

Higher Education Finance

The New Mexico Legislature invests more than \$1 billion directly in 24 public colleges and universities every year for instruction, capital construction, and research and public service projects (RPSPs). State appropriations are one of four types (outlined by institution in Attachment A) and shown below:

1. Instruction & general operating (I&G) expenditures of \$700 million, which includes a \$61 million for UNM Health Sciences Center;
2. Categorical or RPSPs totaling \$140 million, including athletics, public radio, and other public service projects;
3. Student financial aid of \$100 million including the opportunity and lottery scholarship programs; and
4. Capital outlay financing averaging \$106 million annually.

Institutions themselves generate an additional \$600 million for instruction through tuition & student fee revenues, local property tax at two-year colleges, and other sources. Overall, the share of state appropriations for I&G, 51 percent on average, varies from as low as 20 percent at the New Mexico Junior College to as high as 80 percent at Mesalands Community College.

Formula I&G Funding. The Legislature uses a formula to allocate a small portion of state funding for instruction and general operations (I&G) to these institutions. This performance-based funding formula seeks to reward student completion of degrees and those institutions that produce the most awards. This “one-market view” forces small institutions to compete with large institutions, creating a concern about fairness.

Non-Formula I&G State Funding. Some appropriations for instruction do not run through the formula. Non-formula adjustments include: (1) \$61.2 million to the UNM Health Sciences Center, (2) non-formula adjustments for specific programs such as dual-credit instruction, (3) non-formula adjustments for specific institutions such as a \$1 million appropriation for ENMU or WNMU, and (4) non-formula instructional funding embedded within RPSPs such as for nursing expansion or specific scholarship programs such as the ENMU Greyhound Promise. The funding formula does not allocate the \$600 million generated by institutions.

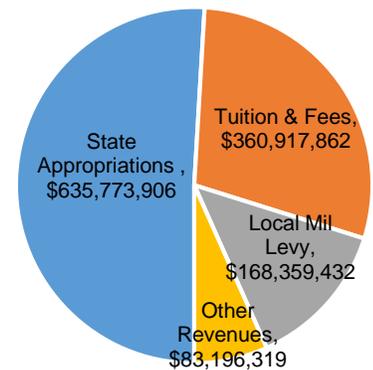
AGENCY: Higher Education Institutions

DATE: June 22, 2021

PURPOSE OF HEARING: Informational. Presentation of key issues surrounding the use of a performance-based funding formula.

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Major Revenue Sources for Higher Education Instruction, FY20
\$1.2 billion



Source: LFC files

I&G Revenue Source	Four-Year Universities	Two-Year Colleges
Formula Funding		
State Appropriations	\$ 435,460,697	\$ 200,313,209
Non-Formula Funding		
Tuition & Student Fee Revenues	283,801,782	77,116,080
Local Property Taxes	-	165,659,432
Land & Permanent Fund Income	19,081,960	-
Federal Indirect Cost	42,401,564	1,807,484
Other	12,143,412	7,761,899
Total Instructional Funding	\$ 792,889,415	\$ 452,658,104

Source: Institutions FY20 Reports of Actuals

Outcomes-Based Funding Overview

Allocating state funding to 24 institutions is managed using an outcomes-based funding formula. More than eight years ago, the Legislature transitioned from an input-based funding formula to one based on student performance.

Transition from an Input-Based to an Outcomes-Based Formula. In 2010, the Legislature directed the Higher Education Department to lead a Taskforce to examine the then input-based funding formula for higher education. The intention was to move toward greater efficiency and collaboration among institutions to produce more graduates with marketable degrees. At the time, the Legislature expressed several concerns about the impacts of an input-based formula, primarily that by focusing on inputs (e.g., more enrollment, more courses, more programs, more faculty, more facilities, etc.), student success was not the focus of institutions. Input-based funding formulas often suffer from the misaligned incentives, prioritizing quantity of students rather than the quality of student education or completion.

At the time, the LFC published several reports that examined student success data, which reinforced the Legislature’s concern. For instance, one LFC report found that two institutions were awarded \$58.4 million, over a three-year period, for courses that student enrolled but never completed. The same study found that candidates who earned a bachelor’s degree had on average 150 credits at graduation, 15 percent more than needed.

The old formula took credits (i.e., deducted state funding) against non-state I&G revenue sources, such as tuition & student fee revenues or local property taxes. The credits were used to ensure state appropriations leveraged other institutional revenue sources, rather than supplant them, given the ability of governing boards to raise discretionary revenue and create resource advantages and uneven playing fields among the institutions. The new formula eliminated these credits.

Outcomes-Based Formula. The new 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. The amount of state funding available to be allocated for performance is based on two key factors of the formula: (1) new money - the amount of new state revenue appropriated higher education; and (2) a base redistribution - the amount of the existing budget that should be redistributed to a performance pool of funding.

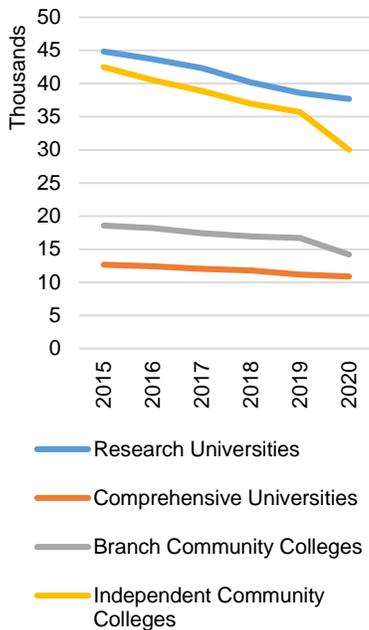
The performance metrics underlying the allocation are shown in the side table and broken into two components: (1) completion metrics and (2) mission metrics. The formula heavily weights completion metrics, which accrue 80 percent of performance. The mission metrics, specific to types of institutions, provide 20 percent of performance value but are not open evenly to all institutions.

For instance, the research grants metric, based on the amount of research dollars generated annually, applies only to the research universities (NM Tech, NMSU, and UNM), which are not eligible for the other three mission metrics. Momentum points - 30 apply only to two-year colleges; momentum points - 60 and dual credit apply to two-year colleges and four-year comprehensive universities. The mission metrics seek to reward institutions for progressing students past key performance milestones, such as first-year completion.

Institution	State I&G Appropriations
NM Tech	\$ 28,048,800
NMSU	118,015,300
UNM	192,283,700
ENMU	29,584,600
NMHU	28,423,600
Northern	10,146,400
Western	18,558,300
ENMU - Roswell	11,696,600
ENMU - Ruidoso	2,065,100
NMSU- Alamogordo	7,032,300
NMSU - Carlsbad	4,240,800
NMSU - Dona Ana	23,343,900
NMSU - Grants	3,443,800
UNM Gallup	8,586,500
UNM Los Alamos	1,878,500
UNM Taos	3,763,500
UNM Valencia	5,699,400
CNM	60,116,100
Clovis CC	9,720,200
Luna CC	6,715,000
Mesalands CC	4,087,700
NM Junior College	5,667,100
San Juan College	24,138,700
Santa Fe CC	10,366,700

Source: HED Funding Formula, FY22

Higher Education Student Enrollment, Headcount



Source: HED eDear reports from Institutions

Mechanics of the Formula. The operation of the formula is simple; its components, however, can be complex. The process starts with two key decisions: (1) sizing the performance funding pool; and (2) weighting of the completion and sector mission measures.

Step 1. Size the Performance Pool. The incentives from the performance-based formula are paid from a performance pool. The performance pool is funded from: (1) a percentage of the prior-year operating budget, called the base redistribution; and (2) new money, which is the amount of new funding appropriated for higher education, typically a set percentage multiplied against the prior-year operating budget. For instance, a 2 percent new money and 2 percent base redistribution would generate a combined \$24.6 million for the performance pool, based on the FY21 operating budget.

Step 2. Define the Weights of the Performance Measures. The colleges and universities compete to earn their share of the performance pool by helping students complete courses and graduate with degrees. The more courses completed and degrees and certificates awarded, the better reward. Each year, the Legislature adopts a recommendation based on performance metrics with assigned percentage weighting. An institution's share to the total determines the financial reward.

Raw Data. Itself mostly automated, the funding formula is built on a trove of two types of raw data captured by HED: (1) awards; and (2) completed courses. The raw awards data is further cut into six categories to show the level of award conferred to a student based on a three-tier structure (See table below).

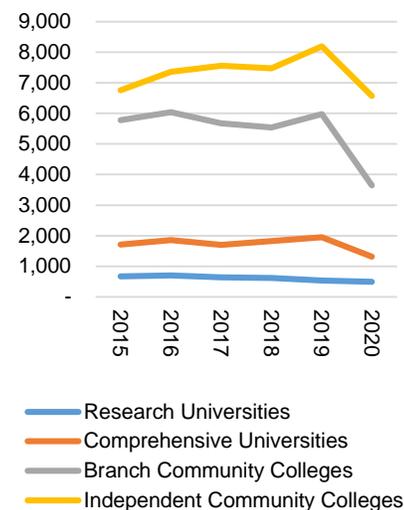
- i. Certificates
 - 1. Less than one year to complete
 - 2. From one to two years to complete
 - 3. From two to four years to complete
- ii. Associate degree
- iii. Bachelor's degree
- iv. Graduate Certificates
 - 1. Post bachelor's degree
 - Post-master's degree
- v. Master degree
- vi. Doctorate
 - 1. First Professional
 - 2. Terminal Doctorate

The tier structure further categorizes academic degree programs according to the technical complexity of the degree, with Tier 3 being the most challenging. Tiers align to the standard industrial classification systems used nationally by higher educational institutions. The awards data, shown below, is provided by institution for total awards, STEM awards, and awards conferred to at-risk students.

Metrics In Funding Formula	
Completion Metrics	80 Percent
Total Awards	26%
STEMH Awards	11%
At-Risk Student Awards	15%
Workload	12%
Mission Metrics	20 Percent
Research Grants	11%
Momentum Points - 30	3%
Momentum Points - 60	3%
Dual Credit Workload	3%

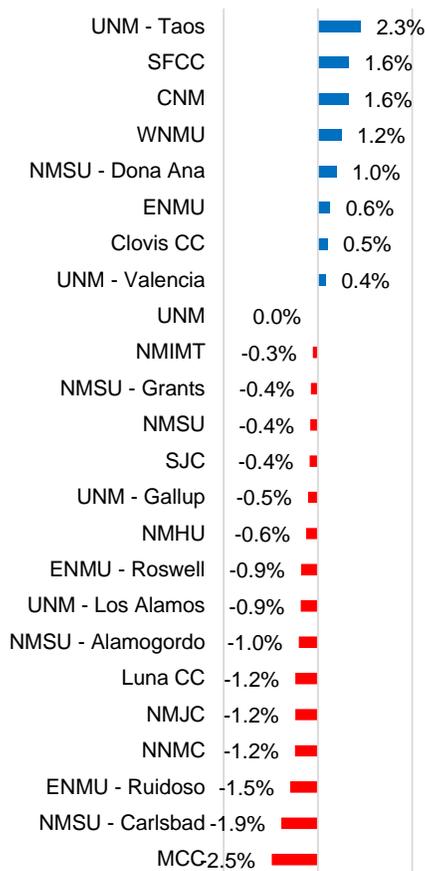
Source: HED Funding Formula

Dual Credit Enrollment



InstSort	InstAbbr	Tier	2016-17									
			Certificates			Assoc Degree	Bach Degree	Master Degree	Doctoral		Grad Cert	
			<1 Year	1-2 Years	2-4 Years				Doctorate	1st Prof	Post Bach	Post MA
			2016-17 1-01	2016-16 1-02	2016-17 1-04	2016-17 2-03	2016-17 3-05	2016-17 4-07	2016-17 5-17	2015-16 5-18	2016-17 6-06	2016-17 6-08
11	NMT	1	0	0	0	1	34	0	0	0	0	0
11	NMT	2	0	0	0	0	22	13	1	0	0	0
11	NMT	3	0	0	0	0	231	78	9	0	2	0

**Funding Formula
Average Annual Percent
Change**



Source: HED Funding Formula, FY13 to FY20

Performance metrics for workload – completed courses, momentum points, and dual credit – are determined by end-of-course student-credit-hours (EOC SCH), which are further separated into lower, upper, and graduate courses and by tiers, similar to awards. The table shows EOC SCH for New Mexico Tech broken down by lower-, upper-, and graduate-level credits and then by tiers. For New Mexico Tech, the nature of its mission – science, engineering, and research – translates to the high percentage of Tier 3 completed courses, except for in the lower division because of the general education core courses.

		FY16 Formula Data End-Of-Course Student Credit Hours					
	Tier	LOWER LEVEL	Share of Total	UPPER LEVEL	Share of Total	GRADUATE LEVEL	Share of Total
NMT	1	13,302	54%	5,566	29%	111	2%
	2	7,350	30%	1,024	5%	965	13%
	3	3,758	15%	12,300	65%	6,240	85%

Similar data for the Eastern New Mexico University translates differently than New Mexico Tech, primarily because of the different missions of the institutions. ENMU has a higher percentage of academic programs that require more Tier 1 courses, and the EOC SCH profile illustrates that point. Additionally, ENMU provides a much higher level of dual credit instruction than does New Mexico Tech.

		FY16 Formula Data End-Of-Course Student Credit Hours					
	Tier	LOWER LEVEL	Share of Total	UPPER LEVEL	Share of Total	GRADUATE LEVEL	Share of Total
ENMU	1	48,551	80%	26,481	65%	10,803	82%
	2	9,939	16%	12,870	32%	2,138	16%
	3	2,121	3%	1,192	3%	256	2%

Normalization Cost Factors. After compiling the raw data, HED normalizes the awards data by using a cost factor. Normalizing by cost attempts to impose an apples-to-apples comparison on the cost borne by an institution to produce an award. Arguably, the cost to produce a certificate that takes less than one year to complete is less than the cost to graduate a bachelor’s degree candidate. Moreover, the cost to educate an engineer is more than to educate an economist.

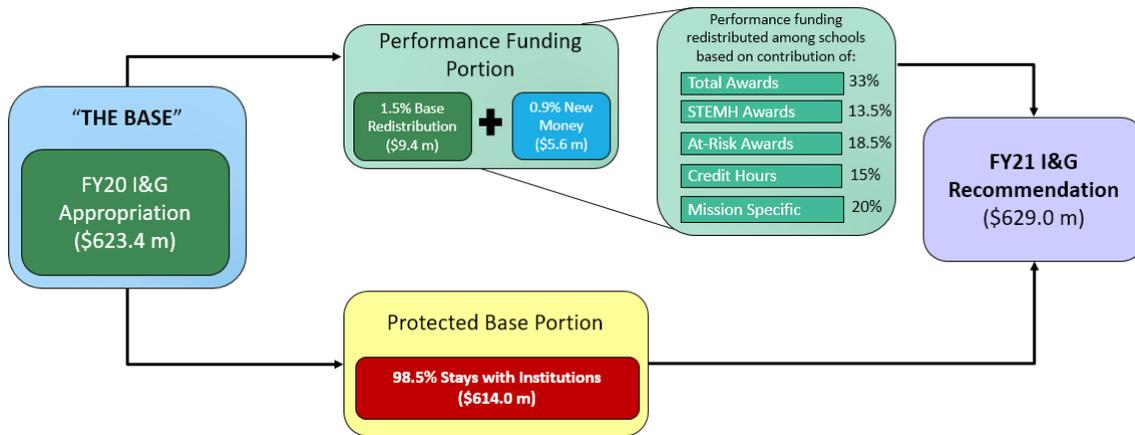
Normalization Cost Factors			
Awards	Research Univ	Regional Univ	Two-Year College
Total	264,168	4,151	4,151
STEM	136,614	2,094	2,094
At Risk	132,627	3,236	3,236

Source: HED Funding Formula

To implement this weighted cost approach, HED develops cost factors, which are multiplied against the raw awards data. The product for each of the institutions is then divided by the UNM factor to normalize all of the institutions. As the denominator, UNM represents the maximum value of 1,000, and the other institutions rank some amount less than 1,000 based on normalized awards. The normalized values are then used to rank performance of each institution within the entire market.

The normalization approach is a source of concern from stakeholders within the higher education community. Though complicated, the use of a proxy cost factor may not mimic actual cost. Rather, the overwhelming focus on costs of a four-year research university could dramatically undervalue the costs of academic programs at two-year community and technical colleges. Some experts argue that costs to institutions is the wrong focus, and instead should be cost to students.

FY21 Formula Design



Funding Formula Issues

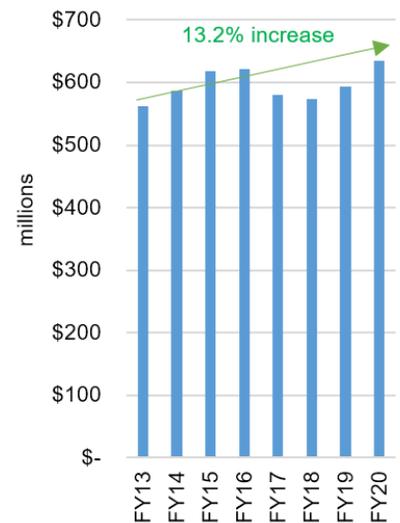
There are a number of issues that stymie the impact of the funding formula and its ability to incentivize quality operations at colleges and universities. For one, the higher education performance-based funding formula has been effective at increasing the number of lower-level student certificates and associate degrees. Student outcomes, however, have not necessarily improved evenly and the state still lags in the most important measures of transfer, retention, and graduation rates. Further, attainment of bachelor’s degrees by the New Mexico population remains low, with the state ranking 39th in the nation in that measure.

Another issue, in years with no or very little new state money added to the total state appropriation for higher education, the funding formula may create a situation where some colleges improve performance slightly yet still lose funding. This is likely because of historical imbalances in funding that result in some schools consistently under-contributing to performance. This potential loss of funding runs counter to the principle that the funding formula should reward year-over-year performance gains.

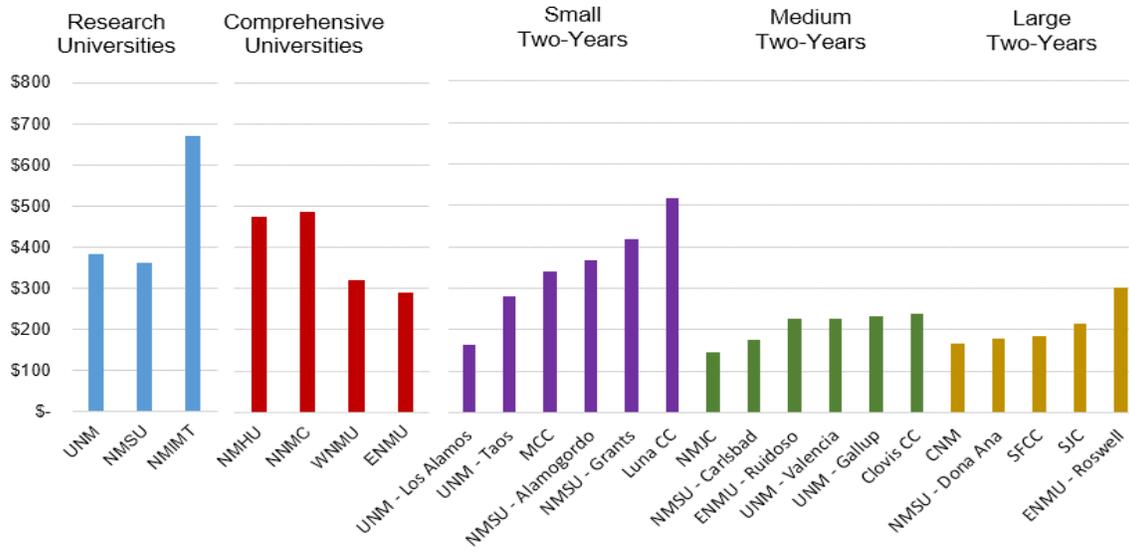
The Legislature has signaled disapproval with these formula funding recommendations in the past by 1) minimizing the amount of funding tied to performance and 2) by providing hold-harmless payments to negate negative effects of the formula. The impact is, effectively, that state funding remains relatively steady even for non-performing institutions while only new money is distributed according to performance. See Attachment B for actual state I&G funding since 2013. More details about key formula issues are noted below.

The ultimate goal of the formula—to equalize funding to be proportional to performance—may be off. Over time the formula works to reallocate state I&G funding to colleges and universities to be proportional with the contribution they make to overall state performance based on the formula metrics. For example, if Eastern New Mexico University produces 5 percent of the performance in awards and other performance metrics but only has 4 percent of the total I&G funding, then the formula awards more funding to Eastern. It does this by giving less money or, in times of a large base shave, by reallocating funding from institutions whose share of total I&G is larger than their contribution of performance.

State I&G Appropriations

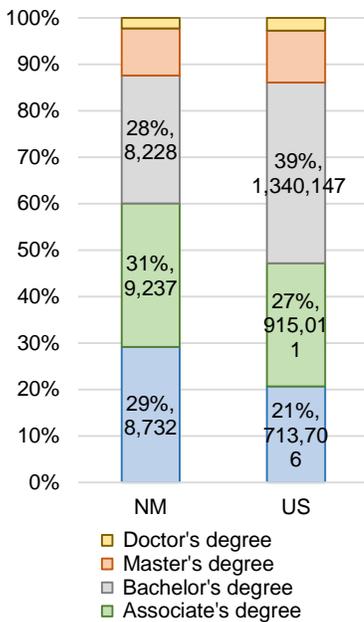


Funding per FTE varies between colleges due to past inequities of funding between institutions and changes in enrollment



Source: LFC files

Postsecondary Awards, 2019



Source: IPEDS

Median Annual Earnings for Full-time Workers, Age 25 to 34, 2019

Less than high school	\$29,340
High school	\$34,970
Some college, no degree	\$39,720
Associate's	\$39,990
Bachelor's	\$55,740
Master's or higher	\$69,980

Source: U.S. Census Current Population Survey

However, it is unclear if moving state funding to be proportional to performance is actually a sound goal. In fact, equalizing funding to performance (assuming performance remains steady) would likely mean that many smaller community colleges would lose significant portions of their state funding and that funding would be redistributed, generally to CNM and the four-year institutions. Further, state and total support per student is already quite variable due to the historical disproportionate funding of colleges and universities before the formula was set in place. Allocating funding completely based on performance would likely only exacerbate existing variance in funding per student.

New Mexico is likely underemphasizing the production of bachelor's degrees. The formula incentivizes degrees and certificates; the more, the better. The “awards” calculation of these degrees and certificates is entirely output-driven, creating a race to produce more awards with little strategic guidance on producing the right awards for the right students at the right time. The result is that New Mexico tends to produce roughly equivalent numbers of bachelor’s and associate’s degrees annually, while public colleges and universities nationally tend to produce about 50 percent more 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. See Attachment D. for total number of certificates and degrees awarded by institution.

As a result, New Mexico lags the nation in the portion of the population that has a bachelor’s degree or higher (26.2 percent compared to 34.5 percent nationwide.) The result is important as early to mid-career earnings for people with a bachelor’s degree are 39 percent higher than those with only an associate’s degree (\$55,740 for bachelor’s compared to \$39,990 for associates). In order to increase wages for the New Mexico population, a larger portion of people will need to earn a bachelor’s degree than in the past.

The funding formula does not address students that transfer from community colleges to four-year schools. The production of associates degrees in equal proportion to bachelor’s degrees wouldn’t be concerning if a majority of those associates graduates went on to pursue a bachelor’s degree. However, this is

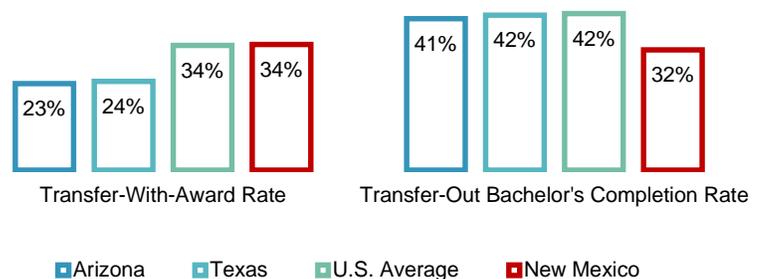
not generally the case. As an example, the largest field of study at the state’s largest community college is the liberal arts associate degree, with nearly 2,500 graduates a year. Such a degree is usually aimed at covering the first two years of college a student might need to attain before moving onto the later courses for a bachelor’s degree. However, this degree on its own is likely not that helpful in increasing job and wage prospects for the student holding it. According to the Center on Education and the Workforce at Georgetown University, “workers with associate’s degrees in liberal arts and general studies typically earn less than those in career-oriented fields, such as business and health. In addition, liberal arts and general studies associate’s degrees—which are often geared toward transfer to the bachelor’s degree—do not place among the top five fields for earnings. This suggests that the real value of a transfer-oriented degree comes with attainment of a bachelor’s degree.”

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LFC’s 2018 formula evaluation cited a study showing 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 (34 percent). However, 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.

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. As a result, LFC has recommended an increased focus on transfer student success as a way to measure college and university performance.

Transfer Student Rates and Bachelor's Success Levels

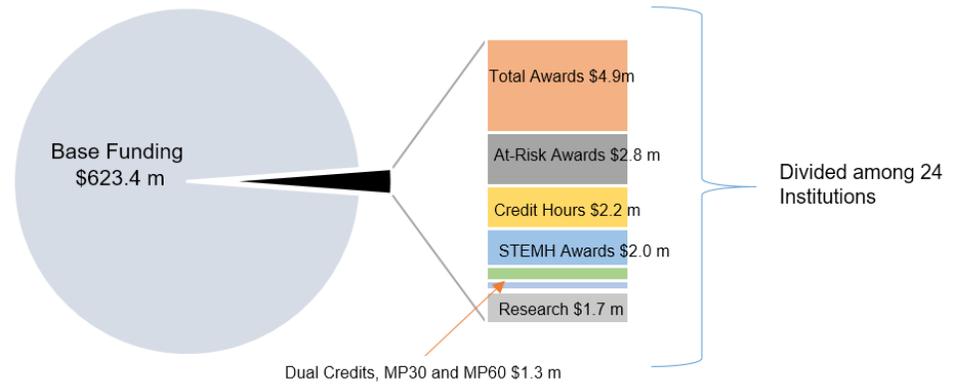


Source: Shapiro, D., Dundar, A., Huie, F., Wakhungu, P.K., Yuan, X., Nathan, A. & Hwang, Y. (2017, September). Tracking Transfer: Measures of Effectiveness in Helping Community College Students to Complete Bachelor’s Degrees (Signature Report No. 13). Herndon, VA: National Student Clearinghouse Research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

Too many metrics dilute formula incentives and do not communicate simple, statewide goals for higher education. Fewer, more impactful performance metrics would allow colleges and universities to focus in on outcomes that matter to the state. When only a small portion of total funding is based on performance, splitting up that portion among too many performance metrics makes the incentives so small that they may become meaningless. Using FY21 as an example, there was \$15 million dollars (only 2.4 percent) of the total \$614 million of total state-based higher education funding dedicated to performance. That 2.4 percent was then divided up among the eight different performance metrics and then those metrics are divided up among the 24 different universities and colleges. The result is performance incentives that are a fraction of a percent of an institution’s total budget, and likely not enough to incentivize significant operational changes at an institution.

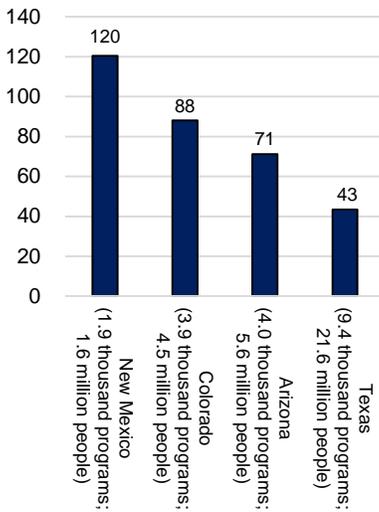
Instead of having multiple, small incentives for colleges, it would likely be better to reduce the number of performance metrics to those which contribute to statewide outcomes such as degree completion, transfers, recruitment, and retention.

Performance is a very small part of college funding, and that performance is split among eight metrics and then split again among 24 institutions, all of which dilutes the incentive amount



The formula does not recognize mission differentiation between universities and colleges. College students follow many different paths to completion: some students take a year to earn a welding credential at a community college for example, while a Ph.D. student may spend five years at a research university. All of these students serve important roles for New Mexico’s economy. The funding formula does not acknowledge those different missions though, as it does not have specific goals or targets specific to those missions. Instead, the formula holds each institution to perform incrementally better year over year.

Higher Education Academic Programs per 100 Thousand Adults



Source: LFC analysis of U.S. Census, IPEDS, Higher Learning Commission, Texas Higher Education Coordinating Board, and HEI information.

A more evenhanded way of funding performance may instead be to set a few targets for each type of institution to meet to gain access to new performance funding, rather than getting small amounts of performance funding for incremental improvement. This potential path forward may mean, however, that institutions need to reassess their goals to be more aspirational and indicative of improved operations rather than just meeting the status quo. As an example, current Accountability in Government Act targets for some colleges and universities remain much too low and would not be good benchmarks for performance.

State budgeting for higher education does not take into account tuition, local support or other campus revenues. The formula only focuses on state appropriations without consideration for other forms of I&G support, such as tuition and student fee revenues, federal research grants, and local property tax support. As a result, institutions with heavy reliance on state funding, minimal local support, and declining tuition and fee revenues are highly sensitive to changes in the formula. Likewise, institutions that benefit from other forms of funding support have a substantial resource advantage and maybe unfazed or indifferent to changes in the formula or statewide policy goals. Best practices for performance funding models recommend considering all sources when allocating higher education investments.

NM HED’s Trifecta Reforms:

- 1) Creating a Common Course Numbering System
- 2) Modeling General Education Requirements
- 3) Establishing Meta-Majors and Degree Maps

Other Higher Education Issues Related to Performance and Funding

Past trifecta reforms have stalled. Unfinished, HED’s trifecta of reforms was intended to simplify the complicated process of earning a college degree. The outcome for students would be reduced time to graduation, more precise academic advising, and lower cost of attendance. The outcome for the state would be higher student retention, higher graduation rates, and a more qualified workforce. The trifecta of reforms has not met its stated goal. Rather, the system appears to be more complex. In one example, the common course numbering system includes 2,643 lower-level courses, of which only six courses are commonly offered by all

higher education institutions in the state. One additional example, when compared to surrounding states, New Mexico offers more than three times the number of academic programs per 100,000 residents than Texas and double the programs in Arizona.

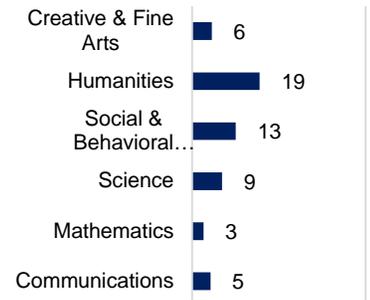
Beginning in 2018, HED promulgated rules to review and approve new associate's and bachelor's degree programs, but similar oversight is needed for certificates. HED has statutory authority to review and approves new graduate, bachelor, and associate degree programs. This review authority does not cover existing programs, however, and thus has limited ability to act as a check on academic quality for current programs. HED also 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. Review of certificate programs is of interest because growth in sub-baccalaureate certificates (17 percent since FY13) outpaced bachelor's degrees (2.2 percent growth). Without a regulatory framework, institutions could be developing strategies to produce more awards that may not be beneficial to the student or to the state. Moving ahead, the Legislature may want to confer statutory review authority for certificate programs to the Higher Education Department.

Even with falling enrollment, there is little focus on efficiency or duplication. Enrollment at New Mexico's higher education institutions has been falling each year since 2011 and no institution is serving more students in 2020 than they did ten years prior. The result is that state funding per student FTE has grown, and that funding has gone proportionally more to executive management and athletics rather than to the instruction of students. In response, LFC staff has, in the past, recommended the committee work with the Higher Education Department to find metrics that reward efficiency in institutional financial management.

The state continues to double-fund dual credit students to uncertain outcomes. Pre-pandemic, New Mexico's higher education institutions provided dual credit to approximately 16 thousand high school students a year, almost all at community colleges. Those dual credit students represent about 13 percent of the total student body attending the state's colleges and universities. As college enrollments have declined precipitously, some two-year community colleges have expanded dual credit programs to the point where the institutions are primarily serving high school rather than college students. For example, dual credit students comprise as high as 63 percent of enrollment at Mesalands Community College and as low as 0.6 percent at New Mexico Highlands University (see Attachment C).

The Legislature double funds high school students that take courses at the state's public colleges for dual credit. The students are first funded via their school district through state equalization guarantee funding. Colleges get to claim these dual credit hours as part of their performance funding and there is also a very small portion of performance funding based on the amount of dual credit each institution provides. Additionally, in FY20, the Legislature appropriated \$2 million directly to colleges and universities to support dual-credit instruction. Colleges maintain that dual credit students negatively affect their bottom line as statute prohibits them from charging tuition to dual credit students, and estimate that forgone dual credit tuition amounts to over \$9 million a year. LFC staff note that offering dual credit does benefit colleges in non-financial ways as it acts, in part, as a recruitment strategy for that state's colleges that offer it. This is especially true as the common

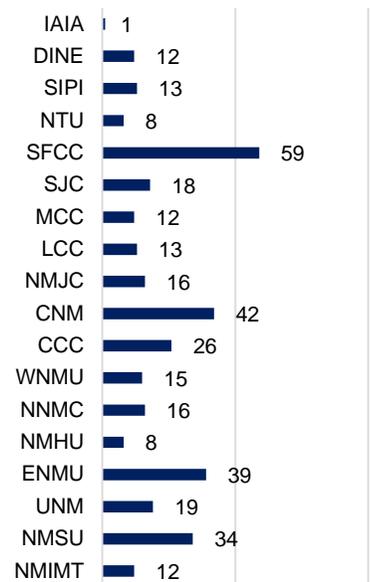
Average Number of Courses Per Institution, Six Pillars of General Ed Curriculum



Source: HED Files

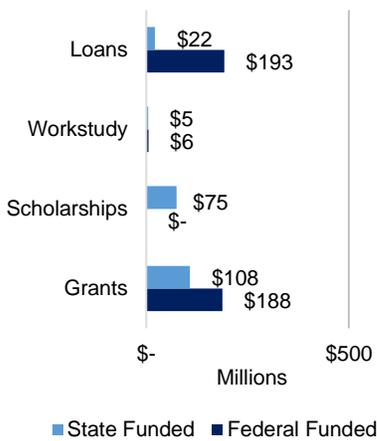
Since 2013, enrollment has fallen by 21 percent and state I&G appropriations have grown by 13 percent.

Humanities General Ed Courses by Institution



Source: HED Files

Student Financial Aid in New Mexico: \$600 million, FY19



Source: FY19 NASSGAP Student Aid File, HED

course numbering initiative remains unfinished and students may not be able to transfer their dual course credits to other institutions.

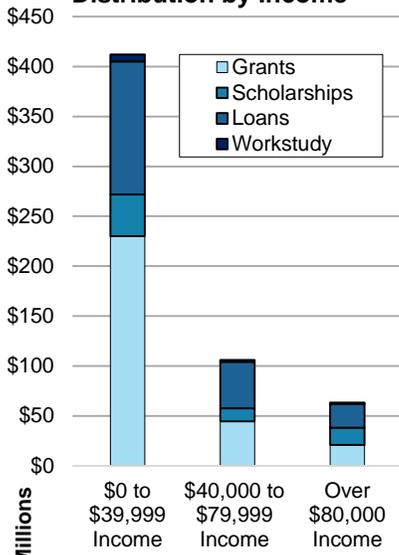
In a 2017 report, LFC staff found that participation in dual credit was less related to eventual college success for students than was a student’s general academic aptitude as measured by ACT scores. This finding raises questions about the impact of the double investment the state is making and the potential tuition revenue colleges are forgoing so that high school students can participate in dual credit.

Looking ahead, there is nothing in statute that prevents community colleges from limiting their dual credit offerings, and HED unsuccessfully attempted to limit dual credit offerings to general education or career-path courses in the past. Such efforts may need to be reconsidered as dual credit becomes more and more of a focus of community college operations. There are also likely opportunities for school districts, especially those with early college high schools, to enter into cost-sharing agreements with their local colleges to share the burden of dual credit instruction.

Financial Aid

During the 2021 legislative session, the Legislature made unprecedented investments in scholarships and tuition subsidies, committing over \$33 million to state-funded student financial aid for college students in New Mexico.

\$600 million NM Student Financial Aid, Distribution by Income



Source: NASSGAP Student Aid File, HED data

The lottery tuition scholarship received \$10.5 million from the state general fund and a \$5 million appropriation from the state’s consumer settlement fund to supplement the \$40 million annual revenues provided from lottery ticket sales. The Legislature also appropriated \$7 million recurring and \$11 million nonrecurring funding to the opportunity scholarship for the second year of operation. Several student financial aid programs benefitted from recurring and nonrecurring increases: an increase in state-funded work-study of \$1.1 million to \$5.7 million; a \$20 million transfer to the teacher affordability preparation fund; a \$5 million transfer to the teacher loan repayment fund; \$500 thousand for the Grow Your Own Teachers program; a \$15 million transfer to the college affordability fund; and \$5 million for the university endowment fund.

Before financial aid, the state already offers the third-lowest cost of tuition in the country, and the increased state support for financial aid means that the tuition burden will be quite low, if not zero, for many of our state’s college students in the 2021-22 year. Students, particularly low-income students, may still require additional financial support to cover living and other costs to allow them to focus on and be successful in college. Staff are monitoring those needs as well as investigating how state funds can be deployed in a way that continues to support students while maximizing federal and other sources of tuition support.

Using Data to Target Services for Improved Outcomes

The Legislature needs clear, comprehensive information that easily communicates college performance with current, consistent, and meaningful data. Perhaps more importantly, college administrators—who have access to troves of records—have the opportunity to mine their databases to identify and produce meaningful information about student success.

Several higher education institutions in other states have made this transition with improved outcomes of student success. Universities in surrounding states are

experiencing higher enrollments and producing more degrees. Arizona universities, as an example, are all experiencing growth in students and degrees awarded, which may serve as a model for New Mexico.

Maybe the best example of a disrupter is Georgia State University, a research university located in Atlanta, who works with its data to inform its leadership, in real time, of any potential problems its students may be experiencing. Partnering with a private company, Georgia State – using existing student financial and performance data – began tracking 801 student factors, daily. Using predictive analytics, the University is able to discern if students are attending classes or struggling, withdrawing from courses, or facing challenges. The predictive analytics program will point to a potential struggling student. Within 48 hours, for a struggling student, Georgia State makes contacts to triage the problem, then determines a plan to support the student. The impact, Georgia State University has doubled its graduation rate since implementing the program.

Next Steps

Between now and the next LFC Higher Education Subcommittee meeting, LFC staff would like to convene with staff from HED to discuss formula funding issues and design methods to develop a funding recommendation for FY23 that mitigates as many of those issues as possible.

Attachment A: Total State Appropriations to Higher Education Institutions

Institution	Share of Students	Funding Formula		Non-Formula Appropriations					Total State Investment - Annual Appropriations (does not include annual student financial aid)
		State I&G Appropriation	Share	Categorical	RPP	State Agency Embedded within Institution	Avg Annual Capital Outlay (2012 to 2020)	Student Financial Aid	
Grand Total		\$ 679,999,300	28.3%	\$ 39,399,400	\$ 69,799,700	\$ 29,941,100	\$ 94,568,100	\$ 102,305,476	\$ 1,016,003,076
University of New Mexico	23.3%	192,166,300	28.3%	5,179,200	6,403,100	-	15,113,910	37,764,731	256,627,241
University of New Mexico HSC (Non-formula I&G)	0.5%	61,826,700	9.1%	20,046,600	14,189,900	6,934,600	9,880,077	-	112,877,877
University of New Mexico-Gallup	1.7%	8,643,100	1.3%	-	363,000	-	990,000	665,140	10,661,240
University of New Mexico-Los Alamos	0.9%	1,875,000	0.3%	-	-	-	565,556	230,851	2,661,407
University of New Mexico-Taos	0.9%	5,711,000	0.8%	-	210,400	-	2,499,444	213,426	8,694,270
University of New Mexico-Valencia	1.4%	3,768,900	0.6%	-	146,500	-	605,555	714,724	5,235,679
Subtotal UNM and Branches	28.5%	\$ 273,991,000	40.3%	\$ 26,225,800	\$ 21,312,900	\$ 6,934,600	\$ 29,644,542	\$ 39,648,871	\$ 396,757,713
New Mexico State University	15.1%	117,941,500	17.3%	5,062,100	6,504,100	-	13,509,332	28,913,199	171,930,231
AES/CES/NMIDA (Non-formula I&G)	0.0%	-	0.0%	-	27,727,600	12,001,000	4,250,000	-	43,978,600
New Mexico State University-Alamogordo	0.9%	7,112,400	1.0%	-	314,800	-	851,977	521,004	8,485,381
New Mexico State University-Carlsbad	0.9%	4,247,400	0.6%	-	554,900	-	1,077,778	543,195	6,183,173
New Mexico State University-Dona Ana	6.6%	23,332,200	3.4%	-	-	-	1,223,333	4,389,794	29,500,227
New Mexico State University-Grants	0.5%	3,473,300	0.5%	-	-	-	1,079,722	332,085	4,885,107
Subtotal NMSU and Branches	23.9%	\$ 156,106,800	23.0%	\$ 5,062,100	\$ 35,101,400	\$ 12,001,000	\$ 21,992,142	\$ 34,699,277	\$ 264,962,719
Eastern New Mexico University	4.9%	29,958,900	4.4%	3,121,800	1,381,400	-	6,554,667	3,921,776	44,938,543
Eastern New Mexico University-Roswell	1.3%	11,743,700	1.7%	-	521,600	-	1,803,215	464,966	14,533,481
Eastern New Mexico University-Ruidoso	0.4%	2,077,600	0.3%	-	178,600	-	589,556	375,261	3,221,017
Subtotal ENMU and Branches	6.6%	\$ 43,780,200	6.4%	\$ 3,121,800	\$ 2,081,600	\$ -	\$ 8,947,438	\$ 4,762,004	\$ 62,693,042
New Mexico Institute of Mining and Technology	1.8%	28,027,100	4.1%	-	4,177,900	7,211,200	7,917,956	4,285,408	51,619,564
New Mexico Highlands University	3.0%	28,403,200	4.2%	2,167,300	1,678,900	-	3,744,444	3,074,570	39,068,414
Northern New Mexico College	1.0%	10,156,900	1.5%	520,400	663,100	-	1,352,507	770,715	13,463,622
Western New Mexico University	2.8%	18,693,500	2.7%	2,109,800	1,735,600	-	4,345,700	3,359,434	30,244,034
Subtotal non-branch Universities	8.6%	\$ 85,280,700	13.2%	\$ 4,797,500	\$ 8,255,500	\$ 7,211,200	\$ 17,360,607	\$ 11,490,127	\$ 134,395,634
Central New Mexico Community College	19.7%	60,070,400	8.8%	-	188,800	-	6,893,577	7,471,009	74,603,786
Ciolis Community College	1.9%	9,714,900	1.4%	-	256,500	-	780,000	612,422	11,363,822
Luna Community College	0.6%	6,801,300	1.0%	453,200	734,800	-	1,096,500	223,798	9,309,598
Mescalands Community College	0.2%	4,100,300	0.6%	209,500	103,400	-	775,555	217,170	5,405,925
New Mexico Junior College	1.6%	5,663,900	0.8%	519,500	464,700	-	3,028,555	622,043	10,298,698
San Juan College	4.7%	24,129,600	3.5%	-	622,600	-	2,254,422	1,549,340	28,555,962
Santa Fe Community College	3.3%	10,360,200	1.5%	-	697,500	3,794,300	1,794,762	1,009,415	17,656,177
Independent Community College Total	32%	\$ 120,840,600	11.9%	\$ 1,182,200	\$ 3,048,300	\$ 3,794,300	\$ 16,623,371	\$ 11,705,197	\$ 157,193,868

Source: LFCFiles

Attachment B: State I&G Appropriations Since FY13

	State I&G Appropriations										Growth From FY13 to FY20	
	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	Dollar Incr/Dcrs	Percent Incr/Dcrs		
NMIMT	\$ 25,806,584	\$ 26,670,388	\$ 27,508,337	\$ 27,622,556	\$ 25,762,800	\$ 25,522,734	\$ 26,650,200	\$ 28,656,334	2,849,750	11.0%		
NMSU	110,375,095	110,375,095	119,311,660	120,089,640	111,993,900	110,874,000	114,344,700	121,364,760	10,989,665	10.0%		
UNM	173,817,000	181,460,402	190,310,996	191,347,394	178,567,300	176,957,600	183,720,200	196,372,464	22,555,464	13.0%		
ENMU	25,492,500	27,147,500	28,652,112	28,844,658	26,929,200	26,715,100	27,786,500	30,142,900	4,650,400	18.2%		
NMHU	26,500,000	27,162,645	28,381,598	28,397,459	26,477,800	26,216,769	27,129,270	28,669,100	2,169,100	8.2%		
NNMC	10,328,500	10,725,300	11,097,714	10,933,100	10,201,400	9,939,900	10,132,700	10,687,200	358,700	3.5%		
WNMU	15,903,576	17,325,550	18,539,505	18,460,235	17,196,100	17,064,900	17,840,327	19,567,939	3,664,363	23.0%		
ENMU - Roswell	11,461,176	11,737,527	12,287,900	11,991,008	11,318,110	11,166,100	11,411,900	12,143,500	682,324	6.0%		
ENMU - Ruidoso	2,077,054	2,105,701	2,150,752	2,127,485	1,983,622	1,952,497	1,980,000	2,106,500	29,446	1.4%		
NMSU - Alamogordo	7,102,258	7,708,827	7,979,319	7,769,900	7,193,315	7,036,200	7,035,715	7,461,545	359,287	5.1%		
NMSU - Carlsbad	4,488,532	4,508,606	4,382,031	4,337,914	4,046,281	3,971,380	4,055,577	4,382,319	(106,213)	-2.4%		
NMSU - Dona Ana	19,905,282	22,083,406	23,658,274	23,682,847	22,094,016	21,825,777	22,503,808	24,069,622	4,164,340	20.9%		
NMSU - Grants	3,435,500	3,569,200	3,622,100	3,650,100	3,418,800	3,362,850	3,434,075	3,783,100	347,600	10.1%		
UNM - Gallup	8,703,700	9,118,300	9,497,657	9,489,220	8,841,700	8,599,200	8,898,887	9,479,000	775,300	8.9%		
UNM - Los Alamos	1,783,500	1,876,000	1,905,100	1,877,221	1,749,300	1,710,400	1,757,000	1,887,600	104,100	5.8%		
UNM - Taos	3,036,600	3,418,600	3,732,200	3,766,100	3,522,500	3,497,400	3,634,400	3,988,500	951,900	31.3%		
UNM - Valencia	5,054,733	5,376,900	5,715,600	5,731,200	5,342,000	5,291,000	5,465,500	5,885,700	830,967	16.4%		
CNM	47,750,400	51,971,700	55,644,425	56,801,075	53,276,400	52,995,400	55,677,500	60,141,000	12,390,600	25.9%		
Clovis CC	8,753,083	9,703,678	10,193,985	10,181,915	9,496,232	9,369,156	9,630,477	10,256,262	1,503,179	17.2%		
Luna CC	7,549,392	8,009,400	8,315,111	8,311,504	7,679,392	7,528,508	7,514,900	7,822,825	273,433	3.6%		
MCC	4,230,200	4,320,200	4,364,653	4,266,648	3,942,825	3,864,200	3,877,300	3,956,200	(274,000)	-6.5%		
NMAC	5,989,296	6,067,955	6,189,467	6,092,784	5,759,514	5,629,896	5,925,900	6,198,932	209,636	3.5%		
SJC	23,200,388	24,328,639	25,170,340	25,275,471	23,390,000	22,982,981	23,320,600	25,448,604	2,248,216	9.7%		
SECC	8,582,004	9,246,900	10,089,700	10,399,399	9,639,365	9,574,300	9,915,099	10,825,700	2,243,696	26.1%		
Total State I&G Funding	\$ 561,326,353	\$ 586,018,429	\$ 618,700,536	\$ 621,446,833	\$ 579,821,872	\$ 573,648,248	\$ 593,642,535	\$ 635,297,606	\$ 73,971,253	13.2%		

Attachment C: Dual Credit Enrollment

Institution Type/Institution Name	2018			2019			2020		
	College	High School	Total	College	High School	Total	College	High School	Total
Research Universities									
New Mexico Institute of Mining & Technology	1,877	9	1,886	1,823	4	1,827	1,673	13	1,686
New Mexico State University	14,046	251	14,297	14,046	228	14,274	13,992	235	14,227
University of New Mexico	23,831	357	24,188	22,295	305	22,600	21,584	242	21,826
UNM - Medical Students	423	-	423	425	-	425	418	-	418
Research Universities Subtotals	40,177	617	40,794	38,589	537	39,126	37,667	490	38,157
Comprehensive Universities									
Eastern New Mexico University	5,002	1,131	6,133	4,786	997	5,783	4,563	705	5,268
New Mexico Highlands University	3,131	64	3,195	2,847	43	2,890	2,762	18	2,780
Northern New Mexico College	929	169	1,098	881	231	1,112	954	285	1,239
Western New Mexico University	2,735	465	3,200	2,651	681	3,332	2,582	310	2,892
Comprehensive Universities Subtotals	11,797	1,829	13,626	11,165	1,952	13,117	10,861	1,318	12,179
Branch Community Colleges									
ENMU - Roswell	1,497	931	2,428	1,341	913	2,254	1,218	485	1,703
ENMU - Ruidoso	384	260	644	365	326	691	325	230	555
NMSU - Alamogordo	1,494	223	1,717	1,370	227	1,597	812	135	947
NMSU - Carlsbad	1,054	836	1,890	1,065	980	2,045	793	416	1,209
NMSU - Dona Ana	7,070	850	7,920	7,082	987	8,069	6,132	902	7,034
NMSU - Grants	673	436	1,109	627	236	863	445	183	628
UNM - Gallup	1,670	564	2,234	1,766	742	2,508	1,541	657	2,198
UNM - Los Alamos	809	131	940	834	146	980	833	121	954
UNM - Taos	841	424	1,265	811	444	1,255	788	319	1,107
UNM - Valencia	1,455	885	2,340	1,413	978	2,391	1,294	193	1,487
Branch Community Colleges Subtotals	16,947	5,540	22,487	16,674	5,979	22,653	14,181	3,641	17,822
Independent Community Colleges									
Central New Mexico Community College	19,967	3,669	23,636	19,074	4,128	23,202	18,283	3,284	21,567
Clovis Community College	2,739	670	3,409	2,552	695	3,247	1,800	583	2,383
Luna Community College	914	179	1,093	1,001	172	1,173	512	171	683
Mesalands Community College	751	317	1,068	515	362	877	184	318	502
New Mexico Junior College	1,816	440	2,256	1,855	474	2,329	1,458	443	1,901
New Mexico Military Institute	412	86	498	383	100	483	383	-	383
San Juan College	5,838	1,214	7,052	5,781	1,361	7,142	4,354	970	5,324
Santa Fe Community College	4,532	900	5,432	4,551	902	5,453	3,034	795	3,829
Independent Community Colleges Subtotals	36,969	7,475	44,444	35,712	8,194	43,906	30,008	6,564	36,572
Student Type Subtotals	105,890	15,461	121,351	102,140	16,652	118,802	92,717	12,013	104,730

* HED eData for years 2015 - 2019 represents end of term data.
 ** Fall 2020 semester - unofficial data based on census date reports, which may be slightly different than end of term data.
 The data excludes students reported as concurrent HS or Dual Credit For International Students, the Non Resident Flag = True is used.

Attachment D: Certificates and Degrees Awarded, Three-year Change

Statewide Outcomes - Certificates and Degrees Awarded FY22 Instruction and General Funding Formula Data

Institution	Total Number of Awards in Academic Year 2017-2018					Grand Total	Total Number of Awards in Academic Year 2018-2019					Grand Total	Total Number of Awards in Academic Year 2019-2020					Grand Total	3-Year Change	3-Year % Change	1-Year Change	1-Year % Change
	All Certs.	Assoc. Degrees	Bach. Degrees	Masters & Graduate Certificates	PhD, Doctoral or Terminal Degrees		All Certs.	Assoc. Degrees	Bach. Degrees	Masters & Graduate Certificates	PhD, Doctoral or Terminal Degrees		All Certs.	Assoc. Degrees	Bach. Degrees	Masters & Graduate Certificates	PhD, Doctoral or Terminal Degrees					
ENMNT	-	1	275	88	14	378	-	2	272	99	20	393	-	2	278	72	18	370	(6)	-2%	(23)	-6%
NMSU	-	16	2,320	725	138	3,199	-	8	2,313	724	134	3,179	-	3	2,236	692	126	3,057	(142)	-4%	(122)	-4%
UNM	8	-	3,994	1,198	426	5,626	-	-	3,849	1,221	447	5,517	15	-	3,639	1,157	419	5,230	(396)	-7%	(287)	-5%
Research Total	8	17	6,589	2,011	578	9,203	-	10	6,434	2,044	601	9,089	15	5	6,153	1,921	563	8,657	(546)	-6%	(432)	-5%
ENMU	-	211	725	309	-	1,245	-	258	684	348	-	1,290	-	221	700	312	-	1,233	(12)	-1%	(57)	-4%
NMHU	-	1	514	417	-	932	-	2	478	483	-	963	-	2	401	436	-	839	(93)	-10%	(124)	-13%
NMWC	10	106	58	-	-	174	5	98	71	-	-	174	20	72	62	-	154	(20)	-11%	(20)	-11%	
WNMU	24	94	273	306	-	697	18	94	246	262	-	620	21	71	249	277	618	(79)	-11%	(2)	0%	
Comprehensive Total	34	412	1,570	1,032	-	3,048	23	452	1,479	1,093	-	3,047	41	366	1,412	1,025	2,844	(204)	-6%	(203)	-7%	
ENMU - Reswell	309	233	-	-	-	542	280	180	-	-	-	460	197	175	-	-	-	372	(170)	-31%	(89)	-19%
ENMU - Rundoso	30	43	-	-	-	73	20	57	-	-	-	77	21	32	-	-	-	33	(20)	-27%	(24)	-31%
NMSU - Alamogordo	3	107	-	-	-	110	7	87	-	-	-	94	93	99	87	-	-	192	82	75%	98	104%
NMSU - Carlsbad	21	143	-	-	-	164	13	145	-	-	-	158	5	119	-	-	-	124	(40)	-24%	(34)	-22%
NMSU - Dona Ana	240	922	-	-	-	1,162	233	859	-	-	-	1,092	293	921	-	-	-	1,214	52	4%	122	11%
NMSU - Grants	29	64	-	-	-	93	17	42	-	-	-	59	72	45	-	-	-	66	(27)	-29%	7	12%
UNM - Gallup	89	201	-	-	-	290	102	234	-	-	-	336	71	180	-	-	-	252	(38)	-13%	(84)	-25%
UNM - Los Alamos	67	93	-	-	-	136	49	61	-	-	-	110	55	41	-	-	-	96	(40)	-29%	(14)	-13%
UNM - Taos	43	93	-	-	-	136	43	99	-	-	-	142	52	82	-	-	-	134	(2)	-1%	(8)	-6%
UNM - Valencia	74	130	-	-	-	204	86	117	-	-	-	203	76	121	-	-	-	197	(7)	-3%	(6)	-3%
CNM	2,480	3,822	-	-	-	6,302	2,322	3,836	-	-	-	6,158	2,936	3,829	-	-	-	6,765	463	7%	607	10%
COC	527	328	-	-	-	855	259	245	-	-	-	504	288	242	-	-	-	772	(70)	-9%	(28)	-4%
LCC	227	142	-	-	-	369	100	68	-	-	-	100	29	43	-	-	-	120	120	120%	(109)	-28%
MCC	53	47	-	-	-	100	276	53	-	-	-	329	192	28	-	-	-	220	120	120%	(109)	-28%
NMJC	44	269	-	-	-	313	87	331	-	-	-	418	94	244	-	-	-	338	(80)	-8%	(80)	-19%
SJC	324	774	-	-	-	1,098	818	760	-	-	-	1,578	565	646	-	-	-	1,211	113	10%	(367)	-23%
SFOC	534	353	-	-	-	887	573	334	-	-	-	907	430	246	-	-	-	676	(211)	-24%	(231)	-25%
Community College	4,624	7,683	-	-	-	12,307	5,217	7,508	-	-	-	12,725	5,419	7,093	-	-	-	15,512	205	2%	(213)	-2%
Total	4,666	8,112	8,159	3,043	578	24,536	5,240	7,970	7,913	3,137	601	24,861	5,475	7,464	7,565	2,946	563	24,013	(545)	-2%	(848)	-3%

Source: FY22 I&G Funding Formula Data