Pathways: Access-driven Architecture
For The Arizona University System
An Implementation Roadmap for the Arizona University System
Long-Term Strategic Plan, 2010-2020

2020 Goal One - Educational Excellence: To be nationally competitive in the percentage of Arizona’s citizens with a high-quality bachelor’s degree by providing affordable access through a well-coordinated and aligned system.
Arizona University System 2020 Strategic Plan, 2009

As Arizona’s population grows, our economy must respond aggressively to the risks and opportunities presented by the compounding factors of globalization and regional competitiveness. To successfully compete, Arizona must retain, attract and develop the best and brightest workforce, strengthen existing businesses and persuade new businesses to relocate to or innovate in Arizona. This will require both strengthened research capacity and increased degree production at Arizona’s public universities.

Indeed, as the State’s primary producer of a highly-educated workforce, our public universities have a critical role to play in Arizona’s economic transformation, and to help keep pace with our economic competition over time we must dramatically increase degree production at reduced cost both to students and to the state.

In her April 30, 2009, presentation to the Arizona Board of Regents, Governor Jan Brewer suggested that meeting these needs would require a new business model for Arizona’s universities focusing on affordability, accountability and predictability. In particular, Governor Brewer suggested that “Affordability means giving students choices and financial certainty that recognizes differences in the types of degrees, types of institutions, and the location of our students.” Fortunately, under the leadership of the Regents, Arizona’s universities had recently undertaken a critical planning process which was aligned with the Governor’s goals.

In addition, our University System has had much success on which to build. Arizona’s three public universities make a significant impact on statewide degree-production needs, providing opportunities for study and training in the necessary range of fields and producing over 18,000 bachelor degrees, 5,900 master’s degrees, 900 doctoral degrees and 550 first professional degrees annually, at a cost per degree that is among the most efficient in the United States. But our current mechanism for public higher education relies almost entirely on a version of the research university platform. In Arizona, 93 percent of students attend such institutions—a costlier model for undergraduate education than is achieved by an institution focused solely on undergraduate degree production.

Even while relying on this research-based platform, the Arizona University System is extraordinarily efficient and accessible both in terms of physical locations and student costs. With four ASU campuses, NAU in Flagstaff plus nearly 35 other NAU sites and an NAU branch in Yuma, two UA campuses and seven UA learning centers, plus Arizona Universities Network
(AZUN) and individual web delivery by each university, no Arizona student lacks access to the System. This is in addition to significant direct university investment in financial aid, dramatically enhancing affordability.

Moreover, a close examination of Arizona’s University System cost structures firmly establishes that Arizona’s existing campuses are among the most productive in the United States relative to their peers or other similar institutions. This conclusion is particularly evident when Arizona’s campuses are compared to the range of costs established for relevant Carnegie Classifications\(^1\) as set forth below.

It is this efficiency which we intend to leverage, making a significant and cost-effective impact on Arizona’s economy through dramatically increased degree production.

A. Increasing Baccalaureate Production: An Arizona University System Long-Term Strategy

The problem in Arizona is not university access, but rather too few students graduating from high school and going on to college. Those students who do attend a community college do not go on to the university in sufficient numbers to make a difference. Unlike in California, Arizona students are not being turned away. The universities provide access to all students who meet admissions requirements. Our system can create additional access, at a cost which must be borne by the state, but that will not increase degree numbers unless we can change aspirations of the students. Simply redesigning the architecture will not take care of the problem, and any redesign must both encourage and facilitate students entering into and graduating from the Arizona University System.

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\(^1\) The Carnegie Foundation classifies all accredited, degree-granting, non-specialized institutions of higher education in the U.S. Universities are placed in categories based on a formula that considers a variety of factors, including degree level, enrollment, number of doctoral degrees conferred, research and development expenditures, and other indicators. This classification does not differentiate institutions with respect to research quality or importance.
In the recently approved Arizona University System 2020 Long-Term Strategic Plan, we determined that our system must increase degree production by at least 50% annually by 2020 to remain nationally competitive. To meet this demand, the presidents of Arizona’s public universities have proposed a structural evolution for Arizona’s University system. To speed the development of capacity for more degrees and to do so in the most cost-efficient manner while continuing to increase research productivity, we must create new educational pathways to serve Arizona’s students. This document serves as the tactical roadmap for achieving these degree production goals.

Using existing infrastructure as a foundation and leveraging the investment of Arizona’s communities, we propose a new University system of deeply integrated community college-based 2+2 branch campuses, regional universities in partnership with community colleges, new baccalaureate campuses, and collaborative Arizona Public University Centers, with high-demand baccalaureate degrees ultimately available in every Arizona county. The universities have partnered with community colleges on traditional 2+2 articulation models for years, but new models are needed if we are to significantly increase baccalaureate production. Such new models, in which seamless degree programs are developed with community colleges, will dramatically increase the number of students completing bachelor’s degrees.

Our initial model, scalable over time, consists of four highly-integrated branch campuses or regional university campuses developed in partnership with community colleges by 2012, and the start-up of at least one new baccalaureate campus by 2010. Full 2020 build-out includes at least one physical community-based campus, regional university or other similar program structure in every county where demand and support makes such expansion feasible, plus several additional baccalaureate campuses, the latter most likely in high-population areas. In addition, successful implementation of this proposal requires expansion of the Arizona Universities Network (AZUN) slate of online degrees, making them available anywhere, all the time, and at a lower cost.

This integrated, scalable and cost-effective response will allow the Arizona University System (with appropriate state support) to rapidly expand capacity to meet significantly higher degree production goals. This model describes an array of pathways, both for Arizona students and for growth of the institutions that serve them, which will define the flexible expansion of America’s state university systems in the future.

Specifically, this document will describe how the three universities will work to enhance productivity, effectiveness and coordination to meet these system-level goals, and to meet Arizona’s workforce and economic development needs.

B. Leveraging the Reach of Arizona’s Universities

In the recently approved Arizona University System Strategic Plan, the universities noted that a “Gold Standard” of doubling the number of degrees produced by 2020 would require complete alignment of effort between K-12, community colleges, private institutions and the universities. While the universities are prepared to devote more resources and effort to the K-12
pipeline, the adequacy of K-12 output is most directly driven by local school districts. The “Silver Standard”, increasing production from a current 18,500 bachelor degrees annually to 28,200 by 2020 relying primarily on university and community college production, would dramatically improve Arizona’s economic competitiveness nationally and worldwide. This latter goal is the basis for the system architecture outlined in this document.

This recommended structural expansion, along with significant enhancements within the Arizona University System related to distance education, retention rates and time to degree, is capable of supporting the capacity needed to reach this system-driven goal. But the model must be recognized as being limited by the availability of reasonable and predictable state support for the new model and existing campuses, the supply chain of prepared students and the cooperation of other educational systems. The proposed ABOR system architecture, however, is one that can lead to increased cooperation with the community colleges and which requires no more than reasonably enhanced levels of state funding.

Principally, any system-level architecture and its funding model must be built upon a wider range of mission-differentiated institutions and locations than exist today. Within the core model, enhanced community college relationships must play a critical role in the strategies of all three universities for building degree capacity and output, whether through significantly increased transfer rates, integrated branches or regional universities in which community colleges deliver most lower division courses, increased delivery of upper division content via distance education from our universities to community college campuses, or the physical delivery of face-to-face university content at facilities on or near community college campuses.

In addition, growth at the current institutions and in new stand-alone, partnership and adjunct institutions must play an equally significant role in advancing system goals and developing greater capacity. With a diverse set of educational options, student choice can be expanded, and differentiated cost structures and revenue models can be established to allow the more rapid expansion and enhanced accessibility necessary to meet those objectives. Indeed, student choice will be a significant factor in retaining and attracting the best students.

As each university reframes its priorities and program offerings to reflect current economic realities, we are taking advantage of these focused planning processes to increase degree output through improved retention in current programs, reduce both the fixed and variable costs of expansion, and increase degree production in the future. As a core element of long-term strategy, each university has developed an expansion plan which best suits their mission, brand and resource scalability. Perhaps most importantly, these expansion plans have been explicitly reconciled to assure that they are compatible across the system.

These analyses, occurring over the last two years, have been shared with the Regents, and are reflected in the decisions of each institution to grow in very different yet entirely complementary ways. A brief summary of these core strategies is assembled below, with the addition of a new model related to the creation of Arizona Public University Centers, where the three universities will offer complementary and non-overlapping content utilizing shared infrastructure.
1. Each university will aggressively expand transfer relations with all community colleges: every student on every community college campus will have a clear and directed path to any campus of the Arizona University System.

2. Each of the universities will develop shorter time to degree options for students throughout the state. Options may include three year degree programs and year-round schedules. All three universities are also significantly enhancing retention programs.

3. All three universities will continue to engage in extensive efforts to expand and coordinate their distance education offerings (both through the AZUN channel and through their separate platforms), and to do so at a lower cost both to expand access in Arizona and to create revenue from outside the state which will support Arizona programs.

4. NAU will expand into at least one and perhaps two regional university models with appropriate community college partners, including Coconino Community College, Yavapai College and perhaps Arizona Western College. Ultimately, resources and demand permitting, this model will be expanded statewide with additional community colleges.

5. The UA will extend its model of deeply integrated, transfer-free 2+2 partnerships with community colleges, offering high-experience undergraduate and limited masters programs through branches or learning centers in target counties, initially including Pima, Santa Cruz, Cochise, Yuma, Pinal and some Maricopa locations.

6. ASU will develop additional baccalaureate campuses (the Colleges @ ASU) focusing on high-demand degree programs. The first of these colleges will be in Maricopa County, with additional locations throughout the state anticipated dependent upon demand and need. The financial model for the colleges relies on partnerships with local communities to provide facilities. As an adjunct to these campuses, ASU will develop a community college partnership network that includes two or more sites around the state.

7. Each university may also pursue the offering of selected 4-year or accelerated programs through a hybrid of on-site and online courses to small cohorts at existing community college locations with a sharing of teaching resources and facilities.

8. In a location to be determined by the Council of Presidents and subject to Regental approval, the universities will explore the feasibility of an Arizona Public University Center model delivering Arizona University System content in a common location.

These efforts will be subject to coordination among universities by the Council of Presidents, and subject to Regental review or approval as appropriate, to alleviate programmatic and
geographic duplication or overlap. The proposed expansion models, their relationships to existing campuses and a general expression of relative cost structures are set forth below:

**University Structure (Proposed by 2020)**
By Carnegie Classification

![Diagram of University Structure](image)

The location of an institution and overall efforts along each continuum tends to reflect the relative cost, necessary support and tuition levels for its programs. Critical to the success of this System expansion strategy, both enrollments and funding must increase at the research and instructionally intensive ends of this continuum.
C. The Collaboration Model

Further, the Presidents have agreed, subject to approval of the Board, to develop an internal process to avoid both geographic and programmatic competition and overlap of programs or efforts as necessary. Specific guidelines will be developed and will take into account the following general principles and observations regarding the relationship between demand and sustainability.

a) In areas where programs might otherwise appear to compete, the Presidents, through the existing mechanism of the Council of Presidents and through the appointment of discipline-specific analysis teams, will jointly evaluate the following factors to determine the offerings and delivery mechanism for a particular locale. These factors will also be used in structuring the variety of relationships with individual community colleges which might involve more than one university.

- relevant demographics and demand;
- existing infrastructure;
- the possibility of leveraging unique relationships;
- local demand for particular or niche offerings; and
- the level of curricular (or market) differentiation among proposed programs that might otherwise appear similar.

b) Since the Arizona University System is significantly under-built, in Maricopa County in particular and in Pima County to a somewhat lesser extent, program overlap is rarely a competition issue since the population is large enough; nor is it a system efficiency issue if the content is adequately differentiated to derive a sustainable market share. The principles of existing infrastructure, leveraged relationships, niche demand, unique expertise, and "true differentiation on closer look" may reveal that existing plans likely avoid real competition and overlap, especially in high population areas.

c) The criteria also resolve potential conflicts in areas where the prepared population does not support the presence of similar programs from more than one institution. None of the universities is interested in offering truly duplicative programs in these areas, so we are in complete agreement that in low-population, potential overlap communities existing programs have priority, and the universities will work together regarding program expansion.

d) In areas that are less populated but rapidly urbanizing, nearly any offering lacks adequate supply of prepared students (as with rural locations described above) but each university recognizes the need to expand into those areas in the future. The factors applied to these areas will result in novel collaboration, from offering differentiated niche programs side-by-side to offering shared programs in Arizona Public University Centers.
e) As the universities develop new models Board policy and legislative authorization may be needed. Examples include the elimination of Board rule 205-A-3 that prohibits the universities from delivering lower-division, 100-200 level courses off-campus; and Board rules that limit the ability of the universities to implement lower tuition costs for specific partnerships. Legislative action may be required to allow the universities to create new baccalaureate colleges or regional universities. The Council of Presidents will also evaluate these issues and make recommendations to the Board as appropriate.

D. Community College Relationships

The community college system is a critical link to expanding the number of baccalaureate degrees. There are thousands of students in the community college system who could be jointly admitted to a university and thousands more older adults in local communities who might return for a focused baccalaureate degree improving their access to high paying jobs. The community colleges also have existing facilities and campuses that can be sites for university investments to increase degree production. NAU has established a presence on nearly every community college campus and these sites can help boost immediate new investments by all three universities.

But the university system architecture must be carefully coordinated with the community colleges to avoid duplication, to assure smooth access to baccalaureates, and to wisely use state dollars for expansion. Currently there is a significant lack of “system” thus involving each community college and each university in separate discussions and ultimately a bewildering array of legal contracts. The chances for wasted efforts, failed investments, and institutional aggravation are enormous in such a disconnected system.

The Presidents propose a new structure that would make the Council of Presidents the entity responsible for assuring smooth relationships with individual community college districts and presidents. The Council would designate appropriate staff from each university as appropriate to facilitate programming and the development of physical sites, and the three Presidents and the ABOR Executive Director would meet on a regular basis specifically to address those issues. To assure that we neither duplicate programs nor confuse community college presidents, local residents, or students, the Presidents would be the main vehicle for coordinating these various efforts throughout the state, subject to applicable program approval authority of the Board.

E. Relationship of Program Differentiation to Funding Structure

One of the critical outcomes of this system design must be the creation of a wider range of tuition prices for Arizona residents to create more options that will allow a student to select the structure and method of instruction that best matches his or her needs. At the same time, while program delivery and style will vary greatly, quality cannot be sacrificed to achieve this end. A degree from any of the programs at the ABOR institutions must represent good value and great preparation. Developing a structure that balances program cost, tuition and fee charges, and required state funding is extremely important to achieving these goals. Indeed, the affordability of tuition for the student in the new models will be significantly enhanced.
The presidents support a funding structure across the university system that provides greater access and opportunity for students and that reflects both the fixed and variable costs associated with these different institutional missions. Use of national data through tools such as the Delta Educational Cost model\(^2\), the Florida database of detailed program costs, or other sources can help to inform an analysis of the relative cost of instruction for the various types of programs. Arizona institution-specific cost profiles for individual program mixes on the varied campuses will also be important in determining the appropriate cost of instruction and the support necessary to advance those programs and campuses.

These costs will vary across the different elements in the new system and may be unique to the needs and developmental status of a site. These elements of cost and the extent to which state support is made available will determine the appropriate tuition and mandatory fee levels required to properly support each program and each instructional model.

Accordingly, the universities anticipate that cost of instruction, necessary state support and tuition, per Student FTE, will be lower in the new instructional models. The presidents foresee a likelihood of differential tuition and fee levels, highest in programs on research-intensive campuses with relatively higher costs and lowest in new model programs with lower costs. Tuition levels must take into account regionally-relevant professional, niche or other specialized programs which might be justified by higher inherent costs (e.g., nursing) or which might appropriately command higher program fees or differential tuition (e.g., MBA programs or distributed technical masters programs leveraging main campus infrastructure).

For example,

- **a)** State support (for both fixed and variable costs), and tuition and mandatory fee ranges, would be highest in programs or at campuses where educational costs (such as programs with more expensive instructional modalities or campuses with higher proportions of research and graduate or professional education) are greatest.

- **b)** State support and tuition would be somewhat lower where the cost of residential education might be higher despite a less graduate-heavy program mix, or where research activity and related costs may be lower.

- **c)** State support and tuition would be lowest at the hybrid locations, baccalaureate colleges or other predominantly undergraduate instruction-focused locations throughout the state where the sole focus is on active student learning.

\(^2\) The mission of the Delta Project on Postsecondary Education Costs, Productivity, and Accountability is to help improve college affordability by controlling costs and improving productivity. The Delta Full Educational Cost (FEC) is defined as spending on instruction and student services, plus the instruction-related share of spending on academic support, institutional support, and operations and maintenance. This is the model presented to the Regents in recent discussions regarding 2020 financing.
F. Summary

Based on these conclusions, the university Presidents, through the existing structure of the Council of Presidents, will oversee teams specific to program disciplines charged with evaluating potential expansion offerings, and will produce for the Board both individual implementation plans and a common document more specifically describing the structure and administration of current and proposed affiliated campuses and describing the relationship of mission differentiation to proposed cost models.