

The Chancellor of the Nevada System of Higher Education presented to the Board of Regents

- ❖ To recognize the research mission of the universities, an additional weighting to upper division and graduate courses is suggested. This additional state support for research reflects the state priorities for the role of research in innovation and economic development.
- ❖ Recognizing the diverse nature of the State and NSHE institutions and the need to ensure higher education access to all Nevadans, this model recommends a base level of support for administrative costs for smaller community colleges.
- ❖ The cost of operations and maintenance (O&M) of physical plant is included in the base amount given to each institution as driven by weighted student credit hours since this cost supports the institution's instructional work and can be managed within the overall budget. An exception is made for certain research facilities at the universities that serve no direct support role for student instruction.
- ❖ Under this proposed model, the revenue from students' tuition and fees remains at each institution. It is the student contribution to the cost of their education, just as the State supports its share of the cost through General Fund support. This methodology enables students (and their families) to see the direct link between their tuition and fees and the services provided to them at the institution they attend.
- ❖ A pool of dollars will be dist

weights for various course levels (e.g. lower division, upper division, master’s, doctoral) using data from cost studies conducted in Texas, Illinois, Ohio and Florida. These are states that have successfully used cost studies in formula funding.

Using NSHE’s existing instructional taxonomy that includes the two-digit Classification of Instructional Programs (CIP) for all state-supported courses delivered across the System, NCHEMS mapped the existing CIP categories to the appropriate discipline clusters for the purpose of assigning weights to the completed credit hours generated. The table of discipline clusters and weights denotes the specific CIP prefixes that fall within each discipline cluster and the corresponding weight NCHEMS assigned to the cluster.

This matrix assigns weights based on a student’s progression to degree completion (e.g. upper division is weighted more than lower division, etc.) and will further provide for funding based on the discipline cluster as recommended by NCHEMS (e.g. clinical and science, technology, engineering and math (STEM) fields will have greater weights than liberal arts). Only credit hours for students who complete courses are used in the formula; student course withdrawals are excluded. Completed courses include courses where a grade has been posted and where resources have been dedicated to instruction of a student, but excludes “withdrawals” and cases where the final grade has not been posted. In addition, the model excludes non-resident credit hours for the purposes of calculating state support.

The completed student credit hours are multiplied by the weight assigned in the instructional matrix to determine the weighted student credit hours for each institution. For purposes of the new model, course completions are based on the most recent actual completions.

### ***Price per Weighted Student Credit Hour***

Weighted student credit hours (WSCH) for each institution will be multiplied by an average *price* that will initially be determined based on the current state appropriation less the cost of any adjustments for small institutions and O&M costs directly related to university research facilities.

$$\text{Average Price per WSCH} = \frac{\text{General Fund appropriation for the seven teaching institutions}}{\text{Completed WSCH for the seven teaching institutions}}$$

This average *price* is the amount the formula will generate for each weighted student credit hour – effectively establishing a system-wide price for course completions. The average *price* will be applied to the institutional WSCH to determine base funding for each institution.

$$\text{Institutional WSCH} \times \text{Average Price per WSCH} = \text{Base Amount for each NSHE institution}$$

### ***General Fund Only Model***

The proposed model allocates General Fund dollars only without the inclusion of student tuition and fees. The funding model then provides that each institution will retain 100 percent of student registration fee and nonresident tuition revenues generated at that institution. The level of student fee revenues generated by an institution does NOT impact the amount of General Fund support generated by the new funding model. Thus, an institution would receive state General Fund support plus revenue from student tuition and fees. This is a change from the current formula and ensures that each institution’s student fee revenue remains at that institution

without an offset to General Fund support. With this, two important factors would be in place. First, the student credit hours generated by nonresident students are not included in the number of weighted student credit hours that determine an institution's state general fund support since this nonresident income will remain at the institution to cover total cost. Secondly, the Board of Regents will continue to monitor tuition and fees levels for reasonableness. The Board will continue to monitor non-resident enrollments and may consider policies related to the appropriate level of non-resident enrollments.

### ***Small Community College Factor***

The model recognizes that every institution has a base amount of fixed administrative costs that exist regardless of student body size, and small community colleges do not have sufficient student credit hours to cover this overhead cost and provide instruction. Therefore, the model includes an adjustment for small community colleges' administrative costs that assumes a base amount of \$1.5 million that diminishes as an institution reaches 100,000 weighted student credit hours. Once an institution reaches 100,000 weighted student credit hours the small institution factor will be eliminated.

### ***Research Factor***

The model assigns higher costs to upper-division and graduate instruction at the state's two research universities since the research mission requires faculty time away from the classroom and administrative infrastructure to support research. This is accomplished through an additional ten percent increase applied to upper-division and graduate student credit hours at UNLV and UNR. This support by the State for the cost of research marks an important milestone in the partnership between the State and NSHE. In addition, research activities will be measured and rewarded through the proposed performance pool.

### ***Operations & Maintenance (O&M)***

The proposed model assumes there is a cost relationship between O&M costs and instruction that generates student credit hours. That is to say, facilities that create or support the capacity for instruction should reasonably be expected to generate student credit hours. However, some facilities at the research universities, due to their specialized nature, do not support instruction through the generation of student credit hours (e.g. dedicated faculty labs) and therefore, should receive support apart from the state general fund. The costs of O&M for these specialized research facilities have been removed from the weighted student credit hour price calculation and are funded separately. O&M costs for non-research space is driven by weighted student credit hours since this cost supports the institution's instructional work and can be managed within the overall budget.

### ***Allocation of Funds Generated by the New Model***

The model generates a level of General Fund support for each individual institution. State support, when combined with student fee revenues generated by an institution, would represent the total funding available to an institution in a given fiscal year. Each institutional President will be responsible for recommending to the Board of Regents for approval the allocation of these resources to the various functional areas (instruction, academic support, student services, etc) within the college or university budget. Institutional Presidents will have flexibility in establishing a budget plan and institutional priorities, but also will be held accountable for final performance outcomes as measured by student success.

## *Implementation*

Implementation of a new formula within existing appropriation levels necessarily implies reallocation of resources. With the proposed model, the resource reallocation calls into question the viability of northern community colleges to continue to serve their respective service areas (See **Appendix C**). The precipitous decline in state funding that could result for northern community colleges will require a phased implementation and other mitigation measures including possible funding from

funding. This model clearly addresses equity based on an allocation of General Fund dollars, based primarily on the key responsibility of public higher education to educate Nevada students. It does not address adequacy of state funding for higher education.

The schedule in **Appendix C** outlines how the proposed funding formula would distribute General Fund support within the seven instructional institutions. The funding model utilizes the latest year's completions to determine the number of weighted student credit hours utilized in the formula calculations for the upcoming biennium. Summer and Fall 2011 completions are utilized to project annual FY 2012 completions which are run through the instructional matrix to determine the number of weighted student credit hours for FY 2014. In addition, the research factor increases upper division and graduate weighted student credit hours at UNLV and UNR by ten percent.

The proposed funding model also allocates funding to small community colleges (weighted student credit hours under 100,000) and carves out funding for O&M costs specifically related to research facilities at UNLV and UNR. Total General Fund support for the seven teaching institutions, less the amount allocated by the small institution factor and the research O&M carve out, is divided by the total number of weighted

## **APPENDIX A - DISCIPLINE CLUSTERS AND WEIGHTS**

<b>Discipline Cluster</b>	<b>Lower Division</b>	<b>Upper Division</b>	<b>Master's</b>	<b>Doctoral</b>
<b>Liberal Arts, Math, Social Science, Languages, Other</b>	<b>1.0</b>	<b>2.0</b>	<b>4.0</b>	<b>5.0</b>
05. Area, Ethnic, Cultural & Gender Studies	1.0	2.0	4.0	5.0
09. Communication, Journalism & related programs	1.0	2.0	4.0	5.0
16. Foreign Languages, Literature and Linguistics	1.0	2.0	4.0	5.0
19. Family & Consumer Sciences/Human Sciences	1.0	2.0	4.0	5.0
23. English Language & Literature/Letters*	1.0	2.0	4.0	5.0
24. Liberal Arts & Sciences, General Studies	1.0	2.0	4.0	5.0
25. Library Sciences	1.0	2.0	4.0	5.0
27. Mathematics & Statistics*	1.0	2.0	4.0	5.0
28. Reserve Officer Training Corps	1.0	2.0	4.0	5.0
29. Military Technologies	1.0	2.0	4.0	5.0
30. Multi/Interdisciplinary Studies	1.0	2.0	4.0	5.0
38. Philosophy & Religious Studies	1.0	2.0	4.0	5.0
42. Psychology & Applied Psychology	1.0	2.0	4.0	5.0
45. Social Sciences	1.0	2.0	4.0	5.0
54. History	1.0	2.0	4.0	5.0
99. Honors Curriculum and other	1.0	2.0	4.0	5.0
<b>Basic Skills</b>	<b>1.5</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
32. Basic Skills				
<b>Business</b>	<b>1.0</b>	<b>2.0</b>	<b>4.0</b>	<b>6.0</b>
44. Public Administration & Social Services	1.0	2.0	4.0	6.0
52. Business Mgmt, Marketing & related services	1.0	2.0	4.0	6.0
<b>Education</b>	<b>1.5</b>	<b>2.0</b>	<b>2.5</b>	<b>5.0</b>
13. Education	1.5	2.0	2.5	5.0
<b>Services</b>	<b>1.5</b>	<b>2.0</b>	<b>3.0</b>	<b>4.0</b>
31. Parks, Recreation, Leisure & Fitness Studies	1.5	2.0	3.0	4.0

**NSHE PERFORMANCE POOL MODEL FOR CONSIDERATION**

There are numerous ways to measure performance, this is but one model for consideration.

The areas proposed to be rewarded under a new performance pool are based on the Board of Regents *Strategic Directions*, institutional missions, and gubernatorial and legislative priorities. These variables include degrees awarded, sponsored research and external expenditures, and progress toward degree for community colleges only.

In order to compare outcomes across institutions, scaling the outcomes is necessary. The outcomes must be appropriately scaled or the calculation of points for the purpose of distributing funds in the performance pool will be skewed and will not represent comparable success for each institution, regardless of size. Utilizing methodology comparable to Tennessee's higher education funding formula based on performance, the following tables are provided as a starting point for a system wide discussion on the development of appropriate outcome measures for an NSHE performance pool.

Two separate performance pools appear to provide the fairest methodology one for the universities and state college and a separate pool for the community colleges. Therefore, C1 and C2 are calculated separately to allow the community colleges to be

**A: RAW OUTCOMES (2009 10)**

OUTCOMES	UNLV	UNR	NSC	CSN	GBC	TMCC	WNC
1 to 2 Year Certificate	n/a	n/a	n/a	229	47	47	23
Associate's Degrees	n/a	n/a	n/a	1,801	238	671	445
Bachelor's Degrees	3,627	2,319	245	6	59	n/a	6
Master's Degrees	1,264	640	n/a	n/a	n/a	n/a	n/a
Doctoral Degrees	140	95	n/a	n/a	n/a	n/a	n/a
Transfer Students w/24 Credits	n/a	n/a	69	1,692	25	657	138



## Performance Pool Outcomes Data Definitions

Outcome	Definition
1 to 2 year Certificate	The total number of certificates requiring 30 or more credit hours granted during an academic year. Students earning multiple certificates in an academic year will have each earned certificate count as a separate outcome.
Associate's Degrees	The total number of associate's degrees conferred during an academic year. Students earning multiple degrees in an academic year will have each earned degree count as a separate outcome.
Bachelor's Degrees	The total number of bachelor's degrees conferred during an academic year. Students earning multiple degrees in an academi year will have each earned degree count as a separate outcome.
Master's Degrees	The total number of master's degrees conferred during an academic year. Students earning multiple degrees in an academi year will have each earned degree count as a separate outcome.
Doctoral Degrees	The total number of doctoral degrees conferred during an academic year. First professional degrees (medical, dental, law) are not included. Students earning multiple degrees in an academic year will have each earned degree count as a separate outcome.
Transfer Students* w/24 credits **	The total number of students who tranfered to an NSHE 4 year institution with at least 24 accumulated college level credits, but no associate degree. Students with a current or prior year earned degree are excluded.
Sponsored/External Research Expenditures	The total amount expended on sponsored programs/projects of research and other scholarly activities for the fiscal year. This amount includes federal, federal pass through, State of Nevada, other state and local government, private for profit, private non profit. Other scholarly activity includes the instructional, public service, scholarship & fellowship, student services, and "other" functional grant categories, including workforce development.
Progression of Remediated Students**	The total number of students who successfully completed a college level English or mathematics course in the reporting year who completed at least one remedial course in the same subject area in the prior two semesters. Students remediated in more than one subject area and completing the college level course in more than one subject area will be counted for both outcomes.
Student Progression**	Total number of freshmen who during the reporting year achieved the benchmark of 30 cumulative college level credit hours (excluding remedial courses).

\*Transfer students are those who enrolled at a four year institution during the fall semester of a given reporting year who had earned at least 24 credits at a community college prior to the reporting year. Students are excluded in the transfer category if they earned an award during that year or a prior year. Students are also excluded if they are co enrolled at a 4 year institution and a 2 year institution during the term in which they otherwise would have been included as a transfer student. Those students will be captured in a future year when not co enrolled.

\*\*Excluded from outcomes are courses with grades of AU, AD, NR, ND, X, I, F, U, W

Formula Funding Proposal

General Fund Only State Budget with adjs for univs Research, Small Institution factor, and univs O&M research space  
 WSCH for Resident Credit Hours only FY12 annualized and projected flat to FY14

	FY 12 Oper Budget Gen Fund
Formula Budgets	
University Press	473,285
Special Projects	1,946,486
System Comp Services	16,669,848
WICHE	876,119
Intercollegiate Athletics UNR	4,850,244
Statewide programs UNR	3,256,905
Cooperative Extension Service	7,460,169
Agricultural Experiment Station	4,959,258
Business Center North	1,828,181
School of Medicine	29,906,783
State Health Lab	1,518,317
Intercollegiate Athletics UNLV	6,988,826
Statewide programs UNLV	2,502,209
Business Center South	1,583,585
Law School	6,909,123
Dental School	7,005,286
Perkins Loans	35,793
Desert Research Institute	7,421,572
<b>Sub Total NFB's</b>	<b>110,698,804</b>
Total NSHE GF Revenues	473,255,848
Total Formula Budgets	362,557,044
Less: SIF & O&M carve out	8,720,886
Net GF allocation formula budgets	353,836,158
Total WSCH includes research adj	2,669,282
<b>\$/WSCH</b>	<b>\$132.56</b>

FY 14 WSCH w/o NRSCH	\$/WSCH	Small Institution Factor	FY 14 O&M	FY 14 Gen Fund	FY 14 GF Incr/Decr
Non Formula Budgets					
System Administration					4,506,815
WSCH Weighted Student Credit H					

s  
 NRSCH Non Resident Student Credit Hours  
 Small Institution Factor \$1.5M Cap phased out between 50K to 100K WSCH  
 O&M Carve out State funded research space  
 Research factor of 1.10 applied against universities upper division and graduate WSCH  
 Resident students credit hours only  
 Adjustments to FY12 Operating Budget:  
 UNR GF adjusted by <\$2.9M> for rechg adjmt AES, CES, ICA, and S/W increased  
 UNLV GF adjusted by <\$3.12M> for rechg recal LS, DS, ICA, and S/W increased  
 WSCH projection methodology FY12 annualized WSCH projected to FY14  
 UNR and UNLV O&M recharge & research space adjustments pending further verification  
 NOTE: Discussions are on going with respect to a formula model for DRI.