

# Bringing Digital Opportunity to all Texans



**The Report\* of the Lieutenant Governor's Advisory Council on the Digital Economy (ACDE)**

*Mike Maples, Chair*

*Rick Perry, Lieutenant Governor*

# Executive Summary

**A** critical first step to maintaining Texas' leadership in the Digital Economy is to create a forum for bringing high tech leaders together with the public sector. These relationships will help assure that the state continues to foster the strong business climate, quality education and livability that have enabled our growth.

- **Appoint a State Technology Commissioner.** With the emergence of the high tech sector as a primary engine of economic growth, there should be an advisory position reporting directly to the governor and the state leadership to act as the central point of contact between state government and the technology community. The Commissioner should also advise on issues, including regional clustering, education technology and e-government.
- **Appoint a State Technology Council (STC).** To advise and support the Technology Commissioner, there should be a standing body to help prioritize issues and recommend action to both the governor and the legislature. The STC will provide the initiative to facilitate collaboration across the state and establish “best practices” in tech-related economic development.

## Deliver Excellence in Education

*Use technology to deliver a 21<sup>st</sup> century education to equip Texans with the skills for success in the Digital Age.*

**Education has never been more closely tied to economic progress than it is today. Success in the Digital Economy requires more than simple access to technology tools and online information.**

- **Build and implement an education technology vision.** The STC, education professionals and high tech leaders should craft a vision for education technology that is flexible and assures that funds are leveraged, ideas are shared and schools provide our children the skills to succeed in the Digital Economy.
- **Use incentives and strategies to increase the numbers of math teachers and students interested in math.**
- **Invest in human infrastructure.** Make teacher professional development and technical support to schools a top priority of TIF.
- **Bring high tech professionals into the classroom.** Encourage Digital Economy mentors and role models to teach related fields to show the connection between math and New Economy jobs. To do so:
  - ▶ Remove barriers for working and retired high tech professionals to enter teaching.
  - ▶ Streamline alternative certification.
  - ▶ Create “adjunct professors” of technology for K-12 from the high tech sector.
  - ▶ Encourage and recognize collaborative projects with companies and community organizations as a part of classwork.

- **Provide scholarships in technology fields.** The state should match private dollars to create a fund to provide tuition for economically disadvantaged high school graduates to pursue technical degrees at a community college, junior college or technical school.
- **Increase output of engineering graduates.** Work to increase engineering graduates from 4-year institutions by targeting community college graduates for enrollment and increase retention and yield of existing engineering programs, with a goal of doubling the number of engineering graduates over the next 5 years.

## **Increase Access and Participation**

*Ensure access to technology and make government more user-friendly*

**State leadership should make public sector adoption of new technologies a top priority.**

- **Move state information and services on-line.**
  - ▶ **G2C: Government to Citizen.** Target the services most used by the public and bring them online fastest:
    - Motor vehicle registration
    - Driver's licenses
    - Renewal of professional licenses
    - Birth certificates
  - ▶ **G2B. Government to Business.** Make it simple to do business with government. Expand the General Services Commission procurement portal and use online reverse auctions.
  - ▶ **Create an annual on-line report card of e-government progress.** Reward progress and innovation and foster competition among agencies moving online.
- **Bring technology tools to economically disadvantaged families.** Create a nonprofit clearinghouse to coordinate a partnership among DHS, the TWC, schools, local businesses and nonprofits to direct donated computers and job training services to disadvantaged families.
- **Use technology to help build stronger communities.** Leverage access by employing an America's Promise-type framework to guide TIF community networking grants to use technology to achieve larger community goals.

## **Address Technology Challenges**

*Encourage partnerships between the high tech industry and public institutions to address the challenges brought by technological innovations.*

**While technology has brought huge opportunities, it has also brought new challenges and risks. These developments demand careful study and thoughtful action to educate citizens and build partnerships to assure safety and fairness, while maintaining conditions key to innovation and growth.**

- **Lead by example; set strong privacy standards for e-government.**
- **Create a public/private partnership for on-line privacy.** The state should immediately take action to educate the public about current law, privacy policies, and ways to protect their personal information online.
  - ▶ **Educate the public.** Publish the Office of the Attorney General (OAG) catalogue of existing privacy statutes and conduct a public information campaign to educate Texas businesses and consumers on current privacy rules and protections.
  - ▶ **Enforce current consumer protection law and report to the legislature.** The state should rigorously enforce current laws and evaluate their effectiveness before enacting new laws.
- **Pilot full on-line voter registration and online voting.** Texas should pilot online registration and assure proper protection against fraud. This effort should be followed by a pilot for online voting when security and privacy can be ensured.

## **Promote Innovation and Economic Growth**

*Create networks of leaders to support innovation and work to share that expertise across the state.*

**Technology tools and companies are revolutionizing the way we think of commerce — bringing record economic growth and wealth creation. Our goal is to help bring that success to all parts of Texas.**

- **Foster Regional Technology Councils.** State leadership, the Technology Commissioner and STC members should encourage development of Regional Technology Councils (RTCs) across the state to share clustering projects and ideas, and to represent their region's issues as the STC helps establish statewide technology policy.
- **Promote and expand technology transfer from universities.** The state should work to build stronger partnerships between university leadership and the high tech sector, leveraging the work of research universities to help build companies, create jobs, and build clusters of entrepreneurial activity. Initial steps are:
  - ▶ **Encourage universities to establish tech transfer centers.** The state should allow institutions to use license agreements, equity stakes, royalty payments or other strategies to commercialize research to maximize economic impact to the school and surrounding community.
  - ▶ **Foster business/risk competency into university leadership.** To build competency in technology transfer, universities should create an advisory board of professionals at research universities that include legal, business development and licensing experts along with venture and investment bank advisors.
  - ▶ **Promote university involvement in RTCs.** To foster closer collaborations between academic and economic leaders, senior university officials should be members of Regional Technology Councils to build relationships and foster collaborative local projects.

# Guiding Principles

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*The following are the underlying concepts that derived from the ACDE's deliberations:*

- **Excellence in education is integral to economic success in the Digital Age** •
  - **Increased access to technology is essential** •
- **Technology challenges require both immediate action and long-term partnerships** •
  - **We must promote innovation to secure continued economic growth** •

*Public institutions, from local to regional to statewide, are working to accommodate the relentless pace of change in the Digital Economy. Through strategic partnerships, thoughtful pilots, innovative expansion of nascent projects and rigorous evaluation, Texas can be a national leader in putting technology tools to work as catalysts for economic growth, expanded opportunity in education, and improved relationships between citizens and their government. We believe that the work of the ACDE is an important first step in that process, providing a framework for future state technology policies to make Texas a thought leader for technology-related economic growth.*

*\*The full report, background materials and links to additional information can be found at [www.txdigecon.bus.utexas.edu](http://www.txdigecon.bus.utexas.edu)*



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