Economic Development Planning: Arizona’s Progress and Priorities to Date

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Over the past decade, researchers from around Arizona and the country have crafted a vast paper trail that stretches across the state’s economic development landscape. It’s a trail of policy briefs, in-depth studies and complex analyses that have provided Arizonans with a wide range of possibilities, priorities and plans for action.

A review of dozens of these studies suggests a penchant for thinking big and asking, “What if?” What if Arizona followed a roadmap designed to transform the state into an emerging center of bioscience? What if Arizona put our 350 days of annual sunshine to work and became the capital of solar power? What if Arizona set its sights on becoming the commercial and international business hub of the Southwest?

Those weren’t the only questions. What if Arizona built its $18 billion aerospace and defense industry into a “Center for Excellence” for global aerospace, defense and security? What if Interstate 11 were built from the Arizona/Mexico border to Canada, positioning Arizona to play a pivotal role in international trade? What if Arizona took greater advantage of its proximity to Mexico to promote more trade and tourism?

And maybe the two biggest “What ifs” ...

- What if the Sun Corridor was transformed into a global powerhouse built on such promising sectors as transportation logistics, renewable energy, biomedical and pharmaceuticals as well as such traditional sectors as tourism, air transportation, aerospace and defense?

- What if Arizona made the transition from an economy based on real estate, retail and construction to one that was much more diversified and knowledge-based? One where investments in education, infrastructure and innovation paid off with high-paying jobs in science and technology.

As part of an in-depth project for the Arizona Commerce Authority, Morrison Institute for Public Policy has indexed and summarized major economic development reports from the past decade as well as plans that are currently in progress. The reports encompass eight broad categories: aerospace and defense, bioscience, infrastructure, trade with Mexico, science and technology, sustainability and solar power, the Sun Corridor and Arizona’s economic competitiveness.
The scan of reports provides a broad review of where Arizona has been in terms of economic development, and where the state could go in the quest to create jobs and wealth for its citizens. The scan is also a reminder that Arizona, its universities and various foundations and organizations have invested greatly in time and funding to produce the reports. The data and ideas in these reports provide Arizonans with a world of choices in moving forward. Underlining every report is the message that collaboration is essential to success.

**Arizona and Strategic Planning**

Arizona has long been an early adapter of new ways of approaching strategic planning in economic development. In the early 1990s, Arizona embraced Dr. Michael Porter’s series of cluster-based economic development, which led to the Arizona Strategic Plan for Economic Development and realigned how the state approached the job of growing targeted industry clusters. Many positive outcomes resulted from this approach, including the growth of the optics, aerospace and defense, and financial services industries, as well as a greater collaboration among Arizona’s technology companies.

Additional work was done to advance economic development in Arizona from 2003 to 2007 under the Governor’s Council on Innovation and Technology. The council was part of a continuum of state economic development efforts, the latest being the creation of the Arizona Commerce Authority in 2010.

The ACA, building on the foundation of work done in the past, and in concert with many partners across the state, is implementing several new initiatives. They include a robust strategy for manufacturing, supported by several federal grants, that features the newly established Manufacturing Extension Partnership (MEP) Center, an economic development toolkit that includes programs to support high-quality job creation, more competitive taxes for business and commerce, and a host of other programs in sectors such as technology, renewable energy and financial services.

**Do Plans Create Real Impact?**

With the publication of numerous reports, we may well wonder how many are merely gathering dust on shelves and how many are actually guiding purposeful action and producing results. A review suggests that a surprising number of good, even significant changes have resulted from these economic development studies.

Among the best examples are the reports that the Battelle Technology Partnership is producing for the Flinn Foundation, following the release of the Arizona Biosciences Roadmap in 2002. That comprehensive study focused on making the state, particularly greater Phoenix, more globally competitive in bioscience. The 2002 initiative was followed by roadmaps for Tucson in 2006, and Flagstaff in 2007. Every year, Battelle issues an assessment of the progress Arizona has made in bioscience, including a 10-year assessment in 2013.

These plans, backed by strongly committed public and private leaders, have contributed significantly to the growth of biocenters and thousands of jobs in Phoenix, Tempe, Tucson and Flagstaff. As an outgrowth of the 2002 bioscience roadmap, Battelle also prepared a series of reports in 2003 and 2004 under the Arizona Statewide Economic Study, which was intended to help Arizona draft a 10-year economic development strategy.
The aerospace and defense studies that Science Foundation Arizona asked Arizona State University to undertake in 2011 have put this important industry, which accounts for 10 percent of the state’s GDP, back on the radar. These reports raised the awareness of leaders about the significance of our defense industry and the threats posed by other states, and a changing economy and world.

The reports helped lay the groundwork for business leaders and groups to collaborate on the Arizona Commerce Authority’s proposal for Arizona to be designated a national test site for unmanned aviation vehicles. The proposal is still under review by the Federal Aviation Administration, but the state’s core competency in this emerging sector provides reason for optimism about the testing, research and manufacturing of UAVs.

Separate studies by the Arizona Department of Transportation and Maricopa Association of Governments are paving the way for possible construction of Interstate 11 between Phoenix and Las Vegas, and possibly south to Nogales, Sonora. And the state’s Transportation and Trade Corridor Alliance is nearing completion of studies that will identify possible trade corridors, including I-11, and infrastructure needed along the Arizona-Mexico border.

A report doesn’t have to be long to have an impact. It needs an intriguing idea. Such is the case with a six-page policy brief by the Arizona Chamber of Commerce and Industry’s foundation that proposes making Arizona the international commercial and business hub of the Southwest, similar to what Atlanta is for the southeastern United States.

In its 2012 brief, the foundation makes the case for a project called Southwest Direct that would take advantage of our airports in greater Phoenix to develop a bigger cargo business with other countries. From there, it is suggested, the hub concept could be expanded to stimulate such sectors as manufacturing healthcare and sustainable/renewable energy.

Arizona State University’s Productivity and Prosperity Project has produced a number of studies in recent years exploring various aspects of Arizona’s economy, including its strengths, weaknesses and competitiveness. Similarly, as part of its economic studies, the University of Arizona has closely tracked the ebbs and flows of the economies of Arizona and Sonora, Mexico.

For all the expertise brought to bear on economic development, why is it that some reports don’t have a greater impact? As in many things, timing is everything. Maybe the time isn’t right to put key recommendations into practice. Any list of reasons would also have to include politics, perhaps a lack of funding and a lack of leadership or the will to implement ideas. For that matter, maybe some of the recommendations just weren’t that convincing. Still, some key themes can be culled from the many reports.
**LOOKING BACK, MOVING FORWARD**

Below are key recommendations from four areas and a representative sampling of organizations that, working together, can lead Arizona forward. Go to MorrisonInstitute.asu.edu for a digital version of this report and access the subsequent 30 chapters in weekly installments.

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**Aerospace, Defense and Security**

The aerospace, defense and security industries are vital parts of Arizona’s economy, offering great potential in many areas, including cyber warfare and unmanned aerial systems. Key recommendations include:

**Promote Arizona as the “Center of Excellence” for global aerospace, defense and security.**


**Strengthen collaboration between industry, universities and the military.**


**Leverage Arizona aerospace and defense foundations to address national security issues.**


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**Bioscience**

Arizona is an emerging player in bioscience with many successes, but the state faces many challenges. Key recommendations include:

**Achieve critical mass in industry.**

**Potential partners:** Arizona Commerce Authority, Arizona State University, Bioscience Leadership Council of Southern Arizona, Celgene Corp., Critical Path Institute at University of Arizona, Economic Collaborative of Northern Arizona, Flinn Foundation, Greater Phoenix Economic Council, Maricopa Integrated Health System, Mayo Clinic, MD Anderson Cancer Center, Northern Arizona University, Phoenix Biomedical Campus, Science Foundation Arizona, St. Joseph’s Hospital and Medical Center, Syncardia Systems Inc., Translational Genomics Research Institute, Tucson Regional Economic Opportunities and W.L. Gore and Associates.

**Increase competitiveness for R&D funding.**

**Potential partners:** Arizona Commerce Authority, Arizona State University’s Biodesign Institute, BID 5 Institute at University of Arizona, Celgene Corp., Chan Soon-Shiong Institute for Advanced Health, Flinn Foundation, Heliae Development, Northern Arizona University, Phoenix Biomedical Campus, Science Foundation Arizona, Sonora Quest Labs, SynCardia Systems Inc., Translational Genomics Research Institute and UA College of Medicine.

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**Sun Corridor**

The Sun Corridor — stretching from Prescott to Nogales — is in an ideal position to pursue key economic opportunities in Mexico, California and beyond. Key recommendations include:

**Become an international transport and business hub.**

**Potential partners:** Arizona Chamber of Commerce and Industry, Arizona Commerce Authority, Arizona Department of Transportation, Arizona-Mexico Commission, Border Trade Alliance, Central Arizona Association of Governments, Gila River Indian Community, Greater Phoenix Economic Council, Governor’s CANAMEX Corridor Task Force, Maricopa Association of Governments, Pima Association of Governments, Tuscon Regional Economic Opportunities and cities of Buckeye, Casa Grande, Chandler, Mesa, Phoenix, Tempe, Tucson, Prescott, Nogales and Scottsdale, among others.

**Grow industry clusters for the future.**

**Potential partners:** Arizona Chamber of Commerce and Industry, Arizona Commerce Authority, Arizona State University, Arizona Technology Council, Greater Phoenix Chamber of Commerce, Greater Phoenix Economic Council, Greater Phoenix Leadership, Maricopa Association of Governments, Pima Association of Governments, Salt River Pima-Maricopa Indian Community, Science Foundation Arizona, Tucson Regional Economic Opportunities, University of Arizona and Northern Arizona University.

**Become a renewable energy hub, especially solar.**

Key Themes from the Economic Development Plans

Mexico
More than a third of the reports dealt at some length with the great promise of trade with Mexico. A central message is that Arizona and Sonora should look to create synergies. For example, companies in Arizona can tap the workforce in Sonora, while companies in Sonora take advantage of the business infrastructure in Arizona, notably the aerospace and biomedical sectors.

The four studies that focused specifically on Mexico are far ranging. One looked at what it will take to develop the port of Guaymas to make it easier to ship goods to and from Tucson, in particular. Another report looked at whether it made sense to build a rail line from Yuma into Sonora, possibly to yet-to-be developed ports. And yet another looked at what it will take for Arizona to boost tourism from Mexico.

Shortening the wait times at the border for commercial trucks was a common refrain in the studies dealing with Mexico. Those wait times are also impacting tourism travel between Mexico and Arizona. It’s also agreed that increasing U.S. Customs and Border Protection staffing would speed travel – and commerce – between Sonora and Arizona.

STEM Education
With so much emphasis on science and technology, it’s not surprising that a half dozen of the reports were very specific in calling for more STEM (science, technology, engineering and mathematics) education at the K-12 level to better prepare students for college and employment. This was especially the case with the reports on advancing the bioscience sector and economic competitiveness.

Infrastructure
Nine of the reports, or nearly a third, examined in some way the kinds of infrastructure needed to meet the needs of tomorrow’s Arizona. The title of one report by ASU pretty much summed up the issue: “Preparing for an Arizona of 10 Million People: Meeting the Infrastructure Challenges of Growth.” By 2032, it’s estimated that an additional $288 billion will be required beyond what is already expected to be spent on infrastructure, to build and support such public sector infrastructure as roads, transit, electricity, drinking water, health care and public education.

When it comes to infrastructure, an idea rapidly gaining support is to build an inland port to handle shipments from California ports and other parts of the country, as well as Mexico. An inland port that would service truck, rail and air traffic in Arizona, and possibly lead to suppliers and manufacturing plants locating nearby, is viewed as one of the possible spinoffs of building an interstate between Phoenix and Las Vegas, and maybe even from Nogales, Sonora to Canada.

Innovation
Common to many of the reports is a call to leverage the state’s assets or strengths, or to leverage the assets or strengths of a particular industry, a reminder that Arizona has many assets upon which to build a more competitive economy. These include Fortune 500 businesses as well as emerging companies, the three state research universities and a growing base of
institutions of higher education, a favorable business cost-operating environment, a young workforce, a spirit of entrepreneurialism, great weather, and a high quality of life.

More generally, reports dealing with the state’s economic competitiveness note the need for improved education, a ready workforce, a climate hospitable to business, and taxes and incentives that will attract new businesses and help retain those already here.

**Looking Ahead**

If there is one thread that runs through every one of the reports it’s the value and need for collaboration. You see it in several aerospace studies where there is a call for the state’s three research universities, aerospace and defense industry, and military installations in Arizona to work close together with a payoff in research and development of products the military needs. You also see it in the bioscience studies, which stress the value of research collaborations between the universities, hospitals and research organizations – and not just in Arizona, but with such cities as San Diego. The four reports exploring development of the Sun Corridor, which stretches from Prescott through Phoenix and Tucson to the border with Mexico, concur that success will require the cooperation of numerous governments, organizations, businesses and individuals.

**The bottom line:** The many economic development studies and initiatives undertaken over the past decade have vastly improved Arizona’s economic development competitiveness. Today, the state has a broad platform upon which to create new and enduring opportunities for the future. With the collective will of all Arizonans and a finely honed focus, together we can build a more prosperous Arizona for decades to come.

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