Higher Education
New Mexico State University & University of New Mexico
August 11, 2010

State of New Mexico
LEGISLATIVE FINANCE COMMITTEE

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David Abbey
Director

August 6, 2010

Mr. Blake Curtis, President
Board of Regents
New Mexico State University
P.O. Box 30001
Las Cruces, NM 88003

Raymond G. Sanchez, President
Board of Regents
University of New Mexico
1 University of New Mexico
Albuquerque, NM 87131-0001

Dear President Curtis/President Sanchez:

On behalf of the Legislative Finance Committee (Committee), I am pleased to transmit the *Higher Education Program Evaluation.* The evaluation review team assessed governance, spending, and student outcomes at New Mexico State University and the University of New Mexico. The report will be presented to the Committee on 11 August 2010. Exit conferences were conducted with HED, UNM, and NMSU staff to discuss the contents of the report. The Committee would like a plan to address the recommendations within this report within 30 days from the date of the hearing.

I believe this report addresses issues the Committee asked us to review and hope New Mexico's institutions of higher education benefit from our efforts. We very much appreciate the cooperation and assistance we received from NMSU, UNM, and HED staff.

Sincerely,

David Abbey, Director

Cc: Representative Luciano "Lucky" Varela, Chairman, LFC
       Senator John Arthur Smith, Vice-Chairman, LFC
       Dr. Viola Florez, Secretary, HED
       Dr. Barbara Couture, President, NMSU
       Dr. David Schmidly, President, UNM

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No other state dedicates more of its citizen's personal income to higher education than New Mexico.

New Mexico funds 25 institutions of higher education and numerous centers including the two largest, New Mexico State University and the University of New Mexico.

Of 100 9th Graders in New Mexico, How Many...

Source: NCMEMS

Arizona serves more than four times as many post-secondary students with fewer state-supported institutions.

Higher education provides significant benefits to the state and society overall and is a key component to the state's economic future. The State of New Mexico is a national leader in committing its tax effort and spending towards higher education and dedicates about 15 percent of the State's general fund appropriations for this purpose. No other state dedicates more of its citizen's personal income to higher education than New Mexico. Despite New Mexico's limited wealth, state-supported appropriations resulted in the third highest per student funding in the nation for FY08. The State has sustained its commitment to higher education; only four other states had a greater percentage increase in appropriations between FY98 and FY08.

The State of New Mexico funds 25 institutions of higher education and numerous centers, including the two largest, New Mexico State University (NMSU) and the University of New Mexico (UNM). These two universities, their branch campuses, and their health and agricultural functions are important assets to New Mexico and total appropriations represent about nine percent of state appropriations from the general fund. The Legislative Finance Committee (LFC) program evaluation staff assessed governance, resource allocation and performance outcome issues for both universities' main-campuses. This report also covers issues that may have a statewide impact because both universities operate in a larger policy and finance context that impacts not only their operations and success, but the State of New Mexico as well.

Both universities have committed faculty, staff and administrators that serve students well, perform excellent research and contribute intellectually and culturally to communities across the state. However, both need improved outcomes for students, attention to structural changes to administrative and academic functions and better monitoring of teaching capacity to contain costs for students and taxpayers, while ensuring academic excellence. Efforts to cut administration, curb subsidies to functions that should be more self-sufficient, such as athletics, and streamline business processes should continue. A more in-depth examination of the physical and instructional capacity of the universities is needed to ensure better alignment of resources with need and productivity, particularly for faculty positions.

Finally, most spending for the Legislative Lottery Scholarship (LLS) is for students to attend these two universities. The combination of stagnant revenues, increased numbers of students earning the scholarship and increased tuition has already required spending from the fund's cash reserves. If trends continue, an automatic across-the-board

reduction will be required according to state law. Time remains to more thoroughly consider other LLS solvency options that strengthen an already strong program.

KEY FINDINGS

New Mexico needs improvements in the cost-effectiveness of higher education. New Mexico faces a combination of strategic challenges that may require a substantially new policy approach for public and higher education should the existing framework not make progress improving the educational attainment of its citizens at the pace needed and cost that is affordable. Higher education cannot solve these issues alone. They require a collective effort among citizens, policymakers and government, and business among others, including communities and families setting expectations for not just attendance, but student success and on-time degree attainment. Given the level of public investment and need for results, the state has an interest in the cost-effectiveness of all of its higher education institutions, not just NMSU and UNM.

The State has already recognized the need to have a well-planned and coordinated higher education system and assigned those tasks to HED. The Higher Education Department (HED) has not fulfilled its primary planning duty required by Laws 1973, Chapter 233, Section 5. A strategic plan is slated for release in November 2010. The strategic plan serves as the basis to inform policy and funding decisions. According to state statute, HED "shall develop a funding formula that will provide funding for each institution of higher education to accomplish its mission as determined by a statewide plan" (Section 21-2-5.1(A), NMSA 1978). Robust planning and careful attention to the incentive structure of financing mechanisms are necessary to balance state interests within New Mexico's decentralized governing and management structure. New Mexico taxpayers support seven four year institutions, 10 branch campuses, and eight community colleges. By comparison, Arizona serves more than four times as many post-secondary students with fewer state-supported institutions.

Finance mechanisms generally encourage growth to meet undefined "access" goals, do not take into account performance or institutional capacity and do not reward excellence. The projected number of New Mexico high school graduates is relatively flat, while neighboring states expect considerable growth. About 70 percent of New Mexico's high school graduates enter college; more than a fifth attend out of state. The State has a considerable infrastructure to deliver higher education. The existing funding formula does not include many of the policy goals outlined in statute.

The strategic plan serves as the basis to inform policy and funding decisions.

Robust planning and careful attention to the incentive structure of financing mechanisms are necessary to balance state interests within New Mexico's decentralized governing and management structure.

About 70 percent of New Mexico's high school graduates enter college; more than a fifth attend out of state.

The projected number of New Mexico high school graduates is relatively flat, while neighboring states expect considerable growth.

- *Enrollment growth is rewarded through additional funding for increases above three percent, but it is unclear how much more the state needs to grow.* The State faces a potential workload funding increase across higher education of over $61 million, about $51 million of which is due to increased student credit hours. Institutional capacity is insufficiently assessed to determine whether direct cost increases are necessary for growth. Teaching or research productivity is not taken into account before awarding additional funding.

- *Course "taking" is funded, but not course completion, resulting in the state potentially paying millions for dropped courses.* Over a three-year period NMSU and UNM generated about $58.4 million in formula funding for SCH never completed by students. This difference in formula funding accounted for between five to seven percent and totaled an estimated $7.1 million at NMSU for SCH generated in FY09 and almost $12.4 million at UNM. Assuming similar completion trends statewide, the total instructional workload funds would be about $43.6 million less. The LFC and HED may want to have institutions report actual completion rates and funding value to obtain better estimates.

- *Tuition and cost-sharing goals for students and the state are lacking.* In FY10 (pre-solvency), the State share of instructional formula funding for UNM was $293 million, or 64 percent, and $125 million, or 67 percent, at NMSU. Branch campuses as a group received a 71 percent share ($72 million) and independent community colleges 57 percent ($108 million).

- *The State waives an estimated $60 million in out-of-state tuition, but has not targeted those waivers to ensure institutions attract higher quality students that are likely to stay in state.* NMSU accounts for an estimated $23 million and UNM $20.7 million State authorized out-of-state tuition waivers. Tuition waivers are provided for Texas residents living within 135 miles of New Mexico, athletes, and tuition reciprocity with other states among others.

- *The State does not incentivize degree production, nor monitor quality outcomes of existing programming and degrees produced.*

- *Efficiency measures are not considered, including on-time degree completion and reducing excessive student credit hours (SCH).* UNM and NMSU graduates earn on average about 150 SCH, or 15 percent in excess of what is required for graduation.

- *The State has hundreds of line item appropriations for research and public service projects without a comprehensive plan for their need, use or expected outcomes.* In some cases research and public funding goes unused as a result. During this

Percent of Graduates Employed in NM

Source: HED

evaluation, UNM-Main identified over $570 thousand in special appropriations that may need to revert to the general fund. This amount may be reduced to about $300 thousand depending on acceptance of some expenditures by the Department of Finance and Administration (DFA). NMSU identified and reverted about $157 thousand during this evaluation.

- *The State has not established clear expectations and desired outcomes for institutions' research activities.* New Mexico higher education institutions spent $417 million on academic R&D, ranking New Mexico fourth in the nation in terms of academic R&D spending relative to state GDP.

New Mexico has the worst generational achievement gap in the nation. Proportionally fewer younger workers have an associate's degree or higher than older workers nearing retirement. National economic growth has historically relied on each generation becoming more educated than their parent's generation. Additionally, the entire state workforce age population has lower educational attainment rates than the national average. These facts exist at the same time the United States as a whole is losing ground internationally in the education levels of its citizens and in an economy that requires higher levels of education and skills. The national agenda has focused on the need to nearly double the levels of degree attainment to remain competitive. New Mexico cannot position itself to thrive economically in a knowledge-based economy with such low degree attainment rates, nor can it compete internationally with labor costs for unskilled jobs and basic manufacturing. Reliance on extraction industries remains fruitful, but volatile and not indefinite. Given employment realities in New Mexico, creating both demand for workers and supply of workers simultaneously creates extraordinary challenges. However, absent significant change, these educational and economic realities make financing the future associated state portion of healthcare and retirement costs for the "baby-boom" generation daunting, let alone other critical and basic needs.

Continuing to allocate 15 percent of the state's budget to higher education will become increasingly difficult given the current economic climate, sluggish revenue growth, reductions in temporary federal aid and competing increased spending pressures from Medicaid, including the costs of insuring additional people related to national healthcare reform. Tuition remains low statewide compared to national and regional averages due in part to New Mexicans' committing more of their personal income to higher education than any state in the country. Continuing to increase the total cost of attendance, however, may create financial challenges for both institutions and students. Given generally lower income levels in the state, families already devote a large amount, even after financial aid, for education at

4 Year Graduation Rates UNM & NMSU
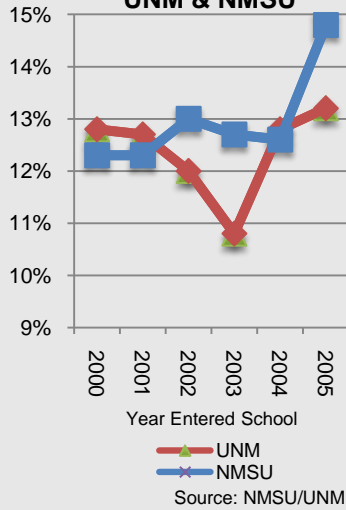
Source: NMSU/UNM

Nearly 25 percent of the students in each university's incoming freshman classes were in the bottom half of their high school class and over 25 percent had less than a 3.0 grade point average.

UNM is appropriately phasing in higher admission standards and creating alternative pathways for students not yet ready to enter a major research institution.

a four-year university (21 percent) and community college (19 percent) relative to other states, according to Measuring Up. In 2007, New Mexico undergraduate students were among the nation's leaders, borrowing on average $5,201.

Many NMSU and UNM students take too long to graduate or do not graduate at all increasing the cost of higher education for students and taxpayers. About 13 percent of first-time freshman graduate in four years from UNM and NMSU, with about 43 percent taking up to six years. In general, students and their families pay about 50 percent more, or $35,400, as a result of graduating in six years instead of four. Given that those who have earned a bachelor's degree earn, on average, over $40,000 annually in New Mexico, a delay of two years equates to over $80,000 in postponed earnings. The total amount of delayed income and additional cost for those two extra years is over $115,000. In general, students are not only taking longer to graduate, they are also graduating with about 17 percent more student credit hours than necessary.

Better preparation in New Mexico's public schools will help ultimately increase graduation rates and on-time degree completion at UNM and NMSU. National studies indicate that higher levels of academic preparation, as evidenced by high school curriculum, GPA, class rank, and ACT scores, increase the likelihood of degree completion. UNM and NMSU offer relatively open-access to an increasing number of students with enrollment driven primarily from local high schools. As freshmen class size continues to increase, the institutions are accepting more and more students with a diminished chance to graduate on time. For example, nearly 25 percent of the students in each university's incoming freshman classes were in the bottom half of their high school class and over 25 percent had less than a 3.0 grade point average.

Both NMSU and UNM have been taking steps to address university practices to help improve student outcomes, but more is needed. UNM is appropriately phasing in higher admission standards and creating alternative higher education pathways for students not yet ready to enter a major research institution. This will help ensure better opportunities for student success. UNM engaged in an extensive study of institutional practices that could inhibit graduation; NMSU should do the same. Both universities could do more to work with major feeder high schools to help improve preparation and clarify expectations for college level work. About half of each universities freshman class come from their top ten feeders schools.

Like universities nationally, tuition and fee increases have generally outstripped inflation and increases in household income.

Tuition and fees, however, account for only about 30 percent of the total cost of attendance.

NMSU spends over $4 million from I&G and research to subsidize its athletic program.

UNM has historically subsidized its athletic program with I&G funding, including almost $1.4 million in FY09.

Academic programs are major cost drivers of institutional spending.

Justifying large tuition increases will require greater efforts to contain spending and cut overhead costs. Tuition and fees for attending NMSU and UNM has increased almost 100 percent between FY01-FY11. Like universities nationally, tuition and fee increases have generally outstripped inflation and increases in household income. Tuition and fees, however, account for only about 30 percent of the total cost of attendance.

Efforts to curb spending on administration across both universities should continue. Administrative costs, both direct and indirect, span the entire university, though the largest identifiable category of indirect administration in university budgets is Institutional Support. Per student spending, including administration, increased rapidly between FY04-FY08, however both universities prioritized resources for instruction over institutional support during recent shortfalls.

Curbing instruction and general subsidies for enterprise functions, including athletics, should be a priority for both UNM and NMSU. Both universities subsidize the cost of their athletic programs, development and alumni offices using I&G funds. While not financially improper, these uses of I&G are not central to the teaching. NMSU spends over $4 million from I&G and research to subsidize its athletic program, which despite the subsidy had a negative fund balance of $9.5 million for FY09. NMSU anticipates reducing this amount to less than $8.5 million in FY11 and has submitted a plan to HED to eliminate the negative balance by FY18. The plan assumes continued transfers totaling over $4.1 million each year, increased spending of 9.5 percent and 22 percent increase in revenue.

UNM has historically subsidized its athletic program with I&G funding, including almost $1.4 million in FY09. To ensure full transparency of the cost of intercollegiate athletics the university should consider a budget and fund transfer to clearly account for I&G subsidy.

Academic programs vary widely in their costs, support services, and productivity necessitating regular in-depth evaluation to justify their continuance and to improve their cost-effectiveness. Academic programs are major cost drivers of institutional spending, across academic and nonacademic sectors. Both universities have expanded degree offerings, programs and coursework without rigorous review of their continued need. As the institutions grow their academic offerings their ability to effectively target resources diminishes. Existing budget and accountability models used by NMSU and UNM appear insufficient to control cost pressures and simultaneously improve academic excellence.

4 year graduation rate: Top NMSU Feeder High Schools

High School	Rate
Mayfield HS	9%
Las Cruces HS	12%
Alamogordo HS	9%
Carlsbad HS	6%
Onate HS	7%
Gadsden HS	5%
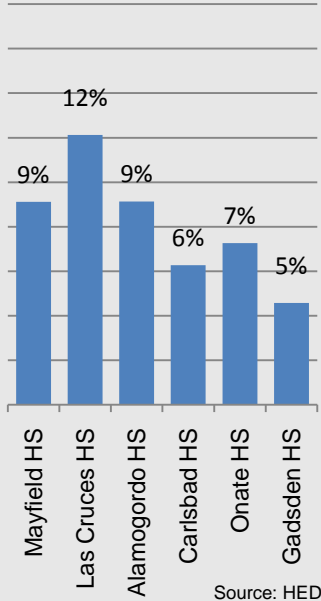
Source: HED

4 year graduation rate: Top UNM Feeder High Schools

High School	Rate
La Cueva HS	16%
Eldorado HS	16%
Rio Rancho	11%
Cibola HS	9%
Sandia HS	13%
Los Lunas HS	3%
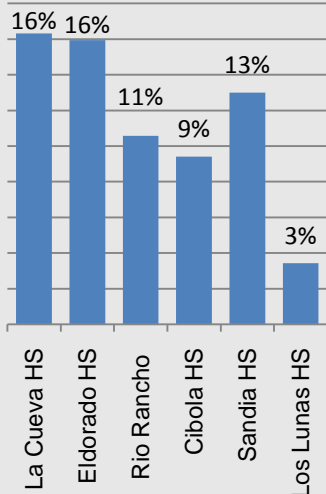
Source: HED

Faculty productivity must be monitored and contributions effectively communicated. Faculty at UNM earn less than their peer groups, but the gap has closed since 2002. At NMSU, the faculty salaries are lower than their peer group averages. Both universities could improve executive monitoring of faculty teaching loads, which would also aid informing the public and policymakers of faculty contributions, including research activities.

KEY RECOMMENDATIONS

Legislature

Consider funding formula changes to provide incentives for cost-effective services, greater completion rates, and on-time degree production (without dilution of quality); to exclude duplicative or unnecessary degree programs from funding; and to boost funding for identified centers of excellence.

Higher Education Department

Develop and implement a strategic master plan for higher education as required by state law. The plan should include specific and measurable outcomes and performance targets; include educational cost-sharing goals between the state, students and local taxpayers; identify physical and instructional capacity of the system and centers of excellence; and provide a framework for changes to the funding formula.

Establish a task force to evaluate options for improving the solvency of the Lottery Scholarship fund and report recommendations to the Legislature.

NMSU and UNM

Set a goal to double the 4-year graduation rate without dilution of quality and create action plans to achieve this starting with the class of 2013.

NMSU should consider and UNM should continue a gradual increase in admissions standards and requirements.

Collaboration between UNM, NMSU, and local feeder high schools should be greatly enhanced and institutionalized.

Realign budgeting practices to a system of "Incentives for Academic Excellence" based on principles similar to responsibility center management.

**Average Undergraduate
Debt at Graduation –
Selected Colleges**

College	NMSU	UNM
Engineering	$18,700	$22,293
Business	$19,868	$19,596
Education	$24,698	$21,679

Source: NMSU, UNM

Develop and implement a comprehensive re-prioritization process and academic and sunset reviews for academic and support programs.

Develop target subsidy levels for athletics, alumni association, and foundation programs and a plan to achieve the target level within five years.

Develop and report comprehensive executive dash board reports to monitor aggregate faculty teaching loads and productivity, make the information available on the university website and report to the Board of Regents semi-annually. This information will aid in determining capacity to absorb enrollment changes or increase resources.

Higher education is key component to economic growth and prosperity for New Mexicans; the State needs a greater percentage of its citizens with post-secondary education. The State of New Mexico invests significant resources in the public higher education sector because it directly affects the economic, cultural, and social well being of the state.

The Array of Higher Educational Benefits		
	Public	**Private**
Economic	Increased Tax Revenues Greater Productivity Increased Consumption Increased Workforce Flexibility Decreased Reliance on Government Financial Support	Higher Salaries and Benefits Employment Higher Savings Levels Improved Working Conditions Personal/Professional Mobility
Social	Reduced Crime Rates Increased Charitable Giving/Community Service Increased Quality of Civic Life Social Cohesion/Appreciation of Diversity Improved Ability to Adapt to and Use Technology	Improved Health/Life Expectancy Improved Quality of Life for Offspring Better Consumer Decision Making Increased Personal Status More Hobbies, Leisure Activities

Source: "Reaping the Benefits: Defining the Public and Private Value of Going to College," Institute for Higher Education Policy, 1998 as seen in The Investment Payoff: A 50-State Analysis of the Public and Private Benefits of Higher Education, February 2005.

Individuals who earn a post-secondary degree derive substantial financial and personal benefits. Similarly, states with highly educated residents enjoy healthy economies, a productive workforce, and increased revenues. Additionally, increases in the proportion of college graduates in the workforce produce higher wages for workers at all levels of education. Estimates suggest that a 1 percent increase in the proportion of the population with a four-year degree leads to a 1.9 percent increase in the wages of workers without a high school diploma. States with more college graduates "have stronger economies…lower unemployment and poverty rates, and higher ranking on measures of economic strength".

New Mexico lags behind the country in educational attainment. Nationally, 83 percent of people between 18 and 24 years old have earned a high school diploma. In New Mexico, this figure is 75 percent. Nationally, 29.5 percent of people between 25 and 34 years old have earned a bachelor's degree while in New Mexico 20 percent have.

Table 1: Educational Attainment in New Mexico: Rank amongst the states

Degree / Age Group	NM Rank
HS Diploma / 25-65	45th
HS Diploma / 18-24	51st
Associate / 25-65	40th
Associate / 25-34	47th
Bachelors / 25-65	39th
Bachelors / 25-34	50th
Graduate / 25-65	17th
Graduate / 25-34	30th

Source: NCHEMS

Educational Attainment and Personal Income

Source: NCHEMS
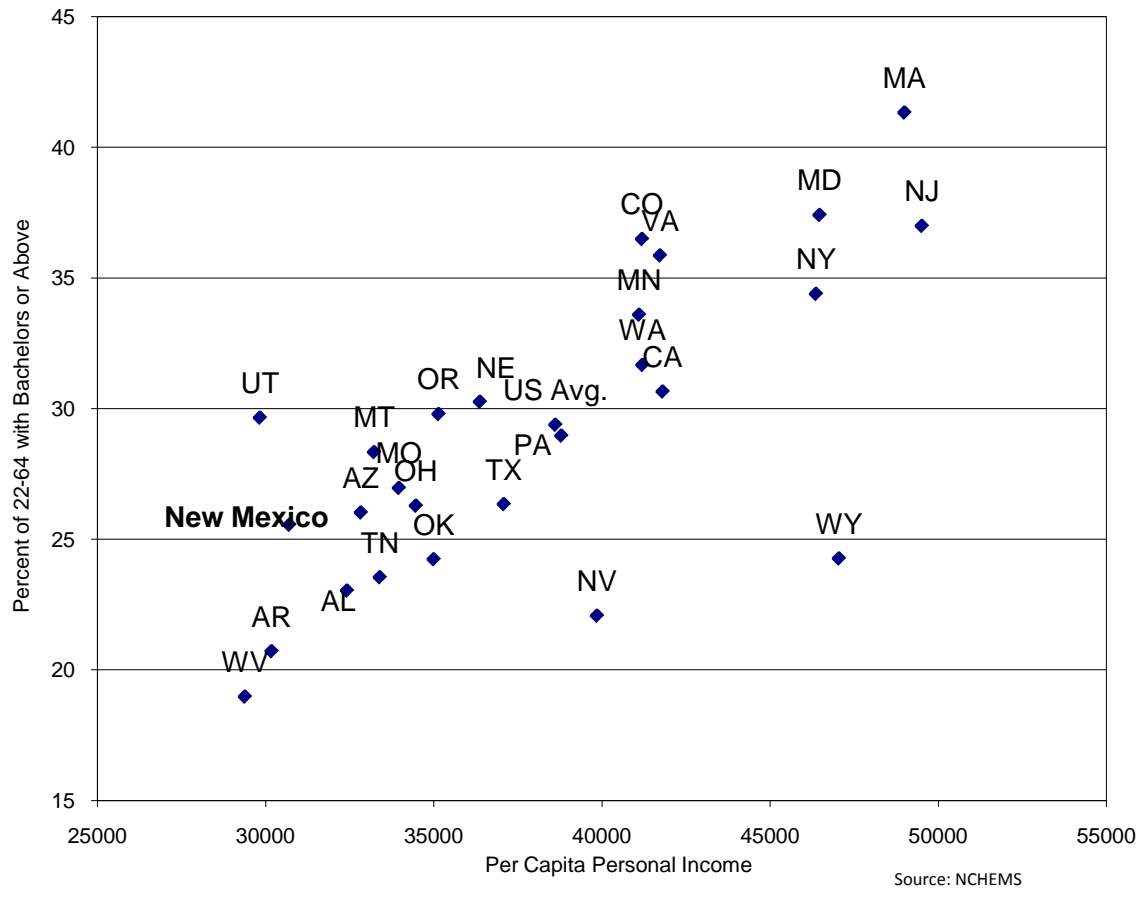
New Mexico State University Las Cruces, New Mexico	
Fast Facts	**Faculty**

Fast Facts

Founded: 1888
President: Dr. Barbara Couture
President, Board of Regents: Mr. Isaac Pino

Number of Colleges: 9; Board of Regents also governs the state Department of Agriculture, as well as the state cooperative extension service and agricultural experiment stations.

Number and Location of Branch Campuses: (4) at Alamogordo, Carlsbad, Dona Ana and Grants.

Faculty

Main Campus Faculty (Fall 2009)

- Tenured
- Tenure track
- Non-tenure track

20%
23%
57%

Total faculty, main campus: 694
Undergrad/ all faculty ratio: 19:1
Source: NMSU Fact book, 2009

Student Profile (Fall 2009)	**Undergraduate Student Performance**

Student Profile (Fall 2009)

Undergraduate	**Graduate**
Students*: 13,673 **Degrees offered:** 87 **Degrees Granted:** 2,304 White, non-Hispanic: 45% Hispanic: 46% Native American: 4% Other: 5% *Fall, 2009 enrollment for main campus; includes distance education enrollment Source: NMSU Fact book, 2009	**Students*:** 3,798 **Degrees offered:** 79 **Degrees Granted:** 921 White, non-Hispanic: 64% Hispanic: 29% Native American: 2% Other: 5% *Fall, 2009 enrollment for Las Cruces, main campus. Source: NMSU Fact book, 2009

Undergraduate Student Performance

Main Campus

- 4-year graduation rate#: 13%
- 6-year graduation rate*: 44%
- 1st-2nd year retention^: 76%

#1st time freshmen entering fall of 2002 that received a degree by fall of 2006.
*1st time, full time freshmen enrolled in the fall of 2003 that received a degree by fall of 2009
^1st time freshmen entering fall of 2008 who returned for fall 2009
Source: NMSU Fact book, 2009

Financial Profile	

NMSU - Total Current Funds Estimated Actual Revenue FY10 ($537.8 million)

- Auxiliary 6%
- Student Aid 9%
- Internal Service 1%
- Public Service 13%
- Research 24%
- Athletics 2%
- Ind Ops 3%
- Instruction & General 41%
- Student Dev. 1%

Source: NMSU Op-Bud Unrestricted & Restricted

NMSU - Total Current Funds Estimated Actual Expenditures FY10 ($541.8 million)

- Auxiliary 4%
- Student Aid 11%
- Internal Service 1%
- Public Service 14%
- Research 27%
- Athletics 3%
- Ind Ops 3%
- Instruction & General 36%
- Student Dev. 1%

Source: NMSU Report of Actuals. Unrestricted & Restricted

University of New Mexico
Main Campus, Albuquerque, New Mexico

Fast Facts	**Faculty**

Founded: 1889
President: Dr. David Schmidly
Pres, Board of Regents: Mr. Raymond G. Sanchez

Number of Colleges: 12; including the state's only schools of Law, Medicine, Pharmacy and Architecture.

Number and Location of Branch Campuses: (4) located at Gallup, Los Alamos, Taos and Valencia.

Main Campus Faculty (Fall, 09)

- Tenure Track — 50%
- Non-Tenure Track — 19%
- Temporary — 31%

Total Faculty: 1,556
Undergrad/ all faculty ratio: 13:1

Source: UNM Fact book, 2009
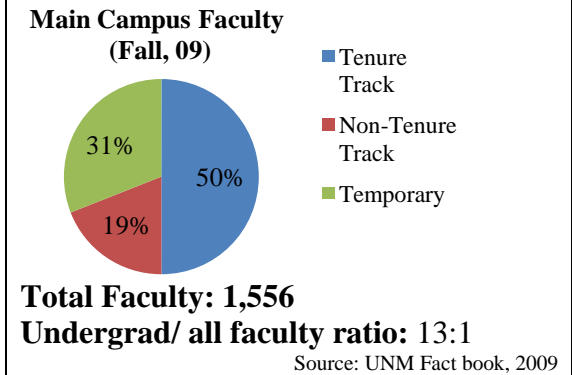
Student Profile (Fall 2009)	**Undergraduate Student Performance**

Undergraduate

Students: 19,610*
Degrees offered: 94
Degrees Granted^: 3,160
White, non-Hispanic: 43.3%
Hispanic: 37%
Native American: 6.7%
Other: 13%

*Includes Extended University enrollment, excludes HSC
Source: UNM Fact book, 2009

Graduate

Students: 5,248*
Degrees offered: 114
Degrees Granted^: 1,580^
White, non-Hispanic: 52%
Hispanic: 21%
Native American:5%
Other: 22%

*Excludes Medical, Pharm D, non-degree status
^Professional, Masters, Doctorate
Source: UNM Fact book, 2009

Main Campus

- 4-year graduation rate#: 13%
- 6-year graduation rate*: 43%
- 1st-2nd year retention^: 79%

#1st time freshmen entering fall of 2005 that received a degree by fall of 2009
*1st time, full time freshmen enrolled in the fall of 2003 that received a degree by fall of 2009
^1st time freshmen entering fall of 2008 who returned for fall 2009

Source: UNM Fact book, 2009

Financial Profile

UNM - Main Total Current Funds
Est. Actual Revenue FY10
($686.6 million)

- Instr & General 50%
- Student Dev. 1%
- Research 11%
- Public Service 8%
- Internal Service 1%
- Student Aid 14%
- Auxiliary 10%
- Athletics 5%

Source: UNM Op-Budget

UNM-MainCurrent Funds
Est. Actual Expenditures FY10
($655.1 million)

- Instr.& General 47%
- Student Dev. 1%
- Research 13%
- Public Service 8%
- Internal Service 1%
- Student Aid 17%
- Auxiliary 8%
- Athletics 5%

Source: UNM Op-Budget

Selection of Universities and Scope of Final Report.

An evaluation of institutions of higher education has been on the LFC program evaluation work plan since January 2009, and initial efforts to develop a project scope started in the fall of 2008. Higher education consumes about 15 percent of appropriations from the general fund and comprehensive assessments of system productivity or institutional practices had not been previously undertaken. The project initially chose NMSU and UNM main campus functions for examination due to their size, not only enrollment but budget, and unique structure as major research universities. The project did not include an operational or performance assessment of branch campuses, UNM-Health Sciences Center or the Department of Agriculture.

As with many LFC evaluations, an assessment of the broader policy environment and finance mechanisms was completed as part of the planning stage. As field work commenced it was apparent that state level policies and practices had a direct impact on the operations and performance of both universities and those issues have been appropriately included in this report.

Evaluation Objectives.

- Assess oversight of institutions and use of governance and management best practices.
- Review the use of funding and cost-effectiveness of resource allocation decisions, including human resources.
- Review outcomes and the extent to which policy, spending and/or personnel changes may have helped the University meet its goals, including for students, communities and the State.

Evaluation Activities.

- Reviewed and analyzed applicable statutes, rules, policies and procedures, financial and budget reports and other documentation establishing the higher education funding formula.
- Conducted interviews with NMSU and UNM administrators, deans, staff and faculty, HED staff, among others and site visits to both universities.
- Reviewed available reports and data produced by NMSU, UNM, HED, including the National Center for Education Statistics' Integrated Post-Secondary Education Data System (IPEDS) and institutional Common Data Sets.
- Reviewed available data and reports produced by other organizations, including, but not limited to, the United States Census, State Higher Education Executive Officers (SHEEO), National Center for Higher Education Management Systems (NCHEMS), Delta Project on Postsecondary Education Costs, Productivity, and Accountability, the National Center for Public Policy and Higher Education, and the National Science Foundation.
- HED performed data matches upon LFC staff requests for employment rates and graduation rates of New Mexico high school graduates by school. The employment rates included a data match of graduates from NMSU and UNM in 2007 and a match against any wages earned and reported in the Workforce Solutions Department Unemployment Insurance system for at least one quarter in the following 12 months of exit. Data was broken down by degree, discipline, and the type and place of high school attendance.

- Analyzed data produced upon request by NMSU and UNM, including student financial aid, high school preparation, use and success of participation with the Legislative Lottery Scholarship (LLS). NMSU performed a regression analysis, upon request, of factors contributing to LLS outcomes.
- Analyzed employment data submitted by major employers in the state, including national laboratories.
- Review available research and literature on higher education, including performance, operations, budgeting and financing.
- Reviewed reports and information other states' higher education systems and selected universities, including Arizona, Texas, Colorado, California, North Carolina, Minnesota among others.
- Contracted with CAaNES, to conduct limited scope information technology audits.

Authority for Evaluation.

LFC has the statutory authority under Section 2-5-3 NMSA 1978 to examine laws governing the finances and operations of departments, agencies and institutions of New Mexico and all of its political subdivisions, the effects of laws on the proper functioning of these governmental units and the policies and costs. LFC is also authorized to make recommendations for change to the Legislature. In furtherance of its statutory responsibility, the LFC may conduct inquiries into specific transactions affecting the operating policies and cost of governmental units and their compliance with state law.

Evaluation Team.
Charles Sallee, Program Evaluation Manager, Lead Evaluator
Craig Johnson, Program Evaluator
Jacob Candelaria, Program Evaluator
Michael Weinberg, Program Evaluator
Placido Gomez, Program Evaluator-Intern
Dr. Robert Kvavik, Consultant

During the course of this evaluation the LFC Deputy Director for Program Evaluation was interviewed and hired as the Director of Internal Audit at the University of New Mexico. This information was disclosed to LFC. After the hiring and disclosure, the LFC Director provided general supervision of the project.

Exit Conferences. The contents of this report were discussed with University and Higher Education Department officials as follows: UNM on July 26, 2010; HED on July 28, 2010; and NMSU on August 4, 2010.

Report Distribution. This report is intended for the information of the University of New Mexico, New Mexico State University, the Office of the Governor, the Higher Education Department, the Department of Finance and Administration, the Office of the State Auditor, and the Legislative Finance Committee. This restriction is not intended to limit distribution of this report, which is a matter of public record.

NEW MEXICO NEEDS IMPROVEMENTS IN THE COST-EFFECTIVENESS OF HIGHER EDUCATION.

The State of New Mexico is a national leader in committing its tax effort and spending towards higher education and dedicates about 15 percent of the State's general fund appropriations for this purpose.   Since FY04, the Legislature has increased general fund spending on higher education nearly $214 million or about 33 percent, from about $639 million to $853 million in FY10 (pre-solvency). Fiscal year 2011 appropriations from the general fund total $792 million, with another $10 million from federal stimulus funding. New Mexico taxpayers support seven four year institutions, 10 branch campuses, and eight community colleges. By comparison, Arizona's post-secondary enrollment is nearly five times that of New Mexico's and has fewer state supported institutions as shown in the appendix.

No other state dedicates more of its citizen's personal income to higher education than New Mexico. The State Higher Education Executive Officers (SHEEO) produces annual reports showing trends in state financing. They show the State of New Mexico's commitment to higher education is strong. In FY08, about $17.39 per $1,000 of personal income was dedicated to higher education in New Mexico, while the national average was about $7. New Mexico allocated almost 14 percent of state, local and lottery revenues to higher education in FY07 and ranked first nationally. New Mexico ranked second behind Wyoming, in annual higher education support per capita in FY08 – dedicated $581. The State has sustained its commitment to higher education; only four other states had a greater percentage increase in appropriations between FY98 and FY08 than New Mexico's 98 percent increase, according to Measuring Up 2008 report.

Despite New Mexico's limited wealth, state-supported appropriations resulted in the third highest in the nation per full-time equivalent (FTE) student in FY08, totaling $9,765 (SHEEO, 2009). In FY09 the combination of enrollment growth and budget cuts reduced that amount to $8,359 and the state ranked 9th.

Institutions rely heavily on state funding for their instructional spending and far less than other states on net tuition. New Mexico raised about $1,827 per student FTE in net tuition in FY09, the second lowest amount nationally. The national average was $4,100. As a result, the state ranked 38th in total education revenue per FTE student ($10,185) in FY09. New Mexico's low tuition appears driven by having more students enrolling in community colleges, which have some of the lowest tuition rates in the nation. About 60 percent of student enrollment is at community colleges in New Mexico and average community college tuition is second lowest nationally at $1,316 (Measuring Up, 2008). Only 52 percent of students are enrolled full time in either 2- or 4-year institutions, further driving down tuition revenue. Finally, average tuition at 4-year institutions was 7th lowest nationally in FY08 at $4,135.

Finance mechanisms generally encourage growth to meet undefined "access" goals, do not take into account performance or institutional capacity and do not reward excellence.   The existing funding formula does not take into consideration many of the policy goals outlined in statute. Additionally, the current approach to financing higher education in New Mexico appears to support sub-optimal use of resources necessary to meet state needs for more graduates and excellent research. These

practices do not appear sustainable under a "no or low" revenue growth situation at the state level and do not allow institutions to develop critical mass to invest in centers of excellence.

Enrollment growth is rewarded through additional funding for increases above three percent, but it is unclear how much more the state needs to grow. The State faces a potential workload funding increase across higher education of over $61 million, about $51 million of which is due to increased student credit hours.

Institutional capacity is insufficiently assessed to determine whether direct cost increases are necessary for growth. Currently, institutions must and do absorb any initial marginal or direct cost increases from growth due to a lag in the funding formula. Institutional use of existing resources, such as classroom utilization, to deliver services is not taken into account before awarding capital outlay appropriations or workload adjustments. Neither NMSU nor UNM has a system to fully monitor classroom space to maximize its use, though both are working towards implementing systems. HED has also taken steps to assess space needs for funding purposes.

Teaching or research productivity is not taken into account before awarding additional funding. Between 40 and 44 percent of undergraduate class sections have less than 20 students according to NMSU and UNM. At research institutions, low teaching loads for tenured faculty should be offset by higher productivity in research and scholarly work. Neither university has a comprehensive system for assessing faculty productivity and setting goals for performance. HED makes no assessment of productivity for any institutions.

Tuition and cost-sharing goals for students and the state are lacking. Without cost sharing policy goals, formula credits (tuition, Land and Permanent Fund, and local mil levy) may not adequately differentiate by mission of the institution; recognize substantial fees students pay; account for variance in the role of property tax wealth and funding; and may over or under subsidize some student's college costs.

In FY10 (pre-solvency), the state share of instructional formula funding for UNM was $293 million, or 64 percent, and $125 million, or 67 percent, at NMSU. Branch campuses as a group received a 71 percent share ($72 million) and independent community colleges 57 percent ($108 million).

Higher Education
Funding Formula Goals

HED <u>may</u> include formula factors to achieve the following.
• Improve quality of programs central to institutions' missions.
• Improve programs to meet targeted statewide needs. Eliminate unnecessary, unproductive or duplicate programs.
• Consider faculty salary increases supported by analysis based on peer institutions, workload and educational outcomes.
• Recognize costs from enrollment increases.
• Provide equipment, maintenance and library funding.
• Fund off-campus courses.
• Provide incentives for pursuing alternative funding sources.
• Encourage sharing of resources, including joint instructional programs.
• Facilitate student transfers.
• Encourage energy conservation.
• Promote greater accountability by tracking spending.
• Make computer-base distance education accessible.

Source:
Section 21-2-5.1 (B) NMSA 1978

An estimated nine percent of research universities' lower division costs receive state subsidy, whereas branch campuses receive over 57 percent. Subsidies vary widely among institutions for the same lower division courses, from four percent at UNM and 14 percent at NMSU to about 76 percent at Mesalands Community College and 79 percent at Northern New Mexico University. Community colleges,

including Santa Fe and New Mexico Junior College, receive little state subsidy for these courses due to high property tax values.

Not all tuition and mill levy revenue is included in the credit calculations. For example, UNM's higher tuition for certain professional and graduate schools is not taken into account when calculating the credit. Some mill levy revenue is purposefully excluded.

The State waives an estimated $60 million in out-of-state tuition, but has not targeted those waivers to ensure institutions attract higher quality students that are likely to stay in state. NMSU accounts for an estimated $23 million and UNM $20.7 million. Tuition waivers are provided for Texas residents living within 135 miles of New Mexico, athletes, and tuition reciprocity with other states among others. In some cases tuition waiver policy puts New Mexico residents at a disadvantage. Out-of-state students can have their higher tuition waived if they work as a graduate teaching or research assistant, but in-state students performing the same job receive no additional subsidy. Waivers are not targeted to high need degree fields either.

Course "taking" is funded, but not course completion, resulting in the state potentially paying millions for dropped courses. Over a three-year period NMSU and UNM generated about $58.4 million in formula funding for SCH never completed by students. This difference in formula funding accounted for between five to seven percent and totaled an estimated $7.1 million at NMSU for SCH generated in FY09 and almost $12.4 million at UNM alone. Assuming similar completion tends statewide, the total instructional workload funds would be about $43.6 million less. The LFC and HED may want to have institutions report actual completion rates and funding value to obtain better estimates.

The State does not incentivize degree production, nor monitor quality outcomes of existing programming and degrees they produce. A performance fund did receive appropriations, but the amounts institutions could earn appeared too low compared to other funding adjustments.   In addition, about $2.5 million in unspent performance funding was swept as part of solvency actions taken by the Legislature.

Efficiency measures are not considered, including on-time degree completion and reducing excessive student credit hours (SCH). UNM and NMSU graduates earn on average about 150 SCH, or 15 percent in excess of what is required for graduation. Both Texas and Arizona have moved to incentivize efficient time-to-degree completion rates by restricting state funding for excess SCH.

The State has hundreds of line item appropriations for research and public service projects without a comprehensive plan for their need, use or expected outcomes. These may or may not fit into the universities' research agenda and in some cases these small pools of funding are insufficient to achieve the scale necessary to implement high quality research. The limiting nature of specific appropriations also makes finding unrestricted matching funds available for major federal grants difficult.

In some cases research and public funding goes unused as a result. During this evaluation, UNM-Main identified over $570 thousand in special appropriations that may need to revert to the general fund. This amount may be reduced depending on the results of UNM working with the Department of Finance and Administration (DFA) to finalize the amount. NMSU identified and reverted about $157 thousand

during this evaluation. Other unspent special appropriations may exist at UNM – Health Science Center and other institutions statewide.

UNM has made progress trying to prioritize these projects and ensure a system of accountability is in place. UNM increased oversight of research and public service projects sine the LFC report on the topic in 2008. UNM has an evaluation process to monitor outcomes and has engaged in a comprehensive process to prioritize the projects and ensure alignment with UNM strategic goals.

State institutions of higher education retain significant control over their individual operations. In New Mexico, state colleges and universities enjoy considerable autonomy under law over the management of their institutional finances, personnel and academic programs. Some of this autonomy is established by the New Mexico Constitution, which requires the legislature to "provide for the control and management of [state institutions of higher education] by a board of regents" (Article XII § 13). Under the governance framework envisioned by the Constitution and state statutes, individual boards of regents enjoy full power over institutional operations.

Relative to other states, New Mexico maintains a decentralized governance structure over its institutions of higher education. States use a variety of models for governing higher education including individual university, multi-campus university, and university system. State government may play various roles in any one of these governance scenarios either as a facilitator, coordinator, or overseer. While there is no clear trend in how states choose to design their systems of governance, decentralization like other models (e.g. university systems/super-board of regents) has benefits and drawbacks. For example, independence of universities makes collaboration more important in order to avoid costly duplication and inefficient use of public funds. Conversely, however, institutional independence also creates challenges to ensure institutions respond to state needs and coordinate to avoid inefficient use of resources.

Better planning, realignment of incentives and more attention to improving outcomes in a collaborative and cost-effective manner is needed to tackle New Mexico's most pressing educational and economic challenges. Historically, higher education has changed in response to State needs. Normal schools are now comprehensive universities; community colleges, whether a branch campus of a 4-year institution or independent, serve every corner of the state; colleges and universities have been named and renamed; financing mechanisms have been changed, updated, modified and overhauled; campuses, degrees and programs have grown and changed to meet the needs of multiple generations and new economic realities.

> *Post-Secondary Educational Planning Act*
>
> Planning activities shall include:
> • Assess current and future needs of higher education.
> • Assess facilities and use.
> • Analyze effectiveness and productivity of programs.
> • Identify marginal, unnecessary programs or excessive duplication.
> • Analyze the most effective means to maximize use of existing resources to meet future needs.
> • Identify need to eliminate, contract or expand institutions and programs.
> • Identify coordination steps.
> • Develop fiscal provisions to effectively use resources.
> • Recommend operational adjustments institutions.
> • Recommend actions to implement a coordinated system to the Legislature, including standards for developing appropriation levels.
> *Source: Section 21-2-5 NMSA 1978*

The Higher Education Department (HED) has not fulfilled its primary planning duty, though a strategic plan is slated for release in November 2010. The State has already recognized the need to have a well planned and coordinated higher education system and assigned those tasks to HED. Statutory requirements for the creation of a higher education master plan were enacted with Laws of 1973, Chapter 233, Section 5. The textbox, *Post-Secondary Educational Act*, lists HED's strategic planning duties.

The strategic plan serves as the basis to inform policy and funding decisions. According to state statute, HED "shall develop a funding formula that will provide funding for each institution of higher education to accomplish its mission as determined by a statewide plan" (Section 21-2-5.1(A) NMSA 1978). HED may include factors in the funding formula to achieve certain stated policy goals, as described in the textbox, *Higher Education Funding Formula Goals*. For example, faculty compensation increases should be supported by not only comparing to peer institutions, but also by a "detailed analysis of faculty workloads and educational outcomes" (Section 21-2-5.1 (B)(4) NMSA 1978).

New Mexico's student pipeline is generally strong in terms of access, but weak in outcomes. New Mexico needs greater degree production, particularly given the level of state investment. Of 100 9th graders, about 12 will eventually complete a post-secondary education program ten years later. The best performing states produce almost 30 students per 100 ninth graders and the national average is almost 20.

Of 100 9th Graders, How Many...

Source: NCHEMS

Legend: Best Performing State | United States | New Mexico

Category	Best Performing State	United States	New Mexico
Graduate from High School	86.3	68.6	60.3
Directly Enter College	60.1	42.3	43.5
Enroll in Second Year	41.8	28.4	25.6
Graduate within 150% of Program Time	29.7	19.7	12.7
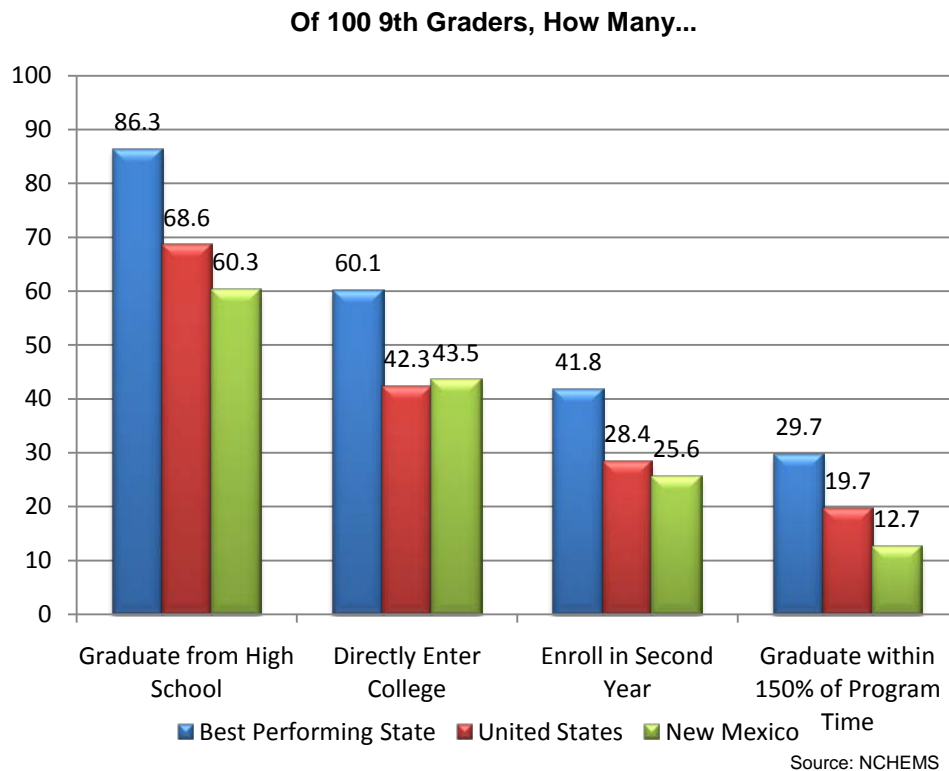
Institutions in New Mexico appear to have relatively low graduation rates. Four-year graduation rates at universities range from five percent to 15 percent across the state. Six-year graduation rates range from 18 to 48 percent. Two year institutions (community colleges and branch campuses) also have graduation rates, ranging from two to 28 percent. Degree completion represents a returned value to the state. The value is the same, regardless of the amount of time it takes to complete the degree. However, the cost to the state and the student do vary depending on the length of time to earn the degree and represent real cost differences. As such, the State should be primarily concerned with on-time degree completion of two or four years depending on the type of institution.

Table 2: University Graduation Rates, 2008

	4-Year Graduation Rate (%)	6-Year Graduation Rate (%)
Eastern New Mexico University-Main Campus	10	28
New Mexico Highlands University	9	21
New Mexico Institute of Mining and Technology	15	48
New Mexico State University-Main Campus	13	43
University of New Mexico-Main Campus	11	44
Western New Mexico University	5	18
New Mexico Average	**10.5**	**33.7**

Source: IPEDS

Table 3: Community College and Branch Campus Graduation Rates, 2007

	3-Year Graduation rate (150% of time)
Central New Mexico Community College	8
Clovis Community College	10
Dine College	7
Eastern New Mexico University-Roswell Campus	17
Eastern New Mexico University-Ruidoso	2
Luna Community College	19
Mesalands Community College	17
New Mexico Junior College	24
New Mexico Military Institute	25
New Mexico State University-Alamogordo	13
New Mexico State University-Carlsbad	6
New Mexico State University-Dona Ana	6
New Mexico State University-Grants	25
Northern New Mexico College*	28
Santa Fe Community College	8
University of New Mexico-Gallup Campus	7
University of New Mexico-Los Alamos Campus	5
University of New Mexico-Taos Branch	6
University of New Mexico-Valencia County Branch	5

Source: IPEDS

Resources (total funding per FTE)
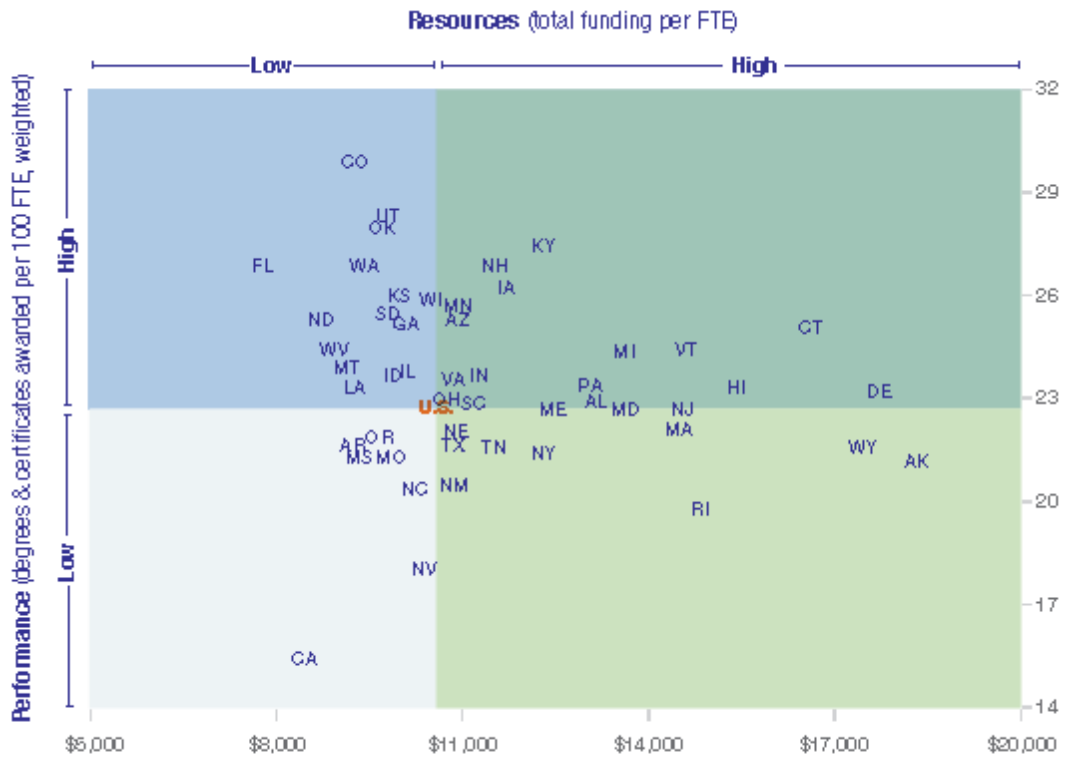
Source: SHEEO State Higher Education Finance Survey 2008; NCES IPEDS Completions Survey.

As seen in the Delta Cost Project, "The Dreaded 'P' Word: An Examination of Productivity in Public Post-Secondary Education", July 2009.

According to the Delta Cost Project, New Mexico ranked 45th nationally by producing 21 degrees/certificates per 100 students, based on FY07 data. This ratio is useful for assessing the overall degree production relative to enrollment of FTE students. The measure also captures all students, including transfer students, in a way that traditional graduation rates do not. New Mexico's total education funding (state appropriations, tuition and other) show the State is close to the national average but has below average performance.

Producing more college graduates is critical. Jobs that require at least some postsecondary education will make up more than two-thirds of new jobs.[1] A more educated workforce yields benefits of enhanced productivity, improved ongoing capacity, reduced social costs and greater research and economic development potential. Lifetime earnings increase substantially with degree completion. In New Mexico, individuals with a bachelor's degree earn about 2.3 times more than those who do not have a high school diploma. The median earnings of a high school dropout in New Mexico are $18,709; the median income in New Mexico of those with a bachelor's degree is $43,868. While there is a modest increase in median earnings of about $4,300 associated with some college attendance over a high school diploma, there is a substantial increase of over $16,800 in earnings associated with completing a bachelor's degree.

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[1] Carnevale, Anthony P. and Donna M. Desrochers, *Standards for What? The Economic Roots of K–16 Reform,* Educational Testing Service, 2003.

Median Income by Educational Attainment: Age 25 and older

Source: U.S. Census Bureau, American Community Survey.

■ Nation ■ New Mexico
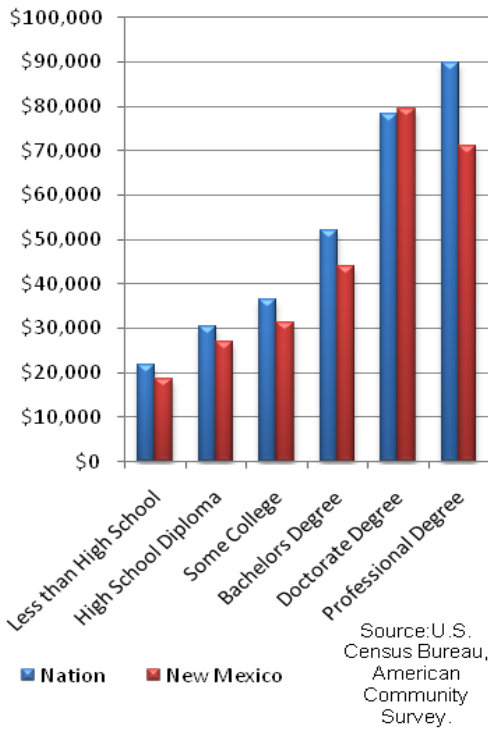
The difference between some college attendance and earning a bachelor's degree translates to well over a half million dollars over a lifetime. The earnings gap is likely to increase as the knowledge-based economy requires greater skill sets. Increasing the number of college graduates bolsters the state's economy as people who are more educated are less likely to be in poverty.

Highly educated native New Mexicans tend to leave the state. People with higher degrees are four times more likely to leave New Mexico than other people born here.

New Mexico is a net exporter of freshmen college students and the number and percentage of New Mexico's students going out of state is increasing. New Mexico routinely is a net exporter of college-going freshmen and net importer of college educated workers, particularly younger workers. In 2006, New Mexico imported over 2,400 college freshmen and exported 3,920 for a net out-migration of college freshmen of about 1,500 students. Arizona, Utah, and Colorado are net importers of college freshmen. By way of comparison, North Dakota imported 3,342 college freshmen and exported 1,991.

Total Median Taxes paid by Educational Level, 2005

■ Median Tax Payments

Source: CollegeBoard
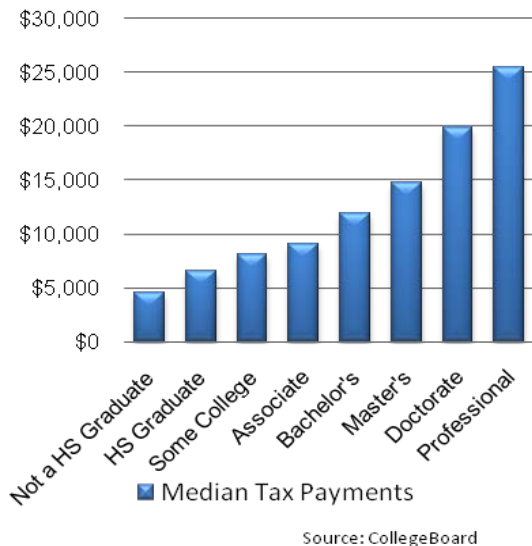
Table 4: New Mexico: Import/Export of First-Time Freshmen

	In-Migration	Out-Migration
1994	1,805	2,239
2006	2,422	3,920
Change	34%	75%

Source: NCHEMS

Even though New Mexico has one of the highest rates of high school graduates attending college directly after high school, due to the low high school graduation rates and low persistence rates, New Mexico is below average in the percentage of 18 to 20 year olds in college. In 2007, New Mexico (30.4%) was below the national average (33.9%) in terms of the percentage of 18 to 24 year olds in college.

NM Net Migration by Age and Education (2005-2007)

Source: NCHEMS
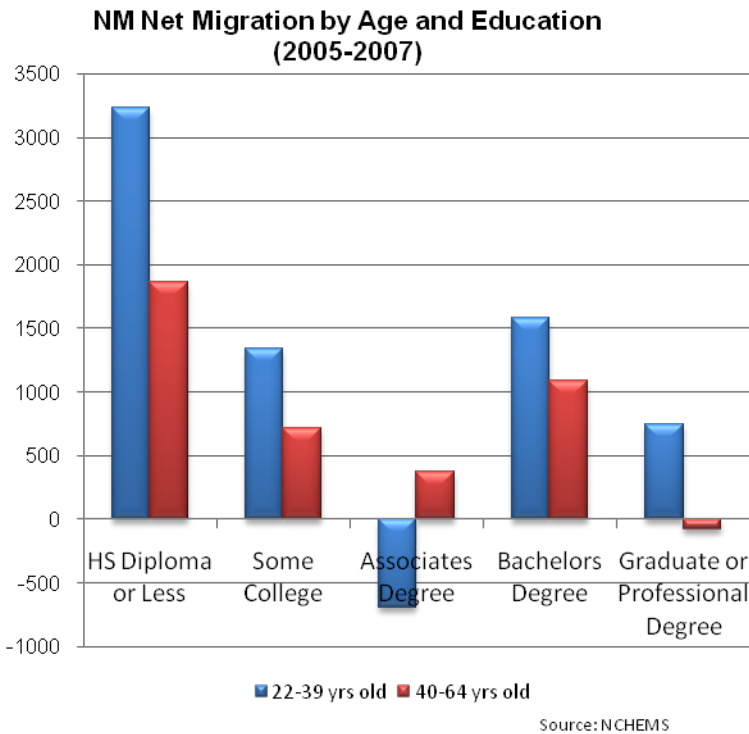
New Mexico imports people with a college education to meet workforce demands. From 2005 to 2007, New Mexico experienced a net in-migration of over 5,000 individuals with less than a high school diploma and a net in-migration of advanced degrees of 670. New Mexico brings in more people with advanced degrees than the advanced degreed residents the state loses, suggesting there are jobs for well educated, native-born New Mexicans. The advanced degree in-migration combined with the fact that native born New Mexicans with advanced degrees tend to leave the state indicates the state is fulfilling the demand for highly skilled professionals with out-of-state imports.

Projected Change in HS Graduates (2006-2019)

Source: NCES
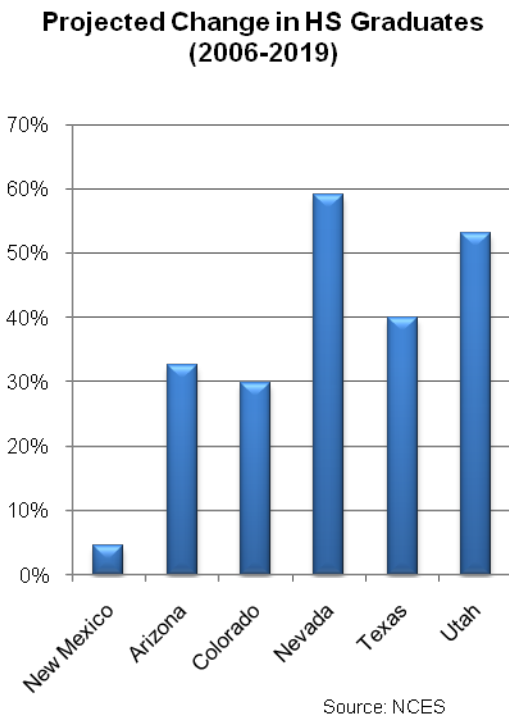
While New Mexico's production of high school graduates is relatively flat, New Mexico's neighbors are projected to produce substantial increases in high school graduates. From 2001 to 2006, New Mexico's number of high school graduates decreased by 2.1 percent. From 2006 to 2019, New Mexico's number of high school graduates is projected to grow only by 4.6 percent. The surrounding states are projected to see growth in high school graduates in excess of 30 percent presenting an opportunity to recruit capable students from these areas.

From 1998 to 2002, about 10.5 percent of first time freshmen at UNM came from another state. In 2007, about 23 percent of graduates came from out of state and nearly 20 percent of the graduates that were working in New Mexico came from out of state.

New Mexico has the worst generational achievement gap in the nation – a smaller percentage of young adults in the state have as much college education as their parent's generation. In New Mexico, the percentage of 25 to 34 year olds with college degrees (associate and higher) is 6.8 percent lower than the percentage of 45 to 64 year olds with college degrees, based on 2005 Census data. This demographic education achievement gap does not yet exist for the country as a whole. The percentage of 25 to 34 year olds with college degrees (associate and higher) is 0.9 percent higher than the percentage of 45 to 64 year olds with college degrees. The number of residents with college degrees can be increased by improving degree production and keeping educated New Mexicans in the state. Low levels of degree production and New Mexico's migration patterns may contribute to this gap.

Percent of Graduates Employed in New Mexico

Source: HED/DWS

The State has not established clear expectations and desired outcomes for institutions' research activities. NMSU and UNM can serve as regional research and economic development engines, but could do a better job of demonstrating the value of their research activities. Institutions of higher education in New Mexico have to demonstrate to the public and taxpayers that public investment benefits the State and that these entities are good stewards of public resources. However, just as important, they must demonstrate results.

New Mexico consistently ranks as a top producer of research and development (R&D) spending nationally. National labs generate the most R&D activity in New Mexico with higher education and industry also important producers of R&D. In 2008, New Mexico ranked fourth in the nation in terms of academic R&D spending per state Gross Domestic Product (GDP). State GDP in 2008 was nearly $80 billion. New Mexico higher education institutions spent $417 million on academic R&D that year, ranking New Mexico fourth in the nation in terms of academic R&D spending relative to state GDP.
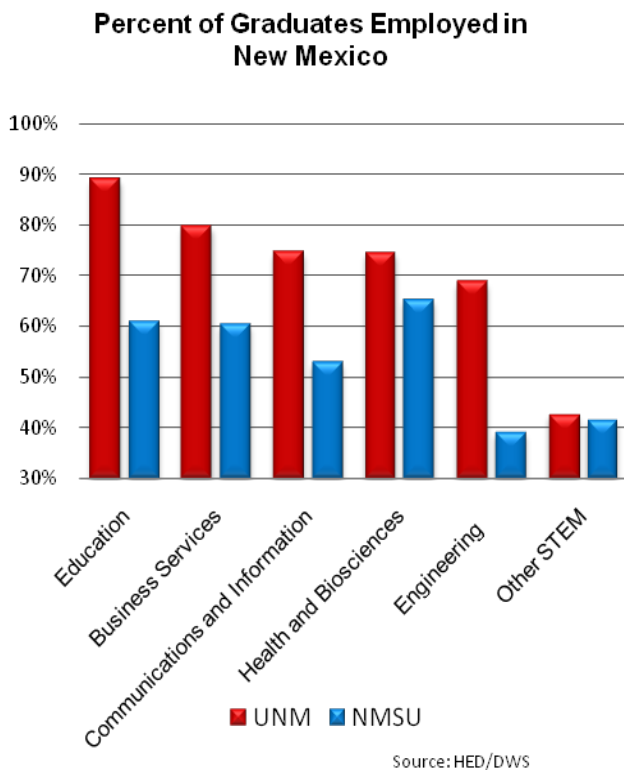
The State supports research activities through higher funding levels for graduate and research intensive degree fields and special appropriations, among others. The funding formula funds Tier 3 graduate level courses at more than 10 times the level of Tier 1 lower division courses.

Table 5: Funding Tiers

	Lower	Upper	Graduate
Tier 1	$133.34	$293.44	$635.09
Tier 2	$199.20	$459.40	$873.81
Tier 3	$321.16	$527.84	$1,396.77

Source: HED v`

The research universities must demonstrate results of research activities, particularly for high cost fields, and contributions toward improved employment and economic development. Research activities at NMSU and UNM help New Mexico fulfill three essential needs – innovation and new knowledge, advanced training, and job creation. Participation in research activities by students has other potential benefits, including entering higher-wage degree fields, higher overall academic performance, and remaining in-state to contribute to New Mexico's economy. Better coordination and targeted strategic investments would help position UNM and NMSU to foster centers of research excellence. The availability of high-quality research units increases New Mexico's competitive position to attract high quality students and increase economic activity.

The State, UNM, and NMSU do not regularly assess employment rates of graduates. Degree fields that typically yield higher paying jobs have lower in-state employment rates. As shown in the appendix, National labs employ many graduates from New Mexico institutions; however they tend to employ more of the lower degree levels.

Recommendations

Higher Education Department
- Develop and implement a strategic master plan for higher education as required by state law and use the plan to develop policy goals for educational excellence and improving cost-effective degree production; research excellence; workforce and community; and productivity. The plan should include specific and measurable outcomes and performance targets; include educational cost-sharing goals between the state, students and local taxpayers; identify physical and instructional capacity of the system and centers of excellence; and provide a framework for a new funding formula.
- Use the master plan to consider changes in the funding formula. The changes should provide incentives for cost-effective services; greater completion rates and on-time degree production; exclude duplicative or unnecessary degree programs from funding; and boost funding for identified centers of excellence.
- Identify the difference in funded SCH versus completed SCH statewide and report the results to LFC no later than November 1, 2010.
- Work with the Department of Finance and Administration and institutions of higher education to identify other unspent special appropriations that should revert to the general fund. UNM should revert its unspent funds.

Legislature
- In a cost neutral manner, modify tuition waivers currently benefitting UNM and NMSU to target broader out-of-state markets, increase the quality of the student body, and to provide tuition discounts for New Mexico students pursuing graduate education in selected fields. Waivers should be capped.
- Consider funding formula changes to provide incentives for cost-effective services; greater completion rates and on-time high quality degree production; exclude duplicative or unnecessary degree programs from funding; and boost funding for identified centers of excellence.
- The Legislature should consider adding employment rates of graduates as explanatory measures in the General Appropriation Act, as is currently required of two-year institutions.

NMSU and UNM

- NMSU and UNM should formalize research goals with specific and measurable targets to help inform strategic investments.
- Work with HED to regularly track the employment rates of graduates working in New Mexico.
- Recruit a larger non-resident cohort into the freshmen class. While the growth rate of New Mexico high school graduates is low, the growth rate of the neighboring states of California, Nevada, Utah, Arizona, Colorado, and Texas is very high. Non-resident students also create a demand for residential housing and bring out-of-state dollars into the local economy.

MANY STUDENTS TAKE TOO LONG TO GRADUATE OR DO NOT GRADUATE AT ALL INCREASING THE COST OF HIGHER EDUCATION FOR STUDENTS AND TAXPAYERS

National studies indicate that higher levels of academic preparation, as evidenced by high school curriculum, GPA, class rank, and ACT scores, increase the likelihood of degree completion. Better preparation in New Mexico's public schools will ultimately increase graduation rates at UNM and NMSU. High school GPA, class rank and ACT scores are indicators of academic preparation and can be used as predictors of success in college. These common metrics are used by most institutions to make admissions decisions. Cliff Adelman in *The Toolbox Revisited* found, "The academic intensity of the student's high school curriculum still counts more than anything else in pre-collegiate history in providing momentum toward completing a bachelor's degree." About half of New Mexico's high school graduates need to take remedial courses when they attend college. New Mexico high school graduation requirements have increased to require more math, advanced placement, dual credit, or distance learning classes.

Factors Influencing Graduation Rates		
	Individual Characteristics	**Institutional Practices**
High School	High School Curriculum	Course Rigor
	High School GPA	Teacher Quality
	High School Class Rank	Advising
	Entrance Exam Scores	Dual Credit / AP offerings
	Family Background	Curriculum
	Educational Expectations	Access to technology
	Math/Composition in Senior Year	Feedback loop (HS and College)
College	Course Load	Admissions Selectivity
	Continuous Enrollment	Faculty/Student interaction
	Immediate Entry	Course Scheduling/Availability
	Need for Remediation	Advising
	Course withdrawal/retake	First Year Experience
	Outside work	Academic Intervention / Tutoring
	Parenthood	Honors Program / Internships
	Summer credits	Class Size
	Work Study	Cost of Attendance / Financial Aid
	Time management	Add/Drop/Transfer policies
	Extra-Curricular activities	Quality facilities / On campus housing

UNM and NMSU offer relatively open-access to an increasing number of students with enrollment driven primarily from local high schools. Together, the universities regularly accept about three fourths of first-time freshman applicants and transfer students. Collectively, about 75 percent of the first-time freshmen applicants to NMSU and UNM are accepted. Over the last four years, NMSU's acceptance rate has averaged about 88 percent while UNM's acceptance rate has been about 68 percent. Over the four-year period, NMSU's acceptance rate increased while UNM's has decreased. About half of those admitted to UNM and NMSU actually enroll; NMSU's yield rate is about 45 percent and UNM's is about 53 percent. Together, the universities accepted about 73 percent of transfers.

Freshman enrollment has increased 13 percent at UNM and 45 percent at NMSU since 2006; student transfers have increased as well. For fall 2006, UNM enrolled 2,957 first-time full-time freshmen. For fall 2009, UNM enrolled 3,409 first-time freshmen, an increase of 13 percent over 2006. For fall 2006, NMSU enrolled 1,913 first-time freshmen. For fall 2009, NMSU enrolled 2,773 first-time freshmen, an increase of 45 percent over 2006. Common Data Sets also demonstrate that freshmen enrollment is growing at a faster rate than total enrollment at both institutions.

Over 75 percent of incoming freshmen students are from New Mexico's public schools and graduates from four local high schools make up about 25 percent of the incoming freshman class. Of the 3,409 freshmen UNM enrolled in 2009, 1,462 or about 43 percent came from the top ten feeder high schools, all of which are in the Albuquerque metro area. UNM's Enrollment report for fall 2009 showed 815 freshmen or about 24 percent of the freshmen class came from four local high schools, Rio Rancho High School, Eldorado High School, La Cueva High School, and Cibola High School.

At NMSU, approximately 25 percent of the students in the incoming freshmen cohorts for the last three years are from four local high schools, Las Cruces High School, Mayfield High School, Onate High School, and Gadsden High School. About 43 percent of NMSU's incoming freshmen come from the top ten feeder high schools.

The quality of incoming freshman classes appear static or declining over time, with both universities accepting a larger number of marginally prepared traditional students. The percentage of marginally prepared students in incoming freshmen classes has been gradually increasing.

As freshmen class size continues to increase, the institutions are accepting more and more students with a diminished chance to graduate on time. Assuming an incoming class size of 3,000 students, admitting an additional 3 percent of students who are inadequately prepared for the rigor of college means the institution must allocate resources to serve an additional 90 students with reduced chances for success.

Nearly 25 percent of the students in each university's incoming freshman classes were in the bottom half of their high school class and over 25 percent had less than a 3.0 grade point average. Trends for high school class rank and high school GPA of incoming freshmen are not improving. From 2006 to 2009, at NMSU and UNM the percent of entering freshmen in the bottom half of their graduating class increased by one percent.

Percentage of UNM Freshmen w/ less than 3.0 HS GPA
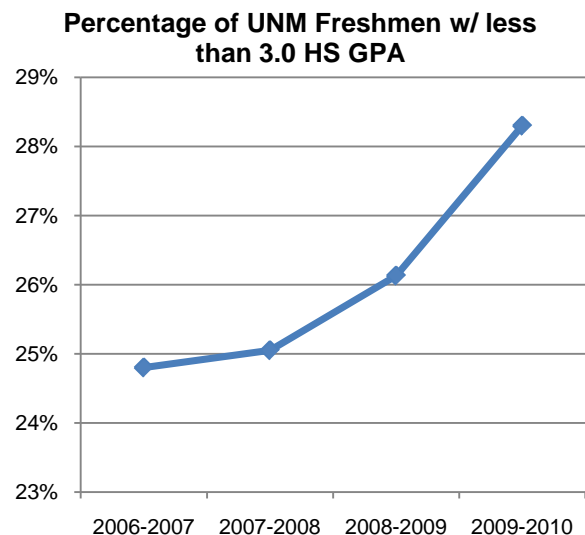
Source: CDS

The percent of freshmen at UNM with a high school GPA of 3.0 or less has increased from 24.8 percent in 2006-2007 to 28.3 percent in 2009-2010. The 2006 UNM graduation task force report identified GPA as the key predictor of success: "At UNM, data from the past decade indicates that high school GPA is the single factor that correlates most strongly with student persistence and success."

ACT 25th percentile 2008
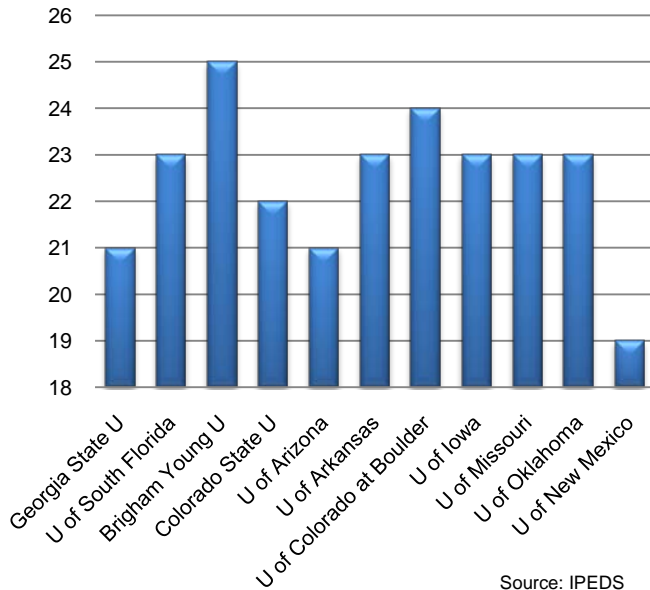
Source: IPEDS

The percentage of NMSU's freshmen in the top half of their graduating class declined from 82 percent in 2001-2002 to 75 percent in 2009-2010. The percentage of freshmen who earned a high school grade point average (GPA) of less than 3.0 increased from 23 percent in 2001-2002 to 27 percent in 2009-2010.

College entrance exams are useful predictors of success and are standardized across states, schools, and years. The percentage of freshmen with an ACT score of 24 or more has been about 33 percent at UNM and about 25 percent at NMSU. Average ACT scores at UNM have been stable. The average ACT at UNM in 1999 was 21.9; the average ACT in 2008 was also 21.9 with little variability from 1999 to 2008. ACT scores for entering freshmen at NMSU have also been stable. In 2001-2002, the ACT scores for the 25th percentile and the 75th percentile were 18 and 23 respectively and were unchanged in 2009-2010.

Peer institutions with similar status and research missions admit a lower percentage of underprepared students. The 2008-2009 Common Data Sets show the percentage of freshmen at UNM with a high school GPA of 3.0 or less was about 26 percent, whereas for peer institutions the percentage of students with a high school GPA of less than 3.0 is 9.8 percent. For the 2002 cohort at UNM, the

Percentage of NMSU freshmen in bottom half of HS class

Source: CDS
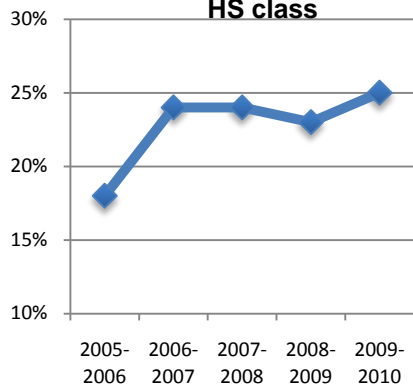
percentage of enrolled students that were in the top half of their high school graduating class was 76 percent at UNM and 90 percent at peer institutions.

CHE peer institutions with higher average ACT scores tend to have higher retention and graduation rates. UNM's students score lower on college entrance exams than peer institutions. In 2008, the 25 percentile ACT score of first time students for UNM was 19, the lowest among the peer group, while the peer group average was 22.9. Of the 2002 cohort at UNM, 33.3 percent of students had ACT scores of 24 of more, whereas 69.4 percent of the same cohort at peer institutions scored 24 or higher on the ACT.

NMSU's students generally score lower on college entrance exams than CHE peer institutions. Of the 2002 cohort at NMSU, 27 percent of students had ACT scores of 24 of more, whereas over 47 percent of the same cohort at peer institutions scored 24

or higher on the ACT. Average ACT scores of freshmen classes are related to future retention and graduation rates.

Table 6: ACT Scores, Class rank, and Graduation rates

University	% ACT of 24 or more	% of freshmen in top half of class	4 yr graduation rate
University of Arizona	50.2%	88.0%	33.0%
University of Arkansas	66.7%	88.6%	33.1%
University of Colorado	76.0%	93.0%	41.2%
University of Iowa	68.5%	93.0%	40.5%
University of Missouri	67.9%	85.0%	41.4%
University of South Carolina	78.0%	91.0%	44.5%
University of New Mexico	33.4%	76.0%	11.4%

Source: 2008-2009 Common Data Sets

Remedial coursework extends the time to degree completion, increasing costs to the state and the student. In 2008, over 50 percent of New Mexico's high school graduates who went to college in New Mexico required remedial coursework. At UNM, about 35 percent of entering freshmen were required to take at least one remedial course. Remedial coursework does not count towards degree completion.

Students who need remedial classes are less likely to graduate. Few underprepared students graduate within six years. The more remedial classes a student takes, the less likely that student will graduate. UNM's graduation study showed that about 30 percent of students needing one remedial class graduated in six years, 25 percent of students needing two remedial classes graduated in six years, and about 10 percent of students needing three or more remedial classes graduated in six years. UNM's graduation task force concluded that "Students who've entered with such deficiencies have been increasingly less likely to graduate than their peers, depending on the extent of the remediation required."

NMSU Feeder Schools

Las Cruces High School, Mayfield High School, Onate High School, Gadsden High School

- High School Graduation Rate (2008)
- Remedial Coursework Rate (2009)
- 4 year Graduation Rate at NMSU
- 6 Year Graduation Rate at NMSU

Source: PED, OEA, HED
Avg 4/6 yr grad rates include 2003,2004, and 2005 cohorts
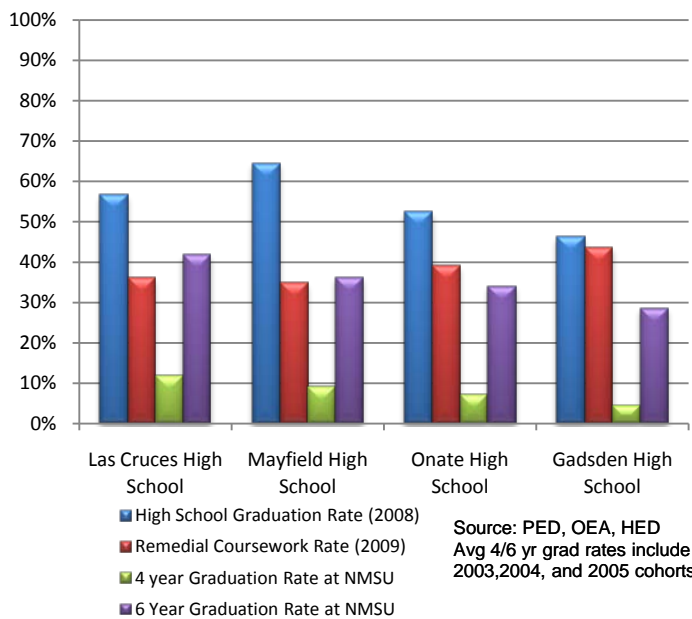
The success of students from the key feeder high schools varies. For example, Del Norte High School has a high school graduation rate of about 58 percent and over 18 percent of Del Norte students graduated from UNM in four years. Cibola High School has a high school graduation rate of over 72 percent however only 9.4 percent of its students graduated from UNM in four years. Artesia High School has a high school graduation rate of over 85 percent but less than 7 percent of its

students graduated from NMSU in four years. Conversely, Las Cruces High School had a high school graduation rate of about 56 percent and 12 percent of its students graduated from NMSU in four years. Almost all graduates from Gadsden High School required remedial coursework and less than five percent graduate in four years.

UNM Feeder Schools

Source: PED, OEA, HED
Avg 4/6 yr grad rates include 2003,2004, and 2005 cohorts
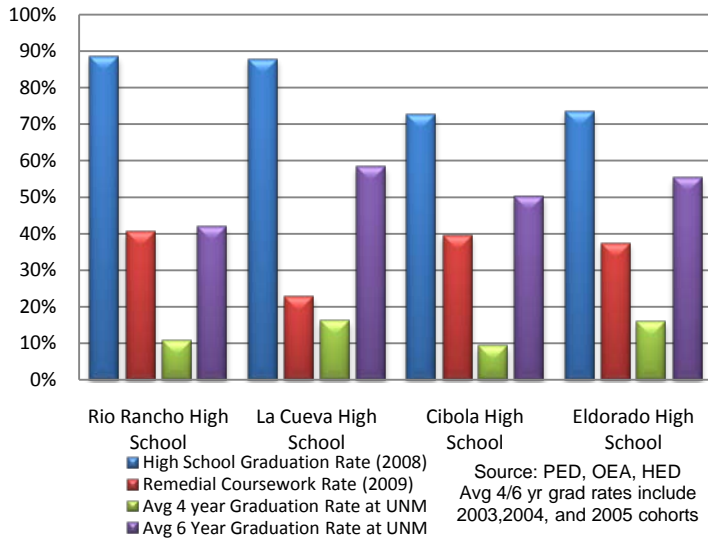
Neither university has a comprehensive effort to work with major feeder high schools to improve preparation of students, though some targeted efforts do exist. The high number of freshmen coming from local high schools presents an opportunity to provide feedback to local schools concerning areas in need of improvement. Institution's efforts to increase the college readiness of entering freshmen should focus on these top feeder schools as they produce a large amount of the entering freshmen. Communication with feeder schools could be improved by providing feeder schools with information about which students are struggling in which classes. Once given this information, schools could respond by focusing on the content areas and standards that need to be augmented. Both universities recognize this opportunity and are working towards building better data sharing and relationships with public schools. For example, UNM has established agreements with local school districts to address mutual interests of improved student success and NMSU has implemented, through grants, targeted support for local math and science teachers.

4 Year Graduation Rates: UNM and NMSU
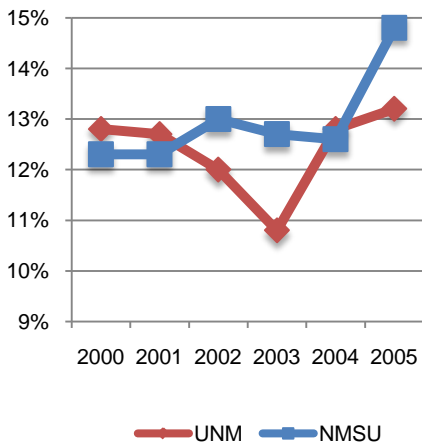
Source: Institutions

About 13 percent of first-time freshman graduate in four years from UNM and NMSU, with about 43 percent taking up to six years. Neither university has made dramatic improvement in its graduation rates over time despite large increases in overall spending and tuition. The graduation rate is a critical component to the vital issue of degree productivity.

UNM and NMSU have seen improvement in the retention rate, the percentage of freshmen that return for their sophomore year. For the freshmen class in 1999, UNM's retention rate was 71.6 percent. The rate increased to 79.2 percent for the freshmen class of 2008. In 2002, NMSU's Common Data Sets reported a retention rate of 72 percent. For the 2009 - 2010 year, NMSU's retention rate had improved to 75.9 percent.

Institutions should focus on improving the four-year graduation rate. UNM's 2009-2010 Fact Book presented four-year graduation rates that ranged from a low of 10.5 percent for the 1999 freshmen class to a high of 13.2 for the 2005 freshmen class. UNM's four-year graduation rate has increased from 12.8 percent for the fall 2000 cohort to 13.2 percent for the fall 2005 cohort.

NMSU provided data showing that NMSU's four-year graduation rate has increased from 12.3 percent for the fall 2000 cohort to 14.8 percent for the fall 2005 cohort. Conversely, NMSU's six-year graduation rate has fallen from 46 percent for the fall 2000 cohort to 44.7 percent for the fall 2003 cohort.

Achieving a four-year graduation rate of 20 percent by 2015 is a viable goal for both institutions. Assuming an institution has an incoming freshmen class of 3,000 students, a 12 percent graduation rate equates to 360 of those freshmen earning their bachelors degree in four years. To increase the rate to 20 percent, the institution would need an additional 240 of the 3,000 students to complete their degree in four years. Efforts to increase student preparation, class scheduling, advising, student transfers, student course load, and other initiatives identified by the institutions can help accomplish this goal and the related goal of increased degree production. Further, accomplishing the goal of a 20 percent four-year graduation rate will help the institutions achieve other goals they have set for themselves, such as Association of American Universities (AAU) membership or higher rankings amongst Living the Vision peers.

6 Year Graduation Rates: UNM and NMSU 1999-2003 Cohorts
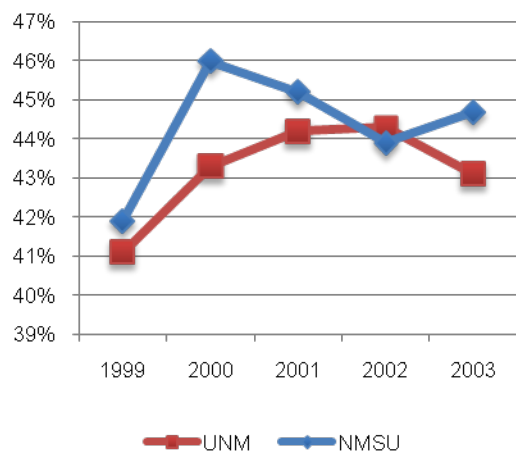
Source: Institutions

As noted by UNM in their graduation study, even with the improvement in retention rates, the six-year graduation rate has remained low. UNM's graduation study focused on enhancing the "completion efficiency" of their programs. Completion efficiency can be defined as the percentage of students retained to the third semester that graduate within six years. The graduation report notes that for UNM, the completion efficiency is only about 56 percent. The report also demonstrates the impact of the completion efficiency measure, "Even if retention rates improved to 80 percent, graduation rates would increase to only about 45 percent. However, given a constant retention rate, a modest increase (to 70 percent) in completion efficiency would produce a six-year graduation rate of 53 percent."

UNM's six-year graduation rates have ranged between about 41 and 45 percent. UNM's six-year graduation rate has gone from 41.1 percent for the fall 1999 cohort to 43.1 percent for the fall 2003 cohort. This is below peer group performance and contributes significantly to the institutions' lower standing in national reputational rankings. It also undermines UNM's goal of becoming a member of the AAU.

Students borrow substantial sums of money and many students graduate with high debt loads; non-graduates incur almost as much debt as students finishing in four years. Graduates are burdened with increasing amounts of debt. Average student loan debt for graduates range from $18 thousand to $27 thousand. In 2008-2009, bachelor's degree earners at UNM borrowed $21,336 on average while NMSU's bachelor's degree recipient borrowed an average of $20,938. Students obtaining a graduate degree incurred debt ranging from $16 to $34 thousand at NMSU. UNM did not have similar data available.

The National Center for Higher Education Management Systems (NCHEMS) data shows New Mexico students borrowed an average of $5,200 in 2007, the second highest average in the nation. The NCHEMS data is a measure of the average loan amount undergraduate students borrow from the main federal government loan programs, such as the Stafford loan program. Nationwide, federal loans comprise more than 90 percent of the funds students borrow to attend college and this debt is highly collectable. High levels of loan debt are difficult for college students to manage as they exit postsecondary education. It is an even larger problem for students who incur substantial levels of debt and don't graduate from college.

NMSU Fall 2003 Cohort: Average Loan Debt
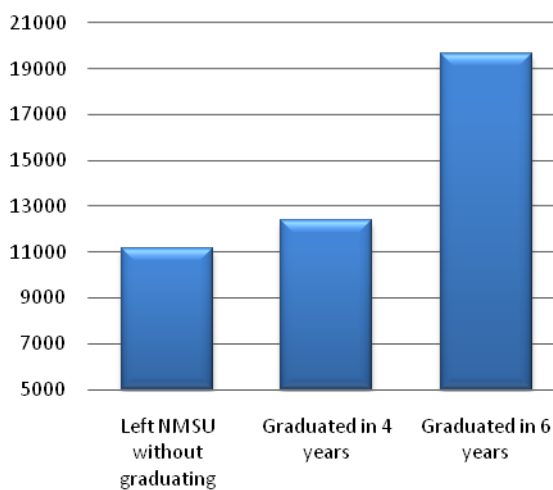
Source: NMSU

Students graduating in six years increased their student loan debt by 59 percent, or over $7,000, over those that graduated in 4 years. The longer it takes a student to graduate, the greater the challenge of affordability. NMSU data indicates that students who took six years to graduate incurred average loan debt of $19,651, an additional $7,278, with no additional earning capacity beyond those that graduated in four years.

Students who do not complete degrees are often burdened with substantial debt. NMSU data indicates that students who left NMSU without a degree incurred about 90 percent of the debt of those that completed degrees in four years. The students who did not graduate will have similar debt burdens without the increased earning capacity achieved by those that graduated. It also costs the state money as the state appropriations are being spent on students who do not acquire degrees.

Most UNM or NMSU graduates with debt have borrowed over $20,000 at graduation. Debt levels are often high even in colleges producing graduates entering generally lower-paid employment fields, such as education and social services.

Table 7: Average Debt and Average Wages

College	NMSU: Avg debt at graduation	UNM: Avg debt at graduation	Avg Wage in NM
Engineering	$18,700	$22,293	$70,430
Business	$19,868	$19,596	$58,580
Education	$24,698	$21,679	$43,890

Graduating in six years instead of four years increases costs by about 50 percent. In general, students and their families pay about 50 percent more, or $35,400 more as a result of graduating in six instead of four years. Actual cost increases associated with delayed graduation are particularly acute for those who lose the lottery after eight semesters and must either borrow or pay out of pocket for remaining semesters. For 2008, IPEDS data present the total costs of attendance for an in-state student living off campus to be about $18,500 at UNM and about $16,900 at NMSU. Therefore, the average total cost to attend NMSU or UNM is about $17,700. This estimate would indicate a total cost of attending for four years to be about $70,800 and a total cost of attending six years of about $106,200, for an additional two-year expense of about $35,400.

Graduating in six years results in lost income for students by delaying their entry into the labor force. Given that those who have earned a bachelor's degree earn, on average, over $40,000 annually in New Mexico, a delay of two years equates to over $80,000 in postponed earnings. The total amount of delayed income and additional cost for those two extra years is over $115,000.

In general, students are not only taking longer to graduate, they are also graduating with about 17 percent more student credit hours than necessary. The excessive student credit hours earned also raises questions about required course availability and the quality of institutional student advisement services. At UNM and NMSU, a student needs a minimum of 128 student credit hours to earn a bachelors degree. This equates to a minimum of 16 credit hours per semester to graduate on time therefore student must understand that they will not graduate on time by earning fewer than 16 credit hours per semester. For students earning bachelor's degrees in spring 2009, students averaged 152 student credit hours (SCH) at NMSU and 148 SCH at UNM. Attention should also be placed on those few degree programs that require more than the minimum student credit hours to graduate and potential impact on student borrowing.

Table 8: Debt and Student Credit Hours, 2008-09

NMSU	Average Debt of Graduates	Average Student Credit Hours of Graduates
Agriculture and Home Economics	$19,727	145
Arts and Sciences	$20,465	148
Business	$19,868	148
Education	$24,698	167
Engineering	$18,700	159
Health and Social Services	$22,062	169

UNM	Average Debt of Graduates	Average Student Credit Hours of Graduates
Arts and Sciences	$21,270	146
Business	$19,596	139
Education	$21,679	152
Engineering	$22,293	166
Fine Arts	$20,338	156
University Studies	$24,697	144

One of the biggest impediments to graduation is excessive volume of courses from which the student withdraws. Cliff Adelman's, *Toolbox Revisited,* noted that students who withdrew from or repeated 20 percent or more of their course attempts had half the chance of completing a degree. Any institutional policies that allow withdrawals without penalty are not conducive to promoting graduation in a timely fashion and should be reviewed.

Student outcomes at both universities compare unfavorably to their peers and suggest improvements in cost-effectiveness are needed. For both UNM and NMSU, graduation rates, retention rates, degree production and cost per degree generally compare unfavorably to their peer institutions.

UNM's retention and graduation rates are below peers. UNM has the lowest retention rate among the Commission on Higher Education (CHE) peer institutions. The full-time retention rate is the percentage of the fall full-time cohort from the prior year minus exclusions from the fall full-time cohort that re-enrolled at the institution as either full- or part-time in the current year. The average retention rates from 2003 to 2007 for UNM was about 76 percent while the peer group average was 84 percent.

Four Year Graduation Rate: 2004 cohort, UNM
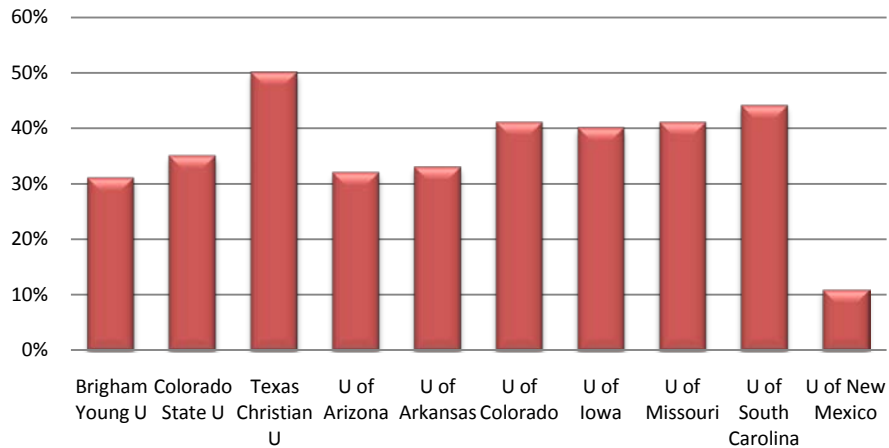
Source: IPEDS

UNM's average four-year graduation rate from 2004 to 2007, is 11.25 percent, the lowest among CHE peers. The peer group average was 36 percent. In 2007, the six-year graduation rate at UNM was 44 percent while the peer group average was 65 percent. Four of UNM's peers (UT Austin, U of South Carolina, U of Virginia, and U of Washington) had 4 year graduation rates at or above UNM's 6 year graduation rate.

UNM created another set of 15 peer institutions that had similarly high rates of attendance by minority students. UNM's graduation rates are below the average graduation rate for this group of peers. Only two institutions in the student referent peer group, University of Memphis and Wayne State University had a lower four-year graduation rate, 10 percent, than UNM's at 11 percent. UNM's graduation rate is substantially lower than the average graduation rates for schools in the Mountain West Athletic Conference as well.

NMSU's graduation and retention rates are below peers. NMSU's average four-year graduation rate from 2004 to 2007, is about 12 percent, one of the lowest amongst the peer group. Only UNM and the University of Texas at El Paso (UTEP) had slightly lower four-year graduation rates than NMSU. The peer group average four-year graduation rate was about 25 percent. In 2007, the six-year graduation rate at NMSU is 45 percent while the peer group average was 53.5 percent.

To reach the top quartile of its peer group, NMSU will need to improve its four-year graduation rate to over 32 percent. The Western Athletic Conference (WAC) institutions serve as another peer reference group. NMSU's graduation rates are among the lowest in the WAC conference, as well.

Four Year Graduation Rate: 2004 Cohort, NMSU

Source: IPEDS
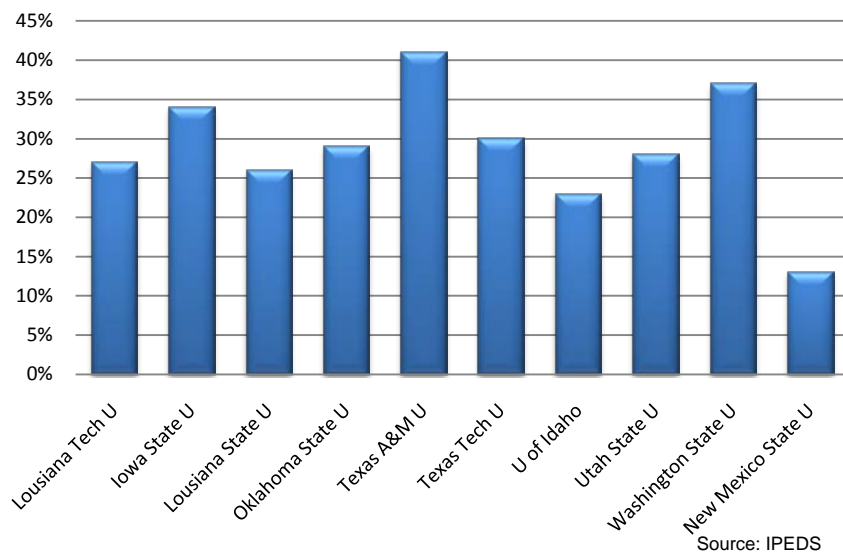
NMSU has one of the lowest retention rates among peer institutions. The average retention rates from 2003 to 2007 for NMSU were 72.2 percent while the peer group average was 78 percent.

Degree production relative to enrollment increases needs improvement. The total degrees awarded have increased largely as a function of the increasing numbers of students. Degree completion is arguably one of the most important of all higher education outcomes. In the *Toolbox Revisited,* Cliff Adelman wrote, "The core question is not about basic 'access' to higher education. It is not about persistence to the second term or the second year following postsecondary entry. It is about completion of academic credentials—the culmination of opportunity, guidance, choice, effort, and commitment." Institutions respond to incentives in the funding formula by striving to increase student credit hour which raises questions about institutional capacity and the sustainability of ever increasing headcounts.

TABLE 9: FTE Students and Degrees Awarded

UNM	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	% Change (05-09)
UNM-Degrees Awarded	4,495	4,590	4,630	4,636	4,772	6.16%
UNM-FTE Students Fall	20,807	20,562	20,551	20,864	22,225	6.82%
UNM-Degrees per 100 students	21.60	22.32	22.53	22.22	21.47	-0.61%
NMSU						
NMSU-Degrees Awarded	3,023	3,105	3,059	3,226	3,255	7.67%
NMSU-FTE Students Fall	12,592	12,793	13,087	13,323	14,236	13.06%
NMSU-Degrees per 100 students	24.01	24.27	23.37	24.21	22.86	-4.76%

Source: Institutional Factbooks

Another measure of productivity is the number of bachelor's degrees awarded per 100 full time undergraduates. UNM produces over 18 bachelor's degrees per 100 undergraduates and NMSU produces about 20 bachelor's degrees per 100 undergraduates. The majority of UNM's and NMSU's peer institutions achieve higher degree productivity, even schools with higher concentrations of students receiving Pell grants. UNM peers awarded over 25 degrees for every 100 FTE students in 2008.

Table 10: Degree Productivity, 2007-08

	Bachelor's degrees produced per 100 undergraduate FTE	Percentage of undergraduates receiving Pell grants	Graduation rate - Bachelor degree within 4 years
University of New Mexico-Main Campus	*18.39*	*26*	*11*
New Mexico State University-Main Campus	*20.09*	*33*	*13*
The University of Texas at Austin	25.24	23	48
University of Arizona	21.85	19	32
University of Colorado at Boulder	23.04	11	41
University of Iowa	20.91	14	40
University of Oklahoma Norman Campus	21.86	20	26
University of Utah	25.90	12	20
Florida Atlantic University	25.56	23	16
Georgia State University	19.59	34	17
The University of Texas at Arlington	24.23	33	13
University of California-Riverside	23.41	40	39
University of Illinois at Chicago	21.85	36	21
University of Nevada-Las Vegas	18.76	19	12
Iowa State University	21.68	19	34
Kansas State University	20.90	23	25
Oregon State University	21.99	22	32
Texas A & M University	22.13	16	41
University of Missouri-Columbia	23.81	14	41

Source: IPEDS

New Mexico has an opportunity to increase the population with a degree by working with those with 'some college'. About 3.8 percent of New Mexico's residents have some college experience, ranking the state fifth in the nation in terms of percentage of the population with some college. Attracting these students presents an opportunity to award additional degrees. UNM has implemented such a program with about a 68 percent success rate.

Both NMSU and UNM have been taking steps to address university practices to help improve student outcomes, but more is needed. To identify and implement the most effective means to improve degree completion, the issues experienced by students should be the focus. Institutions have made plans to improve the information they provide to students and to streamline their processes.

UNM is appropriately phasing in higher admission standards and creating alternative higher education pathways for students not yet ready to enter a major research institution. By 2013, entering freshmen will be required to have a minimum GPA of 2.5 and to have 16 curriculum units. UNM's entrance requirements will still be below peer requirements. The required grade point average has been 2.25.

UNM engaged in an extensive study of institutional practices that could inhibit graduation; NMSU should do the same. UNM's Fall 2006 Graduation Task Force report contains insightful analysis and several promising recommendations. However, UNM does not regularly report to the Board of Regents or public on progress implementing the report's recommendations. While several of these recommendations have been implemented, many have not. Key recommendations in the study dealt with course scheduling and core curriculum requirements. Course schedules determine how and what will be offered, establish the courses that students can choose from and are developed by individual academic departments. The UNM graduation report noted that departments "are not well-positioned either to understand actual student demand, or respond to it with their fixed budgets." Further, the report noted that while there are additional resources available "they are not well-coordinated or managed with the specific goal of meeting student demand."

The study also summarized evidence showing students are often unsuccessful because they attempt courses out of sequence, repeat courses, and fail to complete core requirements early in their careers. The report made several recommendations including taking developmental courses in the summer before their freshmen year, requiring continuous enrollment in math and English until the core is completed, and limiting re-takes.

NMSU should embark on a similar study to see precisely how the concepts of preparation, admission, affordability, enrollment, matriculation, and student engagement impact graduation rates.

Recommendations

NMSU and UNM
- NMSU should consider and UNM should continue a gradual increase in admissions standards and requirements. The link between better prepared incoming freshmen and improved graduation rates is well established. Peer institutions that have higher admissions standards and higher performing freshmen classes have higher graduation rates. Higher standards have resulted in increased applications at other institutions.
- Institutions should set and announce a higher goal for graduation rates and create action plans to achieve them. For an incoming freshmen class of 3,000 students, doubling the four-year graduation rate equates to an additional 300 students. Efforts already identified by the institutions, such as more student friendly course scheduling, improved advising, etc, if implemented could help to achieve this goal. Admirable goals would be increasing four-year graduation rates by 4 percent per year or set a four-year graduation rate goal of 20 percent by 2015 and a goal of bachelor's 25 degrees per 100 full-time undergraduate students.
- Collaboration between UNM, NMSU, and local feeder high schools should be greatly enhanced and institutionalized. Local feeder schools need to focus on areas of needed improvement. The State should encourage or consider requiring high school seniors to take a math course as 3 of the 4 most commonly failed core classes at UNM are entry level math courses. Students need to understand that a course load of 12 credit hours per semester is insufficient to graduate in four years.

- UNM should revisit the graduation study to see the results of the recommendations that have been implemented as well as which recommendations have not been implemented. UNM should create an action plan to implement remaining or new recommendations and report to board.
- UNM and NMSU should continually review policies and procedures to identify ways to improve graduation rates. Institutions need to continue to work on articulation issues. Ideas for further review include ensuring freshmen are placed in appropriate classes, ensuring sufficient course offerings needed to complete degrees, creating effective collaborations with other institutions, and requiring new students to be continuously enrolled in math and English until core curriculum requirements are met. Institutions need more information and further study about the success of program sharing agreements among institutions, like 2 plus 2 agreements and the conditions that lead to success for transfer students. The idea that students should start where they have the best chance for success is logical but needs to be explored further.
- NMSU should conduct a study to identify institutional practices that could be changed to increase completion efficiency and graduation.
- Given the high rate of New Mexicans with "some college" all post-secondary institutions should consider creating or expanding a program to help these individuals complete degrees.

Higher Education Department
- HED's statewide strategic planning efforts should be principally focused on graduation rates and degree production, with attention to ensure quality of academic programs.

Legislature
- The Legislature should consider including desired outcomes, such as improved four-year graduation rates, as a funding formula component.

JUSTIFYING LARGE TUITION INCREASES WILL REQUIRE GREATER EFFORTS TO CONTAIN SPENDING AND CUT OVERHEAD COSTS.

Total spending increased 15 percent, or $81 million at UNM and 11 percent, or $48 million at NMSU between FY07-FY09. Research universities are complex bundles of enterprises with various unique funding sources (Brinkman, Morgan 2010). NMSU and UNM rely on revenue from a number of sources, including tuition and fees, state appropriations, endowment income, and federal funds to operate. About 20 percent, of UNM Main Campus, and about 36 percent of NMSU of all revenue is "restricted" to certain activities and cannot be spent on other priorities. Unless otherwise noted, this section focuses on "unrestricted" revenue and spending.

The modern research university generally has two sectors – one is the traditional education sector which relies heavily on state appropriations, tuition and fee income and gifts. In New Mexico, this sector is referred to as "Instruction and General" (I&G). In FY09, UNM spent over $152 million, or about 25 percent, of its total operating expenses (unrestricted and restricted) on direct instruction. NMSU spent over $105 million, or about 21 percent, on instruction. Revenue to support instruction and general activities (direct instruction, academic support, student support, institutional support, operations and maintenance) primarily comes from state appropriations and tuition and less than four percent is restricted to certain activities.

The other sector performs business-like self supporting activities that require their costs to be covered by revenue they generate. For example, universities conduct externally sponsored research, public service contracts and incur other costs associated with delivery services to students, such as campus housing, bookstore, and student aid. Many of these non-academic activities are, or should be, self-sufficient from revenues they generate (bookstore, golf course) or operate using grants or contracts that generally restrict their use to specific purposes.
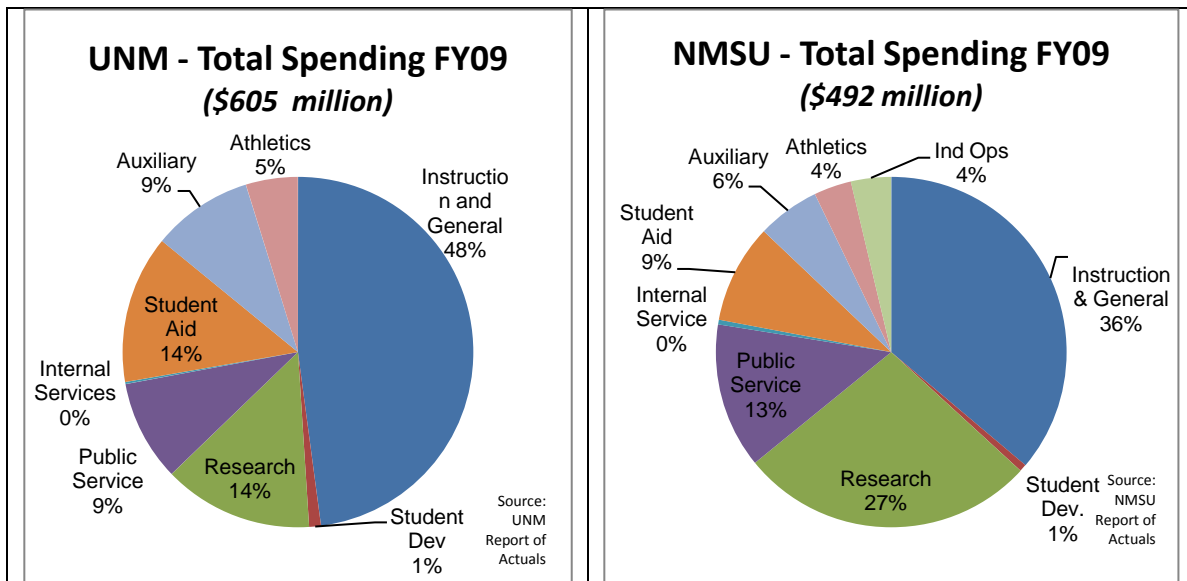
Tuition and fees for attending NMSU and UNM has increased almost 100 percent between FY01-FY11. Like universities nationally, tuition and fee increases have generally outstripped inflation and increases in household income. Tuition discounts and financial aid offset some of the out-of-pocket expense of students, with few paying the full "sticker price" to attend each university. Tuition and fees typically account for about 30 percent of the total cost of attendance.

Tuition rates are one component of affordability and state support for higher education has helped to keep tuition rates low. For 2008-2009, as reported in the Presidents Performance Effectiveness Report, UNM resident undergraduate tuition was $4,834 or about 67 percent of peer institutions and NMSU

In-State Undergraduate Tuition & Fees

NMSU   UNM   Source: IPEDS; Op-Buds
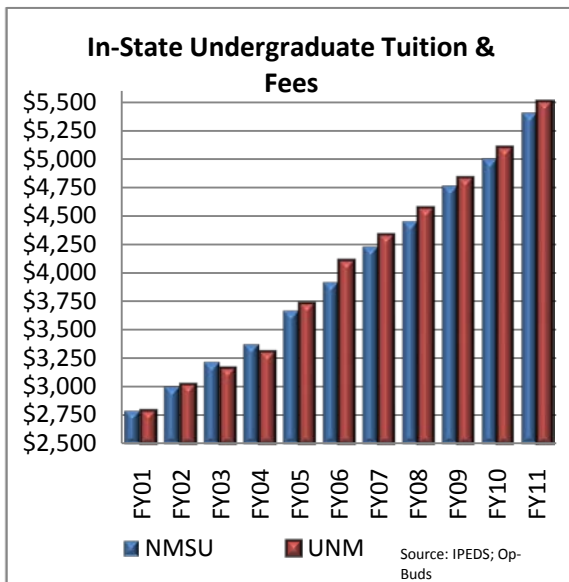
resident undergraduate tuition was $4,758 or 86 percent of peer institutions. The total cost of attendance is more reflective of amounts students pay as it includes tuition, fees, books, and room and board. Using IPEDS data to compare institutions on this metric, the cost to attend UNM for 2008-2009 is approximately 85 percent of the cost of attending CHE peer institutions. The total cost to attend NMSU for 2008-2009 is approximately 93 percent the cost of attending CHE peer institutions. At UNM, students living off campus without family pay about 90 percent of what they would have paid at peer institutions. At NMSU, students living on-campus pay about 97 percent of what they would have paid at CHE peer institutions. UNM and NMSU are affordable choices; however, they appear to be less affordable when viewing total costs as opposed to only looking at tuition rates.

The universities rely on tuition and fee income for a growing share of I&G revenue. In FY07, tuition and fee income accounted for about 27 percent of I&G revenue. For FY11, tuition and fee incomes accounts for about 34 percent of NMSU ($70.8 million), and 36 percent of UNM's ($117 million) budgeted revenue for I&G. However, until recent budget shortfalls, increases in this revenue stream appear to have fueled spending increases. In other states, universities have increasingly relied on tuition increases to offset declining state support. This cost shifting is not as apparent in New Mexico. The appendix shows the uses of tuition and fee income.
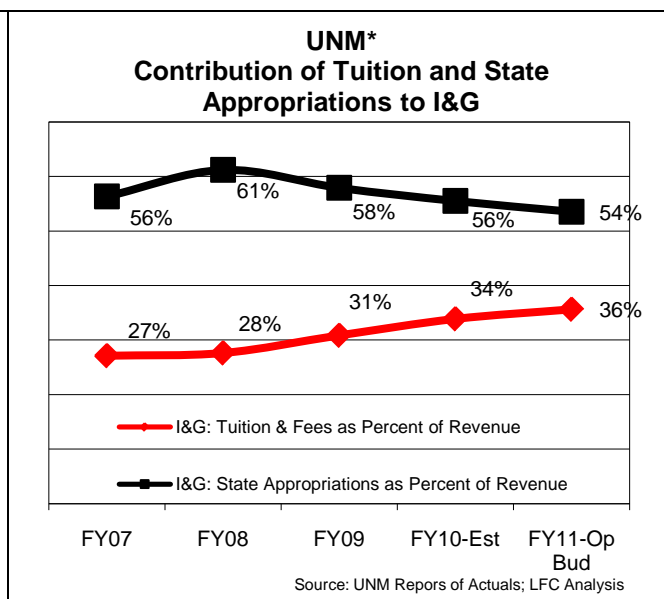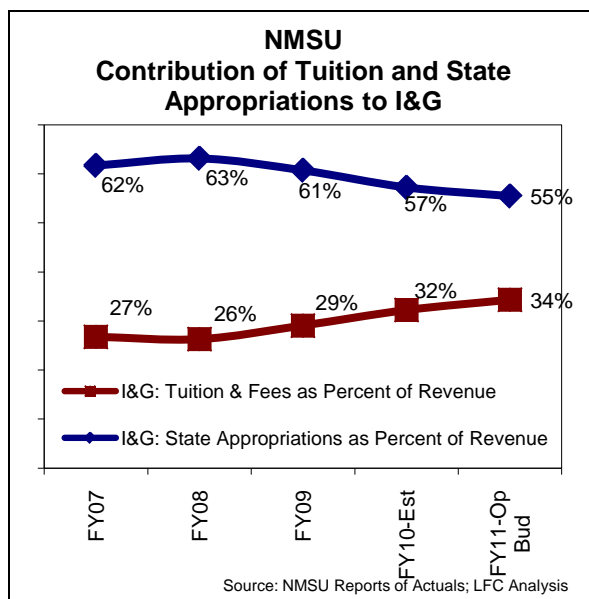
NMSU Contribution of Tuition and State Appropriations to I&G

I&G: Tuition & Fees as Percent of Revenue
I&G: State Appropriations as Percent of Revenue
Source: NMSU Reports of Actuals; LFC Analysis

UNM* Contribution of Tuition and State Appropriations to I&G

I&G: Tuition & Fees as Percent of Revenue
I&G: State Appropriations as Percent of Revenue
Source: UNM Repors of Actuals; LFC Analysis

Efforts to curb spending on administration across both universities should continue.
Administrative costs, both direct and indirect, span the entire university, though the largest identifiable category of indirect administration in university budgets is Institutional Support. Direct administration, including associated salaries and positions, exists throughout the academic portion of the university, including department heads, deans and their offices, research and public service functions. Administrative spending also occurs in other support areas, such as auxiliary services, student services (health center, etc) and athletics. While a significant portion of administration is performed using funding outside of I&G, the public and policymakers should still be concerned about the cost and benefit of these functions as well. For example student fees support a number of non-I&G functions, including student services, auxiliaries and athletics.

UNM's administrative reorganization efforts fed, in some cases correctly, a perception of overspending on overhead though some changes supported institutional priorities such as enrollment management. In 2008, UNM faculty called for a review of changes in upper administration because of a perception that growth in upper administration was resulting in reallocation of resources from the academic mission of the university. Two reports assessed this situation, one an independently contracted audit and another review by a team of UNM staff. The contracted audit simply verified financial data reported for various cost centers at a cost of over $50 thousand.

Two major changes have occurred in upper administration within the last decade at UNM: shift in executive management model started by President Louis Caldera and continued by President David Schmidly and consolidation of some management responsibilities. The shift in executive management model resulted in the upgrading of some existing positions, and associated salaries, to executive vice presidents and vice presidents versus previous positions titled simply vice president, vice provost or assistant vice president/provost. At least eight vice president positions were created as of 2008 compared to 2002, four of which appear to reflect an upgrade of title and salary. For example, vice provost for research was renamed vice president for research, assistant vice president for human resources was reclassified as vice president, and the athletic director position was upgraded to vice president. The reclassification of these positions resulted in higher pay; however amounts are generally less than the national market. Some increases in salaries were due to regular salary adjustments made for many public employees during times of revenue expansion, reflect adjustments necessary to compete in a national market pool and/or reflect increased responsibilities to improve operations and performance of the university.

Other vice president positions appeared as a result of consolidation of some management responsibilities such as the creation of the vice president for financial services which combined positions at Main campus and the Health Sciences Center. In other cases the creation of new vice president positions resulted in a new layer of upper administration that reflect university priorities and may prove beneficial. For example, UNM prioritized improving its enrollment management functions (recruitment, registrar and admissions offices) and created a new vice president to oversee these important functions.

Per student spending, including administration, increased rapidly between FY04-FY08. Flat full-time enrollment and increased spending on administration during FY04-FY08 dramatically increased per student administrative costs. UNM's per student institutional support spending increased 78 percent during this time period across Main campus and HSC. NMSU increased per student spending on institutional support by over 46 percent. Despite small growth in full-time enrollment, instructional

spending per full-time equivalent student increased over 18 percent at NMSU during this time period and 16 percent at UNM (IPEDs data – includes Health Sciences Center). The full per student spending data set is included in the appendix. Both universities compare favorably to peer institutions on administrative spending relative to student population.

The share of I&G spending on various categories has remained relatively stable between FY07 and FY11 budget.   About 55 percent of I&G spending was dedicated to instruction and 14 percent institutional support at NMSU in FY08. UNM spent about 53 percent on instruction and 15 percent on institutional support in FY08, but has modified the share of spending between these two categories in its FY11 budget to increase instructional spending.

NMSU
Instruction & General Spending FY07-FY11
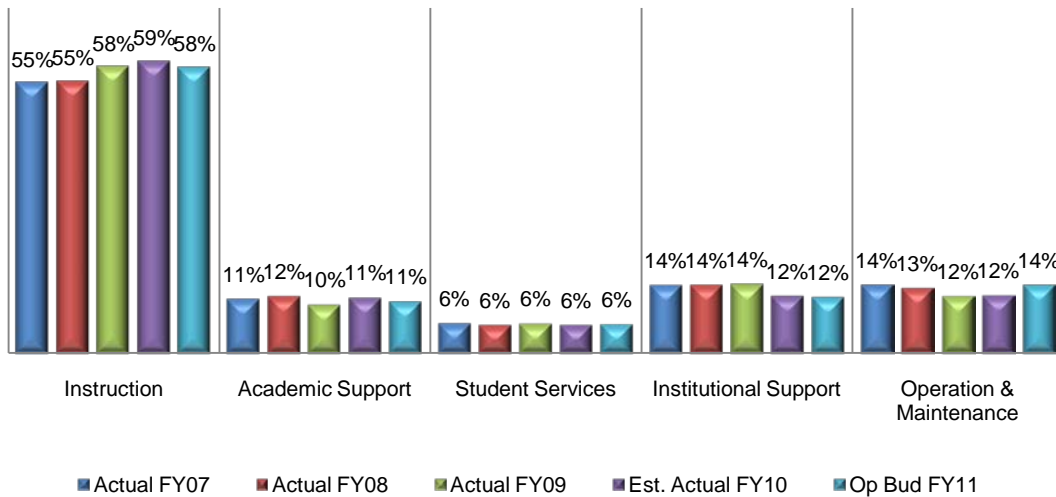
Source: NMSU Reports of Actuals & Operating Budget *Unrestricted

UNM-Main
Instruction and General Spending*
FY07-FY11
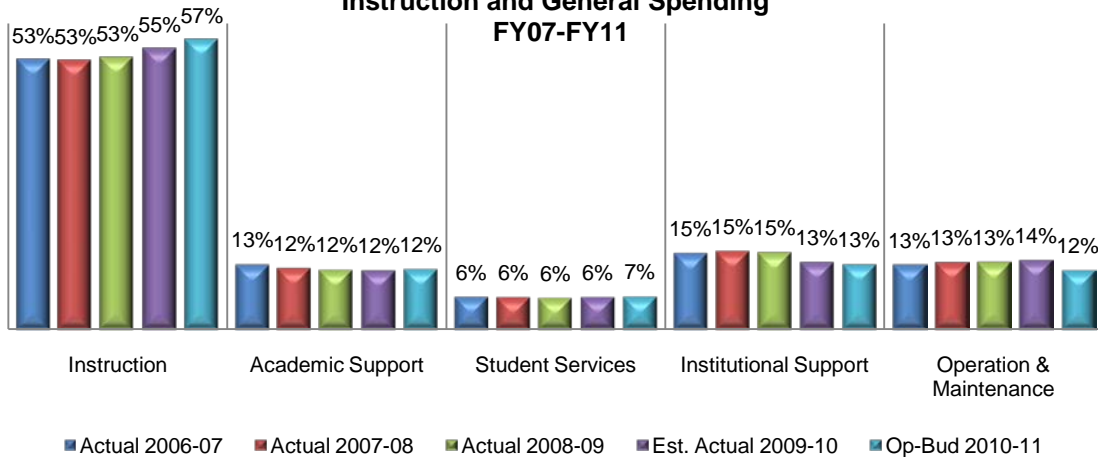
Source: UNM Reports of Actuals & Operating Budget *Unrestricted

UNM wiped out past large increases in institutional support spending during recent budget cuts, whereas NMSU cost shifted to other programs. Institutional support functions are funded through a combination of I&G and charges to other functions and sources of funding. For example, both universities charge athletics, branch campuses, auxiliary and other functions for indirect administration (business office, human resources, public information, executive management, etc). Neither university has implemented a full cost allocation model and may, in some cases, heavily subsidize these other functions using I&G institutional support.

UNM has reduced institutional support funding for FY11 $540 thousand below FY07 actual spending levels. I&G funded about 90 percent of UNM's institutional support spending in FY07 and about 88 percent in the FY11 budget, which reflect minimal cost shifting to other functions.

UNM - Main Total Institutional Support

		$48,200,973		
	$45,704,443			
			$43,247,954	
$41,388,963				$40,848,373
FY07	FY08	FY09	FY10*	Op-Bud FY11
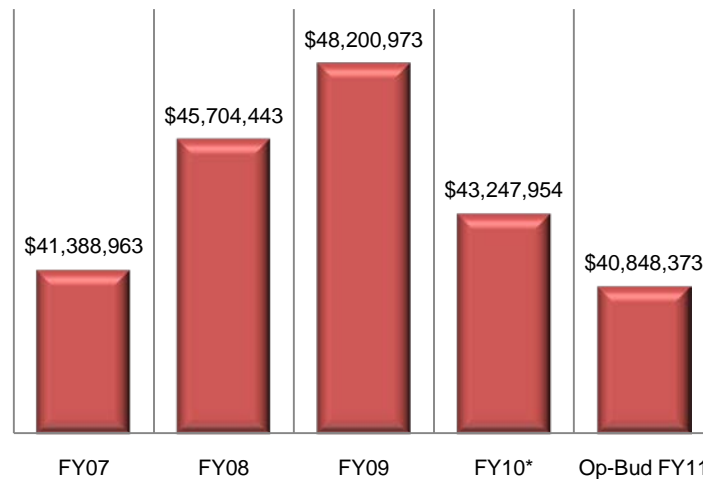
Source: UNM Reports of Actuals and Op-Bud
*Estimated
$Total Charges, including Branch Campuses & AUX

NMSU
Total Institutional Support

	$27,649,561	$29,201,641	$28,417,682	$27,647,991
$23,314,456		19%		
FY07	FY08	FY09	FY10 - Est.	FY11 - Op Bud
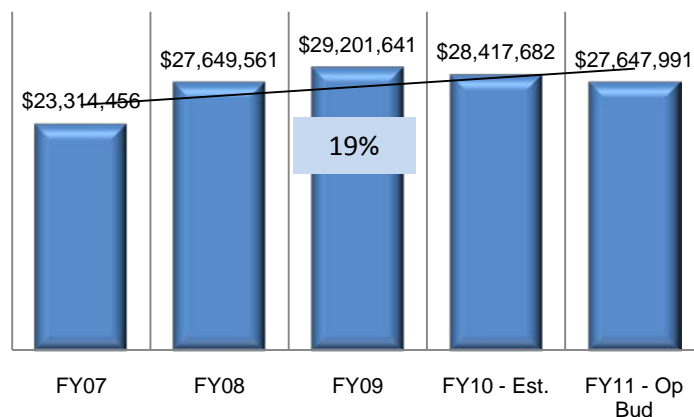
Source: NMSU Reports of Actuals/Op-Bud; LFC analysis. Includes all IS charges, including Branches & AUX

Between FY07-FY11, NMSU increased institutional support about 19 percent, or $4.3 million. NMSU used I&G to fund about 89 percent of the cost in FY07 and plans to use about 71 percent in FY11. This change reflects higher charges to other functions to finance institutional support and appears to reflect the need to appropriately allocate full administrative costs to the proper units.

Both universities prioritized I&G funds for instruction over institutional support during recent shortfalls. Between FY07-FY09 UNM increased I&G funded institutional support spending by almost $6.2 million, or 17 percent. Spending on instruction increased about $21.3 million, or 16 percent, during the same time period. UNM appears to have prioritized its academic teaching mission during the current budget shortfalls by reducing I&G institutional support budget $7.3 million, or 17 percent, below FY09 actual spending levels. By comparison, the FY11 budget for instruction was increased $6.6 million, or four percent, above FY09 actual spending levels.

UNM - Main
Change in I&G Spending
(in millions)

Source: UNM Reports of Actuals /Op-Bud; LFC Analysis

NMSU
Change in I&G Spending
(in millions)
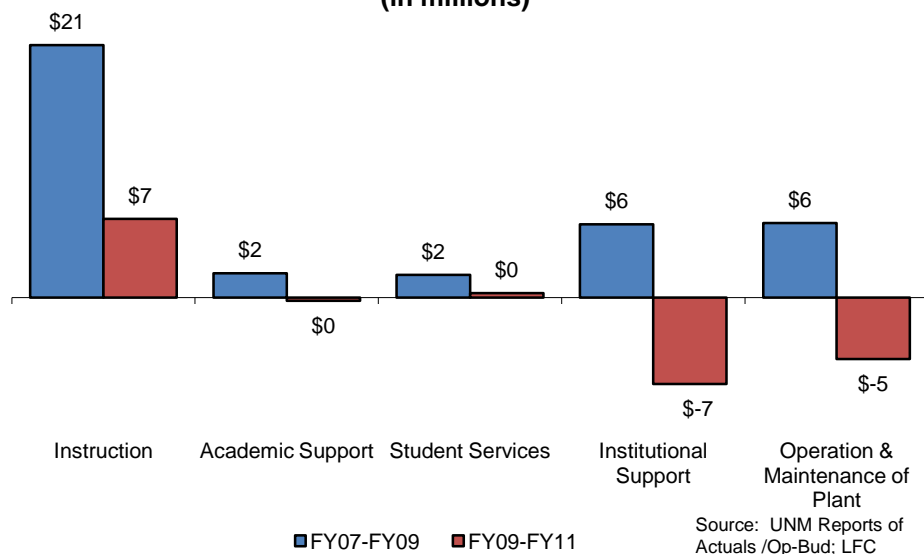
Source: NMSU Reports of Actuals /Op-Bud; LFC Analysis
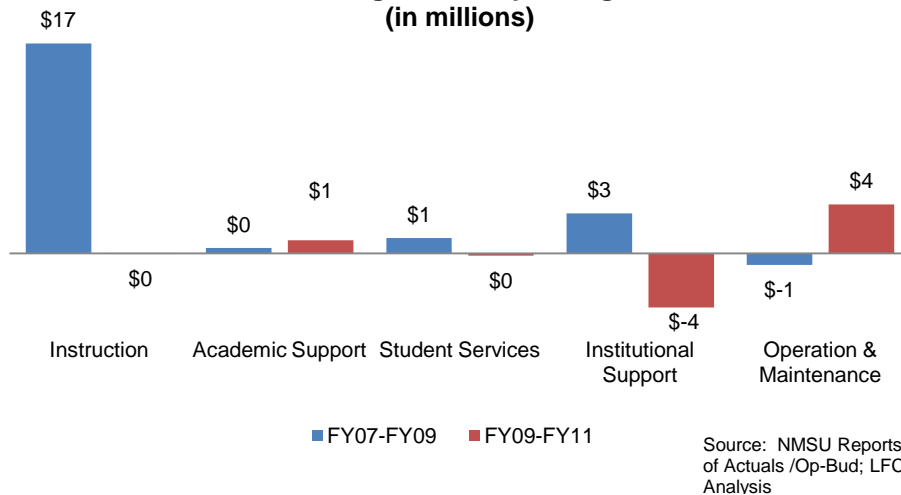
High administrator salaries exist throughout academic affairs and have a larger impact on I&G spending in some cases than non-academic support personnel. Salaries generally appear at or below available national salary benchmark data. UNM reported 159 positions with a Grade 16 or higher with total salaries and additional compensation (car allowances, deferred compensation, etc.) of $20.5 million. I&G funding covered about $13.4 million of these salary costs, or about 65 percent. The data excluded Health Science Center and Athletics.

Table 11: UNM – Main
Administrator Salaries – Grade 16 and Above
2009

Type of Staff	Total Salary & Additional Comp	Total Salary & Additional Comp from I&G (Percent)	Number of Staff
Contract Staff	$8,053,870	$5,031,491 (63%)	63
Executive Faculty	$6,995,957	$6,415,492 (92%)	40
Exempt Staff	$5,449,332	$1,987,956 (36%)	56
Grand Total	**$20,499,159**	**$13,434,940**	**159**

Source: LFC Analysis of UNM Data. Executive Faculty includes President and Provost positions.
Reflects Nov. 1, 2009 filled positions per UNM.

Nineteen of the 63 contract staff and 32 of the 56 exempt staff salaries were paid entirely from sources other than I&G funding. In other cases only a portion was paid from I&G with other funds covering the rest. For example, the University Counsel's staff salaries are only partly covered by I&G. As this staff represents the entire enterprise, their funding comes from multiple sources. The allocation of staff salaries across other areas of the budget for those staff with broad executive responsibilities does not appear consistent. For example, the President and EVP for Finance and Administration's salaries and additional compensation are entirely allocated to I&G.

Of the top twenty paid administrators at UNM (excluding the President, Provost, and EVP Finance), 15 were executive faculty within academic affairs carrying roles such as vice president, dean or vice-provost. Total salary cost for these executive faculty positions was over $3 million. The five contract staff had total salary costs of over $1 million. The contract staff includes three vice presidents, the University Counsel and the Chief Information Officer (information technology), whose salary was $190 thousand plus an additional $20 thousand in deferred compensation. Base salaries for the 20 administrators range from $179 thousand to $235 thousand. Some administrator salaries are paid from non-I&G sources, such as the vice president for research whose $220 thousand salary is paid from research overhead. Most however was funded from I&G.

NMSU reported 66 positions with a Grade 99 with total salary impact of $8.8 million. Of the top 20 paid administrators (excluding the President, Provost and VP for Finance), 13 were in academic units or executive faculty and accounted for over $2 million in base salary costs. Base salaries range from $147 thousand to almost $190 thousand for the vice president of research. Most salaries are paid from I&G. Other high level administrators include the vice president for university advancement at $194 thousand, the senior vice president for planning physical resources and university relations at $178 thousand and vice president for student success at $160 thousand.

NMSU also makes other payments to boost total compensation for faculty and staff, including housing, car and cell phone allowances for some employees. For example, the general counsel is paid $8,400 car allowance and the dean of the health and human service college is paid $12 thousand for housing to bring total compensation to over $184 thousand. Differential payments are also made for distinguished professors and for some department heads. For example, NMSU paid almost $27 thousand for an interim nursing department head that increased their total salary to almost $133 thousand; $17 thousand for an assistant department head in plant sciences that brought total salary to over $130 thousand; $10 thousand to boost the mechanical engineering department head's salary to over $172 thousand; and the health science department head received $11 thousand to bring total compensation up over $131 thousand.

Curbing instruction and general subsidies for enterprise functions, including athletics, should be a priority for both UNM and NMSU. Both universities subsidize the cost of their athletic programs, development and alumni offices using I&G funds. While not financially improper, these examples illustrate the use I&G for purposes not central to the academic teaching mission.

Both universities spend I&G on alumni and development office (foundation) activities but have not set subsidy targets for these activities, which are intended to generate revenue for the universities. These costs increase spending on institutional support and put pressure on available funding for instruction and student support services.

Table 12: Alumni and Development I&G Spending

	UNM		NMSU	
	Alumni	**Development**	**Alumni**	**Development**
Actual FY07	$628,218	$3,563,762	$156,268	$458,913
Actual FY08	$701,572	$3,919,276	$183,486	$728,669
Actual FY09	$690,353	$6,396,126	$288,714	$744,691
Est. Actual FY10	$676,840	$3,944,315	$209,788	$734,591
Op-Bud FY11	$660,353	$3,628,532	$276,507	$752,989

Source: UNM & NMSU Reports of Actuals and Op-Bud. NMSU Development column includes Development, Advancement Services and VP for Economic Development.

UNM Foundation off-set some of this development spending by producing $11 million in revenue from investment proceeds for I&G between FY07 and FY10.

NMSU spends over $4 million from I&G and research to subsidize its athletic program, which despite the subsidy runs a deficit of $9.5 million for FY09. These types of transfers limit available funding for the university's core academic mission but some subsidy may be necessary if NMSU wants to operate a full complement of athletic programs that generate such low sales revenue. Direct transfers from I&G increased from $2 million in FY07 to $3.5 million in FY09. I&G transfers are budgeted at $3.6 million for each year in FY10 and FY11. In FY08, NMSU started to transfer funding from research to athletics totaling $110 thousand. That amount

NMSU Athletics Spending

Legend: Actual FY07, Actual FY08, Actual FY09, Est. Actual FY10, Op Bud FY11

Categories: Football, Men's Basketball, Other Men's..., Women's Athletics
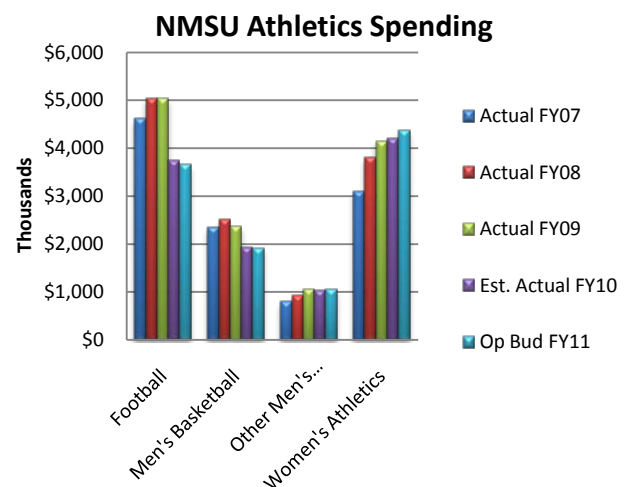
increased to $500 thousand in FY09 and has continued through FY11. The research funding is derived from indirect cost recovery revenue generated from externally sponsored research.

Negative balances increased 80 percent between FY07-FY09 from $5.2 to almost $9.5 million. NMSU anticipates reducing this amount to less than $8.5 million in FY11 and has submitted a plan to HED to eliminate the deficit by FY18. The plan assumes continued transfers totaling over $4.1 million each year, increased spending of only 9.5 percent and 22 percent increase in revenue.

The athletic program's revenue is consistently insufficient to cover program expenditures, let alone to cover the previous years' deficit fund balances. Revenue from student paid fees is anticipated to increase 105 percent between FY07 actual receipts and budgeted amounts for FY11 ($1.4 to $2.9 million). Sales revenue is anticipated to decrease eight percent ($2 to $1.8 million) during the same time period, and state appropriations to decrease nine percent ($3.6 to $3.3 million). Expenditures are expected to increase during the same time period about 5 percent, primarily due to continued increased spending on women's athletics and other men's sports. Football and men's basketball FY11 budgets are below FY07 actual spending levels.

NMSU also subsidizes its athletic programs through direct expenditures in I&G, including spending on NCAA compliance officers and sports information out of institutional support. Sports information costs peaked at over $1 million in FY08, but have been reduced to $537 thousand in the FY11 budget.

UNM has historically subsidized its athletic program with I&G funding, including almost $1.4 million in FY09. I&G spending on athletics has primarily occurred through payments for utilities and grounds/facilities costs to support the athletic facilities at its South Campus and do not appear to directly pay for operating costs of its sports programs. However, to ensure full transparency of the cost of intercollegiate athletics the university should consider a budget transfer to clearly account for I&G subsidy.

Table 13: UNM I&G Subsidies for Athletics
(In thousands)

Year	Utilities	Grounds/Facilities	I&G Transfers
FY07	NA*	$738	$0
FY08	$412	$1,042	($30)
FY09	$395	$909	$74

Source: UNM Reports of Actuals/Op-Bud; Office of Budget and Planning; Agreed Upon Procedures Audit, 2010. LFC did not request FY07 data.

Excluding the payments for utilities/grounds keeping and small transfers, the UNM athletic program generally has operated with smaller operating losses, compared to NMSU. UNM generates significant ticket and sales revenue that support its athletic program spending, but care should be taken to either eliminate or set specific subsidy targets to prevent the program from impacting UNM's academic mission. UNM's athletic program reported negative ending balances of $87 thousand in FY07, $101 thousand in FY08, $647 thousand in FY09, and no negative balances planned for FY10 and FY11. A transfer of over $1.2 million from public service appeared to offset the FY08 negative balance considerably. The funding was from athletic department non-endowment spending.

Academic programs vary widely in their costs, support services, and productivity necessitating regular in-depth evaluation to justify their continuance and to improve their cost-effectiveness.
Most of the variance in cost difference among universities and colleges, 81 to 88 percent, is explained by the mix of disciplines within an institution rather than Carnegie classification (Middaugh, Graham, & Shahid, 2003). Within a discipline, direct costs are affected by the teaching volume (SCH/ FTE), department size, the proportion of tenured faculty, and the presence of graduate instruction (Middaugh, et al.).

Across all schools, service departments (English, mathematics, and social sciences) generally cost the least, while engineering and physical sciences tend to be more costly. For example, Table X shows differences in instructional costs per full-time equivalent student and student credit hour for UNM. The most expensive reported disciplines for Fall 2007 on Main-campus were law ($15,847), civil engineering ($15,695), chemical engineering ($15,675), electric engineering ($14,750), mechanical engineering ($12,419), computer science ($12,393), and public administration ($9,967).

NMSU has similar trends—engineering programs were the highest cost per student on campus, including mechanical ($14,992), chemical ($12,395), electrical ($12,151). Biology reported instructional costs per student of $6,306, math at $4,735, English at $4,519, and wildlife sciences at $10,490.

Table 14: UNM - Main Instructional Cost Per Student Credit Hour and Per FTE Student Fall 2007

Discipline	SCH	Student
English	$128	$3,700
Biology	$282	$8,100
Math	$108	$3,123
Physics	$289	$8,179
Chemical Engineering	$658	$15,675
Electrical Engineering	$640	$14,750

Source: UNM- OIR Delaware Cost Study

Direct Instructional Expenditure per Student, UNM
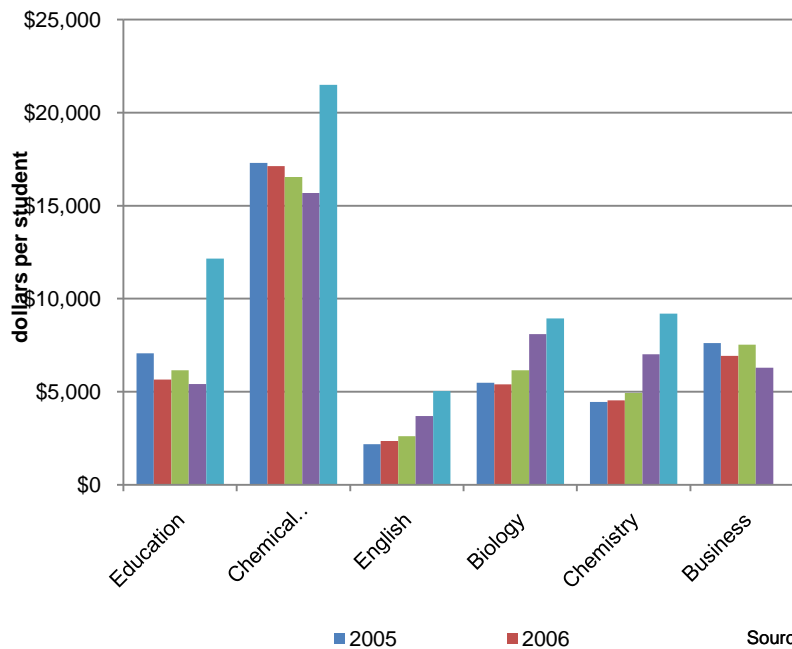
Note: Business Peer group not available due to small sample size.

Source: University of Delaware

Some spending trends have changed over time. For example UNM's chemical engineering program has decreased from $17,293 in 2005 to $15,675 in 2008. Biology, in contrast, has increased 49 percent from $5,490 per student in 2004 to $8,100 per student in 2007, outpacing the peer group's increase of 33 percent over the same time span. These increased costs in biology parallel increases in the number of student credit hours taught by tenure/ tenure-track faculty, but additional analysis at the department levels could add more depth to the understanding of these spending changes.

Productivity trends in generating student credit hours and the value of the courses taught varies among colleges at both universities. Both universities attempt to take these trends into account when allocating resources, but tuition and state appropriations do not automatically flow to the units generating the revenue.
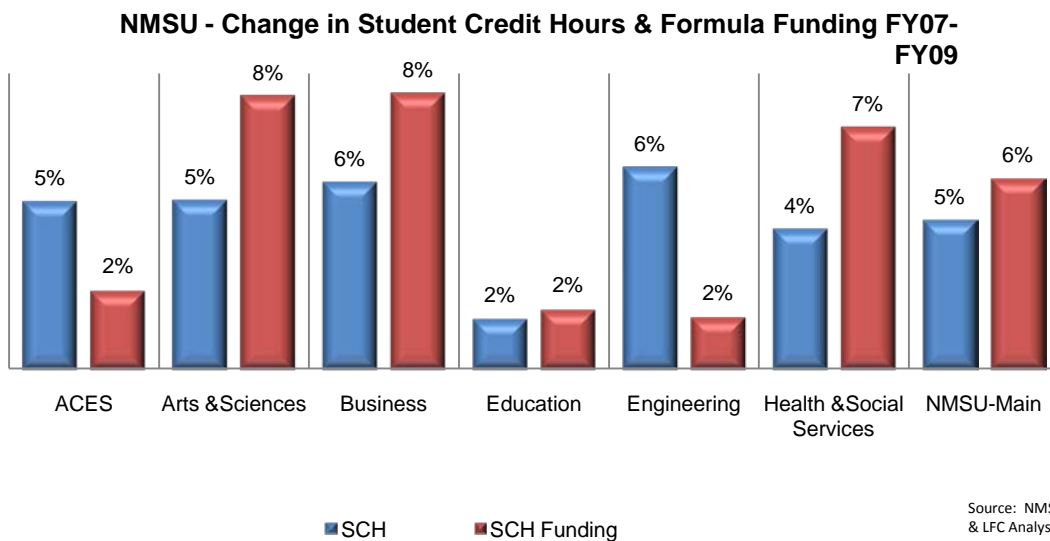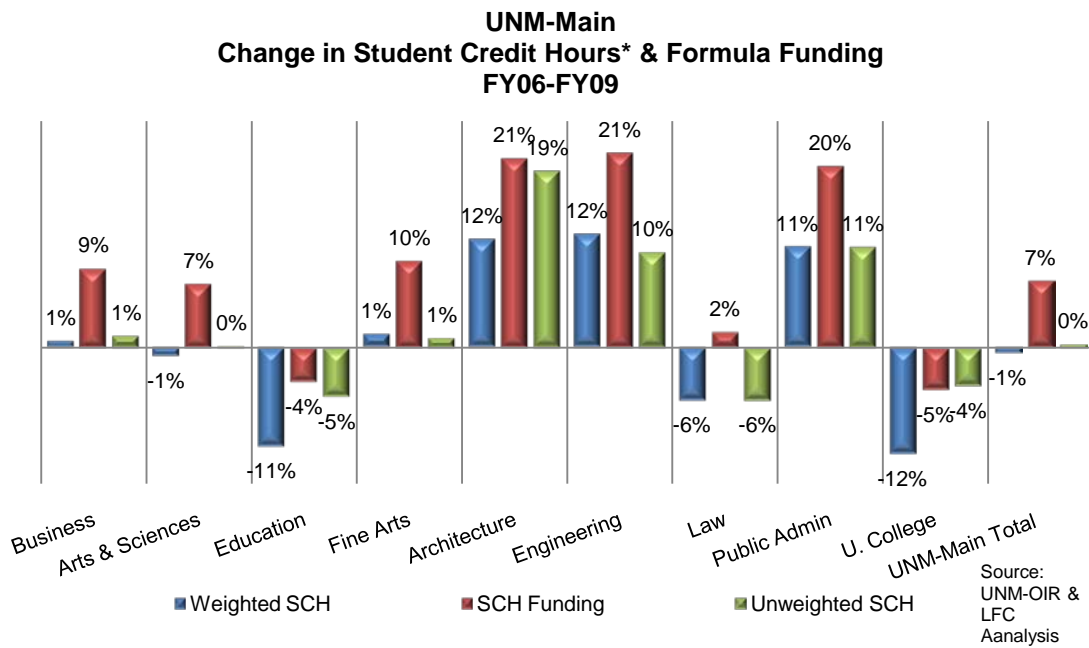
UNM-Main
Change in Student Credit Hours* & Formula Funding
FY06-FY09

Source: UNM-OIR & LFC Aanalysis

■ Weighted SCH   ■ SCH Funding   ■ Unweighted SCH

NMSU - Change in Student Credit Hours & Formula Funding FY07-FY09

Source: NMSU & LFC Analysis

■ SCH   ■ SCH Funding

Academic programs are major cost drivers of institutional spending, across academic and nonacademic sectors. According to Dickenson (2010), "Academic programs – and the capital and services required to mount them – constitute the overwhelming majority of current fund expenditures at any college or university" both directly through instructional spending and indirectly through research, public service and support units needed to sustain the academic core. Conventional wisdom supports that additional programs and course offerings require more faculty, which requires more space and administrative support. Both universities have expanded degree offerings, programs and coursework in an effort to meet demand from students, faculty, employers and policymakers. However, other programs have not had rigorous review of their continued need. As the institutions grow their academic offerings the ability to target sufficient resources to sufficient quality diminishes. As a result institutions, according to Dickenson, become over programmed for their available resources. Thus far, both universities have managed through budget reductions by using a combination of standard short term budget maneuvers, including keeping positions open, dipping into cash reserves, generating small one-time savings and across the board cuts primarily to non-academic units. These issues are not unique to NMSU and UNM and likely exist at other institutions, further straining the ability of the state to invest in excellence.

Opportunities exist for additional efficiencies; both universities have established committees to examine cost saving proposals. Many ideas are already being discussed but other ideas include the following:

- Programmatic and curricular initiatives could include reducing or realigning academic colleges and departments where it makes sense to get better scale or alignment; reducing the number of academic programs, especially low enrollment costly programs that recruit and graduate few students; reduce courses with low enrollments; adjust requirements, within accreditation standards, for majors that require too many credits for graduation; encourage higher course loads by students and fill more upper division courses.

- Administration efficiency efforts could include establishing or enhancing utilization or performance rates of commodity processes, pricing for use of classroom and laboratory space, including monitoring research grant revenues generated per square foot; ensure use of common standards within enterprise systems and simplify reporting; and UNM should reduce customization in the enterprise system and consolidate its multiple email systems.

Both universities enterprise resource planning system offers comprehensive and secure applications. LFC contracted with the Computational Analysis and Network Enterprise Solutions, LLC (CAaNES), 50 percent owned by the New Mexico Tech University Research Park Corporation, to conduct a limited information technology review, including security testing of the enterprise resource planning (ERP) system used by NMSU and UNM. Both universities use SunGard's Banner ERP system, which is widely used among higher education institutions nationally and in New Mexico to manage student and financial information. Overall, the system offers a secure and comprehensive suite of enterprise applications of not only accounting functions, but student financial aid, human resources and academic records among others. However, the CAaNES assessment team was the first group to identify a critical vulnerability in the ERP system, which has already been corrected by Sungard. Institutions should regularly update software patches as they are released to ensure the latest protection and functionality, as well as ensure new applications are tested before being brought into production.

Existing budget and accountability models used by NMSU and UNM appear insufficient to control cost pressures and simultaneously improve academic excellence. UNM and NMSU have developed consultative relationships with various campus stakeholders to inform the university budget making process that appears adequate, but that could begin sooner than waiting until after the end of the legislative session. Resource allocation decisions are ultimately made by the Boards of Regents (BOR) upon final budget recommendations made by the president of the university.

Both universities use traditional annual incremental budgeting practices, but have made efforts to incorporate performance into resource allocation decisions and alignment with broad strategic planning. In an incremental approach to budgeting, actors forecast fixed operating costs for the coming fiscal year by adding or subtracting a predetermined percentage from the unit's historical, or base, budget. Overall, resource allocation is largely a centralized function.

Incremental approaches to budgeting are sub-optimal resource allocation schemes for achieving organizational goals, especially during times of resource scarcity. Incremental budgeting models are typically preferred because they are relatively easy to administer, and provide units with resource stability to facilitate operational planning. Incremental budgeting typically does not lead budget-makers to critically evaluate past resource allocation decisions, however, to ensure that they are being directed towards areas of institutional priorities. (Journal of Higher Education, April 20, 2009). This problem is underscored during times of resource scarcity, as an incremental approach typically result in all units being cut by a similar—if not the same—percentage.

Furthermore, under the current budget models, there is considerable distance between those on the ground who are charged with executing university programs and initiatives, and those who are ultimately charged with making resource allocation decisions. Inevitably, this can lead to a breakdown in information loops, whereby those in charge of making budget decisions are too distant from university operations to make an informed appraisal of needs.

Insufficient rationalization and transparency of instructional subsidies between programs and colleges exists. This may result in some receiving more or less funding relative to student credit hour and tuition revenue generated. Growth in differential tuition and course fees creates additional complexity and funding disparities. For example, UNM's business college budget (instruction and academic support) reflects an allocation of about 74 percent of the value of student credit hours generated under the state funding formula, versus about 56 percent at the education college. However, the business college charges much higher tuition for its graduate programs than the education college, tuition not accounted for in the value of SCH produced.

University administrators and policy makers should view formula funding versus college budget very cautiously because of differences in the potential allocation of differential tuition and fee revenue and because the value of student credit hours is used to determine whether a university receives an adjustment to their base budget and is not a distributional formula. However, extreme situations may raise questions. For example, at NMSU most colleges' budgets reflect between 58 and 63 percent of formula funding, except the college of health and social services which was at 39 percent in FY10. There is no doubt that cross-subsidies exist and are not transparent.

Alternative budget practices that help ensure investments in academic quality, such as responsibility centered management, would help realign and extend responsibilities to efficiently manage costs and create incentives for managed growth. Responsibility Centered Management (RCM) is a resource and cost distribution model that seeks to provide academic managers with incentives to align resource allocation decisions with departmental goals, as well as student needs, and to more closely monitor total program costs. RCM is usually implemented at the college level; this allows academic deans to cross-subsidize programs that may not generate a lot of revenue but that are integral to a college's mission.

Under RCM, academic units are allowed to retain the majority of the revenues they generate—both through tuition and fees, as well as student-credit hours. As a result, college administrators have an explicit incentive to attract students by offering quality instruction, easily navigable administrative processes and courses that meet students' needs and interests.

In addition to having more of a direct role in determining their operating budget, RCM also requires that colleges take greater responsibility for the total cost of their operations (e.g. maintenance, utilities, central administrative services etc). In an RCM framework, colleges pay central administration for these services, and therefore become more aware of the 'total' cost of offering instruction. This provider-consumer relationship makes academic managers more interested in developing ways to reduce their consumption of services, thereby reducing total costs to both the college and institution. Successful RCM models at both private and public universities emphasize accountability for operating within the revenues that colleges generate—bailouts from central administration are discouraged as they undermine the notion that colleges must be held accountable for managing costs, as well as generating revenue.

As is the case with any resource distribution model, RCM can create explicit, and implicit, incentives that may lead colleges to engage in sub-optimal behavior. These behaviors, as in any model, have to regulated and controlled through central administration, such as the Provost and President's offices.

Recommendations

NMSU & UNM

- Realign budgeting practices to a system of "Incentives for Academic Excellence" based on responsibility center management principles. The approach should consider allowing an agreed upon portion of tuition and state I&G funding to flow to colleges, which would be responsible for their full cost of instruction, academic support, operations and maintenance. Cross-subsidies between colleges and/or departments based on productivity should be explicitly rationalized and justified to the BOR and be in alignment with strategic university priorities. Cost pools for commodities, institutional support and O&M services and executive strategic initiatives should be established. Expected level of reserves should be established at each college and only excessive balances should have specific plans for their eventual, non-recurring use in alignment with approved strategic priorities.

- Develop and implement a comprehensive re-prioritization process for academic and support programs.

- Implement a regular sunset review of academic programs to ensure continued effectiveness, efficiency, and need, including consolidation and merging of programs, if necessary.

- Develop target subsidy levels for athletics, alumni association, and foundation programs and a plan to achieve the target level within five years.

- Consider methods to demonstrate to students and their families that tuition increases support improved academic quality of the institutions with clear goals and identifiable results.

FACULTY PRODUCTIVITY MUST BE MONITORED AND CONTRIBUTIONS EFFECTIVELY COMMUNICATED.

Faculty represent about a fifth of employees and between 28 percent of salary expense at NMSU and UNM and are a highly valuable resource for meeting institutional goals. University faculty are the primary service delivery providers of post-secondary education and are responsible for teaching and mentoring students, conducting research and scholarly work, assisting with internal institutional administrative duties and sharing their expertise with their communities through public service. At research universities, such as UNM and NMSU, faculty also conduct more intensive research activities and depending on the discipline often teach less than in other post-secondary institutions. Higher education is an extremely labor intensive field, which requires careful monitoring and management of human resources, including faculty. Higher education and their faculty have come under increased scrutiny and criticism stemming from a public perception that faculties shape their activity to meet their own wants and needs rather than those of students or the institutions that employ them. As responsible stewards of public monies, universities need to be able to provide consistent and reliable information on institution and faculty productivity (Middaugh, 2001).

The FY11 budget for faculty positions on UNM-Main campus includes 1,136, or about 18 percent of all FTE positions, and $81.8 million, or 28 percent of all salary costs. At NMSU, FY11 faculty positions total 924, also about 18 percent of all positions, and $65.5 million in salaries, or about 28 percent of all budgeted salaries. Professional staffs at both universities constitute the largest single employee group in FTE as well as total salary costs.

Compared against two different peer groups, tenure/ tenure-track faculty at UNM earn less, but the gap has closed since 2002, with faculty earning about 90 percent of their peers. Since 2002 the average salaries for tenure/ tenure-track faculty at UNM, equated to a nine-month contract, have steadily increased from $63,202 to $81,321 in 2008. From 2005 to 2008, average salaries in all faculty categories increased, with full professors receiving the largest increases, from $79,889 to $104,011.

For tenure/ tenure-track professors, the gap between UNM and the CHE peer group has narrowed slightly from 2002 to 2008. In 2002, UNM faculty earned 91 percent of the CHE and student referent peer group averages; by 2005, faculty earnings had increased to 93 percent of their CHE peers and 95 percent of their student referent peers. The rate of salary changes has been greatest for assistant, associate, and full professors, exceeding the peer group average and helping to close the salary gap between UNM and these institutions. Professors' salaries at UNM, for example, have increased 16 percent from 2005 to 2008, whereas the peer group average has increased 13 percent during that same time.

Faculty Salaries as a Percentage of Peer Groups, UNM

Source: IPEDS

At NMSU, the average salaries of each of the four faculty categories reported are lower than the average of each of their peer groups. From 2002 to 2008 salaries at NMSU increased $9,811 from $58,356 to $68,167, but they have not kept pace with the
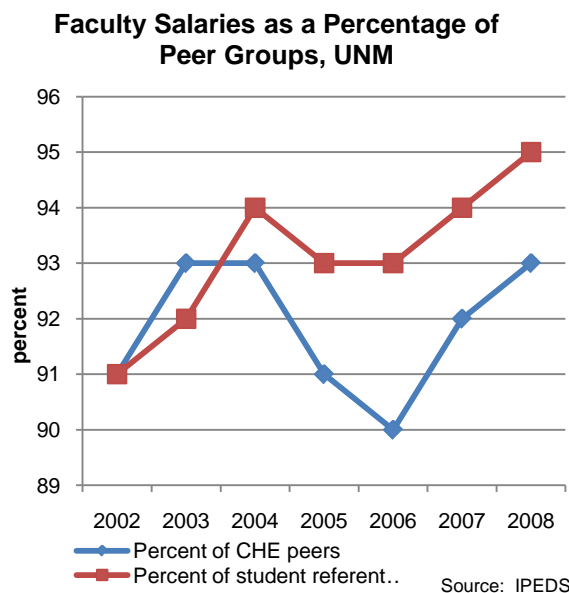
increases for their peer group, which has increased more than $15,000 during the same time period. As a result, NMSU has lost ground, despite substantial investments, in tenure/ tenure-track salaries. For example, NMSU professors earned approximately 90 percent of the peer group's salaries in 2002, decreasing to approximately 85 percent by 2008. Across all faculty categories, NMSU's faculty ranked fourteenth, only ahead of Montana State University and UT El Paso. The greatest disparity at NMSU is for full professors, who on average earned 89 percent of the average peer salary in 2004; that amount decreased to 81 percent in 2008. The gap widened for instructors, assistant professors, and associate professors, as well, from 2004 to 2008. By 2008, NMSU paid the lowest of its peer group for full professors ($80,748/ year) and assistant professors ($56,096/ year).

NMSU and UNM professors' salaries exceed the state's median income levels at a higher rate than the professors in their peer groups. Median income levels in New Mexico are lower than the median income levels in the states comprising each of the four peer groups.

In the states that make up the peer groups, professors on average earn more than the median incomes in those states. In New Mexico, the percentage difference between professors and the median income level is greater at UNM than for either peer group. The average tenure/ tenure-track salary at UNM in 2007, $78,277, was 178 percent of the median income in the state, $44,081. In the same year, professors in the CHE peer group earned 170 percent ($84,689) of their states' median income ($49,920) and professors in the student referent peer group earned 159 percent ($83,318) of their states' median income ($52,505).

Participation in the University of Delaware Study of Instructional Costs and Productivity as well as internal studies have resulted in a rich set of data to inform understanding of trends at both universities. Colleges and Universities are susceptible to what Zemsky and Massey (1990) termed "academic ratchet": increased costs with fewer courses being taught by the most highly qualified instructors. In response to these concerns, since 1992 the University of Delaware Study of Instructional Costs and Productivity (Delaware Study) has gathered data from over 500 colleges and universities. This allows the participating institutions to answer questions such as:

- How do the teaching loads of tenure/ tenure-track faculty at our school compare with national benchmarks?
- What proportion of our undergraduate teaching is done by regular faculty, and how does that compare with other colleges and universities?
- Does it cost more to deliver a student credit hour of instruction at our institution than at our peers'?
- How do externally funded research and service within our academic departments measure up against our competitors?

UNM submitted data for the Delaware Study from 2005-2008; NMSU submitted data in 2008.

The percentage of tenure/ tenure-track faculty at UNM-Main and NMSU varies by college but has generally remained steady. In the Social Sciences division of the College of Arts and Sciences, for example, the percentage of tenure/ tenure-track faculty has stayed at or above 60 percent from 2006 to 2009. In Fine Arts, by contrast, the 4-year rate hovers around 40 percent. Some colleges, like Law, have experienced an overall decline from 57 to 39 percent from 2006 to 2009; this is more a result of an increase of "temporary faculty"—from 13 to 41 members—than a decrease of tenure/ tenure-track faculty—from 33 to 31 members.

Percentage of Tenure/ Tenure-track Faculty, UNM

2006 2007 2008 2009

Source: LFC

NMSU's Engineering College has the highest proportion of tenure/track professors on campus with 83 percent. By contract the Health and Social Service College relies the most on non-tenured faculty, about 64 percent. Between FY07-FY09, the Education College increased its non-tenured faculty from 80-98 and their share of total faculty from 57 to 62 percent.

The amount of classes and sections taught by tenure/ tenure-track faculty varies greatly over time and between academic disciplines. In Biology at UNM, for example, the percentage of tenure/ tenure-track-taught courses has steadily increased from 20 percent to 43 percent to result in a slightly higher percentage of Student Credit Hours taught by tenure/ tenure-track faculty at UNM than the Peer Group (43 percent vs. 42 percent) in 2008. In contrast, over the same four years, in Chemical Engineering the percentage of tenure/ tenure-track-taught courses has steadily decreased from 74 percent to 41 percent. While the initial percentage was much closer to the Peer Group average (72 percent), the most recent rate (41 percent) is 31 percentage points lower than the Peer Group average.
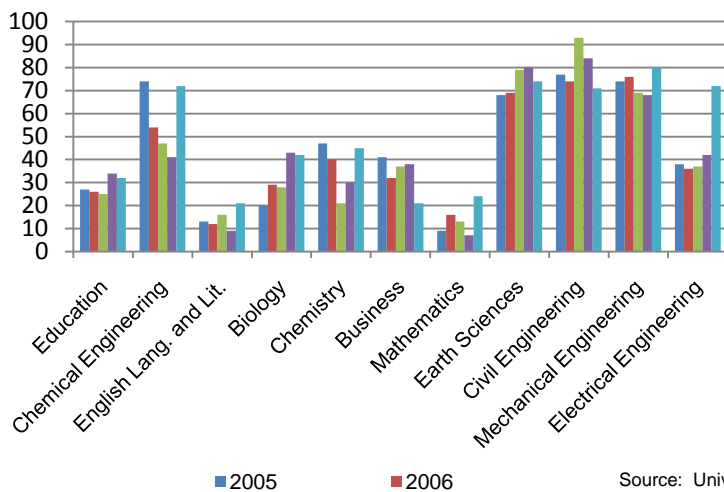
Percentage of Undergrad Student Credit Hours Taught by Tenure faculty, UNM

2005 2006

Source: University of Delaware

This snapshot of the data reported for 37 academic disciplines at UNM leads to questions around hiring trends and staffing patterns likely to be of interest both at the administrative and department levels.

At NMSU from FY07-FY09, the percentage of undergraduate student credit hours taught by tenure/ tenure-track faculty increased in some areas, such as education (36 percent to 40 percent), but decreased in others, like engineering (79 percent to 67 percent).

Percentage of Undergrad Student Credit Hours Taught by Tenure Faculty, NMSU
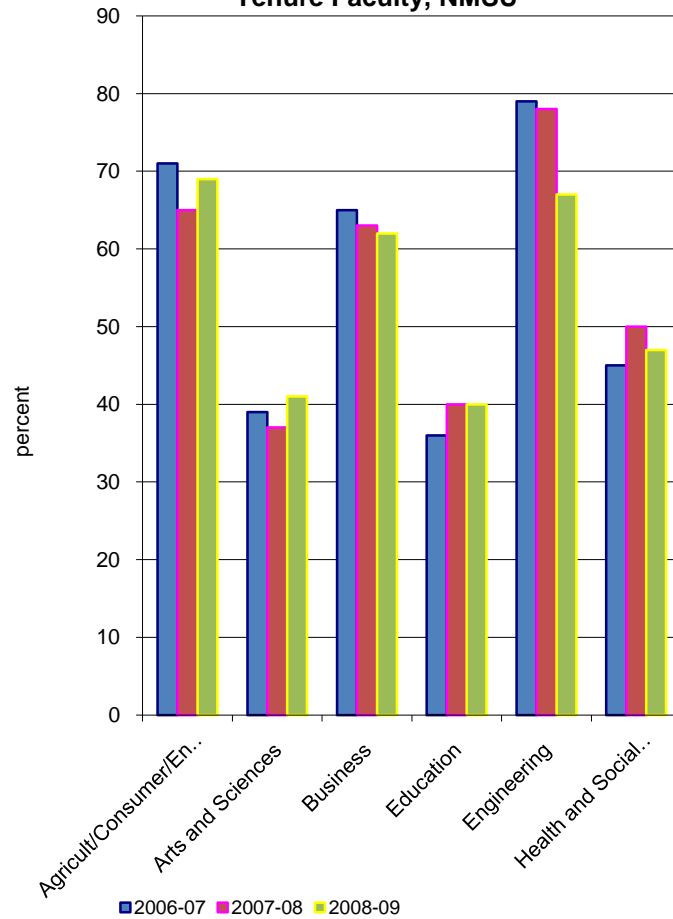
Source: NMSU

Trends in faculty productivity can also be measured by the total number of SCH taught. Trends in this data mirror the percentages of SCH taught by tenure/ tenure-track faculty. In Biology, for example, the number of Student Credit Hours taught by tenure/ tenure-track faculty increased by two and one-half times from 70 SCH/ FTE in 2005 to 184 SCH/ FTE in 2008.

Undergrad Student Credit Hours per Tenure Faculty, UNM

Source: University of Delaware
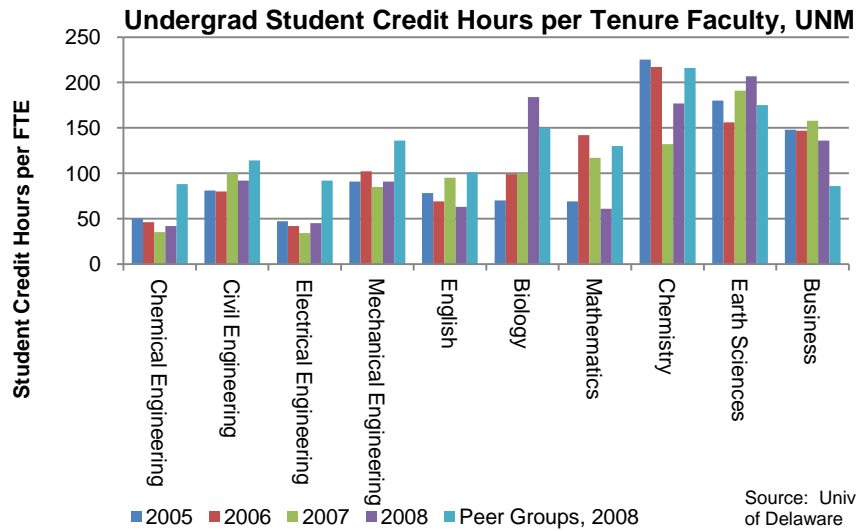
At NMSU, the number of undergraduate SCH taught per tenure/ tenure track faculty remains steady over the three year period for each college. However, the variation between colleges is great, from a low of approximately 100 SCH/ FTE in Agricultural Science to a high of over 400 SCH/ FTE in Business.

Undergrad Student Credit Hours per Tenure Faculty, NMSU

Legend: ■ 2006-07 ■ 2007-08 ■ 2008-09
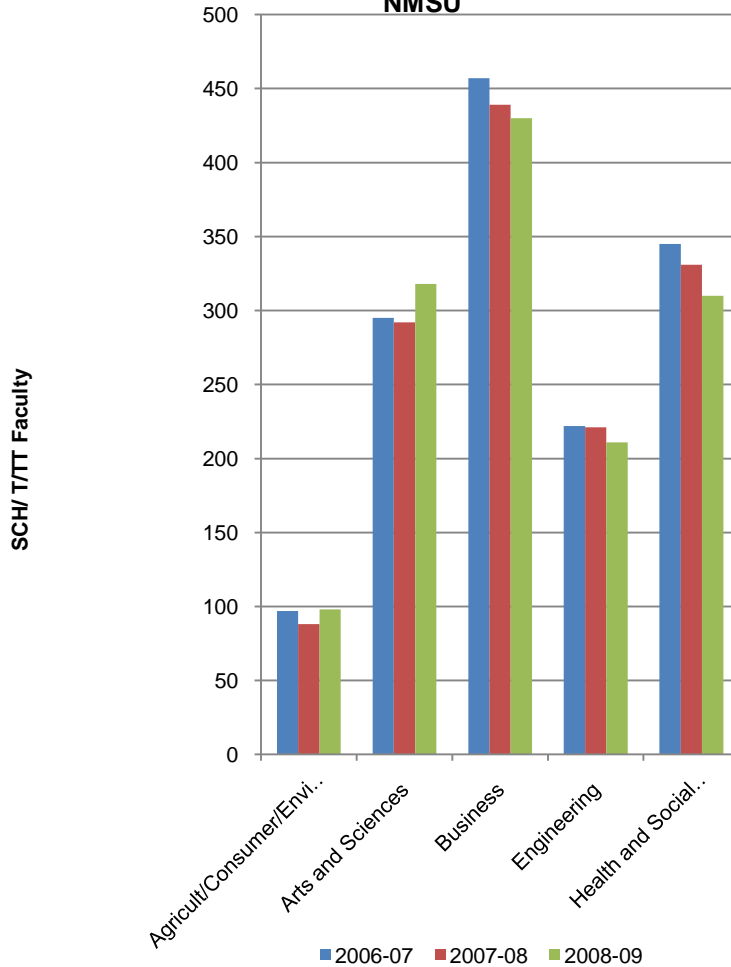
Source: NMSU

While biology costs at UNM have risen by 48 percent from 2005 to 2008, tenure/ tenure-track faculty productivity has increased by 163 percent during that same time. The direct instructional cost per student has grown from $5,490 in 2005 to $8,100 in 2008, though this is still below the Peer Group average of $8,938/ student. The number of student credit hours, the number of organized class sections, and the percentage of organized class sections taught by tenure/ tenure-track faculty have all increased during this time, as well. Organized class sections have gone from 1.1/ FTE faculty in 2005 to 1.4/ FTE in 2008, exceeding the Peer Group average of 0.9/ FTE faculty by 56 percent. Student credit hours have increased from 70 SCH/ FTE in 2005 to 184 SCH/ FTE in 2008; the Peer Group averaged 150 SCH/ FTE in 2008. This has resulted in a doubling of the percentage of

Number of Biology Undergraduate and Graduate Class Sections per Tenure Faculty, UNM

Legend: ■ Undergrad ■ Grad
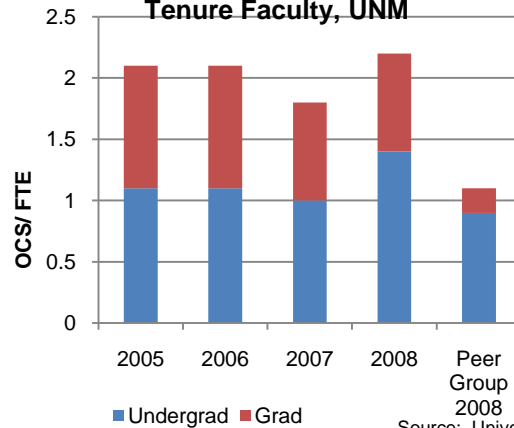
Source: University of Delaware

undergraduate student credit hours taught by tenure/ tenure-track faculty at UNM from 20 percent to 43 percent.

Tenure/ tenure-track business faculty at UNM are teaching slightly fewer students in 2008, though they exceed the Peer Group productivity average and do so at lower costs. The percentage of undergraduate student credit hours taught by tenure/ tenure-track faculty nearly doubles the Peer Group average in 2008—38 percent compared with 21 percent; similarly the number of student credit hours taught by each tenure/ tenure-track FTE at UNM, 136 SCH/ FTE, exceeds the Peer Group average, 86 SCH/ FTE, by 58 percent.
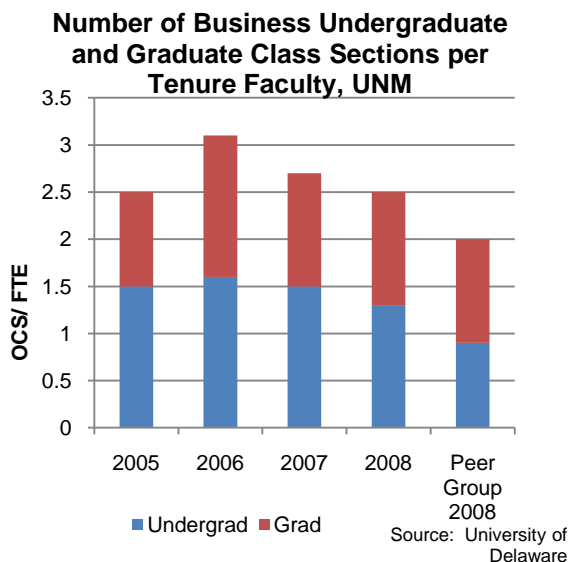
Number of Business Undergraduate and Graduate Class Sections per Tenure Faculty, UNM

Source: University of Delaware

Both universities could improve executive monitoring of faculty teaching loads, which would also aid informing the public and policymakers of faculty contributions. UNM has not consistently implemented its faculty handbook policy to monitor and report faculty teaching loads information to the Provost, though the university was in the process of developing a new reporting and tracking format. NMSU reports some productivity data publicly and to its BOR, but could improve executive management and public dashboard reports and more specific expectations. Deans at both universities had a variety of systems in place for departments to report faculty teaching loads and productivity information, primarily as a tool for evaluations. Rolling up the information into executive dashboard reports could be useful, particularly if combined with online analytic software to monitor trends and do comparisons at various levels within the institution. NMSU has been implementing an executive reporting system that could serve as a useful platform for this type of data.

Recommendations

UNM and NMSU
- Develop and report comprehensive executive dash board reports to monitor aggregate faculty teaching loads, productivity, distribution of teaching loads among permanent and temporary faculty, research and other scholarly productivity data at the departmental and college level. Make the information available on the university website and report to BOR at least semi-annually.

- Executive management and deans should consider specific goals for each measure to facilitate identification of excellent or sub-optimal results and identify stressors that may require a change in funding or faculty lines.

THE LEGISLATIVE LOTTERY SCHOLARSHIP, AS CURRENTLY STRUCTURED, IS SUCCESSFUL BUT UNSUSTAINABLE.

Since 1996, more than 61,000 New Mexicans have attended and more than 25,000 have graduated from New Mexico's colleges and universities through the Legislative Lottery Scholarship (LLS). The LLS has improved access by making higher education more affordable. In 1992 and prior to the LLS, New Mexico ranked 37th in the nation in terms of high school graduates enrolling directly into college. By 2006, the percentage of high school graduates enrollments improved from 50 percent in 1992 to over 70 percent. In 2006, New Mexico's national ranking was 6th on this metric.

Lottery Scholarship Awards and Students: 2003-2009
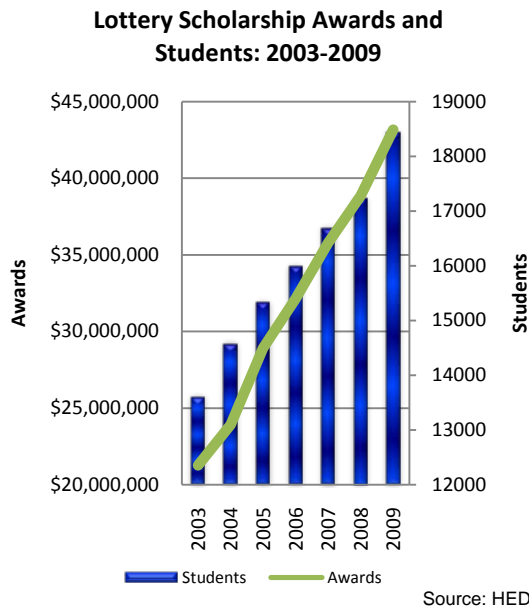
Students qualify for the Lottery scholarship in their first semester of college immediately following their high school graduation and funding begins in the second college semester. Lottery recipients must have graduated from a New Mexico public high school, an accredited New Mexico private high school, or have obtained a New Mexico GED, but there are no requirements relating to high school curriculum, class rank, or GPA. The design of the program implicitly assumes that a New Mexico high school diploma indicates adequate preparation for success at a research institution. To maintain the scholarship, a student must complete 12 credit hours per semester and keep a 2.5 cumulative GPA. The Lottery scholarship pays 100 percent of tuition for eight consecutive semesters of eligibility beginning with the second semester of college. In FY09, there were 18,426 Lottery recipients statewide with an average award of about $2,350 for a total expense of about $43.3 million.

A key objective of the scholarship is to encourage students to complete a four-year degree in no more than nine semesters. New Mexico Administrative Code (NMAC 5.7.20.6) sets degree completion as a goal of the LLS. The objective "is to encourage New Mexico high school students to pursue a postsecondary education in New Mexico to complete a first four-year degree within a maximum of nine (9) semesters." Despite this goal, HED defines full time enrollment as 12 or more student credit hours (SCH) per semester. If a student earned 12 SCH per semester, they would have 108 credits hours after nine semesters, well short of completing a degree as most bachelor's degrees require about 130 credit hours. A requirement of 15 SCH or more per semester is better aligned with the scholarship's goal of timely graduation.

Lottery Success Scholarship Requirements
Requirements to be "ELIGIBILE" for the scholarship:
A student must
- Be a New Mexico resident,
- Have graduated from a New Mexico public high school, an accredited New Mexico private high school, or obtained a New Mexico GED, and
- Be enrolled full-time and complete 12 credit hours and earn a 2.5 GPA in the first semester immediately following high school graduation (Merit component).

Requirements to "EARN" the scholarship:
To earn the scholarship each semester, a student must
- Be enrolled full-time and complete 12 credit hours, and
- Earn a 2.5 grade point average.

Source: NMSA 21-1-4.3 and NMAC 5.7.20

Students who have the skills and preparation to take at least 12 student credit hours (SCH) and maintain a 2.5 GPA are more likely to graduate than students who do not, regardless of the LLS.
In general, students who earn scholarships with higher merit components tend to graduate at higher rates. UNM's graduation report indicated that students who received the Prestige scholarship, which has a higher merit component than the lottery, had a six-year graduation rate of 75.7 percent, about 20 percentage points higher than LLS recipients. Lottery recipients graduate at higher rates than in-state students who did not achieve the merit requirements to be eligible for the scholarship. Lottery recipients who maintain the scholarship graduate at higher rates than those who do not. NMSU provided data indicating that students with a stronger high school GPA are able to earn and maintain the scholarship at higher rates than those with lower high school GPA. This data is provided in the appendix.

While simply sending people to college has some benefits, the primary return on investment of lottery scholarships is assisting students to complete degrees. UNM reported that six-year graduation rates for lottery recipients are almost 15 percentage points higher than the University as a whole, 58 percent compared to 43 percent. About 42 percent of lottery recipients did not graduate in six years. Some groups of students who did not receive a lottery scholarship graduate in four years at higher rates than lottery recipients. For example, UNM provided data indicating that students who were not eligible for lottery (those who came from out of state or delayed entry into college) and whose first college semester GPA was greater than 2.5 had a four-year graduation rate of over 22 percent compared to a four-year graduation rate of almost 14 percent for lottery recipients. The data suggest that although not every student who receives the LLS is adequately prepared to succeed in college, for those students that do possess the capacity to succeed at college; the LLS makes college attendance more affordable. A change in the LLS program will more likely impact overall college enrollment patterns than it will graduation rates.

UNM
Graduation Rates by Lottery Scholarship Status
2003 Student Cohort

Source: UNM
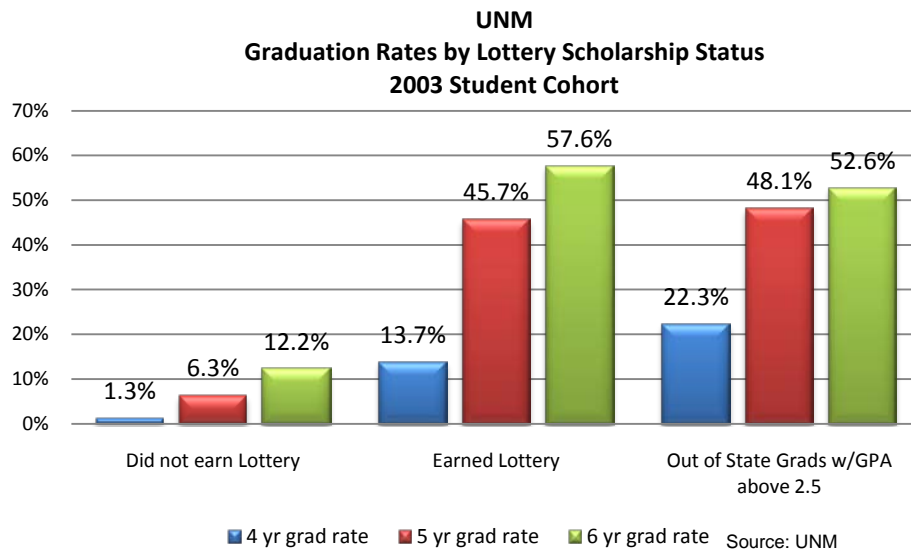
The LLS alone does not appear to 'cause' students to graduate, based on an NMSU regression model. NMSU's Research, Evaluation, and Assessment staff has taken the initial steps to complete a study on the impacts of the LLS on graduation. NMSU data shows that students with a higher high school GPA are more likely to maintain the LLS for 7 or 8 semesters. NMSU has already developed a logit regression model to assess the impacts of LLS and other variables, including high school GPA, ACT scores, and family income, on graduation. Although the initial model does not account for more than 40 percent of the variance in graduation, NMSU is to be commended for developing the initial model and subsequent models will likely incorporate variables for institutional programs and practices that impact graduation as well. NMSU's efforts have indicated that while maintaining the LLS is positively correlated with graduation, other factors contribute to student success as well. NMSU provided the graph below.

Figure 1. Graduation Rates Before and Since the Lottery Scholarship
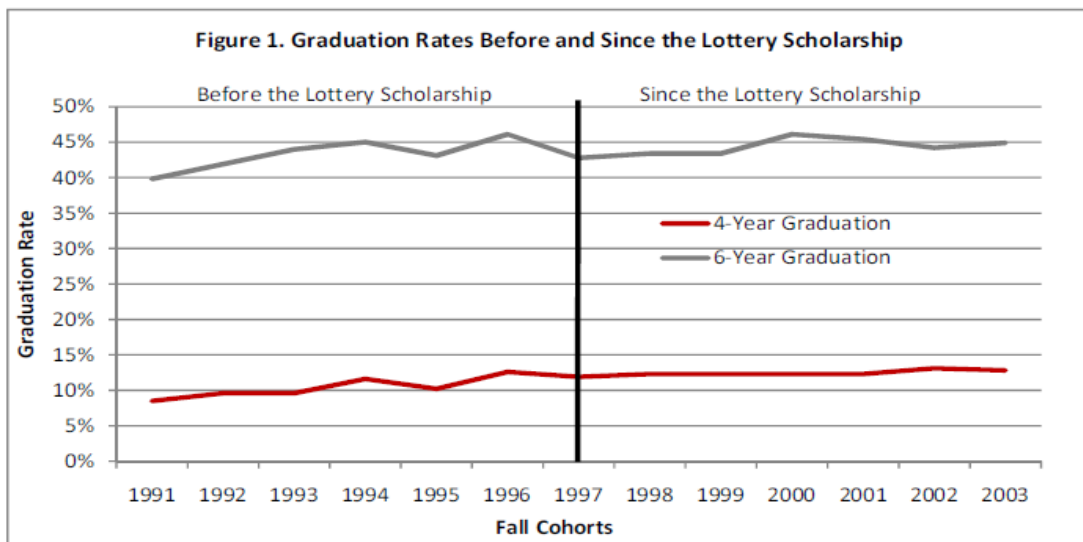
Students from higher income brackets tend to earn the LLS at higher rates. Data provided by NMSU shows that about 30 percent of students from families with incomes between $20,000 and $39,999 receive the Lottery scholarship while over half of the students from families with income over $100,000 earn the Lottery. This outcome is a product of New Mexico's achievement gap whereby economically disadvantaged students are less likely to achieve at the levels required to qualify for, earn, and maintain the Lottery Scholarship.
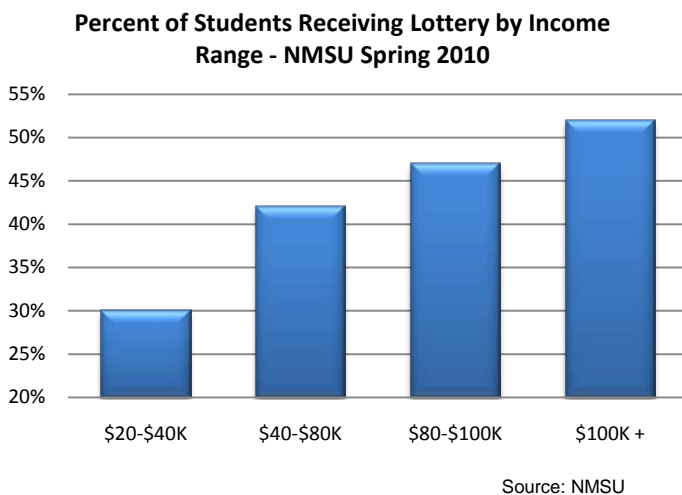
Percent of Students Receiving Lottery by Income Range - NMSU Spring 2010

Source: NMSU

The solvency of the Lottery fund is vulnerable due to stagnant revenue streams and tuition and enrollment increases. In 2007, the Legislature addressed solvency issues and altered the lottery fund distribution by mandating minimum monthly contributions to the program's scholarship fund of 30 percent of

gross revenue from ticket sales. Lottery fund revenues are relatively stable; however total gross revenues have slightly declined in four of the last five fiscal years (FY05-FY09). Lottery fund expenses, which are functions of rising tuition costs and an increasing number of recipients, have risen rapidly. FY09 was the first year that Lottery expenditures of about $43.2 million exceeded lottery income for education of about $41.5 million. The fund balance declined from FY08 to FY09 which leaves a smaller pool from which to earn interest. The decreased fund earnings combined with an increasing number of students receiving the scholarship and the increases in tuition form a serious threat to long-term fund sustainability.

The State must quickly identify ways to extend the solvency of the Lottery fund and take action to reduce lottery fund expenses. Given New Mexico's current fiscal situation, it will likely be difficult to maintain the current level of state support to higher education institutions. Substantial tuition increases are also likely. UNM recently raised tuition 8.5 percent; NMSU raised tuition 8 percent. Assuming a 9 percent tuition increase, the projected FY12 Lottery balance of about $29 million will be less than half of what it was in FY09, $66.5 million, and the balance in FY13 will be negative. While projections indicating that the Lottery fund will be broke in FY13 could be viewed as 'worst case' scenarios, even 'best case' scenarios are concerning. Assuming a 5 percent tuition increase, slower growth in the number of recipients, and moderate increases in lottery revenues, the Lottery fund will have a negative balance in FY15.
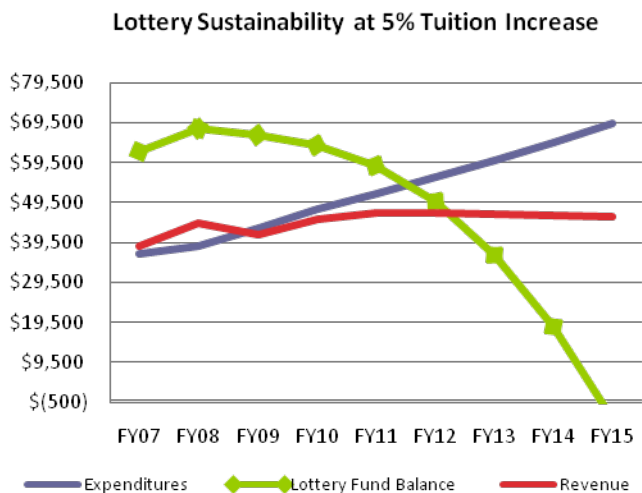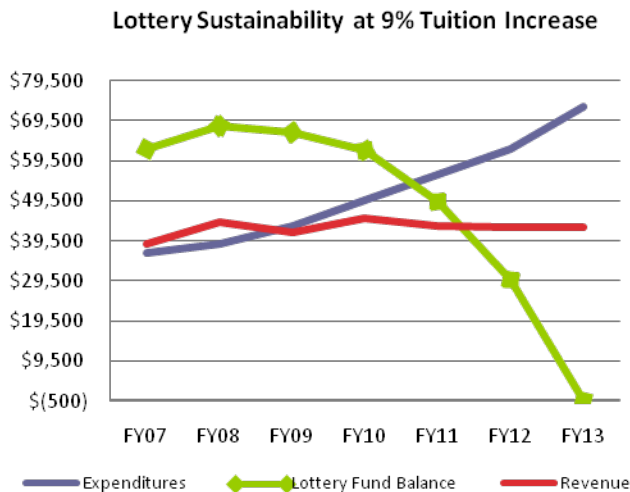
More and more students are eligible for and receive the LLS. Since inception of the lottery in 1997, both the percentage of the freshmen class eligible for the lottery and the percentage of eligible students that earn the lottery have been generally increasing. Lottery participation of all UNM students has grown from about 6 percent at its inception to about 30 percent. Currently, over 80 percent of the incoming freshmen class at UNM and about 70 percent of freshmen at NMSU are eligible for the lottery. In the last few years,

Lottery Sustainability at 9% Tuition Increase

Lottery Sustainability at 5% Tuition Increase

about one third of the students initially eligible for the lottery did not earn it in the first semester, so over half of the incoming freshmen class is on the lottery scholarship by the second semester.

Lottery Eligibility: UNM '97-'09

Source: UNM
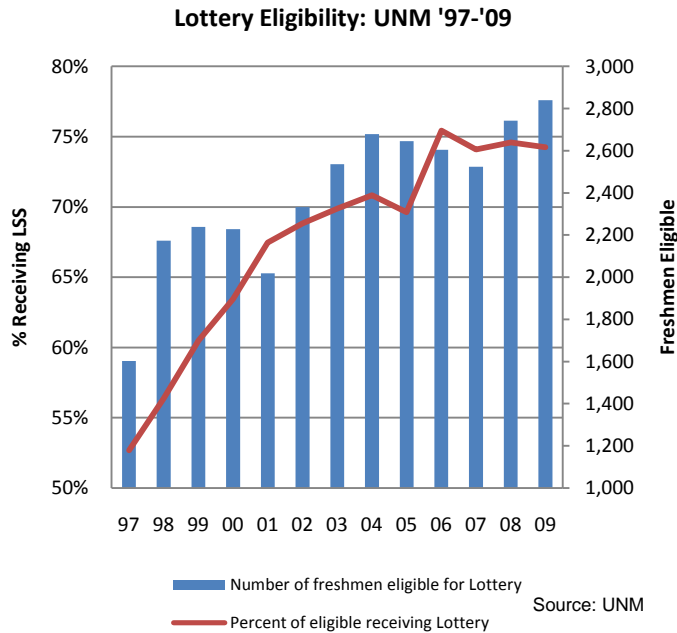
As the price of tuition rises, the value of the Lottery scholarship also rises. Receiving a Lottery scholarship does not mean that the recipient attends college for free because the Lottery does not cover the full cost of attendance. The Lottery pays about 20 to 25 percent of total costs of attendance and most lottery recipients take out loans. NMSU reported that of the Fall 2003 cohort, over half of the graduating lottery recipients had debt at graduation. The LLS is worth more to a student attending UNM than Central New Mexico Community College (CNM) as the cost of attending CNM is less than a fourth of the costs to attend the UNM.

Statutes envision paying less than 100 percent of tuition should funds not be available. However, it is unclear that this is the optimal course of action. Reducing the amount of tuition the LLS covers does not allow the state to prioritize the use of lottery funds; it is simply an across the board reduction. Other states have raised expectations for student performance by increasing the eligibility requirements for similar programs, such as Georgia's Hope scholarship. The idea is to allocate increasingly limited resources in a way that encourages students to graduate in a timely manner before those resources are gone.

As students progress through college, many lose their lottery scholarship and take out loans. Most students lose the lottery because they failed to meet both the GPA and the student credit hours requirements. More students lose the lottery due to the GPA requirements alone than the student credit hour requirements. For spring of 2010, NMSU had a freshmen class of 2,208 students of which 47 percent were on the lottery and a senior class of 3,867 students of which 22 percent were on the lottery. Conversely, 35 percent of the freshmen class took out a loan and 53 percent of the senior class took out a loan.
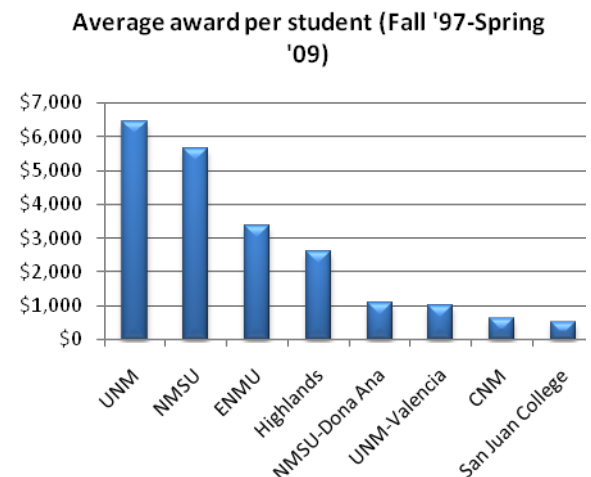
Of 100 UNM Freshmen in 2005...

[Bar chart showing values for 6 categories:]
- Are "Eligible" for the Lottery: ~85
- "Earned" the Lottery: ~60
- Keep it for 1 year: ~43
- Keep it for 2 years: ~36
- Keep it for 3 years: ~32
- Keep it for 4 years: ~9
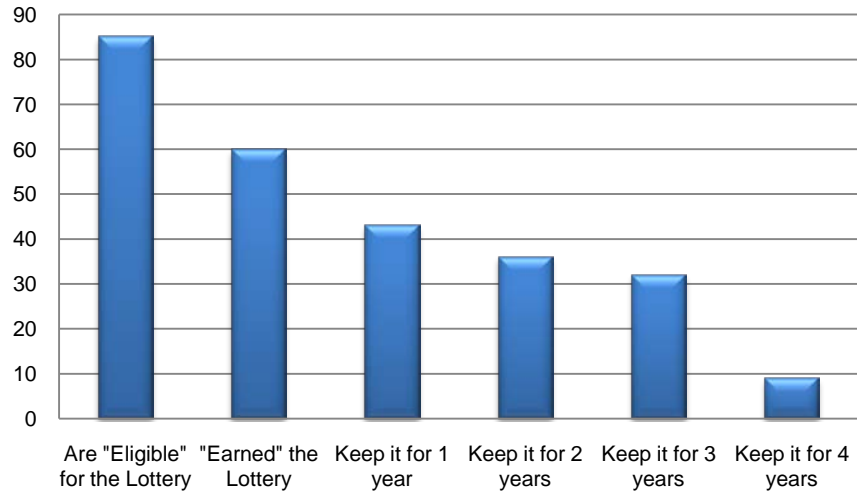
Source: LFC analysis of UNM data

Students who received a Bridge scholarship but did not meet the lottery qualifications have a diminished chance for success. The UNM graduation study reports that only 15 percent of the students who were offered the Bridge but did not qualify for the lottery graduated in six years, whereas 55.5 percent of the students who received both the bridge and the lottery graduated in six years. About 25 to 35 percent of Lottery eligible students received the bridge scholarship but did not actually qualify for the Lottery. The high rate of bridge recipients failing to become lottery recipients raises concerns about the effective use of the Bridge scholarship. UNM and NMSU reported that those who lost their eligibility for lottery in their first college semester had a high school GPA of just over 3.0, whereas those that maintained their eligibility had a high school GPA of about 3.4. The Bridge scholarship only requires a 2.5 high school GPA, and given that the high school GPA of those that lose Lottery eligibility is over 3.0, serious consideration should be given to increasing the GPA requirements to receive a Bridge scholarship to ensure that Bridge scholarship funds are effectively used.

Percent receiving finanical aid by class - NMSU Spring 2010

[Grouped bar chart showing Lottery, PELL Grant, Loan for each class:]
- Freshman: Lottery ~47%, PELL Grant ~39%, Loan ~35%
- Sophomore: Lottery ~41%, PELL Grant ~38%, Loan ~36%
- Junior: Lottery ~39%, PELL Grant ~43%, Loan ~44%
- Senior: Lottery ~22%, PELL Grant ~48%, Loan ~53%

■ Lottery ■ PELL Grant ■ Loan

Source: NMSU

Recommendations.

Higher Education Department
- HED should immediately convene a task force to develop and recommend changes to be made to preserve the lottery scholarship fund. These recommendations should be presented before the 2011 Legislative Session. Ideas that warrant consideration and analysis include:
  o Increasing the minimum student credit hours requirement from 12 per semester to 15 per semester or 30 per year. This would enhance the merit component of the scholarship and require a course load that leads to degree completion in four years. New Mexico Administrative Code (NMAC) 5.7.20 describes the purpose as encouraging "New Mexico high school students to pursue a postsecondary education in New Mexico to *complete a first four-year degree within a maximum of nine (9) semesters*"; however the minimum standards set to maintain the scholarship will not result in a degree in nine semesters.
  o Consider separate Lottery eligibility requirements for research institutions, four-year colleges, and two year colleges. Eligibility for research institutions could have a higher merit component than requirements for two year colleges. Students who wish to use the Lottery for more demanding and more expensive institutions should have to demonstrate they have the needed skills and knowledge to succeed.
  o Consider setting high school performance standards (GPA, college preparation, class rank) as the basis for awarding the LLS. Consider requiring coursework in high school that contributes to success in college.
  o Changing the way the Lottery to pays for remedial coursework. Consider requiring that remedial courses be taken at lower cost institutions such as two year institutions or branch campuses. Consider excluding remedial courses as counting toward the minimum credit requirement.
  o Consider establishing a 'means' test for Lottery eligibility.

UNM and NMSU
- Institutions should analyze the use of Bridge Scholarships to ensure success and explore ways to use the Bridge scholarship more strategically and selectively. Consider awarding the Bridge scholarship to students that are close to graduation and have exhausted the Lottery and other financial aid.

- Institutions should continue to evaluate the impact of the LLS on graduation. Data analysis can identify the traits common to students who are able to maintain the lottery for eight semesters. This information can be revealing and guide decision makers contemplating changes to the LLS.

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August 9, 2010

Mr. Charles Sallee
Legislative Finance Committee
325 Don Gaspar, Suite 200
Santa Fe, NM 87501

Dear Mr. Sallee:

On behalf of New Mexico State University, I wish to thank you for the opportunity to provide our formal response to the LFC Staff report "Higher Education in New Mexico: Phase I—New Mexico State University, University of New Mexico." We understand that the purpose of this report is to review higher education in New Mexico in general and NMSU/UNM in particular.

Our state and nation face trying fiscal challenges this year and for the foreseeable future. New Mexico's historic support of education is worthy of special recognition and we endorse efforts to continue high levels of support. At the same time, we recognize it will be difficult to sustain current levels of support given tightening constraints on our state's revenues. It is in our combined best interest to seek budgetary solutions and new approaches to management of the system itself. We appreciate and are encouraged by the interest that New Mexico's Legislative Finance Committee has in examining the effectiveness of the New Mexico higher education system, and we respect the efforts and energies of those staff members who have worked so very hard to produce a useful evaluation report.

On the whole, we agree with the five leading arguments made in the report, which point to areas where we collectively need to improve productivity, efficiency, and coordination among our higher education institutions.

The NMSU system consists of five campuses: NMSU Alamogordo, NMSU Carlsbad, NMSU Dona Ana Community College, NMSU Grants and NMSU Las Cruces. In addition, our system includes three public service components: the New Mexico Department of Agriculture, the Agriculture Experiment Stations and the Cooperative Extension Service. These divisions, along with the university, have a statewide mission and serve communities, businesses and industry with research, educational programs, and hands-on support. Correspondingly, the support infrastructure established at NMSU reflects these system-level responsibilities that must be met by both the Board of Regents and the university's administrative units. The historic role of the state's land-grant institution clearly extends, by necessity of law, to a much broader reach than has been captured by the scope of this review.

Many issues raised in this evaluation relate to the performance of New Mexico's institutions of higher education as a whole, and many of the issues discussed also reflect on the combined activity of the entire higher education system and the system of public education. Solutions to the challenges we collectively face will impact higher education across all of New Mexico and will require the coordinated and collaborative efforts of all institutions involved.

We agree with the need to contain costs and will strive to improve student performance and graduation rates. At the same time, we are compelled to note that the factor which most drives the cost of higher education in New Mexico is the number of higher education institutions. Put simply, we may have too many to be sustainable. This system is the result of many past decisions. Our state has historically done all within its power to make the opportunity for a higher education available to its citizens. Perhaps no other state has done so much for its citizens in this regard. We did this through significant investment in physical plant and commitment to a robust financial aid system, both of which were built to encourage our citizens to attend our colleges and universities. That being said, the challenge before all of us is whether or not this "system" can now be maintained in light of decreasing state revenues. Of great concern to all is how one might modify our historic approach without severely impacting opportunities for our citizens, and maintaining the high quality of the flagship institutions—UNM and NMSU—that are the focus of this report.

We look forward to working with the Legislative Finance Committee, the auditing staff, and other state bodies that affect the health and growth of our higher education institutions to address the recommendations of this report.   We also hope to add value ourselves by providing additional suggestions for increasing the effectiveness of our higher education system.

Our attached response highlights the specific recommendations of the report and efforts NMSU is making and will make to address them. The response closes with additional recommendations of our own that are given in the spirit of assisting our collective effort to save costs and improve quality.

Again, thank you for your report, and best wishes as you continue your study.

Sincerely,

Barbara Couture
President

NMSU's RESPONSE TO SPECIFIC RECOMMENDATIONS IN THE LFC STAFF REPORT

NEW MEXICO NEEDS IMPROVEMENTS IN THE COST-EFFECTIVENESS OF HIGHER EDUCATION

New Mexico State University agrees with this overall recommendation. We will continue to implement measures to improve cost effectiveness. NMSU is committed to identifying strategies to improve graduation rates and implementing them. We also acknowledge our role in helping our public schools be more successful in producing prepared high school graduates, the primary "fuel" for a higher education system that will increase the number of bachelors, masters, and doctoral degrees attained by students.

Page 24, Recommendation 1: NMSU and UNM should formalize research goals with specific and measurable targets to help inform strategic investments.

Over the next year, New Mexico State University will work with our faculty and external partners to develop goals and strategic objectives for enhancing our research strengths and productivity in several strategic areas. Associated performance metrics will measure research growth, economic impact on the state and the region, jobs created or creation of the job potential, and potential for industry development and/or growth as a result of our research undertakings.

NMSU's "Living the Vision" plan declares our goal: "To be nationally and internationally recognized in research and creative activity." In response to a presidential initiative, the Vice President for Research will be charged to work with a team of faculty and industry leaders to develop a strategic plan for research that will not only set benchmarks for the LTV goal but will specifically define NMSU's research strengths, suggest strategies going forward, and identify specific impacts of research on the economic development of the State of New Mexico. At NMSU, a significant portion of the current budget and employee base is a result of a highly successful history of seeking and obtaining externally non state-funded research grants and contracts. Currently, NMSU Las Cruces brings in over $185,000,000 supporting over 550 employees. This economic benefit is critical to the financial health of our state.

For research to thrive and bring dividends back to the state, we strongly believe in the importance of encouraging individual faculty interests, promoting interdisciplinary collaboration, and identifying strategic areas of research based on core competencies and national needs with specific emphasis on New Mexico. Working with the colleges, we have identified several areas for focused growth and excellence. Each of the areas listed below not only represents a critical need for the nation, but also has specific relevance for economic development in the State of New Mexico. Growth in each of these areas will result in more high-paying jobs for the State and provide motivation for more of our graduates to remain in the New Mexico:

- Renewable energy, including wind, solar, biofuels, and smart grids.
- Space and aerospace, including unmanned aerial vehicles, space physics, aeronautics, instrumentation and related areas.
- Materials science and engineering, including nanostructured materials.
- Biosciences, including emerging pathogens, cancer research, health and biomedical research.
- Preservation and management of natural resources, including water and land resources.

Our challenge now is to align our strengths with industry needs so as to leverage our research capacity to forward economic growth.

Page 24, Recommendation 2: Work with HED to regularly track the employment rates of graduates working in New Mexico.

New Mexico State University is committed to fulfilling our responsibility to produce graduates who are capable of becoming highly successful members of the workforce. Therefore, we take seriously the need for carefully articulated learning objectives and closely monitored outcomes. We stand ready to partner with state workforce efforts, with the understanding that our role is to assure a rigorous academic program designed to meet the needs of the state's employers. We also recognize our responsibility to strategically develop certain degree programs that are of particular importance to meeting the state's workforce needs.

Several years ago, the HED worked with the Department of Labor to identify former students (both graduates and non-graduates) employed across the state with the goal of calculating employment rates. However, this effort has been discontinued. Because of the interactive nature of such tracking, we believe it would be optimally effective for this effort to be coordinated at the state level in collaboration with all of the higher education institutions in the state.   New Mexico State University is willing to participate and assist in this effort. The state may also wish to track employer satisfaction in addition to employment rates, and include both in-state and out-of-state employers, as a true measure of the quality of the degrees being offered.

Page 24, Recommendation 3: Recruit a larger non-resident cohort into the Freshman class.

New Mexico State University is maximizing use of the WUE tuition waiver for students in participating states. Our current targeted focus is students in Arizona and California. Active Alumni Chapters in the greater Phoenix area have been helpful with recruiting. Unfortunately, the WUE tuition waiver does not extend to Texas; the 135-mile Tuition Waiver is critical for NMSU to continue attracting first-time entering students from the greater El Paso area. Unlike UNM, NMSU is within 45 miles of another doctoral granting, major research institution. This waiver helps NMSU compete for quality students within the region. Elsewhere in the evaluation, there is a recommendation to reduce waivers or make them more merit-based, which seems to counter this recommendation.

MANY STUDENTS TAKE TOO LONG TO GRADUATE OR DO NOT GRADUATE AT ALL INCREASING THE COST OF HIGHER EDUCATION FOR STUDENTS AND TAXPAYERS.
New Mexico State University is committed to focusing on student persistence and improved graduation rates. We acknowledge that students' high school GPA and ACT/SAT scores are positively correlated with potential for degree completion, and will work to attract and support students who meet high performance standards. At the same time, we remain committed to providing access to education to all those who are qualified to attend college among the taxpayers of New Mexico.

Page 38, Recommendation 1: NMSU should consider and UNM should continue a gradual increase in admissions standards and requirements.

New Mexico State University agrees that raising the entry requirements for students will increase the percentage of those accepted students that persist to graduation. And while it is only one of eleven

factors stated in the report that influence graduation rates, it seems a logical step to take to raise the graduation rate at any institution.

Enactment of tougher admission standards will impact the opportunity for some of our citizens to attend New Mexico State University. We would hope that any action of this kind can be achieved in such a way so as to not disproportionately negate opportunity for students coming from historically underserved portions of our state's citizenry.

Any admission standard relies upon specific inputs as predictors of success. These include class rank, high school GPA, scores of recognized tests or a combination of these and other data points. All of these "predictors" are impacted by the ability of our state's public education system to help students succeed. Actions to raise entry standards should be coupled with appropriate cooperative planning with public education to address concerns about adequate preparation early on, when intervention can make a difference. Our joint goal should be to afford equal opportunity to all students with talent to succeed. Collaborative planning with the community colleges in our system can help address some preparation issues; another bright prospect is the possibility for increasing college-readiness through supporting NMSU's early college high school program.

We note that care should be taken when considering degree production to be used as a funding benchmark; goals should focus on producing graduates from accredited academic programs prepared to successfully enter society and the work force.

Page 38, Recommendation 2: Institutions should set and announce a higher goal for graduation rates and create action plans to achieve them.

In the next two weeks, NMSU will announce a system-wide presidential initiative to: "Make Graduation Goal #1." Retention and graduation rates are benchmarked regularly in NMSU's plan, *Living the Vision*. Additionally, NMSU's Final Report on our progressive program, the Foundations of Excellence® in the First College Year (Spring 2008), includes a ten-point action plan to improve student success, ultimately leading to improved graduation rates.

According to the chart on page 30, NMSU's four-year graduation rate for 2008 is 13 percent (The stated source is IPEDS data). The four years prior to that, the rate held steady at 12 percent. Increasing the rate to 20 percent by 2015 will be very difficult, but perhaps doable. Doing so implies that changes must be made immediately: the Fall 2011 freshman class is the cohort that will be measured for a four-year graduation rate in 2015. It is important also to have an established process for assessing the four-year graduation rate of community college students transferring into the system.

Numerous units and departments within the university have programs focused on improving graduation rates, especially for our minority and low-income student populations.   Our goal now is to develop a comprehensive plan that touches every student with an intervention known to increase graduation rates. It will begin with a special presidential address this fall to our freshman class, emphasizing the importance of graduation and strategies to meet that goal. We have already implemented additional student support programs. NMSU recently formed an Academic Advising Council to improve student advising. We have also created a financial literacy program as student data have shown that financial

literacy is a major concern of our students. We are also working to improve course availability and access to required courses.

NMSU has received several grants, many specifically focused on underserved populations, to design and evaluate support programs with the ultimate goal of increasing graduation rates. Many of these grants are specific to programs, such as the PRIMOS grant that supports increased degrees in the STEM disciplines. The programs initiated with this grant can serve as models for improving degree completion among a broader array of disciplines.

Additionally, NMSU will investigate the feasibility of creating "funding agreements" with highly motivated, low-income students to encourage and reward them in their pursuit of a bachelor's degree. Other universities have achieved persistence and graduation improvements by connecting financial aid programs to success-oriented habits and activities on the part of their students.   Building on the state's NM Scholars program, this program would support them should they lose the funding provided by the state scholarship due to "bumps in the road" to graduation; such support is often critical for students whose continued enrollment is buffeted by life demands over which they have little control and research has shown to be particularly difficult for low-income students.

Page 38, Recommendation 3: Collaboration between NMSU and local feeder high schools should be greatly enhanced and institutionalized.

New Mexico State University agrees that collaboration between NMSU and local feeder high schools should be enhanced. While NMSU does not yet have a master plan with feeder high schools, the university has implemented several departmental programs which collaborate with local feeder schools (middle and high schools), as well as schools throughout the state to encourage and improve student readiness for NMSU. The Alliance for the Advancement of Teaching and Learning in our College of Education serves as a catalyst for improved education for school personnel, especially for those in the rural schools. Also housed in the College of Education, the Institute for Math and Science Education reaches across the university and the public schools with a wide range of programs that focus on improving math and science learning. The College of Engineering has several educational outreach programs that introduce engineering to middle and high school students. More locally focused programs include Educational Talent Search which currently serves students in the Gadsden Independent School District, and has plans to work with the four high schools in the Las Cruces Public Schools. The Division of Student Success has recently submitted a major grant application that addresses collaboration and data sharing between NMSU and our local feeder high schools to further an understanding of issues that affect student success in college.

One area where we believe we can directly impact high schools is our teacher training and preparation programs. NMSU will remain committed to teacher preparation, especially in the STEM areas that continue to suffer the greatest teacher shortages.

Page 38, Recommendation 4: Not applicable to NMSU

Page 38, Recommendation 5: UNM and NMSU should continually review policies and procedures to identify ways to improve graduation rates.

New Mexico State University acknowledges the need for continuous improvement of our enrollment management processes and a need to have a comprehensive plan for reducing the time to graduation for our students. As noted earlier, one of the presidential initiatives to be unveiled this fall will be actions we will take specifically aimed at improving graduation rates.

As a special emphasis for NMSU's 2008 reaccreditation visit, NMSU participated in the Foundations of Excellence® self-study guided by the Policy Center on the First-Year Experience. This involved a major review of nine dimensions of the first-year experience accomplished by over 50 faculty and staff from across the university. The Ten Priority Action Items could serve as the backbone for improving graduation rates. Efforts by our current administration will move this process forward.

Page 38, Recommendation 6: NMSU should conduct a study to identify institutional practices that could be changed to increase completion efficiency and graduation.

New Mexico State University endorses the goal to identify practices that will increase completion efficiency and graduation rates. As noted earlier, a presidential initiative for the academic year 2010 identifies increasing the graduation rate as one of several strategic goals for NMSU. Metrics for success in this area will be generated and shared with the university community and others through use of our NMSU Factbook, the Student Success action plan and our strategic goals and objectives as outlined in Living the Vision.

The initial phase of such a study was accomplished through the Foundations of Excellence® self-study mentioned above which resulted in an exhaustive review of the first-year experience. As the action items derived from that study are implemented, further study of subsequent years will enhance the educational experience of all undergraduate students at NMSU.

Additionally, NMSU is studying how to most effectively use its financial aid resources to adequately support students throughout their degree program. Flexible aid packaging that recognizes the benefits of "leaving" school for internships, co-ops and study abroad as well as the necessity of "life issues" will reduce the need for students to work off campus or to "stop-out" in order to fully fund their education. Given NMSU's high percentage of low-income students, such flexibility is essential to increasing our completion efficiency while maintaining the quality of our degrees.

Although graduation rates were not directly addressed in the Division of Student Success' action plan, retention rates were addressed, with the understanding that retention is critical to graduation, and that graduation is not just the responsibility of the Division of Student Success. As students move into upper-division course work and progress towards their degrees, interaction and support within the academic department becomes critical to degree completion.

Page 38, Recommendation 7: Given the high rate of New Mexicans with "some college" all post-secondary institutions should consider creating or expanding a program to help these individuals complete degrees.

We concur with the recommendation and, additionally, plan to explore a reverse credit transfer Associate Degree completion program for students who have transferred to NMSU from a community college before completing an associate degree. When the student completes the requirements for the

associate degree at the NMSU Las Cruces campus, the necessary credits are transferred back to the community college for certification and awarding of the degree. For community colleges within the NMSU system, implementation of this will be somewhat simpler as all student work within the NMSU system is in the NMSU student database. Even if the student does not complete the bachelor's degree, he/she will be credentialed with the associate degree and have better access to job opportunities within the state.

Intermittently over the years, NMSU has attempted to contact students who have stopped out from their degree plans. Although there have been some successes, such efforts have not yet proven to be viable and successful. We are committed to actively working lists of former students who are within 30 hours of graduation, and have national data to suggest that such efforts to encourage belated degree completion are economically positive for the students and the state.

JUSTIFYING LARGE TUITION INCREASES WILL REQUIRE GREATER EFFORTS TO CONTAIN SPENDING AND CUT OVERHEAD COSTS.

New Mexico State University is committed to continuing to reduce costs. As an on-going effort, efficiency and effectiveness is now emphasized as one of several presidential initiatives. At the beginning of the Fall term, a committee of faculty, students, staff and business leaders will be named that is dedicated to identifying ways to improve our performance while saving costs. NMSU will evaluate committee suggestions for implementation on an annual basis.

Page 55, Recommendation 1: Realign budgeting practices to a system of "Incentives for Academic Excellence" based on responsibility center management principles. The approach should consider allowing an agreed upon portion of tuition and state I&G funding to flow to colleges, which would be responsible for their full cost of instruction, academic support, operations and maintenance. Cross-subsidies between colleges and/or departments based on productivity should be explicitly rationalized and justified to the BOR and be in alignment with strategic university priorities. Cost pools for commodities, institutional support and O&M services and executive strategic initiatives should be established.   Cash balances should have specific plans for their eventual use, in alignment with approved strategic priorities.

Because our operations are always focused on strategic priorities, New Mexico State University agrees that budget practices must be closely aligned to strategic goals. This practice began in earnest at NMSU after adoption of the Living the Vision planning effort several years ago.

Because we do focus on priorities, New Mexico State University does not currently use a wholly traditional incremental budgetary process. We have implemented a dynamic reallocation model for the instruction budget, based upon both strategic priorities and student demand, and have linked performance metrics to the overall Instruction and General (I&G) budget process. Even in a period of reduced state appropriations, our recent 9.8 percent reduction in funding was applied through a collaborative, strategic process, rather than through across-the-board cuts at any level, a process that directed funds where strategic priorities must be met and where productivity is high. We annually compare each college's share of the instruction budget versus their share of enrollment workload formula earned, and have a mechanism for the strategic reallocation of funds between colleges as a result. Prior to the recent series of budget reductions, NMSU maintained an internal performance fund

designed to fund incentives for excellence, in lieu of the unfunded performance component in the state funding formula.

We urge caution in recommending a pure RCM budgeting system for we believe it does not incent strategic or collaborative behavior.   Rather many believe RCM fosters internal competition for enrollment growth, and saddles academic managers with the burden of covering fixed costs that are wholly outside of their control, and which many are not trained to manage.

We respectfully question the evaluation implication that traditional RCM has been proven more effective than a collaborative model of budgeting which allocates resources based on strategic goals. We believe that our dynamic budget allocation process has yielded true benefits and allowed NMSU to progress even in the face of reduced state appropriations.

The Board of Regents Budget Committee and executive administration is, and will continue to be, routinely informed of all material cross-subsidies within the university budget, with full justification of proposed action.

Cost pools for select commodities, services and initiatives are established, and a formal system for approval of planned use of carry forward balances above a target level is in place.

Page 55, Recommendation 2: Develop and implement a comprehensive re-prioritization process for academic and support programs.

New Mexico State University currently operates under an academic budget prioritization process, and we commit to expanding and enriching this process. Again, as a presidential initiative, our Provost will be charged to develop with our faculty annual goals for driving forward quality indicators (metrics) that align with our strategic priorities. In addition, in preparing to meet the most recent budget reduction, prioritization of academic and support programs has been highlighted: deans were asked to take into account program viability and productivity in recommending funding cuts. This fall, upon the return of the faculty, New Mexico State University, will continue implementation and execution of a detailed academic budget prioritization and planning process as a part of the ongoing budget reduction implementation. We would welcome the opportunity to further brief the staff and committee on the details of the process and the results the effort has yielded.

Page 55, Recommendation 3: Implement a regular sunset review of academic programs to ensure continued effectiveness, efficiency, and need.

New Mexico State University commits to foster and continue this practice among our academic units. Sunseting of defunct and inefficient programs is a part of the current and ongoing plan for addressing program prioritization in light of the reduction in the state's I&G appropriation. This sunset review tracks trends in student credit hour production, student enrollment, majors produced, graduates produced and enrollment.

Page 55, Recommendation 4: Develop target subsidy levels for athletics, alumni association, and foundation programs and a plan to achieve the target level within five years.

New Mexico State University commits to follow the formal multi-year target subsidy level for Athletics as established and approved by the Board of Regents and accepted by the state through the Athletics

deficit repayment plan. We are actively working with the NMSU Foundation Board to develop a formal plan with a timeline to transition the Foundation toward financial independence. A review of peer institutions shows that a common minimum endowment value is required for self-sufficiency, so the implementation of this plan primarily hinges upon growing the endowment value. The Alumni Relations function has recently been reorganized, and a key goal will be to establish a multiyear budget plan to support our goals for growth in this area.

Page 55, Recommendation 5: Consider methods to demonstrate to students and their families that tuition increases support improved academic quality of the institutions with clear goals and identifiable results.

New Mexico State University commits to continue and improve working closely with our students and their families to demonstrate the basis and justifications for tuition and fee rates. We believe we have a strong story to tell. We have had formal written agreements with our student leadership in place for many years that outline our long term agreement on tuition and fees philosophy. Student leadership sits on the University Budget Committee and are active participants in the annual budget and tuition setting process. Our ASNMSU leadership chairs the Student Fee Review Board which proposes required student fee rates, and is directly and collaboratively involved in developing all tuition and fee increases. Our Board of Regents requires that we demonstrate how proposed tuition and fee increases relate to institutional goals. We separately track progress toward goals through our Living the Vision plan and through other institutional metrics. The Living the Vision plan is regularly reviewed publicly for alignment to fund institutional goals. We commit to develop a communication strategy drawn from these public presentations and student government involvement to be targeted to students and their families.

FACULTY PRODUCTIVITY MUST BE MONITORED AND CONTRIBUTIONS EFFECTIVELY COMMUNICATED.

NMSU agrees that faculty productivity should be routinely tracked and monitored, and commits to enhance current efforts in place in this regard. Productivity includes teaching, research, university and professional service, extension responsibilities, and community service. We are committed to developing methods to better document such contributions.

Page 63, Recommendation 1: Develop and report comprehensive executive dash board reports to monitor aggregate faculty teaching loads, productivity, distribution of teaching loads among permanent and temporary faculty, research and other scholarly productivity data at the departmental and college level. Make the information available on the university website and report to BOR at least annually.

NMSU concurs that monitoring faculty productivity is critical—both to assure maximum productivity and to assure adequate reward systems for excellent faculty performance. In order to be able to capture, analyze and report such information, NMSU has put a significant effort into expanding and enriching decision management support for all levels of university management. We have invested in software tools and supporting infrastructure designed to support the type of dash board reporting described in the evaluation, and conducted extensive efforts to ensure that our operational data is consistent across all systems to allow for reporting drawn from multiple data types. We have separately spent time working

with our managers and faculty, and our peers, to identify meaningful metrics for reporting. The volume of reports available now on the desktops of administrators and faculty members has increased significantly, and changed greatly in depth and breadth. Positioned now with a permanent administrative team, we are ready to expand even further this project through web display. Our administrative leadership has ready access now to faculty workload/productivity/research activity data for each college and at the institutional level. We are actively pursuing the implementation of the Digital Measures software, which will help to catalog faculty performance and accomplishments. Although we acknowledge the usefulness of national databases, we note that the accuracy of comparisons is limited by the participation of individual institutions and their willingness to share and be identified as sharing data.

Page 64, Recommendation 2: Executive management and deans should consider specific goals for each measure to facilitate identification of excellent or sub-optimal results and identify stressors that may require a change in funding or faculty lines.

New Mexico State University agrees with this recommendation and commits to continue and enhance its efforts in this regard. Each dean has established criteria internal to his or her college to support faculty resource allocation decisions. Our exisiting dynamic faculty line reallocation process, which is tied to both student demand and faculty workload, is monitored at the provost level. Each college is in the process of establishing formal goals under the Living the Vision plan to further inform resource decisions. Under a forthcoming presidential initiative, colleges will also be expected to demonstrate their commitment to system-wide institutional goals, such as improving graduation rates.

THE LEGISLATIVE LOTTERY SUCCESS SCHOLARSHIP, AS CURRENTLY STRUCTURED, IS SUCCESSFUL, BUT UNSUSTAINABLE.

NMSU supports changes to the lottery scholarship that incent student persistence while acknowledging the financial resources available to our students. National data demonstrates that financial hardship is a major factor discouraging student persistence.

Page 72, Recommendation 1: Institutions should analyze the use of Bridge Scholarships to ensure success and explore ways to use the Bridge Scholarship more strategically and selectively. Consider awarding the Bridge Scholarship to students that are close to graduation and have exhausted the Lottery Scholarship.

New Mexico State University commits to investigate the possibility of providing a scholarship to support students who are close to graduation and have exhausted the Lottery Scholarship. We have begun analyzing the effectiveness of this scholarship, traditionally given in the first semester of attendance at NMSU. It is an effective tool for encouraging low income and minority students who often do not qualify for other scholarships (which require higher high school GPAs and ACT scores) to enter NMSU. Currently, NMSU's bridge scholarship requires a 3.5 GPA.

Page 72, Recommendation 2: Institutions should continue to evaluate the impact of the LLS on graduation.

NMSU's Office of Research, Evaluation & Assessment will continue with the analysis of the LLS impact on graduation.

NMSU's CLOSING COMMENTS AND ADDITIONAL RECOMMENDATIONS

NMSU is committed to:
- Adopting practices that improve student graduation rates and persistence;

- Working with feeder high schools and our community colleges to assure adequate preparation of students for university work;

- Aligning budget practices to meet strategic priorities and achieve cost efficiency while maintaining quality programs; and

- Monitoring faculty productivity to assure maximum use of faculty resources and reward faculty performance.

As noted earlier, New Mexico State University agrees that many of the issues reviewed and commented upon in this report are important to the future well being of our state and its system of higher education. We wish to close with four additional observations for your consideration:

- New Mexico must address the question of its potential support the current number of higher education institutions and their separate administration:

  o Consolidation of additional institutions under three university systems would decrease administrative costs at both the institutional and state levels. Consolidation would reduce the number of governing boards to achieve greater overall efficiency and promote development of the three state university "systems" as centers of excellence across the entire spectrum of community college, undergraduate, and graduate education and research—centers that offer alternative pathways to education for our citizens.

  o NMSU is just beginning to realize the benefits of cooperative management of all of the campuses in our current university system; greater inducements for our President and Regents to manage the financial resources of the entire system would help us realize additional efficiencies.

- NMSU agrees that student success as defined by degree completion is a primary goal for all. Several steps, if taken, can help us achieve it:

  o Address improving student preparedness for college and student retention programs with grants to higher education to support our public schools;

  o Provide incentive funds that enable the reallocation of scholarship funds for students to reward student persistence; and

  o Provide true academic and budget management authority to the Board of Regents for multi-campus systems to assure more effective distribution of developmental courses, control of program duplication across systems, and more efficient administrative management.

- NMSU remains committed to carrying out programs to achieve greater efficiency and lower costs; state funding will remain, however, a critical factor to our success, and we ask that you:

  o Continue efforts to support revision of our state funding formula, and strive for a simple formula that readjusts the current calculation. The current formula adjusts changes in enrollment and square footage, and contains has designed mechanisms for funding building and equipment R&R, scholarships and performance incentives. This overall structure has merit, but the rates within the formula haven't been validated; the 3% enrollment band component needs to be replaced by a more realistic assessment of average enrollment increase; select revenue credit calculations need to be revamped; and differences between institutional mission should be factored in. We have good staff that can help re-vamp the formula for the benefit of all, and we hope that you will take advantage of their expertise.

  o Help us be more transparent in setting tuition rates by eliminating tuition credit as part of the budget process. This has the mandatory impact each year of passing a greater share of the cost of higher education on to our students, with no real net change in the resource base available to the institutions to enhance program delivery. Eliminating the tuition credit calculation would add transparency to the budget process and allow governing boards to hold true responsibility over tuition and cost of higher education in our state.

- Both NMSU and UNM are strong current economic engines for our entire state. NMSU currently brings in over $185 million in externally, non-state funded research activity that supports over 550 full-time employees. We agree that we can do more to work together as research institutions to ensure the state's economic success. At the same time, we believe that confusion about the research mission is related to how the Research and Public Service funds are developed and administered within the state budget process. The vast majority of the state RPSP funds coming to NMSU, support our constitutional missions of the New Mexico Department of Agriculture the Agriculture Experiment Stations and the Cooperative Extension Service; to assert their centrality, we suggest that the state;

  o Move funding for constitutional programs from RPSP to a separate appropriation category to eliminate the confusion associated with the true nature and purpose of this funding.

NMSU appreciates the opportunity provided to comment on the draft report document. We look forward to your consideration of points we have raised as you prepare the document for final publication.

Sincerely,

Barbara Couture
President

<u>**Legislative Finance Committee Report**</u>
Higher Education in New Mexico: Phase I
New Mexico State University - University of New Mexico

<u>University of New Mexico's Response</u>
August 9, 2010

The University of New Mexico would like to begin by thanking the Legislative Finance Committee (LFC) for the extraordinary time, talent, and thoughtfulness invested in researching and developing its Phase I report on higher education in our state. UNM is pleased to be included in this phase, and even more so to be invited to provide this response to the findings.

We have organized our response into four sections, beginning with the issue raised in the report related to special appropriations (RPSPs). We then provide general comments on the data contained in the report, followed by our response to several topics that we believe to be key to the success of our university, as well as to higher education in the state. Our response ends with a look toward the future.

As we begin, we would like to set the context for UNM's overall response. The Task Force we convened to review the findings in the report came to a collective conclusion: *If most of the recommendations in the report were implemented, we would have a better performing system of higher education in New Mexico.*

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<u>1. UNM's Response to a Key Issue: Special Appropriations (RPSPs)</u>

The University of New Mexico has gone to great lengths to create a comprehensive plan in the evaluation of special project appropriations. With the inception of the first "Junior Bill" there was no comprehensive or centralized legislative process or ownership of Research and Public Service Projects at the University. Since then, we have worked to create a more centralized approach through continuous communication and collaboration between the Office of Government Relations, budget offices for main campus and Health Sciences Center, the Provost and Academic Affairs financial division, and branch campus executive directors. Criteria have been created to evaluate special projects for their goals, outcomes and performance measures, and for dividing RPSP's into the categories of student success, academic/faculty scholarship, research, statewide services, economic development, legislator initiatives, and "pass throughs". In 2009 a Special Project Task force was created in which the Deans prioritized their Colleges' special projects in the manner of how the program serves the college, university mission, and the role of the university to its community and the services it provides statewide.

As research was being conducted during the LFC evaluation process, it was discovered that UNM had ending balances for several FY 2006 to FY 2008 non-recurring special project appropriations that, per statute, should have reverted back to the State General Fund. The University's possible reversion amount for main campus is $292,749. The University recognizes that this is an oversight on our part and will work with the Department of Finance Administration to find a quick resolution for the main campus and Health Sciences Center reversions. For FY 2009, the University has already reverted back to the state $19,163, and will return an additional amount of approximately $36,000 for FY 2010

projects. UNM's centralized and collaborative approach to our overall plan for a more comprehensive evaluation of special projects has already paid off and will continue to do so as we further strengthen our evaluation and reporting procedures.

2. General Comments on Data and Peer Group Comparisons

In general, UNM agrees with the data presented in the report. However, we feel it is important to note that there is no singular set of peer institutions that meets all data comparison needs for any university. UNM often uses a list of 16 flagship institutions that was developed about 20 years ago (often referred to as our CHE Peers). These institutions conduct research that is very similar to that of UNM, recruit similar faculty, and have a similar range of professional and doctoral programs. They do not, however, have a student body similar to UNM. UNM is a moderately selective institution with a minority majority enrollment. Our CHE Peers are mostly highly selective non-urban universities and consequently have higher graduation rates. For setting benchmark goals for our retention and graduation rates, UNM has been using public, moderately selective, large institutions that participate in the Center for Institutional Data Exchange and Analysis (CSRDE) system. This does not provide us a list of specific institutions, but it does provide a comparison value for public institutions with an entering freshman profile of ACT scores between 21.0 and 22.4 (average for UNM is 22.0) with a total enrollment greater than 18,000.

3. Response to Key Topics

A. Student Success

- **Admission Standards**
  UNM agrees that raising admission standards is important to improving the retention and graduation rates of our students, and UNM's own disaggregated graduation data further supports this. As noted in the Report, we have already taken steps to raise standards.   UNM believes that attracting academically talented students enriches the student experience and raises the expectations, standards and work ethic of the entire student population. In fact, the number of national scholars at UNM has doubled in each of the past two years, from 14 admitted in 2007, to 77 in 2009, and we have a predicted enrollment of 135 for the fall 2010 semester (enough for UNM to be accepted by the National Merit Foundation as a Sponsoring Institution for the first time ever). We have also developed a two-tier approach to our admissions process that presents students who do not meet our minimum admissions criteria with the option to participate in our enrollment pathway program (Gateway) at branch campuses and state community colleges where their academic needs will be better met until they are ready to transition to UNM.   We believe that admitting applicants to UNM whose ACT/SAT scores indicate remedial needs does not provide a good value for students and the state through the use of the Lottery Scholarship. Increased standards will inspire a greater number of applications from academically talented students, from both in and out of state. We also agree with the observation that neighboring states where high school enrollments are growing will be a good source of well-prepared students for New Mexico's colleges and universities.   At UNM, we are already experiencing this first-hand, as our out-of-state student population on our Albuquerque campus grew 2.4% for the 2008/09 school year, and 6.5% in 2009/10.   Finally, we know that students who choose to reside

in New Mexico after graduation will contribute to our economic development, perhaps helping to drive a higher wage economy.

- **Graduation Rates**

UNM agrees that an educated citizenry contributes greatly to the prosperity of any state. We know that New Mexico lags behind the rest of the country in educational attainment. Furthermore, the longer it takes a student to attain her or his degree, the more costly that degree becomes. We are clearly aware that UNM's graduation rates lag behind those of many of our peer institutions and require improvement. We have either developed or are in the process of developing several initiatives to address this important issue. These include improving admission standards, increasing the recruitment of academically talented students from New Mexico and nationally, and providing higher quality, student friendly enrollment services. We have also consolidated advisement staff, policy, and space to better serve our students, and expanded the mission and organization of UNM's "Graduation Project" to help students finish in a timely manner. (Phase I of this effort will be called "GP 2012," with the explicit goal of raising UNM's six-year graduation rate from its current level of 42.7%, to 46% for the cohort of students who entered UNM in the Fall of 2005, and 50% for the 2006 cohort.) UNM's degree audit system was recently upgraded to help students monitor their progress toward graduation, and ten new advisor positions were added over the past year. Additionally, ensuring that courses are available to keep students on track is one of the keys to success. We believe that a change in the funding formula and other policies to support higher admission standards and degree completion would further aid our efforts to improve student outcomes.

- **Academic Program Review**

UNM agrees with the recommendation that academic and support programs should be regularly reviewed to ensure continued effectiveness, efficiency, and relevance. Doing just that is a key element on the University's FY11 Work Plan, and these efforts are already under way. The Provost convened a working group in late spring to develop principles that will guide UNM's evaluation of academic programs, based on performance and significance to UNM's core mission.

- **Faculty Work Load**

UNM agrees that ensuring consistency and transparency of faculty teaching and workloads is important. The complexity of faculty work at a flagship research institution cannot be understated, as faculty are engaged in activities ranging from teaching, mentoring, and research, to public service, professional associations, and economic development and technology transfer. UNM has, however, made some progress on reporting and clarifying faculty workload. Though the process remains very labor intensive and we will continue to pursue ways to do this work more efficiently and transparently to ensure accurate and timely progress reports.

- **Lottery Scholarships**

The Lottery Scholarship has been a key to improving access to higher education for all New Mexicans. We concur with the Higher Education Department when it described the Legislative Lottery Scholarship Program as "One of the most effective policy tools for providing access to quality post secondary education to students throughout New Mexico." We are also aware that during these challenging fiscal times a review of this program is in order. As changes are considered, however, we encourage the Legislature to continue to ensure that adequate enrollment pathways exist for all students at the colleges and universities that best suit their

academic interests and qualifications. We would also encourage exploration of a system of tiered requirements and benefits, depending on the type of institution in which a student enrolls.

B. Economic Development

- **Research**

UNM recognizes that its research mission as New Mexico's flagship university, and the only Carnegie designated "very high research activity" university in the State, is important to the overall economic development of New Mexico. We agree that formalized research goals that help to inform strategic investments should be clearly articulated. UNM already has measurable, quantifiable goals for research, and uses several metrics to measure outcomes. (One example is our tracking of the number and dollar amount of active research awards.) We agree that more could be done to articulate the benefits of faculty research and to communicate those benefits to the community. Additionally, UNM currently prioritizes strategic investments in research, a practice that has fostered several areas of research excellence, such as nano- and materials-science, ecology and climate change, and emerging energy technology. We agree that greater coordination of these efforts with other entities in the states would be beneficial.

- **A Major Employer in New Mexico**

UNM takes its role as a major employer in New Mexico very seriously, recognizing the importance of this to the health of the State's economy. The University employs over twenty thousand New Mexicans. With hospitals, research operations, academic activities, arts venues, and our own utility generating plants, we are in essence a small city. While the severity of the economic situation has caused us to implement a "pause and hold" policy on hiring, the University has not to-date resorted to wide-scale institutional layoffs, furloughs, or wage cuts.

C. Budget Processes, Efficiencies, and Cost Savings Initiatives

- **Impact of the Economic Meltdown**

UNM has sustained 12.22%, or approximately $26.0M of funding reductions over the last two years. The vast majority of reductions have occurred in Institutional Support (Administration) and reduced allocations to non-core entities, including Alumni Relations, Development, and Athletics.   For example, the Report points out that UNM reduced Institutional Support from $48 million in FY 2009 to $41 million in FY2011, while at the same time increasing instructional support by approximately $7 million, during a time of serious budget reductions. Throughout this period, we have striven to protect our academic mission, quality of programs, and our workforce. However, with each new rescission or reduction, continuing to do so becomes ever more difficult.

- **Time to Degree Completion**

One of the consequences of students' taking longer – five, six, or even more years – to earn their degrees is the added expense to students and their families. UNM agrees that targeting a four-year completion time would greatly increase the affordability of higher education to our citizens. Several strategies to expedite students' time to degree completion have been successfully implemented in other states, including increasing the expected number of hours per semester

from 12 to 15, encouraging or requiring students to take a certain number of credit hours through online courses, and shifting the institution's cultural expectation toward the four year completion target.

- **Energy Program**

The University of New Mexico is actively engaged in an energy conservation program in partnership with Energy Education, Inc. Over a two-year period, UNM has had a positive, net cost avoidance of $3.85M to help manage utility costs across all campuses. We are confident that continuing this program will result in additional benefits.

- **President's Strategic Advisory Team**

In February of 2010, the President's Strategic Advisory Team (PSAT) was formed to identify cost containment and revenue generation opportunities that would help to balance the new, reduced budget requirements. This 20-member team of faculty, staff, students, and administrators identified $6 million in reduction opportunities as they learned and worked together over a period of five weeks. The success of PSAT is notable, demonstrating that a diverse group of committed individuals can come together, and, in a very short period of time, produce meaningful results. UNM will continue the work of this team, with an eye toward expanding this model to other endeavors.

- **Information Technology**

We believe that sound, cost-effective information technology is in many ways foundational to improving significant aspects of higher education in New Mexico. One of the key opportunities identified by the President's Strategic Advisory Team relates to improving UNM's information technology systems and services, from both the cost and service perspectives. To address this opportunity the President's Work Plan for FY11 includes a "Rapid Redesign" of UNM's information technology processes, tools, and infrastructure to improve efficiency and productivity, while minimizing expenditures.

- **Responsibility Center Management (RCM)**

We recognize that UNM must change from current incremental (base-plus) budget model to an incentive based model. UNM has already taken steps to learn more about Responsibility Center Management (RCM). Two information sessions that included the Executive Cabinet, Deans, Department Chairs, and members of the President's Strategic Advisory team have already attended presentations by Dr. Robert Kvavik of the University of Minnesota. We will evaluate RCM along with other incentive-based models to maximize revenues, improve effectiveness, and gain further efficiencies over the expenditures of the University.

D. Funding Policy

- **Formula Funding**

We support the idea that the formula for funding higher education in New Mexico needs to evolve to a system that rewards performance measures such as retention and graduation, in addition to the current formula that only rewards growth in enrollment. We believe consideration should be given to including elements that reflect mission differentiation, such as

research and graduate education. We also encourage the full funding of the formula as it relates to utilities, operations, and maintenance, and building renewal and replacement.

- **Tuition Policy (Moving from reliance on state funding to reliance on tuition)**
UNM understands the need to move from reliance on state funding to a greater reliance on tuition. However, this move is acceptable only if the current tuition credit policy is abolished.

- **Tuition Credit**
UNM strongly believes that the current tuition credit practice in our state is an undesirable policy, serving only to understate the real costs of other services and mandated state expenditures. Application of this policy has been particularly challenging for NMSU and UNM. The current policy also masks the true cost of attendance to students and their parents. Ending the use of the formula tuition credit policy would empower universities to think more critically about their tuition rates and to compare more authentically with their peer groups.

E. Governance

- **Need for a True "System" of Higher Education in New Mexico**
UNM believes that serious consideration should be given to developing and implementing a true "system" approach to higher education that possibly could create the conditions for mitigating many of the educational challenges we face in New Mexico, as well as for more effectively leveraging our resources and capabilities to achieve sustainable success. A "system" of colleges and universities could identify and encourage appropriate entry points for students based on their aspirations and abilities, thereby aiding in retention and expediting time to graduation. As noted, New Mexico is already a national leader in funding higher education, and a "system" could better demonstrate to taxpayers that these funds are being well spent. Texas, Louisiana, California, and other states have successfully used such an approach, and some have adopted mission-differentiating funding formulas as a result. We believe that the strategic plan being developed through the Higher Education Department (HED) holds much promise, provided that all of the stakeholders are actively engaged, and the Legislature is willing to adopt and/or change policies to incentivize progress toward achieving the articulated goals.

- **The Role of the Higher Education Department**
As noted above, UNM believes that the Higher Education Department can facilitate the development of a "system" of higher education in New Mexico. UNM agrees that HED's mandate to develop a master plan for higher education, one that develops policy goals for improving cost-effective degree production without sacrificing education quality, will be a positive step and will also provide a springboard for much-needed changes to the funding formula - changes that recognize the differential roles and responsibilities of institutions in New Mexico. The issue of course and curriculum duplication could be effectively explored and addressed through the HED. The HED can help ensure statewide articulation agreements that are often ignored, despite the need identified in the LFC report. UNM believes the HED can work with institutions to identify consistent lists of peer institutions that make sense given an institution's size, student population, and research capacity. The HED can also take leadership statewide, working with the Department of Workforce Solutions, to track the employment rates of all graduates working in New Mexico.

4. Looking Toward the Future

As many of the findings in the LFC Report indicate, UNM is already implementing a number of the recommendations identified, and is either considering or on track to implement the others.
However, in order to reach the full potential of New Mexico's Flagship University, we believe that the state must also make changes that will create the conditions for greater success. As we look to the future of higher education in our state, we believe that four key policy decisions would facilitate the breakthrough improvements that we are all seeking:

- Cease the formula tuition credit policy.
- Encourage institutions to evaluate admissions standards to ensure that students have the best opportunity to succeed at their chosen college or university.
- Support increases in tuition to relieve the funding burden from the State.
- Develop incentives to increase the number of out-of-state and international students coming to New Mexico.

We want to emphasize that many of the recommendations contained in the Report interconnect and therefore must be addressed together if the overall state of higher education in New Mexico is to significantly improve. The interrelationships among admissions standards, graduation rates, and tuition policies simply cannot be ignored.

We also want to acknowledge that this LFC Report is only Phase I of an ongoing process of evaluating and improving higher education in New Mexico. Every institution in our State is unique, with no two having the exact same set of challenges or opinions on the best pathway forward. We are confident that the work being initiated today will be helpful to the next Administration in our ongoing common quest to develop a robust and enduring higher education system.

In closing, the University of New Mexico would like to thank the Legislative Finance Committee, and particularly the members of the Program Evaluation Team who worked so diligently to develop the report. As the process of data gathering and interviewing progressed, it became very clear that all involved have a strong commitment to improving higher education in New Mexico. We are grateful to have such committed partners along this journey.

August 5, 2010

Mr. David Abbey
Director, Legislative Finance Committee

Dear Director Abbey,

This letter is our response to the draft of the Legislative Finance Committee's evaluation of New Mexico State University and University of New Mexico. Thank you and your staff for the openness and collaborative efforts demonstrated throughout the evaluation and review process. We found the conversations very insightful and thoughtful and appreciate the Department's participation as the data was collected, analyzed and summarized for reporting. The Higher Education Department benefited greatly from the conversations and the collaborative efforts pertaining to data and research efforts.

The draft report that was shared with us highlights many of the areas of strength for both institutions, especially the creativity and innovation that exists. Both serve the state in multiple ways and the report articulates the importance of this continuing, especially due to the economic impact upon the state and its future.

The draft report seemed thorough and thoughtful making recommendations that require serious consideration by the institutions and the Higher Education Department. The recommendation for the Higher Education Department as it pertains to the comprehensive State Master Plan is very focused on educational excellence that measures outcomes and performance goals. This is a major part of the planning process as we move across the state gathering public input on issues such as funding, cost savings, governance, accountability, student success, quality of instruction, distance education, remediation, and so forth. All of the input from the public will influence the development of the State Master Plan. The LFC support for a State Master Plan is appreciated. The Higher Education Department has taken this task seriously and will complete the plan by November with clear recommendations that will impact the future of higher education in the state.

A concern that surfaced as I read the draft report and the recommendations for the Higher Education Department centered on the issue of having adequate personnel to carry out the recommendations. The Department currently is understaffed and struggling to carry out the demands that are statutorily required. Any addition to the demands will be very difficult to accomplish without additional staff. I do believe this has hampered the effectiveness of the Department in the past from accomplishing the mandates outlined in the statue for the Department. This is an area that needs consideration as this report moves forward for implementation.

I want to thank you for the opportunity to review the draft report and look forward to the collaborative work ahead.

Sincerely,

Dr. Viola E. Florez
Cabinet Secretary of Higher Education

APPENDIX A: FEEDER HIGH SCHOOL GRADUATION RATES

Table 15: Post-Secondary Average Graduation Rates by Feeder High School

Top UNM Feeder High Schools				Top NMSU Feeder High Schools			
High School	N	Avg 4yr grad rate	Avg 6 year grad rate	High School	N	Avg 4yr grad rate	Avg 6 year grad rate
La Cueva High School	509	16.3%	58.4%	Mayfield High School	523	9.1%	36.2%
Eldorado High School	454	15.9%	55.4%	Las Cruces High School	498	12.1%	41.9%
Rio Rancho High School	431	10.6%	41.8%	Alamogordo High School	405	9.1%	27.9%
Cibola High School	405	9.4%	50.3%	Carlsbad High School	335	6.3%	16.7%
Sandia High School	356	13.0%	55.1%	Onate High School	308	7.3%	34.1%
Los Lunas High School	302	3.4%	22.1%	Gadsden High School	268	4.6%	28.6%
Manzano High School	288	10.1%	51.1%	Deming High School	140	12.7%	33.2%
Saint Pius X High School	286	12.5%	50.3%	Artesia High School	111	6.9%	18.8%
Gallup High School	269	2.2%	20.1%	Grants High School	101	6.1%	17.0%
Valley High School	255	10.3%	46.9%	Los Alamos High School	98	20.9%	53.6%
Belen Senior High School	208	4.4%	28.1%	Goddard High School	97	19.7%	60.2%
Del Norte High School	187	18.8%	46.1%	Silver High School	79	11.5%	40.4%
Albuquerque High School	181	12.6%	46.6%	Santa Teresa High School	78	7.9%	26.2%
Los Alamos High School	181	14.2%	47.8%	Tularosa High School	76	4.9%	37.3%
Highland High School	164	6.6%	35.1%	Santa Fe High School	67	16.3%	51.2%
Moriarty High School	164	11.0%	43.5%	La Cueva High School	65	19.5%	72.2%
West Mesa High School	137	5.1%	36.8%	Sandia High School	62	19.9%	59.4%
Santa Fe High School	133	9.9%	54.7%	Rio Rancho High School	62	6.2%	47.6%
Taos High School	102	8.4%	40.3%	Saint Pius X High School	58	25.0%	72.9%
Rio Grande High School	101	7.7%	40.9%	Hobbs High School	57	19.6%	63.5%
Pojoaque High School	80	9.1%	31.0%	Mesilla Valley Christian	52	23.3%	67.5%
Espanola Valley High School	79	12.0%	55.4%	Farmington High School	52	19.4%	59.0%
Saint Michaels High School	72	12.6%	55.3%	* Hatch Valley High School		5.1%	13.9%
Albuquerque Academy	68	32.0%	67.4%	* Cibola High School		16.1%	55.4%
Hope Christian High School	67	20.3%	52.2%	* Peidra Vista High School		22.7%	68.3%
Goddard High School	61	13.5%	44.5%	* Moriarty High School		18.3%	72.4%
Farmington High School	59	15.8%	55.1%	* Hot Springs High School		14.6%	16.7%
Alamogordo High School	54	24.1%	51.3%	* Ruidoso High School		5.0%	17.5%
* Tohatchi High School		0.0%	0.0%	* Los Lunas High School		25.1%	48.6%
* Menaul High		6.2%	31.2%	* Cloudcroft High School		13.9%	25.8%
* Socorro High School		12.5%	41.7%	* Gallup High School		16.3%	45.1%
* Capital High School		4.7%	28.9%	* Lovington High School		5.1%	26.9%
* Robertson High School		10.3%	42.9%	* Hope Christian High School		27.1%	74.4%
* Mccurdy High School		3.0%	30.8%	* Belen Senior High School		22.9%	50.4%
* Las Cruces High School		16.8%	70.8%	* Eldorado High School		23.4%	26.3%
* Mayfield High School		11.7%	28.9%	* Espanola Valley High School		23.0%	31.8%
* Grants High School		5.6%	19.2%	* Clovis High School		16.9%	36.7%
* Carlsbad High School		8.8%	26.9%	* Aztec High School		29.7%	40.0%
* Pecos High School		10.0%	20.0%	* Roswell High School		8.6%	30.0%

* Roswell High School		6.7%	46.4%	* Del Norte High School		12.5%	22.7%
* Clovis High School		10.0%	49.2%	* Capital High School		0.0%	26.9%
* = less than 50 students							

(NOTE: Avgs of cohorts entering in 2002, 2003, and 2004)

TABLE 16: Graduation Rates and Lottery Scholarship Semesters by High School GPA

High School GPA Range	Headcount	% did NOT receive Lottery	% who received some Lottery	% who received 7 or 8 semesters of Lottery	6-Year Graduation Rate
Less than 2.5	178	76.4	15.7	7.9	11.8
2.5 - 2.99	1606	64.8	22.6	12.6	22.8
3.0 - 3.49	2607	44.4	28.4	27.3	40.6
3.5 - 3.99	2600	23.7	29.5	46.9	60.2
4.0 or higher	724	16.3	27.4	56.4	77.6

Source: NMSU

Table 17: 2007 UNM Graduates working in NM by HS and Field

Degree Major	High School Attendance				Grand Total NM Workers	Total Graduates
	Foreign	Out of State	Public HS	Private HS		
Architecture (N)	0% (*)	75% (*)	84.4% (27)	83.3% (*)	80.5% (67)	83
Cultural Studies (N)	100% (*)	64.7% (*)	72.2% (*)	100% (*)	63.3% (38)	61
Journalism (N)	0% (*)	66.6% (*)	85.5% (53)	100% (*)	81.5% (66)	81
Computer Science (N)	50% (*)	81.5% (*)	91.7% (*)	100% (*)	63.3% (31)	49
Education (N)	91.6% (*)	86.9% (93)	93.7% (329)	94.4% (34)	89% (634)	712
Engineering (N)	60% (*)	72.1% (31)	78.4% (98)	62.5% (*)	68.7% (189)	275
Foreign language (N)	75% (*)	52.2% (*)	69.2% (27)	80% (*)	59.8% (58)	97
Human Sciences (N)	0% (*)	75% (*)	68.3% (28)	50% (*)	66.1% (39)	59
Law (N)	NA	58.3% (*)	44.4% (20)	66.7% (*)	70.3% (78)	111
English (N)	50% (*)	67.7% (21)	78.4% (76)	70% (*)	69.7% (136)	195
Humanities/General (N)	0% (*)	58.2% (32)	84.3% (91)	52.9% (*)	73.6% (145)	197
Biology (N)	42.9% (*)	60% (*)	72.8% (99)	57.1% (*)	65.5% (131)	200
Math (N)	83.3% (*)	62.5% (*)	50% (*)	100% (*)	55.9% (33)	59
Physical Science (N)	50% (*)	71.4% (*)	69.2% (*)	100% (*)	36.6% (41)	112
Psychology (N)	40% (*)	51.4% (*)	81.3% (126)	87.5% (*)	69.7% (175)	251
Corrections (N)	25% (*)	13.0% (*)	55.2% (48)	68.8% (*)	80.2% (65)	81
Public Administration (N)	NA	40% (*)	88.9% (*)	100% (*)	79.3% (23)	29
Social Science (N)	60% (*)	66.7% (40)	77.8% (119)	73.5% (25)	69.8% (215)	308
Health (N)	81.3% (*)	70.9% (73)	84.0% (288)	80.5% (33)	77.4% (516)	667
Business (N)	46.7% (*)	61.1% (44)	84.1% (327)	91.8% (45)	79.7% (471)	591
History (N)	10% (*)	24.4% (*)	38.3% (44)	50% (*)	70.1% (68)	98
Grand Total (N)	61.1% (58)	67.7% (491)	82.2% (1976)	79.9% (262)	74.4% (3418)	4592

Note: The table shows graduates working in NM. For example, 93.7% (or 329 graduates) of public high school students who graduated in education are working in NM.

Table 18: 2007 UNM Graduates working in NM by Degree and Field

Degree Major	Associate's Degree	Bachelor's Degree	Master's Degree	Doctorate Degree	Professional (M.D. or J.D.)	Total Graduates
Architecture (N)	NA	84.8% (28)	76.7% (33)	NA	NA	83
Cultural Studies (N)	NA	73.7% (30)	42.9% (*)	50% (*)	NA	61
Journalism (N)	NA	81.5% (66)	NA	NA	NA	81
Computer Science (N)	NA	94.4% (17)	36.4% (*)	40% (*)	NA	49
Education (N)	NA	93% (343)	88.9% (265)	53.8% (21)	NA	712
Engineering (N)	NA	73.4% (116)	66.7% (60)	48.1% (*)	NA	275
Foreign language (N)	NA	67.1% (47)	42.9% (*)	33.3% (*)	NA	97
Human Sciences (N)	NA	65.2% (30)	77.8% (*)	50% (*)	NA	59
Law (N)	NA	NA	NA	NA	70.3% (78)	111
English (N)	NA	78.1% (121)	35.7% (*)	41.2% (*)	NA	195
Humanities/General (N)	NA	73.6% (145)	NA	0% (*)	NA	197
Biology (N)	NA	69.4% (127)	33.3% (*)	18.2% (*)	NA	200
Math (N)	NA	70% (28)	35.7% (*)	0% (*)	NA	59
Physical Science (N)	NA	58% (29)	13.2% (*)	29.2% (*)	NA	112
Psychology (N)	NA	74.3% (165)	31.3% (*)	38.5% (*)	NA	251
Corrections (N)	NA	80.2% (65)	NA	NA	NA	81
Public Administration (N)	NA	100% (*)	78.6% (22)	NA	NA	29
Social Science (N)	NA	75.4% (193)	42.9% (*)	41.1% (*)	NA	308
Arts (N)	NA	76.8% (139)	52% (26)	0% (*)	NA	232
Health (N)	72.7% (*)	84.1% (286)	68.2% (88)	50% (*)	72.8% (115)	667
Business (N)	NA	80.3% (358)	77.6% (111)	NA	NA	591
History (N)	NA	78.3% (65)	25% (*)	33.3% (*)	NA	98
Grand Total	72.7% (11)	78.6% (3091)	68.1% (999)	41.8% (194)	71.7% (269)	4592

Note: The table shows graduates working in NM. For example, 73.4% (or 116 graduates) of those who graduated with a bachelor's degree in engineering are working in NM.

Table 19: 2007 NMSU Graduates working in NM by HS and Field

Degree Major	High School Attendance				Grand Total work in NM	Total Graduates
	Foreign	Out of State	Public HS	Private HS		
Agriculture	0.0%	44.4% (*)	63.4% (45)	50% (*)	50% (67)	134
Environmental Science	NA	14.3% (*)	62.5% (*)	NA	48.4% (*)	31
Journalism	0.0%	64.7% (*)	71.4% (25)	0.0%	64.9% (37)	57
Computer Science	60% (*)	53.8% (*)	52.8% (*)	100% (*)	44.6% (37)	83
Education	100% (*)	75.2% (82)	86.1% (267)	88.9% (*)	81.2% (440)	542
Engineering	21.4% (*)	44.7% (*)	53.5% (69)	45.5% (*)	39.0% (108)	277
Engineering Tech	NA	46.2% (*)	72.7% (24)	100% (*)	66% (33)	50
Foreign Language	33.3% (*)	33.3% (*)	77.6% (45)	100% (*)	63.7% (65)	102
Human Science	50% (*)	50% (*)	80% (24)	100% (*)	68.7% (46)	67
English	100% (*)	48% (*)	75% (36)	83.3% (*)	62.6% (62)	99
Humanities/General	100% (*)	54.3% (*)	54.5% (*)	100% (*)	55.6% (40)	72
Biology	0.0%	50% (*)	67.1% (47)	66.7% (*)	57.4% (70)	122
Math	NA	0.0%	45.5% (*)	NA	25% (*)	28
Philosophy	NA	33.3% (*)	85.7% (*)	NA	72.7% (*)	11
Physical Science	NA	28.6% (*)	50% (*)	NA	23.3% (*)	43
Psychology	NA	45.5% (*)	77.8% (35)	100% (*)	66.2% (43)	65
Corrections	0.0%	44.7% (*)	68.0% (87)	100% (*)	62.5% (120)	192
Public Administration	66.7% (*)	47.1% (*)	80.8% (63)	100% (*)	68.4% (117)	171
Social Sciences	75% (*)	43.8% (21)	58.1% (43)	71.4% (*)	49.4% (81)	164
Arts	NA	75% (*)	83.9% (26)	100% (*)	76.9% (40)	52
Health	62.5% (*)	40.4% (36)	83.3% (125)	66.7% (*)	68.5% (198)	289
Business	15% (*)	41.5% (54)	74.3% (228)	81.8% (*)	60.3% (318)	527
History	0% (*)	38.5% (*)	70.6% (*)	50% (*)	53.5% (23)	43
Grand Total	37.3% (28)	49.0% (369)	73.2% (1268)	75% (60)	61.6% (1988)	3226

Table 20: 2007 NMSU Graduates working in NM by Degree and Field

Degree Major	Associate's Degree (2 year degree)	Bachelor's Degree	Master's Degree	Doctorate Degree	Grand Total Work in NM	Total Graduates
Agriculture (N)	NA	56.1% (55)	26.7% (*)	66.7% (*)	50% (67)	134
Environmental Science	NA	50% (*)	44.4% (*)	NA	48.4% (*)	31
Journalism	NA	64.9% (37)	NA	NA	64.9% (37)	57
Computer Science	NA	59.6% (34)	4.8% (*)	40% (*)	44.6% (37)	83
Education	NA	82.3% (218)	82.2% (194)	60% (*)	81.2% (440)	542
Engineering	NA	49.7% (74)	20.4% (22)	46.7% (*)	39.0% (108)	277
Engineering Tech	NA	66% (33)	NA	NA	66% (33)	50
Foreign Language	NA	64.6% (62)	50% (*)	NA	63.7%	102
Human Science	NA	68.4% (39)	70% (*)	NA	68.7% (46)	67
English	NA	66.7% (42)	57.1% (20)	0.0%	62.6% (62)	99
Humanities/General	NA	55.6% (40)	NA	NA	55.6% (40)	72
Biology	NA	63.6% (63)	26.7% (*)	37.5% (*)	57.4% (70)	122
Math	NA	36.4% (*)	18.8% (*)	0.0%	25% (*)	28
Philosophy	NA	72.7% (*)	NA	NA	72.7% (*)	11
Physical Science	NA	33.3% (*)	21.7% (*)	0.0%	23.3% (10)	43
Psychology	NA	72% (36)	0.0%	50% (*)	68.5%	65
Corrections	50% (*)	62.3% (104)	65.2% (*)	NA	62.5% (120)	192
Public Administration	NA	68.6% (59)	68.2% (58)	NA	68.4% (117)	171
Social Sciences	NA	56.0% (65)	33.3% (*)	NA	49.4% (81)	164
Arts	NA	79.1% (34)	66.7% (*)	NA	76.9%	52
Health	NA	67.3% (171)	77.1% (27)	NA	68.5% (198)	289
Business	57.9% (*)	64.2% (240)	51.5% (67)	0.0%	60.3% (318)	527
History	NA	51.5% (*)	60% (*)	NA	53.5% (23)	43
Grand Total	57.1% (12)	64.6% (1454)	54.8% (466)	44.4% (32)	61.6% (1988)	3226

Percentage of Lab Employees from NM Institutions

■ LANL ■ Sandia　　Source: LANL and Sandia
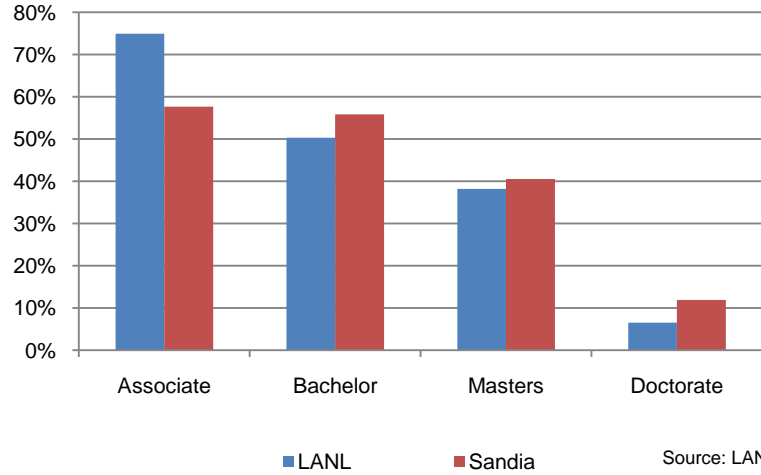
Number of LANL Employees by School, 2010

Source: LANL

Instruction and Student Services Appropriation

Institutions report actual total student credit hours, by class and level of instruction (lower, upper, graduate) to HED (i.e. '09 numbers determine '11 adjustment)

INSTRUCTION AND INSTRUCTIONAL SERVICES
Student credit hours are multiplied by a dollar value, set by HED, that varies by the type of class and level of instruction.

Credit hours and generated instruction dollars are compared to the base year. If credit hours *or* program dollars increase by 3 percent, the institution qualifies for a positive workload adjustment. If *credit hours* decrese by 5 percent, the institution qualifies for a negative workload adjustment. If an institution qualifies for a workload adjustment, the previous year becomes the new base year. Otherwise, the base year remains unchanged.

NO WORKLOAD (Stay within the Band)

Institution receives *no* student services adjustment, Student Services funding remains

POSITIVE WORKLOAD

NEGATIVE WORKLOAD

STUDENT SERVICES ADJUSTMENT
Institutions that qualify for an instruction and instructional services workload adjustment qualify for a student services adjustment. This is calculated by:
Previous Year's Fall Student Headcount-Base Year Fall Student Headcount*Flat Dollar Rate

INSTRUCTION AND INSTRUCTIONAL SERVICEST+STUDENT SERVICES (ADJUSTED OR UNADJUSTED)=Estimated Instruction and Student Services Adjustment.

Physical Plant Operations Appropriation

Physical Plant Operation:
Total eligible square feet*flat dollar value

Space is eligible if used for 'instruction and general purposes'; HED determines the flat dollar value.

Utilities:
Average utility cost per square foot*eligible space

Average cost is calculated by HED, but has not been updated in recent years.

PHYSICAL PLANT OPERATION+UTILITES=Estimated Physical Plant Operations Appropriation.

Instruction and Instructional Services+Student Services+Physical Plant and Operation=Estimated ING Adjustment

INSTRUCTION AND INSTRUCTIONAL SUPPORT+STUDENT SERVICES (ADJUSTED OR UNADJUSTED)=Estimated Instruction

Revenue Credits

Land and Permanent Revenue Fund Credit
Credit is taken from four-year institutions for actual Land and Permanent Revenue Fund revenue (i.e. '07 income determines '09 credit). If revenue exceeds the ammount assumed under the BRR transfer: the institution is credited for 1/3 of the excess, and is allowed to retain 2/3 for discretionary use.
An increase in Land and Permanent Fund income will reduce general fund appropriation, and vice versa.

Mil Levy Revenue Credit
Credit is taken for the *projected* mil levy revenue generated by the minimum mil levy required by statude for branch community colleges (1 mil) and independent community colleges (2 mil). Any revenue generated by mils above the minimum is retained by the institutions for discretionary use.

Tuition Revenue Credit
Calculated by:
A=Total number of credit hours*appropriate credit hour tuition rate (for students with hours 3-9).
B=Headcount*appropriate tuition rate (for students with hours 9-18).
A+B=Tuition Revenue Credit.

Beginning in SY 09, dual credit enrollment will be deducted from the institutional headcount. If institutions raise tuition above the percentage increase assumed by the legislature, then they will see an increase in their deduction, and vice versa. (Applies to both four and two year institutions)

Cost Adjustments

Building Renewal and Replacement
Meant to fund 3 percent of replacement costs for eligible facilites (includes all square footage used for instruction and general purposes). Currently funded at 67.5percent.
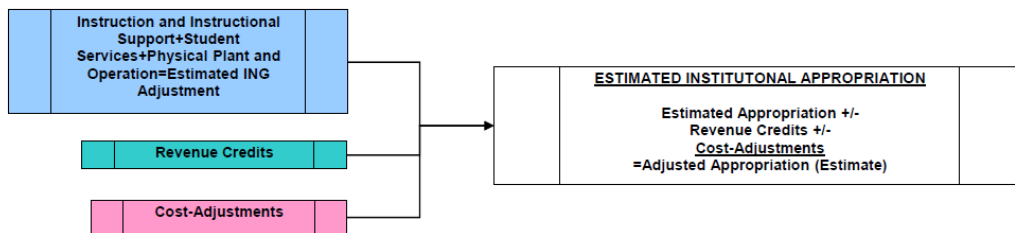
Equipment Renewal and Replacement
This component is designed to fund 1/5 replacement costs of 5-year equipment, and 1/12 replacement costs of 12-year equipment used for instruction and general purposes. Currently funded at 23.25 percent.

Inflationary Adustments, including compensation:
No infromation available, follow up with HED necessary.

Other Adjustments
No information available, follow up with HED necessary.

3% Scholarship Adjustment
This is calcluated by multiplying 3 percent of the previous fall's student headcount enrollment by the institution's current tuition and fee rate. (Applies to both four and two year institutions)

Mechanics of Higher Education Funding Formula

Instruction and Instructional Support+Student Services+Physical Plant and Operation=Estimated ING Adjustment

Revenue Credits

Cost-Adjustments

ESTIMATED INSTITUTONAL APPROPRIATION

Estimated Appropriation +/-
Revenue Credits +/-
Cost-Adjustments
=Adjusted Appropriation (Estimate)

TABLE 21: UNM: Degrees per Student Comparisons

Institution	Bachelor's degrees per 100 FTE undergraduates (2008)	Total Degrees/Certificates per 100 FTE enrolled (2007)
University of New Mexico	**18.39**	**22.18**
Brigham Young University	21.71	26.31
Colorado State University	21.26	22.77
San Diego State University	23.94	26.69
Texas Christian University	21.33	26.61
United States Air Force Academy	18.74	21.90
University of Wyoming	20.97	22.24
University of Utah	25.90	31.46
University of Nevada-Las Vegas	18.76	22.03
Mountain West Average	**21.6**	**25.0**
Florida Atlantic University	25.56	30.29
George Mason University	23.10	32.26
Georgia State University	19.59	26.86
New Mexico State University	20.09	21.19
Temple University	20.23	24.50
The University of Texas at Arlington	24.23	29.65
University of California-Riverside	23.41	23.06
University of Hawaii at Manoa	22.63	26.13
University of Houston	20.91	24.45
University of Illinois at Chicago	21.85	25.72
University of Memphis	18.18	21.82
University of South Florida	22.04	26.98
Virginia Commonwealth University	18.14	21.57
Wayne State University	17.32	22.88
University of Nevada-Las Vegas	18.76	22.03
Student Referent Average	**21.1**	**25.3**
The University of Tennessee	17.81	22.54
The University of Texas at Austin	25.24	26.45
University of Arizona	21.85	23.25
University of Arkansas Main Campus	16.95	22.49
University of Colorado at Boulder	23.04	25.46
University of Iowa	20.91	25.08
University of Kansas	20.81	24.32
University of Kentucky	21.61	23.89
University of Missouri-Columbia	23.81	26.34
University of Nebraska-Lincoln	19.21	21.35
University of Oklahoma Norman Campus	21.86	25.99
University of Oregon	22.57	28.74
University of South Carolina	20.29	25.41
University of Virginia-Main Campus	23.19	26.95
University of Washington	25.28	29.84

Institution		
University of Utah	25.90	31.46
CHE Group Average	**21.9**	**25.6**

TABLE 22: NMSU: Degrees per Student Comparisons

Institution	Bachelor's degrees per 100 FTE undergraduates (2008)	Total Degrees/Certificates per 100 FTE enrolled (2007)
New Mexico State University	**20.09**	**21.19**
Boise State University	12.72	19.99
California State University-Fresno	20.49	20.97
Louisiana Tech University	26.52	21.84
San Jose State University	21.81	24.23
University of Hawaii at Manoa	22.63	26.13
University of Idaho	21.05	25.87
University of Nevada-Reno	18.75	19.11
Utah State University	24.75	28.18
WAC Average	**21.1**	**23.3**
Clemson University	21.24	24.00
Louisiana State University	20.25	22.90
Texas A & M University	22.13	24.39
The University of Tennessee	17.81	22.54
University of Arkansas Main Campus	16.95	22.49
University of Missouri-Columbia	23.81	26.34
Virginia Polytechnic Institute and State University	21.16	24.12
Colorado State University	21.26	22.77
Iowa State University	21.68	22.51
Kansas State University	20.90	22.62
Oregon State University	21.99	25.22
Texas Tech University	21.88	23.62
LTV average	**20.9**	**23.6**
Montana State University	18.74	22.58
Oklahoma State University	22.62	24.06
The University of Texas at El Paso	18.98	21.17
University of Arizona	21.85	23.25
University of New Mexico-Main Campus	18.39	22.18
University of Wyoming	20.97	22.24
Washington State University	25.48	30.20
Colorado State University	21.26	22.77
Iowa State University	21.68	22.51
Kansas State University	20.90	22.62
Oregon State University	21.99	25.22
Texas Tech University	21.88	23.62
University of Idaho	21.05	25.87
University of Nevada-Reno	18.75	19.11
Utah State University	24.75	28.18
CHE average	**21.3**	**23.7**

Table 23: Higher Ed Comparison Between New Mexico and Arizona

	New Mexico	Arizona
State population	2,000,000	6,500,000
Total college enrollment	134,375	624,147
Number of public institutions	28	27
Number of public 4-year institutions	8	6
Higher Ed support as a percentage of tax revenues	13.7%	8%
State support per capita	$581	$301
Appropriations per $1000 of personal income	$16	$6
Bachelor's degrees awarded per 100 HS graduates six years earlier	40	75
Gross state product, in millions	$79,901	$248,888
Per capita personal income	$29,929	$31,936

Source: LFC

Table 24: UNM Graduation Rates

Category	4 YR %	6 YR %
Overall	13.2	43.0
Top Quartile	20.6	56.5
Lottery	17.6	57.8
Top Quartile & Lottery	23.9	65.7
Anglo	15.2	47.9
Anglo/Lottery	20.3	61.5
Anglo/Lottery & Top Quartile	26.9	68.5
Minority	9.6	36.9
Minority/Lottery	13.5	52.6
Minority/Lottery & Top Quartile	18.5	61.3
Non-Traditional Freshman	0	20.0

Source: UNM

Table 25: UNM Student Athlete Graduation Rates, 2002-03

All students	Student-athletes
44%	55%

Source: UNM