



Faculty Study

New Mexico Higher Education Institutions
Compared with Regional Peers

Gap Analysis

Prepared for the Legislative Education Study Committee

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Secretary of Higher Education

I. Introduction and Overview:

This study addresses concerns regarding compensation disparities between New Mexico institutions and their peers. A recommended adjustment schedule with fiscal requirements is included, but not specific recommendations for faculty at individual institutions.

University of New Mexico Health Science Center:

This institution is unique in the state system of higher education with a unique mission (Teaching / Research / Private Practice / Business) and status of the related faculty. It is funded only partially by the existing higher education funding formula and receives additional appropriations from the legislature. In some cases, due to the unique nature of the medical center, faculty salaries are substantially above those at other institutions. Due to the unique and complex nature of the UNM Medical School, a separate study for that institution is recommended.

Community College Peers -

The charge was to identify colleges in the state with lower than average salaries, calculate the gap, and recommend modifications which would bring low salary colleges up to the current state average, which is dominated by Central New Mexico Community College due to the size of the faculty.

II. Executive Summary:

Closing the Gap: HED estimates correcting the current difference between salaries at New Mexico institutions and their peer averages will require an estimated \$25,218,000 in additional funding. Assuming this will occur over 4 years requires additional funds to offset an anticipated salary inflation of 3.5%, bringing the amount to approximately \$28,750,000. This will require an annual allocation of \$7,200,000 to allow the institutions to approximate the average salaries of their peers. All values assume the inclusion of benefits in the calculations.

III. Methodology Overview:

The average salaries for New Mexico institutions were compared with regional peers to identify 'gaps' in faculty compensation. The differences between each New Mexico institution and its peer average is in turn weighted by the number of New Mexico faculty in each rank category to estimate the funds required to bring those salaries to approximate the average of their peers. These institution specific amounts are then summed to provide an estimated minimum allocation required to accomplish this goal. This amount is spread out over a four year implementation schedule, which includes expected inflation in peer salaries, in order to meet the peer average in a reasonable time with reasonable increases in salary expenditures.

Community college salaries were compared to the average for all New Mexico community colleges, which is dominated by Central New Mexico College. Those below the state average were identified as having a salary gap and a similar schedule was developed for those institutions.

The case of Northern New Mexico College is unique in that the institution is in transition as it expands its mission to include bachelor's and graduate degrees. Currently, however, it offers a primarily lower division curriculum, with a typical community college faculty; that is a faculty with fewer terminal degrees than other comprehensive institutions. All faculty are classified as instructors and salaries are in line with instructors at other comprehensive institutions. A number of bachelor's and graduate programs are proposed which will require additional faculty with terminal degrees. Those individuals are included in a separate table with the assumption they will be hired at the peer average for assistant professors at other comprehensive universities. Based on this assumption the salaries required for NNMC will be approximately \$1.9 million dollars for 32 additional faculty by 2009.

IV. Detailed Summary of Findings: Salary and Benefits

Universities

	Professor	Associate	Assistant	Instructor	Lecturer	No Rank
Weighted Peer Average	\$125,646	\$85,576	\$76,664	\$46,492	\$55,605	
Research	New Mexico Tech	\$98,015	\$77,634	\$70,461	\$43,121	\$49,772
	New Mexico State University	\$89,741	\$76,235	\$64,064	\$45,722	\$0
	University of New Mexico	\$108,859	\$78,810	\$70,235	\$66,684	\$58,502
	Weighted average	\$101,194	\$77,664	\$67,318	\$53,117	\$58,094

Salary Gap Research Institutions v. Peers **-\$24,452** **-\$7,912** **-\$9,345** **\$6,626** **\$2,489**

Weighted Peer Average	\$87,162	\$72,781	\$62,087	\$45,971	\$47,321	\$59,074
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Comp.	Eastern New Mexico University	\$75,492	\$61,917	\$56,680	\$46,410	\$0	\$0
	New Mexico Highlands University	\$69,005	\$63,529	\$59,131	\$0	\$0	\$54,676
	Western New Mexico University	\$65,766	\$55,935	\$59,390	\$46,998	\$0	\$0
	Weighted AVG	\$69,900	\$61,057	\$58,001	\$46,583	\$0	\$54,676

Salary Gap Comprehensive Institutions v. Peers **-\$17,262** **-\$11,724** **-\$4,086** **\$612** **-\$47,321** **-\$4,398**

Community Colleges

Community Colleges

Institution Name	Number	Average	Difference
UNM T	8	\$63,905	\$8,769
NMMI	79	\$61,836	\$6,701
SFCC	58	\$61,665	\$6,529
UNM G	66	\$57,816	\$2,681
SJC	96	\$56,849	\$1,713
NMSU C	25	\$56,464	\$1,329
CCC	50	\$55,348	\$213
UNM V	24	\$55,321	\$185
CNM	330	\$55,286	\$150
NMJC	70	\$54,778	(\$358)
NMSU G	15	\$53,814	(\$1,322)
ENMU RUI	3	\$52,848	(\$2,287)
ENMU R	66	\$52,601	(\$2,534)
NMSU DA	93	\$51,711	(\$3,424)
UNM LA	1	\$47,725	(\$7,411)
NMSU A	52	\$47,118	(\$8,018)
MCC	12	\$46,814	(\$8,322)
LCC	34	\$44,674	(\$10,462)
Weighted State Average		\$55,136	

Northern New Mexico College

Current Northern New Mexico College faculty are primarily instructors and there is no current salary discrepancy between faculty of that rank at other comprehensive universities in the state. However, with the additional faculty required to support the expanded mission and new programs, more faculty will be required with higher educational attainment and corresponding salaries.

Program	2006	2007	2008	2009	2010
Bachelors Elementary Education	1	1	1	2	2
Endorsements in Reading, Bilingual Education, TESL	1	1	1	2	2
Bachelors of Special Education	1	1	1	2	2
Bachelors of Secondary Math/Science	1	1	1	2	2
Masters of Teaching & Learning	1	1	1	2	2
Masters of Educational Leadership	1	1	1	2	2
*BS Biology (1 Ph.D, 1 MS)	2	2	2	2	2
*BS Environmental Science (Agr. Sci., Forestry Sci., Environmental Mgt. & Policy - 1 Ph.D.)	1	1	1	2	2
Math		1	1	2	2
*Bachelors of Engineering Technology (Materials Sci., Electronics 1 Ph.D.)		1	1	2	2
Bachelors of Computer Science	1	1	1	2	2
Bachelors of Spanish Literature		1	1	2	2
Bachelors of Native American Studies		1	1	2	2
Bachelors of Fine Arts		1	1	2	2
BS Nursing		1	1	2	2
*BS Integrative Healing - No new faculty indicated)			1		
*Bachelors in Business Administration (Accounting, Project Management - 1 Ph.D., 1 Ph.D. adjunct)			1	2	2
**Engineering					
**General Studies					
**Criminal Justice					
**Social Sciences					
**College Studies/Liberal Arts					
Annual Total:	10	16	18	32	32

* Proposed now

** Need Identified, not currently requested.

NNMC Requirements for Proposed Programs		
Year	Faculty	Salary Requirements
2006	10	\$ 622,067
2007	16	\$ 995,308
2008	18	\$ 1,119,721
2009	32	\$ 1,990,615
2010	32	\$ 1,990,615

Peer Average for Comprehensive Assistant Professors \$ 62,087

Appendix A - Peer Group Selection

Comparisons between institutions are difficult due to their unique characteristics. The composition of the faculty in terms of length of service and educational attainment may affect salary levels. In addition programs in the curriculum will reflect market rates for recruitment and retention of faculty in different disciplines, making science and engineering programs more expensive than liberal arts. Such factors in combination make such comparisons challenging.

In response to these challenges cited above, a neutral source was used to identify regional peer institutions. This source was the U.S. Department of Education which identifies peers based on institutional characteristics such as Carnegie classification, control and level of institution, degree-granting status, Title IV status, and region. Data collected from this source reflects a long standing survey with credibility in the academic community. All New Mexico colleges were removed from the comparisons.

IPEDS REGIONAL PEER GROUP

<i>Research Universities (UNM, NMSU, NM Tech)</i>	<i>Comprehensive Universities (ENMU, WNMU, NMHU)</i>
Arizona State Univ., Tempe Campus	Angelo State Univ.
Oklahoma State Univ.-Main Campus	Arizona State Univ., West Campus
Texas A & M Univ.	Cameron Univ.
Texas Tech Univ.	East Central Univ.
The Univ. of Texas at Arlington	Lamar Univ.
The Univ. of Texas at Austin	Midwestern State Univ.
Univ. of Arizona	Northeastern State Univ.
Univ. of Houston	Northwestern Oklahoma State Univ.
Univ. of North Texas	Prairie View A & M Univ.
Univ. of Oklahoma Norman Campus	Sam Houston State Univ.
	Southeastern Oklahoma State Univ.
	Southwestern Oklahoma State Univ.
	Stephen F Austin State Univ.
	Sul Ross State Univ.
	Tarleton State Univ.
	Texas A & M International Univ.
	Texas A & M Univ., Corpus Christi
	Texas A & M Univ., Texarkana
	Texas State Univ., San Marcos
	The Univ. of Texas, Brownsville
	The Univ. of Texas, San Antonio
	The Univ. of Texas, Tyler
	The Univ. of Texas, Permian Basin
	Univ. of Central Oklahoma
	Univ. of Houston, Clear Lake
	Univ. of Houston, Victoria
	West Texas A & M Univ.

Appendix B – Methodology

Technical Definitions:

Faculty - Only Full-time *instructional* faculty equated to 9-month contracts.
Any teaching contract longer or shorter than 9-months were converted to 9-month equated contracts.

Faculty Rank - Full Professor - Highest
Associate Professor -
Assistant Professor -
Instructor/ Lecturer - Lowest

Research Institution - NMSU, NM TECH, UNM

Comprehensive Institution - ENMU, NMHU, WNMU

Institutional Salary Calculations (*weighted average*): In recognition of the unique institutional characteristics within the peer group, a weighted average salary is calculated to reflect the number of faculty at each level of academic rank and their average salary.

Consider an example institution with 100 faculty; 33 professors, 44 associates, and 23 assistants.

	Pct of Faculty	Avg. Salary	Weight
Professor	33%	X \$75,000 =	\$24,750
Associate	44%	X \$65,000 =	\$28,600
Assistant	23%	X \$45,000 =	\$10,350
Total: 100	100%		\$63,700 Institutional Avg.

A similar calculation was made for all members of the peer group to determine an “average peer” salary for comparison with New Mexico institutions.

Peers – institutions with similar characteristics as determined by NCES.

IPEDS Regional Peers - Arizona, Oklahoma, Texas

Data collection:

- 2005 Integrated Postsecondary Educational Data System (IPEDS) data was used in this study.
- Peer groups based on IPEDS automated peer group to assure some neutrality in peer selection. (Note that private or tribal schools were removed.)

The peer group is based on:

- Carnegie classification (2005 Carnegie)
- Control (Public) and level of institution (Research, Comprehensive, etc...)
- Degree-granting status (Doctoral, Master's, Bachelor's)
- Title IV status (Qualification for Federal Financial Aid Programs)
- Southwest Region (New Mexico, Arizona, Texas, Oklahoma)

Results (See appendix A for specific institutions.)

- Research
 - 9 Out-of-state peers
 - 3 In-state peers
- Comprehensive
 - 27 Out-of-state peers
 - 3 In-state peers
- Community College
 - 17 In-state institutions
 - Branch campuses and Independents
- Transitional Institution
 - NNMC

Population Selection:

- Full-time salary information for Research and Comprehensive Universities
 - Collected total salary outlay and number of faculty by institution and academic rank
 - Professor
 - Associate Professor
 - Assistant Professor
 - Instructor
 - Lecturer
 - No Academic Rank
- Contract length description for faculty employed full time for any academic year. Institutions may have different academic terms or contract lengths. IPEDS recognizes the following:
 - Full-time faculty on 9 or 10-month salary schedule
 - Full-time faculty on 11 or 12-month salary schedule

9 Month Equivalent Contract:

Calculation of 9 month equivalent contracts: To facilitate valid comparisons, IPEDS employs the following methodology to convert 11 or 12 month contract into a 9 month equivalent.

- Multiply 11 or 12 month salary amount by 81.8% (9 months divided by 11 months = 81.8%)
- Example (not based on actual numbers)
 - Faculty A is earning \$100,000 under a 11 month contract
 - $\$100,000 \times 81.8\% = \$81,800$
 - Faculty A earns \$81,800 under the 9 month-equated

contract

11/12 Month Contract	Ratio	Equated 9 Month Contract
\$100,000	X 81.8% =	\$81,800

- Calculating the 9 month equated total salary outlay for a specific faculty rank at an institution
 - Example for Professors (not based on actual numbers)
 - The sum of 9 or 10 month salary outlay is \$1,980,000
 - The sum of 11 or 12 month salary outlay is \$605,134
 - 9 month equated salary calculation
 - $\$605,134 \times 81.8\% = \$495,000$
 - $\$1,980,000 + \$495,000 = \$2,475,000$

11/12 Month Salary Outlay	Ratio	Equated 9 Month Salary Outlay	9/10 Month Salary Outlay	Total Salary Outlay for Professor
\$605,134	X 81.8% =	\$495,000	+ \$1,980,000 =	\$2,475,000

Salary and Benefits Calculation:

- Average salary of full-time faculty by institution and academic rank
 - Divide total salary outlay by number of faculty members in respect to institution and academic rank
 - Example (not based on actual numbers)
 - Total salary outlay for Professors at Institution A is \$2,475,000
 - Total number of Professors at Institution A is 33
 - Average salary of Professors at Institution A is
 - $\$2,475,000 / 33 = \$75,000$

Institution A	Faculty	Salary outlay	Number	Avg. Salary
	Professor	\$2,475,000	33	\$75,000
Associate	\$2,860,000	44	\$65,000	
Assistant	\$1,035,000	23	\$45,000	
Total:	\$6,370,000	100		

- Benefits calculation
 - Total benefit outlay is divided by total salary outlay to arrive at a ratio of salary vs. benefits
 - Example (not based on actual numbers)
 - Total Salary outlay at institution A is \$6,370,000
 - Total Benefits outlay at institution A is \$1,592,500
 - $\$1,592,500 / \$6,370,000 = 25\%$
 - Using this percentage we can now estimate an average benefits for each of the academic ranks
 - Example (not based on actual numbers)

Institution A	Faculty	Ratio	Avg. Salary	Benefits	Total Compensation
	Professor	25%	X \$75,000 =	\$18,750	\$93,750
Associate	25%	X \$65,000 =	\$16,250	\$81,250	
Assistant	25%	X \$45,000 =	\$11,250	\$56,250	

- Weighted average salary of full-time faculty at an institution
 - Get the total number of faculty at the institution by adding the number of faculty members from all of the academic rank.
 - Derive the percentage of each academic rank
 - Example (not based on actual numbers)
 - Professor: $33 / 100 = 33\%$
 - Associate: $44 / 100 = 44\%$
 - Assistant: $23 / 100 = 23\%$
 - Calculate the weighted average by multiplying the percentage with the average salary of each academic rank and adding the resulting numbers together
 - Example (not based on actual numbers)

Institution A	Faculty	Percent	Avg. Total Compensation	Weight
	Professor	33%	X \$93,750 =	\$30,938
Associate	44%	X \$81,250 =	\$35,750	
Assistant	23%	X \$56,250 =	\$12,938	
		100%	\$79,625	

- A similar calculation was made for all members of the peer group to determine an average peer salary for comparison with New Mexico institutions.

Peer Group	Institution	Number	Percent	Avg.	Weight
				Compensation	
	Institution A	100	22%	X \$79,625 =	\$17,518
	Institution B	54	12%	X \$84,300 =	\$10,116
	Institution C	154	34%	X \$60,100 =	\$20,434
	Institution D	114	25%	X \$62,000 =	\$15,500
	Institution E	32	7%	X \$95,200 =	\$6,664
	Total	454	100%		\$70,232

Gap calculation:

- Weighted average of IPEDS peer group is compared to New Mexico weighted average.
- Example (not based on actual numbers)
 - If the weighted average of IPEDS peer is \$70,232 and
 - If the weighted average of New Mexico (NM) peer is \$60,232 and
 - If the total number of NM peer faculty is 50
 - $\$70,232 - \$60,232 = \$10,000$ is the weighted average difference per full time faculty
 - $\$10,000 \times 50$ (NM peer faculty) = \$500,000 (estimated total cost of bringing the NM peers up to IPEDS peers)

Peer group Compensation	NM peer Compensation	Difference	Number of NM faculty	Total Cost
\$ 70,232	- \$ 60,232 =	\$ 10,000	X 50 =	\$ 500,000

Community Colleges:

- The objective is to determine if some institutions are below the state average.
- Difference from universities
 - IPEDS peers are the same as NM state average
 - Weighted institutional average vs. NM state weighted average
 - There is no consistency in regards to distribution of academic rank
 - Some institutions have no academic rank while others have full range
- Salary Comparison calculation
 - Both weighted institutional and NM state averages are calculated as previously described and comparisons made to identify gaps. The amount of the gap is multiplied by the number of faculty at institutions which are below the NM state average.

Institution	Weighted Avg. Institution Compensation	Weighted Avg. NM Compensation	Difference	Number of faculty	Cost of increase
Community College A	\$50,000	- \$55,000 =	\$(5,000)	X 55 =	\$275,000
Community College B	\$56,000	- \$55,000 =	\$1,000	X 70 =	N/A
Community College C	\$53,000	- \$55,000 =	\$(2,000)	X 65 =	\$130,000
Community College D	\$60,000	- \$55,000 =	\$5,000	X 40 =	N/A
Total					\$ 405,000

Transitional Institution (NNMC):

- Transition institution
 - Currently NNMC does not have any reported faculty with academic rank
 - NNMC plans on having 32 faculty with terminal degrees by 2009
 - Estimated salary based on that of Comprehensive Institutions peer average for assistant professors:
 - Peer average = \$62,087
 - 32 new faculty
 - \$62,087 X 32 = \$1,990,615