



NEW MEXICO HIGHER EDUCATION I&G FUNDING FORMULA

2017 Technical Guide for the
FY18 Budget Cycle.

HIGHER EDUCATION DEPARTMENT STAFF



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NEW MEXICO'S HIGHER EDUCATION I&G FUNDING FORMULA TECHNICAL GUIDE INTRODUCTION

With an eye toward a rational method for distributing state funds to New Mexico's 24 public colleges and universities for instruction and general (I&G) support, the state uses a funding formula each year to calculate how much each institution should receive based on various inputs. Between the late 1980s and FY12, this I&G funding formula focused on partially reimbursing the costs of educating students, including those related to instruction, academic support, student services, facilities, and institutional support.¹

The General Appropriation Act of 2011 required the Higher Education Department (HED) to recommend revisions to the funding formula by October 15, 2011.² As a result, the formula evolved after FY12 from partially funding an institution's instructional costs to allocating a portion of state general fund revenues based on an institution's performance in key measures, such as the total number of students graduating from certain certificate and all degree programs.³ New Mexico was not alone in this endeavor – 32 states have implemented higher education funding formulas that, at least in part, reward colleges and universities for performance outcomes.

New Mexico statute (Section 21-2-5.1 NMSA 1978) requires HED "to develop a funding formula that will provide funding for each institution of higher education to accomplish its mission..." and lists certain factors the secretary may consider when drafting the formula. The secretary of higher education, with the advice of a steering committee of higher education stakeholders, submits a request based on the funding formula to the Department of Finance and Administration and the Legislative Finance Committee (LFC) on the 1st of each November. This request serves as the basis for Executive and LFC I&G funding recommendations for the following fiscal year. Consistent with past practice and the exercise of its appropriations power, the Legislature may adjust the funding formula levels to address state priorities.

Although a direct causal effect is uncertain at this time, there does appear to be a correlation between New Mexico's performance-based funding formula and increased certificate and degree production statewide -- between FY11 and FY16, the number of New Mexico credential completions in FY16 (22,885) was 19.6% (3,753) higher than in FY11 (19,132).

To aid legislators and stakeholders during the 2017 legislative session, HED staff developed this technical guide outlining the formula used for FY18.

¹ LFC Budget Recommendation for FY12 – Volume I - Policy and Performance Analysis (2011), p.20-25.

² New Mexico General Appropriation Act of 2011 (Laws 2011, Chapter 179), p.177

³ LFC Budget Recommendation for FY13 – Volume I - Policy and Performance Analysis (2012), p.20-21.



NEW MEXICO' S HIGHER EDUCATION I&G FUNDING FORMULA

SECTION 1: FORMULA DESCRIPTION

The New Mexico Higher Education Instruction and General (I&G) Funding Formula allocates I&G funding according to the following steps:

Step 1:

The percentage of new money available and the percentage of total I&G funding to be distributed by performance measures are set and, in turn, determine the inputs into the formula.

Step 2:

Institutions' prior year base funding is sorted into either "protected" base funding or "redistributed" base funding (i.e. to be redistributed by performance measures). If the amount of new money available is enough to fully cover performance outcomes funding, then institutions do not experience any redistribution of their prior year base funding.

Step 3:

The current year's overall "performance funding" (new money + redistributed prior year base funding) is split into separate amounts and each amount will be distributed by a different performance measure.

Step 4:

The funding for each performance measure is distributed in proportion to each institution's contribution to the higher education system's (or a sector's) total performance on that measure (or sector mission measure). In other words, if an institution contributes 3% to the higher education system's (or a sector's) total performance on a particular measure, then that institution will receive 3% of the funding distributed by that measure. The performance outcome measures in the NM Higher Education I&G Funding Formula are as follows:

- Total Awards (students receiving an academic award),
- STEMH Awards (students receiving an award in Science, Technology, Engineering, Math, or Health),
- Awards to Financially At-Risk Students (defined by expected family contribution for those receiving aid),
- End-of-Course Student Credit Hours (student credit hours completed by students), and
- Sector Mission Measures (i.e. research contracts/grants, student momentum points, and dual credit).

The raw awards production data used in the formula (for the total awards, STEMH awards, and awards to at-risk students outcomes measures) are weighted/normalized in order to assign more weight to higher and more costly academic awards. See Sections 2 and 3 for more detail on the data collection/preparation.

Step 5:

All the separate components of the formula (i.e. protected base funding and the funding from each performance measure) are added together in order to make the final I&G recommendation.



NEW MEXICO HIGHER EDUCATION I&G FUNDING FORMULA SECTION 2: RAW DATA COUNT DEFINITIONS

The terminology and methodologies for coding/counting the raw data that goes into the New Mexico Higher Education I&G Funding Formula are as follows:

Awards:

The academic award(s) that an institution of higher education confers onto a student when that student successfully completes a degree/certificate program from that institution. If a student received multiple awards (ex. a certificate and an associate's degree) then only the highest level award is counted within the formula for that institution's performance. If two or more awards are granted at the same award level, then only one is kept, and if they differ by tier level the one with the highest tier level is kept. All certificates, at both the undergraduate and graduate level, are counted in the formula with the exception of non-STEMH certificates that are designed to be completed within less than one year.

Total Awards:

The total number of students who graduated with an academic award, degree or certificate, from an institution within each academic year. Academic Year in the formula includes summer, fall, and spring semesters. For example, Academic Year 2014-15 is summer 2014, fall 2014, and spring 2015.

STEMH Awards:

The number of students who graduated with an academic award, degree or certificate, in any STEMH (Science, Technology, Engineering, Mathematics, and Health) field from an institution within each academic year.

At-Risk Awards:

The number of financially at-risk students who graduate with an academic award, degree or certificate, within each academic year. Students are considered as being financially "at-risk" when their expected family contribution (EFC), compiled from FAFSA financial aid files submitted by institutions, is less than or equal to \$5,000 per year. For community colleges, if a student's EFC is less than or equal to \$5,000 in the current or previous year, then the student is considered as financially at-risk. For four-year universities, an EFC of less than or equal to \$5,000 during the current year or the previous three years qualifies a student for being considered financially at-risk.

End-of-Course Student Credit Hours (EOC SCH):

End-of-course student credit hours (EOC SCH) are unrestricted SCH that students have completed, though not necessarily passed, at the end of a semester. Students with a grade for the course, including audit and incomplete, are considered as having been enrolled at the end of the course. Grade symbols that indicate withdrawal, and blanks in the grade field, are excluded. The one exception is that EOC SCH for audited physical education courses are excluded. (EOC SCH are contrasted with Census Student Credit Hours (Census SCH) which count the SCH of enrolled students at the date when 15% of the total course time has elapsed; these were the SCH used in the formula prior to FY13.



Sector Mission Measures:⁴

Research Mission Measure: (*Research University Sector*)

The dollar value of expenditures based on out-of-state dollars that come to New Mexico as a result of the work of New Mexico's research universities. From each research university's Annual Financial Report, subtract "Total Student Financial Aid" from "Total Federal Awards" and then add "Non-governmental grants and contracts" for UNM and NMSU, and "Private grants and contracts" for NMT. The "Total Student Financial Aid" and "Total Federal Awards" data is in the Schedule of Expenditures of Federal Awards (SEFA). The "Non-governmental grants and contracts" and "Private grants and contracts" data is in the Statement of Revenues, Expenses, and Changes in Net Assets (SRECNA).

Dual Credit Mission Measure: (*Comprehensive University Sector and Community College Sector*)

The total EOC SCH coded as having been taken by a dual credit student at that institution each academic year. For a student to be coded as a "dual credit student", institutions should have documentation on file with the dual credit agreement between the student's parents, the local educational agency (i.e. public school district, state-chartered charter school, a bureau of Indian education-funded high school) and the higher education institution (NMAC 6.30.7.8). Each coded dual credit student should also have a unique Student Teacher Accountability Reporting System identification number (STARS ID) as well.

Momentum Points: (*Comprehensive University Sector and Community College Sector*)

Momentum points are calculated by keeping a running total of the total number of course credit hours a student passes (either a D- or higher, or a grade symbol such as "S" or "P"). All courses are counted, including dual credit classes prior to enrollment as a first-time freshmen, and all remedial courses. HED data from student-course files submitted by the institutions is used to track a student's progress. All students who first enroll as a first-time freshmen anywhere in the public higher education system (for this measure, just the 24 institutions funded by the funding formula are included) are tracked.

Whenever a student hits a momentum point (such as 30 or 60 total passed hours) a calculation is made to determine which institution contributed courses. For example, a student may hit 36 hours at the end of semester and thus trigger a momentum point calculation. If all 36 hours were earned at the same institution (Institution A) that institution would earn 1 momentum point. If 18 hours were earned at Institution A, and 18 at Institution B, then each institution would earn 0.5 momentum points. And so forth, if Institution A contributed 18 hours, B 9 hours, and C 9 hours, then the points would be distributed as 0.50, 0.25, and 0.25, respectively.

Momentum Points 30: (*Comprehensive University Sector and Community College Sector*)

Points accumulated by institutions when students achieve 30 or more total credit hours for the first time.

Momentum Points 60: (*Comprehensive University Sector*)

Points accumulated by institutions when students achieve 60 or more total credit hours for the first time.

⁴ The 20% of Total Performance Funding for Sector Mission Measures is comprised of the Research Measure (11.1%), the Dual Credit Measure (3.3%), the MP30 Measure (5.0%), and the MP60 Measure (0.6%).



NEW MEXICO HIGHER EDUCATION I&G FUNDING FORMULA SECTION 3: AWARD WEIGHTING MATRICES AND SCALE FACTORS

The New Mexico Higher Education I&G Funding Formula has three performance outcome measures relating to institutions' award production: Total awards, STEMH awards, and Awards to Financially At-Risk Students. The formula weights and then scales/normalizes the award production data for these measures in order to assign more weight to higher awards and, for the research universities, awards that are more costly to produce. The process for weighting and normalizing the raw data for these performance outcome measures is as follows:

Step 1: The raw award data is submitted by institutions to the Higher Education Department (HED).

Step 2: Each award within the raw data is defined as being one of ten award types (ranging from a less-than-one-year certificate to a PhD) and categorized into one of three cost tiers. The three cost tiers were developed in order to reflect that certain award programs, as defined by Classification of Instructional Program (CIP) codes, are more costly for institutions to offer than others.

- Tier 1 programs are humanities, business, and liberal arts programs.
- Tier 2 programs are technical and general science programs.
- Tier 3 programs are engineering and health science programs.

Step 3: Each award outcomes measure (Total, STEMH, and At-Risk awards) has a 3x10 award weighting matrix (3 cost tiers, 10 award types) for each higher education sector. For each award outcomes measure, the raw "pre-matrix" awards for each institution are multiplied by weights within the 3x10 weighting matrix for their sector. After these calculations, each institution has a weighted awards value.

Note: The weights for the research sector award matrices come from historical cost figures, whereas the weights for the comprehensive and community college sectors award matrices are flat amounts for certificates, associates' degrees and bachelors' degrees that are not tied to historical cost figures.

Step 4: The weighted awards value of each institution is then divided by a scale factor, for each 3x10 matrix, so that the weighted values of each institution can be scaled down and more easily compared to each other. The scale factor for each award weighting matrix is calculated each year as follows:

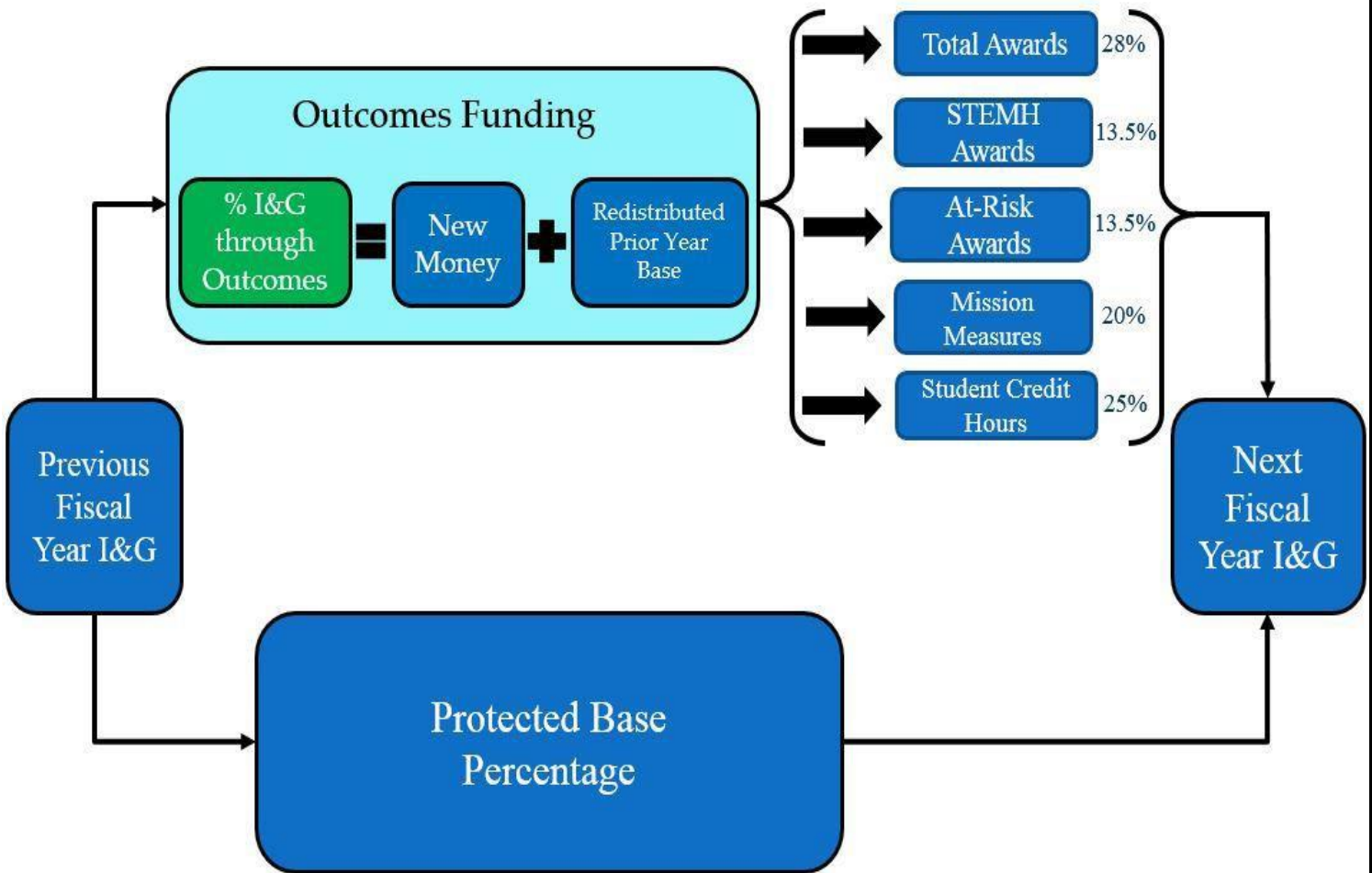
(UNM's current unscaled three-year average weighted award value from that matrix) / 1,000

Note: Although the comprehensive and community college sectors have different 3x10 award weighting matrices for each measure, the comprehensive sector scale factor is applied to both sectors for each 3x10 weighting matrix for each measure. This scales down associates degrees and certificates relative to bachelor's degrees and higher level degrees.

Step 5: Once this process of weighting and normalizing the data is complete, the final "post-matrix" award values for each institution are used for the award outcome measures within the formula.



NEW MEXICO HIGHER EDUCATION I&G FUNDING FORMULA
SECTION 4: EXHIBIT I - FUNDING FORMULA STRUCTURE





**NEW MEXICO HIGHER EDUCATION I&G FUNDING FORMULA
SECTION 4: EXHIBIT II - FUNDING FORMULA HIGHER EDUCATION INSTITUTIONS**

Higher Education Sector	Higher Education Institution (HEI)	General Fund I&G Recommendation Method	
Research Sector	New Mexico Institute of Mining and Technology New Mexico State University University of New Mexico	NM Higher Education Instruction & General (I&G) Funding Formula	
Regional Comprehensive Sector	Eastern New Mexico University New Mexico Highlands University Northern New Mexico College Western New Mexico University		
Branch Community College Sector	Eastern New Mexico University-Roswell Eastern New Mexico University-Ruidoso New Mexico State University-Alamogordo New Mexico State University-Carlsbad New Mexico State University-Dona Ana New Mexico State University-Grants University of New Mexico-Gallup University of New Mexico-Los Alamos University of New Mexico-Taos University of New Mexico-Valencia		
Independent Community College Sector	Central New Mexico Community College Clovis Community College Luna Community College Mesalands Community College New Mexico Junior College San Juan College Santa Fe Community College		
Tribal Colleges	Dine College Institute of American Indian Arts Navajo Technical College Southwestern Indian Polytechnic Institute		Federal Funds (Non Applicable)
Special Schools	New Mexico Military Institute New Mexico School for the Deaf New Mexico School for the Blind and Visually Impaired		Non – Formula
Health Science Center	University of New Mexico - Health Science Center	Hybrid	