All of us sitting in this room are concerned with the quality of life and quality of place in the metropolitan region. We want businesses to succeed, we want to create jobs, we want to see great neighborhoods emerge, and we want to see future generations have greater opportunities. The advancement of ASU, as the sole major research university for the metropolitan area, is critical to the realization of these objectives.

However, no institution advances in isolation. A bedrock public asset like a great university can only be built by the constituencies it serves: students, alumni, parents, faculty, staff, members of the community, civic and business groups, business and industry, local government and municipalities, state government, friends of the university, philanthropic foundations—those who understand the significance of its mission and are committed to the success of both the university and the region. Many of the recent accomplishments that mark the progress of the university would not have been possible without your support. The passage of the research infrastructure bill in the legislature last year, for example, would not have succeeded without the support of the Tempe Chamber of Commerce, the city of Tempe, and many members of the Tempe community.

Tempe is one of the great college towns of America, but it has the potential to be the greatest. It has been a pleasure to work with the city council and the mayor as we make progress toward that goal. The Tempe business community and the city council are tremendous assets to and allies of the university. Not every university president can say they are working in tandem with the business community and governmental leadership in a way that will lead to success for all concerned. We consider all of you here at the Tempe Chamber of Commerce as part of the ASU team, a stalwart group that works as the university’s partner to get things done. Your support gives the university a tremendous advantage as the city of Tempe, ASU, and the state of Arizona face the new competitive global environment.

The steps that have taken ASU from a territorial normal school to a national university with global impact were never made in a vacuum, and as we now redefine the university for twenty-first century excellence and
accessibility, significant external forces are at play that drive our decisions and influence our plans. A number of these external forces—call them “determinants”—are global in scale, and just as no institution advances in isolation, Arizona can no longer maintain a parochial perspective if we are to be competitive in the new global economy.

The Chinese economy, for example, has been growing annually at a rate of more than 9 percent, but that only offers a hint at what is happening there and in the rest of the developing world. Several nations of the world are poised to transition from Third World to first World status, skipping all of the steps in between. Although this may be very good news, the transition plays havoc with things like the price of oil because it cannot be refined fast enough to meet the unprecedented demands of these growing Third World economies. The accelerated transformation of the global economy is also going to even out the playing field economically, a process that should be well under way by the year 2015. America’s economic dominance over the past 100 years will have left it unable even to remember what it means to have serious challengers for economic, industrial, and military preeminence in the world. And so one of the “determinants” of which we need to be cognizant is global competition, and the fact that the American economy and the regional economy are going to have to figure out how to participate.

Another factor that demonstrates the scale of the economic challenges that lie ahead is the announcement this week that the United States balance-of-trade deficit this quarter will be $195 billion, which means that at any moment the trade deficit will exceed one trillion dollars per year. Macroeconomists can debate the significance of the deficit, but it compels the United States and the state of Arizona to consider how to remain economically competitive and viable and adaptable despite such an enormous trade imbalance. To anyone who has looked at the role of innovation as a driver of economic development during the past half-century, the most obvious mechanism to enhance long-term economic competitiveness and growth is to invest in America’s research universities.

I recently visited China and Hong Kong and Singapore and had the opportunity to see a part of the world that is in the process of building from scratch approximately one hundred research universities and two hundred other universities. The Chinese and Singaporeans intend to compete, and they intend to compete on a global basis—as frontline global powers, economically, militarily, culturally, and in every other possible way. These countries intend to do so by making massive investments in education and research.

As a nation, the United States can still claim economic dominance in many sectors—we have enormous creativity and have demonstrated that we are capable of increasing productivity—but I do not know that this country ever imagined it would face economic competition on the level it is about to encounter from China and other countries scattered across the globe. Instead, the United States has become a little bit complacent and a little bit over-confident. As just one example, I would cite the junk bond status of General Motors Corporation.

Meanwhile, in Arizona, things are going pretty well economically and we expect them to continue to go pretty well. But this region is actually living off of economic shifts occurring in other parts of the nation. Arizona is not yet living off of its own productive capacity or its own capacity for innovation.
It is important to realize that the economic system in which we live is built on what the economist Joseph Schumpeter nearly a century ago called the forces of “creative destruction.” The only way to move forward is to replace what you have with something better—to innovate and to create new technologies and products and processes to replace those that already exist. The United States cannot become technologically static or inwardly focused. Just two months ago the United States was surpassed by Europe as the dominant scientific and technological power on Earth.

How are the city of Tempe, the metropolitan Phoenix area, and the state of Arizona going to remain competitive? There are a few cities still emerging in the nation, and metropolitan Phoenix is one of them. While this region matures and evolves, we must make certain that as its cornerstone we build a world-class force for creativity and discovery. That force is a comprehensive transdisciplinary research university that is able to compete with any university on the planet in the race for new ideas, new inventions, and the creation of new businesses.

Thus the challenge for ASU is to evolve as a national university with global impact and yet stay true to what the constitution of the state of Arizona intended as the purpose of the university: to embrace all of the citizens of Arizona, leaving no one behind. We at ASU are obligated to build a university, which on the one hand is a center of academic excellence and on the other is accessible to large numbers of students from diverse backgrounds.

But there are further challenges as well. The Arizona university system—consisting of the University of Arizona, Northern Arizona University, and ASU—remains identical in structure to its original design of sixty years ago. Since 1945 the population of the state of Arizona has grown by a factor of ten, but the university system remains unchanged. At present approximately 105,000 students attend the three state universities. At the current rate of enrollment, we will need to add about 75,000 new seats to the universities by 2017. In many places, such an increase would lead to the establishment of three new universities, each enrolling 25,000 students. Here, however, no new public universities will be established any time soon, and, unlike some states, Arizona is home to very few private institutions. At the same time, it is important to recognize that Arizona community colleges will have to accommodate between approximately 400,000 and 500,000 students in Maricopa County alone during the same timeframe.

In order to meet the challenges ahead, ASU recently developed a Comprehensive Development Plan for the New American University. Implementation of the plan is underway and ASU is expanding and intensifying its capacity for discovery in all disciplines. ASU’s strategy is to operate from four academic platforms spatially distributed across metropolitan Phoenix—a conceptualization of ASU that is referred to as “One University in Many Places.”

In addition to the Tempe campus, ASU will develop planned clusters of related academic programs at the ASU Polytechnic campus, in Mesa; the ASU West campus, in Glendale; and the new ASU Downtown Phoenix campus.

ASU at the Polytechnic campus will focus on a curriculum that integrates applied science and technology, emerging as one of the nation’s premier polytechnics. ASU at the West campus will become an enterprise of differentiated interdisciplinary programs and alternative and creative ways of learning across disciplines. ASU at the Downtown Phoenix campus will have a number of schools and programs related to professional education and the public mission of the university. Each of these three campuses will ultimately enroll approximately 15,000 students. In this way ASU hopes to accomplish the daunting
task of building a university that serves and teaches 95,000 students, hosts a research and knowledge production enterprise of world stature, while remaining accessible and deeply connected to the community it serves.

The Tempe Chamber of Commerce, the city council, and others were very important in helping us realize this plan. When you are visiting the Tempe campus, you will see that construction is ongoing at a record pace. In order to fully implement our plan for a university of approximately 90,000 students with a research budget of $350 million, ASU estimates the need to expand from 8 million square feet to 20 million square feet of functional space. For example, construction of the third and fourth buildings of the Biodesign Institute at ASU will require approximately $265 million in additional funding, and approximately $500 million more will be needed for other research facilities. This is a formidable objective, especially in a state that has no capital budget for new university buildings or campuses—other than the research infrastructure funding that we were able to secure just several years ago for the first time.

Great universities cannot be built on operating funds alone. While ASU currently receives about 30 percent of its budget from the citizens of Arizona, the state’s investment in the university continues to decrease as a percentage of the total university budget each year. We are seeking private sector investors, local government investors, corporate investors, state government investors, and federal government investors. The City of Phoenix, for example, has offered to help secure $233 million to establish the Downtown Phoenix campus. Partnerships like this are new to academic institutions, but the nature of competition at the university level is undergoing a dramatic transformation, and we intend to participate in that transformation successfully. Moving forward in this way is important not only to the region but to the state and nation.

The competition is not down the street. The competition is global, and we must realize that in order to be competitive we have to know the map of the playing field. With your support and the support of all our constituencies, ASU can play a leading role in charting that map, and positioning metropolitan Phoenix and the state of Arizona as major players in the new competitive global environment.