

# NEW MEXICO HIGHER EDUCATION DEPARTMENT



October 14, 2011

Susana Martinez  
Governor of New Mexico  
State Capitol  
Santa Fe, New Mexico 87501

David Abbey  
Director  
Legislative Finance Committee  
325 Don Gaspar, Suite 101  
Santa Fe, New Mexico 87501

Dear Governor Martinez and Director Abbey,

I am pleased to present, attached, the funding formula for higher education, in compliance with Section 4J of Chapter 179, Laws of 2011, authorized by Section 21-2-5.1 NMSA 1978.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Dr. José Z. Garcia".

Dr. José Z. Garcia  
Secretary of Higher Education

cc: Tom Clifford, Cabinet Secretary-designee, DFA

Enclosures: Background memo  
Formula

# NEW MEXICO HIGHER EDUCATION DEPARTMENT



## The Watson-Hadwiger Formula October 2011

To calculate the formula for each institution:

$$D_i = \text{Base}_i + U_i + W_{ia}O_{ia}C_{ia} + W_{ib}O_{ib}C_{ib} + W_{ic}O_{ic}C_{ic} + W_{id}O_{id}C_{id} + S_i$$

To calculate the total funding generated by the formula:

$$\sum_{i=1}^n D_s = \sum_{i=1}^n \text{Base}_i + \sum_{i=1}^n U_i + \sum_{i=1}^n W_{ia}O_{ia}C_{ia} + \sum_{i=1}^n W_{ib}O_{ib}C_{ib} + \sum_{i=1}^n W_{ic}O_{ic}C_{ic} + \sum_{i=1}^n W_{id}O_{id}C_{id} + \sum_{i=1}^n S_i$$

### Definition of equation terms:

D	=	Total amount of funding generated by the formula	
i	=	Institution	
Base	=	Base I&G Budget	
U	=	Market utilities adjustment	
W	=	Weight (45% of completed SCH, 2% total awards, 3% workforce, 3% at-risk)	v
O	=	Outcome	
C	=	Cost to produce each increment of outcome	?
S	=	Institutional Share (LGPF, statutory mill levy change)	.
a	=	Completed student credit hours	
b	=	Total <u>number</u> of certificates and degrees awarded in 2009-2010	1408
c	=	Total workforce awards in 2009 – 2010	
d	=	Total awards to at-risk students in 2009 – 2010	
n	=	Number of institutions in a <u>sector</u>	
s	=	Sector	

*Because the Higher Education Department has been directed to recommend a flat FY13 budget, the Base amount will not be 100% of the FY12 budget in the HED FY13 budget recommendation.*

## **THE WATSON-HADWIGER FORMULA**

### **NEW MEXICO HIGHER EDUCATION DEPARTMENT, OCTOBER 2011**

*Increasing productivity in higher education will depend...on building strong accountability systems that move away from the ones primarily in use today, which tend to emphasize inputs over outcomes and the collection and reporting of data....Revamping states' higher education accountability systems should focus on increasing the use of performance and outcome metrics and then using those metrics to make and evaluate policy decisions..." (Reindl and Rayna, National Governors Association, 2011)*

The effort by the Higher Education Department this year to make fundamental changes to New Mexico's higher education funding formula has been both a monumental challenge and an historic opportunity. For years taxpayers in New Mexico have funded a system based on inputs, or costs, and on providing strong access to institutions for students. The result has been a college and university system that is relatively expensive in cost-per-degree compared to other states, a proliferation of new campuses and learning centers without a corresponding increase in the number of degrees and certificates, and a lack of synchronization between the kinds of skills students emerge with and the workforce needs of New Mexico. While each individual institution of higher learning is producing in some cases world-class students and research, collectively, the system as a whole is not operating at optimal levels. The challenge is to shift incentives away from the costs of educational inputs toward stronger performance outputs, while still maintaining strong student access to education. The opportunity is to create a system of higher education that will provide efficient incentives for colleges and universities to help create a globally competitive workforce for the future.

#### **BACKGROUND**

**The Governor:** In her interview with Dr. José Z. Garcia for Higher Education Secretary, Governor-elect Susana Martinez charged him with creating a funding formula that would emphasize outcomes; moreover, the new formula would reward institutions for closing gaps between the workforce now available and the workforce New Mexico will need in the future to remain globally competitive.

**The Boulder Concordat:** After the 2011 legislative session ended, the Higher Education Department (HED) convened a one-day workshop in Boulder, Colorado, facilitated by the Western Interstate Commission on Higher Education (WICHE), with participants from a broad sector of New Mexico's major stakeholders in higher education: private sector employers, the Sandia and Los Alamos labs, legislators, the DFA Secretary, a representative from the LFC, representatives from the Workforce Solutions and Economic Development Departments, representatives of the various higher education associations, college presidents, and the chair of the Council of University Presidents. The gathering ended with a broad consensus of cooperation toward moving swiftly towards a workforce-driven, output-measured formula. This consensus has come to be known as "The Boulder Concordat."

**The Funding Task Force (FTF):** Active for many years prior to 2011, the FTF was reconvened; Curtis Porter, from the University of New Mexico, continued to chair the Task Force. With participation open to each institution, as well as the LFC and DFA, agreements were reached on how to make the process inclusive, transparent, and fair. Institutions would be held to a stop-loss of 1%-2% of the FY2013 distribution for the first year, and sector equity among research, comprehensive, and two-year institutions would be maintained. The FTF would make recommendations to the HED by September 15. Further input would be solicited, but in accord with statutes the ultimate responsibility for writing the

formula would reside with the HED. Subcommittees working on the formula included the “strawman” committee, held weekly meetings to develop a structure for the new formula; the “institutional research group,” responsible for identifying and defining output data; the “finance committee,” which assigned dollar values to data; and a “research committee” to study practices in other states.

**Workforce Projection and Achievement Gap:** While the FTF was building the formula, HED was sponsoring a number of other activities designed to project a desired New Mexico workforce for the future, to be updated annually, at both statewide and regional levels. HED has consulted with the top expert in the U.S. in workforce projections, Anthony Carnavale, from Georgetown University, who participated in the Boulder meeting. Two workshops were held to discuss workforce projections, eliciting strong support from the private sector, the national labs, the Workforce Solutions, Taxation and Revenue, and Economic Development departments. In addition, since an agreement was reached early on to provide incentives to institutions for reducing the achievement gap, a workshop has been held to study ways to do this, and discussions are under way to explore the possibility of regionalizing existing workforce-college/university partnerships. HED is continuing to develop a mechanism to produce and update a desired workforce that will enhance New Mexico’s global competitiveness in the future.

**Future Refinements:** As data collection for output measures is improved and as feedback is gathered, new metrics will be used and the formula will be refined.

## THE FUNDING FORMULAS

### Some Characteristics of the Old and New Formulas:

**Simplicity:** The old funding formula required 125 worksheets to calculate. In the new formulation we expect the formula to require less than a dozen worksheets.

**Metrics:** The old formula rewarded institutions for **inputs:** square feet of building space, enrollment, eligible square feet for building replacement and renewal, equipment valuation, tuition rates, in-state and out-of-state students, 17 different tuition waiver types, utility costs, land grant permanent fund revenue projections, and other measurements of cost. The new formula provides **four** output incentives: for students to **complete their courses**; for institutions to **increase the number of graduates**; for institutions to **increase science, technology, engineering, health, and mathematics degrees and certificates**; and to **graduate more at-risk students**.

**Mission Differentiation:** The old formula consisted of one single set of complex metrics of cost inputs, across the three sectors. As a result, research institutions have been spending valuable assets to educate underperforming students instead of concentrating on research, while four-year colleges struggle to compete with research institutions or with two-year colleges; and two-year colleges sometimes try to compete with four-year institutions. The new formula (in fact, there are three new formulas) distinguishes missions between sectors, providing different metrics for each. The separation of metrics for each sector signals to institutions that they should sharpen their educational mission goals to maximize formula incentives.

## FORMULA CONCEPTS

- a. **Workload and Outcomes:** This model reflects changes in workload and outcomes. As changes occur in course completions, the number of students graduating, increases in the achievement of at-risk students, etc., these will be reflected in the distribution of funds to the institution.

- b. **Outputs as a percentage of the total distribution in 2013:** To jump-start the new formulas, the 2012 distribution for each institution was used as a “base.” Five percent of the total distribution will be calculated by output measures. The percentage of the total distribution calculated by output measures will increase in subsequent years. National experts on funding formula experiences in many states suggested that these proportions were optimal for the first year: strong enough to warrant institutional attention, suggesting immediate planning changes, but not strong enough to hurt institutions unduly in the short run.
- c. **Stop-loss:** Since institutions could not have planned for the FY2013 distribution it was agreed for the sake of fairness that HED would hold each institution to a stop-loss provision of plus-or-minus 2%. This will not be true of the FY2014 distribution.
- d. **Sectoral Equity:** For the first year’s distribution, the proportion of the total distribution going to the different sectors will remain intact; that is, the overall proportionate allocations to research, comprehensive, and two-year colleges, will remain the same.
- e. **Process:** Leadership at HED insisted from the beginning that the process of creating a new formula would be inclusive, transparent, and fair. Leaders of the three sectors on September 8 agreed this indeed had been the case, and at a meeting on September 26 between HED leadership and institutional leaders, Dr. Steven McCleery and others attested to the adherence to these principles throughout the process of creating the new formula.
- f. **Budgetary Considerations:** Given the fiscal constraints on the state budget, HED will present a flat budget to the executive branch for the FY2013 funding distribution

#### **EXAMPLES OF MAJOR CHANGES IN THE FORMULA**

1. In the previous formula a student census on the twenty-first day determined the calculation of student credit hours. In the new formula only students who have finished the course at the end of the semester will be counted. This measure shifts resources to more productive purposes.
2. In the old formula incentives were provided for adding square feet of building space for each campus. This resulted in recent years in a huge proliferation of buildings. The new formula will not reward institutions through the formula for adding new square feet. The emphasis is on graduating students, closing the achievement gap, and increasing the production of STEHM (science, technology, engineering, health, and math) degrees and certificates.
3. The old formula did not reward movement of institutions toward a globally competitive workforce. In New Mexico the workforce cannot become fully competitive until the state finds a way to close the achievement gap, since well over 60% of the future workforce is now in the at-risk category. This formula specifically rewards institutions for closing the achievement gap.

#### **SUMMARY**

With the active assistance and consultation of public and private stakeholders as well as national experts, HED has written a new formula for funding higher education. It provides incentives for closing the gap between the workforce New Mexico will need and what the higher education institutions are producing today. HED will continue working on it and will convene the institutions to discuss its implications for a number of important policy issues.