate 11** – Support federal and state funding for the timely construction of Interstate 11 to connect Phoenix and Las Vegas. Encourage multimodal linkages with rail, telecommunications and energy rights of way and facilities. Further, extend I-11 south of Phoenix to create an important international freight corridor between Mexico and the Intermountain West.

**Transportation Systems** – Support modernization of the state's transportation infrastructure to improve mobility, move freight to market faster and advance international trade. Support transit-related systems and development that add to the quality of life for Arizona residents and visitors.

**Long-Term Federal Highway Bill** – Encourage Congress to enact a multi-year bill reauthorizing the Highway Trust Fund. Support legislation that maintains the historic partnership between the state and federal government, utilizes a user-fee based funding model, and provides adequate funding for freight corridors.

# UNIVERSITIES



## Principle

The 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 sectors. The universities engage the communities throughout Arizona and rely upon technology to provide education, research and other valuable community services.

## Positions

**Further Strengthening of Public Universities With Stable Funding And Enhanced Flexibility** – Collaborate with the Arizona Board of Regents to build upon the existing strengths of the university system and ensure world-class research capabilities, access for qualified students and excellent workforce preparation. With the state's improving fiscal situation, support all efforts to restore fiscal 2016 funding cuts, secure the state's financial relationship with the university system as one that is based on per resident student funding, and obtain funding to support critical capital renewal project needs.

**Support Efforts to Reduce Regulation, Increase Operational Flexibility and Minimize Costs of Conducting Business** – Support enterprise model of operations, which recognizes and advances each university and its differentiated mission.

**Sun Corridor Network** – Improve stakeholder involvement to facilitate the Arizona universities' Sun Corridor Network to bring better Internet services to the state's universities, community colleges, K-12 schools and libraries. This provides more efficient data communications and improved reliability. As a result, the postsecondary education providers would have access to technology that better enables discovery, innovation and research. Successful deployment of the Sun Corridor Network can ensure the ability of the universities to share bandwidth and costs with educational institutions, libraries, and other community anchor institutions to achieve economies of scale and shared infrastructure as well as provide citizen benefits.

# WORKPLACE & WORKFORCE



## Principle

One of the top issues for Council members is the lack of enough skilled talent needed for their companies. Education at every level certainly supports a thriving technology workforce but even beyond education, employers must feel reasonably able to attract and retain technology talent – whether produced within Arizona or “imported” from other states and countries – for Arizona to thrive as a technology hub.

## Positions

**Align workforce development and education efforts with employer needs** – Explore joint curriculum development, creation of work-based and work-like experiences and pathways to accelerate skills development through apprenticeships with real-world application scenarios, career and technical education (CTE), and early college and career high schools. Utilize technology for scale and implementation in rural and remote locations.

**Promote active company participation in bridging the talent gap** – Implement business-friendly engagement models, including apprenticeships and other innovative employee training and on-boarding programs. Encourage companies to actively engage with educators and workforce development organizations to create curriculum content and set work experience and apprenticeship standards that support certification and credentials.

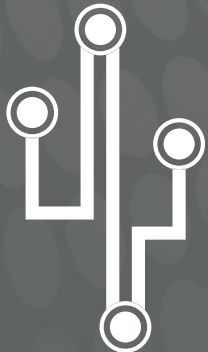
**Promote workforce development** – Leverage programs and agencies charged with addressing skilled workforce shortages in high-tech industry sectors, including energy, information technology, bioscience, health sciences, and mid-skill and advanced manufacturing. Engage business, education, workforce and economic development communities in collaborative, integrated cross-industry strategies and implementation.

**Job Training** – Advocate for the Legislature to reinstate a funding structure to the Job Training fund administered by the ACA to help attract and grow businesses in Arizona. In the 2015 legislative session, the Job Training tax was repealed from the fiscal 2017 budget, a year earlier than it was scheduled to sunset. This tax provided funds to attract new businesses, and support small and rural Arizona companies by offering reimbursable grant money for job training to new and existing employees.



# ARIZONA TECHNOLOGY COUNCIL LEGISLATIVE PRIORITIES – 2016

- Recapitalize the Angel Investment Tax Credit
- Implement Dodd-Frank small fund exemption
- Appropriately fund the state's education system, including Pre-K, K-12, postsecondary, JTED and CTE programs
- Create and fund a job training program



## FEDERAL ISSUES

The Arizona Technology Council is involved with many federal policy issues that impact member companies.

Through its partnership with the Technology Councils of North America (TECNA) and CompTIA, the Council is regularly interacting with the congressional delegation on a number of critical issues.



# AEROSPACE, AVIATION & DEFENSE



## Principle

Arizona is a powerful contributor to our national defense and has fostered a pioneering spirit in aerospace, aviation and defense for generations. With well over 1,200 companies in aerospace and defense—including all the 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 states military bases contribute \$9 Billion annually to the Arizona economy. State leaders and members of the Legislature must continue to develop strategies that will maintain, strengthen and grow the aerospace, defense, aviation and unmanned systems industrial base, especially in light of sequestration and top-line defense cuts nationally.

## The Council Supports

**Importance of FAA Reauthorization** – Legislation authorizing the FAA expired September 30, 2015. Passage of this legislation is critical to setting the policy agenda for the FAA over the next several years by continuing and reforming current FAA programs and oversight as well as establishing new priorities and activities. Before the current authorization took effect in 2012, Congress passed 23 short-term extensions over a 4½-year period, which created uncertainty in the marketplace. Repeating this experience is harmful to the aviation industry, especially as it continues to recover from the recent economic recession and navigates the challenging global marketplace. Congress has enacted an extension of the current authorization, giving lawmakers additional time to consider new policies for the U.S. aviation sector. This extension, while necessary to continue operations of FAA-related programs, also moves the debate into an already complicated 2016 election year and adds to the growing list of legislative agenda items that must be addressed.

**Key FAA Priorities** – Certification reform is a key priority for aviation and technology manufacturers of this discussion. The current certification process is cumbersome and inefficient, as both industry and the FAA acknowledge, and needs to be streamlined. Doing so will enable manufacturers to bring new technologies and products to market faster, and continue to improve aviation safety. In 2015, a draft outline of the House FAA reauthorization measure was released. The proposal suggested any reauthorization proposal would push the FAA to more fully utilize Organizational Designation Authorization (ODA) and manage scarce safety resources effectively, invest in training programs that help FAA employees succeed in their safety oversight responsibilities, and measure the performance of both the FAA and industry in their respective certification responsibilities. The outline also showed reauthorization would focus on the FAA's international engagement with other aviation authorities as well as its leadership role in facilitating the flow of products globally and improving aviation safety. We support this critical initiative.

**Air Traffic Control Reform** – Another issue that has come up in FAA reauthorization is whether to privatize the nation's air traffic control (ATC) system, by moving it out of the FAA and putting it under the control of a separate, independent entity. Legitimate questions have been raised about this concept given concerns about user fees, governance of the system by private interests, funding for elements of the FAA beyond air traffic, and the impact on small and rural communities. However, some sectors of the aviation industry and lawmakers have suggested that Congress now consider privatizing ATC because they believe a system independent of government would be more effectively managed. Not surprisingly, this has increased political debate surrounding the reauthorization. It is unclear if the current discussion will yield a result that is more palatable and equitable to all stakeholders or if it will become an impediment to the bill's passage in an increasingly complicated legislative environment. We urge Congress to fully address and consider these concerns while also moving expeditiously on an FAA reauthorization bill early in 2016.

# CYBERSECURITY AND THREAT DATA



## Principle

Cyber attacks that threaten our nation's critical infrastructure and impose significant economic costs for businesses continue to be on the rise. As a consequence, cybersecurity has become a focus at the state, federal and international levels of government. As the debate continues, the Council asserts that any cybersecurity legislation should preserve the vitality of innovation and promote the sector's ability to respond to constantly evolving cyber threats. The Council and its members are dedicated to maintaining and expanding the partnership between the private sector and the government to address our nation's cybersecurity preparedness. The Council is focused on these critical issues, working closely with Congress and the administration to address the threats to our nation's cybersecurity.

A strong public/private partnership remains the key platform for a national strategy to combat cyber attacks. We believe that legislation must enable stakeholders to adapt as quickly as threat and technology landscapes change. The threats that the technology industry faces are rapidly evolving and becoming more difficult to navigate. Whether it is identity or intellectual property theft, cyber espionage, or—worst of all—an attack that seeks to destroy our nation's critical infrastructure, we must ensure our economy and the supply chain have the necessary tools to combat the threat. Therefore, threat data sharing with voluntary incentives that include liability protections must be the basis for our national strategy to prevent cyber attacks. Our goal as a nation must be to balance the appropriate securities with sufficient privacy protections to make Americans safe in the fifth dimension of warfare.



## The Council Supports

**Improved threat information sharing** – One vital element of cybersecurity legislation that the Council strongly supports is enhancing national cybersecurity and critical infrastructure protection by creating an environment that allows real time threat sharing between the government, which holds most of the threat information, and the private sector, which owns most of our nation's critical infrastructure.

**An incentive-based voluntary approach** – The Council supports President Obama's Executive Order 13636 and its directive to the National Institute of Standards and Technologies (NIST) to develop a framework that utilizes industry best practices and promotes voluntary adoption.

In addition to the framework, Congress must further incentivize threat-based information sharing by passing legislation that grants liability protection for the private sector in order to ensure maximum participation.

**Greater penalties for cybercriminals** – Our national focus must be on deterring and combating bad actors, and punishing criminals.

## Why Congress Must Act

The threats to our nation's critical infrastructure are continually growing. Malicious cyber activity in the United States costs upwards of \$120 billion per year. Our capacity as a nation to protect critical infrastructure from a cyber attack must remain at the forefront of lawmaking and congressional oversight.

From individual hackers and criminal rings to nation-states and terrorists, America's adversaries aim to disrupt and destroy our information infrastructure, and perpetrate significant economic theft and fraud.

The private sector possesses over 85% of critical infrastructure. The federal government has the responsibility to protect American citizens. Therefore, it is imperative that threat data be shared and disseminated between the private sector—particularly owners and operators of critical infrastructure—and federal, state and local government agencies with the tools and the mandate to deploy protective services.

Many of our nation's small and medium-sized businesses that operate within the critical infrastructure supply chain do not have the resources or the expertise to protect their products, services and networks from cyber attacks. In order to encourage businesses to make this a priority and gain the necessary knowledge to protect themselves, we must provide incentives.

Currently, there are no statutory guidelines for liability protections. These protections provide the greatest incentives for participation and only can come from Congress.

Congress also must utilize its oversight capacity. As agencies begin to implement the NIST framework and new information sharing directives from the administration, it is imperative that the government refrains from promulgating new regulations or using these blueprints to blacklist businesses. To encompass the voluntary spirit of the framework, we believe Congress should be cognizant of the sector-specific agencies approach to implementation. A regulatory approach will not effectively encourage threat information sharing, and will be counterproductive.

# DATA BREACH NOTIFICATION LAW



## 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 47 different, often conflicting state data breach notification laws in the aftermath of a breach. With the increasingly mobile and decentralized nature of our economy, and 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: the customers whose data was taken.

## The Council Supports

A national standard for data breach notification would provide consumers and businesses with consistency and predictability on how consumer notice must be provided. In the wake of several recent high-profile data breaches, the timing is ideal to finally pass a federal data breach notification law that contains the following:

- **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 will not be alleviated and the effectiveness of any law would be significantly undermined.
- **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. The businesses that have suffered breaches are victims of criminal activity.
- **Narrow Definition of “Personal Information”** – To avoid overnotification 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 birthday should not qualify as personal information.



- **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 take into account the size of the company that suffered the breach and the type of data that was accessed.

- **No Fixed Data Security Requirements** – Data security requirements should not be specifically enumerated within the legislation. Instead, the legislation should direct the federal government to work with industry to develop a set of flexible “best practices.”

- **No Overburdensome Notification Requirements** – Many state laws have very specific information that must be included in each notice. Use of that information has proven to be unnecessary. Given the risks of overnotification, we urge Congress to avoid detailed, prescriptive notifications. In the event of a breach, companies should dedicate their resources to efforts that most directly notify and protect consumers. Additional requirements, such as those mandating the creation of call centers or the provision of credit reports, would divert resources away from small businesses seeking to protect and inform their customers.

- **‘Reasonable Notification’ Timeframe** – Federal data breach legislation should require a “reasonable timeframe” for notification, which includes allowances for risk assessment and any necessary law enforcement investigation, without requiring a specific time limit that must apply to every case.

- **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 overnotification about data breaches that really aren’t harmful.

- **Take Other Laws Into Account** – Companies that are subject to other data security or breach notification laws, such as Gramm-Leach-Bliley or the Fair Credit Reporting Act, should be exempt from these requirements.

- **Avoid Extraneous Provisions** – Congress has wrestled with this issue for more than a decade and has failed to enact legislation, in part because of the inclusion of extraneous provisions such as data broker and privacy provisions.



# ELECTRONIC COMMUNICATIONS PRIVACY ACT (ECPA)



## 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 instead simply with a subpoena to obtain access.

## The Council Supports

ECPA must be reformed to require government agencies and law enforcement to obtain warrants to compel service providers to disclose the contents of emails, text messages, and other private communications they store.

- **Pass the Email Privacy Act in the House and the ECPA Amendments Act of 2015 in the Senate** – The Email Privacy Act introduced by Rep. Kevin Yoder (R-Kan.), has a plurality of bipartisan support with more cosponsors (292) than all but one other bill in the House. The ECPA Amendments Act introduced by Sen. Mike Lee (R-Utah), similarly has strong bipartisan support with 23 cosponsors. Both bills appropriately update ECPA and are expected to be marked up in fall 2015.
- **No Civil Agency Exceptions** – Some civil agencies such as the U.S. Securities and Exchange Commission (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 still can get access to emails and texts by serving subpoenas on users, not service providers. The SEC even testified that it does not currently obtain emails from service providers.
- **No Emergency Exception** – Under current practice, the government may request digital content from providers by declaring an emergency situation. Providers then can 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, especially when many Internet companies are already complying with about 75 percent of emergency requests. While service providers don’t want to be responsible for derailing criminal investigations, requiring compliance with “emergencies” means the government simply needs to declare an emergency to get the information it wants.

# IMMIGRATION REFORM FOR HIGH-SKILLED WORKERS



## Principle

Our outdated immigration policy is preventing the best and the brightest from around the world from bringing their ideas and entrepreneurial spirit to the United States. This places the nation at a significant disadvantage to remain the worldwide leader in innovation and technological development. The Council supports immigration reform, particularly as it relates to using market-based caps on H1B visas and creating new visas for students receiving advanced degrees in the fields of STEM. Highly educated foreign professionals have made and will continue to make substantial contributions to the U.S. financial and innovation economy, and create jobs for Americans. It's time for Congress to fix the broken immigration system by enacting legislation that supports America's growth and provides U.S. employers, research institutions and universities access to the world's top talent. We urge Congress to pass high-skilled immigration reform.

## The Council Supports

- **Increase Green Cards for High-Skilled STEM Graduates** – Increase access to Green Cards indicating permanent resident status for high-skilled STEM graduates by expanding the exemptions and eliminating the annual per country limits for employment-based Green 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 and our member companies are strongly committed to improving U.S. STEM education and encouraging more young Americans to choose careers in those fields.

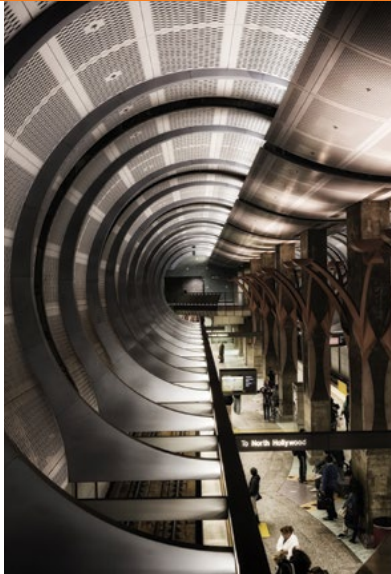
## Why Congress Must Act

- **The brightest scientists, researchers, innovators and engineers in the world**—whether American or foreign-born—always will be in demand, and drive economic growth and job creation.
- **Arbitrarily low visa quotas and system backlogs plague our employment** - based visa process.
- **U.S. employers, be they small businesses or large multinationals, must be able to recruit and retain highly educated foreign-born professionals**—particularly, after they graduate from a U.S. university—as an important complement to domestic sources of talent.
- It's counterproductive to educate and train the world's great minds then send them elsewhere to compete against us.
- Future growth and job creation will be led by innovation, whether it's new technologies, new cures or new sources of energy. For every foreign

STEM worker who stays in the United States and works, an additional three jobs are created. America does not have a monopoly on brainpower, and in an increasingly competitive global environment, we have to retain the talent that will keep us leading worldwide innovation.

- America benefits from the contributions of highly educated, entrepreneurial professionals, regardless of where they were born. More than 40 percent of Fortune 500 companies were founded in part by immigrants or children of immigrants. Iconic American companies—and major employers—such as Intel, Sun Microsystems, eBay, Yahoo! and Google were all founded, at least in part, by foreign nationals.
- In November 2014, President Obama took executive action on immigration reform. Although well intended, the high-tech related principles are not a long-term solution. As a follow-up to the executive order, the White House in July 2015 issued a visa modernization report outlining initiatives it is pursuing based on the action. The preferred and lasting path to high-skilled immigration reform must be for Congress and the White House to work together to introduce and pass legislation that addresses the shared goals of the high-tech community.

# INTELLIGENT TRANSPORTATION SYSTEMS



## Principle

The United States should utilize information technology to design a transportation system that is safer, more efficient and environmentally sound.

## The Council Supports

- **Deployment of Intelligent Transportation Systems** – Funding should cover costs of research, demonstration projects, spectrum preservation, standards and deployment of the system.

## Why Congress Must Act

- An intelligent transportation system will require federal investments in infrastructure to deploy on the interstate system.
- Mobility is key to Americans' freedom but is impeded by badly clogged roads and high rates for collision insurance.
- Technologies such as vehicle-to-vehicle communications, which the National Highway Traffic Safety Administration recently estimated could prevent up to 592,000 crashes and save more than 1,000 lives annually, will require attention from policy makers to address privacy and security issues.

# INTERNATIONAL TRADE



## Principle

As the global marketplace for technology goods and services continues to thrive, technology companies are looking to expand their consumer base in foreign countries where there is high demand for technology goods and services produced in the United States. Ninety-five percent of the world's consumers live outside of the United States. Yet, existing trade barriers and the amount of resources required to expand abroad often thwart startups, small and medium-sized enterprises, and large enterprise technology companies' efforts to enter into foreign markets.

The U.S. technology industry needs 21st century free trade agreements to ensure the movement of data across borders, which is vital to moving internal communications, R&D data, human resources information and processing payments. Additionally, agreements must address intellectual property and trade secrets protections, and the elimination of tariffs for technology goods.

## The Council Supports

### **World Trade Organization Information Technology Agreement (WTO ITA)** –

The WTO ITA is a trade pact that requires participants to eliminate tariffs on a specific list of information technology (IT) and telecommunications products. The ITA was



finalized in 1997 and covers 80 WTO members that produce a wide range of information technology products:

- Computers and computer peripheral equipment
- Electronic components including semiconductors
- Computer software
- Telecommunications equipment
- Semiconductor manufacturing equipment
- Computer-based analytical instruments

The original participants represented approximately 97 percent of world trade in IT products. However, since the agreement was made in 1996, substantial changes have occurred in the IT and telecom industries. Many products invented since that agreement fall outside of its jurisdiction. A breakthrough in negotiations to expand products covered by the ITA was initiated in 2012, with an agreement reached in July 2015. This pending agreement would add about 200 products to ITA coverage.

WTO has yet to release the added product categories. The Council supports the goal of increased international trade by eliminating or lowering tariffs. We will continue to support ITA expansion for new technology products.

**Reauthorization of the Export-Import Bank (Ex-Im Bank)** – The Export-Import Bank is the official export credit agency of the United States. Ex-Im is an independent, self-sustaining executive branch agency created to support American jobs by aiding in financing exports of goods and services from thousands of American companies. The bank's authorization expired on June 30, 2015. While bi-partisan Ex-Im reauthorization legislation is pending in both the

House and the Senate, efforts to pass this legislation prior to expiration of the bank's authority failed. The bank continues to operate to service its prior loan commitments but no new trade funding is permitted. The Ex-Im Bank bolsters our global competitiveness. Manufacturers in the United States and their customers overseas operate on long-term plans that often involve multiyear projects in which the Ex-Im Bank is a critical partner.

Failure to reauthorize Ex-Im will forfeit opportunities for manufacturers in the United States as other nations aggressively expand their own trade finance programs. Without Ex-Im Bank acting as a lender of last resort to fill market gaps, many foreign customers will turn to non-U.S. suppliers that already have significant support from their own official export credit agencies (ECAs). There are more than 60 ECAs around the world that aggressively promote their domestic companies and industries at the expense of American businesses. The Council supports reauthorization of the Ex-Im Bank.

**Trade Adjustment Assistance (TAA)** – TAA is a federal program that assists workers who lose their jobs because of international trade. Companion legislation was introduced in both the House and Senate to extend the TAA Program. The Trade Adjustment Assistance Reauthorization Act of 2015 (S. 1268/H.R. 1892) would extend the program through fiscal year 2021 at a lower funding rate of \$450 million per year. TAA seeks to provide training and support for affected workers to obtain skills and other aid needed to assist them in becoming re-employed. Benefits and services for individual workers are administered by the states through agreements with the U.S. Department of Labor's Employment and Training Administration's

Office of Trade Adjustment Assistance. On June 29, 2015, President Obama signed into law the Reauthorization Act, which continues the TAA program for six years. The Council supported this legislation and will continue to support TAA, pending review of future program changes.

**Trade in Services Agreement (TiSA)** – The proposed international trade agreement is being negotiated by 24 members of the WTO, including the European Union. The intent is to address cross-border services. The Trade in Services Agreement (TiSA) is a trade initiative directed exclusively at services. The goal is to develop an agreement that will provide for fair and open trade for all categories of services, such as telecommunications, technology, distribution and delivery. TiSA will address cross-border data flows and is intended to support the development of effective regulatory policies facilitating international commerce. Services account for three-quarters of U.S. GDP and 4 out of 5 jobs in the United States. Since its initiation in March 2013, there have been numerous rounds of negotiation among the participating countries, which represent 75 percent of the world's \$44 trillion services market. Similar to our positions on TPP and TTIP, the Council's continuing support for a future TiSA agreement will only be determined after the agreement is released for public review.

**Trade Promotion Authority (TPA)** – Trade Promotion Authority, also referred to as "fast track," provides guidelines for the negotiation of international trade agreements that the president can submit to Congress for a yes or no vote, without amendment or filibuster. The TPA law is intended to guide the administration in pursuing trade agreements that

# INTERNATIONAL TRADE

support U.S. jobs, eliminating barriers in foreign markets and establishing rules to stop unfair trade. TPA is a legislative procedure through which Congress defines U.S. negotiating objectives, and spells out a detailed oversight and consultation process for trade negotiations. Under TPA, Congress retains the authority to review and decide whether any proposed U.S. trade agreement will be implemented. TPA does not provide new power to the executive branch. Since the 1930s, such authority has been critical to the opening of new markets for American companies and workers. However, TPA was last enacted in 2002 and lapsed in 2007. By reenacting and updating TPA, Congress can address new issues and challenges to doing business in the global marketplace that have emerged since the last iteration was drafted more than 10 years ago. TPA is critical to the completion of current trade negotiations, such as the Trans-Pacific Partnership between the United States and Asia-Pacific region that will remove barriers to increased U.S. international trade. TPA was passed by both the House and Senate in June 2015, was signed into law by the president on June 29. The Council supported this legislation.

**Trans-Pacific Partnership (TPP)** – TPP is a proposed international trade agreement being negotiated among 12 Pacific Rim countries, including the United States, intended to enhance trade and investment among the partner countries. The agreement will create new trade and investment opportunities with other partner countries for all sectors of the U.S. economy. A successful TPP agreement also would establish a template for

the integration of other Asia-Pacific economies into a high-standard, comprehensive agreement that eliminates trade and investment barriers and improves competitiveness across the region. Negotiations were concluded on October 5, 2015, but the final language of the agreement has not yet been released. However, under law set out by TPA, the text of TPP must be made public for 60 days before Congress can vote on it. During this 60-day study period, much attention will be given to provisions, such as:

- Market access
- Removing duties/taxes on export/imports
- Regulatory harmonization
- IP protection
- Cross-border data flows and data protection/privacy
- Technical standards for products and services
- Investment protections and investor-state dispute settlement
- Elimination of national subsidies, including mechanisms to address the unfair competitive advantages of state-owned enterprises (SOEs)

While the Council supports the goal of the TPP to increase international trade by eliminating or lowering tariffs and non-tariff barriers, our continuing support for a future TPP agreement will be subject to review of the actual text of the agreement after it is released to the public.

**Transatlantic Trade & Investment Partnership (TTIP)** – This proposed international trade agreement – being negotiated between the European Union and the United States – intends to promote free trade. A comprehensive trade and investment agreement, TTIP would help unlock opportunity for American families, workers, businesses and farmers through increased

access to European markets for American-made products. TTIP would promote U.S. international competitiveness, jobs and growth. It is expected that final agreement will not be reached until 2017. While the Council supports the goal of increased international trade by eliminating or lowering tariffs, our continuing support for a future TTIP agreement will be subject to review of the agreement once it is released to the public. Like TPP, a key concern will be promoting the free flow of data while protecting privacy rights and data security.

## Why Congress Must Act

- Congress must reauthorize the Ex-Im Bank to continue support for U.S. companies to participate in international trade. Since 2007, almost 9,000 companies have used the Export-Import Bank to finance export sales, including almost 6,000 small businesses. In 2014, Ex-Im made over 3,700 authorizations, with more than 3000 directly serving U.S. small businesses.
- International trade agreements are needed to prevent protectionist non-tariff barriers that threaten market access for U.S. companies. The best way to keep U.S. businesses competitive is to ensure they have market access to developed countries as well as the world's fastest growing economies. This must be done through free trade agreements, which provide commercial commitments and protections to the U.S. technology industry.

# INTERNET TAX FREEDOM ACT



## Principle

Since its initial enactment in 1998, the Internet Tax Freedom Act (ITFA) has banned federal, state and local governments from taxing Internet access charges as well as from assessing multiple taxes on electronic commerce. The stated purpose of this law was to “... promote and preserve the commercial, educational and informational potential of the Internet.” This purpose is even more valid today. However, this moratorium, which has been extended five times since its enactment, expired October 1, 2015, as extended by the Consolidated and Further Continuing Appropriations Act, 2015 enacted in December 2014. The Internet has brought astounding changes to both our economy and our daily lives. We now learn, shop, do business and communicate with friends and family online. The Internet provides a dynamic mode of communication for our American society as well as our neighbors around the world. Accordingly, we believe that access to the Internet should remain unburdened by taxes. We must not allow a patchwork of federal, state and local taxes to restrict access to this essential service.

## The Council Supports

- Access to the Internet Unburdened by a Patchwork of Federal, State and Local Taxes.
- Enactment of a Permanent Ban on Multiple And Discriminatory Taxes on Access to the Internet As Provided In The Internet Tax Freedom Act (H.R. 3086 and S. 1431).

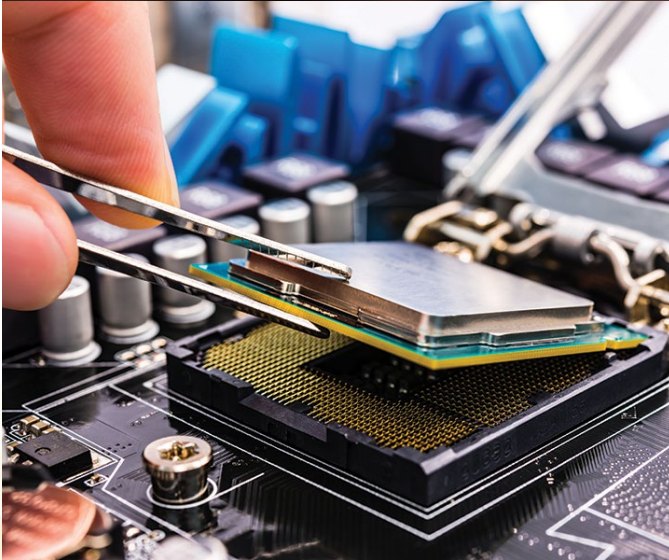
## Why Congress Must Act

- The current moratorium expired October 1, 2015.
- Upon expiration of this ban, federal, state and local governments will be permitted to tax Internet access charges.
- A complicated patchwork of federal, state and local taxes will restrict the Internet.

**Legislation** – H.R. 235, the Permanent Internet Tax Freedom Act (PITFA), was introduced on January 9, 2015, by House Judiciary Committee Chairman Bob Goodlatte (R-Va.); Rep. Tom Marino (R-Pa.), chairman of the Subcommittee on Regulatory Reform, Commercial and Antitrust Law; and Reps. Anna Eshoo (D-Calif.), Steve Chabot (R-Ohio), and Steve Cohen (D-Tenn.). PITFA would ban federal, state and local governments from taxing Internet access charges as well as from assessing multiple or discriminatory taxes on electronic commerce. Were the ban allowed to lapse, state and local governments could move to enact taxes on Internet access as well as other Internet-related activity, such as bits taxes, bandwidth taxes and email taxes. Also, most Internet service providers, which are not currently collecting sales taxes on Internet access charges, would have to establish internal systems to collect and remit sales taxes.



# INVESTING IN RESEARCH



## Principle

Federal investments in fundamental research through the National Science Foundation (NSF), the National Institute of Standards and Technology (NIST) and the Department of Energy's (DOE) Office of Science have provided the basic understanding of our physical world, an understanding that is a prerequisite for the technology advances by Arizona's industries.

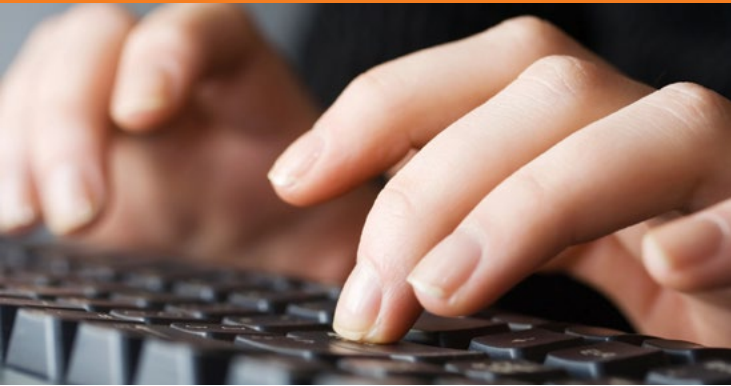
## The Council Supports

- Robust increases in appropriations for the NSF, NIST and DOE's Office of Science.

## Why Congress Must Act

- If the United States is to lead in the nanotechnology era as it has led in the microelectronics era for more than five decades, there must be more investment in the physical sciences.
- Investment in scientific research leads to the innovations that support economic growth at technology firms such as semiconductor producers and, more importantly, companies that use technology, including financial, retail and entertainment enterprises. This economic growth is needed to further deficit reduction.
- Much of the federal investment in science supports research at universities such as Arizona State University, Northern Arizona University and The University of Arizona.

**Small Business Innovation Research Program (SBIR)/ Small Business Technology Transfer Program (STTR)** – Federal funding should be continued to support these important programs while state funding through ACA assists Arizona-based technology firms to apply for these funds.



## Principle

The Council is committed to a state and federal judiciary system that provides a favorable economic climate for Arizona businesses by providing fair and just processes. In particular, the Council seeks a court system that discourages lawsuit abuse, provides appropriate limits on the abuse of tort actions and provides certainty in the adoption of court rules. The court system should be viewed by the business community as a primary reason for locating in Arizona.

## The Council Supports

**Employment Non-Discrimination** – Public policy decision makers should be advocated to pass the federal Employment Non-Discrimination Act (ENDA) and statewide protections in Arizona. Passed by the U.S. Senate in 2013 with the support of both senators representing Arizona, ENDA would end employment discrimination on the basis of sexual orientation and gender identity.

**Employer Policies** – Companies must be encouraged to proactively sign the Unity Pledge, and adopt best practices for LGBT inclusion and non-discrimination to advance or retain a competitive edge for the technology sector.

**Equality for All Workers** – Employees should be judged on their merits opposed to their identities, fostering an environment where innovation can thrive. Embracing basic principles of non-discrimination is critical for attracting and retaining a competitive workforce.

**Housing and Public Accommodation Non-Discrimination** – Public policy decision makers should be advocated to pass legal protections for LGBT people in housing and public accommodations. Employees who can operate freely in the marketplace without the stresses of biased treatment are better able to focus on productivity and performance at work.



# MORE SPECTRUM FOR INNOVATION AND RURAL BROADBAND



## Principle

The United States is barreling towards a spectrum crunch. There is not enough spectrum currently designated for use by the private sector and general public to handle the expected growth in demand for data in the next few years. Most of the attention on the spectrum crunch thus far has been devoted to licensed spectrum but that is only one piece of the spectrum equation. Unlicensed spectrum is that which can be used by anyone as long as the devices using the spectrum meet certain guidelines. However, it also is in short supply. Unlicensed spectrum has a wide variety of potential uses, from Wi-Fi and offloading wireless traffic to providing broadband in rural areas and garage door openers. It also allows companies that cannot afford to purchase spectrum licenses to use spectrum in new and innovative ways.

## The Council Supports

It is essential for Congress and the Federal Communications Commission (FCC) to understand the importance of unlicensed spectrum for the future of the information technology and communication industry. The FCC currently has several open proceedings related to unlicensed spectrum, and Congress must encourage the FCC, NTIA and other government agencies to do everything within their power to make more spectrum available for both licensed and unlicensed use. Specifically, the Council supports:

- **Make More Government Spectrum Available for Both Licensed & Unlicensed Use** – The federal government is the largest holder of spectrum suitable for wireless use. Even government officials will admit that they are not using their spectrum efficiently. The recent AWS-3 auction raised nearly \$45 billion, demonstrating the immense demand for spectrum today. However, clearing and auctioning spectrum 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.
- **Moving Forward on 5 GHz** – The FCC already has made great strides to free up unlicensed spectrum in the 5 GHz band but there is more work to be done. The FCC should impose less restrictive rules in the U-NII-1 and U-NII-3 bands so wireless Internet service providers (WISPs) can provide broadband in rural areas. Additionally, the FCC should continue to work towards making spectrum available for unlicensed use in the U-NII-2 and U-NII-4 bands.
- **More TV White Spaces** – The FCC's Broadcast Incentive Auction has opened an opportunity to create more TV white spaces in rural areas for unlicensed use, which will be used primarily for providing broadband to millions of Americans. The FCC should repack television stations in rural areas to optimize unlicensed use in white spaces and should craft less-restrictive white space rules that take new technologies into account.
- **More Opportunities for Unlicensed** – Congress, the FCC and NTIA should continue to work together to find new spectrum bands for potential unlicensed use.



# PATENT LITIGATION REFORM



## Principle

The Council represents the full spectrum of the technology industry. Our members are at the forefront of innovation and provide a critical backbone that supports broader commerce and job creation. These members include major IT enterprise companies, small and medium-sized IT solution providers, and the distribution partners that bring these products and services to market. Virtually all of these companies have at stake some interest in the debate over abusive litigation practices by patent assertion entities (PAEs). At present, billions of dollars are expended each year fighting or settling abusive patent litigation. While there are certainly many valid suits, the fact remains that businesses, small and large, have been impacted by a system that does not distinguish the bad actors from the good. This ultimately leads to the stifling of innovation and job creation.

## The Council Supports

We support comprehensive federal legislation to curb abusive patent litigation practices. We urge Congress to pass patent reform legislation that reflects the following principles:

### Transparency

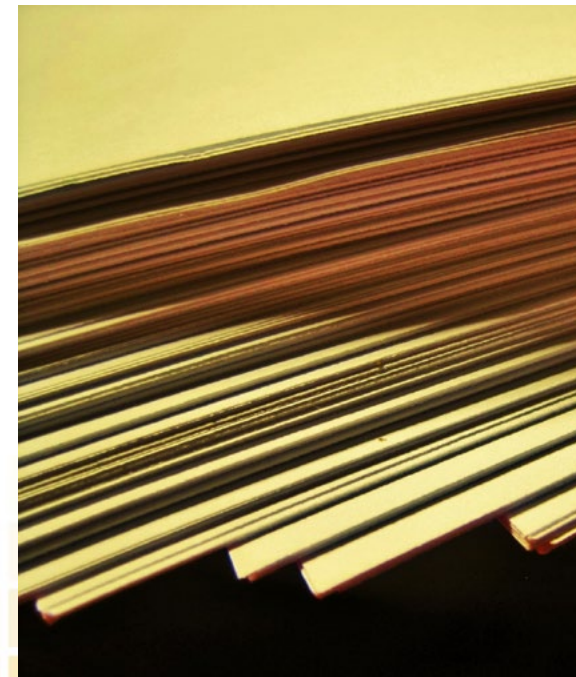
- **Heightened Pleading Standards** – Plaintiffs in a patent infringement lawsuit should be required to disclose the basis and scope of the suit in their initial pleadings, and provide genuine notice to defendants.
- **Disclosure of Real Party-In-Interest** – Patent plaintiffs should be required to disclose all ownership interests when they sue to enforce a patent.

### Accountability

- **Fee-Shifting** – Those who file abusive or objectively unreasonable patent infringement claims should be required to pay the prevailing party's legal fees and costs.
- **Demand-Letter Reform** – Those who transmit fraudulent and deceptive demand letters should be held accountable by the Federal Trade Commission.

### Fairness

- **Protecting End-Users** – End users and customers who are simply using or reselling the final patented product should have reasonable protection from patent infringement lawsuits when a manufacturer is better-positioned to mount a defense.
- **Proper Allocation of Discovery Costs** – To further deter frivolous actions, patent litigants should be required to bear the costs of the discovery they request that lies beyond core documentary evidence.



# PROMOTE RULES TO PROTECT AND OPEN INTERNET



## Principle

In January 2014, the U.S. Court of Appeals – District of Columbia Circuit overturned a significant portion of the FCC’s 2010 Open Internet Order, which imposed “net neutrality” rules on broadband Internet service providers (ISPs). These rules prevented broadband ISPs from blocking and slowing access to Internet content and web services on their networks. In February 2015, the FCC passed a new Open Internet Order reclassifying broadband as a “telecommunications service” under the Communications Act and enacting new net neutrality rules. The rules went into effect in June 2015 but have since been challenged in court. The District of Columbia Circuit is set to hear oral arguments on the case in December.

## The Council Supports

Given the diverse composition of our membership, the Council now sits in an ideal position to add a voice of reason to an issue that has grown increasingly contentious and politicized. We believe the Internet should remain a place where all businesses, regardless of size, should be able to compete with one another on a level playing field. To achieve that, the FCC should pass rules that not only ensure an open Internet but that also provide certainty for the communications and information technology industry for both the short and long term.

The Council filed comments in March 2014 and again in July 2015 advocating for the FCC to retain broadband’s classification as an information service and pass new transparency, no-blocking and non-discrimination rules under Sec. 706 of the Communications Act because we believed that approach best suited the needs of our members. The FCC’s decision to reclassify broadband as a telecommunications service, however, undermines the certainty that is so important to investment in our industry. The decision could be overturned by the District of Columbia Circuit, and regardless of the outcome, we won’t know what the rules are for at least another three years. But there is still another option. Specifically, The Council supports:

- **New Transparency, No-Blocking and Non-Discrimination Rules Through Legislation** – Only Congress can pass net neutrality rules that both ensure a truly open Internet and provide the necessary certainty for industry investment. Bills that do just that will be introduced in both the House and Senate imminently. Based on what we know now, the rules will help keep the Internet open and balance the interests of consumers, edge providers and broadband ISPs alike.

# TAX AGENDA



## Principle

A competitive tax policy is critical for American technology companies to thrive in the United States and effectively compete in a global economy. Because of the innovative nature of technology companies and the incredible products the Council's members create, it is easy to forget that in order to succeed these businesses require a level playing field in domestic and international tax issues. Our global members are constrained by an outdated and complex federal tax code that is desperately in need of overhaul to reflect the dynamic evolution of global American businesses.

Online companies and users of e-commerce platforms are finding new ways to deliver products and services but face scores of different tax laws in states and other taxing jurisdictions across the country. According to the Tax Foundation, there are over 9,600 tax jurisdictions across the United States. Our members are concerned with the complexities of the current tax codes and the ever-increasing costs associated with compliance with local, state and federal taxing jurisdictions.

## The Council Supports

**Corporate Tax Reform** – Our system of corporate taxation puts U.S. companies at a competitive disadvantage with their global competitors and is in urgent need of an overhaul. The last major tax reform occurred in 1986. While many support reform, congressional debate continues and timing for action remains uncertain. Therefore, during this debate the technology industry must ensure any corporate tax reform proposals treat the technology industry equitably—large companies as well as small and medium-sized businesses. Specifically, the Council recommends the following issues be included in comprehensive corporate tax reform:

- **Lower Corporate Tax Rate** – U.S. companies are burdened with a corporate tax rate that is the highest among Organization for Economic Co-operation and Development countries. This high corporate tax rate makes U.S. companies less competitive globally. The Council supports lowering the corporate tax rate to 25 percent without increasing taxes on small and medium-sized businesses.
- **Territoriality** – Currently, the United States is one of a handful of developed countries that tax corporate earnings on a global basis. This means that a company's foreign earnings are subject to U.S. tax when repatriated, increasing the foreign tax rate on these earnings to the U.S. rate. The Council supports enactment of a territorial international tax system that would remove the punitive tax that effectively prevents foreign earnings from being repatriated to the United States.





# TAX AGENDA

- **Intellectual Property** – The Council supports tax policy that fosters innovation such as a “patent box” to attract and retain domestic IP development and ownership.
- **CFC Look-through Rule** – The territoriality provisions of most other developed countries allow companies based there to structure their foreign operations without the additional home country tax of the sort imposed by the U.S. Subpart F rules. Making the CFC look-through rule permanent (as included in the discussion draft that House Ways and Means Committee Chairman Dave Camp (R-Mich.) published in spring 2014) would allow U.S. based companies to marshal their capital outside the United States in a way that would enable them to compete on a more level playing field with foreign competitors.
- **Repatriation of Profits** – We support legislation that would incentivize U.S.-based companies to bring profits back into the United States by allowing those repatriated profits to be taxed at a lower rate. This influx of capital back into the country could be used for capital investment to create technology advancement and job growth. Currently, companies are discouraged from bringing profits back into the United States because of the high corporate tax rate that would result.

## Other Federal Tax Priorities

- **R&D Tax Credit** – The Federal R&D tax credit expired at the end of 2014. The Council has repeatedly called for Congress to make the credit permanent. We also urge extending the economic availability of the credit to startup firms by allowing them to offset the credit against payroll tax liability. Startup companies typically do not generate a profit for a number of years and, thus, have no federal income tax liability. This means that the current R&D tax credit is useless to most startup companies, as it can only be offset against federal income tax liability. However, startups do have employees and pay payroll taxes. Accordingly, the Council supports reinstating the R&D tax credit and making it permanent as well as extending its current economic benefits to startups.
- **Bonus Depreciation** – Businesses that invest in certain assets are permitted to depreciate the acquisition cost over a period of years, as determined by the type of property. For 2014, businesses were allowed an additional 50 percent bonus depreciation, thus accelerating the tax benefit allowed for certain property investments. However, this provision has expired for 2015. Bonus depreciation has served to encourage investment and growth by businesses, and has been especially important to small and medium-sized businesses. The Council supports making this bonus depreciation permanent at the 2014 level.

- **Section 179 Expensing** – This is a very important incentive as well as a tax simplification provision. It enables small businesses to make investments in assets, including technology, that improve business operations and profitability, benefitting both small businesses and our overall economy. For 2010 through 2014, the maximum allowable section 179 deduction was \$500,000, with a phase-out beginning at \$2 million in purchases. For 2015, the limitation has dropped to \$25,000 (with a \$200,000 phase-out). The Council supports continuation of the 2014 limitation as adjusted for inflation.

**Interstate Tax** – The multiplicity of state and local tax jurisdictions creates complicated and repetitive compliance issues for all businesses. Some of these problems can be addressed by federal legislation that provides consistent rules across state and local tax jurisdictions:

- **Internet Tax Freedom Act** – The Internet Tax Freedom Act was set to expire on October 1, 2015, but has been extended temporarily to December 11, 2015. This law bars state and local jurisdictions from taxing Internet access and imposing discriminatory taxes on Internet sales. The Council supports a permanent extension of this moratorium. On June 9, 2015, the House passed the Permanent Internet Tax Freedom Act, but as of the end of the 2015 summer legislative session, the Senate failed to act on this legislation. Without congressional action, the Internet tax ban will expire on December 11, 2015.

- **Online Sales Tax** – In an effort to collect state sales taxes for online (remote) transactions, a number of legislative proposals would require all remote sellers to collect and remit sales taxes for products and services sold from State A into State B, even if the seller in State A has no connection to State B (e.g., a building, distribution center, employees). The Council opposes such legislation, as we are concerned with the new compliance burden it would impose on all businesses, especially small and medium-sized businesses. Accordingly, the Council opposes legislation such as S. 698, the Marketplace Fairness Act of 2015.

- **Digital Download Tax** – 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 across state borders. The need for consistency is underscored by the potential for increased compliance costs when state sales tax laws allow two or more states to assert authority to tax a single transaction. Accordingly, 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, and denote which party is responsible for collecting and/or paying over the tax to the taxing jurisdiction.

- **Business Activity Tax** – Some states seeking to collect additional tax revenues have begun to assert authority to tax transactions that occur outside their jurisdictional borders. We believe it is fundamentally unfair and burdensome for a state

to require a business to collect sales and use taxes when that business has no physical presence in the taxing state. Accordingly, the Council supports legislation such as the Business Activity Tax Simplification Act. This legislation would prohibit state taxation of an out-of-state entity unless such entity has a physical presence in the taxing state, and expand the federal prohibition against state taxation of interstate commerce to include taxation of out-of-state transactions involving all forms of property (e.g., intangible personal property, services).

- **Mobile Workforce** – Some states are imposing income taxes on non-residents after very brief work-related stays. This makes tax compliance more complicated for individuals and their employers. It also deters business-related travel. The Council supports legislation such as S. 386, the Mobile Workforce State Income Tax Simplification Act of 2015, which would establish national standards for state income taxation of non-residents.

**State Tax** – Past state tax policies have had a positive impact on the many successes of technology businesses. A strengthened technology industry will help strengthen state and local economies.

- **R&D Tax Credits** – Research and development tax incentives at the state level encourage more investment by technology companies, helping them to remain globally competitive and to create high paying technology and production jobs. Accordingly, the Council supports the continuation and expansion of those tax policies, such as R&D incentives, and sales and use exemptions on manufacturing and R&D equipment.

- **Affiliate Nexus** – The Council opposes tax policies that impose a use tax collection duty on out-of-state retailers by virtue of their business relationships with in-state companies. Not only are these types of policies fraught with legal challenges, they specifically attack the business models of many U.S.-based technology companies and undermine their ability to remain viable.

- **Taxation of Digital Goods and Services** – 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.



### 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 Arizona Technology Council offers numerous events, educational forums and business conferences that bring together leaders, managers, employees and visionaries 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](http://aztechcouncil.org)**.

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