Thank you Chairman Williams, Vice Chair Chavez, and other distinguished members of the California State Assembly’s committee on higher education for affording me this opportunity to speak to you about national trends and efforts in higher education.

I am Dr. Michelle Asha Cooper, and I have the honor of serving as the president of the Institute for Higher Education Policy, an organization commonly referred to as IHEP. IHEP is a nonpartisan, policy research organization located in Washington, D.C. Now in our 20th year, we proudly acknowledge that we were among the first policy research organizations to have a mission focused exclusively on college access and success. Our research efforts centralize policy and its impact on students, especially those who have been underserved by the postsecondary system. In all our work, we stress the importance and interconnectedness of access and success. Essentially, we believe that successful college completion begins with college access. But, access alone is not enough. Access without an accompanying system-wide and institutional commitment to helping students successfully complete their degrees is unacceptable.

To strengthen our democracy and leadership in the world, our nation must meet the challenge of ensuring that all Americans have the opportunity to attain a high quality postsecondary degree or credential. To meet this challenge, we must, first, rethink what college access and success mean within today’s context; and then, begin the important work of redesigning our postsecondary system to address the current needs of our students and society.

**Higher Education’s Role in Expanding Access and Affordability**

The American higher education system has a long history, spanning nearly four centuries. While today’s postsecondary system is grappling with issues that will significantly alter its landscape, it is important to remember that this is not the first—not even the second or the third—time that our colleges and universities have been faced with the need for change. The nation’s first colleges and universities were founded during the 17th and 18th centuries. In this era, college going was a rarity and primarily designed to train the clergy. Prior to the American Revolution, less than 1,000 students were enrolled in fewer than 10 colleges. Of these colleges all had an explicit mission to train ministers, except the College of Philadelphia–currently known as the University of Pennsylvania (Rudolph 1990).

As the nation grew during the post-Revolutionary War era—a college degree became a symbol of status and wealth. During the 19th century, higher education witnessed one of its earliest shifts with the passage of the Morrill Land Grant Acts (i.e., Morrill Act of 1862 and Morrill Act of 1890). The Morrill Acts gave birth to public postsecondary education and expanded opportunity to thousands more Americans. The Morrill Act of 1890, in particular, was the nation’s first attempt to ensure college access to all Americans, not just White Americans, as it designated separate land-grant institutions for persons of color and gave birth to today’s Historically Black Colleges and Universities. Also, the latter half of the 19th century welcomed the first female college students. In the early days, the growth of the female student population was slow. Today, female students represent the majority of college students.
The Morrill Acts are credited with introducing the first wave of growth and accessibility in higher education, while the second wave was the result of the GI Bill in 1944. The latter legislation spawned massive growth in the postsecondary system, making college accessible and affordable. Many people acknowledge the GI Bill as legislation that changed the face of our nation’s colleges and universities as well as the face of America, as it is credited with the development of the middle class. Throughout the 20th century, other seminal legislative efforts—Civil Rights Act of 1965 and Higher Education Act of 1965—helped to make postsecondary education even more accessible and affordable for millions more Americans.

**Higher Education in the 21st Century**

The current era of higher education—the beginning of the 21st century—presents another watershed moment in our nation’s history. Today’s issues still relate to affordability and accessibility, but they are further complicated by anticipated increases in the U.S. population growth, skill specialization across the labor market, and technological innovations that are changing how we think, learn, and work. According to recent Census Bureau reports, the U.S. population overall is expected to witness its slowest decade of growth since the Great Depression. In spite of this fact, U.S. population growth remains among the highest for developed countries, with major growth occurring in states such as California, Florida, and Texas, driven largely by growth among Hispanic populations (U.S. Census Bureau 2011). This massive demographic shift will undoubtedly have an impact on higher education, and it is anticipated that during the first decades of the 21st century, the face of American higher education will change again. The composition of the 21st century’s student body will include many of those that have been reflected on our nation’s college campuses, but certain demographic groups are expected to increase—low-income students, first-generation students, non-native English speaking students, adult students, Latino/a and Asian students, and working students.

Educating these diverse students is a national imperative, as education has become one of our nation’s primary economic drivers. It has long been established that the higher the educational levels, the less likely one is to be unemployed. This finding holds true when analyzing both national and state unemployment rates. Since the recession, there has been a noticeable shift in the jobs that require a postsecondary degree or credential. Of the 30 fastest growing occupations, at least half require postsecondary education (White House 2013). Also, there is a growing mismatch between the jobs that have already been—and will continue to be—created over the next decade and the education and training of the existing workforce. As more and more city leaders realize a gap exists between the average education for listed jobs and the average education of the city or region’s workforce (Rothwell, 2012), the need to re-educate the population, especially among adult and dislocated workers, intensifies.

In addition to the demographic and labor market drivers fueling change in higher education, there are also technological innovations that are swiftly transforming the modern colleges and universities. Today’s postsecondary institutions must understand and must embrace technology. Not just technology for the sake of word-processing or information-gathering. Instead, technology can transform how postsecondary leaders teach and reach their students.

**Today’s Need for Increased College Access and Success**

Even though international comparisons indicate that postsecondary education in the United States is losing ground, the current model of higher education remains highly regarded around the world. In spite of its laudable reputation, cautionary signs suggest we are on the brink of another historic shift in postsecondary education. The current shift—characterized by changing demography, labor market
needs, and technological needs—is coupled with the sobering reality that many of today’s college students struggle academically and, therefore, are unlikely to graduate:

- Over 1 million young adults drop out of high school each year (Alliance for Excellent Education 2013)
- Approximately one-half of college students enroll in at least one remedial course (Bustillos 2012)
- Aggregate completion rates for two- and four-year colleges is less than 50 percent (U.S. Department of Education 2012)
- Nearly two-thirds of U.S. employers say they cannot find workers with the skills they need, even for entry level jobs (Hart Associates 2010)

These startling findings have given rise to the college completion movement. This movement is national in scope and is strongly endorsed by the Obama Administration and national, state, and local leaders—inside and outside of the postsecondary community—all of whom recognize that our nation’s long-term stability depends on our ability to harness and develop our human capital.

Not only have the nation’s leaders been vocal about postsecondary education, so has the public. Findings from a recent Gallup/Lumina Foundation (2013) poll highlighted American’s perceptions of higher education:

- 97 percent say that a postsecondary degree or credential is important
- 74 percent say college is unaffordable
- 27 percent say that the quality of higher education is worse today than it was in the past

Taken together, these facts reveal that while Americans believe postsecondary education and occupational skills training are important, they are confounded by the need to gain access to college and how much it costs. At the same time, there are growing concerns about quality, leading the public to question whether they are getting less while paying more for college. Only a small percentage of survey respondents had strong favorable impressions of the quality of traditional colleges and universities (29 percent), community colleges (19 percent), and online programs (11 percent).

Very few people stand in opposition to the goal of college completion, but several—including the survey respondents—have acknowledged the need to focus on more than just counting—metrics, seat time, and retention / graduation rates. While many of the efforts to increase degree production and time-to-degree are notable, when done in isolation, they can be dangerous and may even exacerbate educational gaps within our postsecondary system and foster greater inequality within our society. To mitigate these unintended policy consequences, a focus on degree completion must do more than encourage “more degrees, cheaper, faster” (Schneider 2012). It must lead to greater clarity and agreement on standards and learning outcomes and develop appropriate definitions of quality and rigor.

The public is calling for the reexamination of the value of a college degree, in part, because it is trying to better understand simply—“Why does it cost so much?” In all honesty, the cost of higher education has always been expensive for the masses. For most students, the shared responsibility model of higher education financing—federal government, state governments, institutions, and students/families—helped to subsidize a greater share of the tuition and fees for students and families, until recent years. With states providing less state support to higher education, students and their families are required now to shoulder a greater proportion of the total cost of attendance. It just so happens that these escalations
in college costs have come at a time when, for many, growth in family income has been slow or nonexistent.

The public outcry over the cost and value of higher education has been effective and has caught the attention of institutional and policy leaders across the nation. In last week’s State of the Union Address, President Obama referenced college affordability and stated his intent to seek major changes in the accountability system of higher education. President Obama’s plans include developing a set of benchmarks for student outcomes and affordability that will be used as criteria for receipt of federal student aid dollars (White House n.db). These bold, yet controversial remarks sent shock waves from Washington, D.C. all across America, sparking conversation and speculation among postsecondary leaders and the general public.

The issues facing higher education in the 21st century are real. Similar to our predecessors, higher education’s challenges are focused on issues of access and affordability. Today’s challenges, unlike those prior, are exacerbated by questions of quality, accountability, and outcomes, and then further complicated by the emergence of new technologies. Given the postsecondary community’s historic record of success in tackling major, intractable problems, the ingenuity needed to address today’s challenges is likely still among us. While the needed change will require a tremendous, collective effort, it must also include both a shift in our attitude and a shift in our approach.

**Reforming Higher Education: A Shift in Attitude**

Higher education has made great strides in becoming more inclusive, but current trends threaten to expand opportunity gaps. Trends in college financing and financial aid across all levels—federal government, states, and institutions—have placed an “extraordinary financial burden” on low-income families. To cover the net cost of college, low-income families are expected to pay or borrow an amount equal to nearly three-quarters (75 percent) of the family income. In contrast, middle-income students and high-income students pay or borrow an amount equivalent to 27 percent and 14 percent, respectively, of their family income (Lynch, Engle, and Cruz 2011). Simultaneous to the growing disparity in college costs is the unearthing of one of higher education’s secrets—the realization that all degrees and credentials are not equal. As these trends converge, they have the potential to threaten equal opportunity in higher education and across all segments of society as well.

One of the challenges in mitigating the unintended consequences of these converging trends is higher education’s understanding of the relationship between access, quality, and costs. In health care policy, these three components have led to the development of the “iron triangle theory.” In health care, it is believed that the health care system can be cheaper, but only if access or quality is reduced in some way. Similarly, access can be increased, but it will either cost a lot of money or compromise quality (Duggan 2012). In other words, the theory asserts that it is impossible to achieve universal health care, improve quality, and reduce costs. In recent years, this theory has been tested on higher education. It was found that college and university presidents often subscribe to the iron-triangle theory, believing that, similar to health care, there are inherent trade-offs in higher education policy. In interviews with institutional presidents, it was found that they saw these three concepts—access, quality, and costs—linked in an “unbreakable reciprocal relationship….Most of the presidents believe that if one wants to improve the quality of higher education, one must either put more money in the system or be prepared to see higher education become less accessible to students” (Immerwahr, Johnson, and Gasbarra 2008). While university presidents view these dimensions of higher education policy as a “zero-sum” game, where you have to be willing to sacrifice to get one or the other, the general public disagrees.
The public believes that higher education could cost less and still achieve its goals for access and quality (Immerwahr, Johnson, and Gasbarra 2008).

Before the higher education community can come to any substantive agreement about the future of design and outcomes of the postsecondary system, there must be an acknowledgement and shifting in the iron-triangle belief. The common conceptualization of this framework within the context of higher education is one-dimensional (Figure 1). But the higher education enterprise is not one-dimensional or static at all. Such a view of higher education is limiting, exclusionary, and potentially divisive. In contrast, higher education in the 21st century is dynamic and multi-dimensional (Figure 2). And when considering the possibilities inherent within the multi-dimensional iron-triangle framework, we can see that even if you pull on one side, it does not automatically disrupt the equilibrium of the alternate sides (Figure 2).

My first recommendation to the legislature is to lead an effort to move away from this limiting perception and belief. We should no longer be swayed by those seeking to apply the traditional, one-dimensional iron-triangle framework to higher education. Our colleges and universities cannot afford to operate in such a limiting manner. Instead, we must recognize that our world and our students are dynamic and multi-dimensional; therefore our policies and procedures at the state and institutional levels must accommodate the changing realities. Shifting our attitudes and engaging in new ways of thinking and decision-making is a prerequisite to progress.

Reforming Higher Education: A Shift in Behavior
Recognizing the need for dramatic change in postsecondary education, many postsecondary leaders and organizations are leading efforts in response to the national college completion movement, from development of online courses, establishment of common metrics, and a shift to performance-based funding. Many of these efforts—occurring at the state and institutional levels—show great promise for addressing particular aspects of the completion agenda. But far too many are operating either: a) In isolation, with no awareness or regard of their complementarity; or b) in direct competition, once again with little awareness of or regard for their potential collective impact.

Our next step toward progress will require a shift in behaviors. So, I recommend that the Legislature resist the urge to implement or support isolated efforts. Instead, legislators should lead the postsecondary community toward a more coherent and comprehensive reform agenda, focusing on
teaching and learning, data quality, and financial aid. Addressing these components in a simultaneous, layered approach increases the likelihood that access, quality, and costs are integrated into state-wide and institutional success strategies.

Redesign of Teaching and Learning
Some higher education reformers, as a part of the broader college completion movement, have made attempts to improve teaching and learning. The National Center for Academic Transformation (NCAT) has worked with 30 two- and four-year colleges to redesign learning environments to produce better outcomes for students at a reduced cost. Information technology is used to achieve both outcomes. NCAT’s Program in Course Redesign showed increases in student learning in 25 of the 30 projects. Of the projects that measured retention, there was a noticeable decrease in drop-failure-withdrawal rates and higher course completion rates. In addition, all participating institutions reduced their costs by 37 percent, on average. State systems, such as the Arizona Board of Regents, Tennessee board of Regents, and University System of Maryland, have worked with NCAT to establish a major effort in course redesign. In the case of Tennessee, specifically, the use of technology-supported active-learning strategies have led to the system-wide redesign of the developmental math and English curriculum. Overall, NCAT’s efforts show that access, quality, and costs can co-exist and lead to higher education transformation.

As seen in the course redesign work led by NCAT, technology can be a useful tool. Other instructional initiatives employing technology include efforts by faculty to “flip classrooms.” This approach allows students to view and/or listen to lectures outside of classroom time. As a result, face-to-face time is devoted to experiential exercises and more group discussion (Bergmann, Overmyer, and Wilie 2012). Relatedly, major developments in online education are occurring swiftly. Every day, a new story emerges about massive open online courses (MOOCs) and their potential to radically transform learning. Technology has the ability to be quite transformative in teaching and learning. New models for assembling and delivering educational content are radically changing the traditional notion of the classroom. And technology potentially offers colleges and universities the opportunity to open its “doors” to millions more students, thereby changing our perception of the traditional college campus. Although transformative, technology, by itself, is not a success strategy. I recommend that as the Legislature supports the development of instructional technology, you be mindful that it must incorporate an integrative access and success strategy and be coupled with realistic outcomes for select student populations. Otherwise, technological advancements run the risk of increasing access, but not much more.

The University System of Wisconsin is now experimenting with a comprehensive technology platform for teaching and learning with its Flexible Degree Program. The program is designed to award bachelor’s degrees based on knowledge and not just class time or credits. This competency-based model targets near completers (a concept advanced by IHEP’s Project Win-Win—to learn more visit: http://www.ihep.org/projectwin-win.cfm). Wisconsin’s institutional leaders estimate that about 20 percent of adults have some college but lack a degree (Office of Governor Scott Walker 2012). In addition to allowing students to set their own schedules and work at their own pace, the program recognizes credit for prior learning. The Council for Adult and Experiential Learning (CAEL) estimates that about one-half of all postsecondary institutions offer some form of prior learning assessment. A CAEL study found that students who completed some form of prior learning assessment had higher graduation rates than other students and completed their degrees faster (2011).
The Association of American Colleges and Universities (AAC&U) has been very vocal about the college completion movement’s seemingly inattention to or lack of understanding about academic quality: “The real message seems to be ‘more degrees, cheaper and faster’ with no questions about what the degree represents” (Schneider 2012). To ensure that quality metrics are centralized along with the productivity metrics commonly referred to among higher education leaders, AAC&U has begun to: 1) Bring clarity to learning outcomes; 2) ensure that all students experience high-impact educational practices; and 3) develop and require the use of meaningful and authentic assessments (Schneider 2012). Similarly, the Degree Qualifications Profile (DQP) – created by leaders from AAC&U, IHEP, Kent State University, and the National Center for Higher Education Management Systems in partnership with Lumina Foundation – is designed to help institutional leaders and faculty define learning outcomes and the associated competencies. From an institutional perspective, gaining clarity on student outcomes and learning levels will be of tremendous value to enhancing quality. From a student perspective, the DQP can facilitate student access and progression within and across institutions with greater ease. The DQP also responds to employer’s pleas to increase the workforce readiness of its college graduates, as it focuses on the subject matter and applied learning competencies that employers desperately need (Lumina Foundation for Education 2011). To advance, the productivity and academic quality initiatives supporting college completion will need to be strongly linked. I recommend that legislators encourage this type of coordination among state-wide and institutional completion efforts. Also institutional leaders must be encouraged to better articulate and measure student learning and competencies required for good jobs and good lives in the 21st century.

Also, as you move colleges and universities toward more comprehensive redesign of teaching and learning, I strongly urge legislators to include faculty and administrators in the discussions. State policy leaders and institutional leaders all share the same goal, and given faculty’s access and influence over students, they must be allies in this transformation. They care deeply about student success and graduation, and also desire to increase productivity and enhance quality. Often, they too are frustrated by the seemingly slow rate of change within their institutions and many simply do not have the tools they need to understand their role with the college completion movement. In recent IHEP initiatives involving minority-serving institutions (MSIs), including several of California’s Hispanic Serving institutions–California State University, Fresno; California State University, Monterey Bay; El Camino Community College; Cabrillo College; Hartnell College; and Mount St. Mary’s College–it was found that faculty contributions and support were critical to achieving successful student outcomes. “Faculty members are students’ primary point of contact in the classroom, and they can provide a powerful connection between in-class and out-of-class learning experiences for students (IHEP 2012).”

Redesign of Data Gathering and Purposes
In the redesigned higher education system, there will be a greater need and reliance on data. Not just data for compliance purposes, but data to assess student outcomes and evaluate the state of college access, instructional and degree quality, and college costs. As a result, it will be imperative for state and institutional leaders to have access to reliable, comparable metrics.

The federal government’s Integrated Postsecondary Education Data Survey (IPEDS), used for reporting purposes and not necessarily improvement purposes, has limited applicability to informing key aspects of the college completion agenda. Angst over IPEDS has existed within the community for some time, and last year, the U.S. Department of Education made an attempt to address some of the concern in its Action Plan for Improving Measures of Postsecondary Student Success. The action plan suggests improvements to some of the data elements found in IPEDS and the National Student Loan Data System. It also outlines a collective strategy for engaging institutions and state systems in gathering and
reporting data and outcomes on students’ success. Given the dissatisfaction in how graduation data are calculated by IPEDS, in particular, the Action Plan suggests additional metrics that would be more applicable to two-year colleges, especially (U.S. Department of Education, Committee on Measures of Student Success 2011).

The Education Department’s plan called for greater collaboration among the federal government, states, and institutions to improve gathering, collection, and dissemination. Toward this goal, the National Governors’ Association (NGA), in partnership with Complete College America (CCA), has introduced a common set of metrics and accompanying templates to ensure that state and institutional leaders have the information needed to understand and improve productivity and completion rates. The metrics focus on outcome measures (i.e., degrees and certificates awarded, graduation rates, transfer rates, and time and credits to degree) and progress measures (i.e., enrollment in remedial education, success beyond remedial education, success in first-year college courses, credit accumulation, retention rates, and course completion, Reyna 2010). As more states take action to increase degree attainment, NGA’s metrics can provide a framework for better understanding degree completion within the state context and can inform better decision making among postsecondary leaders. NGA’s metrics are strong, but for optimal results should be used by both state and institutional leaders; to date, these initiatives have focused primarily at state level leadership.

Institutional leaders, especially those that serve high percentages of non-traditional students (e.g., low-income, first-generation, part-time, and adult students) have begun to create their own data elements to better assess and track students’ progress toward completion. IHEP worked with several MSIs who desired to “[find] better ways to measure success, progress, and the unique benefits that MSIs provide beyond the typical data points” (Vuong and Hairston 2012, p. 2). The University of Texas-El Paso (UTEP), a Hispanic-Serving Institution, for example, measures the standard four- and six-year graduation rates, but also examines its degree production ratio. The ratio examines the relationship between the total number of bachelor degrees awarded and the total number of full-time equivalents enrolled four years earlier. For UTEP, the traditional measures of graduation rates only tell a fragment of their story, but when accompanied by the degree production ratio, it offers a more complete illustration of their success for all students, including transfer students. UTEP has also developed a Risk Stratification Model to identify factors that impact student success and better serve their at-risk population as they progress toward degree completion. Institutional leaders regularly assess the model—alongside its student body—and constantly refine and develop additional questions for deeper examination of the factors—positive and negative—related to student progress and degree completion (Vuong and Hairston 2012).

As you seek to move forward, I recommend that state leaders encourage the higher education community to strive for greater integration of federal, state, and institutional data systems, as it would provide the best overview of institution-specific and student outcomes. But given existing impediments, it is necessary to simply start; and beginning with a focus on integrating the state and institutional systems seem quite appropriate. Members of the legislature should do an audit of the state and institutions’ data capacity and management systems, and then begin implementing the necessary changes to integrate and strengthen across all levels and sectors. Doing so will help to ensure access to quality data management systems and analytic tools, and allow state and institutional leaders to make clearer assessments and outline strategies that increase the likelihood of continuous improvement. Even as the legislature undertakes this important task, it is equally important to develop coherent plans for the use of these data to drive decision-making at the state and institutional levels, including developing metrics and benchmarks for goal-setting purposes, which will require investing in the analytical resources and capacity of colleges and universities.
Redesign of Financial Aid

As postsecondary education grows in importance, ensuring that student financial aid—at the federal, state, and institutional levels—responds to this growing demand takes on even greater importance. IHEP is one of 14 organizations participating in the Bill & Melinda Gates Foundation’s Reimagining Aid Design and Delivery Project charged with recreating the financial aid system for greater effectiveness today. For our work, IHEP surveyed our stakeholders and conducted focus groups. From these conversations there were three major takeaways: 1) The financial aid system is not completely broken, but does require substantial improvement; 2) financial aid should be thought of as more of a system, and not just a collection of individual programs; 3) existing financial aid programs are designed for the traditional 18 year old, even though approximately 75 percent of today’s student body is nontraditional in some way.

In redesigning the financial aid system, I encourage the Legislature to view it as an interconnected system that assists students throughout their entire postsecondary experience—enrollment, progress, completion, and post-graduation (Huelsman and Cunningham 2013). Clearly delineating the role and intent of each program will, we hope, better illustrate each program’s intent and reduce the desire of some to link all programs to student completion only.

In addition to linking the financial aid system’s key progression points along the educational pipeline, research has identified that the salient features of such a system would require (Huelsman and Cunningham 2013):

- The primary targets of need-based financial aid should be low-income students. For these students, need-based grants are more likely to be effective in increasing access and completion than other forms of financial aid.
- Efforts should be taken to minimize the use of student loans as a financing strategy, especially for low-income students. The increasing reliance on student loans has detrimental effects on low-income and underserved students, who are most likely to face loan delinquency or default.
- Students should be informed about financial aid programs earlier. Efforts to communicate information earlier, allow easy completion of the FAFSA, and provide financial education and support are shown to be effective.

Even though the federal government’s role in financial aid is significant, it represents only one type of financial aid available. Many states run state-based financial aid programs. At a time when states could increase the return on investment of these state dollars by investing in the neediest populations, more and more states are using these programs to further subsidize wealthy students. Twenty years ago, 90 percent of state grant dollars were awarded based on financial need; that share is now about 70 percent (Brown Center on Education Policy 2012). I reside in Washington, DC—the nation’s capital where the unemployment rate is 8.6 percent and a child poverty rate is 30 percent—where increased educational attainment is needed, especially among native Washingtonians. Even with that stark reality, only six percent of D.C.’s state-based grant aid is given to students with need. Clearly, this is a trend that California and other states should strive to avoid. Instead, I recommend that the Legislature continue to fund the California Grant program at a rate that will ensure students ability to access and progress through college; over time it will prove to be a wise investment.

California’s state leaders, especially, should consider the perspective introduced in a white paper last week—Using a Latino Lens to Reimagine Aid Design and Delivery—that encourages an approach to
financial aid redesign that uses the Latino population as the baseline (Santiago 2013). Given the existing population and projected growth of Latinos across California, it seems logical that the baseline for research and policymaking should shift. From all accounts, the current system of financial aid was designed for a more traditional student demographic—one that represents only one-quarter of today’s students. Exploring the redesign of the financial aid system from a perspective that centralizes Latinos/as presents opportunity for more inclusive policymaking, as significant numbers of today’s students have more similarities to the Latino population than to the traditional student from years ago.

**Putting All Together—Comprehensive State-Wide Redesign**

The clarion call has been issued: College completion is an absolute imperative and state leaders—in partnership with postsecondary leaders (and other business and community advocates)—must lead the effort to redesign higher education. In leading this effort, state leaders will need to be mindful of the various pressures and realities that make it an absolute necessity—changing demographics, workforce demand, global competitiveness, etc., while also balancing the need for greater access, enhanced quality, and reduced costs.

I have offered nine recommendations that I encourage the Legislature to address—boldly and comprehensively. **The 10th and final recommendation is to address all of the other recommendations in a complementary, integrative fashion.** In doing so, you will be better able to identify reforms that are likely replicable and scalable. And during this process, you will develop more fertile ground—good will—for system-wide reforms that centralize performance and accountability. Failure to consider all aspects of higher education redesign, and instead opt for one or two major reforms, could lead to much consternation, appear punitive, and even worse lead to unintended policy consequences.

Increasing college credential and degree completion is important, and broad, sweeping change is needed now, but the best way to induce greater completion is to focus on teaching and learning, enhanced data quality and management, and financial aid reform. This is the kind of change that higher education in the 21st century needs.

Thank you again for the honor of being with you today.
Works Cited


