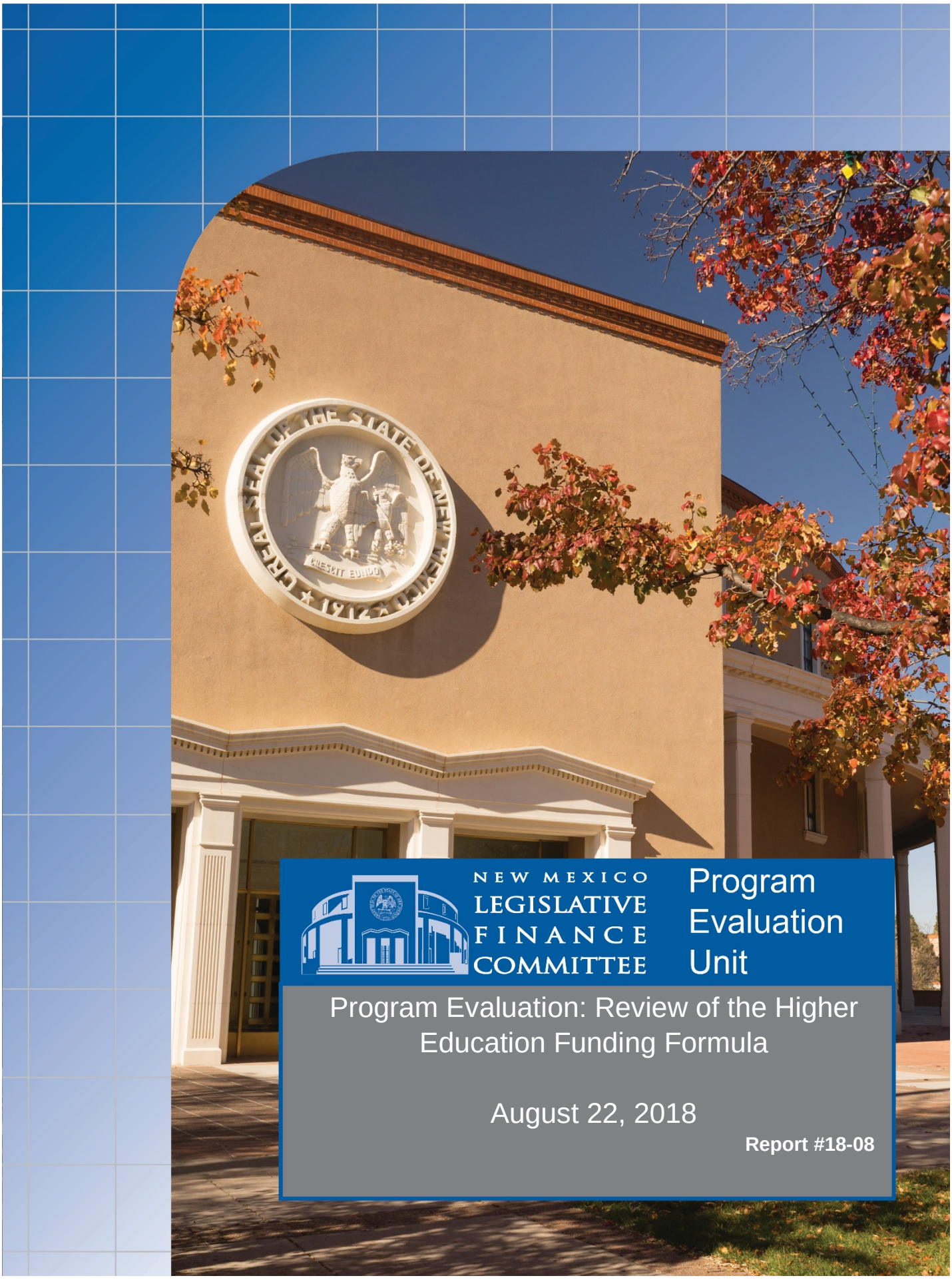

Program Evaluation: Review of the Higher Education Funding Formula

August 22, 2018

Report #18-08

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David Abbey
Director

August 22, 2018

Dr. Barbra Damron, Cabinet Secretary
Higher Education Department
2044 Galisteo Street, Suite 4
Santa Fe, NM 87505-2100

Dear Secretary Damron:

On behalf of the Legislative Finance Committee, I am pleased to transmit the evaluation, *Review of the Higher Education Funding Formula*. The evaluation reviews the status of the higher education performance funding formula and the relationship between funding and performance outcomes, and trends driving changes in college and university performance.

This report will be presented to the Legislative Finance Committee on August 22, 2018. An exit conference to discuss the contents of the report was conducted with the Higher Education Department on August 15, 2018. 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 colleges, universities, and students will benefit from our efforts. We very much appreciate the cooperation and assistance we received from you and your staff.

Sincerely,

David Abbey, Director

Cc: Representative Patricia Lundstrom, Chairwoman, Legislative Finance Committee
Senator John Arthur Smith, Vice-Chairman, Legislative Finance Committee
Marc Saavedra, Executive Director, Council of University Presidents
Ty Trujillo, Executive Director, New Mexico Association of Community Colleges
Katherine Ulibarri, Executive Director, New Mexico Independent Community Colleges

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EXECUTIVE SUMMARY

Adjusting Formula Incentives Will Ensure Quality Higher Education Outcomes

Since FY13, the staff at New Mexico's Higher Education Department (HED) and Legislative Finance Committee (LFC) have used a performance funding formula to allocate a small portion of annual appropriations to each of the state's 24 public, nonspecial and nontribal higher education institutions. The formula is meant to incentivize credential production (degrees and certificates), with special emphasis on science, technology, engineering, math and health (STEMH) credentials and credentials conferred to low-income students.

Initial data shows that credential production in New Mexico has increased since formula introduction, but little analysis has been conducted to see what types of degrees were generated, or if they were degrees of value – those with which graduates were satisfied, and resulted in adequately paid employment. The objectives of this evaluation were threefold: 1) to assess the status of the higher education performance funding formula and the relationship between funding and performance outcomes, 2) to review the data behind recent formula runs, and trends driving changes in institutional performance, and 3) to determine if new metrics or other, nonformula methods would be necessary to maintain quality in performance outcomes.

This evaluation finds that, without substantial changes in performance, a few schools will lose significant portions of their state revenues because the formula equalizes total funding to be proportional with performance. For some of those schools this equalization is not punitive but simply right-sizing state funding to smaller student bodies, and all but one college would still receive more state appropriations per student than their peers nationally. The analysis also found several two-year schools are overly reliant on state funding because of minimal levels of local tax support. These schools are disproportionally affected by shifts in formula funding and should consider ways to increase local support to offset fluctuations in formula funds.

Additional findings of this evaluation include that, though credential production has increased since formula implementation, most of the growth has been in lower-level certificates and associate's degrees in general studies – indicating the formula may need to be refined to better promote the eventual acquisition of bachelor's degrees and jobs. Other incentives in the formula seem insufficiently effective, likely because incentive levels are set too low. Neither degrees conferred to at-risk students nor STEMH credentials have increased any more than average since formula implementation.

In conclusion, the higher education funding formula would benefit from new and revised metrics to incentivize colleges to meet broader higher education goals of the state. Because no formal structures currently exist to monitor or amend the formula, this evaluation also recommends the Legislature consider using models from other states to codify HED's formula steering and technical committees.

KEY FINDINGS AND RECOMMENDATIONS

At least five colleges are overly reliant on state funding due to minimal levels of local financial support.

Some colleges demonstrate improvements in degree production but still lose money in the formula. Keeping the percent of performance funding low in years with little new funding prevents these improving colleges from losing funding. Over time, the formula will adjust appropriations to be proportional with each college's performance. Due to uneven local tax support levels, some colleges are better prepared for reductions in state funding than others.

For some colleges, right-sizing funding via formula equilibrium over time is appropriate; other colleges may simply require more funding to produce degrees in ways not rewarded in the formula. Equalizing state appropriations to be in proportion with performance would still leave most colleges with more state funding per student than their peers nationally.

Growth in general studies certificates has exceeded 600 percent over the last five years.

Evidence suggests that even the low level of performance funding used in New Mexico's formula since FY13 has compelled institutions to focus on degree completion. However, most of the increase in degree completion has come from nonspecific, subbaccalaureate certificates and associate's degrees. Counter to this increase, growth in jobs requiring an associate's degree or certificate are not projected to be especially large compared with jobs requiring a graduate degree. This indicates that New Mexico may be under emphasizing bachelor's and graduate degree production.

Only 32 percent of transfer students earn a bachelor's degree within six years.

The value of non-degree certificates, especially those not specific to a trade, is uncertain. Liberal arts and humanities have been the certificate and associate's degree majors of most growth, but these general degrees do not appear to prepare students for later baccalaureate success. New formula measures of job placement, wages, and transfer student success could help ensure the value of certificate and associate's programs.

Neither the proportion of degrees to at-risk students nor STEMH degrees have increased significantly since formula introduction.

Though largely compliant with best design practices, certain formula components could be modified to incentivize quality and encourage colleges to meet broader higher education goals. At 13.5 percent of total performance funding each, the at-risk and STEMH incentive metrics may be too low to combat attainment gaps for low-income students or sufficiently incentivize the production of STEMH degrees.

New formula measures of job placement, wages, and transfer student success could help ensure the value of certificate and associate's programs. Also, benchmarked metrics of spending efficiency would encourage quality business management at colleges.

Tennessee provides a good statutory model for the use and modification of a higher education funding formula.

Unlike other states, neither the Legislature nor HED officials have written New Mexico's formula into rule or statute or defined a process for current formula maintenance. Though the formula does benefit from an annual review by a "technical committee," just as with the formula itself, the technical committee, its leadership, and decision-making processes are not defined in statute or rule. While this arrangement has worked well over the last six years, now that the use of the formula is more accepted, legislators could consider codifying the review, modification, and use of the formula. Doing so would establish a process to review and implement changes recommended in this evaluation

Key Recommendations

The Higher Education Department and Legislative Finance Committee should

Keep the proportion of funding for performance low in years of little or no increases in appropriations to prevent colleges that are improving performance from losing year-over-year funding.

For the FY20 and FY21 formula run, ratchet back the amount of performance funding dedicated to end-of-course student credit hours by 4.25 percent each year, giving that share to the total awards and at-risk awards measures until the proportions are 30 percent to total awards and 20 percent to at-risk awards. The remaining 16.5 percent of dedicated end-of-course funding should be, over time, transferred to efficiency-related and other recommended measures outlined in Table 6 on page 29.

Between now and FY25, phase out the use of the STEMH, dual credit, 30 credit hour momentum, and 60 credit hour momentum measures and transition instead to new metrics rewarding job placement, transfer students, and transfer student success as outlined in Table 6. on page 29.

The Higher Education Department should

Work with the New Mexico Department of Workforce Solutions to determine the best way to create database or share data to track job placement and wages for graduates of New Mexico colleges.

The Legislature should

Consider amending Section 21-14-9 NMSA 1978 to require communities with branch community colleges to support those colleges at a two mill levy property tax to help offset any loss of state funding due to the formula.

Consider codifying the review, modification, and use of the formula in Section 21-2-5.1 NMSA 1978 using Tennessee law § 49-7-202 as a model for formula review committees.

New Mexico's Funding Formula Drives Degree Production

Like 24 other states,[i] staff at the Higher Education Department (HED) and Legislative Finance Committee (LFC) use a shared performance funding formula to develop annual state appropriation recommendations for the state's public colleges.[1] The formula, based on data collected by HED and executed in Microsoft Excel, is used to identify colleges that are performing in meeting state higher education goals, and to assign recommended appropriations to those colleges based on that performance and the annual availability of state funding.

Although the current version of the funding formula is not mandated or defined in statute nor rule, HED and LFC have been using it since FY13. Before that time, LFC and HED determined funding recommendations based on a more complicated formula that relied heavily on input-type metrics such as building square footage and credit hour load. This encouraged colleges to focus spending on new buildings and enrolling large freshmen classes without adequate attention to efficient institutional management or to shepherding students through to completion of a degree.

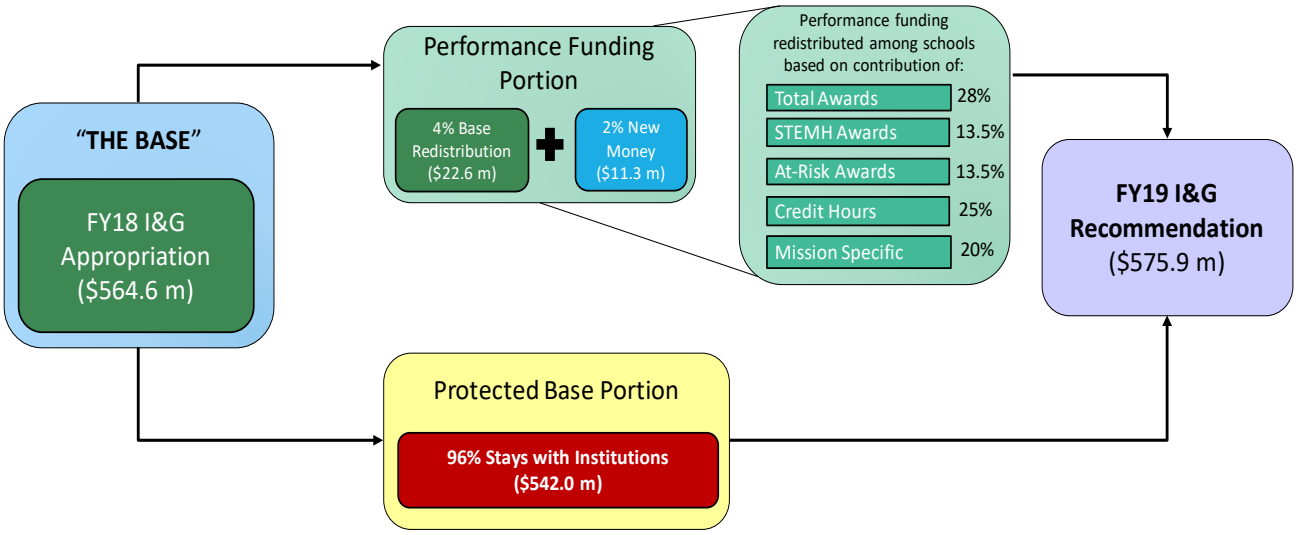
In contrast, New Mexico's current higher education performance funding formula functions by rewarding mostly output- and outcome-type metrics. It does this by taking a small portion of colleges' previous year state appropriations ("the base") and then reallocating that portion back to colleges based mainly on the number of degrees and credentials they produce, with special emphasis on STEMH awards and credentials conferred to low-income students (outcome metrics.) The formula also allocates any new money appropriated from the Legislature according to performance. As a result, colleges that produce increasing numbers of degrees generally receive more performance funding than was initially taken out of their base, at the expense of lower performing colleges that receive less. However, performance funding allocations are not solely tied to degree production. The formula also considers mission-specific metrics for certain classes of colleges: student progression (momentum) and dual credit course completion for comprehensive and two-year colleges, and generation of research funding for the three, research-focused universities.

Colleges Included in the Funding Formula

College	*Abbreviation*
University of New Mexico	UNM
New Mexico State University	NMSU
New Mexico Institute of Mining and Technology	NM Tech
Eastern New Mexico University	ENMU
Western New Mexico University	WNMU
New Mexico Highlands University	NMHU
Northern New Mexico College	NNMC
University of New Mexico-Gallup	UNM-G
University of New Mexico-Los Alamos	UNM-LA
University of New Mexico-Taos	UNM-T
University of New Mexico-Valencia	UNM-V
New Mexico State University-Alamogordo	NMSU-A
New Mexico State University-Carlsbad	NMSU-C
New Mexico State University-Doña Ana	NMSU-DA
New Mexico State University-Grants	NMSU-G
Eastern New Mexico University-Roswell	ENMU-RO
Eastern New Mexico University-Ruidoso	ENMU-RU
Central New Mexico Community College	CNM
Clovis Community College	CCC
Luna Community College	LCC
Mesalands Community College	MCC
New Mexico Junior College	NMJC
Santa Fe Community College	SFCC
San Juan College	SJC

[1] For the purposes of this report, all 24 institutions of higher education included in the funding formula are referred to in general terms as *colleges* or *schools*. Special schools and the University of New Mexico's Health Sciences Center are not included in the higher education performance funding formula.

Figure 1. FY19 Funding Formula Diagram



Though the formula is used to incentivize and reward outcomes, most annual legislative appropriations to colleges are not dependent on performance. Instead, an amount equal to over 90 percent of the college's prior-year appropriation is "protected" and flows back to the institution regardless of performance. In that way, much of a college's annual state appropriation is still the result of past input-type calculations, and any past imbalances in funding between similar colleges before the funding formula are carried over year after year.[2]

Also, the formula still includes 25 percent of performance funding based on a short-term output measure, end-of-course student credit hours (EOC SCH.) While EOC SCH was initially included in the formula as a soft landing for schools during the transition to the new funding formula, the phasing out of the EOC SCH metric has stalled.

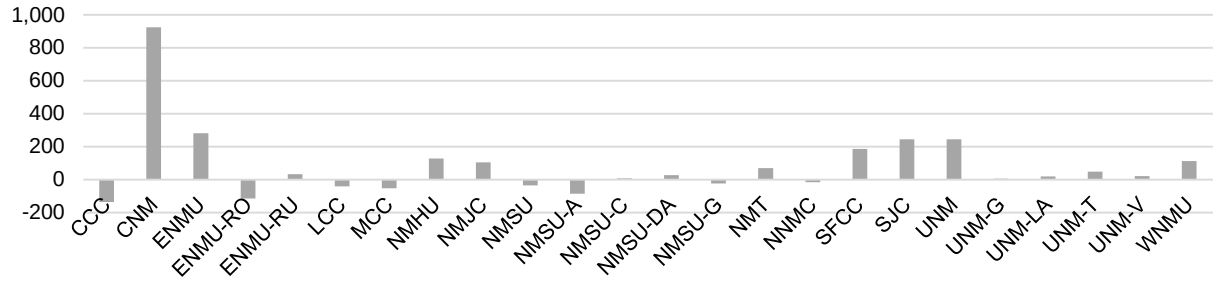
Evidence suggests that even this low level of performance funding has compelled many institutions to change their operations to focus on degree completion, but institutional performance is uneven. Since FY12, higher education institutions have increased total credentials awarded by 23 percent, while enrollment has declined. How much of this increase is attributable to the current funding model is unclear, but the higher education funding formula has certainly motivated several institutions to implement changes that help more students graduate. For example, some institutions implemented simple administrative changes that help students take the most direct path to their degree without taking unnecessary credit hours. At the University of New Mexico, enhanced student advising resulted in a near doubling of its four-year graduation rate. Certain recent actions by the Higher Education Department (HED) have also facilitated increased degree production. These include remedial course reform, statewide common course

The University of New Mexico nearly doubled their four-year graduation rate between 2014 and 2018, from 16.7 percent to 32.5 percent.

[2] LFC analysis found that inequities in past funding from one college to another were not coorelated with racial/ethnic or socio-economic make-up of a college's student body. See Appendix B for more infomation.

numbering to facilitate credit transfers, the revision of general education requirements across degrees, and development of statewide meta-majors.

Chart 1. Change in Three-year Average Credentials Awarded
(FY12-FY14 and FY15-FY17)



Source: FY19, FY17, and FY15 funding formulas

Moreover, even though the intent of the funding formula - to increase the number of New Mexicans with degrees and credentials with a special focus on low-income students and those in STEMH fields – seems to be slowly bearing fruit, it does not mean that the formula is optimized. Credential growth has not been shared evenly among institutions and many state colleges are still plagued with graduation rates far below their peers nationally. Also concerning are the attainment gaps that still exist for low-income, transfer, adult, Native American, and Hispanic students. Further honing of formula incentives could work to combat some of these lingering disparities.

Though largely compliant with best design practices, certain formula components could be modified to incentivize better outcomes. The National Center of Higher Education Management Systems (NCHEMS), a state higher education policy focused think-tank developed a seminal report in 2016 with best practices for outcomes-based funding formulas for higher education.[ii] New Mexico's formula meets many of NCHEMS's design standards. It includes all public colleges, reflects and reinforces mission differentiation, includes metrics that reward student progress (momentum) as well as ultimate success (degrees), has a minimum number of metrics and is clear on what outcomes count, and, finally, has unambiguous metrics difficult to game (using absolute numbers rather than rates.)

However, New Mexico falls short on a number of NCHEMS's formula design principals. First, NCHEMS states a funding formula should reward colleges that demonstrate improvement in their numbers of credentials. New Mexico's formula is designed in such a way so that, in years with little "new" money available, some colleges may improve slightly in overall degree production (measured on a rolling, three-year average) but still lose funding.

Second, NCHEMS suggests outcomes-based funding formulas should include metrics that reward success in graduating "at-risk" students, be they low-income, adult learners, or academically underprepared or part of a racial or ethnic group with persistently low degree-attainment levels. Including at-risk metrics should encourage colleges to increase the graduation rates of at-risk students, which will, in turn, help close achievement gaps. Further, at-risk metrics should discourage colleges from increasing selectivity – thus, lowering access - to students to increase graduation rates and their resulting rewards in performance funding. While New Mexico's formula currently rewards credentials earned by at-risk students, the proportion of degrees earned by at-risk students has not increased significantly since adoption of the formula.

NCHEMS also asserts that a higher education funding formula should be developed based on clear goals. While HED set a statewide attainment goal of 66 percent of the state's adult population earning some higher education credential by 2030, HED has not explicitly connected that goal to the formula. Recommendations from a number of past LFC evaluations also point to the need for the formula to more directly incentivize broader statewide goals for higher education, including meeting state workforce needs, keeping college administrative costs low relative to instructional spending, transferring students from two-year colleges to four-year colleges successfully, and keeping college accessible for rural, minority, and low-income students. Other states include metrics in their higher education funding formulas that reward progress toward these goals.

Finally, in their 2016 report, NCHEMS notes that academic quality issues are not addressed in New Mexico's funding formula, but should be. Without metrics based on quality, institutions could lower student learning standards to produce more degrees and certificates. However, there are some checks on academic quality are already in place outside of the formula itself, including academic program accreditation and HED review of new degree programs. Academic quality, and suggestions for how to address it both within and outside of the formula are further covered in the final section of this report.

Unlike other states, New Mexico has not formalized its formula in rule or statute and has no defined process for formula maintenance. In a March 2016 review of outcomes-based funding formula nationally, HCM strategists noted the need for regular formula review. "In addition to supporting independent research to evaluate the qualitative and quantitative impacts of [outcomes-based funding] OBF, states should carefully monitor and evaluate their policies. When data and experience warrant, adjustments should be made to the model, phasing in larger changes over time. In several states, the stakeholders who initially developed the OBF models meet periodically to discuss progress and enhancements."[iii]

New Mexico's formula benefits from an annual review by a "technical committee," which includes staff from HED and LFC, and representatives from some four- and two-year colleges. This group verifies the awards, student credit hour, and other data on which the formula draws. Though major facets of the formula have remained the same, the formula has been tweaked in various ways each year since its FY13 inception, mostly because of agreements among parties in the technical committee.

NCHEMS Formula Design Best Practices

1. Based on clear goals,
2. Includes all public institutions (statewide goals need contributions of all institutions),
3. Reflects and reinforces mission differentiation,
4. Includes metrics that reward success in serving underrepresented populations, with a focus on closing achievement gaps,
5. Has metrics that reward progress as well as ultimate success,
6. Has a minimum number of metrics and is clear on what outcomes count,
7. Has unambiguous metrics that are difficult to game (absolute numbers rather than rates),
8. Bases performance on year-over-year improvements,
9. Includes metrics that address quality.

As with the formula itself, the technical committee, its leadership, and decision-making processes are not mandated nor defined in law or rule. While this arrangement has worked out relatively well over the last six years, now that the use of the formula is more accepted, legislators may want to consider codifying the review, modification, and use of the formula moving ahead. If nothing else, doing so would establish a transparent and fair process and timeline for colleges and stakeholders to review and implement changes recommended in this evaluation.

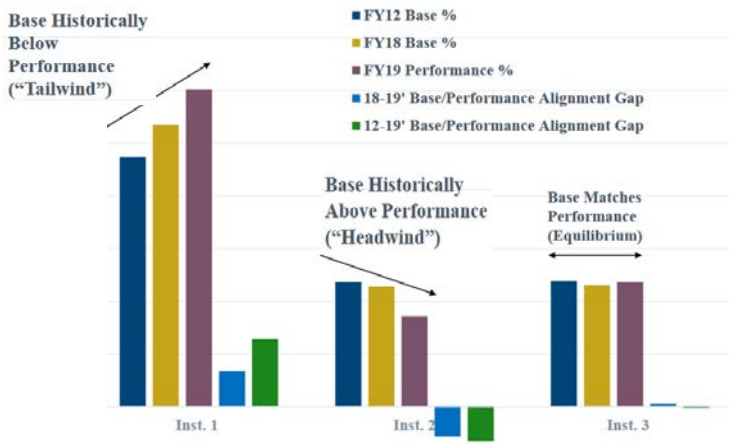
The Formula's Objective is to Match Funding with Performance Levels

Over time, the formula will adjust total appropriations to be proportional with each college's performance, and some colleges are better prepared for adjustments to state funding than others.

After determining the portion of the base to be dedicated to performance, the formula allocates performance funds for each formula metric (e.g., total awards, STEMH awards) among the colleges based on their contribution to the state on that metric. For example, in FY19 the University of New Mexico produced 36.8 percent of all awards (degrees and credentials after weighting and scaling.) Therefore, the University received 36.8 percent of funding available for that metric - $3.5 million out of $9.5 million. After repeating for all metrics, the formula determines the proportion of total performance funding to each college. In cases where the proportion of performance funding is higher than the proportion of total base funding a college receives, the school gains funding in the formula. In cases where the performance proportion is lower, the formula recommends a smaller appropriation. See Appendix F for an illustration of the proportions of performance and total base funding each college received in the FY19 formula.

HED refers to these latter institutions - those that produce less in performance than the proportion of base funding allotted to them - as "headwind" institutions. These colleges, the HED secretary suggested in a December 2017 LFC budget hearing, were overfunded in the past and cannot now, under performance-based funding, produce degrees in proportion to their funding allocations. A headwind institution will continue to lose funding in the formula until, over time, its base, determined by the previous year's allocation, stabilizes to a level where it is closer to the proportion of credential production. "The goal is for funding to better correlate with performance, and reduce dependence on historical funding levels," noted the secretary.

Chart 2. Headwind and Tailwind Institutions



Source: HED

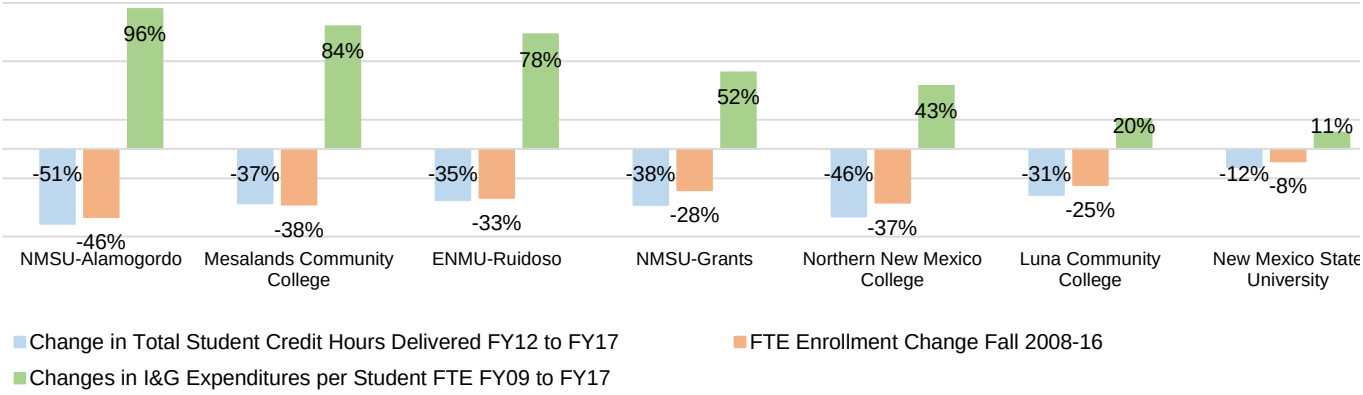
Without a comprehensive cost study, it is difficult to determining if headwind institutions are overfunded is difficult. These institutions possibly require more funds to produce credentials due to diseconomies of scale or other factors. Of the 13 headwind institutions in the FY19 formula run, six are already spending less per full-time equivalent student (FTE) than their peer institutions nationally. If these schools are not able to grow revenues from tuition increases or local support, cutting state support for these schools will likely harm their ability to deliver adequate educational experiences and increase performance.

Table 1. FY19 Formula Headwind Institutions
(Colleges with an asterisk spent less per student FTE than Carnegie peers in both 2015 and 2016)

College	Proportion of FY18 Base	Proportion of FY19 Performance	Difference
New Mexico State University	19.4%	18.6%	-0.8%
NMSU-Alamogordo	1.2%	0.5%	-0.8%
Luna Community College	1.2%	0.5%	-0.7%
Northern New Mexico College	1.7%	1.0%	-0.7%
UNM-Gallup	1.5%	0.8%	-0.6%
San Juan College	4.0%	3.4%	-0.6%
ENMU-Roswell	1.9%	1.4%	-0.5%
Clovis Community College*	1.6%	1.2%	-0.4%
Mesalands Community College	0.7%	0.3%	-0.4%
NMSU-Grants	0.6%	0.3%	-0.2%
NMSU-Doña Ana*	3.8%	3.6%	-0.1%
NMSU-Carlsbad	0.7%	0.6%	-0.1%
ENMU-Ruidoso	0.3%	0.3%	-0.1%

For a few colleges, right-sizing funding via formula equilibrium over time seems appropriate. For example, the LFC's 2017 evaluation of cost drivers in higher education found that NMSU-Alamogordo was delivering 50 percent fewer credit hours in FY16 as it did in FY12. As a result, the campus had increased spending per student FTE by 116 percent between FY07 and FY16. In an equilibrium scenario, NMSU-Alamogordo is poised to lose 59 percent of their annual state appropriations (37 percent of total unrestricted revenues.) This is likely bringing their state appropriation to a more appropriate size, given the smaller number of students NMSU-Alamogordo now serves. Three other schools are in a similar situation – where declining enrollment and credit hours delivered have driven up expenditures per student, indicating that state funding at those colleges is too high for current enrollment.

Chart 3. Headwind Institutions with Declining Enrollment and High Expenditures per Student



Source: Reports of Actuals, LFC files

Keeping the percent of performance funding low in years with little new funding prevents improving headwind institutions from losing funding.

In years with no, or very little new state money added to the total state appropriation, the funding formula may create a situation where some colleges improve performance yet still lose funding. For these headwind institutions, the increase in awards is still not enough to bring their performance proportion

up to base proportion levels. This is likely because the increase was due to low-weighted awards like certificates or associate's degree, historical imbalances in base funding allocation that result in some schools consistently under-contributing to performance, or both. This potential loss of funding runs counter to one of NCHEMS's best practices in formula design –formulas should reward year-over-year performance gains.

That said, these improving headwind institutions only lose funding formula money if the base is cut significantly for performance in times of little or no new appropriations. To illustrate: At the FY19, 4 percent base redistribution and 2 percent new money, only one improving headwind school, UNM-Gallup, lost $48.5 thousand. However, if the FY19 formula were run at 2 percent base redistribution and 2 percent new money, no improving headwind institutions would have lost funding. Further, eliminating base redistribution with new money means that all institutions gain (though not equally.)

Table 2. Losses To Improving Headwind Institutions Disappear When the Performance Funding Portion of the Base Is Kept Low in Times of Little or No New Money

College	Did the college increase 3-Year Average Awards?	Did the college lose money if FY19 formula is run at 4% with 2% new money? (FY19 Actual)	How much?	Would the college lose money if FY19 formula was run at 0% with 2% new money?	Change in funding from FY18
New Mexico Technology	Yes	No		No	$524,900
New Mexico State University	No	No		No	$2,097,500
University of New Mexico	Yes	No		No	$3,683,100
Eastern New Mexico University	Yes	No		No	$576,400
New Mexico Highlands University	Yes	No		No	$533,200
Northern New Mexico College	No	Yes		No	$117,500
Western New Mexico University	Yes	No		No	$388,400
Eastern New Mexico University-Roswell	No	No		No	$163,300
Eastern New Mexico University-Ruidoso	Yes	No		No	$32,800
New Mexico State University-Alamogordo	No	Yes		No	$55,800
New Mexico State University-Carlsbad	Yes	No		No	$65,000
New Mexico State University-Doña Ana	No	No		No	$411,400
New Mexico State University-Grants	No	Yes		No	$38,900
University of New Mexico-Gallup*	Yes	Yes	$48,500	No	$95,900
University of New Mexico-Los Alamos	Yes	No		No	$29,000
University of New Mexico-Taos	Yes	No		No	$74,100
University of New Mexico-Valencia	No	No		No	$101,200
Central New Mexico Community College	Yes	No		No	$1,358,900
Clovis Community College	No	No		No	$138,400
Luna Community College	No	Yes		No	$54,000
Mesalands Community College	No	Yes		No	$37,300
New Mexico Junior College	Yes	No		No	$106,600
San Juan College	Yes	No		No	$387,400
Santa Fe Community College	Yes	No		No	$220,800

Another option, the Legislature could, over the short-term, consider appropriating nonrecurring funding to offset losses by small, rural headwind schools to ease their transition to lower levels of state appropriations. A January 2018 LFC staff memo outlined that Laws 2003, Chapter 388 created a higher education performance fund in the state treasury (Section 21-1-27.3 NMSA 1978) that historically has not received an appropriation. New appropriations to this fund, however, could provide nonformula adjustments to colleges. HED could administer the allocation of this funding based on criteria established by the Legislature – potentially limiting funding cuts to rural schools that provide access to otherwise very remote pockets of students.

Equalizing state appropriations to be in proportion with performance would still leave most colleges with more state funding per student than their peers nationally.

Assuming little to no change in performance among colleges, bringing each college's portion of base funding in line with its proportion of performance would result in the state appropriations of many colleges being cut significantly, mostly to the benefit the University of New Mexico and Central New Mexico Community College. This equilibrium scenario – bringing base funding allocations in line with performance - is best illustrated by running the formula with 100 percent of funding allocated to perfromance.

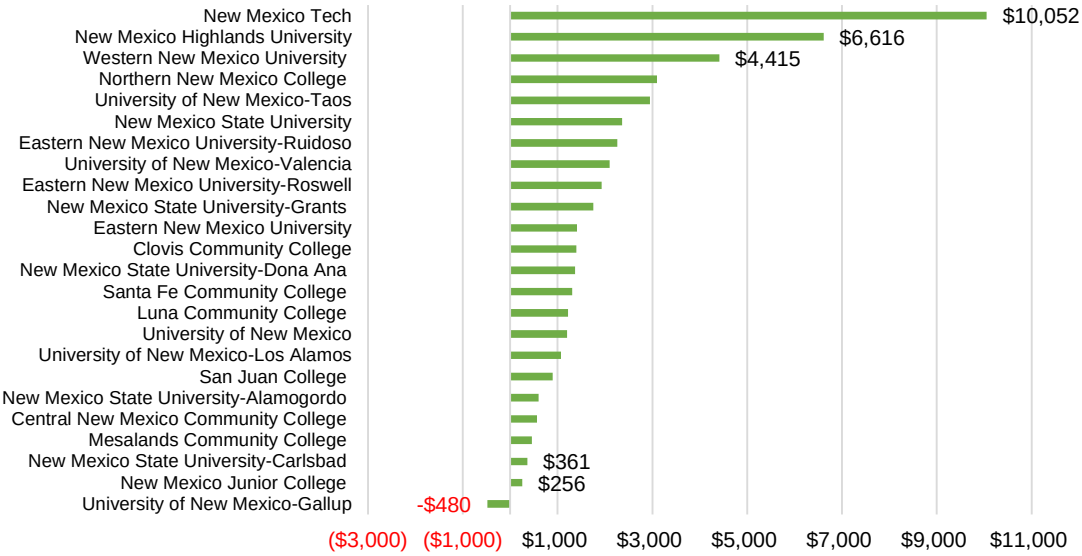
Table 3. Equilibrium Funding Scenario for State Appropriations

Row	College	FY19 Formula (4% Performance and 2% New Money)	FY19 Equilibrium (100% Performance and 2% New Money)	Absolute Difference	Percent Difference
		A	B	C=B-A	D=(B-A)/A
1	New Mexico Tech	$26,076,900	$26,771,800	$694,900	2.7%
2	New Mexico State University	$111,353,400	$106,972,000	-$4,381,400	-3.9%
3	University of New Mexico	$179,839,600	$187,838,000	$7,998,400	4.4%
	Research University Total	**$317,269,900**	**$321,581,800**	**$4,311,900**	**1.4%**
4	Eastern New Mexico University	$26,308,200	$29,396,000	$3,087,800	11.7%
5	New Mexico Highlands University	$26,603,800	$27,191,700	$587,900	2.2%
6	Northern New Mexico College	$9,671,200	$5,993,100	-$3,678,100	-38.0%
7	Western New Mexico University	$16,522,200	$19,807,800	$3,285,600	19.9%
	Comprehensive University Total	**$79,105,400**	**$82,388,600**	**$3,283,200**	**4.2%**
8	Eastern New Mexico University-Roswell	$11,036,200	$8,329,000	-$2,707,200	-24.5%
9	Eastern New Mexico University-Ruidoso	$1,956,900	$1,670,800	-$286,100	-14.6%
10	New Mexico State University-Alamogordo	$6,922,000	$2,844,000	-$4,078,000	-58.9%
11	New Mexico State University-Carlsbad	$3,900,700	$3,316,000	-$584,700	-15.0%
12	New Mexico State University-Doña Ana	$21,765,900	$20,979,900	-$786,000	-3.6%
13	New Mexico State University-Grants	$3,304,100	$1,985,800	-$1,318,300	-39.9%
14	University of New Mexico-Gallup	$8,358,600	$4,892,700	-$3,465,900	-41.5%
15	University of New Mexico-Los Alamos	$1,728,900	$1,477,600	-$251,300	-14.5%
16	University of New Mexico-Taos	$3,365,500	$3,779,600	$414,100	12.3%
17	University of New Mexico-Valencia	$5,233,500	$5,162,800	-$70,700	-1.4%
18	Central New Mexico Community College	$54,779,900	$69,305,200	$14,525,300	26.5%
19	Clovis Community College	$9,145,400	$7,055,600	-$2,089,800	-22.9%
20	Luna Community College	$6,623,700	$2,755,200	-$3,868,500	-58.4%
21	Mesalands Community College	$3,821,400	$1,900,800	-$1,920,600	-50.3%
22	New Mexico Junior College	$5,271,500	$5,438,000	$166,500	3.2%
23	San Juan College	$22,815,500	$19,758,600	-$3,056,900	-13.4%
24	Santa Fe Community College	$9,477,900	$11,260,900	$1,783,000	18.8%
	Community College Total	**$179,507,600**	**$171,912,500**	**-$7,595,100**	**-4.2%**

Source: HED

While these cuts seem dramatic for several colleges, New Mexico already provides more funding per student than most other states ($1,706 more per FTE student than the national average in 2017). All but one college (UNM-Gallup) would still receive more than average amounts of state appropriations per student FTE under an equilibrium scenario than peer colleges nationally. See Appendix D for details.

Chart 4. Difference Between State Funding per Student FTE at Formula Equilibrium and Average Funding per FTE among Carnegie Peers



Source: HED, IPEDS

In the context of total unrestricted revenue (revenues including tuition and local mill levy funding), the impact of the equilibrium scenario cuts is lessened, but still significant (more than 15 percent) for five institutions.

Table 4. Equilibrium Funding Scenario for Total Revenues

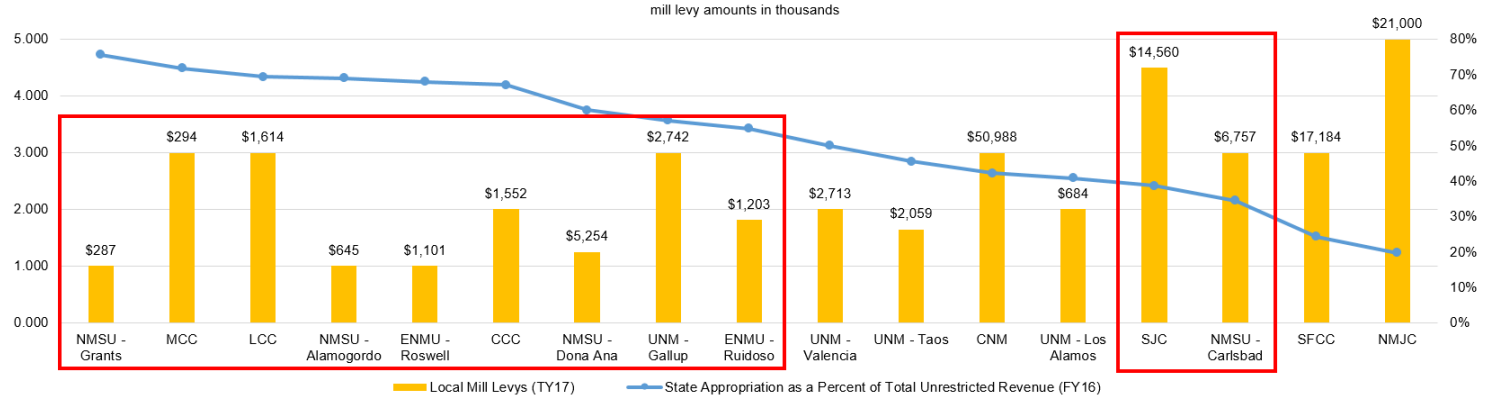
Row	College	Total Unrestricted Revenue (FY17 Actuals)	Total Unrestricted Revenue if Formula Funded at 100% Performance and 2% New Money	Absolute Difference	Percent Difference
		E	F=E+C	G=F-E	H=(F-E)/E
1	New Mexico Tech	$85,628,945	$86,323,845	$694,900	0.8%
2	New Mexico State University	$332,709,589	$328,328,189	-$4,381,400	-1.3%
3	University of New Mexico	$669,637,584	$677,635,984	$7,998,400	1.2%
	Research University Total	**$1,087,976,118**	**$1,092,288,018**	**$4,311,900**	**0.4%**
4	Eastern New Mexico University	$73,097,686	$76,185,486	$3,087,800	4.2%
5	New Mexico Highlands University	$54,196,630	$54,784,530	$587,900	1.1%
6	Northern New Mexico College	$18,447,741	$14,769,641	-$3,678,100	-19.9%
7	Western New Mexico University	$42,907,755	$46,193,355	$3,285,600	7.7%
	Comprehensive University Total	**$188,649,812**	**$191,933,012**	**$3,283,200**	**1.7%**
8	Eastern New Mexico University-Roswell	$18,243,602	$15,536,402	-$2,707,200	-14.8%
9	Eastern New Mexico University-Ruidoso	$4,013,310	$3,727,210	-$286,100	-7.1%
10	New Mexico State University-Alamogordo	$10,948,238	$6,870,238	-$4,078,000	-37.2%
11	New Mexico State University-Carlsbad	$14,122,245	$13,537,545	-$584,700	-4.1%
12	New Mexico State University-Doña Ana	$41,004,207	$40,218,207	-$786,000	-1.9%
13	New Mexico State University-Grants	$5,336,057	$4,017,757	-$1,318,300	-24.7%
14	University of New Mexico-Gallup	$16,777,948	$13,312,048	-$3,465,900	-20.7%
15	University of New Mexico-Los Alamos	$3,930,058	$3,678,758	-$251,300	-6.4%
16	University of New Mexico-Taos	$8,049,053	$8,463,153	$414,100	5.1%
17	University of New Mexico-Valencia	$11,149,260	$11,078,560	-$70,700	-0.6%
18	Central New Mexico Community College	$182,608,618	$197,133,918	$14,525,300	8.0%
19	Clovis Community College	$15,608,584	$13,518,784	-$2,089,800	-13.4%
20	Luna Community College	$12,255,385	$8,386,885	-$3,868,500	-31.6%
21	Mesalands Community College	$7,310,467	$5,389,867	-$1,920,600	-26.3%
22	New Mexico Junior College	$34,923,707	$35,090,207	$166,500	0.5%
23	San Juan College	$61,600,694	$58,543,794	-$3,056,900	-5.0%
24	Santa Fe Community College	$49,816,786	$51,599,786	$1,783,000	3.6%
	Community College Total	**$497,698,219**	**$490,103,119**	**-$7,595,100**	-1.5%

Source: HED

The impact on New Mexico State University and its branch campus in Alamogordo illustrates the difference. Both colleges are slated to lose more than $4 million under a formula equilibrium scenario, but that $4 million represents only 1.3 percent of NMSU's annual revenues while it represents almost 40 percent of Alamogordo's revenues. In this way, the formula acts as a much larger incentive, carrot or stick, to some colleges than others.

Unequal local support results in formula cuts affecting some community colleges more than others. Colleges like NMSU-Alamogordo with high percentage swings in their total revenues under formula equilibrium tend to rely most heavily on state support for revenue and may want to consider diversifying their revenue streams to combat downturns in state formula funding. Three branch headwind colleges in particular (NMSU-Grants, NMSU-Alamogordo, and ENMU-Roswell) are at their statutory minimum levels of local mill levy support (one mill) and could mitigate effects of formula losses by increasing operational mill support to be more in line with the other community colleges. Current statute (Section 21-14-9 and 21-13-24.1 NMSA 1978) stipulates that for community colleges to receive more than minimal ($325 per student) state support, independent community colleges must levy at least a two-mill tax. Branch community colleges are only required to levy one mill. The Legislature could consider amending Section 21-14-9 NMSA 1978 to require communities with branch community colleges to support those colleges at a two mill level to help offset swings due to formula equilibrium.

Chart 5. Community College Reliance on State I&G funding and Local Mill Levels
Notes: 1 and 5 mills are the statutory minimum and maximum levels for community colleges
Red outline around headwind schools
mill levy amounts in thousands



Source: Reports of Actuals and LFC files

Recommendations

The Higher Education Department and Legislative Finance Committee should keep the proportion of funding for performance low in years of little or no increases in appropriations to prevent colleges that are improving performance from losing year-over-year funding.

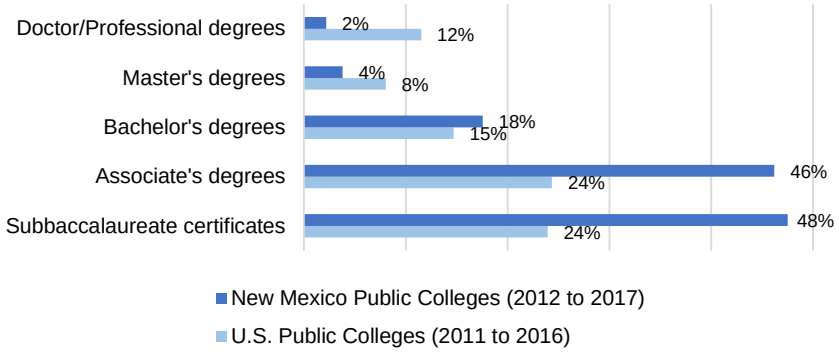
The Legislature should consider amending Section 21-14-9 NMSA 1978 to require communities with branch community colleges to support those colleges at a two mill levy property tax to help offset any loss of state funding due to the formula.

The Formula has Driven Production of Lower Level Degrees and Certificates but Does Not Provide Adequate Incentive for At-risk or Other Metrics

Though production of degrees and credentials has increased since formula introduction in FY13, most of the increase has come from nonspecific subbaccalaureate certificates and associate's degrees.

Compared with public colleges in other states, New Mexico's public colleges and universities vastly increased the number of subbaccalaureate certificates and associate's degrees over the last five years. While growth in subbaccalaureate certificates and associate's degrees was at 24 percent each nationally, certificates and associate's degrees awarded in New Mexico grew 48 and 46 percent, respectively. Conversely, New Mexico's 18 percent growth in bachelor's degrees was closer to the 15 percent growth rate nationally, and the state lagged in graduate degree production.

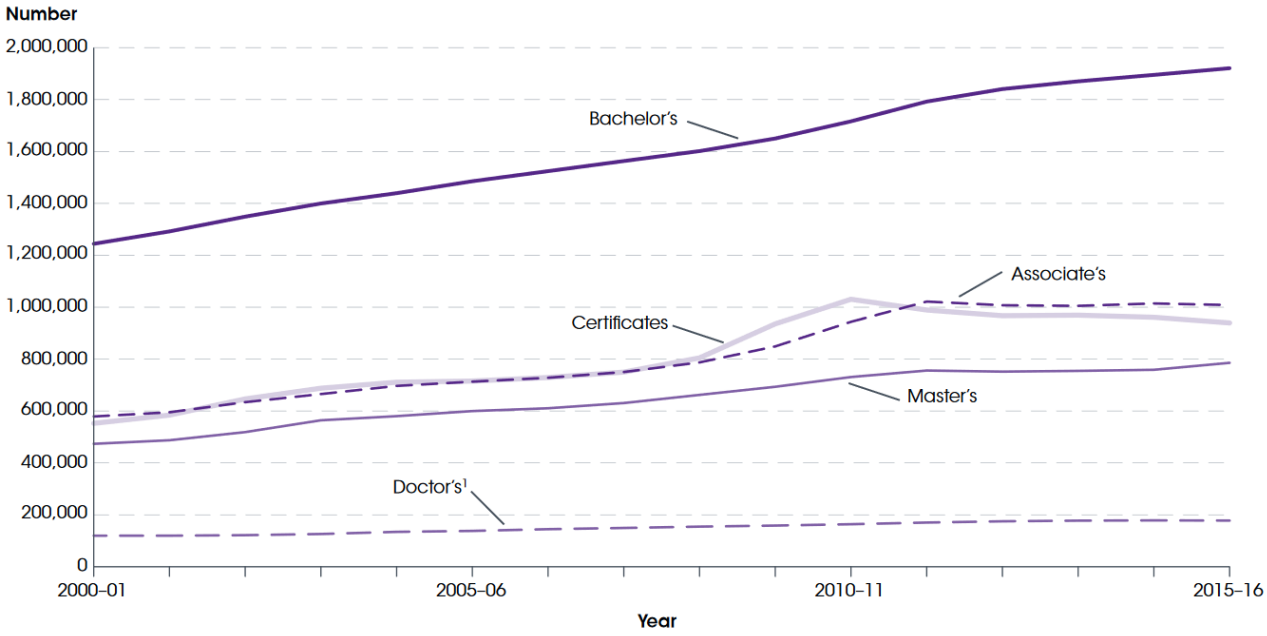
Chart 6. Percent Change in Credential Production



Note: Only New Mexico credentials included in the higher education funding formula run are included in this chart.
Source: IPEDS, HED

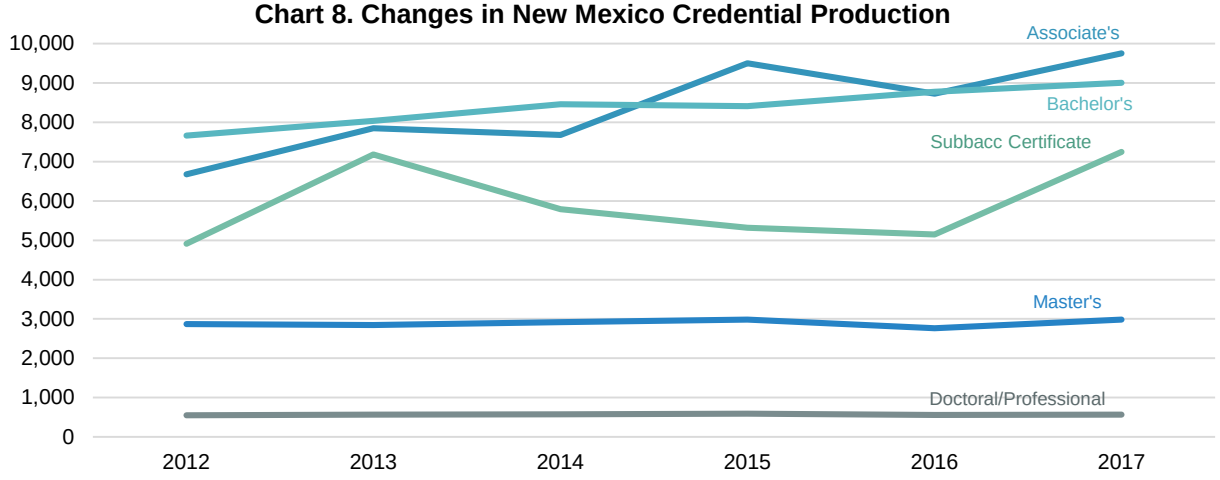
New Mexico is likely underemphasizing production of bachelors and graduate degrees. While New Mexico tends to produce roughly equivalent numbers of bachelor's and associate's degrees annually, public colleges and universities nationally tend to produce double the amount of bachelor's degrees as associate's. Moreover, the number of associate's degrees produced nationally has begun to level off in recent years, yet it remains one of the fastest areas of credential production growth in New Mexico.

Chart 7. Certificates and Degrees Conferred by U.S. Colleges: AY2000-01 through AY2015–16



[1] Includes Ph.D., Ed.D., and comparable degrees at the doctoral level. Includes most degrees formerly classified as first-professional, such as M.D., D.D.S., and law degrees.
NOTE: Data are for postsecondary institutions participating in Title IV federal financial aid programs. Data for associate's degrees and higher awards are for degree-granting institutions. Data for certificates are for certificates below the associate's degree level. Some data have been revised from previously published figures.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall 2001 through Fall 2016, Completions component. See *Digest of Education Statistics 2017*, table 318.40.

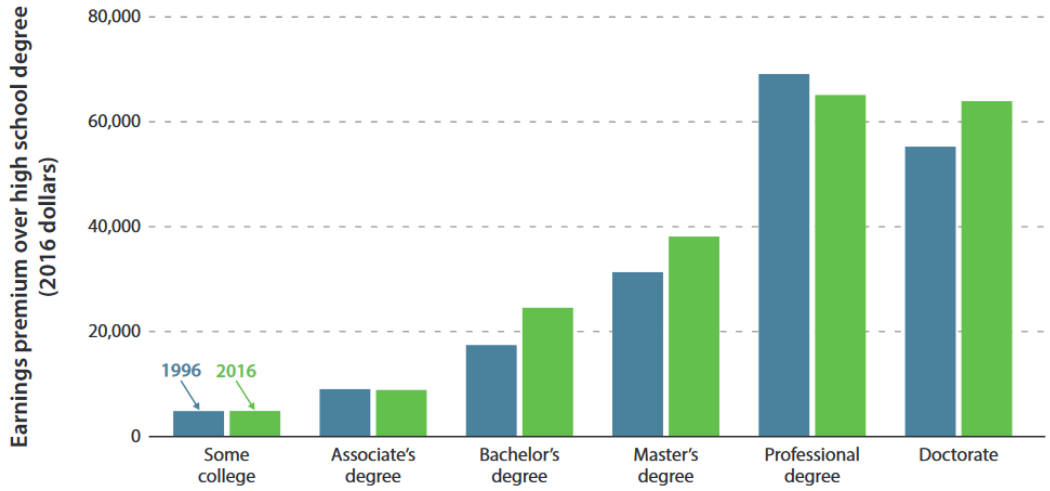
Chart 8. Changes in New Mexico Credential Production



Note: Only credentials included in the higher education funding formula run are included in this chart. Certificates of less than one year, CNM's 2017 general education certificates, and medical doctor degrees from UNM's Health Sciences Center are not included.
Source: HED

Overemphasizing subbaccalaureate degrees and credentials is problematic because, according to the Brookings Institute: "Earnings premiums are progressively larger for those with more advanced postsecondary education, and these premiums have been rising." However, the premiums for those with some college but no postsecondary degree and those with an associate's degree have not grown since 1996.[iv] Without more of the population attaining a bachelor's degree or higher, New Mexico will likely continue to fall behind other states in average wages.

Chart 9. Annual Postsecondary Earnings Premiums, 1996 and 2016



Source: U.S. Census Bureau 1997, 2017a; authors' calculations.

Note: The "earnings premium" is median earnings minus $37,000, which is the approximate median earnings of a high school graduate. "Earnings" are medians and are expressed in 2016 dollars, deflated using the Consumer Price Index for All Urban Consumers Research Series (CPI-U-RS). "High school degree" includes GED attainment. The population includes people ages 25 to 64 years old that work full-time and year-round.

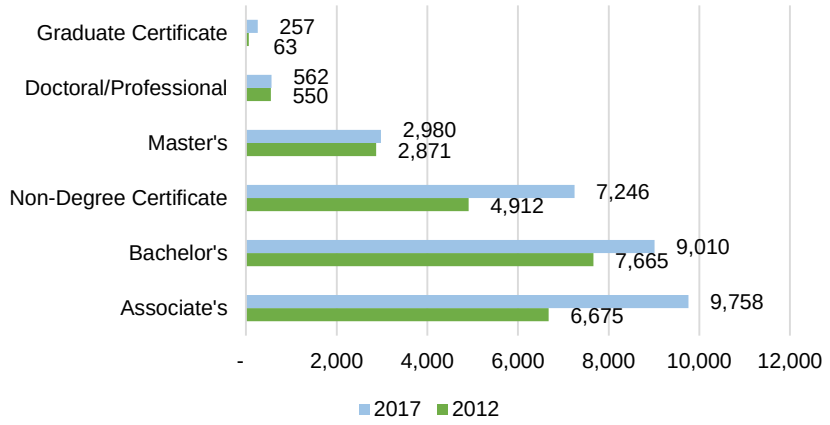
THE HAMILTON PROJECT BROOKINGS

Growth in certificates has been especially notable, which may be the result of colleges looking to gain performance funding. In January 2018, staff from the State Higher Education Executive Officers Association testified to the Texas Legislature:

> Across evaluations of [outcomes-based funding formulas] in individual states, the most consistent finding is a relatively large and statistically significant bump in certificates, and short-term certificates in particular, after the implementation of outcomes-based funding (OBF), with little to no impact of associate's and bachelor's degrees. In many states short-term certificates can be implemented through an expedited process or without state approval, they are relatively low cost, and can be implemented quickly. Therefore, they may offer the path of least resistance to earn more OBF points. A recent national study revealed similar findings with increases in short-term certificates following the implementation of OBF.

The situation seems to hold true in New Mexico. Only counting certificates included in formula calculations, the annual number of nondegree certificates produced in New Mexico academic year (AY) 2017 was 48 percent greater than in AY2012, growing from 4,912 to 7,246. Five of the 19 two-year schools issued more certificates than associate's degrees in AY2017.

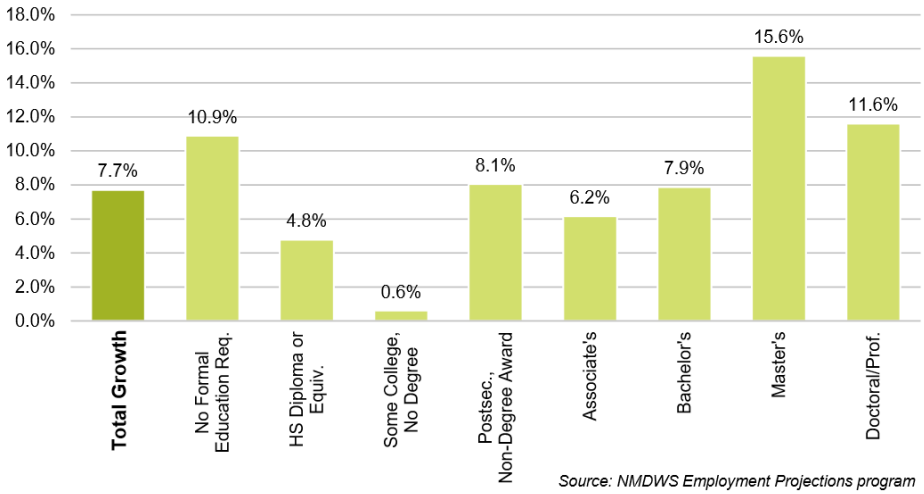
Chart 10. Degrees Awarded, AY2012 and AY2017



Note: Only credentials included in the higher education funding formula are included in this chart
Source: HED

Growth in jobs requiring an associate's degree or certificate is not projected to be especially large compared with jobs requiring a graduate degree. The New Mexico Workforce Solutions Department projects employment in New Mexico jobs that require a subbaccalaureate, or non-degree certificate in New Mexico to grow at a very slightly higher rate than those jobs requiring a bachelor's degree through 2024 (8.1 percent compared with 7.9 percent.) However, the growth in jobs requiring graduate degrees dwarfs the growth in both.

Chart 11. Employment Growth by Educational Attainment Required
New Mexico, 2014-2024



Source: New Mexico Workforce Solution's 2017 State of the Workforce Report

Liberal arts and humanities have been the certificate and associate's degree majors of most growth, but these general degrees do not appear to prepare students for later baccalaureate success.

While the rates of the largest growing bachelor's majors in New Mexico tended to follow growth in those same majors nationally, New Mexico diverged in the large increase in many certificates and associate's degree majors. Specifically, the state saw enormous (more than 600 percent) growth in liberal arts and sciences certificates, and associate's degrees in social sciences and history.

Table 5. Growth in New Mexico Majors by Credential
(Credentials Included in Formula Only)

Credential	Major*	Difference Between 2012 and 2017 Number	Percent	Growth Nationally (2011-2016)
Certificate	Liberal Arts and Sciences	1,307	634%	124%
	Health Professions and Related Sciences	860	43%	-3%
	Education	115	49%	36%
Associate's	Liberal Arts and Sciences	1,913	69%	27%
	Health Professions and Related Sciences	258	22%	6%
	Social Sciences and History	173	618%	54%
	Psychology	153	255%	180%
Bachelor's	Health Professions and Related Sciences	396	67%	54%
	Psychology	229	43%	23%
	Engineering	224	41%	44%
	Business Mgmt. and Administrative Services	147	13%	16%
	Protective Services	127	37%	35%

* Based on two-digit Classification of Instructional Program (CIP) codes.

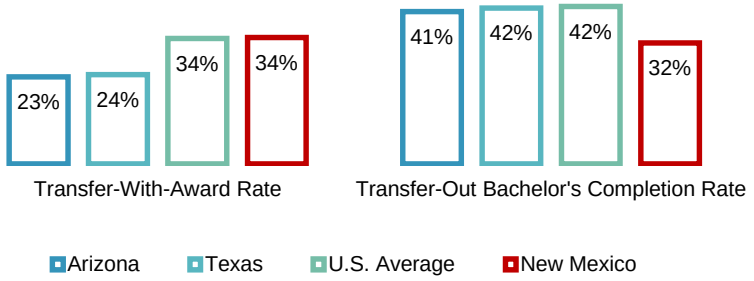
Source: IPEDS, HED

A liberal arts and sciences or humanities degree may be an appropriate credential for a student at a two-year college who plans to transfer to a four-year institution to complete a bachelor's degree.[3] A 2017 report from the National Student Clearinghouse and funded by the Lumina Foundation found that New Mexico was close to average in the proportion of students who earn a community college credential and subsequently transfer to a four-year college or university (the 34 percent "Transfer-With-Award" rate shown in Chart 12). However, in 2017, 50 percent of all associate's degrees in New Mexico were granted to students majoring in liberal arts and sciences or the social sciences. This indicates at least some students are leaving community college with a credential but without skills specific to an occupation. Interestingly, Eastern New Mexico University, a four-year comprehensive university, granted 264 of the 4,695 liberal arts and sciences associate's degrees in AY17, though students earning that degree do not need to "transfer" back to Eastern to earn their bachelor's.

Eastern aside, most transfer students save significant tuition dollars by completing their first two years at a lower-cost community college. However, those transfer students may not be equipped for success in a bachelor's degree program. Transfer students in New Mexico have six-year bachelor's graduation rates that are only slightly better than Pell grant students whom HED considers "at-risk" (a 32 percent graduation rate for transfer students versus 28 percent for Pell). Transfer students in New Mexico also perform worse than transfer students nationally in completing their bachelor's degrees.

[3] LFC staff heard anecdotal evidence about a few employers looking for associate's graduates with general skills – e.g., writing, math, and problem solving. However, a graduate of any associate's degree program, not just a liberal arts and sciences or general studies program, should have some level of competence in these skills.

Chart 12. Transfer Student Rates and Bachelor's Success Levels



Source: Shapiro, D., Dundar, A., Huie, F., Wakhungu, P.K., Yuan, X., Nathan, A. & Hwang, Y. (2017, September). Tracking Transfer: Measures of Effectiveness in Helping Community College Students to Complete Bachelor's Degrees (Signature Report No. 13). Herndon, VA: National Student Clearinghouse Research Center. https://nscresearchcenter.org/signaturereport13/

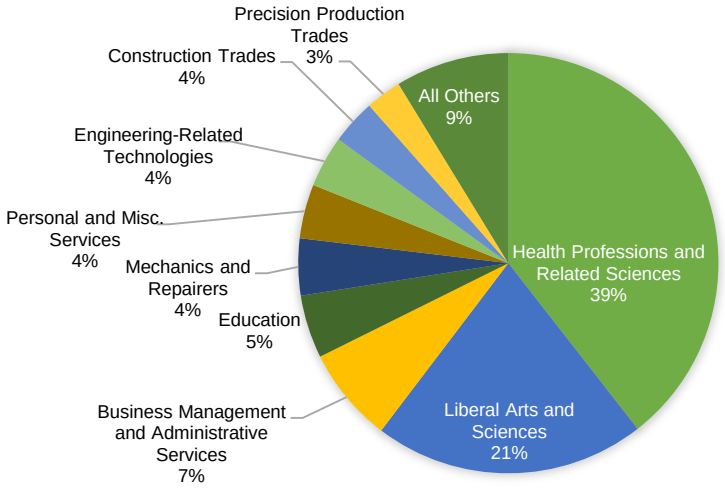
Most concerning, New Mexico transfer students underperform when compared with their first-time, full-time student peers at New Mexico four-year colleges and universities, with a 32 percent six-year graduation rate for transfer students compared with 45 percent for the first-time, full-time students. To illustrate further: The New Mexico Council of University Presidents reported a combined 3,248 undergraduates enrolled as transfer students from New Mexico two-year schools in AY17. If the trend holds steady, 2,209 of those students will not make it to their bachelor's degree in six years' time.

To increase the success of transfer students and generally increase the level of bachelor's degree attainment, state leaders might want to consider incentivizing transfer student success in the funding formula. Most other states provide incentives in their higher education performance funding formulas for "at-risk" students – those in groups with notable attainment gaps. New Mexico's formula considers low-income students as at-risk, but considering the similarly low graduation rates of transfer students, state higher education leaders might want to consider further adding an at-risk-type incentive for transfer student success. North Carolina provides one example for this type of incentive. Its formula for two-year schools includes funding based on the percentage of students who transfer to a four-year college and, after two consecutive semesters, earn a grade point average of 2.25 or better after completing an associate's degree or least 30 cumulative hours of transfer credits. Arkansas also includes credentials for transfer students as an optional formula metric for its four-year universities.

The value of non-degree credentials, especially those not specific to a trade, is uncertain. Georgetown's Center on Education and the Workforce notes, "Certificate holders without postsecondary degrees earn an average of 20 percent more than workers with no more than a high school diploma. But the benefits vary widely, especially based on field of study. Certificate holders in technical fields, such as computer and information services, earn as much as many degree holders, while those in fields such as cosmetology make much less."

Likewise, a 2017 review of data from several states by the U.S. Department of Education's Center for Analysis of Postsecondary Education and Employment found that completion of a vocational certificate resulted in a positive, but modest (about $2,500 annually) income boost for students, and that health-related certificates yielded the largest potential income increases.[v] However, the center also found a likelihood that these certificate returns fade within a few years post-college. Importantly, from that same report: "There is strong evidence that [associate] degrees yield higher returns than certificates; the growth in completion of certificates is therefore unlikely to have the same economic effect as would promoting degree completion."

Chart 13. Breakout of the 7,246 Certificates Included in the FY19 Formula Run by Two-digit CIP Title



Source: HED

One point of information is helpful for a New Mexico context: The Department of Workforce Solutions only lists two occupations (heating, air conditioning, and refrigeration mechanics and installers, and emergency medical technicians and paramedics) that require a nondegree award, are in-demand in New Mexico, and provide a relatively high median wage.[4]

The at-risk and STEMH incentive metrics may be too low to combat attainment gaps for low-income students or sufficiently incentivize the production of STEMH degrees. Broader measures of job placement could more precisely incentivize workforce development than the current STEMH metric.

NCHEMS, State Higher Education Executive Officers (SHEEO), and others encourage the use of metrics that especially reward credentials earned by at-risk students. These proponents contend that at-risk metrics will incentivize colleges to increase the graduation rates of at-risk students which will, in turn, help close achievement gaps. Further, at-risk metrics should discourage

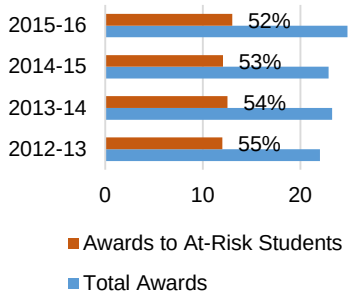
[4] The department refers to these as STAR occupations and revises the list of STAR occupations once every two years. See https://www.dws.state.nm.us/Portals/0/DM/LMI/Star_Occupations_Poster_2016.pdf

colleges from increasing their admissions selectivity, thus lowering access to at-risk students to bolster graduation outcomes. Most states, including New Mexico, consider low-income students to be at-risk as those students tend to be less academically prepared and have lower graduation rates than their higher-income peers.

The at-risk incentive in New Mexico's funding formula represents just 13.5 percent of the formula, however. Only $4.6 million of the $33.9 allotted to performance in the FY19 formula was dedicated to rewarding credentials to financially at-risk students, and because only 4 percent of the base was dedicated to performance, that $4.6 million represents less than 1 percent of total funding.

Perhaps because of the small size of the at-risk incentive, there is no indication that college access for low-income students has increased since New Mexico's formula introduction. The percent of undergraduates receiving Pell grants has stayed within a few percentage points at most campuses since 2010. Perplexingly, the proportion of total awards granted to low-income students since 2013 has declined slowly but steadily. (See Appendix E for charts showing the change in proportion of at-risk degrees at each college.)

Chart 14. Total Awards to At-Risk Students
(in thousands)



Source: IPEDS

It is impossible to know if, without the influence of the formula's at-risk metric, New Mexico colleges would have become more selective and, as a result, the proportion of awards to at-risk students wouldn't have dropped more dramatically. That scenario seems unlikely though. The percent of undergraduate students at New Mexico's colleges receiving Pell grants in 2016 is significant - ranging from 18 percent to 61 percent. As such, the amount of tuition that New Mexico colleges would forego by increasing selectivity is likely much more than the amount of formula funding they might gain by enrolling more highly prepared (and often higher income) students. Reducing the weight of the end-of-course student-credit hour metric to bolster the weight of the at-risk student metric would help to counter this imbalance.

Similarly, the proportion of STEMH degrees conferred throughout the state only grown for bachelors and graduate degrees. Formula incentives for STEMH degrees are given weighting equal to that of degrees to at-risk students ($33.9 million in FY19, or 13.5 percent of all performance funding.) Unlike the proportion of degrees conferred to at-risk students since FY13, colleges have increased the portion of STEMH degrees, but only slightly and only at the bachelor's and master's levels.

The original formula authors included STEMH incentives as a workforce-related measure. However, as discussed later in this evaluation, it may be more appropriate now for HED to begin to track and incentivize job placements more directly, rather than incentivizing STEMH degrees as a proxy. Freeing up performance funding dedicated to STEMH would also allow more funding to be dedicated to at-risk and other incentives of importance.

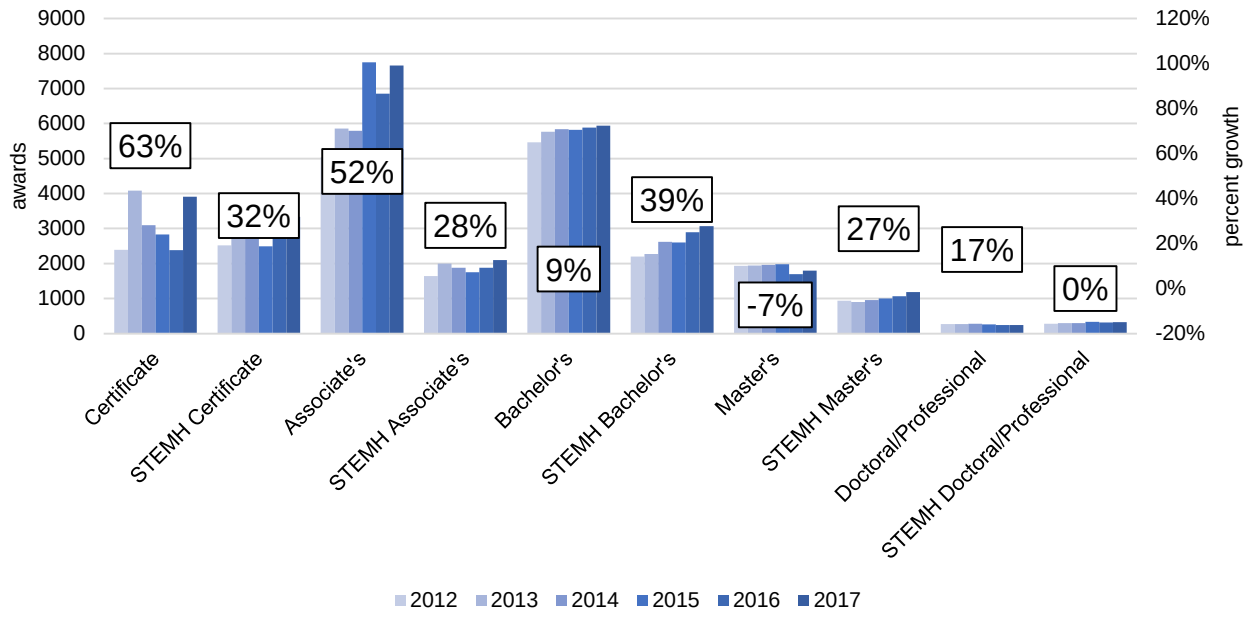
At 5 percent of performance funding or less, three mission-specific measures likely contain too little money to provide adequate incentive.

Three mission-specific measures, the 30-credit hour momentum point metric, the 60-credit hour momentum point metric and the dual credit metric each

provide less than 5 percent of performance funding (between $213 thousand and $1.7 million to be split among the 21 community colleges and comprehensive colleges, or approximately 0.5 percent of total state appropriations.) Because these measures are so small, they likely do not properly incentivize colleges and should be reconsidered in favor of other larger and more meaningful measures.

Rewarding credit progress was a good transition metric during formula formation because it provided short-term incentives for colleges that were adjusting to a formula that mostly rewarded longer-term degree and certificate production. However, six years into using the formula, HED and LFC may want to consider moving away from rewarding these momentum points and instead incentivize outcomes that are more important to the state – degrees to at-risk students, efficiently run colleges, transfer student success, and job placement of graduates.

Change in STEMH Credential Production Compared to nonSTEMH Credentials



Source: HED

Recommendations

The Higher Education Department should develop clear guidelines and promulgate rules for which certificates are included in formula runs and not, and should consider only including certificates that directly relate to workforce needs.

The Higher Education Department and Legislative Finance Committee should consider new metrics to reward transfer student success in the formula. See Table 6. on page 29.

The Higher Education Department and Legislative Finance Committee should increase the level of performance dedicated to awards to at-risk students, and consider broadening at-risk to include Native American students. See Table 6. on page 29.

New and Revised Metrics are Needed to Ensure Quality and Encourage Colleges to Meet Broader Higher Education Goals

New Mexico's performance funding formula for higher education measures the productivity of colleges and universities, but ensuring that degrees and certificates are of high quality remains a task separate from the formula itself.

Though academic quality can be viewed through a number of different lenses, in this evaluation quality is defined as students obtaining a certificate or degree of value – one that graduates were satisfied with and resulted in adequately paid employment. While the formula does not contain any specific checks on quality, HED, the Legislature, and others regulate academic quality outside of the formula through accreditation, HED oversight of new degree programs and formula credential inclusion, and legislative oversight through the Accountability in Government Act.

Accreditation is a common, national standard of educational quality, but even colleges with suboptimal student outcomes receive and retain accreditation. Achieving accreditation is perhaps the most ubiquitous indicator of quality in higher education. Importantly, students who attend an accredited college have access to federal student aid programs (e.g., Pell grants, Perkins and Stafford loans), while students at unaccredited institutions do not. All 24 of New Mexico's formula-funded colleges and universities are accredited by the Higher Learning Commission, New Mexico's third-party, regional accreditor.

Yet, in 2015, a prominent think tank and several major media outlets began questioning the role of accrediting agencies that were consistently accrediting colleges with less than 25 percent (for four-year schools) or 15 percent (for two-year schools) graduation rates for first-time, full-time students.[5] In response, the Council of Regional Accrediting Commissions, the umbrella group of all seven regional higher education accrediting organizations, conducted a two-year investigation. The investigation concluded that a single graduation data point is not sufficient to appropriately judge the quality of an institution and that colleges with consistently low graduations rates are often those that serve low-income, minority, and part-time students. The Center for American Progress, the think tank that initially raised the issue, was not impressed with the council's findings, asserting, "With no definition of what performance means in terms of a college's quality, even the lowest performers pass the bar."

[5] In 2016, 10 of New Mexico's 24 colleges fit these categories: University of New Mexico-Los Alamos, New Mexico State University-Alamogordo, University of New Mexico-Gallup, University of New Mexico-Valencia County, New Mexico State University-Dona Ana, New Mexico State University-Carlsbad, University of New Mexico-Taos, Western New Mexico University, New Mexico Highlands University, and Northern New Mexico College.

Low bar or not, some New Mexico colleges have struggled to meet accreditation standards. In July 2018, New Mexico Highlands University was finally granted full accreditation after being on probation for two years. Luna Community College started a two-year probationary period in 2018, meaning that the institution is not in compliance with accreditation standards of the Higher Learning Commission, including the college's inability to demonstrate a commitment to educational improvement through ongoing attention to retention, persistence, and completion rates in its degree and certificate programs. In short, while accreditation is an important check to see if institutions are meeting the bare minimum of educational quality, it does not mean the college is performing adequately in meeting statewide goals.

The Accountability in Government Act allows the Legislature to monitor the performance of the state's colleges and universities, but most performance measures do not directly tie to formula incentives. Colleges in New Mexico report two staple Accountability in Government Act (AGA) performance measures – annual retention and completion rates. However, these measures have two main weaknesses. First, they only measure the completion and retention rates of first time, full-time students - a relatively small subset of students at many colleges. Second, they are not directly related to the performance metrics provided in the formula.

It is quite difficult to understand how or whether schools are either improving on formula-measured performance without digging into the raw data provided for the formula. As such, building out a suite of new and refined AGA metrics should be helpful for the Legislature to better understand how changes in performance relate to formula funding recommendations. One welcome recent development: For FY18, colleges began reporting on a new AGA measure: the absolute numbers of degrees and certificates awarded (though not disaggregated by type of degree.) This reporting of an absolute number of awards is important because it is currently the only AGA performance measure that directly tied to metrics within the formula.

In future years, Legislative Finance Committee and Department of Finance and Administrative staff should consider amending the AGA's number of degrees and certificates measure also to report the number of each *type* of degree produced (e.g., bachelor's, associates, certificates, etc.) Also, new measures related to formula metrics, such as an AGA measure delineating the number of degrees and certificates granted to at-risk students at each institution, would be illustrative.

Beginning in 2018, HED promulgated rules to review and approve new associate's and bachelor's degree programs, but similar oversight is needed for certificates. HED already reviews and approves new graduate programs and as of 2018, is beginning to exercise its authority to review and approve new bachelor and associate programs as well. This review authority does not cover existing programs, however, and thus has limited ability to act as a check on academic quality for current programs. Further, HED does not have statutory authority to review or approve certificate programs but has exercised power in refusing to include certain certificates in the formula for HED and LFC funding recommendations in the past.

HED staff does review the awards data submitted by colleges for formula inclusion to identify anomalies, such as spikes in certain credentials; HED has used this review to discount some certificates in the past. In 2017, LFC and

HED staff became aware that Central New Mexico Community College (CNM) had created a new general education certificate that resulted in a four-fold increase in the number of one- to two-year certificates generated by the institution. Because of the ongoing work of reforming the statewide general education core curriculum, and with agreement from CNM's administration, HED and LFC staff did not include these certificates in the FY19 funding formula.

However, this discounting of CNM's certificates was a one-off event. Also, though HED staff and other members of the formula's technical committee may review the credentials included in the formula annually, no rule or statute that defines how or if this review should occur, nor are there any formal rules for which credentials are to be included in the formula. Legislators might want to consider codifying the review, modification, and use of the formula moving ahead. If nothing else, doing so would establish a process to review and implement changes recommended in this evaluation. It would also allow colleges input regarding the timeline of implementing recommended changes – leaving the schools adequate time to adjust to any new or modified formula incentives.

Tennessee law §49-7-202 provides a good model by which New Mexico might want to consider codifying its funding formula. It outlines that Tennessee's Commission on Higher Education should develop and use an outcomes-based funding formula, as well as establishes a review committee to meet annually to aid in the revision of the formula. Selected, relevant pieces of Tennessee's law are in Appendix C.

New formula measures of job placement and transfer student success could help ensure the value of certificate and associate's programs. In May 2018, the New Mexico Independent Community Colleges (NMICC) sent a letter to HED regarding the possibility that the department might begin authorizing subbaccalaureate certificates, something the department only does for higher degrees. In its letter, the organization noted that HED and LFC recognize both degrees and some certificates in the funding formula and that it might be unfair that funding is distributed based on certificates, which do not require formal approval by HED. NMICC recommended that an authorization process for certificates by HED would be acceptable if 1) HED only authorized inclusion of certificates in the formula, not the ability of colleges to offer certificates, 2) HED used clear criteria to determine formula inclusion of certificates, and 3) HED considered all certificates, not just those of over-one-year or in STEMH, for formula inclusion.

This outlines a structure similar to that used by some other states in their funding formula. Colorado, for example, only includes less-than-one-year certificated in its formula if they meet the federal "gainful employment" definition. In Tennessee, the Higher Education Commission counts all certificates of more than one year and *technical* certificates of less-than-one year. The commission does not count less-than-one-year *academic* certificates though (e.g., those in liberal arts and sciences.) The Tennessee Higher Education Commission determines which certificates are technical versus academic as part of its degree and certificate authorization process.

Tennessee and New Mexico's formulas differ in two important ways, however. First, Tennessee has a formula incentive for community college transfer students that assumes colleges award academic, less-than-one-year certificates

to students who intend to transfer to a higher college. As such, the state considers it best to incentivize the student's transfer, rather than the certificate itself. New Mexico currently does not give credit for transfer students or the success of those transfer students.

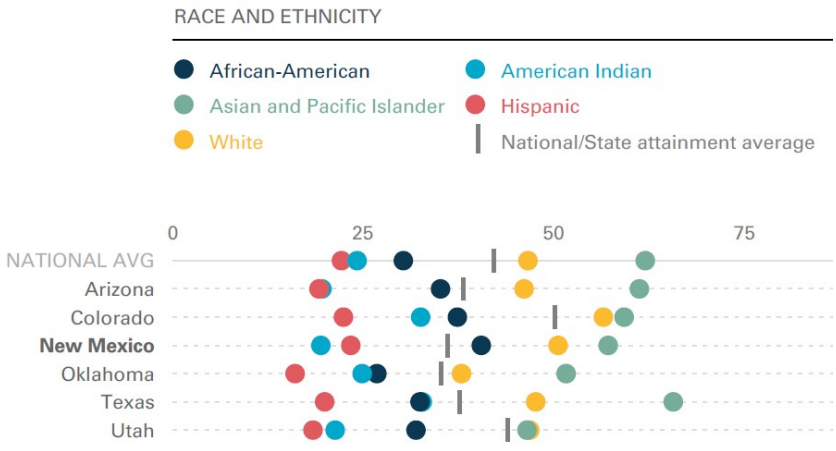
Second, Tennessee bases 5 percent to 15 percent of its performance funding for community colleges on successful job placements of graduates in a field related to their credential. As New Mexico has no similar quality check, nor hard evidence of the labor-market value of different kinds of certificates in state, HED should be cautious of opening the formula to further inclusion of certificates. The department may also want to consider how to incentivize the long-term outcomes of certificates – job placement and success of transfer students– rather than the certificates themselves.

A 2016 Lumina Foundation report recommends, "States should consider including value-added metrics [in performance funding] of student labor-market outcomes, as well as measures of student learning and engagement." With further analysis of currently collected data, HED could track students that transfer from two-year to four-year in-state colleges and ascertain their eventual success rates in achieving a bachelor's degree. Measuring and analyzing job placement rates is more complicated but still attainable. For example, Tennessee has a state longitudinal data system that combines data from the Tennessee Department of Education, Department of Labor and Workforce Development, and Higher Education Commission. That longitudinal data system allows Tennessee's Higher Education Commission to complete an annual, statewide job placement analysis that is uniform across all community colleges and provides meaningful information.

For the New Mexico Higher Education Department to integrate job placement numbers as a new formula metric, the department would likely need additional staff and resources to develop a similar shared data system with the Department of Workforce Solutions.

Though overall degree production is up, attainment gaps for many student groups remain unaddressed in the formula. Low-income students are not the only population of students with attainment gaps. Adult students, Native American students, low-income students, and students needing remedial coursework all have six-year graduation rates that are lower than their

Chart 16. Attainment Gaps by Student Race and Ethnicity, 2016



Source: Lumina Foundation's *A Stronger Nation* Report, 2018

high-income, white, and first-time full-time peers. A 2017 study indicated that at-risk metrics might be most effective if they were paired – including both low income and minority students as at-risk.[vi] As such, New Mexico may want to consider not only increasing the proportion of performance funding dedicated to rewarding credentials conferred to financially at-risk students, but also to Native American students, to decrease attainment gaps.

Benchmarked metrics of spending efficiency would encourage quality business management at colleges. The New Mexico higher education funding formula does not specifically reward or consider efficiencies in financial management when allocating annual state appropriation. However, growing expenditures per student over the last 10 years at many colleges have led LFC to recommend that the committee work with the Higher Education Department to update the funding formula to include metrics that reward efficiency in financial management.

Maine, Mississippi, and Utah each specifically reward lower expenditures per degree in their formulas. A more nuanced measure may be needed for New Mexico though. As was found in the 2017 LFC evaluation of cost drivers in higher education, several colleges have relatively low overall expenditures per student already but tend to spend too many resources on executive management or athletics and not enough on instruction. A more appropriate measure could look like Michigan's, which rewards institutions that keep institutional support expenditures as a percent of all expenditures lower than their benchmarked peers nationally.

Recommendations

The Legislature should consider codifying the review, modification, and use of the formula in Section 21-2-5.1 NMSA 1978 using Tennessee law § 49-7-202 as a model for formula review committees.

The Higher Education Department should work with the New Mexico Department of Workforce Solutions to determine the best way to create database or share data to track job placement and wages for graduates of New Mexico colleges.

The Higher Education Department and Legislative Finance Committee should, for the FY20 and FY21 formula run, ratchet back the amount of performance funding dedicated to end-of-course student credit hours by 4.25 percent each year, giving that share to the total awards and at-risk awards measures until the proportions are 30 percent to total awards and 20 percent to at-risk awards. The remaining 16.5 percent of dedicated end-of-course funding should be, over time, transferred to efficiency-related and other recommended measures outlined in Table 6 on page 29.

The Higher Education Department and Legislative Finance Committee should also, between now and FY25, phase out the use of the STEMH, dual credit, 30 credit hour momentum, and 60 credit hour momentum measures and transition instead to new metrics rewarding job placement, transfer students, and transfer student success as outlined in Table 6. on page 29.

Table 6. Recommended Changes to Formula Measures to be Phased in Over Time, but Before the FY25 Formula Run

Current Performance Levels	Current and Recommended Measures	Recommended Performance Levels
	Measures for all Colleges	
28%	Total Awards	**30%**
0%	Efficiency Benchmarks	**14%**
13.5%	At-Risk Awards*	**20%**
13.5%	STEMH Awards	**0%**
25%	End-of-Course Student-Credit-Hours	**0%**
	Mission Specific Measures	
3.3%	Dual Credit (cc and comprehensives only)	**0%**
11.1%	Research Funding (research only)	**10%**
5%	30 Credit-Hour Momentum (two-year only)	**0%**
0.6%	60 Credit-Hour Momentum (cc and comprehensives only)	**0%**
0%	Job Placement of Graduates plus Students Transferring to Four-year Colleges with at least 15 Credit Hours (two-year only)**	**13%**
0%	Bachelor's Degrees Awarded to Transfer Students from NM Two-year Colleges (four-year only)	**13%**

* Formula committees may want to consider splitting the at-risk metric into two: 15 percent for awards to low income students and 5 percent for awards to Native American Students.
** This metric would require some sort of longitudinal database to be shared between HED and New Mexico Workforce Solutions and/or Taxation and Revenue Department.

NEW MEXICO HIGHER EDUCATION DEPARTMENT

SUSANA MARTINEZ
GOVERNOR

DR. BARBARA DAMRON
CABINET SECRETARY

August 17, 2018

TO: Mr. David Abbey
Director, Legislative Finance Committee

FROM: Dr. Barbara Damron
Cabinet Secretary, New Mexico Higher Education Department

Dear Director Abbey,

I first want to recognize the hard work that the staff of the Legislative Finance Committee performed and my appreciation for the collaborative efforts through working with HED staff to generate this report. I also appreciate the opportunity to respond with the Higher Education Department's (HED) perspective on the recommendations contained within this report. HED recognizes student success as the primary lens through which all its work is focused, and that success is also the lens through which our comments are based.

We agree that New Mexico needs to continue to improve access and success of our at-risk students and the Instruction and General performance outcomes-based funding formula (the funding formula) should incentivize those accomplishments. The Route to 66% attainment goal and HED's trifecta of initiatives (state-wide common course numbering; general education reform; and meta-majors) are significant drivers in the gains observed in funding formula outcomes and other measures of student success. HED has worked with the institutions to put these state-wide reforms in place in order to serve students and to provide the foundation for institutions to increase student completions. HED has not explicitly given institutions a goal in terms of what their degree production should be, as we do not want to establish quotas at this stage without further data. As the state-wide foundations are being put in place (common course numbering, general education reform, state-wide meta-majors), HED will begin working with the institutions to establish specific degree production goals for each.

The recommendations from this report would change over half of the current funding formula outcomes. While we agree that a redistribution of formula funding outcomes should occur, HED believes that these changes should include input from many stakeholders using the collaborative process through which HED has made its most significant accomplishments in the past 3 ½ years.

It should be noted that all current performance measures within the funding formula are based on 3-year rolling averages. These averages smooth changes in funding that may be out of the institutions' control, such as normal fluctuations in enrollment from year to year. Consequently, HED believes the elimination of metrics or incorporation of new measures should be strategically phased in over time. This will give institutions time to adapt to formula changes and avoid unintended effects on their funding streams.

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We agree there should be a much stronger correlation between the performance outcomes in the funding formula and the performance measures outlined through the Accountability in Government Act (AGA). Because of New Mexico's highly decentralized higher education system, building a new suite of AGA metrics more closely related to the formula metrics will require considerable time and resources because the metrics will have to be developed on an institution-by-institution basis. This is a logical step, but must respect the broad differentiation in missions and student demographics.

Non-formula adjustments should be made through a careful evaluation of regional and state needs, rather than through arbitrary supplemental appropriations. We suggest that non-formula funds be appropriated to the Higher Education Performance Fund with accompanying language authorizing HED to develop a systematic methodology for disbursing non-formula adjustments.

HED concurs with the recommendations that degrees and certificates should be meaningful from a workforce development perspective, and that these credentials should have lasting value. The current proxy for workforce outcomes is the STEM-H credential measure. The workforce development component of the formula may need to be expanded to include emerging areas of workforce demand such as the needs of the energy sector. Certificates and non-credit credentials can have value but must lead to meaningful employment or efficient transfer and successful completion of a degree. This underscores the need for streamlined state-level approval for all levels of postsecondary credentials.

HED's Responses to Key Recommendations:

Codifying the Funding Formula

Regarding the recommendation that the Legislature should consider codifying the review, modification and use of the funding formula within statute modeled similarly to Tennessee law, HED wishes to note that we have had discussions with the Legislative branch for several years regarding statutory changes to the formula. We agree that the guiding principles of the formula and its governance structures (i.e., steering and technical committees) can and should be placed in statute to ensure ongoing funding based on meaningful outcomes. However, HED believes that specific outcomes, types of credentials incentivized and other metrics should be placed in administrative code that accompanies the statute so that the State can remain flexible in incentivizing its needs and quickly adapting to novel best practices. Great caution must be exercised by the Legislature when codifying the outcomes-based funding formula in statute.

Modification of Certain Current Performance Measures

HED concurs with the recommendation regarding the phasing out of the End of Course Student Credit Hour (EOC SCH) measure, which is an input measure – not a performance-based outcomes measure, moving funding associated with this measure toward more meaningful outcomes. In refining the funding formula it is imperative that funding for at-risk students and total awards remain a high proportion of the total outcomes funding. We also agree that incentivizing transfer is appropriate in an outcomes-based funding formula, but it must reward transfer that results in successful degree completion. While we do not disagree with removing the dual-credit measure, it should be noted that this conflicts with the State's high school graduation requirement for students to complete some advanced work (dual credit; AP; honors courses or online instruction) in order to graduate from high school.

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Table 6 notes that 14% of outcomes funding should eventually be directed to institutional efficiency benchmarks. HED cautions that New Mexico's decentralized, inhomogeneous system of institutions does not easily lend itself to the development of uniform institutional efficiency benchmarks due to the numerous governing boards addressing the broad range of institutional size, mission, and student demographics. We again raise concern with removing the STEM-H outcome measure, as this is arguably the current formula's proxy for a workforce development outcome. Any change in the workforce outcome measure requires a carefully phased approach.

Incentivizing Job Placement through Data Sharing

While HED agrees that incentivizing job placement of graduates is perhaps the most meaningful outcome that could be included in new iterations of the formula, there are many nontrivial technical details that must be addressed to introduce such a measure. Progress has been made in developing a data system that tracks students' entry into the workforce but significant challenges remain. For example, Taxation and Revenue Department data cannot identify the specific type of work an individual student has secured. Correlating job classification data with student degree data is imperfect under the current classification systems. Meaningful employment measures can be based on simple metrics such as wage data and time to employment. Identifying if a job is within a student's field of study is immaterial if the job they secure is of high quality. Irrespective of definition, considerable staffing and IT resources will be required to develop the data systems required to implement such a measure, and any changes to the employment measures would have to be phased in over time.

Incentivizing Transfer Outcomes

HED also concurs that funding successful student transfers from a 2-year college to a 4-year college is a valuable outcome measure. However, technical and policy obstacles regarding its implementation exist. The majority of students in our higher education system are classified as non-traditional (e.g., adult learners who have had some gap between high school and matriculation). The State cannot achieve its Route to 66% attainment goal without improving the success of adult learners. Non-traditional students frequently experience gaps of a semester or more in their pursuit of a degree. Developing a policy that incentivizes meaningful transfers should account for these gaps in order to reward colleges for successfully graduating non-traditional students. Moreover, HED's current data system is not well prepared to track such transfers. A new coding system would be required along with concomitant training of registrars, institutional research staff and others at each institution. This is particularly challenging in New Mexico's decentralized system of higher education with its dissimilar data systems and multiple governing boards. Again, a phased approach would be required, with funding made available for training and system development.

Increasing the Mill Levy for Branch Community Colleges

HED does not disagree with the recommendation to expand the local mill levy to two mills for branch community colleges. However, branch community college districts already have the ability to request additional mill levy through local elections. HED notes that with few exceptions, the imposed tax rates at branch community colleges are lower than those of their independent peers and this creates some disparities in the proportion of State support for these institutions. However, it should be noted that as branch community colleges, these institutions have opportunities for support from their main campuses in the form of resources not available to independent

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community colleges such as shared support services, increased purchasing power, and the ability to fund system-wide capital improvements.

In conclusion, HED again thanks the Legislative Finance Committee staff for the opportunity to collaborate and comment on the recommendations of this report. The state's higher education funding formula has been successful in increasing educational attainment for the students of New Mexico, in no small part due to the stability of the current formula over the past five years. We nevertheless recognize that the time has come to re-examine and revise the funding formula to enhance the desired outcomes of increased award production, successful workforce development and placement, and increased institutional efficiency. Enacting some of these changes will be technically and perhaps politically challenging and may take several years to develop. We look forward to our continued collaboration in developing a funding model and deliberative process that is not only best for the people of New Mexico, but also continues to serve as a model to the rest of the nation.

With warmest regards,

Barbara Damron, PhD, RN, FAAN
Cabinet Secretary, New Mexico Higher Education Department

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COUNCIL OF UNIVERSITY PRESIDENTS

Membership: Eastern New Mexico University, New Mexico Highlands University, New Mexico Institute of Mining and Technology, New Mexico State University, Northern New Mexico College, The University of New Mexico, and Western New Mexico University

August 17, 2018

Mr. David Abbey,
Legislative Finance Committee
325 Don Gaspar, Suite 200
Santa Fe, NM 87501

Dear Mr. Abbey:

The Council of University Presidents (CUP) would like to begin by thanking the Legislative Finance Committee (LFC) for the work done researching and developing its evaluation of the performance-based funding formula for higher education in our state. The CUP greatly appreciates the opportunity to provide comments to the key findings and recommendations.

Our response is organized to provide general comments on the data and recommendations contained in the report, followed by several topics that we believe are key to the success of our CUP higher education institutions (HEIs), as well as to all of higher education in New Mexico. Our response provides alternative suggestions in regard to the evaluation's initial recommendations.

Representatives from the seven CUP institutions convened to review the findings in the report and came to a collective conclusion on the following:

The report does an excellent job identifying a number of important issues that need to be addressed, including increasing support for at-risk students and recognizing that the formula undervalues bachelor's degrees and terminal degrees, including STEM degrees. The CUP could support some of the proposed measures that incentivize efficiencies, job placement and student transfers to a four-year institution as long as the methodology is agreed upon by key stakeholders from all sectors of higher education. The CUP views development of a reliable methodology, including definitions, as crucial to ensuring efficiency in implementing the new measures. In addition, the CUP is concerned about the rapid shift in performance priorities articulated in successive performance-based funding formulas. A rapid shift toward a new performance priority may undermine strategic investments in student success that have been made to meet prior priorities. The proposed changes to STEMH, research and MP30 and MP60 measures fall into this category.

Ensuring that transfer students have opportunities to succeed in four-year institutions is a New Mexico priority. As the formula evaluation points out, "Only 32 percent of transfer students earn a bachelor's degree within six years" (page 2). To address the needs of transfer students, an accountability process determining transfer student preparedness for the four-year institution needs to be developed. Without this accountability process, the measure for Bachelor's Degrees Awarded to Transfer Students from NM Two-year Colleges will be unreliable. The CUP can only support the implementation of transfer student performance metrics with consensus from key stakeholders on 1) a process that helps to ensure transfer students are prepared and 2) valid data and definitions on preparedness to support the performance measure. Stakeholder consensus on methodology and definitions with respect to all of the performance measures identified by the LFC will strengthen their reliability. The CUP requests a description, supported by research and projections, of how the proposed performance metrics will produce better student outcomes than the current performance metrics.

The CUP believes the report sends the wrong message when it comes to the proposed elimination or reduction in the areas of STEMH, research, and student completion of MP30 hours and MP60 hours. At our three research institutions and four comprehensive institutions, prioritization of these areas drives student success and provides economic development and revenue to the State of New Mexico. The LFC report highlights that "At 13.5 percent of total performance funding each, the at-risk and STEMH incentive metrics may be too low to combat attainment gaps for low-income students or sufficiently incentivize the production of STEMH degrees" (p. 2). The report proposal to cut the STEMH measure to zero percent and omit an increase in the at-risk measure (earmarked for low income, underrepresented and low attainment populations throughout New Mexico) fails to address fundamental needs in New Mexico higher education. Eliminating these measures delivers the message that the State no longer supports students' strides in STEMH and institutional strategic development support for research, as well as support for student completion of 30- and 60-hour milestones. The Evaluation doesn't demonstrate a true methodology to justify eliminating these measures and at this point these recommendations seem to be based on theory.

The evaluation recommends phasing out the dual credit measure as well. State requirement does not allow NMHEI's to charge tuition for dual credit. Over time NMHEI'S went from being funded roughly $325 per headcount in the old formula to only the comprehensive schools and two-year community colleges receiving roughly three $3 for every one percent of new money in the current formula. To eliminate funding for dual credit encourages institutions not to offer dual credit. The cost of providing dual credit is only partly associated with building and classroom capacity. NMHEI's providing dual credit must fund additional faculty, provide advisers and assign other resources without tuition or an appropriation to offset costs. If the measure is eliminated in the formula, CUP requests that the legislature fund dual credit at least sector average tuition to provide dual credit.

> It is also important to keep in mind that the old formula was not driven by merely "square footage"; in fact, the old formula consisted of exceeding your base by 3% in order to receive additional funding in two fiscal years later, or if you're based decreases by 5%,

then you would receive the decrease within the next fiscal year; a non-scientific nor realistic approach was used to fund a miniscule portion of your fixed assets (equipment renewal and replacement E&RR) and deferred maintenance costs again not using industry practices on square footage. The evaluation makes inferences that "Square Footage"-drove institutions to build more buildings, consequently, there is no absolute data that can correlate this assumption. The CUP respectfully requests that these misstatements not be asserted in the future.

If all the recommendations are adopted, this will constitute a major overhaul when the current formula has only been consistent for the last two years. At the same time, re-distribution was taking place during three years of cuts, and FY19 is the first year of new money for this current formula. It is important to understand that it takes four years to graduate a student. The CUP has hesitations about allocating 63% of the formula without a better analysis of the effects and potential unforeseen consequences this would have to higher education and the state of New Mexico. To transitioning to the new recommendations, the various stakeholders should be actively engaged with mutually agreed upon timelines, in the process, as occurred when the formula was created.

In conclusion the CUP calls for the following to allow for a fair and productive process when changing the funding formula:

1.) Preserving the simplicity of the funding formula;

2.) Continuity;

3.) Any implementations that are time sensitive allow for all NM HEI's to plan and react to changes;

4.) Consensus among all sectors that are part of the funding formula; and

5.) All measures should use data that can be audited.

On behalf of the New Mexico Council of University Presidents, I wish to thank you for the opportunity to provide our formal response to the LFC evaluation of the State's only performance-based funding formula.

Sincerely,

Joe Shepard, PH.D.
Chair, NM Council of University Presidents
President, Western New Mexico University

The Performance-based funding formula has been in existence for 6 years and has had major and minor modifications in 4 of those 6 years. The formula has only run in its current existence for the last two fiscal years.

- The performance-based formula was first implemented in FY13 and went through major modifications through FY15 which also formed the basis of the formula we have today
- A hold-harmless plus and stop-loss component were added in FY16
- FY17 continued the hold-harmless plus fund with non-recurring funding and eliminated the stop-loss component
- FY18 and FY19 were the only two years where the formula was not modified from previous years
- We cannot continue to add moving performance targets with constant major modifications – however, technical issues may be required

The recommendations, if adopted, would be the fourth major change of the funding formula in 7 years

- The recommendations, if adopted, would eliminate 63 percent of the existing performance measures
- The current formula includes a total of eight performance measures. The evaluation recommends eliminating five of the current measures and replacing them with new measures:
    - Eliminate end of course student credit hours (all sectors impacted)
    - Eliminate STEM-H awards (all sectors impacted)
    - Eliminate 30 credit hour momentum points (2-year and comprehensive sector impacted)
    - Eliminate 60 credit hour momentum points (comprehensive sector impacted)
    - Eliminate dual credit (2-year and comprehensive sectors impacted)
    - Amend the at-risk measure to include Native American student graduates
    - Add job placement of graduates (2-year only)
    - Add efficiency measure (all sectors impacted)
    - Add 2-year transfers to 4-year institutions with at least 15 credit hours (2-year only)
    - Bachelor's Degree Awarded to transfer students from NM 2-year colleges (4-year only)

The performance-based funding formula is based on lagged data and any changes implemented in FY20, as recommended in the report, will only result in measuring past, and not future, performance in the short run

- All recommended changes should be announced to all institutions and implemented at least two years from announcement to allow institutions to change practices to fulfill positive changes towards the new measures

- The formula is based on lagged data therefore institutions should be given time to change and implement changes. For example, the FY20 at-risk performance measure will use data from AYs 2015-16, 2016-17 and 2017-18

CUP Response to LFC Funding Formula Evaluation

August 2018

Key Recommendations:

1) Formula Redistribution: **Keep the proportion of funding for performance low in years of little or no increases in appropriations to prevent improving headwind colleges from losing year-over-year funding.**

    i) Keeping the redistribution low in years when there is no new money will help to preserve the base for the universities in years when funding is limited.

2) Formula Changes: **Starting with the FY20 formula run and for two years annually, ratchet back the amount of performance funding dedicated to end of course student credit hours (EOC SCH) by 4.25 percent, giving that share to the total awards and at-risk awards measures until the proportions are 30 percent to total awards, and 20 percent to at-risk awards.**

    i) Completely eliminating the performance measure for STEMH degrees contradicts the incentive to increase STEMH degrees.
    ii) STEMH degrees could be incentivized by re-valuation in the degree tier/level formula factors.
    iii) Including ethnicity to the At-Risk measure could be problematic if using IPEDs definition. As of Summer 2010 IPEDS:
        "Individuals are now given the option of identifying themselves as Hispanic or Not Hispanic and are also given the option of selecting one or more races. For Federal reporting, anyone who selects Hispanic is reported as Hispanic regardless of any race choices they select. Anyone who selects Not Hispanic and two or more races is reported as 'Two or More'."
    iv) Using academically underprepared as a classification for at-risk would necessitate defining this.
    v) While the incentive to increase at-risk awards is notable, there are other at-risk factors that should be considered, such as other ethnicities that fall below the National/State attainment average.

The remaining 16.5 percent left in EOC SCH should transition to efficiency-related and other recommended measures.

i) Metrics to reward efficiencies in financial management can easily be gamed. In depth audits and resources may need to be allocated for this measure to be properly evaluated.
ii) This is the only efficiency measure proposed within the evaluation. Will there be others proposed? Specific efficiency data sources and methodology would help in deciding if this measure could be supported.

Between now and FY25, phase out the use of the dual credit, 30 credit hour momentum, and 60 credit hour momentum measures and transition instead to metrics rewarding job placement, transfer students, and transfer student success.

i) This measure needs to be more clearly defined. Do transfer students have to complete a number of credits with a 2.25 GPA after two consecutive semesters? Is this data readily available for the 2-year schools measure or will there be a lag to actualize the funding incentive?
ii) For the 4-years schools, does it include transfer students from out of state? Does it matter how long it takes for the transfer student to receive a bachelor's degree? *Transfer Student for a 4-year school is defined by the individual university admission requirements. UNM requires 24 transferable hours and NMSU requires 30 hours. If a student does not meet the requirements, then the student is admitted using the freshman requirements and is not classified as a transfer student.*
iii) For the 4-year schools, should the transfer students be included as an at-risk measure?

This is a replica of table 6 from the LFC evaluation with a dollar value assigned to the proposed percentage changes. FY 25 Proposed Dollar Distribution is based on FY 19 redistribution and new money funding level. It demonstrates the shift of funding from measures for all colleges to more mission specific.

Table 6 Recommended Changes with FY 19 Formula Dollars				
Current and Recommended Measures Measures for all Colleges	Current Performance Measures(%)	Recommended Performance Measures (%)	FY 19 Performance Funding ($) - New Money and Redistribution	FY 25 Performance Funding Proposed Distribution
Total Awards	28.0%	30.0%	9,485,128.80	10,162,638.00
Efficiency Benchmarks	0.0%	14.0%	0.00	4,742,564.40
At-Risk Awards*	13.5%	20.0%	4,573,187.10	6,775,092.00
STEMH Awards	13.5%	0.0%	4,573,187.10	0.00
End-of-Course Student-Credit-Hours	25.0%	0.0%	8,468,865.00	0.00
	80.0%	**64.0%**	**$27,100,368.00**	**$21,680,294.40**
Mission Specific Measures				
Dual Credit (cc and comprehensives only)	3.3%	0.0%	1,117,890.18	0.00
Research Funding (research only)	11.1%	10.0%	3,760,176.06	3,387,546.00
30 Credit-Hour Momentum (two-year only)	5.0%	0.0%	1,693,773.00	0.00
60 Credit-Hour Momentum (cc and comprehensives	0.6%	0.0%	203,252.76	0.00
Job Placement of graduates plus Students Transferring to Four-year Colleges with at least 15 Credit Hours (two-year only)**	0.0%	13.0%	0.00	4,403,809.80
Bachelor's Degrees Awarded to Transfer Students from NM Two-year Colleges (four-year only)	0.0%	13.0%	0.00	4,403,809.80
	20.0%	**36.0%**	**$6,775,092.00**	**$12,195,165.60**
Grand Total (FY 19 Funding Resources Redistributed plus New Funding)	**100.0%**	**100.0%**	**$33,875,460.00**	**$33,875,460.00**

3) Formula in Written in Code: The Legislature should consider codifying the review, modification and use of the formula in Section 21-2-5.1 NMSA 1978 using Tennessee law § 49-7-202 as a model for formula review committees.

Given how often this formula has changed in the last 10 years, would the code have to keep changing as well?

4) Exploration of Alternate Data Sources: The Higher Education Department should work with the New Mexico Department of Workforce Solutions and/or the taxation and Revenue Department to determine the best way of creating a database or sharing data to track job placement and wages for graduates of New Mexico Colleges.

While the exploration of alternate data sources is commendable, the implementation of this measure will need to be evaluated in its entirety. These are just a few of the questions generated by its mention. Is there a limited timeframe from graduation to job placement? Will there be a reliance on Workforce Solution to run this information and how can it be validated?

Does NM Workforce Solutions have employment and wage data on graduates who leave NM? For those graduates who are employed in other states, how will this measure be impacted? Are the universities penalized for having graduates who go out of state for jobs?

7

Decrease/or Elimination of Current Performance Measures:

While the findings in the evaluation are clearly delineated, the change in recommended percentages do not reflect incentives for these measures. For instance, the importance of STEMH degrees is emphasized; however, the recommended percentage of funding for this measure goes from 13% to 0%. It is unclear how this is an incentive for STEMH degrees. What message will this send to our Labs and potential impact to the states' economic development that STEMH degrees are not valued? The same is true for the decrease to incentivize external research expense. This Research measure was implemented to reward the universities for the vast undertaking involved in gaining external research funding for the state. In FY 17 the research expenditures totaled over $240,000,000.

The proposed mission measures that are being eliminated or reduced were implemented after extensive evaluation by the formula team. The LFC evaluation does not address why these measures are not effective or essential to the state.

Conclusion and Suggestions:

Changing the funding formula from year to year does not give the universities a clear direction on expectations. How can universities keep changing output focus when the measures change yearly, especially as the formula captures awards after a 2-year lag? For instance, with the proposed change for FY20 to increase the at-risk performance measure, the awards for this incentive will have been awarded for Academic Year 2017-18. The universities and colleges will not have implemented any changes to address this change.

The Higher Education Funding Formula in New Mexico in its current state has undergone various iterations but the core premise of the formula has remained intact. Redefining components or re-valuing the formula factors could provide the desired outcome measures without completing eliminating some of these categories. This formula was developed over three years with input and analysis from all facets of higher education with oversight and direction from HED and LFC. Any future changes to the formula should include a committee from the various constituents to ensure acceptance and understanding of the new objectives/goals.

NMICC
New Mexico Independent Community Colleges

Central New Mexico Community College • Clovis Community College • Luna Community College
Mesalands Community College • New Mexico Junior College • New Mexico Military Institute
Northern New Mexico College • San Juan College • Santa Fe Community College • Western New Mexico University

August 17, 2018

Ms. Micaela Fischer
Program Evaluator
NM Legislative Finance Committee
325 Don Gaspar Ave. #101
Santa Fe, NM 87501

Dear Ms. Fischer:

Thank you very much for the opportunity to review and comment on the draft program evaluation report on the higher education funding formula. We value your assessment of the funding formula, particularly as it pertains to the impact to "headwind" institutions of various redistribution and new funding scenarios. We support your key recommendation on page 3 that states: "Keep the proportion of funding for performance low in years of little or no increases in appropriations to prevent improving headwind colleges from losing year-over-year funding." We would request that you consider abandoning the practice of base redistribution and move toward a system of base restructuring in years when new money is available for higher education appropriations. New money for high performing institutions without redistribution does ultimately realign the base, but does so at a more reasonable pace that allows institutions to budget more consistently and predictably.

We also appreciate your clear explanation of headwind institutions and your description of the impact to those institutions in various funding situations. The tables and charts on pages 10 through 12 are interesting and helpful. A few of our institutions are also concerned that the awards metrices embedded in the formula are inherently flawed in incentivizing awards in certain areas, particularly in STEMH disciplines, and believe this may contribute to the negative impacts to headwind institutions. Further analysis of this concern would be helpful.

There are a few additional points, however, that we would like you to consider. First, there are several places in the report that suggests the formula may be over emphasizing certificates and associate's degrees when compared to bachelors and graduate degrees. On page 2 paragraph 3, the report speaks to the increase in certificate and associate's degree production and states "Counter to this increase, growth in jobs requiring an associate's degree or certificate are not projected to be especially large compared to jobs requiring a graduate degree." While we understand this perspective is based on information you have received from the Workforce Solutions Department, the studies we have reviewed indicate something different. For example, in the report "Recovery – Job Growth and Education Requirements Through 2020" by Anthony Carnevale, Nicole Smith, and Jeff Stroul of Georgetown University's Public Policy Institute, the data shows that new jobs will require primarily certificates, associate degrees, and bachelor's degrees. Jobs requiring a master's degree or higher will increase at a much slower pace. According to this

report, there will be 12 million new jobs requiring a certificate or associate's degree, 13 million requiring a bachelor's degree, but only 6 million new jobs requiring a master's degree or higher.

So, what does this mean from a public policy standpoint? The draft LFC formula evaluation report suggests that perhaps New Mexico has over emphasized certificates and associate's degree and under emphasized bachelors and graduate degrees. But our state has seen tremendous improvements in graduation rates at the baccalaureate level – most notably at the University of New Mexico (UNM). The NMICC congratulates UNM for this impressive achievement! We also believe that this trend will continue naturally over time. Because certificates and associate's degrees are shorter in duration than bachelor's degrees, large increases in production at this level will appear in the formula more quickly than the large increases we all hope to see at the bachelor's degree level in the near future. Given that our state's overall educational attainment levels are low when compared to other states in the nation, increases at any level are critical. It is important that we improve our educational attainment levels dramatically by the next census in order to better demonstrate to the rest of the country that New Mexico does indeed have a talented and skilled workforce that is worthy of investment in existing New Mexico businesses, and that makes New Mexico a more attractive place for other businesses to consider for relocation or expansion.

Additionally, the state should not assume that students only progress from certificates to associate's degrees to bachelor's degrees and so forth. NMICC institutions, much like community colleges around the country, are seeing increases in the number of students who already hold bachelor's degrees or higher. Because the job market *does* value certificates and associate's degrees, individuals with higher level degrees *do* return to our institutions to retrain and retool to meet the requirements of new jobs.

Next, on page 2 paragraph 4, the report speaks to the uncertainty of the value of more general liberal arts or general education certificates and associate's degrees. We would like to point out that some of our institutions do believe there is evidence of value. There are studies that support stackable credentials as a means to motivate first generation and non-traditional students and to help those students progress through to a higher level degree in an affordable manner. For example, the American Association of Community College's publication "Empowering Community Colleges to Build the Nation's Future: An Implementation Guide" highlights stackable credentials as an effective method for achieving student success. Their research does suggest that completion of a first stage certificate improves the likelihood that a non-traditional or first generation student will go on to complete an associate's degree or higher. Some of our institutions believe this holds true for students who obtain a general education certificate based on improved graduation rates at their own colleges.

Then, in key recommendations, the report recommends ratcheting back funding dedicated to end of course student credit hours and giving that share to total awards and at-risk awards measures until certain proportions are reached, and then transitioning to efficiency-related and other measures. We are not opposed to this recommendation, but do believe significant discussion about methodologies and definitions for new measures would be required. One thing to think about before moving to increase funding for at-risk awards is that the current definition for "at-risk" is very narrow. Now, an at-risk award is defined as an award to a student who is eligible for a federal Pell grant with a low expected family contribution. But the New Mexico Higher Education Department's (NMHED) data system can only determine awards to students who actually received Pell, not those eligible for Pell. All institutions in the state award degrees to

student who are financially eligible for Pell, but who have lost access to Pell for a variety of reasons.

On an historical note, when the at-risk award definition was first established, the institutions and the NMHED sought to include as at-risk, awards to students who began as academically underprepared regardless of their financial aid eligibility. The desire was to include awards to students who took a given number of developmental courses or remedial co-requisite courses in their journey toward that award. Unfortunately, the data available in the NMHED's Data Editing and Reporting (DEAR) system did not make this possible. If these data and definitional issues could be resolved, we believe it would be beneficial to all institutions to broaden the definition of at-risk awards. This would also be a good opportunity to consider including awards to students from underrepresented racial and ethnic groups in the definition of at-risk.

Next, on page 3 under Key Recommendations, NMICC does not support a plan to phase out the inclusion of dual credit as a mission specific measure. The dual credit program has allowed many students to earn certificates and associate's degrees at the same time they are completing high school. This has saved families in this state a significant amount of money since we do not charge tuition and fees for dual credit students. Given our state's low investment in need-based financial aid, limiting an institution's ability to provide dual credit instruction ultimately hurts families trying to finance higher education. Some of our institutions are in support of revising the methodology for measuring dual credit performance so that it is decoupled from an institution's tuition rate. But we all believe that dual credit is too important to students and families to eliminate from the funding formula.

In terms of the recommendation to move away from momentum points to transfer related metrics, another piece of historical context is that for community colleges, the momentum point measure was included as a proxy for transfer ready because the DEAR system in its current format does not provide a mechanism for determining transfer. The momentum points for comprehensive universities were included because there was data demonstrating that if a student reached these milestones, they were more likely to progress to graduation.

Then, regarding the report's recommendation to codify the formula in either statue or rule, we would like to point out a downside to doing so. As is evident with the State Equalization Guarantee (SEG) formula for public education, it can be difficult to be nimble in responding to shifts in performance measures, workforce, and state priorities when a change in the formula requires legislation. That being said, we understand and appreciate the desire for there to be a legislative voice at the table during conversations about changes in the funding formula. Perhaps statutory language supporting the use of the NMHED's existing technical committee including a requirement that LFC staff serve on that committee would be sufficient to address this concern while still allowing the state and institutions to quickly pivot to address emerging state needs.

Next, in terms of the comparison of New Mexico institutions to their Carnegie peers, we do believe there is important context related to need-based financial aid that is missing from this analysis. The report points out that New Mexico provides more funding per student than most other states. We are immensely grateful for that. But part of the reason our funding per student looks comparatively high, particularly at universities like New Mexico Tech, is because both tuition and state-funded need-based aid are so low. Historically, New Mexico has functioned as a low tuition/low aid state. Our primary means of keeping education affordable is to keep tuition low. Other states expect higher tuition rates and then fund substantially more need-based aid to provide access for economically disadvantaged students. Given New Mexico's low median

household income, it may make sense to remain a low tuition/low aid state. But that does result in a higher than average state appropriation per student FTE.

Finally, concerning the recommendation on page 29 regarding the creation of a data sharing mechanism to track job placement and wages for graduates, we support this so long as we are careful to include mechanisms for tracking job placement nationally. Graduates from our boarder colleges do find employment in neighboring states. Some choose to remain residents of New Mexico but commute across the border for work. There are tools available through organizations such as Emsi that can track employment nationally, and this should be included in the methodology for tracking job placement and wage related performance measures.

Again, thank you so much for the opportunity to provide input. We look forward to hearing the presentation of the report at the upcoming LFC hearing.

Sincerely,

Katherine L. Ulibarri

Katherine L. Ulibarri
Executive Director
NMICC

cc: Dr. Becky Rowley, Chairperson, NMICC, Inc.
NMICC Presidents

Appendix A: Evaluation Scope and Methodology

Evaluation Objectives.

- Assess the status of the higher education performance funding formula and the relationship between funding and performance.
- Review data behind recent formula runs, and trends driving changes in institutional performance.
- Determine if new potential metrics or other, nonformula methods are needed to maintain quality in performance.

Scope and Methodology.

- Analyzed trends in funding, and credential production at each New Mexico college since formula implementation.
- Interviewed out-of-state experts regarding lessons learned in the past five years of performance funding in higher education.
- Compared credential production trends in New Mexico to national trends.
- Examined the relation between credential production and workforce needs.
- Analyzed methods and metrics other states use to measure performance of public colleges.

Evaluation Team.

Micaela Fischer, Lead Program Evaluator

Authority for Evaluation.

LFC is authorized under the provisions of 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, LFC may conduct inquiries into specific transactions affecting the operating policies and cost of governmental units and their compliance with state laws.

Exit Conferences.

The contents of this report were discussed with the Secretary of the Higher Education Department and her staff on August 15, 2018.

Report Distribution.

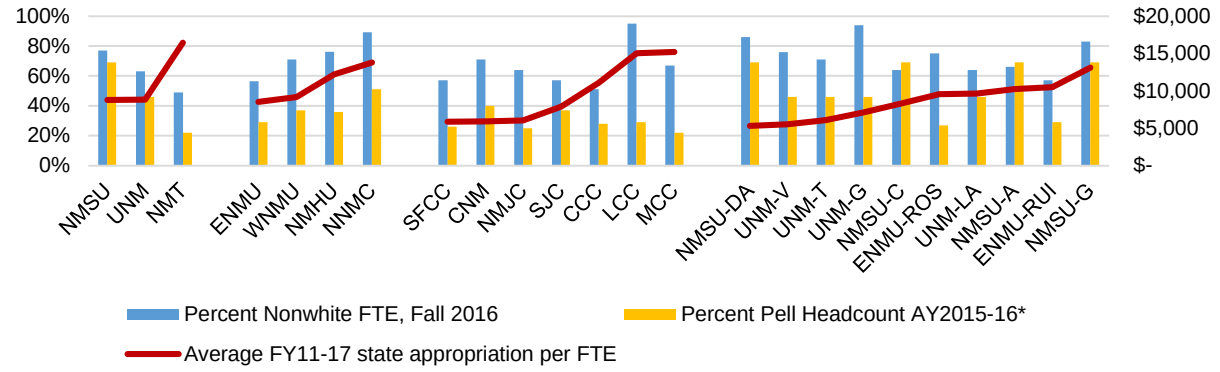
This report is intended for the information of the Office of the Governor, the Higher Education Department, New Mexico colleges and universities, and the Legislative Finance Committee. This restriction is not intended to limit distribution of this report, which is a matter of public record.

Charles Sallee
Deputy Director for Program Evaluation

Appendix B: Historic Funding per Student Full-Time Equivalent (FTE)

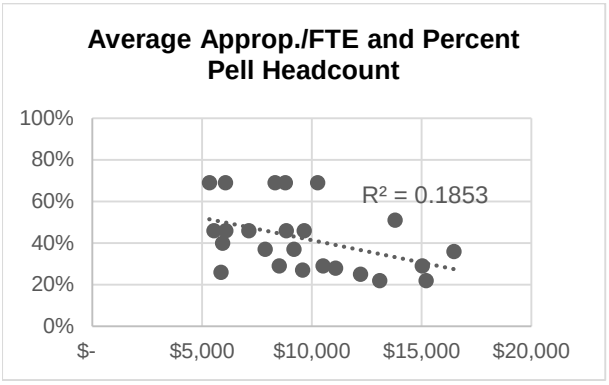
Any inequities in past funding from one college to another do not appear to be related to the racial/ethnic or socio-economic make-up of each college's student body. Over 90 percent of state Instruction & General (I&G) appropriations annually end up as "protected base" funding, derived directly from previous years' appropriation. As such, LFC staff were concerned that any past inequities in funding based on racial/ethnic or socio-economic make-up of the student body would be carried forward year after year, even under the state's newer performance funding formula. However, neither the percentage of Pell Grant recipients, nor the percentage of non-white students at a college had a statistically significant relationship to the amount of I&G appropriations a college historically received when compared to recent years.

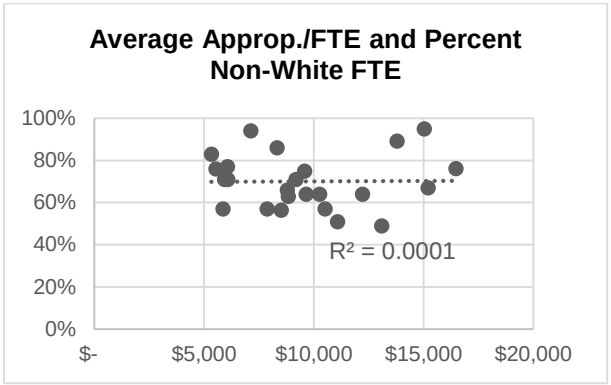
State I&G Appropriations Compared to the Proportion of Pell Grant and Nonwhite Students



*Note: Federally reported Pell Grant data combines NMSU and UNM branch campuses with their parent institution.
Source: HED, LFC Files, U.S. Department of Education

While not significantly related, I&G appropriations are weakly correlated with the percent Pell eligible students at a college. There is a positive but very weak correlation between average I&G appropriations per FTE and the percentage of non-white FTE students. In short, this means that while the trends are not significant, high Pell colleges tend to have lower I&G appropriations per FTE and there is almost no relationship between a college's proportion of non-white students and their I&G appropriations per FTE.





Source: HED, LFC files

Appendix C: Excerpt of Tenn. Code Ann. § 49-7-202

(f)

(1) The commission shall develop and utilize an outcomes-based funding formula model to ensure the fair and equitable distribution and use of public funds among state institutions of higher education.

(2) This funding formula model shall further the goals of the statewide master plan by emphasizing outcomes across a range of variables that shall be weighted to reinforce each institution's mission and provide incentives for productivity improvements consistent with the state's higher education master plan, including:

(A) End-of-term enrollment for each term, student retention, and timely progress toward degree completion and degree production; and

(B) Student transfer activity, research, and student success, as well as compliance with the transfer and articulation policies required in this section.

(3) The funding formula model shall consider the impact of tuition, maintenance fees, and other charges assessed by each institution in determining the fair and equitable distribution of public funds. The commission shall also consider capital outlay programs and operating expenses, which shall be utilized to determine the higher education appropriations recommendation.

(g)

(1) The commission shall establish a review committee to aid in development or revision of the higher education master plan and funding formula. The committee shall include the executive director of the Tennessee higher education commission, the chancellor of the board of regents, the president of the University of Tennessee system, each president of a board of regents state university, the commissioner of finance and administration, the comptroller of the treasury, the chairs of the standing committees on education and finance, ways and means of the senate, the chairs of the standing committees on education administration and planning and finance, ways and means of the house of representatives, and the directors of the office of legislative budget analysis, or their designees.

(2) The committee shall review the funding formula components, as well as identify needed revisions, additions, or deletions to the formula. The committee shall also ensure that the funding formula is linked to the goals and objectives of the master plan.

(3) The review committee shall meet at least annually.

(h) The commission shall submit the revised higher education funding formula to the office of legislative budget analysis and the comptroller of the treasury no later than December 1 of each year. The commission shall also report any projected tuition increases for the next academic year to the office of legislative budget analysis and the comptroller of the treasury no later than December 1 of each year. The office of legislative budget analysis and the comptroller of the treasury shall each provide comments on the higher education funding formula to the chairs of the education and finance, ways and means committees of the senate and the chairs of the education administration and planning and finance, ways and means committees of the house of representatives.

(i) Before any amendment or revision to the outcomes-based funding formula model shall become effective, the amendment or revision shall be presented to the education and finance, ways and means committees of the senate and the education administration and planning and finance, ways and means committees of the house of representatives for review and recommendation.

(j) In the implementation of its duties, the commission, in cooperation with the commissioner of finance and administration and the comptroller of the treasury, shall establish uniform standards of accounting, records, and statistical reporting systems in accordance with accepted national standards, which standards shall be adhered to by the various institutions in preparing for submission to the commission statistical data and requests for appropriations.

(k) The commission shall develop funding recommendations that reflect the outcomes-based funding formula model as well as the priorities of the approved master plan.

(l) The commission shall have no authority for recommending individual colleges of applied technology's operating budgets nor in approving or disapproving the transfer of any funds between colleges of applied technology deemed necessary by the board of regents to carry out the provisions of chapter 181 of the Public Acts of 1983. For fiscal years ending on and after June 30, 2013, the commission shall have no authority for recommending individual community colleges' operating budgets or in approving or disapproving the transfer of any funds between community colleges as may be determined necessary by the board of regents.

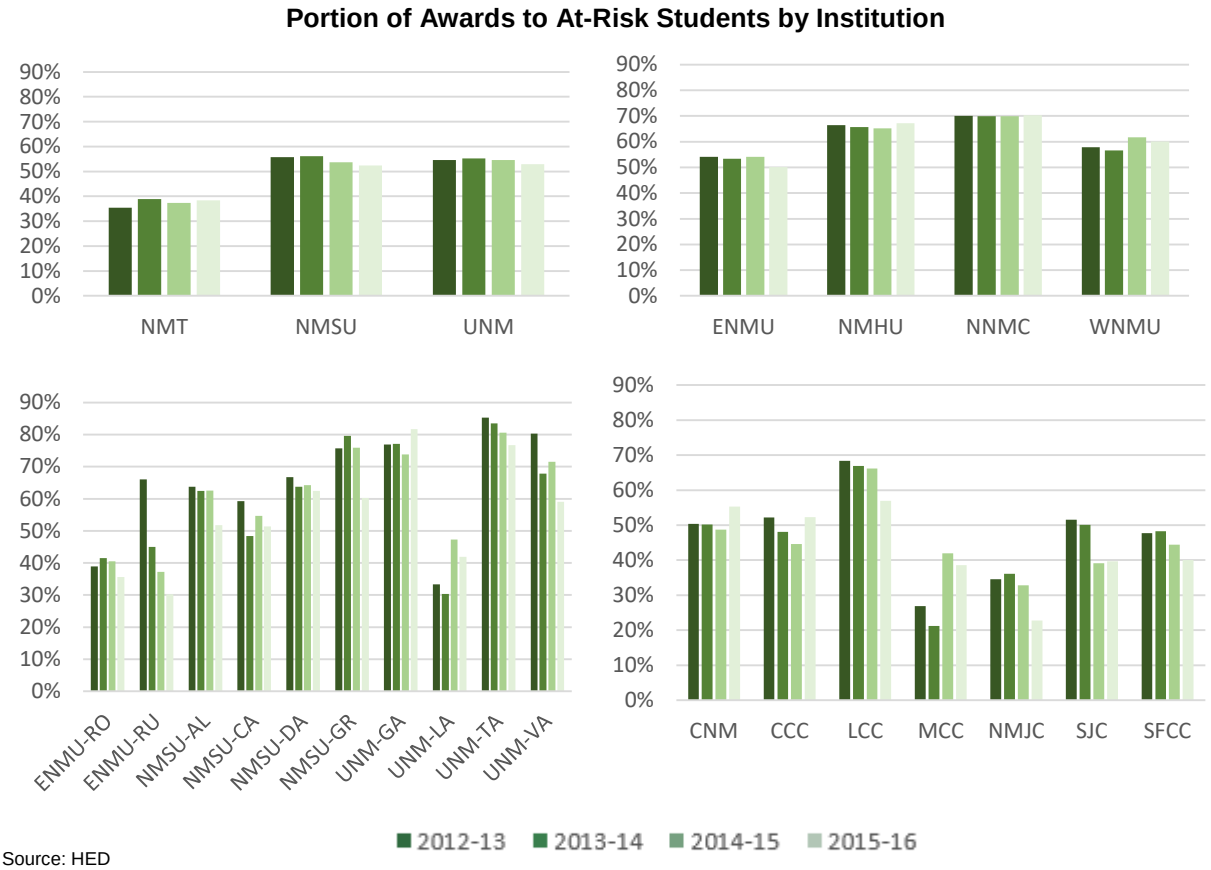
(m) The commission shall develop a comprehensive strategic financial plan for higher education focusing on state appropriations, student tuition and other charges, financial aid, and capital and infrastructure issues, as well as other factors, as appropriate. The plan shall also address higher education efficiency, affordability, performance, return on investment, and other relevant factors.

Appendix D: Equilibrium Funding Compared to Average State Funding per Student FTE at Carnegie Peer institutions

Institution	Carnegie Basic 2015 Classification	FY18 FTE	Actual FY19 Formula Funding per FTE	FY19 Equilibrium Funding per FTE	Carnegie Group Average State Appropriations per FTE	Actual - Carnegie Average	State Appropriaitons per FTE at Formula Equilibrium - Carnegie Peer Average State Appropriations per FTE	Total Revenue per FTE at Formula Equilibrium - Carnegie Peer Average of Total Revenue per FTE
UNM	Associate's Colleges: Mixed Transfer/Career & Technical-High Traditional	1,352	$6,182	$3,619	$4,099	$2,083	-$480	-$3,530
NMJC	Associate's Colleges: High Transfer-High Nontraditional	1,601	$3,293	$3,397	$3,141	$152	$256	$9,179
NMSU-Carlsbad	Associate's Colleges: High Transfer-High Nontraditional	947	$4,119	$3,502	$3,141	$978	$361	$1,556
MCC	Associate's Colleges: High Career & Technical-High Traditional	406	$9,412	$4,682	$4,226	$5,187	$456	-$357
CNM	Associate's Colleges: High Career & Technical-Mixed Traditional/Nontraditional	12,520	$4,375	$5,536	$4,972	-$597	$564	$2,010
NMSU-Alamogordo	Associate's Colleges: High Transfer-High Nontraditional	761	$9,096	$3,737	$3,141	$5,955	$596	-$3,711
San Juan College	Associate's Colleges: Mixed Transfer/Career & Technical-Mixed Traditional/Nontraditional	4,083	$5,588	$4,839	$3,945	$1,643	$894	$750
UNM-Los Alamos	Associate's Colleges: High Transfer-High Nontraditional	351	$4,926	$4,210	$3,141	$1,785	$1,069	-$2,258
UNM	Doctoral Universities: Highest Research Activity	20,063	$8,964	$9,362	$8,165	$798	$1,197	-$21,613
LCC	Associate's Colleges: Mixed Transfer/Career & Technical-High Nontraditional	617	$10,735	$4,465	$3,247	$7,489	$1,219	$92
SFCC	Associate's Colleges: Mixed Transfer/Career & Technical-High Nontraditional	2,473	$3,833	$4,554	$3,247	$586	$1,307	$7,364
NMSU-Dona Ana	Associate's Colleges: High Transfer-Mixed Traditional/Nontraditional	4,826	$4,510	$4,347	$2,980	$1,530	$1,367	-$3,769
CCC	Associate's Colleges: High Career & Technical-High Nontraditional	1,511	$6,053	$4,669	$3,272	$2,781	$1,398	-$5,635
ENMU	Master's Colleges & Universities: Medium Programs	3,902	$6,742	$7,534	$6,127	$615	$1,407	-$441
NMSU-Grants	Associate's Colleges: Mixed Transfer/Career & Technical-High Nontraditional	397	$8,323	$5,002	$3,247	$5,076	$1,755	-$3,381
ENMU-Roswell	Associate's Colleges: High Career & Technical-High Nontraditional	1,601	$6,893	$5,202	$3,272	$3,621	$1,931	-$3,928
UNM-Valencia	Associate's Colleges: High Transfer-High Nontraditional	985	$5,313	$5,241	$3,141	$2,172	$2,101	-$1,492
ENMU-Ruidoso	Associate's Colleges: High Career & Technical-High Nontraditional	302	$6,480	$5,532	$3,272	$3,208	$2,261	-$1,290
NMSU	Doctoral Universities: Higher Research Activity	11,680	$9,534	$9,159	$6,795	$2,739	$2,364	-$2,719
UNM-Taos	Associate's Colleges: High Transfer-High Nontraditional	621	$5,419	$6,086	$3,141	$2,279	$2,945	$889
NMMC	Baccalaureate/Associate's Colleges: Mixed Baccalaureate/Associate's	779	$12,415	$7,693	$4,595	$7,820	$3,099	$6,799
WNMU	Master's Colleges & Universities: Medium Programs	1,879	$8,793	$10,542	$6,127	$2,666	$4,415	$4,619
NMHU	Master's Colleges & Universities: Larger Programs	2,284	$11,648	$11,905	$5,289	$6,359	$6,616	$4,581
Tech	Master's Colleges & Universities: Small Programs	1,614	$16,157	$16,587	$6,535	$9,622	$10,052	$31,969

Source: HED and IPEDS

Appendix E: Portion of Awards to At-risk Students by College



Source: HED

Appendix F: FY19 Formula Summary

(2 percent new money and 4 percent performance funding)

Institution	Protected Base Funding from Previous Fiscal Year	Protected FY18 Base Funding for FY19	FY19 Funding distributed by each Performance-Outcomes Measure									FY19 Performance Funding		Total FY19 I&G Formula Funding			
			Total Awards Funding	STEM H Awards Funding	At-Risk Student Awards Funding	EOC SCH Funding	Research Mission Measure Funding	MP30 Mission Measure Funding	MP60 Mission Measure Funding	Dual Credit Mission Measure Funding	FY19 Performance Funding		I&G Funding	Change in I&G Funding from FY18 Adjusted Budget	Percentage Change FY18 to FY19	Proportion of Total I&G Funding
Grand Total	**$542,007,360**	**$9,485,129**	**$4,573,187**	**$4,573,187**	**$8,468,865**	**$3,745,662**	**$1,687,667**	**$212,571**	**$1,129,192**	**$33,875,430**	**100.00%**	**$575,882,900**	**$11,291,900**	**2.00%**	**100.0%**		
New Mexico Institute of Mining and Technology	$24,502,080	$347,570	$254,770	$95,799	$297,130	$579,544				$1,574,810	4.65%	$26,076,900	$553,900	2.17%	4.5%		
New Mexico State University	$105,060,960	$2,049,050	$822,500	$769,092	$1,593,170	$1,058,654				$6,292,470	18.58%	$111,353,400	$1,914,900	1.75%	19.3%		
University of New Mexico	$168,790,272	$3,489,371	$1,303,825	$1,437,632	$2,711,000	$2,107,465				$11,049,290	32.62%	$179,839,600	$4,016,400	2.28%	31.2%		
Research University Total	**$298,353,312**	**$5,885,991**	**$2,381,095**	**$2,302,523**	**$4,601,300**	**$3,745,662**				**$18,916,570**	**55.84%**	**$317,269,900**	**$6,485,200**	**2.09%**	**55.1%**		
Eastern New Mexico University	$24,578,976	$540,885	$182,351	$289,934	$457,590		$97,352	$59,969	$101,097	$1,729,180	5.10%	$26,308,200	$705,100	2.75%	4.6%		
New Mexico Highlands University	$25,004,256	$558,159	$272,195	$299,371	$402,270		$41,293	$14,981	$11,243	$1,599,510	4.72%	$26,603,800	$557,700	2.14%	4.6%		
Northern New Mexico College	$9,318,624	$44,806	$48,433	$55,807	$61,810		$29,424	$71,864	$40,396	$352,540	1.04%	$9,671,200	($35,700)	-0.37%	1.7%		
Western New Mexico University	$15,357,024	$287,654	$150,870	$172,626	$308,720		$48,029	$65,757	$131,507	$1,165,160	3.44%	$16,522,200	$525,300	3.28%	2.9%		
Comprehensive University Total	**$74,258,880**	**$1,431,504**	**$653,850**	**$817,738**	**$1,230,390**		**$216,098**	**$212,571**	**$284,244**	**$4,846,390**	**14.31%**	**$79,105,400**	**$1,752,400**	**2.27%**	**13.7%**		
Eastern New Mexico University-Roswell	$10,546,272	$82,903	$107,038	$48,729	$122,210		$54,615		$74,443	$489,940	1.45%	$11,036,200	$50,500	0.46%	1.9%		
Eastern New Mexico University-Ruidoso	$1,858,656	$14,629	$18,526	$9,030	$21,800		$10,724		$23,578	$98,290	0.29%	$1,956,900	$20,800	1.07%	0.3%		
New Mexico State University-Alamogordo	$6,754,752	$30,483	$9,202	$21,395	$58,330		$27,544		$20,334	$167,290	0.49%	$6,922,000	($114,200)	-1.62%	1.2%		
New Mexico State University-Carlsbad	$3,705,600	$22,869	$8,839	$14,155	$63,850		$40,668		$44,681	$195,060	0.58%	$3,900,700	$40,700	1.05%	0.7%		
New Mexico State University-Dona Ana	$20,531,808	$248,095	$143,484	$193,208	$322,450		$227,065		$99,810	$1,234,110	3.64%	$21,765,900	$378,600	1.77%	3.8%		
New Mexico State University-Grants	$3,187,296	$17,455	$11,503	$15,782	$27,290		$14,352		$30,430	$116,810	0.34%	$3,304,100	($16,000)	-0.48%	0.6%		
University of New Mexico-Gallup	$8,070,816	$45,669	$28,212	$43,604	$103,310		$64,130		$2,875	$287,800	0.85%	$8,358,600	($48,500)	-0.58%	1.5%		
University of New Mexico-Los Alamos	$1,641,984	$13,195	$12,108	$6,671	$25,330		$15,047		$14,563	$86,910	0.26%	$1,728,900	$18,500	1.08%	0.3%		
University of New Mexico-Taos	$3,143,136	$24,205	$18,041	$25,137	$51,500		$39,923		$63,526	$222,330	0.66%	$3,365,500	$91,400	2.79%	0.6%		
University of New Mexico-Valencia	$4,929,792	$36,440	$42,863	$35,144	$71,170		$58,716		$59,363	$303,700	0.90%	$5,233,500	$98,300	1.91%	0.9%		
Central New Mexico Community College	$50,703,168	$1,070,816	$596,941	$716,538	$955,380		$533,047		$204,050	$4,076,770	12.03%	$54,779,900	$1,964,100	3.72%	9.5%		
Clovis Community College	$8,730,336	$74,746	$93,476	$52,227	$104,520		$54,598		$35,470	$415,040	1.23%	$9,145,400	$51,300	0.56%	1.6%		
Luna Community College	$6,461,664	$29,982	$23,611	$24,405	$47,910		$21,538		$14,617	$162,060	0.48%	$6,623,700	($107,200)	-1.59%	1.2%		
Mesalands Community College	$3,709,632	$15,144	$30,634	$9,111	$30,840		$9,384		$16,693	$111,810	0.33%	$3,821,400	($42,800)	-1.11%	0.7%		
New Mexico Junior College	$4,951,584	$79,743	$11,866	$28,717	$105,930		$57,788		$35,840	$319,880	0.94%	$5,271,500	$113,600	2.20%	0.9%		
San Juan College	$21,653,184	$222,874	$254,033	$123,491	$343,250		$158,881		$59,742	$1,162,270	3.43%	$22,815,500	$260,100	1.15%	4.0%		
Santa Fe Community College	$8,815,488	$138,384	$127,864	$85,581	$182,090		$83,550		$44,933	$662,400	1.96%	$9,477,900	$295,100	3.21%	1.6%		
Community College Total	**$169,395,168**	**$2,167,634**	**$1,538,242**	**$1,452,926**	**$2,637,170**		**$1,471,569**		**$844,948**	**$10,112,470**	**29.85%**	**$179,507,600**	**$3,054,300**	**1.73%**	**31.2%**		

Appendix G: Citations

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