Background Report
New Mexico First
April 2006

Today's Students, Tomorrow's Workforce:

A Town Hall on Higher Education

A report prepared for Town Hall 34
April 20-22, 2006

Convened by New Mexico First
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Executive Summary

This report was developed to help participants prepare for New Mexico First's April 2006 town hall on higher education and workforce issues. The report has three sections:

1. The body of the report, containing four short stories describing hypothetical futures for New Mexico;
2. A summary of focus groups conducted in three small towns (Grants, Taos, and Tucumcari); and
3. The appendix, containing data and related information on New Mexico's higher education system.

Participants need to read at least the four short stories (pages 9-19) prior to the town hall.

Four Different Futures

The four hypothetical short stories – or scenarios – are each about the future of New Mexico and its educational system. The stories were developed through a process called "scenario planning" that included the viewpoints of citizens statewide. (The process is described in detail on p. 7.) All four scenarios are based on the same basic question: *How can we ensure that New Mexico's higher education system delivers what students need to succeed in the 21st century?*

New Mexico First used a scenario planning approach that develops the stories around two critical policy choices, which are then put together in different combinations to produce four stories. After extensive deliberation, committee members prioritized the following two critical choices: a) the system and vision of higher education; and b) funding and related resources to support that vision. As a result, the following four stories were developed:

1. *The Competitive Spirit* (envisions a new system for higher ed and new money)
2. *The Frugal Innovator* (envisions a new system for higher ed but with no new money)
3. *Perfecting the System* (builds on the current system for higher ed and uses new money)
4. *From 48th to Last Place* (retains an old-school vision for higher ed and less money)

The last of these stories was intentionally written to present a "worst-case scenario" so that readers could envision what they *don't* want. The other three are intended to present different – yet equally plausible – visions of New Mexico's higher education system.

It is important to note that the four scenarios are not intended to be predictions, nor are they mutually exclusive. We fully expect that readers will mentally generate their own stories as they read these.

Participants at the town hall will use the four stories to develop policy recommendations for the future – *not assess the probability of each scenario.* The scenarios are simply a tool for considering some choices New Mexico might be facing.

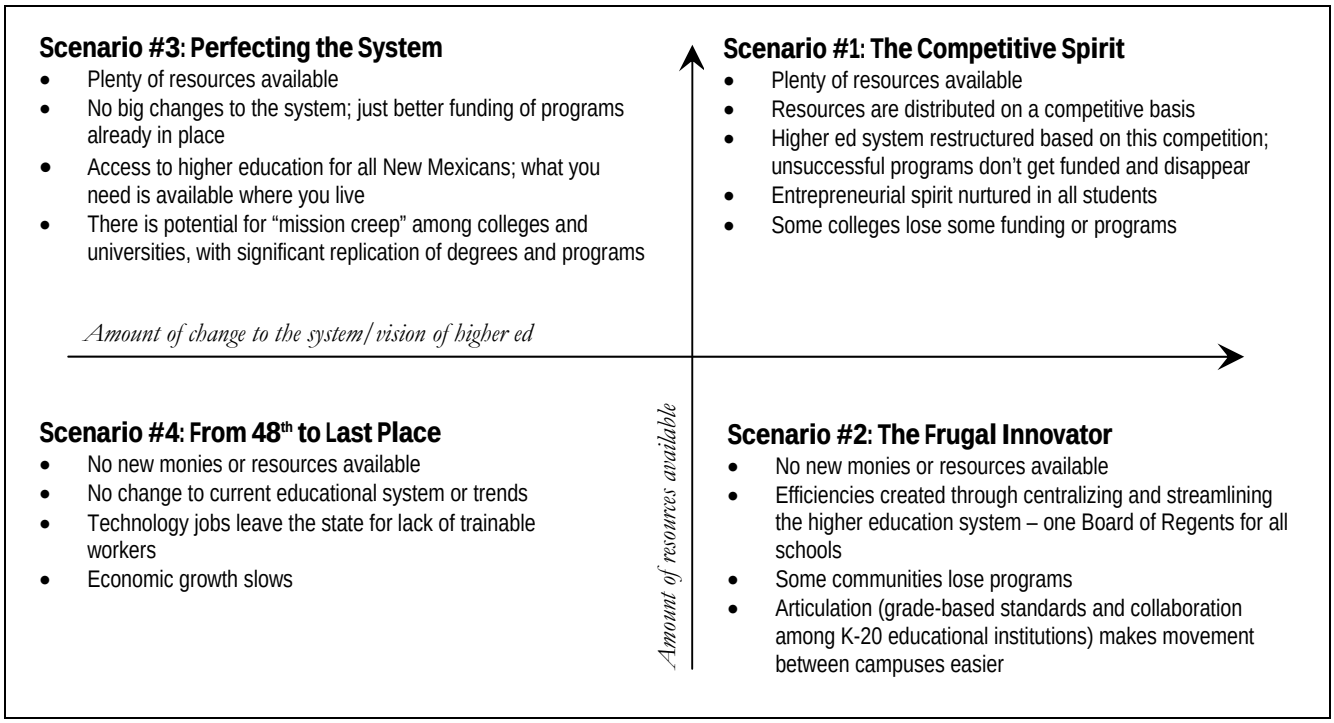
During the town hall, participants will talk about each scenario, discuss ideas not included in the scenarios, suggest steps state leaders should take *if* that scenario were occuring, and, ultimately, develop recommendations that go beyond just the four stories.

About Victoria

Each of the four stories portrays a girl, Victoria, raised in a nurturing Farmington family. Her parents worked as farm laborers for several years, saving money to open their own business. They opened a small restaurant in 2000, the same year Victoria was born. By the time our stories begin, in 2006, the restaurant is doing well and Victoria's younger brother, Robert, is born. Victoria and Robert – two small children growing up in their hard-working, close-knit family – will be the first in their family with the opportunity to attend college. While they live in Farmington, many of the issues they face are relevant to families statewide.

How their lives unfold depends, in part, on the education policies lawmakers choose for New Mexico.

The following table overviews the four scenarios.


Scenario #3: Perfecting the System
Plenty of resources available
No big changes to the system; just better funding of programs already in place
Access to higher education for all New Mexicans; what you need is available where you live
There is potential for "mission creep" among colleges and universities, with significant replication of degrees and programs
Scenario #1: The Competitive Spirit
Plenty of resources available
Resources are distributed on a competitive basis
Higher ed system restructured based on this competition; unsuccessful programs don't get funded and disappear
Entrepreneurial spirit nurtured in all students
Some colleges lose some funding or programs
Amount of change to the system/vision of higher ed
Amount of resources available
Scenario #4: From 48th to Last Place
No new monies or resources available
No change to current educational system or trends
Technology jobs leave the state for lack of trainable workers
Economic growth slows
Scenario #2: The Frugal Innovator
No new monies or resources available
Efficiencies created through centralizing and streamlining the higher education system – one Board of Regents for all schools
Some communities lose programs
Articulation (grade-based standards and collaboration among K-20 educational institutions) makes movement between campuses easier

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Preface

This report was compiled in preparation for the New Mexico First event: *Today's Students, Tomorrow's Workforce: A Town Hall on Higher Education.* The event will bring people together to discuss the question: *How can we ensure that New Mexico's higher education system delivers what students need to succeed in the 21st century?*

In order to address that question in an informed way, participants attending the town hall are asked to read this report in advance of the meeting. The event will be held April 20-22, 2006 in Santa Fe, NM.

Scenario Planning

When New Mexico First began planning its 2006 town hall, the staff and board decided to try a new approach to the style and format of the event. The method, called scenario planning, has been well tested by local, national and international groups as diverse as Sandia National Labs, the nation of South Africa, the U.S. Department of Defense, and the Child Care Action Campaign.

Simply put, scenario planning is an approach that allows creative problem-solving by looking at an issue through the lens of different scenarios written as short stories.[1] These short stories, each of which contain different policy solutions and potential outcomes, enable people to think about issues differently than if the information were presented as raw data like charts or tables. (This report has plenty of those as well, in the research appendix, pages 24-48.)

Good scenarios are provocative, plausible, broad, diverse in perspective, and understandable by laypeople.[2] It is important to note that the scenarios are *not* intended to be accurate predictions of the future nor are they an exact science. Any number of different stories could have been developed that may have been equally relevant to our town hall discussions. The stories are simply intended to jump-start our conversations during the town hall. New Mexico First does not endorse any particular solution or combination of solutions.

Developing the Scenarios

The scenarios were developed in consultation with Jack Jekowski, Principal Partner of Innovative Technology Partnerships, who brings over ten years experience in scenario planning. He has provided the service for the national labs, the U.S. Department of Energy, and other clients. The scenarios were written by New Mexico First staff members Heather Balas and Jo Carter.

To select the topic and collect information for the scenarios, New Mexico First commissioned a statewide, random sample survey of New Mexicans. The organization also issued a smaller online survey to about 100 stakeholders in the education and business communities. In addition, to ensure that the views of smaller communities were included, focus group meetings called "Community Conversations" were held in Grants, Taos, and Tucumcari.

Drawing on that information as well as their own expertise, a "scenario planning group" developed the basic framework for the four stories. Based on the committee's framework, the scenarios were authored by New Mexico First staff and then were reviewed and refined by the scenario planning group as well as a statewide review committee.

Scenario Planning Group:

Research Chair: Dr. Daniel Lopez, New Mexico Tech
Heather Balas, New Mexico First
Catherine Carlton, PNM
Jo Carter, New Mexico First
Lena Trujillo Chavez, Public Education Department
Reese Fullerton, Office of Workforce Training & Development
Bill Garcia, New Mexico First Board Member
Jack Jekowski, Innovative Technology Partnerships
Dr. Sul Kassicieh, UNM
Bill Knauf, New Mexico First Board Member & former New Mexico First Board Chair
Dr. David Lepre, Council of University Presidents
Carl Moore, The Community Store
Patrick Newman, Mid-Region Council of Governments
Suzanne Otter, Suzanne Otter Consulting
Mary Beth Schubert, Public Works
Dr. Peter White, UNM

Review Committee:

(All people on the previous list, plus the following)
David Buchen, Mesalands Community College
Felicia Casados, NMSU - Grants
Dr. Alicia Chavez, UNM - Taos
Terri Cole, Greater Albuquerque Chamber of Commerce
Dr. Bob Coppedge, NMSU
Dr. Everett Frost, ENMU President Emeritus
Dr. Bob Grassberger, BBER, UNM
Linda Kay Jones, NMF Board Member, Silver City
Herb Mosher, Gallup-McKinley Chamber of Commerce
Dr. Frank Renz, NM Association of Community Colleges
Dr. Becky Rowley, Clovis Community College
Nancy Stewart, Albuquerque TVI
Kris Swedin, City of Santa Fe, Economic Development Division

[1] For additional information on the scenario planning process, see the book *Art of the Long View*, by Peter Schwartz.
[2] "Worldchanging Scenarios," by Jamais Cascio, printed in Worldchanging: Another World is Here, www.worldchanging.com/archives/000433.html

Compiling Additional Materials

The Community Conversations summary was compiled by Elizabeth Neustadter, based on information collected at the events by Elizabeth Neustadter and Ellie Dendahl, both of whom serve on New Mexico First's leadership teams.

The information contained in the Appendices was compiled by Dr. David A. Lepre, Executive Director of the Council of University Presidents. Lepre donated his time and expertise to developing the comprehensive materials in the appendices. The staff of New Mexico First appreciates his support of the town hall process.

About New Mexico First

New Mexico First is a nonpartisan, nonprofit organization that engages citizens in public policy. Co-founded in 1986 by U.S. Senators Pete Domenici (R-NM) and Jeff Bingaman (D-NM), the organization brings people together for two- and three-day town hall meetings. These town halls use a unique consensus-building process that enables participants to learn about a topic in depth, develop concrete policy recommendations addressing that topic, and then work with fellow New Mexicans to help implement those recommendations with policymakers.

Scenario #1: The Competitive Spirit

Dateline: 2026

Basic Assumptions

In 2006, NM chooses to:

- fundamentally restructure its higher educational system; and
- devote major financial resources to that restructuring over the course of the following 20 years, using a competitive model for resource distribution.

The Story

The New Mexico Miracle. That's what CNN, FOX, ABC, and other media outlets across the nation dubbed the transformation of one of the nation's previously poorest states. Airing story after story, the networks told the world about how New Mexico went from the bottom of practically all the lists – literacy levels, minority graduation rates, college completion rates, economic growth[3] – to near the top. By 2026, the state ranked in the top 10 on most of those same indicators. In a global economy where lots of jobs had moved overseas, New Mexico continued to thrive because many of its citizens held higher order thinking skills that enabled them to adapt to ever-changing job needs. Other states were left behind because they did not pay attention to the economic changes of the world.

How did New Mexico get there? In part because its citizens, business leaders, educators, and policymakers came together and *chose* to. They realized they had to reinvent their education system or let New Mexico remain "the 48th dumbest state" in educational rankings.[4] In addition to a strong desire to improve its education system, New Mexico's transformation was partly enabled by money. By 2010, the cost of oil soared to more than $100 a barrel, enabling the state's oil and gas industry to assure a flow of revenue into the state's General Fund. That – coupled with the U.S. Department of Energy's investment in the national labs to develop alternative energy sources – created a surplus of revenue to invest in education.

Given those resources, strong political leadership, and a commitment to innovation by educators and business leaders, the state reinvented its higher educational system. Once the educational system was strong, that strength produced a chain reaction: good colleges produced highly educated students; those students became smart entrepreneurs, talented employees, and competent teachers; new companies brought high-wage, high-skill jobs because employers wanted to hire smart graduates; personal incomes rose, lifting large segments of the population out of poverty; the arts and tourism flourished; and crime declined. Simply put, *reinventing New Mexico's education system reinvented New Mexico.*

Preeminent Research Institutions

Drawing on the examples of San Francisco, Austin, Boston, and the North Carolina Research Triangle, New Mexico leaders decided that world-class universities and creative, entrepreneurial people are both tremendous economic drivers.[5] Early in the 21st century, state leaders invested heavily in New Mexico's research universities, by providing funding for research and for the recruitment of nationally renowned faculty. This investment was based on a heightened level of competition between the various higher education institutions, similar to that of entrepreneurial companies competing for venture capital investments.

The funding authority was very clear – schools would be funded based on their chances for success, program by program. Success was judged by: 1) national standards of excellence including accreditation and program rankings; 2) demonstrated impact on the community and the state; and 3) graduating students being able to find satisfactory employment. This situation rewarded educators and educational institutions who were willing to innovate, to reinvent themselves for the best possible results. Certainly, some programs in engineering and business had an easier time demonstrating their success against these measures than did their colleagues in English, teaching, and history, but overall funding patterns by subject did not dramatically change. Liberal arts programs were funded as "protected

[3] The National Center for Public Policy and Higher Education's Measuring Up: The National Report Card on Higher Education. New Mexico received a grade of F for inadequately preparing students for college coursework – only one of two states to receive a failing grade in that category. For more information, see p. 34 in the appendix. Economic growth ranking based on "State economic forecaster gets it dead right," from the New Mexico Business Journal, August 6, 2004.

[4] New Mexico ranked 48th in the nation in the "Smartest State Award" based on the *Educational State Rankings, 2005-2006* published by Morgan Quitno Press. Additional information available at: www.morganquitno.com/edrank.htm.

[5] Florida, Richard. *The Rise of the Creative Class,* p. 292.

infrastructure" because they provided necessary foundations for more applied subjects.

The state was willing to fund only one world-class program in a limited number of fields, so its universities had to compete to see which of them would be designated as the state's flagship MBA school, alternative energy program, teaching college, journalism school, etc. While other schools continued to receive modest resources for programs in these areas, it became clear that these were "second-tier" programs, designed to compete on a different level and serve as feeder schools for the top-tier programs. As the schools' reputations grew, some became harder for students to get into. Only students with good grades and test scores were admitted to top schools. Increasing numbers of New Mexico's best and brightest students chose to stay in the state for college and their subsequent careers. More out-of-staters began applying to New Mexico schools. However, the top schools became less accessible to New Mexico students who were not academic achievers.[6]

The state continued its policy of not initiating degree programs that were more cost-effectively conducted out-of-state, such as dentistry or veterinary medicine. The state also expanded research producing annual workforce projections.[7] This resource enabled schools to align degree offerings with current industry needs, including healthcare, social work, and technical fields.

Strong Trade Schools

The emphasis on establishing clear college leaders in different fields paid off as schools established clusters of collaboration with industry and academic leaders. The colleges and universities became hubs for research, nonprofits, and industries related to their areas of excellence. For example, the UNM-Gallup branch campus became a hub for extractive industries, with the oil and gas industry helping develop and fund a new two-year technical degree in extractive engineering. Part of the students' coursework was completed online with faculty from the UNM main campus. The collaboration paid off for both the students – most of whom got jobs at graduation – and the industry that needed well-prepared employees. A similar collaboration occurred at Tucumcari's Mesalands Community College with the establishment of a two-year trade degree in wind energy. Both programs were well established by 2012.

It wasn't just the tech industries that got involved in these business/education collaborations. Santa Fe Community College's series of applied arts degrees were providing a pipeline that moved students into local studios and galleries, with art pieces ranging from fine woodworking to digital media. These new artists were not only keeping tax revenue from art sales in the state, but Santa Fe was also seeing an increase in new tourists, drawn by the diversity of Santa Fe's artistic and cultural experience. [8]

The state's economic growth also produced increased needs for people with certified trade skills such as construction workers, electricians, and plumbers. Industry-specific trade degrees with certificates were offered at selected two-year schools around the state. In addition, the state continued its investment in Career Readiness Certificates and the WorkKeys initative to ensure that employers could find the workers they needed.[9]

The state's investments paid off for Victoria and Robert, who both chose to stay in-state for college, using the lottery scholarship to pay the tuition. By the time Victoria graduated from Farmington High School in 2018, she knew she wanted to major in science. She started off at San Juan College, which was close to home, but her demonstrated skill in their renewable energy program meant that she was able to transfer to the engineering school at New Mexico Tech after her sophomore year. New Mexico Tech had extensive ties with the business community working on alternative energy development and use, enabling Victoria to stay extremely busy for her final two years of school. Her apprentice-style internship was considered part of her education. As a result, she had several job offers before graduation. In the end, she started her own business with a group of her classmates and two innovative professors. Her first start-up didn't succeed, nor did the second one, but the third one is currently thriving. The work is hard but rewarding, and it allows her to stay on the cutting edge of her field. Research shows that small, entrepreneurial businesses help drive technological innovation and economic growth.[10]

Like Victoria, Robert choose to stay in his hometown for college. He completed a trade certificate program in

[6] Opponents to raising admissions criteria point out that Albuquerque is the largest population in the state. If UNM were to tighten admission standards, some Albuquerque students might have to leave home to attend a four-year college.
[7] See p. 40 in the appendix for workforce projection information.

[8] See p. 44 in the appendix for more information about the economic contribution of the arts.
[9] New Mexico is currently implementing a statewide Career Readiness Certificate, based on the WorkKeys employability assessments. WorkKeys offers nationally-consistent certification for a variety of skill levels in applied math, locating information, and reading for information, so that employers know precisely what to expect from new employees in these basic areas.
[10] *Innovation and Small Business Performance: Examining the Relationship between Technological Innovation and Within-Industry Distributions of Fast-Growth Firms,* by Jonathan T. Eckhardt and Scott Shane. (www.sba.gov/advo/research/rs272tot.pdf)

creative arts and technology, enabling him over time to develop a small graphic and web design business in Farmington. Thanks to the internet, he was able to work with clients throughout the state while staying near home to help look after his aging parents.

Victoria and Robert weren't the only high-skill, highly-motivated graduates coming out of New Mexico's universities; instead, they were part of a generation that grew up with this hunger for success. All the state's colleges and universities cultivated an entrepreneurial spirit in their students. Much of the "apathy" that teachers and professors observed in previous generations' attitudes about education began to disappear.

Part of this shift was due to strong parents who worked hard to ingrain educational values in their children. In addition, the funding system rewarded schools for "community impact," which included a program's ability to attract, retain, and graduate employable students. Now schools were rewarded for keeping their students within the system. So when Victoria transferred from San Juan College into the prestigious engineering program at New Mexico Tech, San Juan College received credit for having produced a student worth "promoting" within the system.

The Spirit Continues

By now, in 2026, these policy changes continue to produce a culture of excitement about education. The majority of students aspire to college – and finish. The wide range of creative and technical careers inspire more graduates to stay in New Mexico to raise their families. The business community plays a key role by supporting their employees' desires to return to college. Many offer tuition reimbursement or paid time off to workers taking college, continuing education, and certification courses. In addition, many businesses provide support for their employees to be active in their children's classrooms, supporting the next generation of well educated New Mexicans.

Interestingly, because they had to be competitive and entrepreneurial during their college educations, both Victoria and Robert now expect their children's education to be challenging. As parents, both of them plan to be active in their local school system, pushing the school to raise citizens that will have the tools necessary for success in the new economy. Through forward-thinking parents like Victoria and Robert, the change in higher education is positively impacting K-12 schools throughout the state, and the spirit of excitement about competition continues.

Policy Choices and Trade-offs in Scenario 1

Key Policy Choices	Trade-Offs
Fund degree programs at schools on a competitive basis in order to promote excellence and reduce duplication.	Smaller schools may lose programs or status because of loss of funding, resulting in some New Mexicans in rural areas having less access to those degrees.
Set as a criteria for degree programs that "graduating students are able to find satisfactory employment."	If taken to an extreme, this policy could devalue majors like philosophy, English, anthropology, or art.
Prioritize private-sector participation in developing trade degrees and certificates, in order to ensure that students get the concrete skills a particular industry requires.	Trade degrees give students skills in one area, and not, some argue, in broad critical thinking, reading, and writing skills – possibly making those students less adaptable to a changing economy.
Attempt to project workforce needs and match education to them.	Student training aligned to specific workforce needs could result in education being less well-rounded.
Raise admission criteria to top college programs, making them harder to get into.	Some students' grades might prevent them from attending the university nearest their homes.

For more information on :

- The degrees, enrollment, locations, and related data of New Mexico's **colleges and universities**, see Appendix I, beginnning on page 26;
- National and state **workforce projections**, see Appendix III, beginning on page 40.

Scenario #2: The Frugal Innovator

Dateline: 2026

Basic Assumptions

In 2006, NM chooses to:

- fundamentally restructure its educational system; and
- devote no new financial resources.

The Story

Near the beginning of the 21st century, New Mexico's leaders and educators came together to develop a new and exciting vision for education. They chose to follow the advice of author Tom Peters: *"Better to fall flat on your face trying a breakaway from the pack than to spend your days on a dab of 'continuous improvement' here and a dollop of 'Kaizen' there."* [11]

Before New Mexico's education reform effort began, there was little or no systematic collaboration among educational systems, individual schools, or the business community. Pre-schools, K-12 schools, community colleges, and four-year universities were each independent "islands," setting many of their own standards and policies. They were each trying to do their job well – and in many cases they were succeeding. But they wanted to do more. They knew that education reform had to start with the youngest children, and that meaningful parental involvement was essential. New Mexico's education reformers decided to break away and try something new for the state. They imagined a system in which:

- Pre-school children entered kindergarten with the basic language skills they needed to become learners;
- Elementary school students entered middle school and later high school with the skills they needed to excel;
- High school students were prepared for college (as opposed to the 50% or more requiring remedial coursework before they could begin college courses, as was the case in 2006)[12];
- Community college students were prepared for first jobs or transfers to universities (with college credits that would easily transfer); and
- University graduates were truly prepared for the world of work, with strong writing, speaking, critical thinking, and math skills.[13]

The visionaries loved their plan, but they had no new money to support it. So, they did what Americans do when they need to stretch a dollar: they got creative.

Higher Education Governance

The education reformers assessed the college and university system, determining that New Mexico ranked among the top spenders in education nationally.[14] Those funds were distributed across 25 public two-year and four-year colleges and universities.[15] Within those schools, the reformers found a great deal of overlap in degrees and courses offered.

With strong political leadership in Santa Fe, the reformers took the very controversial step of establishing a single statewide Board of Regents to replace the 23 local boards.[16] This board worked with each school to set its mission and degree offerings. Clarifying each school's mission also made those schools more competitive, resulting in the state's three research universities tightening their admission criteria while still meeting their enrollment targets. Duplication of services across colleges reduced significantly, freeing up funds for other purposes.

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[11] Peters, Tom. "I'll Take 'Interesting.'" [Weblog comment.] Posted 9/20/04. www.tompeters.com/archives.php?date=200409. Kaizen is a Japanese word that generally denotes "continuous incremental improvement."

[12] From the minutes of the Legislative Education Study Committee (LESC), August 17, 2004. Document available at legis.state.nm.us/lcs/lesc/lescdocs/Aug2004LESCMinutes.pdf.

[13] The notion that graduates lack the skills comes in part from a New Mexico First survey of stakeholder groups, January 2006. By contrast, a Council of University Presidents study, dated October 1999, found that most New Mexico employers gave four-year universities an A or B on preparing students for the workforce. See p. 45 for a summary of this study.

[14] New Mexico ranked highest in the nation for per capita state and local government expenditures for higher education, according to the National Education Association report, *Rankings and Estimates,* published May 2004. Source: www.nea.org/edstats/images/04rankings.pdf. However, some researchers argue that these figures are inflated because New Mexico includes some expenses, such as speech-hearing clinics, in higher education while other states do not.

[15] Six public universities (3 comprehensive universities, 3 research universities), 19 two-year colleges. Northern New Mexico College is transitioning into a four-year school for selected programs, but it is currently counted among the community colleges.

[16] New Mexico's public higher education governance structure includes: seven college or university Boards of Regents with members appointed by the governor; nine locally elected advisory boards for branch campuses; and seven locally elected governing boards for independent community colleges.

This streamlining of institutional mission was made possible in part due to the implementation of statewide broadband access, so that every secondary school and community college, no matter how remote, had access to Internet resources. This communications backbone – underwritten in large part by private industry – enabled distance learning, joint curricula, and sharing of faculty members across campuses.

However, streamlining the governance of the colleges and universities came at a cost. Many university officials were strongly opposed to what they termed "the politicizing of education," and some administration and faculty members left the state as a result. Local communities lost direct authority of their colleges and universities, since that power became centralized in Santa Fe. While the smaller colleges continued serving students, fewer of their courses were taught by professors on site. This produced a loss to the small communities of some of their college teachers who were either phased out or transferred to other schools. And while high-speed internet enabled distance learning, educators disagreed about whether students received as good an education online.

Articulation

The effort to make the education system more efficient didn't stop with unifying the governance of the state's colleges and universities. Educators and policymakers broke down institutional barriers and created a streamlined system unifying the entire education system – pre-school through college. The two state departments of education had already begun rigorous efforts to strengthen collaboration.[17] Using a principle called "articulation" (one level of school clearly leading to the next and the next), educators began their reform with the state-funded pre-schools and continued it through college.

The key to systemic articulation was developing standards that all the schools could agree upon as both desirable and doable, and implementing those standards starting with the earliest educational level. Thus, the first year, all the articulated preschools and kindergartens laid foundations for the development and use of language and cognitive skills to enhance children's vocabulary growth, thinking skills and language development. The goal was to ensure that all students were reading for comprehension by third grade. As students progressed through each grade, they were assessed regularly to determine which students were falling behind – and catch them.

Educators realized that the old-school approach of some students being tracked into "college prep" advanced reading and math classes needed to change. They came to understand that almost *all* students in a 21st century economy needed strong skills, whether or not they were planning to enter a four-year college.[18]

It was a full 17 years before the first students who had been educated under the articulated system graduated from college. These students had fewer obstacles between them and a good education, because at every step of the way, their teachers knew exactly what the incoming students did and did not know.[19] There was less need for college remedial education. Students easily transferred between colleges at every educational level, knowing that their courses would be accepted by other schools within the statewide system.

Over time policymakers even combined the state's Public Education Department and the Higher Education Department into one agency to strengthen collaboration among schools, from preschool through graduate school. Policymakers also improved linkages to the business community. Education counselors were encouraged to be responsive to annual employment forecasts produced by the state. These forecasts listed the jobs employers expected to offer in the coming years and also the *skills* employers desired. This information informed student decision-making and faculty advising. The college standards, building on the K-12 standards, retained a strong focus on higher order, critical thinking skills for *all* students. This decision enabled New Mexico's workforce to remain competitive despite the globalized economy that moved many jobs to Asia and other areas.

For Victoria and Robert, changes in the system meant they could get much of their education in their hometown. Victoria enrolled in San Juan College in Farmington. She completed her basic college requirements without having to leave home, while working part-time. After two years, she moved to Albuquerque to attend UNM, chose a major, and started taking more specialized classes. All her credits transferred easily, so she finished her engineering degree on time and took a job with Sandia National Labs.

[17] See p. 35 in the appendix for information on the current articulation efforts underway at the higher education level.

[18] ACT found that levels of readiness in reading and mathematics required for entry into college and workforce training are comparable. This level of readiness is needed if students are to succeed in college-level courses without remediation and enter workforce training programs ready to learn job-specific skills. Source: *Ready for College and Ready for Work: Same or Different?,* published by ACT, 2006.

[19] It is important to note that some education reformers argue that grade-based articulation will not meaningfully improve student performance unless it is tied to a total retraining of K-12 teachers, who may be underprepared to use assessment tools analytically.

Meanwhile, Victoria's little brother was doing well also. His early interest in creative technologies had led him to enroll at UNM-Gallup and complete some extra work through distance education with the UNM main campus. After graduation, he moved to Las Cruces where he works today as a TV news producer.

The Innovation Continues

By now, in 2026, many of the frugal innovations are starting to pay off. K-12 test scores and college graduation rates are rising. Community members remain divided about some of the policy changes, however. Because community colleges are often key economic drivers of small towns, some rural communities were negatively impacted by the loss of many of their community college's programs and services. Many people argue that the system could have been improved without such drastic changes. This was an unresolvable debate, but at least the state was moving in a unified way toward a single educational goal.

Policy Choices and Trade-offs in Scenario 2

Key Policy Choices	Trade-Offs
View education reform as a pre-school through graduate school issue.	Schools at all levels would be required to collaborate extensively.
Prioritize "articulation" across grades and educational institutions.	Some people argue that focusing on articulation pulls attention away from more important educational issues, such as student performance, teacher retraining, or graduation rates.
Establish a statewide board of regents, disbanding the 23 local boards.	Colleges and universities would lose their own governing boards. The degree of local control would depend on the structure of the statewide board. Such a step could be risky and, some say, would divert energy from improving classroom instruction.
From a statewide perspective, set the institutional mission of each college and university, reducing duplication of programs.	Small schools could lose programs or find their ability to expand into new programs limited by the statewide board.
Ensure the development of statewide, broadband Internet access.	Leaders must determine how to pay for it, or how to get private industry to pay for it.
Offer selected courses online, rather than at local colleges.	Students receive less face-time with professors, and many educators question whether students learn as much through online education.

For more information on:

- New Mexico's higher education articulation plans and programs, see Appendix I, page 35.
- The current diversity of New Mexico's educational degree offerings, see Appendix I, beginning on page 31.
- Issues regarding higher education governance structures, see Appendix VI, beginning on page 48.

Scenario #3: Perfecting the System

Dateline: 2026

Basic Assumptions

In 2006, NM chooses to:

- attempt to perfect its existing higher educational system without changing the basic model; and
- devote significant financial resources.

The Story

For the first two decades of the 21st century, New Mexico benefited from a budget surplus sparked by continuing high oil prices.[20] Democrats and Republicans alike, worried about the state's declining high school and college graduation rates,[21] felt that a significant investment in the state's education system was the single best use of those surplus dollars.

Reformers considered revamping the education system significantly, but chose not to. They realized that major changes are risky, often expensive, and they don't always pay off. While some people advocated moving to a centralized form of higher education governance, critics of that plan pointed to states such as Florida[22] that had tried to emulate California's success in that regard and reported significant problems. The decision was made to retain the basic higher education system – governance included – and build it up.

While some modest changes to the education system were prioritized – particularly a need to improve students' understanding of math and science – policymakers saw this moment as a chance to fund the system the way it should have been funded all along. The strengths of the system would form the bedrock as the state worked to "float all boats" (fund all programs) with the improved financial flow.

Investing in Colleges

And so the incredible access that New Mexicans had to higher education continued.[23] Recognizing that almost all New Mexicans were within an hour commute of a college or university,[24] the legislature worked to improve access through new types of scholarships[25], many of which covered the cost of books and other necessities. By 2015, the state's governor was able to brag that all New Mexico students had the opportunity to attend college without leaving home.

Higher teacher salaries at all educational levels meant that more college students were attracted to teaching in the public schools. In addition, New Mexico's colleges and universities were able to attract more bright young faculty members, as well as a few big names. More students attending school meant that more faculty members were needed, just to handle the load.

The campuses themselves were improved as well, with money available for new buildings and renovations to existing buildings. The schools themselves were each independent and competitive with each other, which meant the state could offer plenty of academic programs vying for faculty, students, and star status. Every year, the administration from each school went up to Santa Fe to plead their cause, and no one ever quite knew what next year's budget was going to look like, but they knew they'd be able to keep going, no matter what.

Some of the universities complained that their resources were being siphoned off to allow smaller schools to grow beyond their original missions. For example, a few community colleges essentially offered their own MBA programs, as they developed partnerships with graduate programs elsewhere in order to offer distance education business classes in their classrooms. This meant that, effectively, New Mexico was funding 15 separate MBA programs throughout the state.

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[20] This possibility is based on predictions made by the U.S. Government's Energy Information Agency, in their *Annual Energy Outlook 2006 with Projections to 2030*, where the "high price" scenario predicts that oil will cost nearly $100/barrel in 2030. As reference, oil prices are currently just under $70/barrel, as of 3/29/2006. Data available at www.eia.doe.gov/oiaf/aeo/pdf/overview.pdf.

[21] Only 60% of New Mexicans graduate from high school, only 36% enter college, only 22% return for their sophomore year, only 11% graduate from college within 6 years. From U.S. Census Bureau, Public Use Microdata Samples, 2000.

[22] When Florida moved to a statewide governance system, the lines of responsibility were blurred to the point where no one claimed responsibility for negotiating contracts with faculty. This forced faculty to work without the reassurance of a contract for over a year if they wanted to stay within the system. From "USF faculty union leader lashes out at trustees," at http://www.uffucf.org/news/article.php?id=55.

[23] See p. 34 in the appendix for the source of this data.

[24] *The Condition of Higher Education in New Mexico, 2004-2005,* New Mexico Department of Higher Education, p. 14.

[25] See p. 33 in the appendix for information on the current lottery scholarship program.

Some saw this diversity as a good thing, saying that it allowed students to stay within their communities and still receive needed education. Others called it "mission creep" and said that it merely meant that everyone received a mediocre education rather than anyone getting an outstanding one. The debate raged on, and no conclusive data has yet been developed to settle the issue.

For Victoria, what some people called "mission creep" was wonderful. With her existing interest in science, she was able to see a good future for herself as a science teacher. She never actually left Farmington for very long – she took most of her classes through San Juan College, with some distance learning supplements and one year commuting regularly to UNM-Gallup. She settled down as a teacher at Farmington High School and enjoyed her work. She was right there to support her family as her parents got older and needed some help. Eventually, Victoria worked toward her MA in education through San Juan College and got an administrative position at her school.[26] They say she'll undoubtedly be principal there someday.

Robert went directly to the broadcast communications program at ENMU after high school, which had long been his dream. Robert had strengthened his application by developing a short documentary film on the Mexican-American migration to the Farmington area. This demonstration of his skill and enterprising spirit impressed the admissions committee members, who knew this was the type of student they wanted. He worked a summer job with the New Mexico Film Commission, learning the ropes of attracting feature films to the state. He now owns his own documentary film and production studio in Santa Fe.

Of course, not everything was rosy, despite the influx of resources. Some students still just didn't seem to fit into the system, and so minority dropout rates were still high (though lower than they were at the beginning of the century). Colleges and universities were still having to spend many of their resources on remedial education programs, just to get students capable of working at a collegiate level. College completion rates improved as remedial programs were expanded and the financial concerns were alleviated, but it took average students three years to finish their associate's degrees and seven years to finish their bachelor's degrees.

Some people said that these lengthy stays in higher education were because there was no financial incentive to leave, since students were taken care of so well; others claimed that the long stays were a result of the need for students to adjust between the varying standards at different schools. For the students that started at a community college and then transferred to a university after two years, the transition could be rough, since there was no guarantee that the classes would transfer or that all of the needed basics would have been covered.

For students who left the educational system, it was often difficult to re-enter the pipeline, as the scholarship programs were largely targeted at new high school graduates who were becoming full-time students. Many of these students claimed that the requirement to take remedial classes prevented them from returning to college, that it felt insulting to go back to high school work.

Perfecting Goes On

There is no doubt about it – the system has improved. Graduation levels have increased across the board, though there is still a gap between anglo and minority completion rates.[27] Talented and motivated students now have the opportunity to rise to the top, usually without having to leave their families and their community. The network of higher education institutions serve as vibrant community resources throughout the state, making lifelong education possible and plausible.

[26] See p. 34 in the appendix for the source of this data.

[27] Among New Mexican freshman at four-year colleges the following percentages of students finish their degrees within six years: 44% of Whites, 39% of Latinos, 33% of African Americans, and 22% of Native Americans. Data from the February 2005 New Mexico Data Profile compiled by Achieve, Inc.; available at www.achieve.org/dstore.nsf/lookup/NewMexicodata/$file/NewMexicodata.pdf.

Policy Choices and Trade-offs in Scenario 3

Key Policy Choices	Trade-Offs
Build on the existing higher education system, rather than changing it.	Existing perceived failings in the system may go unaddressed.
Invest state's financial resources heavily in higher education through teacher salaries, new buildings, technology, etc.	Dollars go to education, perhaps at the expense of the taxpayer or other social programs.
Campuses allowed to continue expanding course offerings and degree programs.	Increasing number of colleges duplicate each other's efforts.
Retain the existing governance structure.	Colleges and universities retain what some consider a cumbersome governance system of 28 boards.

For more information on:

- Perceived strengths and weaknesses of New Mexico's higher education system, see Appendix I, page 34, and Appendix IV, page 45
- The current diversity of New Mexico's educational offerings, see Appendix I, beginning on page 31.

Scenario #4: From 48th to Last Place

Dateline: 2026

Basic Assumptions

In 2006, NM chooses to do nothing new.

- It retains its existing educational system.
- It spends no additional dollars.

The Story

Drive through any New Mexican town or city and you'll see them: empty buildings and empty-looking people. The past two decades have been hard on New Mexico. By 2026, the world has changed dramatically, but the state has not. As a result, people and businesses have stopped coming, and many of the state's best and brightest students leave New Mexico in order to fulfill their dreams. Victoria didn't leave, but sometimes she wonders if that was the right choice.

No one wanted this to happen, but it seems the slide was inevitable. When the bottom fell out of the oil and gas industry[28], a major source of funding for the state's education systems was lost. Even back in 2006, New Mexico was already near the bottom of the pack – with its higher education system ranked 48th in the nation – and literacy levels, graduation rates, college completion rates, and economic growth also suffering.[29] Employers complained that they could not find enough skilled workers with basic reading, math, and workplace skills (like showing up everyday on time). While everyone recognized there were problems, political infighting and turf wars raged over how to solve things and where the limited amount of funding should go. No initiative lasted very long, and very little real change occurred.

By 2015, that inaction was starting to take its toll. Experts at the state's universities estimated that well over half of the incoming students needed remedial work in the basics – reading, writing, and math.[30] This provided a serious drain on university resources, and the schools just weren't able to deal with the need. Bewildered by what was being asked of them, more and more college students were dropping out, hitting the streets for jobs that didn't require a college degree.

It's not that people weren't trying to fix things, but the fixes didn't ever seem to get a foothold. Innovative retention programs at universities and community colleges would start, but then they'd wither for lack of continuing funding. Institutions would try to launch new programs or research on that year's hot topic, but in an effort to keep them all happy, none of them would receive the funding and other support they needed to become truly excellent. The state's over-riding funding policy was jokingly referred to as the "peanut butter approach": spread it as far as it will go.

Outside New Mexico

That's what was happening in-state. Outside New Mexico's borders, a lot was changing. New Mexico's political clout declined dramatically as both of its prominent U.S. senators retired and were replaced with fresh faces without seniority. Foreign countries – especially India, China, and Ireland – were reaping the benefits of their investment in education, as much of the world's manufacturing and online industries had moved to take advantage of these low-cost, high-quality resources.[31] Trade with Latin America had taken off, too, but most of that went through Texas or California, where the business resources could handle the influx of work.

Closures

In 2022, the most recent BRACC (Base Realignment and Closure Commission) recommended that Kirtland Air Force Base in Albuquerque be closed, with the labs there moved to Dayton, OH. The BRACC pointed out that almost all the labs' staff was being hired out of state, since the local area couldn't provide the technical expertise necessary. In fact, the only employment area that still contained a majority of New Mexicans was facilities support. While the local area fought this closure of the largest military installation in New Mexico, the relatively new congressional delegation just didn't have the clout to get a reprieve for Kirtland.

With that closure, the scientific industries in New Mexico seemed to crumble. The land cleared for the spaceport near Las Cruces still bore its "Coming Soon" sign, though

[28] This possibility is based on predictions made by the U.S. Government's Energy Information Agency, in their *Annual Energy Outlook 2006 with Projections to 2030*, where the "low price" scenario predicts that oil will cost under $35/barrel in 2030. As reference, oil prices are just under $70/barrel, as of 3/29/2006. Data available at www.eia.doe.gov/oiaf/aeo/pdf/overview.pdf.

[29] See p. 34 in the appendix for the source of this data.

[30] Currently, 67% of students entering community colleges require remedial work, according to the minutes of the Legislative Education Study Committee (LESC) from August 17, 2004. These minutes are available at legis.state.nm.us/lcs/lesc/lescdocs/Aug2004LESCMinutes.pdf.

[31] Friedman, Thomas L. "Developing Counties and the Flat World," from *The World is Flat*, pages 309-336.

no tenants had ever materialized. The defense contractors that had served Kirtland were gone within the year. While Los Alamos National Labs were still functioning, some of their research was already being transferred to labs in other parts of the country. Rumor had it that LANL was on its way out, though nothing official had been said about it.

Private sector growth had slowed as well. Intel downsized and Eclipse Aviation – the company that showed such promise near the turn of the 21st centure – had moved most of its operations out of state because New Mexico did not have the workforce it needed.

By 2024, the universities seemed almost irrelevant – disconnected from the communities they served and unable to handle the reality they were given. Since they were provided with students unready for higher education, they seemed to produce students unready for the world of work. While businesses without a good employee-base were free to leave the state for greener pastures, the universities couldn't move to find better prepared students. And so they continued gamely on, graduating ever-smaller classes.

The community colleges were faring a little better. Granted, they were still spending most of their resources on remedial education, but many of them had just admitted the necessity and stepped forward to the new task.

Victoria was a smart kid, so she did what smart kids do – she left Farmington for the big city for college. She did well enough in her classes at UNM, but she was frustrated that so much class time was devoted to teaching the least prepared students. She was bored easily in her classes, and so she stopped paying attention. Her grades didn't change, because she was still ahead of the pack, but she didn't see the point in doing any better. After all, no one else she knew was working hard at school, so why bother?

With that state of mind, she came home to Farmington for the summer and never went back to school. Robert hadn't left home yet, but he took some advice from his older sister and never even tried to leave. They both worked the family restaurant, though business wasn't exactly booming. People in Farmington weren't going out to eat as much, and when they did, they often went to the big chain restaurants designed for the tourist trade in Durango. Robert eventually moved to Durango himself, where he could earn more money and enjoy life a little more. He managed to send some cash home every month to help support his parents, who were struggling to stay in business.

Tourism

By now, in 2026, many New Mexicans have just given up. Those with ambitions have moved, though many have just gone as far as Arizona, Texas or Colorado, in order to stay close to older relatives who stayed in-state. A few communities manage to make a fairly decent living off the tourist industry – after all, vibrant history and natural beauty remain the state's best assets. The *Travel Channel* just ran a program about New Mexico as a low-cost relaxing getaway, and the state's economic development board is thrilled. Everyone is hoping that that program will bring people to experience the best of what New Mexico has to offer: friendly people, a great climate, and enough relaxation to really empty your mind from all the business of the 21st century.

But those who live in New Mexico say that escape from the 21st century isn't particularly relaxing. Local talk radio throughout the state is filled with complaints about the state's population decline, more tax increases to balance a shrinking workforce, rising unemployment rates, failing schools, and rural communities that seem to disappear as their people all leave to be near good hospitals and schools. Still, New Mexicans put on a good face for the visitors, since they're paying the bills. And they continue to hope that someday, things will be different.

Policy Choices and Trade-offs in Scenario 4

No real choices were made in this scenario. The state found itself in decline because no action was taken.

Community Conversations Summary

Purpose

In preparation for Town Hall 34, New Mexico First convened small groups, called Community Conversation, in Taos, Gallup, and Tucumcari. These communities were selected to ensure that perspectives from smaller communities would be incorporated into the statewide town hall discussions. These local forums also served to identify town hall participants from the Taos, Gallup, and Tucumcari areas.

Participants

Effort was made, in each location, to achieve diverse participation from key stakeholders, including students, teachers, administrators and business people. A full list of participants in each of the three locations is listed at the end of this report.

Structure

Each local forum was structured to involve six hours of discussion by participants, including development of consensus statements associated with four general questions related to the town hall topic. The forums were facilitated by a discussion leader and recorder who attempted to capture the full range of ideas presented to better inform the town hall. The four questions addressed were:

1) What concerns you most about the higher education system as it pertains to the workforce?
2) What do you like best about the higher education system as it pertains to the workforce?
3) What skills does the talent pool need to grow the economy?
4) What factors affect business start-ups or businesses locating in New Mexico? How important is the quality and quantity of the employee base to this decision?

Common Themes

A diversity of comments, ideas, and recommendations surfaced from these community conversations. Though four clear themes emerged, each community shared unique perspectives. The four themes are:

- Greater integration and cooperation (a) among higher education institutions, (b) between higher education institutions and local businesses, (c) between K-12 and higher education institutions, and (d) among parents and community members with local schools.
- Financial resources and programs that better support (a)traditional students going on to higher education after high school and obtaining a degree, and (b) non-traditional students obtaining more education while continuing to work and raise a family. Note: all three groups cited concurrent enrollment between high schools and college as a major plus in their area, enabling high school students to more easily transition to higher education institutions.
- Students prepared for the workforce by having a strong foundation in (a) life skills, e.g. interpersonal communication, bilingual skills, reading, writing, critical thinking, problem solving, and flexibility, (b) continuing education opportunities that provide skills needed by local employers and (c) skills that enable employees to obtain higher-paying jobs.
- A diverse statewide economy that offers higher-paying jobs. Of concern to all three groups was the lack of local higher-level jobs available for educated youth and community members.

Community Responses to Each of the Common Themes

Theme	Taos	Grants	Tucumcari
The contribution of higher education institutions to the community	Advanced and concurrent enrollment classes with local high school. Opportunity to earn a college degree without leaving the local area. Help for employers to match educational programs with skills needed in local jobs. Hiring local people as faculty and staff.	Dual-enrollment programs, which support both workforce development and college transition. Access to higher education for non-traditional students who continue to work and raise a family. More affordable education than the four-year institutions.	Relationship with the local school district offers advanced level classes to high school students and eases their transition to college.

Theme	Taos	Grants	Tucumcari
Improving integration and cooperation between higher education and other resources	Overarching local interest centers on the high degree of potential seen in a more formal, systematic integration between the K-12 and higher education institutions. Both of these are seen as valuable key assets to development of the future of the area. As an integrated unit, they can more adequately address the needs of students for continuing education and rewarding job opportunities, as well as the needs of employers for educated and skilled workers. By blending resources, less duplication of facilities could be achieved, such as through the sharing of lab facilities and instructors.	The key concerns about how the higher education system impacts the workforce are 1) lack of coordination and cooperation, and 2) uneven distribution of funds. Colleges need to form better partnerships between each other and with New Mexico businesses and industries.	With 40% of individuals lacking even a high school degree, it is important for the community to get behind a comprehensive parent-involvement program to improve education completion rates. Area employers working with educational institutions can create mentoring and apprentice-like programs. The college could serve as the catalyst to raise the leadership skill levels of officials and get the community working on a strategic plan that addresses quality-of-life issues, including development.
Improving workforce preparation	Need a focus on language skills (communication and fluency skills) and encouraging multi-lingual community to benefit our workforce. Mentoring/internship programs need to be available for students well before they engage themselves in the curriculums required for a job position. There is a need for more instructors, teachers, and administrators who represent the ethnic make up of the community to facilitate learning and serve as role models for encouraging younger students to pursue these professions.	Educational basics and life skills are crucial to ensure that those in the workforce are best prepared to successfully grow the economy. People need to be able to read, write, listen, and speak effectively, and must be taught people skills and interpersonal communication. Math and science skills are also key components, as are critical thinking and problem solving. Businesses and industries can assist with curriculum development to better prepare students to enter the workforce as employees that businesses need. Being bilingual is crucial.	Students need to be able to effectively communicate, think critically, and problem-solve creatively. The talent pool should be adaptable to life changes, self-motivated, entrepreneurial and responsible for their actions. A good work ethic, computer skills (word processing, software and internet usage), life skills (time and money management), and the ability to comfortably interact with others are essential. We need more work-off-campus programs or internships to gain the practical knowledge that would improve our workforce.

Theme	Taos	Grants	Tucumcari
Improving the rates of students attending and completing higher education	We need new programs and policies that facilitate the completion of higher education while recognizing the needs of students to make a living. We need to get non-traditional students on a college track. Distance education provides greater connections for high school students and helps "take college" to the high schools. Students need role modeling from different cultures. We need to continue providing college courses to high school students helps the students start college early. Both the students and the university see this as a good thing.	Higher education is still too expensive, when additional costs are factored in. Living expenses act as a deterrent to stay in college long enough to achieve a bachelor's degree or to continue on with a masters and doctorate. The lottery helps, but the requirements are too stringent (e.g. even a semester break between high school and college is not permitted). The lottery also doesn't assist with text books, which are often more expensive than tuition. Credits need to be more easily transferred between schools to better meet students' needs.	Many community members might be discouraged from pursuing higher education because it is often inconvenient and time-consuming. Providing more 4-year programs in the small colleges would provide more needed options and strengthen the workforce. The education process should be augmented with more innovative and individual education plans.
Increasing the availability of higher paying jobs	Quality of education and the availability of a skilled workforce are some of the most important factors to draw businesses to our state. Top-notch schools can be one of the most powerful tools for attracting new businesses and employees to an area. We need ongoing current knowledge and a better understanding of what is happening outside of our community. We need to prepare ourselves to adapt to the changing world around us.	The workforce needs to be expanded to include higher wage industries. Infrastructure (employee base to technology and other resources) most impacts whether businesses start in or locate to New Mexico. Businesses locate where it is most cost effective for them to thrive. Higher education needs to deliver students that can meet the demands of industry growth areas that are ripe for development in New Mexico, such as media, digital, computer, energy scientific and medical research.	We're concerned about the lack of jobs available for educated youth and community members and the low rate of pay in this region of New Mexico. We could be a better community if our leaders would become more knowledgeable and skilled in the areas of planning and economic development. Any company that comes to New Mexico is going to have to factor in our demographics to be successful. This is especially true for smaller communities, where the company or product needs to really fit the community.

Full Participant Roster

Taos: New Mexico First Partnered with The University of New Mexico Taos Branch
Lead Team: Dr. Alicia F. Chavez, UNM Taos Executive Campus Director; David Duran, New Mexico First Communications Manager and forum discussion leader; Ellie Dendahl, forum recorder, and Felicia Hererra, UNM Administrative Assistant.

Participants: Shawn Duran, Taos Pueblo Director of Education; Sunshine Duran, UNM student; Virginia Greeno, business owner; Judy Hofer, UNM faculty member & administrator of UNM-Taos Adult Education; Ben Maddox, Director of the Business Person & Bridges to Education program; Ned Martinez, high school senior; Julianna Matz, high school teacher; Alex Ninneman, high school senior; Arturo Mondragon, UNM student; Tom Trujillo, high school principal, and Barney Voorhees, UNM faculty member.

Grants: New Mexico First Partnered with New Mexico State University Grants Branch
Lead Team: Felicia Casados, NMSU Campus Executive Officer; Barbara Brazil, New Mexico First President and forum discussion leader; and Elizabeth Neustadter, forum recorder.

Participants: Victor Briseno, senior at Grants High School; Vicki Gonzales, counselor at Grants High School; Stan Carlson, NMSU biology faculty member; Paul Garcia, NMSU automotive faculty member; Kenna Losito, senior at Grants High School; Randy Roberts, NMSU student; Susie Rhoderick, NMSU student, and Sandee Kosmo, NMSU marketing and community education department.

Tucumcari: New Mexico First Partnered with Mesalands Community College
Lead Team: David Buchen, Director of the Small Business Development Center at Mesalands College; Heather Balas, Associate Director of New Mexico First and forum discussion leader; and Ellie Dendahl, forum recorder.

Participants: David Buchen, Director of the Small Business Development Center at Mesalands College; Justin Bollinger, Instructor of Animal Sciences at Mesalands College; Susan Montoya, Principal of Tucumcari High School; Andres Apodaca, senior student at Tucumcari High School; Cort Watson, Commercial Loan Officer at Wells Fargo Bank; David Brown, majoring in elementary education at Mesalands College; Antonio Pacheco, business/marketing teacher at Tucumcari High School; Debbie Lafferty, President of Tucumcari Chamber of Commerce and multi-business owner; Bronson Moore, Mesalands Board of Trustees member and retired magistrate judge; Rita Martinez, student at Mesalands College and mother; Judy Roybal, Case Manager at Quay County Career Center.

Introduction to the Appendix

"We live in an age of great events and little men, and if we are not to become the slaves of our own systems or sink oppressed among the mechanism we ourselves created, it will only be by the bold efforts of originality, by repeated experiment, and by the dispassionate consideration of the results of sustained and unflinching thought."
Sir Winston Churchill, November 21, 1901

The role of higher education in bolstering America's workforce and growing her economy is a subject of nearly immeasurable proportions and importance. Today there is genuine concern for America's position in the global knowledge-based, high-technology, fast-paced competition for economic prosperity. *How must today's resources best be invested to secure a better future?*

Any discussion on this topic is only slightly narrowed when brought down to the state level. However, New Mexico's comparatively large proportion of undereducated adults, low per capita income, limited industrial economy, and struggling public education system present daunting challenges to preparing a readied workforce, building human capital, and attracting moderate to high-wage businesses. Elected, appointed, and otherwise concerned citizens of every ilk search for information and answers, for at the end of every day there is the inevitable thought of tomorrow and important unanswered questions.

- *What is the plan for ensuring our students get the educations they need?*
- *To what degree should higher education institutions collaborate with the business community?*
- *How should the system of higher education in New Mexico be structured in order to assure efficiency and the best use of our limited dollars?*

Documents in this appendix are intended to present a range of views and provide context that is relevant to this town hall. Sources are clearly provided for those wishing more information or to view entire reports. In the interest of bringing balance and range to this compilation without excessive volume, many documents have been excerpted in this appendix without editing original language.

It is hoped that these materials will productively inform the discussions at the town hall.

David Lepre, Ph.D.
Executive Director
Council of University Presidents

On the following pages please find:

Appendix I: New Mexico's Higher Education System
- List of publicly funded colleges and universities
- Enrollment data
- Demographics
- Types of degrees awarded, level and topic area
- Tuition and fees
- Lottery scholarship program description
- Articulation and alignment programs
- New Mexico's report card – Measuring Up

Appendix II: Governor's Task Force on Higher Education

Appendix III: Higher Education and the Economy
- Higher Education's Contribution to the Knowledge Economy
- Investing in America's Future: The Case for Higher Education
- University Research and State Economic Development
- National Economic and Education Forecasting Charts
- State Economic Forecasting Table
- Beyond Technology Transfer: US State Policies to Harness University Research for Economic Development
- Arts & Culture in the Local Economy

Appendix IV: Higher Education and the Role of Business
- Employer perceptions of New Mexico Universities – 1999 Survey
- Business Leadership is Essential to Collaboration and Progress

Appendix V: Workforce Development – A Report from the States

Appendix VI: Higher Education Governance and Policy
- Governance of Higher Education in New Mexico
- State Capacity for Higher Education Policy – The Need for State Policy Leadership
- Review of Alternative State-level Higher Education Governane Structures
- Guidelines for States Considering Reorganization

Appendix I: New Mexico's Higher Education System

Overview

New Mexico has given high priority over the years to higher education. The state supports:

- Three research universities, each of which has received national recognition in areas of specialization;
- Three comprehensive universities which provide the benefits of small residential colleges at relatively low tuition rates; and*
- Nineteen two-year colleges, ten of which operate as branch campuses of the universities and nine as independent community colleges; they are located around the state so that every New Mexican has geographic access to higher education.

** (Northern New Mexico College is transitioning into a four-year school, but is currently listed with the community colleges.)*

Throughout this appendix, all data tables come from the New Mexico Department of Higher Education unless otherwise noted.

Public Universities and Colleges in NM

According to the New Mexico Higher Education Department, the state has 25 publicly supported, regionally accredited campuses located throughout the state. Most citizens are within a one-hour commute of at least one campus, and many can reach several campuses. Several campuses are expanding their off-campus educational capabilities, providing additional educational opportunities for citizens. The state's universities and independent community colleges are governed by boards whose members are either appointed by the governor or elected locally. Branches are governed by the boards of their parent institutions through operating agreements with local area college boards.

Each of these schools operate almost entirely independently. Each one sets its own standards and fees, decides which degree programs to offer, and evaluates its own students, staff, and faculty. The state funds each of these schools to some degree through revenues related to taxes and oil and gas revenues, but the schools compete with each other during the legislative session to see how funding will be distributed.

Publicly Funded Colleges and Universities

Research Universities	Location	Chief Executive Officer	Web
NM Institute of Mining & Technology	Socorro	Dr. Daniel Lopez	www.nmt.edu
New Mexico State University	Las Cruces	Dr. Mike V. Martin	www.nmsu.edu
University of New Mexico	Albuquerque	Mr. David Harris	www.unm.edu
Comprehensive Universities			
Eastern New Mexico University	Portales	Dr. Steven Gamble	www.enmu.edu
New Mexico Highlands University	Las Vegas	Mr. Manny Aragon	www.nmhu.edu
Western New Mexico University	Silver City	Dr. John Counts	www.wnmu.edu
Branch Community Colleges & Instructional Centers			
ENMU – Roswell Branch	Roswell	Dr. Judy Armstrong	www.roswell.enmu.edu
ENMU – Ruidoso Branch	Ruidoso	Dr. Michael Elrod	www.ruidoso.enmu.edu
NMSU – Alamogordo Branch	Alamogordo	Dr. Rodger Bates	www.alamo.nmsu.edu
NMSU – Carlsbad Branch	Carlsbad	Mr. Melvin Vuk	www.cavern.nmsu.edu
NMSU – Dona Ana Branch	Dona Ana	Dr. Margie Huerta	dabcc-www.nmsu.edu
NMSU – Grants Branch	Grants	Dr. Felicia Casados	www.grants.nmsu.edu
UNM – Gallup Branch	Gallup	Dr. Beth Miller	www.gallup.unm.edu
UNM – Los Alamos Branch	Los Alamos	Dr. Carlos Ramirez	www.la.unm.edu
UNM – Taos Branch	Taos	Dr. Alicia Chavez	www.unm.edu/~taos/
UNM – Valencia Branch	Valencia	Dr. Alice Letteney	www.unm.edu/~unmvc/
Independent Public Community Colleges			
Albuquerque Technical Vocational Institute (TVI)	Albuquerque	Mr. Michael Glennon	www.tvi.cc.nm.us
Clovis Community College	Clovis	Dr. Becky Rowley	www.clovis.edu
Luna Community College	Las Vegas	Mr. Leroy Sanchez	www.luna.cc.nm.us
Mesalands Community College	Tucumcari	Dr. Phillip Barry	www.mesalands.edu
New Mexico Junior College	Hobbs	Dr. Steve McCleery	www.nmjc.cc.nm.us
New Mexico Military Institute	Roswell	Rear Adm. David R. Ellison	www.nmmi.cc.nm.us
Northern New Mexico College*	Espanola/El Rito	Dr. Jose Griego	www.nnmcc.edu
San Juan College	Farmington	Dr. Carol Spencer	www.sanjuancollege.edu
Santa Fe Community College	Santa Fe	Mr. James N. McLaughlin	www.sfccnm.edu

**Northern New Mexico College is transitioning to a four-year comprehensive university.*

Enrollment Data

Total Student Enrollment at New Mexico Public Post-Secondary Institutions (Fall 2004)

Research Universities	#Students	FTE	St. Residents
New Mexico Institute of Mining and Technology (NM Tech)	1,829	1,474	78.0%
New Mexico State University	16,442	12,950	79.0%
University of New Mexico (including medical school)	26,533	20,785	86.2%
Research University Main Campus Subtotals	44,804	35,209	86.0%
Comprehensive Regional Universities	**#Students**	**FTE**	**St. Residents**
Eastern New Mexico University	3,964	3,105	82.2%
New Mexico Highlands University	3,551	2,324	86.8%
Western New Mexico University	2,858	1,846	81.8%
Comprehensive University Main Campus Subtotals	10,373	7,275	84.0%
University Branch Community Colleges	**#Student**	**FTE**	**St. Residents**
ENMU Roswell	4,196	2,337	90.2%
ENMU Ruidoso	754	314	99.3%
NMSU Alamogordo	1,884	1,075	78.9%
NMSU Carlsbad	1,296	814	98.1%
NMSU Dona Ana	6,320	3,422	91.7%
NMSU Grants	703	414	96.9%
UNM Gallup	3,188	1,715	70.7%
UNM Los Alamos	970	439	95.7%
UNM Taos	1,125	511	89.7%
UNM Valencia	1,798	1,027	97.3%
Subtotal University Branch Community Colleges	22,234	12,068	88.0%
Independent Community Colleges	**#Students**	**FTE**	**St. Residents**
Albuquerque Technical Vocational Institute	22,972	12,259	96.8%
Clovis Community College	4,195	1,899	73.8%
Luna Community College	2,041	916	97.5%
Mesalands Community College	574	344	94.6%
New Mexico Junior College	3,546	1,857	86.5%
New Mexico Military Institute	483	515	24.2%
Northern New Mexico College	2,121	1,003	96.0%
San Juan College	9,128	4,259	85.3%
Santa Fe Community College	5,170	1,958	90.8%
Subtotal Independent Community Colleges	50,230	25,010	91.0%
Totals	**#Students**	**FTE**	**St. Residents**
Total Two-Year	72,464	37,078	90.0%
Total Four-Year	55,177	42,484	85.0%
Grand Total Public Universities and Community Colleges	127,641	79,562	88.0%

Source: Fall 2004 Institution Registrar's Report. These figures are based upon Third Friday census date enrollments. Many of these students are not taking classes full-time, but the full-time equivalent (FTE) enrollment is calculated by dividing the total undergraduate credit hours taken by 15 and dividing the total graduate credit hours taken by 12, the minimum numbers of credit hours required for full-time enrollment at those two levels, respectively.

Adult Basic Education Enrollment History - Students With 12 or More Hours of Instruction

Adult Basic Education is an umbrella term for adult education which will not lead to a college-level degree or certificate. This may include GED preparation courses, English as a Second Language, literacy courses and tutoring, etc.

Adult Basic Education Program	FY 02-03	FY 03-04	FY 04-05
Alamo Navajo School Board	260	40	85
Albuquerque TVI	3,697	3,519	3,331
Catholic Charities	570	704	846
Clovis Community College	702	542	558
Crownpoint Institute of Technology	108	121	194
Dine College	171	179	177
ENMU-Roswell	995	1,677	1,616
ENMU-Ruidoso	185	216	246
Gathering Place	182	182	190
Luna Community College	408	339	375
Mesalands Community College	152	148	158
NM Corrections Department	1,604	2,304	3,403
NM Junior College	658	737	730
NMSU-Alamogordo	515	534	530
NMSU-Carlsbad	514	504	577
NMSU-Doña Ana	3,455	3,387	3,486
NMSU-Grants	123	192	176
Northern New Mexico College	302	290	312
San Juan College	878	1,067	986
Santa Fe Community College	2,238	2,318	2,072
Ser De NM	67	86	160
Southwestern Indian Polytechnic Institute	230	254	168
Socorro Consolidated Schools	566	505	461
Tepeyac Consortium Inc.	205	207	324
UNM-Gallup	672	785	832
UNM-Los Alamos	270	320	276
UNM-Taos	164	123	192
UNM-Valencia	901	927	937
Western New Mexico University	670	620	734
Total Enrollment	21,462	22,827	24,132

Enrollment at New Mexico Tribal and Private Post-Secondary Institutions (Fall 2005)

Tribal Colleges	# of Students Enrolled
Crownpoint Institute of Technology	Not reported
Dine College - Crownpoint & Shiprock	576
Institute of American Indian Arts	177
Southwestern Indian Polytechnic Institute	Not reported
New Mexico Based Private Colleges and Universities	
College of Santa Fe	1,768
St. John's College	533
Regionally Accredited Universities	
College of the Southwest	741
National American University	Not reported
Southwestern College	164
University of Phoenix	5,006
University of St. Francis	Not reported
Webster University	175
Nationally Accredited Licensed Schools*	4,175
Licensed Private Schools**	10,527
Statewide Totals:	23,309

** Nationally Accredited Licensed Schools include vocation-specific training from an institution accredited by a national body. The largest schools in this category include ITT Technical Insitute (916 students) and Pima Medical Insitute (705 students).*

*** Licensed Private Schools include vocation specific training from non-accredited institutions. The largest schools in this category include New Horizons Computer Learning Center (7,365 students) and Century University (691 students).*

Demographic Data

Ethnicity and Gender of All Students at Public Post-Secondary Institutions (Fall 2004)

	Total Enrollment	Anglo/ White	Hispanic	Native Am	Black	Asian	Non-Res Alien	NR*	Female
Research Universities									
NM Tech	1,829	65%	18%	3%	1%	3%	8%	2%	33%
New Mexico State University	16,442	32%	42%	3%	3%	1%	4%	16%	56%
University of New Mexico	26,237	49%	30%	5%	3%	3%	4%	6%	57%
UNM Medical School	296	58%	26%	4%	1%	8%	0%	3%	62%
Comprehensive Universities									
Eastern New Mexico University	3,964	59%	27%	3%	6%	1%	1%	4%	58%
New Mexico Highlands University	3,551	28%	56%	5%	4%	1%	2%	5%	58%
Western New Mexico University	2,858	44%	42%	2%	3%	1%	1%	7%	62%
University Subtotals:	*55,177*	*37%*	*33%*	*4%*	*3%*	*3%*	*3%*	*8%*	*56%*
Branch Community Colleges									
ENMU – Roswell	4,196	46%	44%	2%	3%	1%	0%	4%	57%
ENMU – Ruidoso	754	64%	20%	8%	1%	0%	0%	6%	68%
NMSU – Alamogordo	1,884	38%	25%	4%	5%	3%	3%	22%	69%
NMSU – Carlsbad	1,296	38%	39%	1%	1%	1%	0%	21%	67%
NMSU – Dona Ana	6,320	19%	64%	2%	2%	1%	1%	11%	56%
NMSU – Grants	703	16%	31%	38%	1%	0%	0%	14%	69%
UNM – Gallup	3,114	10%	9%	79%	0%	0%	0%	1%	66%
UNM – Los Alamos	970	49%	37%	2%	0%	3%	1%	7%	56%
UNM – Taos	1,125	40%	44%	7%	1%	2%	0%	8%	73%
UNM – Valencia	1,798	36%	55%	3%	1%	1%	1%	3%	70%
Independent Community Colleges									
Albuquerque TVI	22,927	39%	41%	7%	3%	2%	0%	7%	60%
Clovis Community College	4,195	65%	27%	1%	5%	2%	0%	1%	67%
Luna Community College	2,041	11%	85%	1%	1%	0%	0%	1%	60%
Mesalands Community College	574	58%	32%	4%	1%	1%	0%	3%	56%
New Mexico Junior College	3,546	51%	35%	1%	4%	1%	0%	7%	62%
New Mexico Military Institute	483	55%	15%	2%	16%	8%	4%	0%	17%
Northern New Mexico College **	2,121	21%	70%	7%	0%	1%	0%	0%	63%
San Juan College	9,128	61%	11%	25%	0%	1%	0%	2%	56%
Santa Fe Community College	5,170	53%	36%	3%	1%	1%	0%	5%	63%
Community College Subtotals:	*72,493*	*42%*	*37%*	*11%*	*2%*	*2%*	*0%*	*5%*	*61%*
Statewide Totals:	*127,670*	*40%*	*36%*	*8%*	*3%*	*2%*	*1%*	*6%*	*59%*

** NR categorizes students who chose not to identify their race/ethnicity. In addition, during Spring 2000, New Mexico State University changed the race/ethnicity selections available to students, permitting "White" as an option separate from "Other." Students were asked to select their most appropriate race/ethnicity category. Students may not have yet changed their designation and are reported as "Not Reported" or NR.*

*** Northern New Mexico College is transitioning into a four-year school.*

Average Age of Students in NM's Public Colleges and Universities (Fall 2004)

	Average Age of: First-Time Freshmen	Average Age of: Undergraduate Students	Average Age of: Graduate Students	Average Age of: All Students
Research Universities				
New Mexico Institute of Mining and Technology (NM Tech)	19	23	33	26
New Mexico State University	18	23	34	25
University of New Mexico	18	23	34	26
UNM Medical School	0	0	28	28
Comprehensive Universities				
Eastern New Mexico University	18	24	36	26
New Mexico Highlands University	19	26	39	30
Western New Mexico University	23	27	39	29
University Averages:	*18*	*23*	*35*	*26*
Branch Community Colleges and Instructional Centers				
ENMU – Roswell	26	28	0	28
ENMU – Ruidoso	23	33	0	35
NMSU – Alamogordo	21	29	0	29
NMSU – Carlsbad	23	29	0	29
NMSU – Dona Ana	20	26	0	26
NMSU – Grants	28	32	0	32
UNM – Gallup	22	29	0	30
UNM – Los Alamos	23	28	0	31
UNM – Taos	31	32	0	35
UNM – Valencia	23	29	0	29
Independent Public Community Colleges				
Albuquerque Technical and Vocational Institute (TVI)	22	29	0	29
Albuquerque TVI (UNM)	18	18	0	18
Clovis Community College	26	34	0	34
Luna Community College	31	28	0	28
Mesalands Community College	25	33	0	33
New Mexico Junior College	24	30	0	30
New Mexico Military Institute	18	18	0	18
Northern New Mexico College – El Rito	34	45	0	45
Northern New Mexico College – Espanola	26	32	0	32
San Juan College	30	34	0	34
Santa Fe Community College	26	37	0	37
Community College Averages:	*24*	*30*	*48*	*30*
Statewide Averages:	*22*	*28*	*35*	*29*

Types of Degrees Awarded

Bachelor's & Graduate Degrees from NM Public Colleges and Universities Awarded (2004-2005)

	Graduate Degrees			Bachelor's Degrees		
Fields of Study	**Male**	**Female**	**Totals**	**Male**	**Female**	**Totals**
Agriculture and Related Vocations	3	1	4	21	16	37
Architecture and Planning	25	24	49	27	16	43
Business, Acct, Mgmt, Applied Computing	293	161	454	606	562	1168
Communications and Journalism	2	3	5	55	103	158
Education	234	791	1025	179	590	769
Health Related Professions	104	327	431	64	398	462
Home Economics and Related Vocations	2	25	27	7	116	123
Humanities, Including History	66	113	179	248	435	683
Law	38	61	99	0	0	0
Math, Science, and Engineering	353	134	487	596	372	968
Performing, Studio, and Musical Arts	24	38	62	107	157	264
Social and Behavioral Sciences	77	181	258	355	595	950
Total Degrees Awarded:	1,221	1,859	3,080	2265	3360	5625

Certificates and Associates Degrees from NM Public Colleges and Universities Awarded (2004-2005)

Fields of Study	Male	Female	Total
Accounting and Banking	24	113	137
Agricultural Sciences and Services, Natural Resources	8	4	12
Art, Graphic Design, Photography, Visual Communications	16	38	54
Automotive and Other Transportation Repair Trades	271	22	293
Aviation Science and Pilot Training	104	21	125
Business Administration and Management	103	244	347
Computing and Data Processing	85	100	185
Construction Trades (Carpentry, Plumbing, Electrical, etc.)	176	17	193
Cosmetology	5	70	75
Culinary Arts, Baking, and Other Food Service Trades	52	57	109
Dental Health Specialties	3	55	58
Education, Child Care, and Gerontology	51	233	284
Emergency Medical Technology	26	4	30
Engineering-Related Technologies	185	61	246
General and Specialized Secretarial Services	17	275	292
Health Records Technology and Health Unit Coordination	8	98	106
Liberal Arts, General Studies, Social Sciences, and Humanities	443	1099	1542
Machine, Metal, and Welding Trades	80	5	85
Media and Communication Specialties plus Interpreting	0	1	1
Music, Dance, and Performing Arts	2	0	2
Natural Sciences, Mathematics, and Related Technologies	7	14	21
Nursing: LPN and Nurse Assistants	39	271	310
Nursing: RN	79	404	483
Occupational and Physical Therapies	3	15	18
Other Health-Related Technologies and Therapies	42	162	204
Pharmacy Technology and Assisting	5	17	22
Protective Services (Criminal, Police, and Fire)	108	104	212
Public Administration, Community and Social Work	11	73	84
Radiologic and Respiratory Technologies	11	74	85
Retailing and Hospitality Services	2	5	7
Truck, Bus, and Heavy Equipment Driving	67	6	73
Woodworking Trades	7	1	8
Total Certificates and Associate Degrees Awarded:	2040	3663	5703

Master, Educational Specialist, and Doctoral Degrees Awarded by Tribal and Private Colleges (2003-2004)

Fields of Study	Total
Business, Accounting, Management, Applied Computing	789
Education Administration	100
Education Counseling	19
Education: All Fields	117
Other Health Related Fields	277
Psychology	42
Public Administration	39
Total Certificates, Diplomas and Associate Degrees Awarded:	1,383

Categories are based on established federal Classification of Instructional Program codes. Some institutional responses were not categorized and are not shown on this table. The time in class to earn certificates in some fields may vary from one day to several months.

Bachelor's Degrees Awarded by Tribal and Private Colleges (2003-2004)

Fields of Study	Total
Architecture and Planning	7
Business, Accounting, Management, Applied Computing	582
Education	14
Elementary Education	16
Engineering, Surveying, and Related	7
Health-Related Professions	16
Liberal Arts and Humanities	14
Math, Science and Engineering	57
Mathematics, Statistics, Computer Sciences	47
Middle, High School, and Adult Education	43
Performing, Musical Arts	88
Political Science	39
Protective (criminal, police, fire)	14
Psychology	57
Public Administration	519
Social Sciences	512
Social Work - all fields	512
Technical Trades	3
Total Bachelor's Degrees Awarded:	2,556

Categories are based on established federal Classification of Instructional Program codes.

Certificates, Diplomas, and Associate Degrees Awarded by Tribal and Private Colleges (2003-2004)

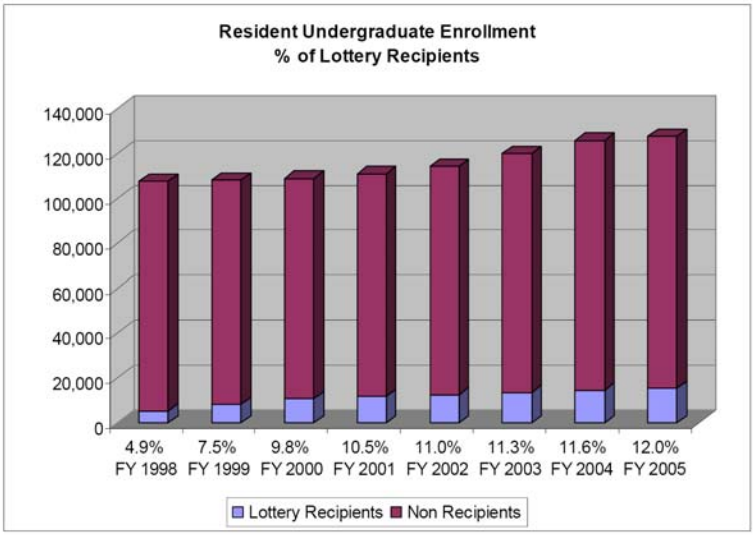
Fields of Study	Total
Agricultural Sciences and Services, Natural Resources	127
Art, Visual Communications	99
Business Administration and Management	804
Computing and Data Processing	378
Construction Trades	58
Dental Health Specialties	161
Education, Child Care, and Gerontology	13
Liberal Arts, General Studies, Social Sciences, and Humanities	35
Other Health-Related Technologies	897
Paralegal and Legal Assistant Services	40
Retailing and Hospitality Services	154
Truck, Bus, and Heavy Equipment Driving	401
Total Certificates, Diplomas and Associate Degrees Awarded:	3,167

Categories are based on established federal Classification of Instructional Program codes. Some institutional responses were not categorized and are not shown on this table. The time in class to earn certificates in some fields may vary from one day to several months.

Comparison of Annual Tuition and Fees, New Mexico Public Post Secondary Institutions (2005-2006)

	Undergraduate Rates		Graduate Rates	
	Resident	Non-Resident	Resident	Non-Resident
Research Universities				
New Mexico Institute of Mining and Technology	$3,644	$10,463	$4,882	$11,088
New Mexico State University	3,918	13,206	4,206	13,560
University of New Mexico	4,109	13,438	4,517	13,814
Comprehensive Universities				
Eastern New Mexico University	2,784	8,340	3,108	8,664
New Mexico Highlands University	2,280	3,420	2,424	3,636
Western New Mexico University	2,863	10,423	3,007	10,615
Branch Community Colleges				
ENMU – Roswell	989	4,255		
ENMU – Ruidoso	648	768		
NMSU – Alamogordo	1,176	3,960		
NMSU – Carlsbad	1,080	2,496		
NMSU – Dona Ana	1,080	3,240		
NMSU – Grants	1,128	2,640		
UNM – Gallup	1,220	3,068		
UNM – Los Alamos	1,071	3,051		
UNM – Taos	1,272	3,000		
UNM – Valencia	1,152	3,096		
Independent Public Community Colleges				
Albuquerque TVI	1,045	5,223		
Clovis Community College	712	1,432		
Luna Community College	644	1,868		
Mesalands Community College	1,076	1,772		
New Mexico Junior College	788	1,316		
Northern New Mexico College	1,022	2,246		
San Juan College	600	840		
Santa Fe Community College	840	1,894		
Special Schools				
New Mexico Military Institute	4,636	10,126		

Lottery Scholarship Program



The Lottery Scholarship helps provide tuition for New Mexico high school graduates (or GED recipients) who want to attend a New Mexico public college or university. These scholarships fund tuition for eight consecutive semesters of college, beginning with the second semester of college enrollment. To receive a scholarship, one must:

- Be a New Mexico resident;
- Have graduated from a New Mexico public, accredited private, parochial, BIA or home high school, or have obtained a New Mexico GED;
- Be enrolled full-time (at least 12 hours) at an eligible New Mexico public college or university in the first regular semester immediately following high school graduation; and
- Obtain and maintain at least a 2.5/4.0 GPA.

New Mexico's Report Card

Source: From "Measuring Up: The National Report Card on Higher Education," produced by The National Center for Public Policy and Higher Education, 2004. Full report available at measuringup.highereducation.org

2004 REPORT CARD NEW MEXICO	
Preparation	F
Participation	A-
Affordability	F
Completion	D
Benefits	C+

Preparation

The preparation category measures how well a state's K-12 schools prepare students for education and training beyond high school. The opportunities that residents have to enroll in and benefit from higher education depend heavily on the performance of their state's K-12 educational system. Over the past decade, New Mexico has shown no notable progress in preparing students to succeed in college.

Participation

The participation category addresses the opportunities for state residents to enroll in higher education. A strong grade in participation generally indicates that state residents have high individual expectations for education and that the state provides enough spaces and types of educational programs for its residents. New Mexico, over the past decade, has shown consistently good performance in the number of students enrolling in higher education.

Affordability

The affordability category measures whether students and families can afford to pay for higher education, given income levels, financial aid, and the schools in the state. Over the past decade, New Mexico has shown no notable progress in providing affordable higher education opportunities.

Percent of income (average of all income groups) needed to pay for college expenses minus financial aid:			
	NM 1994	NM 2004	Top States 2004
at community colleges	19%	22%	15%
at public 4-year colleges/universities	21%	27%	16%
at private 4-year colleges/universities	70%	58%	32%

Completion

The completion category addresses whether students continue through their educational programs and earn certificates or degrees in a timely manner. Certificates and degrees from one- and two-year programs as well as the bachelor's degree are included. Despite substantial improvement over the past decade, relatively few students in New Mexico earn a certificate or degree in a timely manner.

COMPLETION	NEW MEXICO		Top States 2004
	1994	2004	
PERSISTENCE			
1st year community college students returning their 2nd year	64%	52%	63%
Freshmen at 4-year colleges/universities returning their sophomore year	n/a	71%	84%
COMPLETION			
First-time, full-time students completing a bachelor's degree within 6 years of college entrance	35%	41%	64%
Certificates, degrees and diplomas awarded at all colleges and universities per 100 undergraduate students	11	13	21

Benefits

The benefits category measures the economic and societal benefits that the state receives as the result of having well educated residents. Over the past decade, New Mexico has seen an increase in benefits to the state from having a more highly educated population.

- If all ethnic groups in New Mexico had the same educational attainment and earnings as whites, total personal income in the state would be about $1.5 billion higher, and the state would realize an estimated $517 in additional tax revenues.
- Whites are almost three times as likely as those from other ethnic/racial groups to have a bachelor's degree. This is among the widest gaps in the country on this measure.
- In 2002, New Mexico scored 57 on the New Economy Index, compared to a nationwide score of 60. The New Economy Index, developed by the Progressive Policy Institute, measures the extent to which states are participating in knowledge-based industries.

Articulation and Alignment in New Mexico Higher Education

Given the importance of alignment between secondary schools and higher education, as well as articulation within the higher education system, Cabinet Secretary Beverlee McClure has created task forces to deal with both of these issues.

Currently, there are 35 credit hours of "common core" classes all students must take in the first half of their college career. This works out to roughly 10-12 courses of required work across all institutions, divided into the general subject areas of communications, mathematics, laboratory sciences, social/behavioral sciences, and humanities/fine arts. An additional 29 credit hours of common core is currently in development.

For more information on New Mexico's work on higher education articulation and educational alignment, please visit hed.state.nm.us/TaskForces/taskforces.htm.

Appendix II: Governor's Task Force on Higher Education

On March 19, 2004 Governor Bill Richardson signed Executive Order 2004-012 creating the Governor's Task Force on Higher Education. The mission of the Task Force was to develop recommendations to improve higher education in New Mexico with particular emphasis on the delivery of education and training to all New Mexicans. This report summarizes the findings and recommendations of the Task Force. It is the beginning, not the end, of a quest to improve higher education in New Mexico. The report is intended to initiate a statewide conversation about the need for, and expectations of, a statewide system of higher education to meet the needs of individuals and of the state, and to make specific recommendations on alternative structures and means to help attain those goals.

The Governor's Task Force on Higher Education formed five working groups to study and research these issues: Student Success, Governance, Workforce Development, and Efficiency, and Excellence and Accountability. The five groups convened meetings with educators, students, business and government leaders, legislators, and interested citizens. Each group produced a report. The finding of the workgroup reports were combined into major themes for the Task Force report.

Common themes across the five workgroups include the need to address inefficiencies and duplication of programs, to refocus on statewide needs for higher education, to develop policies to improve low student graduation rates and under-representation of Hispanic and Native populations in higher education, and to improve responsiveness of institutions to the state's economic needs.

Each workgroup addressed specific issues, recommending priorities for change:

- *Governance* – Centralization of state governance in a cabinet Secretary of Higher Education reporting to the Governor.
- *Finance* – Use of incentive funding to achieve goals of increased student persistence and graduation rates, centralized control of capital outlay decision, and inventory all facilities.
- *Workforce Development* – Tie programs of study to needs of the state and improve responsiveness of colleges and universities.
- *Student Success* – Increase access to underrepresented groups of students; provide increased student support to increase graduation rates. Strengthen the New Mexico Virtual College for delivery of courses throughout the state.
- *Efficiency, Excellence and Accountability* – Improve transfer among two-year and four-year institutions through policy leadership for common course numbering, admissions and transfer requirements. Centralize decision-making authority over new programs at the state level. End proliferation of branches, centers, and other campus extensions of facilities. Review the possible need for consolidation of existing programs and facilities.

The Governor's Task Force on Higher Education found common elements among those states that were the most successful in delivering higher education to its students. Among these were a statewide agenda for the goals of higher education, a funding mechanism to drive that agenda, and a centralized authority to help oversee the development and implementation of that statewide agenda.

In summary, the Governor's Task Force on Higher Education concludes that the sate must take action to do more with its higher education resources. Creation of a new structure for a stronger statewide system of higher education in New Mexico will require the political will of the legislative and executive branches and the willingness of the institutions to cooperate.

The Task Force issues a call to action to the New Mexico institutions of higher education to refocus on the needs of the state, including potential sacrifice of programs in certain institutions and reframing if institutional identities. The future of institutions will depend on their ability to realize the larger statewide vision for higher education in New Mexico.

Appendix III: Higher Education and the Economy

Higher Education's Contribution to the Knowledge Economy

Source:
By Donna Desrochers, Vice President and Director of Education Studies, Committee for Economic Development, Washington, DC. Date: 2005
(Excerpts follow; the complete document is available at: www.solutionsforourfuture.org/site/DocServer/08.Knowledge-Economy.pdf?docID=103)

Millions of people in the United States have found that earning a college degree has led them to a comfortable, middle-class life style. Viewing higher education primarily as a launching pad for individual economic security has overshadowed higher education's critical role in our economic growth. As the U.S. has moved from an industrial economy to a knowledge-based economy, higher education has emerged as the vehicle for preparing the highly skilled workers our nation requires. In the 21st century, America's ability to produce and disseminate education will increasingly determine its economic competitiveness. Key issues include:

- *The Changing Structure of Work:* The economic landscape of the United States has changed dramatically over the past 30 years because of advances in technology and globalization.
- *Computing Technology:* Computers have allowed companies to restructure production processes and employ fewer workers using more sophisticated technology. Often, modern technologies replace the manual tasks performed by less-skilled workers. In the jobs that remain, increasingly sophisticated skills are required to mange the technology.
- *Globalization:* Domestic employment has fundamentally changed because less skilled labor-intensive jobs have moved abroad to low-wage competitors. However, jobs are gained from trade as well, and they tend to be more highly skilled because globalization provides new markets for America's technologically advanced goods and services.

Higher Education in the Knowledge Economy

As recently as 30 years ago, only 28% of prime-age workers had at least some college education. Today, more that 60% of workers ages 30 to 59 have some education beyond high school, and one-third of workers have baccalaureate or advanced degrees.

- Most of the new jobs are in occupations dominated by highly skilled managerial and professional workers.
- Office jobs, the fastest growing segment of the economy, have frown from 30% of all jobs in 1959 to 39% today, while education and health care jobs have grown from 10% to 16% of all jobs.
- The share of technical jobs in which highly skilled workers create and deploy complex technologies—engineers, computer programmers, scientists, health and science technicians—has doubled since 1959, thought it still only accounts for about 7% of all jobs.

Much of the increased demand for college-educated workers comes from rising skill requirements within existing jobs. While education and health care jobs have always employed large numbers of college-educated workers, the share of those workers with at least some college has grown from 50% to 76% over the last 30 years. Technical jobs employ the most educated workers; roughly 86% have at least some college education. Low-skilled service jobs account for 20% of jobs in the economy in 1959, and they still account for 20% today.

Along with increased educational requirements, new skill requirements have also emerged. General reasoning, problem-solving, and interpersonal skills have all become more important in today's workplace because most new positions are being created in education, health care, and office settings, where there are higher levels of human interaction. In manufacturing, as technology takes over more of the manual processing tasks, employees spend more time interacting with each other to effectively manage the new technologies. Most employers associate reasoning, problem-solving, and interpersonal skills with educational attainment, especially college-level attainment.

Solid cognitive and applied skills also are still needed to complement general skill requirements. As jobs change and skill requirements increase, workers need sufficient cognitive abilities to learn new tasks and apply what they already know in new ways. Workers also still need occupational and professional competencies that provide the applied skills to get the job done.

The Future Knowledge Economy

The most recent employment projections from the U.S. Bureau of Labor Statistics (BLS) indicate that jobs requiring higher education will grow by 22% between 2002 and

2012, nearly double the rate of growth in jobs not requiring college. Wages provide the strongest evidence on the value of a college degree. Within so-called non-college jobs, those workers with college degrees earned higher salaries than their less-educated coworkers, suggesting their education makes them more valued and productive employees.

The Demographic Landscape

Past economic changes that increased the demand for college educated workers coincided with the sizable baby-boom generation entering the workforce and women entering the ranks of the employed in record numbers. As a result the U.S. workforce increased by almost 50% over the past 20 years.

By 2029, 44% of today's workforce, or 62 million working baby boomers, will have reached retirement age. Labor force growth is expected to slow to only 16% over the next two decades. Furthermore, projections suggest that minorities will account for the largest population increases in the coming years, meaning labor force growth will come primarily from workers who tend to have lower levels of educational attainment.

The college-educated labor force, which increased by 107% between 1980 and 2000, will likely grow by less that 35% over the next 20 years. The demographic shifts will make it increasingly difficult to maintain a skilled workforce without engaging more students in higher education.

Higher Education and Economic Competitiveness

Thus far, education has been our "ace in the hole," allowing investments in the development and exploitation of new technologies that increase productivity growth, and ultimately, economic growth. But competitive pressures are already mounting as countries with formerly low rates of college participation and graduation have been making gains on the United States.

The prevailing view that higher education is primarily a purveyor of individual economic opportunity rather than an engine for national economic growth provides too narrow a perspective on higher education. And without consideration of its broader economic benefits, higher education is in danger of losing public support amid arguments that those individuals who benefit should pay. But in a knowledge based economy, higher education benefits more than just those who attend. A strong economy benefits all of us.

Investing in America's Future: The Case for Higher Education

Source:
By Steve Gunderson, The Greystone Group
Date: 2005. (Excerpts follow; the complete document available at: www.solutionsforourfuture.org.)

The U.S. Commission on National Security in the 21st Century, known as the Hart-Rudman Commission, described the public sector investment challenge facing America today when it wrote, "The adequacy of our system of research and education poses a greater threat to U.S. national security over the next quarter century than any potential conventional war." Today, America's competitive edge—based up the emergence of a knowledge-based global economy—is at risk. China is graduating almost four million students per year from its colleges compared to 1.3 million we graduate here at home. India has over twice the number of college graduates as the United States. America's historical leadership in postsecondary education now is challenged by the growth in the quality and size of the investments in education by several other countries.

While the demands on us are greater, the public investment is not keeping pace. Consider the following:

- By 2015, the traditional college-age population will grow by 16 percent, and 80% of the new students will be non-white; nearly half of the growth will be among Hispanic students.
- International students have accounted for 50 percent of U.S. graduate enrollment in engineering and 40 percent of the enrollment in the sciences. Yet, trends suggest that more students are now studying at home or in other countries or are returning home after their education is complete.
- Whether it be by two-year programs in specific trades and professions, the comprehensive liberal arts degrees, or a new generation of academic research founded upon graduate education, higher education's ability to meet the demands for skills and knowledge will define America's future.

We need to begin a serious conversation about future public investments in higher education that is grounded in recognition of our past stunning commitments and the multitude of benefits that we continue to reap from them.

University Research and State Economic Development

Source:
By Roger L. Geiger and Creso Sa , Center for the Study of Higher Education, Pennsylvania State University, Date: April, 2004, (Excerpts follow; complete document available at: www.psu.edu.)

Purpose and Key Conclusion

University research is an increasingly important component in states' economic development strategies. To flourish in the knowledge-based economy, states need not only to educate a skilled citizenry but also generate economic opportunity that will attract and retain such talent. Such opportunity accrues from high-technology and information-based sectors, where knowledge plays a major role. The old policy paradigms of subsidizing technology assistance and technology development have been increasingly supplemented with (1) targeted investments in knowledge creation, (2) encouragement of academic spin-off firms, and the (3) efforts to stimulate the information of industrial-academic clusters.

Research and development (R&D) in state development:

- Academic R&D has a particularly strong association with state wealth.
- R&D works as a catalyst for business creation, retention and attraction.
- If left on their own, firms will invest less in R&D than socially desirable due to uncertainty.
- The distribution of national R&D is skewed towards wealthiest states; however, overachieving states have invested in local university infrastructure.

Research Universities and Economic Growth

- The top 50 research universities are located in the 23 states with the highest Gross State Product per capita.
- Research universities generate economic activity on their own. The stronger their scientific excellence, the more human and financial resource they attract and retain in the state.
- In a challenging competitive environment, targeted state support plays a role in university advancement.
- Selective funding for university R&D is important, but cannot substitute for general appropriations to maintain and upgrade infrastructure and to attract talented faculty and students.

New Policy Paradigm: Technology Creation

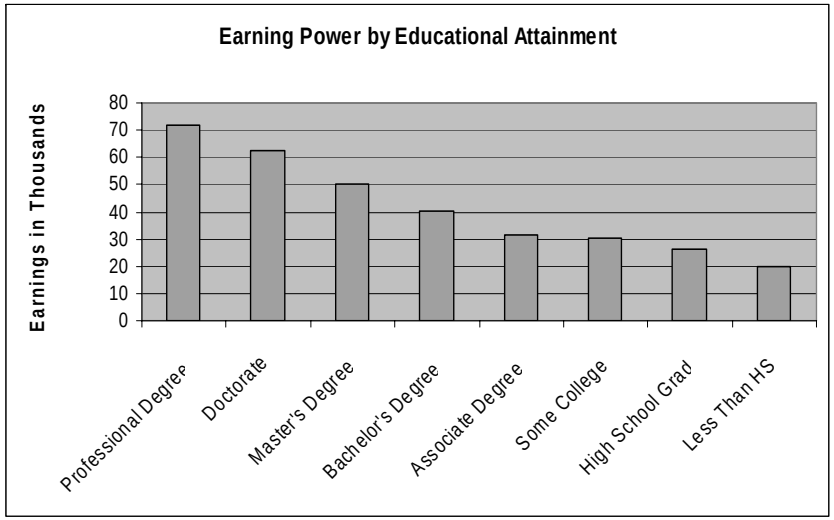
- Older state policies sought to promote technology transfer by subsidizing technology development through university-industry cooperative research.
- Recent policies emphasize technology creation through state investments in scientific discovery in fields with potentially high economic pay-offs.
- Technology created in this way is generally transferred to industry as intellectual property.
- The problem for state policy is to capture the economic returns from knowledge investments, and one attractive solution is to foster clusters of high-tech industry.
- Clusters require policies to encourage spin-off companies, including venture capital and management assistance.
- Existing economic infrastructure and private sector partnerships are crucial in decisions on where to channel public R&D investment.
- Relying on federal/private investments in university research does not assure that scientific discovery will result in local firms or jobs.
- Some strategies states use: (1) endowed professorships in targeted fields; (2) creating research institutes, often across institutions (corridors); and (3) allocating research funds for fields linked with local strengths (centers of excellence).
- Biotechnology, nanotechnology, genomics, information technology are some salient fields, but economic opportunity goes beyond those.

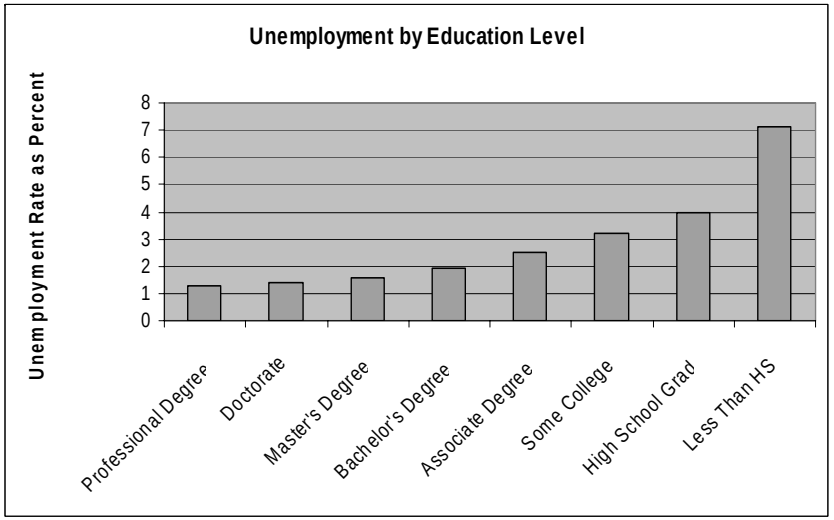
Policy Implications

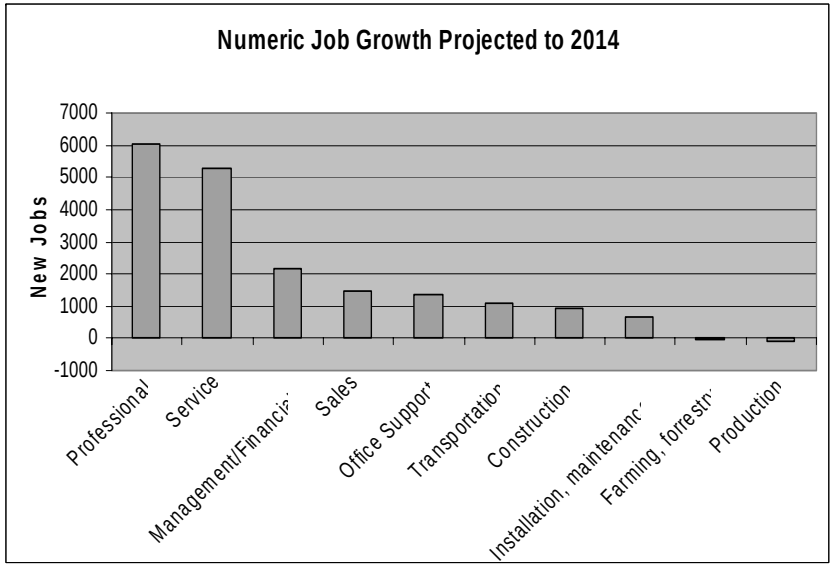
- Scientific leadership and high-technology firm development are increasingly coupled and inseparable.
- States are assuming a central economic role by investing in scientific leadership and new technologies.
- States that lag behind are likely to suffer from brain-drain and capital flight to regions that prioritize the knowledge sectors.
- High technology firms give states economies potential access to world markets, higher paying jobs, an increased tax base, and a sophisticated workforce.
- States profit from nurturing first-class research universities and implementing policies to augment scientific activity and commercialize knowledge.

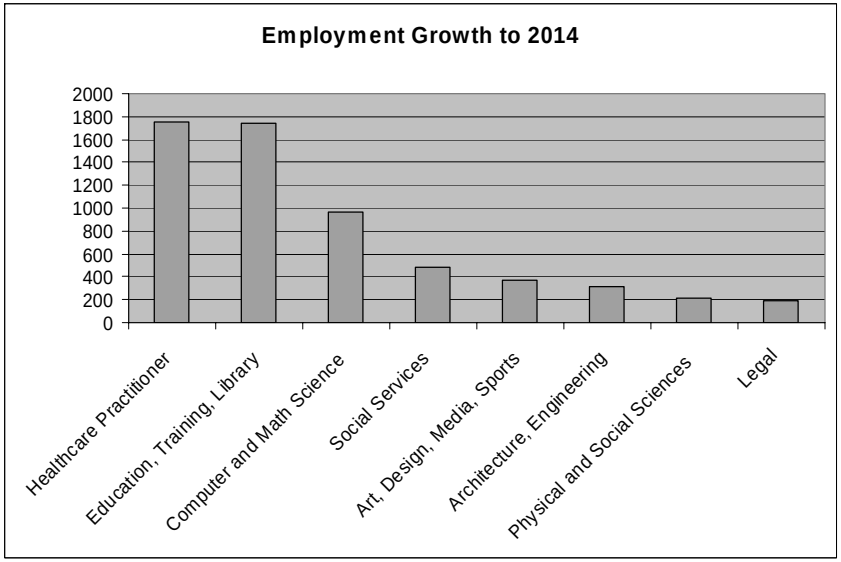
Selected Economic and Education Forecasting Charts, Nationwide

Source:
Occupational Outlook Quarterly, Bureau of Labor Statistics, U.S. Department of Labor, Fall 1999









New Mexico Industry Employment Projections (2005)

NAICS Industries	2005 Projection	Annual Job Growth	Annual Average Percentage Growth
Total, All Industries	***795,980***	***14,910***	***1.9%***
Agriculture	21,220	180	0.9%
Natural Resources (Mining/Oil & Gas)	14,630	180	1.3%
Utilities	4,060	30	0.7%
Construction	51,140	1,230	2.5%
Manufacturing	38,660	730	2.0%
Wholesale Trade	22,720	250	1.1%
Retail Trade	93,000	1,160	1.3%
Transportation & Warehousing	19,250	300	1.6%
Information	16,140	140	0.9%
Finance & Insurance	23,170	210	0.9%
Real Estate & Rental	10,630	170	1.6%
Professional, Scientific and Technical Services	53,960	1,260	2.4%
Management of Companies	5,030	20	0.5%
Administrative Support & Waste Mgmt. Services	43,610	540	1.3%
Educational Services	68,810	1,060	1.6%
Health Care & Social Services	100,920	3,620	3.9%
Arts, Entertainment, and Recreation	16,150	520	3.5%
Accommodation & Food Service	101,740	1,630	1.7%
Government	91,150	1,680	1.9%

Source: New Mexico Two-Year Strategic Plan for Workforce Investment Act and Wagner-Peyser Program, July 1, 2005 through June 30, 2007, p. 21. This document is available at http://www.state.nm.us/wc/pdf/StatePlan2005.pdf.

Beyond Technology Transfer:
U.S. State Policies To Harness University Research For Economic Development

Source:
By Roger L. Geiger and Creso Sá , Center for the Study of Higher Education, Pennsylvania State University, Date: February 2004 , (Excerpts follow; complete document available at: www.psu.edu.)

Economist Irwin Feller has warned against states narrowly focusing their university investments on potential economic development while neglecting to support the institution as a whole. A few states—California and North Carolina—deserve high marks for supporting the quality of their public universities even in adversity. But New York, Texas, and Illinois appear more interested in gathering the golden economic eggs than in feeding the university goose. And Virginia expects its appropriations-starved universities to garner funds for the Virginia Institute for Defense and Homeland Security. More generally, Feller argues, "states that are either unable or unwilling to provide the financial support necessary to maintain competitive higher education systems are likely to fall behind in longer-term efforts to develop nationally competitive knowledge-based economies."

State Characteristics

The variation across the fifty states in scientific capabilities, industrial base and economic vigor is enormous. State S&T policies for economic development reflect these differences. Although general trends can be discerned, policy implementation and termination across the states continually occur according to political moods and economic conditions.

High quality research universities are an essential component of state policies for knowledge-based economic development. Knowledge creation and technological advancement are now considered central to economic competitiveness. In the past decade, science and technology (S&T) policies have become important subsets of economic development strategies, not only in the United States but also in the Organization for Economic Cooperation and Development (OECD) countries. On a global scale, Japan and the US are the countries that invest most extensively in R&D, followed by nations in the European Union. In one way or another, most of the efforts to leverage scientific and technological resources to promote innovation include higher education.

State Roles in Strengthening University-Industry

The economic rationale for government involvement in university-industry relations starts with the role of R&D in industry. Universities perform one-half of basic research in the U.S. and have a special relationship with industrial research. Firms engage in R&D to acquire competitive advantage in the form of improved products or processes. In this sense, research-based innovation is a beneficial social outcome, generating economic returns to producers (through competitive advantage) and consumers (cheaper/better goods).

Virtually all states wish to attract or develop high-tech industries to furnish well-paid jobs and sustainable economic growth. The example of Silicon Valley, and the literature spawned by its fabulous growth, has focused the attention of policymakers on the crucial role of agglomerations. The clustering of similar high-tech industries creates a social and economic infrastructure where, spillovers are largely captured by local firms; innovations and ideas are quickly communicated, creating a far greater collective 'intelligence'; and entrepreneurs translate technological opportunities into start-up firms, enlarging economic activity.

State Policies

Among states initiating or refining policies, there are two general courses of action: *technology creation* – investing directly in university chairs and infrastructure in carefully targeted fields to build additional research capabilities, usually designed to leverage existing resources and build upon scientific expertise, and the approach, representing the older technology transfer policies called *facilitation.* Such policies are intended to promote utilization of university research by existing firms largely to enhance their own R&D.

Technology Creation Policies

State	Policy Initiative	Event	Features
California	California Institutes for Science and Innovation	Four-year $300 m state investment in four institutes since 2001, counting on 2:1 matching funds from other sources.	Each institute is based in multiple campuses of the U of California System, and enlists industrial partners for R&D support and tech transfer.
Florida	Centers of Excellence	Three (of five authorized) innovation-oriented centers chosen in 2003, $10 m each; 2 more proposed	Each center is based in a university, in the fields of photonics, biotechnology and biomedical research
Georgia	Venture Lab; Yamacraw	VL Expansion in 2003 to the state's universities through the Georgia Research Alliance	VL a Mechanism that supports faculty research commercialization; Y created professorships to support broadband
New York	Centers of Excellence, Gen*NY*sis	Legislature approved $470 million in 2003 for these programs.	Centers of Excellence in high tech sectors, universities must raise 3:1 matching funds. Gen*NY*sis focuses on enhancing R&D potential in life sciences at academic research institutions.
South Carolina	Centers of Excellence	$30 m approved in 2003	Endows professorships in focused research areas. Funding from lottery proceeds. Universities required to raise 1:1 private sector funds within 18 months

S&T Policies in States with Largest Academic R&D

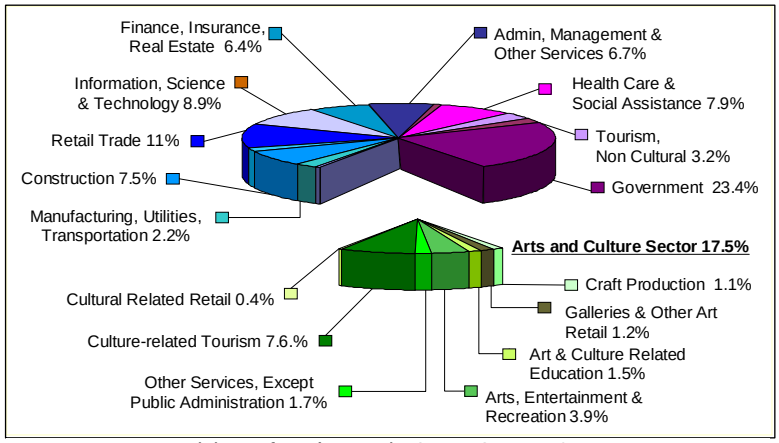
R&D Rank	GSP Rank*	State	Program
1	1	California	4 California Institutes for Science and Innovation
2	2	New York	Centers of Excellence; Gen-NY-sis for biosciences
3	3	Texas	Texas Excellence Fund (TEF), University Research Fund (URF), Advanced Research Program (ARP)
4	6	Pennsylvania	Life Sciences Greenhouse, biotech
5		Maryland	Private and federal partnerships
6	11	Massachusetts	Private sector initiatives
7	5	Illinois	Leveraged investments for science at U of Illinois, Urbana
8	12	North Carolina	Mature programs (research triangle, biotech consortium); Centennial Campus, NC State
9	9	Michigan	Life Sciences Corridor
10	7	Ohio	10-year/$500 m. state commitment to collaborative research
11	4	Florida	3 Centers of Excellence @ $10 m. each
12	10	Georgia	Georgia Research Alliance; Ga. Electronic Design Center
13		Wisconsin	Leveraged investments at U of Wisconsin

* *Gross State Product*

Many of these state programs have relied on what might be called 'windfall financing.' The windfalls in some cases (Pennsylvania, Michigan) came from the settlement of lawsuits against the tobacco industry. Some states earmarked the proceeds from lotteries, and the commitment to the California institutes occurred when the state's coffers were literally overflowing. It made sense to allocate such non-recurring revenues to investments likely to produce future wealth.

Arts & Culture in the Local Economy

Source:
Excerpted from the Executive Summary of "The Economic Importance of the Arts & Cultural Industries in Santa Fe County," by Drs. Jeffrey Mitchell and Lee A. Reynis, UNM Bureau of Business & Economic Research, November 2004.



Breakdown of Employment by Sector, Santa Fe County

In 2002, Santa Fe's arts & cultural industries (A&CI) and cultural tourism generated over $1 billion in receipts, employed 12,567 workers (17.5% of total employment in Santa Fe county), and paid $231.5 million in wages and salaries. Just over one-half of employment and wages are generated by industries that are either directly engaged in the creation, presentation or preservation of art and/or cult activities, or indirectly engaged with cultural content but not themselves "source activities". The balance is generated by the tourism industry to the extent that tourism is associated with an interest in Santa Fe's art, cultural and historical attractions.

Santa Fe's A&CIs rank among the top contributors to economic development in New Mexico. Preliminary estimates based on secondary sources and previous work by BBER suggest that the volume of dollars Santa Fe's A&CIs bring into the county is 100 times greater than what New Mexico's film industry brings to the state; is comparable to all aspects of the University of New Mexico contribution to the state; is roughly equal to the total contribution of Intel (which has benefited from generous tax breaks); and is equivalent to about 70% of the volume of funds brought into the state by LANL.

Evidence suggests a growing disconnect between the creative and commercial aspects of Santa Fe's art industry. Data collected in first part of this research project shows that slightly more than 15% of art (by value) sold in Santa Fe galleries is produced by artists who live in the county; 84% of Santa Fe gallery revenues come from art delivered out-of-state, and hence are exempt from gross receipt taxes. The consequence of these trends is that much of the wealth generated by A&CIs is leaving in Santa Fe,

To date, Santa Fe has failed to establish A&CIs in new media and emerging industries and markets. Technical and social innovation has created new outlets for the delivery of cultural products, increasing competition and necessitating innovation. To its advantage, Santa Fe possesses a high level of technical capacity, complementing the region's rich cultural resources. However, a weak tradition of entrepreneurship, poorly developed investment networks and limited institutional support have impeded collaboration between the creative and technical communities of Santa Fe, restricting the development of products in new media and markets.

Santa Fe has lost nearly one-third of its share of the national tourism market since the mid-1990s. The decline is part of a statewide pattern, but is most pronounced in Santa Fe. Available evidence suggests that tourism industry in Santa Fe is supported by an increasingly narrow market of repeat visitors, and is failing to expand its appeal to more rapidly growing market segments. Declining market share is problematic because it tends to increase the volatility of the industry during periods of change and market instability; it limits the capacity of Santa Fe to leverage its success in tourism in other industries; and more generally, it raises questions regarding the value of the Santa Fe "brand" over the longer term.

Appendix IV: Higher Education and the Business Community

Employer Perceptions of New Mexico Universities Survey

Source:
Summary of survey report
Survey prepared for: Council of University Presidents
by the Albuquerque-based firm Research & Polling, Inc.
October 1999. Excerpted from:
http://www.unm.edu/~cup/pep2000/appendexecsumm.PDF

The New Mexico Council of University Presidents (CUP) conducted a telephone survey of 500 New Mexico business managers who were interviewed in October 1999 by Research & Polling. The major objectives of the survey were to ascertain employer satisfaction with the educational preparation of students by the four-year public universities in New Mexico, identify employers' suggestions for how these universities may be improved from the perspective of the end-user, and identify employer hiring practices.

The survey focused strictly on four-year public universities in New Mexico. The survey results attest to the importance New Mexico businesses place on four-year college degrees with 60% of the employers rating such degrees above the mid-point on a five-point rating scale, where '5' is the highest rating possible. Thirty-four percent had actively recruited employees from these campuses. Ninety-one percent of all businesses had hired a graduate of these campuses within the previous four years, and 29 percent of all the employees at these businesses are graduates of one of these campuses.

In general, the four-year public universities received a favorable evaluation from employers. Employers were asked to rate the four-year public universities as a group using an academic grade system of A, B, C, D, and F.

	A	B	C	D	F
Preparation of students for the work place	23%	55%	16%	2%	0%
Providing students with a well-rounded education	24%	53%	15%	1%	0%
Preparing employees for current jobs	25%	43%	22%	3%	1%

The employers were given an exercise in which they were asked to first evaluate the importance of fourteen work skills and attributes, and then to rate how well the four-year public New Mexico universities had prepared their employees on these skills. Employers gave universities the highest ratings for student preparation in reading skills, teamwork, positive work ethics, responsibility, honesty and integrity, and inspiring students with the willingness to learn new skills. The universities were rated as doing well on all the skill areas, ranging from 4.3 to 3.6 on the five-point rating scale.

Fifty-seven percent of the employers also of the believed that New Mexico public universities could benefit them in areas other than the academic preparation of students. Nearly half (42%) of the employers mentioned the desirability of having students from these universities in their labor force as part of an on-the-job training program. Also mentioned were consulting and technology transfer functions, and the general spirit of the partnering of the academic and business entities.

Employer Suggestions for Student Preparation

Employers were asked in an open-ended format for suggestions of how the four-year public universities could best prepare students for jobs. They suggested:

- On-the-job training programs;
- Emphasis on 'people skills'/teamwork/community involvement; and
- Ensure basic secondary school skills.

Employer Suggestions for Universities Management

- Flexibility in time and location of classes offered
- Required exit skill testing of students
- Affordability/scholarships
- Business and university partnerships
- Consulting
- Technology transfer

In conclusion, New Mexico employers are favorably disposed to the New Mexico four-year public universities; yet there is a desire for more collaboration with these institutions through on-the-job training programs and internships for students of these universities, including technology transfer and consultation from these universities. Based on the survey results, it appears that there is very good potential for more collaboration between the business sector and the four-year public university sector. It would be worthwhile to consider the short-term and long-term economic benefits of instituting programs that will facilitate greater academic and business sector partnership. Ultimately, such programs could benefit New Mexico's economy by developing local talent and encouraging employers to hire from New Mexico's work force.

Business Leadership is Essential to Collaboration and Progress

Source:
Report of the Business-Higher Education Forum, Winter 2001. A partnership of the American Council on Education and the National Alliance of Business. Excerpts from: *Sharing Responsibility: How Leaders in Business and Higher Education Can Improve America's Schools*
Complete document location:
www.bhef.com/includes/pdf/sharingresponsibility.pdf

The new generation of collaborations we advocate should build on the groundbreaking work of business organizations that propelled the standards movement throughout the 1990s. Their powerful persistence helped the nation achieve today's consensus about standards-based reform. Their continued involvement, then, will strengthen the drive to raise achievement through higher standards. Involve all three sectors (business, higher ed & K-12) in discussing community aspirations for education and workforce development and in developing a long-term strategy to reach those goals. Above all, engage yourselves in substantive conversations with leaders in the other sectors about how to improve education achievement.

We believe ambitious collaborations…produce three powerful benefits.

Generating a comprehensive, coherent strategy

The varying perspectives of multiple partners enrich the analysis of the problem; produce better strategic plans and help partners focus their resources on solutions.

Achieving a critical mass in reform efforts

The participation of both business and higher education leadership is essential, inasmuch as those two institutions are the destinations of all those emerging from the K-12 system.

Dealing with "It's not my job"

When one sector or a combination of sectors assume the leadership, a comprehensive plan can be devised for a complex systemic issue, with appropriate roles for each collaborator.

Since 1983, business leaders have persistently voiced their support for school improvement, exerting strong external pressure in some cases and providing powerful internal support in others. These leaders have been instrumental in elevating the issue to the top of the nation's agenda, in fostering the standards-based reform movement, and in insisting on stricter accountability and bottom-line results.

Ten essential elements for effective business/education collaborations:

1. Involve as many different parties as possible. Make certain that representatives from public schools, colleges and universities, and business are present. Seek involvement by elected officials, community organizations and unions, where possible.
2. Involve the highest level of leadership: company executives, superintendents and presidents of schools, and chancellors of colleges and universities.
3. Establish ongoing, formal collaborative structures with a defined mission and clear goals and agendas. Meet regularly.
4. Focus on student achievement.
5. Develop a long-term focus and commit to a multiyear effort.
6. Develop a collaborative plan focused on systemic, coherent reform efforts.
7. Concentrate on the most important issues: the system-changing improvements that will result in higher student achievement. Be willing to tackle important issues even if they are difficult and produce conflict.
8. Be results-oriented and establish methods to evaluate results. Hold the collaborators accountable for achieving those results, just as schools and students are being held accountable.
9. Dedicate staff and money to the collaboration.
10. Remain above politics. Insist that the organization's strategic plan and recommendations avoid partisan or special-interest advantage.

Appendix V: Workforce Development-A Report from the States

Across the country, state leaders are taking action to develop more competitive workforces and to attract and retain business and industry. While some activities have been stimulated by the federal Workforce Investment Act, others are the result of governors' task forces, legislative initiatives, postsecondary leadership, and business efforts. Many involve new kinds of partnerships, accountability systems, and educational innovation. The following examples illustrate just a few of the many innovative and significant efforts in which state higher education agencies are currently engaged.

University System of Georgia: Georgia's Intellectual Capital Partnership Program (ICAPP®)

Program: ICAPP Advantage, an economic development incentive program that helps companies meet needs for knowledge workers in areas of high demand but low supply.
How it works: Companies screen and sponsor program participants, guaranteeing them a well-paying job with growth potential after they successfully complete the educational program. ICAPP applicants are eligible for service-cancelable loans of up to $10,000, and all people admitted to an ICAPP program have met admission standards.
Results: Since its creation in 1996, nine Georgia companies have worked with ICAPP Advantage. One company, Total System Services (TSYS®), stayed in Georgia in part due to ICAPP's commitment to prepare 1,200 computer programmers. A study by Georgia State University's Economic Forecasting Center shows that ICAPP Advantage nets a greater than 15:1 return on the state's investment. *For more information, visit www.icapp.org.*

Kentucky: Legislation as a Driving Force

Legislation: The Kentucky Postsecondary Improvement Act of 1997, which made economic development a goal for state colleges and universities.
How it works: The Kentucky Council on Postsecondary Education helps advance the Act by working closely with several technology and workforce organizations.
Results: One public-private partnerships is in Metropolitan College (MC) in Louisville, a joint venture between the University of Louisville, Jefferson Community College, Jefferson Technical College, and United Parcel Service (UPS). MC enables students to finance their education and a company to recruit employees: it provides tuition-free education, flexible scheduling, and employment at UPS with good pay and benefits for those who meet the admissions requirements of one of the colleges. *For more information, contact Daniel Rabuzzi at daniel.rabuzzi@mail.state.ky.us.*

North Dakota: Model for the Legislative Process

Program: A funding plan comprised of four elements: fees for service from business and industry; administrative and in-kind support from colleges; local/regional funds from economic development organizations, cities, or coalitions of major companies; and state general funds. Each campus must submit a business plan before state funds are released, and these plans must include performance measures.
How it came to exist: A major initiative passed the 1999 state legislature as a result of a partnership of 31 state leaders from business and industry, the North Dakota University System, the Governor's office, legislative leadership, and several state agencies. *For more information, contact Eddie Dunn at edunn@badlands.nodak.edu.*

Ohio Board of Regents: The Power of Collaboration

Program: Enterprise Ohio Network, an effort of the Ohio Board of Regents, to enable two-year campuses to share resources and keeping informed of new strategies for meeting the training needs of employers.
Results: The Network launched a new project to address Ohio's information technology worker shortage. The recently enacted state budget allocated $19 million to enhance their service capacity and provide employer training incentives. *For more information, visit www.enterpriseohio.org.*

Pennsylvania State System of Higher Education: Promising Partnerships

Programs: Three major partnership efforts address workforce issues in Pennsylvania: the Workforce Resource Network's collaboration with IBM's Education and Training division; the Workforce and Economic Development Network (WEDnet), a partnership of the 14 universities, 15 community colleges, and the state's Department of Community and Economic Development; and the Labor Education Institute begun last summer in cooperation with Pennsylvania's AFL-CIO.
Results: One example is a project undertaken with the two statewide teacher unions and the school administrators association to develop web-enabled, in-service courseware to prepare teachers for Pennsylvania's new rigorous mathematics standards. Another example is an employer-driven job-training program that trained 13,647 employees from new or expanding manufacturing or technology-based businesses. *For more information, contact Charles Clevenger at ccleveng@mailgate.sshechan.edu.*

Appendix VI: Higher Education Governance and Policy

Governance of Higher Education in New Mexico

Source: New Mexico Higher Education Department

Governance of the public system of higher education in New Mexico is a joint responsibility of the state, exercised through the New Mexico Higher Education Department, and the individual institutions. Six public universities in the state and one community college are each governed by separate and independent boards of regents, each appointed by the Governor. There are nine branch campuses of the universities in the state, which are governed under the auspices of the boards of regents for the parent institutions. In addition, these campuses also have locally elected advisory boards. There are seven independent community colleges, which are governed by locally elected governing boards. The department also oversees three special schools and coordinates financial aid programs at eight institutions which are not part of the state system, including tribal colleges and private, nonprofit colleges.

State Capacity for Higher Education Policy – The Need for State Policy Leadership

Source:

By the National Center for Public Policy and Higher Education, Date: July 2005. (Excerpts follow; the complete document available at: www.highereducation.org/crosstalk/ct0305/news0305-insert.pdf.)

In almost every state, legislatures and governors have responded to the changed policy climate for higher education by refocusing the state role away from institutional oversight and regulation in favor of greater campus autonomy and market adaptability. Many states have loosened or abandoned traditional attention to mission differentiation, and are encouraging institutions to be entrepreneurial to best compete in the markets they deem most appropriate.

We believe that the state-level public policy environment in which colleges and universities operate must change in significant ways to meet the challenges of the rapidly emerging knowledge-based global economy, particularly the need for more Americans to achieve knowledge and skills beyond the high school level.

The current system of American higher education has produced some of the most respected colleges and universities in the world because we have built a generously financed, entrepreneurial, and institutionally diverse system with strong support and a high degree of independence from government, both federal and state. All this has been possible because of a remarkable degree of consensus that the interests of society are best served by strong educational institutions with considerable autonomy.

However, states are the decision-making entities historically responsible for higher education policy and they remain the ones best situated to frame a broad public policy agenda for all of education, with the greatest probability of maintaining focus and sustainability.

State policy capacity should be focused on the linkages between higher education and society, and not on the details of institutional management. The new policy environment will require organizations with credibility and leadership skills that can link higher education to the future of each state and the nation as a whole, build relationships between higher education and policy leaders, work across education sectors—with schools and colleges, with public and private education—and with agencies responsible for other dimensions of social and economic policy. In some states, this change will be one of emphasis, but in most it may require a different design for state policy than they have had before.

The Challenge: Raising Educational Attainment

There is increasing evidence of serious gaps in our national capacity and performance in college in access and degree attainment, some new and some old. Consider the following:

- *Global competition:* Several countries have now overtaken the United States in higher education access and degree attainment. Shortages of educated manpower are particularly acute in science and technology. Several international competitors now far surpass the Unite States in degree production. As these countries invest in building their own systems of higher education, our country is also losing the foreign graduate students who have long contributed to the excellence of our doctoral programs.
- *A leaking pipeline:* The U.S. system of higher education is characterized by relatively low college-degree and credential completion. Only 68 percent of 9th graders graduate from high school in four years,

and only 18 percent complete an associate's degree within three years or a bachelor's degree within six years of enrolling in college. Baccalaureate degree attainment rates for Latino and African American young adults—the fastest growing population groups in our county—are less than half of those for white and Asian-Pacific Islanders. The educational attainment of Americans is declining. Unless these problems are addressed, the nation's competitive position in the world will deteriorate.

- *Workforce supply and demand:* Currently, the fastest growing and highest paid jobs require education and training beyond high school. The baby boomers – the best educated generation in our history – will shortly begin to leave the workforce. Some labor market forecasts predict a significant shortage of college-educated workers over the next decade and a half, a situation that reflects failure to produce sufficient graduates. A *Business Week* analysis has warned employers of an impending "wrenching manpower and skills shortage," especially of college-educated workers.
- *Technological Change:* The pace of technological change requires a continuous need to reinvent and develop the U.S. economy through attention to research that supports economic growth.

Changing the State Focus

In the last decade there has been a substantial change in the role of the state in higher education. There have been four major reasons for this:

- *Changes in state government*: Faced with increasing demands for public resources to finance health care, public schools and other services – and public pressures to reduce taxes – many states have decentralized and privatized state services and altered the functions of existing boards. Greater political volatility has created challenges in sustaining policy agendas across political and economic cycles.
- *Shift of responsibility for funding*: Nationwide, there has been a sea change in patterns of public financing of higher education as the costs have slowly shifted from the taxpayers to individual students. Tuition comprises an increasing share of revenues for higher education. Because financial aid has not kept pace with tuition increases, low- and middle-income students are being priced out of colleges.
- *New modes of providing higher education*: The growing for-profit sector and the expansion of distance learning are changing the higher education landscape. Accredited degree-granting proprietary institutions are the fastest growing education sector in the country. While some view these new providers with skepticism, they are here to stay. Their presence has contributed to pressure for a shift in state policy toward greater attention to the contributions of all sectors to meeting student needs, improving student learning outcomes, and contributing to public priorities. The changes also present new challenges in quality assurance and consumer protection.
- *Student mobility*. Increasing numbers of students now obtain their education from courses taken at a number of institutions. Some do this through formal course transfer from one institution to another, but many do this by augmenting on-campus education with internet-based instruction. States must find new strategies to set goals and evaluate results for student learning outcomes that cut across individual institutions and are capable of benchmarking learning achievement at a statewide level. Traditional information systems designed to support budget allocations to institutions are inadequate to these new demands.

A Word about How to Proceed

Dramatically increasing the educational attainment of the population is unlikely under a business-as-usual scenario. Without state policy leadership to develop statewide priorities and effect change, traditional decision-making entities built for other times and other public purposes will crowd out these important public priorities. Whatever the organizational forms, effective sustained policy leadership for higher education must include:

- A broad-based public entity with a clear charge to increase the state's educational attainment and prepare citizens for the workforce
- Strengths to counter inappropriate political, partisan, institution, or parochial influences.
- Capacity and responsibility for articulating and monitoring state performance objectives for higher education that are supported by the key leaders in the state; objectives should be specific and measurable. Including quantifiable goals for college preparation, access, participation, retention, graduation, and responsiveness to other state needs.
- Engagement of civic, business, and public school leaders beyond state government and higher education leaders.
- Recognition of distinctions between statewide policy—and the public entities and policies needed to accomplish it—and institutional governance. The role of statewide policy leadership is distinct from the roles of institutional and segmental governing boards.
- Information gathering and analytical capacity to inform the choice of state goals/priorities and to interpret and evaluate statewide and institutional performance in relation to those goals.

- Capacity to bring coherence and coordination in key policy areas, such as the relationship between institutional appropriations, tuition, and financial aid.
- Capacity to influence the direction of state resources to ensure accomplishment of these priorities.

No single organizational model of public policy has yet been proven to accomplish what we believe is essential to the nation's future – substantially increasing the levels of educational attainment for all Americans to ensure the necessary knowledge and skills for the economy and the democracy. Therefore, while we believe the characteristics described above are useful, they surely must be open to frank discussion, debate, and refinement.

Review of Alternative State-level Higher Education Governance Structures

Source: The Oregon University System
Date: December 2001
(Excerpts follow; the complete document available at www.ous.edu/aca/governance-ex-sum-12-01.html.)

Governance Structures

Higher education analysts have developed a common taxonomy [categories] regarding state-level boards including coordinating boards and consolidated governing boards. Consolidated governing boards generally have the broadest range of authority. Currently, 23 states have consolidated governing boards, for which responsibilities typically include:

- budget development and recommendation to the legislature,
- academic program review and approval,
- appointment, evaluation, and removal of system and institution heads,
- resource allocation,
- mission determination,
- auditing/assessment,
- coordination of centralized services,
- advocacy at the institution, state, and federal levels, and
- policy analysis and strategic planning.

Twenty-five states have coordinating boards, which have more limited authority than consolidated governing boards. In general, states with coordinating boards rely on institutional boards for governance activities while their coordinating boards focus on broader, statewide policy and system issues. There are two types of coordinating boards: regulatory and advisory. Regulatory boards generally have authority to approve academic programs whereas advisory boards usually make recommendations only. Some advisory boards also have other responsibilities in such areas as student financial aid. Typical responsibilities for coordinating boards include:

- mission approval,
- academic program review or approval/recommendation
- budget development,
- statewide planning, and
- providing advice to governor/legislature on higher education issues.

Advisory coordinating boards participate only in the planning and advising parts of those responsibilities. Their role is quite similar to planning agencies. Only two states have planning agencies, whose job it is to conduct statewide master planning and advise the legislature and/or governor on issues relating to higher education. The structures/models become somewhat mixed, because higher education governance and advisory activities also occur below the state level, especially in those states with coordinating boards. Twenty-six states have individual university/college boards, with responsibilities along a continuum from serving as goodwill ambassadors to providing significant governance to the institution. Twenty-four states have at least one multicampus board, ranging in size from two campuses (University of Virginia) to the State University of New York (64 postsecondary institutions). Like the institutional boards, the extent of the board responsibilities varies widely. Finally, the reader should note that 15 of these states have both multicampus boards and individual institutional boards.

State Examples of Governance

Seven states were selected to illuminate various ways in which governance responsibilities are delegated.

Idaho: Idaho's eight-member consolidated governing board is what many refer to as a "superboard," governing kindergarten through graduate school. Part of what enables this structure to work is the small size of the state's population. Their fall 2001 postsecondary headcount enrollment, which includes high school vocational as well as two-year and four-year institutions, was 56,854.

Georgia: Georgia's University System is governed by a 16-member consolidated governing board, appointed by the governor, whose members serve seven-year terms. The board has authority over four-year universities and colleges and community colleges. The University System is composed

of 34 institutions: 4 research universities, 2 regional universities, 13 state universities, 2 state colleges, and 13 two-year colleges.

Maine: The Board of Trustees of the University of Maine System is a consolidated governing board. Fifteen of the 16 members are appointed by the governor for five-year terms. The board has authority over the four-year universities and colleges. In addition, each institution has its own board of visitors, which has limited authority.

Nevada: The 11 members of the Board of Regents of the University and Community College System of Nevada are elected by the public to serve six-year terms. Like other consolidated governing boards, they have significant authority over the campuses they serve.

New Jersey: New Jersey has three distinct statutory bodies assigned to oversee postsecondary education in the state. The New Jersey Commission on Higher Education is a regulatory coordinating board with authority over the four-year public universities and colleges, community colleges, private institutions, as well as three degree-granting proprietary schools. A second layer of authority consists of the individual public university boards. A third layer is the Presidents' Council, with responsibilities such as reviewing and commenting on new academic programs and recommending new postsecondary institutions.

Washington: A regulatory coordinating board closer to home, Washington's nine members are appointed by the governor for four-year terms. The board oversees the state's four-year institutions and community colleges. In addition, the community and technical colleges also have a nine-member state board. The four-year institutions each have their own board with specific institutional authority.

Wisconsin: The 17-member Board of Regents of the University of Wisconsin System is a consolidated governing board with authority over 26 institutions (13 four-year and 13 two-year). The Regents serve seven-year terms and are appointed by the governor. There are no institutional boards

Guidelines for States Considering Reorganization

Source:

Education Commission of the States, By Aims C. McGuinness, February 2002. (Excerpts follow; the complete document available at www.ecs.org.)

In most states, leaders have made governance changes without first making a thorough evaluation of how well their existing policies and structures align with the state's agenda and the public interest. Consequently, one can find numerous examples of governance changes that failed to meet the expectations of the people who proposed them. Continuing changes in public expectations and new policy environments require changes in many existing structures. States that fail to assess these contextual factors risk seriously hampering the capacity of the state and its postsecondary education system to compete in the new environment.

States considering reorganization need to do the following:

- *Focus first on ends, not means*. Clear goals and objectives need to precede reorganization. Reorganization is a means to an end, not an end in itself. Reorganization without a sense of purpose or direction may be more damaging than maintaining the status quo. If reorganization debates are framed by good information about the state's demographic, economic and education trends, the debate is more likely to focus on the ends to be achieved than on arguments about means, turf and power.
- *Be explicit about the specific problems that are the catalysts for the reorganization proposals.* In governance debates, rationales for change can be expressed in lofty terms disconnected from the problems that led to the proposals. In some cases, the real issue is a specific concern, such as perceived inequities, other problems in financing policy or failure of an existing structure to curb institutional turf battles and unnecessary duplication of high-cost graduate and professional programs. In other cases, the issue may be state leaders' sense that the existing structure is inadequate to help the state confront major policy priorities, such as workforce development or P-16 reform. Whatever the issue, the problem may lie elsewhere (e.g., in the politics of the legislative process), and not in the postsecondary education structure itself.
- *Ask if reorganization is the only or the most effective means for addressing the identified problems.* Reorganization is necessary at times and can be an effective way to signal new directions, assert new leadership and provide a framework for new policy initiatives. But other alternatives need to be considered carefully.
- *Weigh the costs of reorganization against the short- and long-term benefits.* What short- and long-

term damage will result if reorganization is pursued? It may take five to eight years for a newly organized system to begin to function effectively and to yield anticipated results. Large-scale organizational change requires extensive consultation and rebuilding of the formal and informal networks essential for effectiveness. All these processes are the basic costs of change.

- *Recognize that a good system balances state and societal needs and the needs of colleges and universities.* The assumption that one viewpoint must rule is dangerous. Some officials argue that institutional autonomy is an absolute good and that state involvement on behalf of the public interest must be kept at a minimum. Others believe state priorities must rule and that they need to constrain institutional autonomy. The challenge for states is to develop structures and policies that foster appropriate institutional autonomy, as well as institutional responsiveness to public priorities.
- *Distinguish between state coordination and institutional governance.* Coordination is concerned primarily with the state and system perspective – the framework within which governance takes place. Governance, on the other hand, relates to the direction, by boards of trustees and presidents, of individual colleges and universities or systems of institutions. This distinction is important because states often try to solve coordination problems with governance alternatives or vice versa.
- *Examine the total policy structure and process, including the roles of the governor, executive branch agencies and the legislature, rather than only the formal postsecondary education structure.* States often will change the postsecondary education structure when, in reality, the source of the problem lies elsewhere.

State coordination of postsecondary education is one of the most complex, difficult balancing acts in state government. There are no simple answers… While lessons can be drawn from other states, there is no perfect model. Conflicts are the reality. The challenge is to resolve those conflicts as close to the operating level (e.g., at the campus or through cooperation among campuses) and as close to the real problems as possible. Once issues rise to the level of the governor and legislature, political, as opposed to education values, tend to dominate the debate. Finally, what worked at one point, with one set of actors, may not work at another point. State leaders need to periodically evaluate the adequacy of their systems and undertake carefully considered changes when necessary.