COMMITTEE TO STUDY THE FUNDING OF HIGHER EDUCATION (SENATE BILL 374, 2011 LEGISLATURE)



Wednesday, May 23, 2012 9:00 a.m.

Grant Sawyer State Office Building Room 4401 555 East Washington Avenue Las Vegas, Nevada

Videoconference to:

Legislative Building Room 3137 401 South Carson Street Carson City, Nevada

Great Basin College High Tech Center Room 121 1500 College Parkway Elko, Nevada University of Nevada School of Medicine Pennington Health Sciences Building Room 102 1664 North Virginia Street Reno, Nevada

STATE OF NEVADA LEGISLATIVE COUNSEL BUREAU

LEGISLATIVE COMMISSION (775) 684-6800 STEVEN A. HORSFORD, Senator, Chairman TAMMY GRACE, Acting Director, Secretary

CARSON CITY OFFICE:
Legislative Building, 401 S. Carson Street
Carson City, Nevada 89701-4747
Fax No.: (775) 684-6600
TAMMY GRACE, Acting Director (775) 684-6800
BRENDA J. ERDOES, Legislative Counsel (775) 684-6830
PAUL V. TOWNSEND, Legislative Auditor (775) 684-6815
DONALD O. WILLIAMS, Research Director (775) 684-6825

INTERIM FINANCE COMMITTEE (775) 684-6821

DEBBIE SMITH, Assemblywoman, Chair Rick Combs, Fiscal Analyst Mark Krmpotic, Fiscal Analyst

LAS VEGAS OFFICE: 555 E. Washington Avenue, Room 4400 Las Vegas, Nevada 89101-1049 Fax No.: (702) 486-2810 BRIAN L. DAVIE, *Legislative Services Officer* (702) 486-2800

MEETING NOTICE AND AGENDA

Name of Organization: COMMITTEE TO STUDY THE FUNDING OF HIGHER

EDUCATION (SENATE BILL 374, 2011 LEGISLATURE)

Date and Time of

Meeting:

May 23, 2012 – 9:00 a.m.

Place of Meeting: Grant Sawyer State Office Building

Room 4401

555 East Washington Avenue

Las Vegas, Nevada

Note: Some members of the committee may be attending the meeting and other persons may observe the meeting and provide testimony through a simultaneous

videoconference conducted at the following locations:

Legislative Building

Room 3137

401 South Carson Street

Carson City, Nevada

University of Nevada School of Medicine Pennington Health Sciences Building

Room 102

1664 North Virginia Street

Reno, Nevada

Great Basin College High Tech Center

Room 121

1500 College Parkway

Elko, Nevada

If you cannot attend the meeting, you can listen to or view it live over the Internet. The address for the Nevada Legislature website is http://www.leg.state.nv.us. Click on the link "Live Meetings — Listen or View."

Note: Please provide the secretary with electronic or written copies of testimony and visual presentations if you wish to have complete versions included as exhibits with the minutes.

AGENDA

Note: Items on this agenda may be taken in a different order than listed. Two or more agenda items may be combined for consideration. An item may be removed from this agenda or discussion relating to an item on this agenda may be delayed at any time.

- I. ROLL CALL.
- II. PUBLIC COMMENT.

(Because of time considerations, the period for public comment by each speaker may be limited, and speakers are urged to avoid repetition of comments made by previous speakers.)

III. APPROVAL OF MINUTES OF THE FEBRUARY 29, 2012, MEETING.

For Possible Action

For Possible Action

- IV. DISCUSSION REGARDING CHANGES TO THE HIGHER EDUCATION FUNDING FORMULA AND HIGHER EDUCATION FUNDING IN NEVADA BY NEVADA SYSTEM OF HIGHER EDUCATION STAKEHOLDERS:
 - a. STUDENT REPRESENTATIVES
 - b. FACULTY REPRESENTATIVES
 - c. OTHER INTERESTED STAKEHOLDERS

For Possible Action

V. PRESENTATION AND DISCUSSION REGARDING THE ALTERNATIVE HIGHER EDUCATION FUNDING FORMULA PROPOSED BY THE NEVADA SYSTEM OF HIGHER EDUCATION.

For Possible Action

VI. PRESENTATION AND DISCUSSION ON THE LUMINA FOUNDATION'S INITIATIVE RELATING TO INCREASING THE NUMBER OF CERTIFICATES AND DEGREES AWARDED BY HIGHER EDUCATION INSTITUTIONS.

Dr. Mario Martinez, Professor, University of Nevada, Las Vegas

For Possible Action

VII. PRESENTATION AND DISCUSSION REGARDING EFFORTS MADE BY THE NEVADA SYSTEM OF HIGHER EDUCATION TO IMPROVE THE NUMBER OF HISPANIC STUDENTS WHO COMPLETE COLLEGE, INCLUDING EFFORTS TO ATTAIN HISPANIC-SERVING INSTITUTION DESIGNATIONS.

Dr. Magdalena Martinez, Assistant Vice Chancellor for Academic and Student Affairs, Nevada System of Higher Education

Edith Fernandez, Interim Director, Student Success Initiatives, College of Southern Nevada

For Possible Action

VIII. PRESENTATION AND DISCUSSION REGARDING THE WORK AND RECOMMENDATIONS OF THE NEVADA SYSTEM OF HIGHER EDUCATION'S FRESH LOOK AT NEVADA'S COMMUNITY COLLEGES TASK FORCE.

For Possible Action

IX. DISCUSSION REGARDING THE PROVISIONS IN THE CONTRACT WITH COMMITTEE CONSULTANT SRI INTERNATIONAL RELATING TO STATES' USE OF STUDENT ENROLLMENTS AS A BASIS FOR HIGHER EDUCATION FORMULA FUNDING (CONTRACT DELIVERABLE #2) AND STATES' INCLUSION OF PERFORMANCE RELATED COMPONENTS IN HIGHER EDUCATION FUNDING FORMULAS (CONTRACT DELIVERABLE #3).

For Possible Action

- X. PRESENTATION AND DISCUSSION REGARDING SRI INTERNATIONAL CONTRACT DELIVERABLES #2 AND #3:
 - a. STATES' USE OF STUDENT ENROLLMENTS AS A BASIS FOR HIGHER EDUCATION FORMULA FUNDING (CONTRACT DELIVERABLE #2).
 - b. STATES' INCLUSION OF PERFORMANCE RELATED COMPONENTS IN HIGHER EDUCATION FUNDING FORMULAS (CONTRACT DELIVERABLE #3).

XI. PUBLIC COMMENT.

(Because of time considerations, the period for public comment by each speaker may be limited, and speakers are urged to avoid repetition of comments made by previous speakers.)

XII. ADJOURNMENT.

Note: We are pleased to make reasonable accommodations for members of the public who are disabled and wish to attend the meeting. If special arrangements for the meeting are necessary, please notify the Fiscal Analysis Division of the Legislative Counsel Bureau, in writing, at the Legislative Building, 401 South Carson Street, Carson City, Nevada 89701-4747, or call the Fiscal Analysis Division at (775) 684-6821 as soon as possible.

Notice of this meeting was posted in the following Carson City, Nevada, locations: Blasdel Building, 209 East Musser Street; Capitol Press Corps, Basement, Capitol Building; City Hall, 201 North Carson Street; Legislative Building, 401 South Carson Street; and Nevada State Library, 100 Stewart Street. Notice of this meeting was faxed for posting to the following Las Vegas, Nevada, locations: Clark County Government Center, 500 South Grand Central Parkway; and Grant Sawyer State Office Building, 555 East Washington Avenue. Notice of this meeting was posted on the Internet through the Nevada Legislature's website at www.leg.state.nv.us.

MINUTES OF THE COMMITTEE TO STUDY THE FUNDING OF HIGHER EDUCATION (Senate Bill 374 of the 2011 Legislative Session) February 29, 2012

The Committee to Study the Funding of Higher Education (Senate Bill 374 of the 2011 Legislative Session) held its third meeting of the 2011-12 Interim on February 29, 2012, in room 1107, Greenspun Urban Affairs Building, 505 South Maryland Parkway, University of Nevada, Las Vegas, Nevada. The meeting was videoconferenced to room 3137, Legislative Building, 401 South Carson Street, Carson City, Nevada; room 111, Center for Molecular Medicine, 1664 North Virginia Street, University of Nevada, Reno, Nevada; and room 130, Greenhaw Technical Arts Building, 1500 College Parkway, Great Basin College, Elko, Nevada.

COMMITTEE MEMBERS PRESENT IN LAS VEGAS:

Senator Steven Horsford, Chairman Senator David Parks Assemblyman Paul Aizley Assemblyman Pat Hickey Assemblywoman Debbie Smith Hugh Anderson Jason Geddes Gregory Mosier Kevin Page Michael Richards Spencer Stewart Michael Wixom

COMMITTEE MEMBERS PRESENT IN CARSON CITY:

Heidi Gansert Julia Teska

COMMITTEE MEMBERS PRESENT IN RENO:

Mike Dillon

COMMITTEE MEMBERS PRESENT IN ELKO:

None

COMMITTEE MEMBERS ABSENT:

Senator Ben Kieckhefer

STAFF MEMBERS PRESENT IN LAS VEGAS:

Alex Haartz, Program Analyst, Fiscal Analysis Division Brenda Erdoes, Legislative Counsel, Legal Division Patti Sullivan, Committee Secretary, Fiscal Analysis Division

STAFF MEMBERS PRESENT IN CARSON CITY:

Mark Krmpotic, Senate Fiscal Analyst, Fiscal Analysis Division Eileen O'Grady, Chief Deputy Legislative Counsel, Legal Division Kristin Roberts, Senior Principal Deputy Legislative Counsel, Legal Division

STAFF MEMBERS PRESENT IN RENO:

Rick Combs, Assembly Fiscal Analyst, Fiscal Analysis Division

EXHIBITS:

Exhibit A – Agenda and Meeting Packet

Exhibit B – Nevada System of Higher Education – An Alternative Formula, Funding the Nevada System of Higher Education

I. ROLL CALL.

Chairman Horsford called the meeting of the Committee to Study the Funding of Higher Education to order at 9:10 a.m. and the secretary called roll. All the members were present at the meeting, with attendance in Las Vegas, Carson City and Reno, except Senator Kieckhefer who was absent excused, and Mr. Dillon joined the meeting in progress.

Senator Horsford thanked the Nevada System of Higher Education, University of Nevada, Las Vegas (UNLV), President Neal Smatresk and their staff for allowing the committee to hold its meeting on the UNLV campus. He said it was great to be on campus. The meeting was important because it afforded students and faculty an opportunity to provide input about a new funding formula for NSHE and for the selection of a contractor to help the committee with information to make recommendations to the next Legislature and the Governor for a new funding formula.

II. PUBLIC COMMENT.

Chairman Horsford asked for public comment on any agenda item from attendees, including students and faculty in Las Vegas, Carson City, Reno and Elko.

Ricardo Carnejo, Economics student at UNLV provided comment and pointed out that currently the overall mission of NSHE was that all institutions were access institutions; however, as the different missions of the institutions were changed, the overall mission of NSHE would be changed as well. Moving forward, he thought the system needed to cater to the needs of the most affected students, as the missions were differentiated

within institutions. Mr. Carnejo said the most affected students included those from minority backgrounds, students who were first-generation for higher education, and low-income students. With the impending changes, not all institutions were going to be considered access any longer and he was concerned those students would be given a value, perhaps a higher value at some institutions and a relatively lower value at other institutions. He said if that were case then tuition might be higher at some institutions, no longer making them access institutions. Mr. Carnejo thanked the committee for its time and for holding the meeting at UNLV.

Aimee Riley, President of the ASCSN and chair of the Nevada Student Alliance representing 115,000 students across the state offered comment on a few key points including the tremendous equity issue in higher education, especially at the College of Southern Nevada (CSN). She said there was a large disparity in the funding of CSN versus the other institutions with CSN receiving the least funding, but serving the most (approximately 40,000) students. Ms. Riley stated CSN also served a vulnerable population of students who could not afford to go to UNLV or other higher education institutions. She said CSN students supported the retention of out-of-state tuition and fees at the institutional level. This allowed the institutions to control their resources and keep the monies locally on campus in order to best meet the needs of the students and increase student success. Another point Ms. Riley addressed was to insure meaningful higher education for students by offering meaningful quality degrees that allowed for training. Offering certificates of value that were stackable, allowed for credits to be earned toward Certificates, Associate's, Bachelor's or Master's degrees. She thought it was important to keep local talent in Nevada rather than have people leave in pursuit of better opportunities. Ms. Riley indicated the students were concerned about paying more for less and the state needed to start investing in higher education. She realized during every legislative session it was a tough choice to cut the higher education budget, but from a student perspective cutting the higher education budget meant higher tuition and diminished student services. This process reflected a constant cycle of cutting funding and the students paving more for less services. Ms. Riley said students could not afford higher tuition as many were unemployed; others balanced family demands with parenting and attending classes. Many people had returned to school to gain new skills, become marketable and give back to the state. Ms. Riley stressed that students wanted to be contributing members of the state, but were seeing less opportunity to access higher education. She thanked the committee and asked the members to keep her points in mind when making decisions.

John Farley, President, Nevada Faculty Alliance, UNLV Chapter, Physics Professor, UNLV, urged the committee to throw out the current funding formula because it did not fund UNLV or the University of Nevada, Reno (UNR) as research institutions. He explained that at a research institution faculty in the sciences had to write proposals to funding agencies to secure funding, to administer grants and contracts, to perform experiments in a laboratory and perform calculations, and to write up manuscripts for publications in scientific literature. It was a large amount of work which was not reflected in the current funding formula. He thought the current funding formula did not promote the interests of UNLV or UNR as research institutions, and the expectations

placed on research institutions were high as state leaders looked to university based research to help lead the way to economic diversification and economic recovery. Dr. Farley expressed that research was a part of education, not just graduate education, but also undergraduate education. In the physics department, it was a requirement for a student to perform a research project in order to obtain an undergraduate degree. He said 300 undergraduate students did research in his laboratory in the summer of 2011 and at UNLV, typically 50 undergraduate students from all the sciences participated in research. There were also undergraduate researchers in engineering at UNLV, with similar programs at UNR and about 40 students statewide who participated in the UNR/UNLV undergraduate research symposium held every April in alternating locations north and south. Dr. Farley said the money spent on research produced a return for students who worked in a laboratory at all levels, a return for the regional economy for the quality of life that benefited from innovation, and a return for the system of higher education and the university, which received a significant return on its investment in funding invested in scientific research. He asked the committee members to not only consider including a research component, but to have it be sufficient to create incentive for the university to fulfill that part of its mission. He thanked the members and stressed for the committee the need to adopt a new funding formula that reflected the research mission of the research universities.

Neal Smatresk, President, UNLV, thanked the committee and welcomed them to the campus at the Greenspun Urban Affairs Building, an incredible facility made for the benefit of advanced study for students in communications. He said it was one of the smartest classrooms in the country due to the technology, and showcased the kind of opportunities that could be created in higher education for students to participate in very sophisticated programs of education. Dr. Smatresk wanted the committee to know that all his colleagues in NSHE were dedicated to producing high quality education for an incredible workforce to help the state create the future needed in Nevada. He appreciated the work the committee was doing and offered UNLV's services to help the members understand the university's research mission or how the university interacted with UNLV's colleagues at CSN and Nevada State College (NSC). Dr. Smatresk encouraged the members to contact UNLV for a tour and for an in depth and granular understanding of the university. He wished the committee luck in its deliberations in support of higher education in Nevada.

Christopher Hudgins, Dean of the College of Liberal Arts, UNLV, said the College of Liberal Arts was currently the largest college on campus. He came to UNLV in 1976 when there were only about 8,000 students and no Ph.D. programs. Dr. Hudgins noted the College of Liberal Arts was proud of the fact that the English Department graduated the first Ph.D. candidate in UNLV's history. As English Chair for many years, Interim Dean and Dean, he had seen three or four periods of financial strife and then the blossoming after that financial strife, as well as decades of regional wrangling and of tension between the System and the state. He urged the committee that it was time for a new formula and to be sure the process included an independent assessment, because it was time Nevada recognized the need for national expertise to support the state's efforts in solving the decade's old problem. Dr. Hudgins also stressed the

committee consider the central importance of the differentiation of mission of the two research universities and the continuing importance of those research universities to the economic diversity building for the state. He said research faculty at UNLV and UNR taught in undergraduate classrooms as well as graduate classrooms and there was educational excitement from the undergraduates as they began to perform research at the university level. That research prepared the undergraduate students for graduate work and for entering the workforce. To have a graduate faculty member who was on the cutting edge of his research field was central to a good undergraduate and graduate education. Dr. Hudgins asked the committee to consider the research libraries in any realistic research based formula. He thought the research libraries were essential to the universities mission to serve the community, undergraduate students, graduate students and research faculty. He said he was fortunate to be educated at a top ten North Carolina academic college and while there watched the birth of the research triangle. Davidson College where he was a student was currently one of the most successful research university based diversity operations in the county and it had made an impact on North Carolina. Dr. Hudgins thought the committee had the opportunity to make an impact on Nevada and take the first steps toward the planning for the state's future, which depended on the higher education system. He emphasized Nevada needed a funding formula that would allow the two research universities to do impactful work for the state, the students and for the communities, both north and south. Dr. Hudgins thanked the committee for letting him speak and appreciated their attendance on campus.

Peter Starkweather, Dean of the Honors College, Biology Professor, UNLV, was a faculty member for 33 years and came to UNLV before it was a research university, with only 8,500 students. He was privileged to facilitate the development of UNLV's first Ph.D. program in collaboration with UNR and the Desert Research Institute (DRI), which started graduating Ph.D. students in the late 1980's. Dr. Starkweather said when the university began to develop Ph.D. programs in English and the life sciences the quality of the faculty attracted to UNLV was palpable. The university was suddenly an institution that was attractive to the best new faculty and senior faculty from throughout the country and the world, which was a dramatic change from the demographic hiring profile of non-research institutions. He stressed the students needed research and creative, active faculty. In attracting instructors for the Honors College, he looked for great teachers, those who were interested in interacting with bright undergraduates and those active in their respective fields of research and creativity. That criteria was important because the faculty needed to model great behavior, academic behavior and intellectual behavior to which the students could aspire. Dr. Starkweather also said the Honors College was privileged to oversee the senior thesis work at UNLV, which included exceptional research and creativity covering a full range of subject matter. The faculty members who served as mentors for the senior theses were all creative individuals, active in research and added to the intellectual vibrancy of UNLV, Southern Nevada and the state. If UNLV did not have an established mission, it would not have been able to attract these types of faculty members to promote the continuity of the mission that research and creativity implied. He noted that four out of five Honors College students went on to graduate or professional schools, with most receiving

full-ride scholarships. Numerous students had won nationally competitive scholarships, including Fulbright Fellows, Truman Fellows and Goldwater Scholars, which he attributed to the students working with scholars, the faculty at UNLV. Dr. Starkweather urged the Committee to make recommendations that reflected the necessity of the research institutions (UNLV, UNR and DRI). He also asked the committee to recognize that research institutions represented the central success of American higher education that made it a model for the world and why so many students came from hundreds of countries to attend. It was clear to those in academia that UNLV needed to stay as a research institution, and continue to grow. He thanked the committee for allowing him to speak.

Tom Bussey, Doctoral Candidate, Chemistry Department, took the opportunity to echo the previous comments made about the research mission and the research component of the funding formula. He chose to pursue higher education in the state of Nevada and at UNLV because of the research opportunities available in the departments, which he did not attribute to state supported funding. He thought research was able to flourish at UNLV in spite of the current funding formula and the state needed a funding formula that encouraged more students to come to Nevada to pursue the rigorous and important work at UNLV, UNR and DRI. Mr. Bussey said the state needed a research component to the funding formula that supported that mission and did not disregard its importance. He was privileged to serve in the Graduate and Professional Student Association (GPSA) as the chair of the Grants Committee, which funded graduate student and professional student research and conference travel. One of the things the committee took seriously was not only equability and distribution of funds, but also the efficiency of the funds that were spent and whether the university received a return on the funding. Mr. Bussey stated research produced a significant return on investment. The research conducted at UNLV brought in a significant portion of budgetary funds that were able to Supporting research through the funding formula would support other activities. encourage more faculty and more research. He thanked the committee and encouraged the members to consider including research in the funding formula.

Mary Guinan, Dean of the School of Community Health Sciences, UNLV, had been at the university for seven years and there was not public health training before her arrival. She was hired to build a research program and was recruited because of her 20 years of experience doing research in the health sciences at the Centers for Disease Control and Prevention in Atlanta, Georgia. Dr. Guinan was a professor of epidemiology and emphasized to her students and faculty that evidence-based decision making was necessary. She supported the idea of performance based funding and to have metrics that showed what the performances were, which became evidence-based decision making. Dr. Guinan said her unit at UNLV brought in more money per faculty member to perform undergraduate and graduate research than any other unit at UNLV. She noted an undergraduate student along with Dr. Shawn Gerstenberger studied the mercury levels in canned tuna sold at supermarkets throughout Southern Nevada and the research revealed excessive mercury in the tuna. The student published the data, which was sent all over the nation, and the student went on to a scientific career. It was very important research done by an undergraduate student with a graduate student

idea. Dr. Guinan thought it was important to understand that the education of a student at a four-year research based university cost more than at a two-year college and the cost difference needed to be acknowledged. She said the difference in the percentage in cost to educate a student in the two types of institutions should be included in the formula, along with metrics for performance. She thanked the committee.

Sebring Frehner, student, NSC, and community organizer in Southern Nevada requested to develop a new funding formula and discard the current formula. He thought the current formula might have worked when it was originally implemented, but it had not worked for a while. Mr. Frehner asked the committee to consider a new formula to be data driven by metrics. He thought one that was data driven by metrics was the most equitable way to distribute funding and wanted to use the successes of the institutions in a way that allowed for the schools to be challenged to greater heights. He did not want to see funding reduced another year in a row for education throughout the state and in in addition to thanking the committee said it was important to get the formula right this time.

Carol Servino, Ph.D. student, Public Affairs program, Greenspun College of Urban Affairs commended the committee for tackling the funding formula problem realizing the solution was not easy. She had lived in Las Vegas for five years and moved to Nevada after earning her Master's Degree from a research university in New Jersey. She had not considered studying for a Ph.D. as an undergraduate. When she was accepted into the Ph.D. program at UNLV after working a year with her Master's Degree qualifications, she began as a graduate assistant and learned she was a good Talented undergraduates appreciated the time she spent providing instructor. feedback, support and encouragement, which was what she needed as an undergraduate. Ms. Servino said she was traveling to New York to deliver a paper based on her research in the social sciences on life and death, specifically on the deaths of police officers and motor vehicle crashes. She credited the GPSA with providing funding for students such as her for research, because graduate students typically did not qualify for other funding. Ms. Servino noted that in one the classes she taught, Enterprise Risk Management, she explored the difference between risk and uncertainty in which uncertainty was the unknown, but risk could be measured and was a degree of a possibility. She taught her students that one could minimize the risks. She asked the committee to consider that there was a difference, it cost more, but with retooling and reform, she was hopeful it could be a change for the better. Ms. Servino thanked the committee and supported the committee's process to fix the problem.

Mark Ciavola, undergraduate student, College of Liberal Arts, UNLV and a Senator representing the College of Liberal Arts in the Consolidated Student University of Nevada (CSUN) thanked the committee for its work on the funding formula and was privileged to have worked with many of the members on past issues that spanned party lines and ideology. He said it was extraordinarily important to have a proper funding formula to address some of the funding challenges and thought the universities and colleges should be able to retain more of the revenue collected in order to be more independent from the volatility of the state's General Fund. Mr. Ciavola noted that the

recent economic crisis greatly affected Nevada, compared to other states. He said when the state's General Fund was affected, so was education. He was concerned with performance-based measures because the link between that type of funding and graduation rates could create an issue like No Child Left Behind, where people "gamed" the system to receive funding at the cost of producing well-educated graduates. Mr. Ciavola reminded the committee that tuition at UNLV had doubled since 2005 and students suffered the consequences. He implored the committee to find an adequate and appropriate solution, with efficiency built into decisions made during the study, and to pass it in the 2013 Legislature, so the state could move forward. Mr. Ciavola thanked the committee.

Mercedes Shafer, undergraduate student, Sociology Department, UNLV said the formula funding should be rewritten because a formula that took 75 percent from Southern Nevada and diverted more to Northern Nevada without giving the southern students their money back, did not work. She thought the students paid more for tuition and received less in services.

Jim Richardson, Lobbyist, Nevada Faculty Alliance served at the request of Governor Guinn on the last formula study and was also asked to serve on the Assembly Bill 203 committee that addressed problematic and funding issues. When Governor Guinn invited him to participate, he asked if Dr. Richardson thought he could represent all the faculty in the state. Dr. Richardson answered yes and he hoped he had succeeded in speaking for all the faculty statewide on those two committees. He said the last formula study developed a set of formulas that everyone, including the committee, representatives north and south and various institutions agreed to at that time; however, the formula had been tweaked a bit since. When the committees worked on those funding formulas comparison groups were developed for each of the institutions and the committee tried to figure out what the average levels of funding were for the various types of institutions, which became a benchmark of 100 percent of funding. He explained that the state never achieved more than an 85 percent funding level and in recent years, it had been in the low 70 percent. The formula's biggest problem was the lack of money and if 100 percent funding levels at average levels of support had been achieved for institutions of the type in Nevada, he thought many of the problems being addresses at the meeting would have gone away. Dr. Richardson indicated his plea was for higher education funding to become more of a priority in the state and for higher education funding not to be a place to balance budgets in the future. If there was going to be economic diversification in the state, the universities and DRI had to play a role in that important effort, but funded adequately in order to accomplish that role. He thought the committee would approve a new formula that incorporated performance funding in some form. One of the major criticisms of the previous formulas was that the institutions were paid for enrollments and not for graduation rates. Performance funding was a recommendation of the last formula funding committee, but it never got any funding. Dr. Richardson said performance funding should be discussed along with new funding; additional funding on top of what the institutions were currently getting, otherwise it came out of the basic funding that had already suffered tremendous budget cuts. He urged the committee to approve performance funding and thought all the

institutions were ready to face that challenge, but it was going to take new funding to make it effective. The current formula did not include an element for research; however, it was discussed, but was not included due to the lack of funding. He applauded the comments already made by others on the necessity of funding research. needed a workable and sophisticated formula that recognized the importance of research, economic diversification and the effort to encourage entrepreneurship in the state. Addressing the research component supported graduate students' need to work in the labs and then stay in the state once they obtain their training. Dr. Richardson called on the committee to recognize the differentiation within the system where every institution had an important role to play. It was necessary for the formula to recognize the need for new funding for the research institutions, but then not forget the community colleges or NSC. When he was on the Assembly Bill 203 committee, it was strongly recommended that CSN needed a significant infusion of funding to meet its growth to develop proper infrastructure to serve the students and Dr. Richardson still supported that funding recommendation for CSN. He hoped that whatever the committee decided included recognition of the differentiation of the institutions within the system with equitability and a higher priority given for higher education in Nevada than in the past. He thanked the committee.

Chairman Horsford outlined his approach to the agenda for the remainder of the meeting. He intended to take item VII, the status on the NSHE alternative formula funding model, out of order followed by item IV, review and update of the RFP by staff, with possible action by the committee to extend the committee work timeline to allow for additional time for the selected contractor to complete their work. Under item V, the respondents to the RFP would be given 10 to 15 minutes to provide a presentation, with 10 minutes to answer questions from the committee members. Out of fairness to each of the potential consultants, Chairman Horsford intended to ask the bidders to wait in the lobby until called one by one to make their presentation. Before the committee took action on the selection of a consultant, he wanted to take additional comment from faculty, students and other additional stakeholders, which was item VI. Returning to item V, the committee would discuss and select a consultant. He stressed the agenda contained items that reflected an important part of the committee's overall work. The time and effort put into the process would help generate a good work product to be utilized throughout the study.

III. APPROVAL OF MINUTES OF THE JANUARY 11, 2012, MEETING.

Chairman Horsford asked for approval of the minutes of the January 11, 2012, meeting.

SENATOR PARKS MOVED TO APPROVE THE MINUTES OF THE JANUARY 11, 2012, MEETING. ASSEMBLYWOMAN SMITH SECONDED THE MOTION.

THE MOTION PASSED UNANIMOUSLY. (Mr. Dillon was not present for the vote.)

VII. UPDATE BY THE NEVADA SYSTEM OF HIGHER EDUCATION ON THE STATUS OF THE ALTERNATIVE FORMULA FUNDING MODEL.

This agenda item was taken out of order.

Daniel Klaich, Chancellor, Nevada System of Higher Education, reported on two primary activities NSHE had been working on related to the alternative funding formula model. The first was the interaction between NSHE staff with faculty and students to discuss the proposed model, and the second was an update on the status of the model. He pointed out that since the January committee meeting, the interactions with faculty and students regarding the alternative funding model had been numerous. Chancellor Klaich had met with the eight institutional presidents every Friday to discuss the alternative model; had participated in two additional three-hour sessions devoted to developing the model; and provided periodic written updates to the faculty and student body presidents. In addition to written updates, he said there had been town hall meetings including all the institutions and monthly meetings with the faculty senate. He had appeared before the UNLV faculty senate to specifically discuss the model and was "grilled" by the chairs from NSC and CSN. Chancellor Klaich also expressed he had spent one-third to one-half of each of his day on this subject from the beginning of 2012.

The second activity presented by Chancellor Klaich was the work the NSHE had done on the proposed alternative model since the January committee meeting, which was outlined in the handout entitled *An Alternative Formula Funding the Nevada System of Higher Education* (Exhibit B). He outlined three major areas of work the model included (page 2):

- Discipline Clusters and Weights referred to as the matrix
- Performance Pool Funding
- Implementation

Chancellor Klaich said NSHE staff had spent the bulk of their time preparing the matrix for the funding formula, which was the first major area of work. He indicated that staff concluded the current formula could not be fixed and a new formula was needed in order to align NSHE's interest with the state which rewarded goal attainment, performance, data, and metrics. He thought it was important for the formula to reinforce mission differentiation, provide incentives, and be simple and understandable to everyone. On page 6 (Exhibit B) he pointed out a series of principles developed as a result of feedback from different groups of people after his presentation at the January 2012, committee meeting. Chancellor Klaich said NSHE recommended that the new formula allocate General Fund dollars only. In addition, 100 percent of student registration fees and out-of-state tuition would be retained by the respective institution

where it was generated. He indicated the new model proposed the exclusion of non-resident weighted student credit hours, including Western Undergraduate Exchange (WUE) students so that the General Fund appropriation only was based on the work product of Nevada residents. Chancellor Klaich pointed out that if the committee wanted NSHE to be entrepreneurial then retention of the out-of-state tuition would make the system responsible for making that retention profitable at the respective institutions. Other recommendations for the model included basing it on course completions rather than enrollments, and accounting for a research mission of the universities by adjusting upper-division, master's and doctoral weighted student credit hours. The model also reflected a base administrative support for small community colleges, which would be phased out as the college grew. Lastly, he said operation and maintenance of buildings would be in the model; however, staff was struggling on how to make that issue work. Referring to pages 7 and 8, Chancellor Klaich said NSHE staff worked with the National Center for Higher Education Management Systems (NCHEMS) and asked them to prepare a draft instructional matrix that reflected various costs of clusters, which were listed from the lowest to the highest cost (page 7). After NCHEMS provided the draft matrix, NSHE staff catalogued every course offered in the system and gave it back to NCHEMS for their recommendations of weighting assigned to the various clusters (page 8). The weightings were derived from cost studies performed in Texas, Ohio, Illinois and Florida. He explained the weightings were cost informed because these states had done cost studies for many years and had years of longitudinal data that showed relevant trends that were consistent among those states. He said it was important to rely on the longitudinal data from the other states rather than trying to do a cost study in Nevada mainly because of time, but also because it might only reflect a conglomeration of past decisions that might have been good, bad or inefficient.

Chairman Horsford asked about NCHEMS, who they were and their affiliation with NSHE. He thought they had produced some significant conclusions and although it was important to rely on information from other places, it needed to be an "apples to apples" comparison.

Chancellor Klaich said NCHEMS had consulted with the state of Nevada and with NSHE, including the Assembly Bill 203 (2003 Session) study. He had hired NCHEMS twice to obtain data from other states to help with policy information. He said NSHE did not have a formal affiliation with NCHEMS.

Chairman Horsford asked if NCHEMS was a consultant to NSHE and if it was a private company or associated with another organization or entity.

Chancellor Klaich said NCHEMS consulted the system as well as nationally. He indicated NCHEMS was located in Boulder, Colorado and he did not know the actual organization, but it was possibly a 501C-3. In his opinion, NCHEMS was more knowledgeable about higher education funding than any other entity he knew. Chancellor Klaich said it was critical for the selected consultant to the committee to take a hard look at the matrix. If the matrix was discovered not to work, then the whole

proposed funding formula would not work, because it was the matrix that reflected the relative cost of the offerings, it differentiated the mission, and it funded the research component. He indicated it was a cost driven matrix and did not include any policy component.

Chairman Horsford was concerned whenever weights were given that there needed to be a rationale and a justification for the reason behind that intent. He wanted to understand the justification, because it looked like a ranking process. Chairman Horsford also wondered if the cost of the program denoted the numerical rankings and whether the number of tenured faculty in a particular program had any bearing.

Chancellor Klaich stated that an undergraduate liberal arts course would be considered a number 1.0 discipline weight. He said the weighting did consider the number of tenured faculty in a program, but that was the reason long-term longitudinal data was used to develop the matrix because it would difficult to know exactly what an English 101 course was at UNLV, versus NSC and Great Basin College (GBC). He reiterated it was a cost driven matrix.

Continuing, Chancellor Klaich indicated the first driving factor of the proposal was the matrix and the second was the concept of a weighted student credit hour (page 9). The weighted student credit hour was the amount the formula would generate for each weighted student credit hour effectively establishing a system-wide price for course completions, which would then be allocated among the seven teaching institutions. He wanted to also make it clear that this referred to the teaching budgets and not the non-formula budgets or budgets such as DRI. Chancellor Klaich said NSHE staff catalogued every course offered in the system, then catalogued every course completed in the system and that reflected the number of student credit hours completed at every institution throughout the state. The matrix was populated with those student credit hours and then were weighted appropriately. Those weights were broken down among every institution in the system and would be paid on an equal basis. He cited an English 101 course at UNLV would be paid the same as an English 101 course at Truckee Meadows Community College (TMCC). He had been criticized for the higher costs of differing institutions and there were legitimate arguments to be made; however, he expressed that making those types of differentiations were extraordinarily difficult. Pages 1 through 10 (Exhibit B) showed most of the work he did with the institution presidents since January which included looking at the matrix, populating the matrix and then determining where the weights were inappropriate, as well as determining an appropriate factor for a scale for research.

Referring to pages 10 and 11 (<u>Exhibit B</u>), Chancellor Klaich indicated the second area of work for the proposal was performance funding. He was pleased to be partnered with the Governor on a grant through the National Governors Association (NGA) that dealt with data performance, metrics and accountability, which were all part of the NSHE proposal. Performance funding, he thought, was one of the most critical issues

of mission differentiations because a community college was not the same as a research institution. In defining the metrics for performance in this part of the formula, he cautioned there would be different metrics. Chancellor Klaich explained that largely at the universities it was graduation that counted, but in addition, how the institution increased its funded research should also be taken into account. The community colleges would have a different metric because they were access missions. Many students came to community colleges unprepared so it was critical when the college got that student to complete their first college level class. He said the performance pool was a work in progress and expected to have it vetted by the next meeting of the committee in April and provided to the selected consultant. Chancellor Klaich stated the third area of work was implementation (page 13). As consistent with previous formula studies, a phased implementation over two biennia was recommended, with retention of the concept of 3-year weighted averaging to smooth out significant shifts that could occur from one school year to another and from one biennium to another. Chancellor Klaich concluded his presentation by thanking the presidents of the eight institutions who assisted with the model. He said it had been difficult work, but thought it provided critical recommendations to assist the committee in its work and eventually vetted by the selected independent consultant.

Chairman Horsford asked him to explain again if the non-resident enrollments were excluded from the formula and if it included WUE students.

Chancellor Klaich said NSHE participated in WUE, which allowed institutions to accept student from neighboring states at a discounted rate. He indicated that some institutions utilized that method of recruiting while others had recruited with full pay, non-resident tuition. The way the current formula worked, the institution who recruited with full-pay non-resident tuition was at a disadvantage. As an example, he said in the proposed model if an out-of-state resident took 15 credits at TMCC, his credits were pulled out of the calculation entirely and TMCC had to rely on the fees and out-of-state-tuition it received from that student to cover the expense of his education. With this proposal, the state would only pay for the education of Nevada students, not students from other states.

Assemblywoman Smith asked where the cost of remediation factored into the formula.

Chancellor Klaich replied in one way remediation factored in the formula and in another way NSHE would not make a recommendation. He explained that remedial education at a level that could prepare the student for college courses was still funded by the state in the community colleges and those credits were counted in the matrix, but were not given a weighting. It was a controversial discussion because it could be argued that it took more effort and assets to get a student to a college level course and should that be recognized. However, he said NSHE decided not to encourage behavior that seemed to reward underperformance.

Assemblywoman Smith understood why remediation had been shifted to the community college system, but she was concerned that the cost to provide remedial education

would continue to be present, but potentially the funding would no longer be included in the formula.

Chancellor Klaich said remediation was also reflected in the performance side of the calculation. One of the things measured was how quickly students that came to the community colleges not ready for college-level courses were brought up to college level and completed their first course. However, the cost for bringing that student to the college level would not be measured.

Dr. Mosier thought using the student credit hours to fund the research mission might lead to skewing of NSHE's opportunity to align with the economic development plans of the state. He said the industry sectors identified for economic development, including technology, renewable energy and healthcare would not necessarily generate the types of student credit hours generated in other disciplines, but would be rewarded through a budget formula that used student credit hours at the graduate level. Dr. Mosier said the UNLV faculty who spoke in the public comment part of the meeting talked about differentiation of research. He pointed out that those were usually small laboratories, which were very expensive and used by a small number of students, but the budget would be driven by large numbers of students and were not necessarily central to the economic development activity.

Chancellor Klaich said the weighting of upper division and graduate courses was intended to produce a pool of dollars for the universities to use as they see fit in the discharge of their mission and would not be told how to utilize the funding. He said there might be other ways to measure that capacity and build it into the formula, but he was concerned that a metric would be used that would not allow UNLV to advance at an appropriate pace and creation of a pool based on the activity at the respective campuses met that need. Chancellor Klaich said there might be another way and the selected consultant might propose something else. He thought it was a fair way to fund research, although he expected it to be a relatively unattractive answer.

Assemblyman Aizley asked if NSHE had tested the formula, had applied it and if it working.

Chancellor Klaich said innumerable tests had been run on the formula; however, one of the problems was that not all the drivers had been worked out to this point. He did not know about the sufficiency of the formula and did not recommend knowing, because part of this exercise was to create a funding environment that returned more autonomy and flexibility of funding decisions to the campuses where it was the presidents' and provosts' job to allocate the funds derived from the formula for the best use on their respective campuses. All of the tests had demonstrated that there was a lower level of funding at some institutions and a higher level of funding at other institutions that people considered like institutions and therefore adjustment needed to be made.

Chairman Horsford said that information would be included in one of the consultant's deliverables and the information reported to the committee.

Chancellor Klaich said NSHE staff looked forward to working with any of the consultants and would provide any data or assistance to anyone the committee selected.

Assemblyman Hickey asked when the model was presented to the consultant would it reflect the various allocation formulas for each institution. He wanted to know if the committee at some point would be reviewing what the numbers could likely be in the formula.

Chancellor Klaich said absolutely and thanked the committee for allowing him to present.

IV. REPORT FROM STAFF ON THE EVALUATION OF PROPOSALS SUBMITTED BY PROSPECTIVE CONSULTANT(S) TO ASSIST THE COMMITTEE IN THE STUDY OF THE FUNDING OF HIGHER EDUCATION IN NEVADA.

Alex Haartz, Program Analyst, Fiscal Analysis Division directed the committee to the meeting packet (page 31, Exhibit A) to the Revised Scope of Work, the original RFP and the Revised RFP. After discussion, at its January 11, 2012, meeting the committee authorized staff to revise the RFP to include the NSHE alternative model and change several items to become optional deliverables under the scope of work. Mr. Haartz said the Scope of Work released in the Revised RFP began on page 37, with the first substantive change on page 39, which directed the interested vendors to include the NSHE alternative model as part of the basic comparative analysis on other states inventories and best practices information. He explained it was not an optional deliverable and the consultant would be expected to analyze the existing NSHE funding formula, the alternative model, and compare both against all other states' funding methodologies. On page 40, he pointed out the first optional deliverable reflecting the committee's interest in understanding how other states funded economic development and workforce development in the context of funding higher education in those states. The revised RFP required vendors to indicate whether they would undertake the optional deliverable and to include the cost for providing the optional deliverable in their proposal. Mr. Haartz indicated the second deliverable (page 41) regarding the use of performance criteria and how states incorporated performance funding included an optional aspect to determine how states' performance criteria aligned with the National Governors Complete College of America initiative, as well as the Nevada Board of Regents' Strategic Plan. The prospective consultant was asked to comment or provide information on which performance measures had been found to be the most effective and why they were effective. Mr. Haartz said another change to the RFP was the revised Committee Work Timeline (page 59, Exhibit A). The consultant was originally going to be selected at the January meeting, but the delay until February necessitated a change in the timeline to provide the consultant sufficient time to complete all the tasks. He also noted the timeline was adjusted for receipt of the final deliverable from the consultant on June 27, 2012, which was intended to be the last committee meeting. Instead, it was proposed for the committee to meet for the final time on

August 15, 2012. Mr. Haartz said all of the other meetings on the timeline were previously scheduled and approved by the committee.

Chairman Horsford asked for a motion on the new revised Committee Work Timeline.

ASSEMBLYWOMAN SMITH MOVED TO APPROVE THE REVISED COMMITTEE WORK TIMELINE ADJUSTING THE SCHEDULE TO INCLUDE THE FINAL COMMITTEE MEETING ON AUGUST 15, 2012. DR. GEDDES SECONDED THE MOTION.

THE MOTION PASSED UNANIMOUSLY. (Mr. Dillon was not present for the vote.)

V. DISCUSSION AND SELECTION OF A CONSULTANT(S) TO ASSIST THE COMMITTEE IN THE STUDY OF THE FUNDING OF HIGHER EDUCATION IN NEVADA AND AUTHORIZATION OF STAFF TO NEGOTIATE A CONTRACT(S).

Presentations of proposals received in response to the Revised Request for Proposals were provided by representatives from the following companies:

- MGT of America, Inc.
- Public Financial Management, Inc.
- SRI International
- The Stillwater Group
- Western Interstate Commission for Higher Education (WICHE)

Chairman Horsford announced each company representative was allowed 15 minutes to make a presentation on their company's proposal, with an additional 10 minutes to answer questions from the committee members. The presenters were taken in alphabetical order according to their company name. To ensure fairness, Chairman Horsford requested that presenters remain in the building's lobby while other company's' representatives addressed the committee.

MGT of America, Inc. – Mary McKeown-Moak, Senior Partner

Ms. McKeown-Moak said MGT was a major public sector consulting firm, which had been established for 38 years primarily to serve higher education. MGT was founded in Tallahassee, Florida, but had expanded to include offices in Austin, Texas; Olympia, Washington; Sacramento, California; and Washington D.C. The firm was known as the premier consulting firm in the development and evaluation of funding and resource allocation models for higher education and in accountability models. She said there were no subcontractors included in the proposal, because MGT had sufficient staff to do the work even on the constrained timeline set for the committee and the selected consultant. Ms. McKeown-Moak thought MGT brought a significant amount of attributes

that made the firm an ideal consultant for this important project. She said MGT completed a study for NSHE in the previous year, which analyzed the current funding formula and made recommendations, many of the same ones the committee was considering in this legislative study. However, Ms. McKeown-Moak emphasized that MGT was not asked to suggest a different funding formula, but rather only to suggest improvements to the current funding formula that perhaps made it more equitable. She said MGT did not address the issue of adequacy; however, the study included performance components, identified the differentiating missions of the institutions and looked specifically at a funding component for research. Ms. McKeown-Moak remarked that MGT had previously worked with numerous legislators, legislatures, legislative committees, executive offices, governors and state boards on funding, as well as with 45 states on funding and resource allocation in higher education. MGT understood the challenges and constraints that went into developing a funding formula. She said MGT also understood the environment in Nevada and the perception of citizens across the state. In the evaluation of the current funding formula, MGT staff traveled throughout the state and met with educators, citizens, students, legislators, and visited every institution including the Desert Research Institute. Ms. McKeown-Moak indicated that MGT was objective and independent, and wanted whatever was developed to be the best possible for the state. She said MGT had an extensive library on funding and resource allocation and performance measures developed through historical records dating back to 1949 when the state of Texas developed its first funding formula. Funding formulas had changed significantly since that time and the new trend was performance funding. Ms. McKeown-Moak noted that MGT's proposal was designed to meet the full scope of work including the optional items. Although MGT planned to meet the first April 13, 2012, deadline she commented it would be tight. However, MGT had a significant database and staff had already been working daily and checking the news to keep up with all the changes other states were making in their funding. It was MGT's intention to work closely with the committee and staff in order to provide exactly what the committee wanted. MGT proposed to perform six tasks that included the initial task of finalizing the work plan. She said the first task was to develop the inventories, and the second task to look at performance components and states funding with a comparison of Nevada to other states. The third task was to look at the use of enrollments as a base and the examination of the budgeting of student-derived revenues comprised the fourth task. The last task was for MGT to attend at least four of the committee meetings. Ms. McKeown-Moak explained that the inventories would compare both the current formula and the alternative formula proposed by NSHE. She also reiterated MGT proposed to provide both of the optional deliverables, which included the funding for state economic and workforce development, and how performance criteria aligned with the NGA Complete College of America. Ms. McKeown-Moak indicated that not every state used funding formulas and some states only used formulas for certain components, such as community colleges. MGT would look at every state that used funding formulas to ensure an understanding of their funding methodologies. She was confident that MGT could complete the assignment within the designated timeline and looked forward to working with the committee and staff.

Chairman Horsford said it appeared that MGT had an extensive background in working with higher education systems and university programs on funding formulas. He understood that MGT had been engaged to make recommendations on the existing formula and that report had been shared with the committee. Chairman Horsford said there were concerns that the material was dated, with some of it dating back to 2006. He asked if the material was dated because MGT did not have access to the data.

Ms. McKeown-Moak said MGT used the 2006 report that was done for the State Higher Education Executive Officers (SHEEO) because it was the last completed national survey. However, the information was updated when MGT looked at the performance funding components. At the time the report was delivered, the performance funding components provided the most recent available information. Ms. McKeown-Moak commented that SHEEO had joined with Western Interstate Commission for Higher Education (WICHE) as another bidder for the current higher education study.

Chairman Horsford asked her to explain if MGT utilized data from SHEEO or relied on certain data they provided.

Ms. McKeown-Moak said MGT gathered data and produced the report for SHEEO to publish and use as a standalone document on their website. The information MGT produced was also used at SHEEO's professional development conference, which was held for the coordinating or governing board people across the 50 states and territories. She indicated the report was the last one published.

Chairman Horsford clarified that 2006 was the last time that information was available and that MGT did the report.

Ms. McKeown-Moak said MGT produced the report and that was the last time the national report was created.

Chairman Horsford said MGT's proposal included the optional components for economic development and workforce development. He asked how MGT would approach those two elements.

Ms. McKeown-Moak said when MGT surveyed how other states funded higher education it was their intent to also look at the states' performance components. If the performance components contained components for economic development and workforce development that information would be extracted. For example, she pointed out that for the last ten years Ohio had used a successful workforce development component. Ohio utilized a performance pool and if the colleges increased the number of graduates in a certain field of study, such as engineering, in response to the needs of specific areas of the state, the college received additional money. She also cited that Hawaii had just started putting in performance components that specifically referred to economic and workforce development. For the second optional deliverable, which was how states performance criteria aligned with the NGA Complete College of America

goals and the Nevada Board of Regents strategic plan, Ms. McKeown-Moak said MGT would look at what each state was doing that tied to both of those initiatives. She indicated that Indiana was doing something specifically related to the NGA Complete College of America goals.

Mr. Page said in Ms. McKeown-Moak's presentation a reference was made to a funding equity study at the University and Community College System in Nevada. He asked what year that study was done.

Ms. McKeown-Moak said it was completed in 2011.

Mr. Page clarified that he was referring to a University Community College System of Nevada sponsored study.

Ms. McKeown-Moak said MGT did that study ten years ago (1999).

Mr. Page noted that she said in her presentation MGT was able to recommend strategies for addressing inequities and he asked for clarification on that point.

Ms. McKeown-Moak stated in the study from 10 years prior, MGT looked at components of the current formula that could lead to greater equity; however, they were just recommendations. For example, she said the matrix Chancellor Klaich presented with the change in weights would lead to greater equity. However, greater equity could not be achieved in a funding formula unless the base is equitable. MGT addressed the issue of equity by including a research component, and performance funding, but did not address the base because it was not requested. Ms. McKeown-Moak clarified that the study done in 1999 was an equity study where equity was analyzed across the system including all the system institutions. Although recommendations were made in the study, only some were followed and others were not.

Since the higher education study was a legislative committee study, Chairman Horsford stressed that objectivity and third-party affiliations were important to the process. He asked how MGT would ensure complete objectivity, considering they had previously worked in a similar capacity as a consultant to the System.

Ms. McKeown-Moak said consultants work for many different clients and based their engagements on the ethic of loyalty to each client. She thought having previously worked for the System gave MGT an opportunity or the challenge of understanding what had occurred in the System. She indicated having interviewed stakeholders across the state also gave MGT the ability to understand the varying and different perspectives of individuals in the north and the south. In addition, Ms. McKeown-Moak considered it a plus that MGT was familiar with some of the members of the committee and Mr. Haartz that only came from having worked with the System previously. She reiterated that MGT's loyalty would be to the committee as the client in this instance.

Public Financial Management Inc. – Randy Bauer, Director; Bob Guadagno, Senior Managing Consultant; Mike Alastuey, Director, Applied Analysis

Mr. Bauer said his area of expertise was in state government practice and he had been with PFM for six years, with previous employment for seven years as the budget director for the state of Iowa under Governor Tom Vilsack and as legislative staff before that time. With his background in state government, he understood both sides of many of the issues addressed in the higher education study. Mr. Bauer introduced Bob Guadagno, Senior Managing Consultant in PFM's higher education group who explained that PFM provided financial advisory services that were debt related services to public and private universities across the country. Mr. Guadagno noted that PFM had been nationally ranked as one of the leading advisors for the past ten years. Mr. Bauer also introduced Mike Alastuey, Director of Public Policy with Applied Analysis, a firm based in Las Vegas. Mr. Alastuey said Applied Analysis was the predominant firm in fiscal and economic analysis in the state of Nevada. Mr. Alastuey said his firm provided innumerable public and private sector clients with fiscal and economic analysis and had worked in public service with the Executive Branch and Legislative Branch with financial analyses related to state and local fiscal policy. Mr. Bauer said PFM was excited to be partnered with Hobbs, Ong and Associates, a Nevada based firm, on the proposal for the study. He noted PFM worked well with Hobbs, Ong because they had similar corporate guiding principles, such as data driven analysis.

Mr. Bauer said PFM was the nation's largest independent financial and management advisor to the public sector and had held that distinction under any metric for the last ten years. The PFM proposal merged several sectors at the firm, including government, which would be led by Mr. Bauer and John Cape. The government sector had worked with 15 states on over 100 projects over the last 8 years. It also merged the higher education sector, where Mr. Guadagno worked to advise and provide financial analytical services to many public universities across the country, including several state systems. Mr. Bauer said the higher education practice had dealt with funding formulas and was currently assisting the state of Tennessee and University of Tennessee system with funding adequacy and how to get additional resources into key areas of higher education. The firm had also worked with major state universities, including the University of New York, related to its Centers of Excellence, which were their economic drivers for the state. Mr. Bauer stated PFM had broad experience with funding formulas. He had recently led a project for the state of Pennsylvania to develop a weighted student funding model for their K-12 system and the exercise determined what resources were necessary for differing types of students to be successful in a particular field of study. The model had been accepted by the state of Pennsylvania and PFM was talking with several other states interested in the same kind of modeling capacity.

Continuing, Mr. Bauer said PFM was excited about the opportunity to work on Nevada's study. The comments made by the students and faculty earlier in the meeting touched on real issues, which were issues on the performance of states across the country. It was PFM's mission to make states and local governments the best-managed entities in the country. PFM had a practice of seriously engaging itself with clients and was a

knowledge based firm, with an understanding and analysis of what was occurring in other states. Mr. Bauer noted that sufficient analysis and data checking were a critical part of the project. He said PFM also had a dedicated research arm used for benchmarking purposes on nearly every project and it would be at the center of Nevada's project. Mr. Bauer reiterated PFM was pleased to be partnered with two Nevada based firms, since both understood the local dynamics and the issues around the funding of higher education in the state of Nevada, as well as other states. He indicated the firms would be an outstanding resource for PFM to meld its analysis of Nevada versus other states. Mr. Bauer remarked there had been much discussion about performance funding as a critical area of interest in states around the country. He said PFM had access to information through their contacts in their higher education practice from states that had recently developed performance based funding components for their funding systems. PFM would be able to augment its database and analysis using that information. In terms of the cost, PFM stood behind its proposal and he said the deliverables would be delivered on time and to the committee's satisfaction, without providing billing until the satisfaction was met. PFM staged its proposal around key activities and deliverables, with the inclusion of the actual dollar amount value for each so if the committee desired the deliverables could be split. He understood the four deliverables had a budget of \$150,000; however, PFM staff had figured a cost slightly higher to perform the actual work. Mr. Bauer assured the committee the firm would sign a contract for the budgeted price of \$150,000. In summary, Mr. Bauer said the state of Nevada had been a PFM client for financial advisory in the past and with this study saw it as an opportunity to partner with two Nevada firms along with an opportunity to work for the state of Nevada. PFM was a national firm with 450 professionals in 33 offices around the country and could provide independent, knowledgeable and professional services. Mr. Bauer indicated PFM would provide whatever resources were necessary to complete the project in an aggressive timeframe, and he guaranteed the committee's desired result to be on time and on budget.

Dr. Richards said one of the things that he looked for in PFM's proposal was an understanding of community colleges. It seemed that much of the company's work was with public and private universities. He asked about PFM's experience with three-tier systems of higher education and specifically community colleges because in this study, four of the seven institutions were community colleges.

Mr. Bauer cited the experience of two key PFM principals, himself and John Cape, who were budget directors for the state of Iowa and the state of New York, respectively. He said the state of Iowa had a strong, thriving community college system and he had been involved in funding formulas established for those institutions. Mr. Bauer indicated there was an understanding or the differing need for differing types of institutions within the state. He thought PFM was capable of recognizing those differences and applying them in a process of analyzing a formula.

Mr. Guadagno said PFM served a number of community college institutions as a financial advisor. The company also had many professionals in the higher education group that worked with community colleges.

Mr. Bauer added that several of the community colleges in the lowa system were represented by PFM as a financial advisor. He expressed there were professionals at PFM who understood what the needs were at a community college as it related to infrastructure, curriculum, and the different types of students and how services were provided to those students.

Mr. Anderson asked of the number of projects that PFM worked on, what percentage were funding formula projects. He noted that PFM's higher education practice has ranked number one consistently over the years, but wanted to know if most of the engagements were with the subcontractor model in each geographic location.

Mr. Bauer said PFM had used the subcontractor model on a number of projects; however, the percentage of the company's work with higher education projects that were formula based was probably a strong minority. He stated the subcontractor model had been used in Nevada where PFM partnered with Hobbs, Ong and Associates, Inc. Often in many instances, states had requirements for minority or women based enterprises as a percentage of the bid and then PFM definitely used the subcontractor model. Mr. Bauer mentioned that PFM utilized a tool known as "Future Perfect" which was a financial management and strategic planning tool used in many state systems as well as public and private universities. The Future Perfect tool was a PFM product, which provided expertise to look at how funding formulas worked with this type of a model for each of the schools within a state system; however, he said it was not something that would be used for each of the schools in Nevada. He expressed that the staff at PFM were practitioners who worked with schools and PFM wanted the venture to be more of a collaborative process with the institutions and with the state system.

Referring to pages 182 and 185 of the meeting packet (<u>Exhibit A</u>), Assemblywoman Smith noted in the Project Plan and Timeline and the Cost Proposal that PFM allocated 40 hours to comparing Nevada's alternative formula. She was concerned with that amount of time given that the committee had shifted its intention from its original direction at the beginning of the Interim Study.

Mr. Bauer said it was difficult to allocate hours to some specific tasks and suspected that the comparison would probably end up requiring more hours. As hours in a proposal were allocated, it was assumed there would be "spillover" among the various activities. Mr. Bauer indicated any current formula or suggested new formula would be a major area of focus when benchmarking because the same benchmarks would have to be identified for the other states.

Assemblywoman Smith was not concerned on whether the appropriate number of hours had been allotted, but she just wanted to make sure the comparison was a significant piece of work, as it had become a big part of the committee's discussion.

Mr. Bauer thought the conversation and questions on the analysis of the current formula would be the same kinds of questions PFM would address. For example, was the cost basis analysis that used four fairly large urban states appropriate for the basis for Nevada? He did not know the answer, but it was something that would be explored.

Dr. Mosier asked how PFM would provide objectivity while working on the project. He thought there were competing firms who submitted proposals who might observe themselves as more objective with regard to the process because of the lack of contact with Nevada. He noted that some of the firms PFM partnered with had existing relationships with a single institution within the NSHE system.

Mr. Bauer assumed Dr. Mosier was referring to subcontractor Hobbs, Ong and Associates, but anticipated their level of effort to be a significant minority of the overall work PFM would perform on this particular study. Mr. Bauer said PFM was engaged in two major practices, higher education practice and state practice neither of which had any relationship, contractual or otherwise with the state of Nevada either past or present. PFM was an independent financial advisor, which meant that there it was not affiliated with any investment banks or political persuasion. He noted the financial advisory practice had a contractual relationship with refunding of bonds, but did not think it was significant to the study. Mr. Bauer said PFM worked on both sides of the aisle in states across the country and was confident that they would be able to navigate any conflict concerns from the committee.

Chairman Horsford asked who would actually be working with committee staff and the System.

Mr. Bauer said he was the point of contact, although there would be a number of individuals, including John Cape and June Matte who would be involved in key activities and discussions with the committee and the System. He also noted Mr. Guadagno from the higher education group, two analysts based in Philadelphia to oversee the data collection and analysis, and a couple of senior managing consultants would all be involved in the project. It was PFM's intent to merge the higher education and the state practices for the project team, but he would be the main point of contact.

Chairman Horsford noted that PFM's cost proposal was higher than the amount indicated for the study. He asked if PFM was willing to meet the cost proposal as a portion of the negotiation or was the cost proposal in the bid PFM's cost.

Mr. Bauer said although the cost proposal showed a total higher than the available funding for the four primary deliverables, PFM would perform the work for \$150,000. The company chose to include a proposal on the optional deliverable concerning economic and workforce development. He remarked that PFM had considerable experience in that area. Mr. Bauer said PFM was willing to negotiate with the state on the cost of the optional deliverable, but reiterated PFM would provide the four primary deliverables for \$150,000.

Mr. Anderson asked if there were any compromises being made in their submission because from a business standpoint it appeared that the company's work cost more than the available funding, but the company was willing to concede the price.

Mr. Bauer responded said PFM was always willing to disclose the hourly rates to do a project and then work with the client. He did not think the small difference in price between the cost proposal and the available funding for the project was outside what the company would consider to be in the realm of discussion and would not compromise their work.

SRI International – Roland Stephen, Senior Economist

Mr. Stephen would be the leader of the project team and had an extensive background for the types of challenges the state of Nevada faced. He cited his work before joining SRI International was as a faculty member and leader in an economic development technology based entity in the research triangle based at North Carolina State working on issues across North Carolina. Mr. Stephen said SRI was well known as a very large, independent, non-profit basic research organization based in Menlo Park, California, with its Center for Science, Technology and Economic Development (Center) in Roslyn in the Washington D.C. area. The Center had an international reputation in science and technology policy, economic development and had partnered with Brookings Institution on Nevada's state economic plan that was completed in 2011. Mr. Stephen noted that project was a great experience for SRI and learned about Nevada through engagements in all the regions, which would help to set the agenda for the future of the state. He said like all states, Nevada needed to look for the way forward following the big recession. SRI's work with Brookings and with Nevada had set some goals and the next step included working on higher education, which he said was central to the future of Nevada. Mr. Stephen commented on SRI's experience including work on a project in the Tampa Bay, Florida area that aligned economic development goals, skill clusters. and workforce institutions as well as helping the National Science Foundation benchmark STEM (Science, Technology, Engineering, Mathematics) preparation in the research universities. He thought it was the committee's expectation to have a report, which was a "roadmap" including formulas, and performance criteria, but which also answered how the state would align its institutions of higher education around the agreed and shared goals for the future development of the state. SRI had the technology to access existing data sources to gain the data to provide an independent analysis, but he indicated any of the proposals received for the study could all do that at a high level. However, he pointed out that SRI knew what the questions were and could provide information to help the committee get the needed answers, but SRI would not provide the answers, that task would fall to the committee. Mr. Stephen said in listening to speakers during the meeting it was clear that the current formula was not liked, but the formula must be revisited because any future design for funding higher education in Nevada would have a formulaic component. He noted a formula was not a goal, it was a measure of inputs and not outputs, because outputs were not a measure of performance. Those were some of the questions called upon by the design of the RFP,

he thought the work of Chancellor Klaich, and the work the System had done with the NGA on performance metrics would be most important. Mr. Stephen noted that earlier in the meeting, there was discussion of what used to be a measurement of full-time student equivalents changing to student credit hours, and if a cost-plus basis was an approach to explore, which were other questions for the committee to answer. SRI could sift practices from other states and identify helpful element in those best practices, but there was no "cut and paste" because Nevada had its own challenges and difficulties; however, it could learn from the other states. Mr. Stephen thought it was a question of the goals rather than the question of the cost to be paid, or the numbers generated that was critical. He said SRI knew those goals. Another NGA report that he liked was called *What Degrees for What Jobs*, and the question of how the state funded the system of higher education had to answer the question of what degrees for what jobs and SRI knew how to do that.

Dr. Geddes received the SRI Brookings Report and found it to be a great roadmap, which he referred to often. He acknowledged that economic and workforce development was a key and large component of what the System did; however, Nevada was also trying to build a richer state in arts, literature, performing arts, English, teaching and the medical fields. These fields of study were not directly tied to economic development, but would build a better state and educate a better citizenry. Dr. Geddes asked how SRI would address those metrics. He noted earlier in the meeting there was talk regarding the matrix and weighting factors and wondered how SRI would factor those versus direct economic development.

Mr. Stephen said those fields counted as economic development in some sense. The seven clusters SRI identified were important because of the critical quality of life questions, which would help the state grow. Furthermore, part of the workforce produced by any system goes into the identified clusters that the state wanted to fuel, but part of it was fed into K-12, public health institutions or the health sector itself. He stressed of the seven sectors SRI identified, the health sciences were going to remain very important big drivers of the economy for every regional economy in the country. Mr. Stephen said SRI's approach would be inclusive and not to make any choices on the state's behalf, but to identify the implications of any particular formula as it worked on a very rich matrix that the Chancellor presented. He acknowledged there were tradeoffs that existed and funding formulas did not produce actual funds. Actual funds were produced by an authentically shared vision by all the regions of the state for the state as a whole and for higher education institutions.

Mr. Wixom found Mr. Stephen's presentation impressive and it included helpful information. Like Dr. Geddes, he too appreciated SRI's work with Brookings and thought it was particularly helpful. He noticed in the proposal that SRI had participated in the Dallas Metro Higher Education Benchmark study, but did not see other relevant higher education project experience. He asked Mr. Stephen to relate SRI's higher education experience with the legislative study.

Mr. Stephen referenced the Tampa Bay project, a large integrated study in which SRI did economic development analysis for the region, and which examined the workforce implications for the higher education institutions in the area. It was a higher education experience and that team of staff had a large amount of expertise working with the data sets, which could be used in this project. He also cited SRI's experience on the Ohio Third Frontier project and couple of other ongoing projects in higher education, which he could not talk about until the studies were finished. Mr. Stephen stressed that SRI could not work on technology based economic development without coupling it with higher education because it was tied together.

Assemblyman Hickey said Nevada's institutions had grown in different ways because of different circumstances. Given that the formula needs to be fair, he asked Mr. Stephen how SRI juxtaposed the issue of equity because that was an underlying issue in the state.

Mr. Stephen said equity was addressed by the institutions that represented the people themselves. He thought data and information would help to reveal equity issues and there would be some tensions that would be explored by research. Seven clusters had already been identified and SRI wanted to build the research capacity in those areas. At the same time, there was indirect benefit from treating other linked areas such as humanities and social sciences equitably and the value they provided. Mr. Stephen said SRI organized the Business Leaders in North Carolina, who historically had been strong supporters of higher education. The leaders were asked when they hired students from the system with degrees, did the degrees mean what they said and the answer was often yes and often no. It was decided that soft skills were needed in addition to technical skills. Critical thinkers, writers, speakers were all needed and those qualities were sometimes neglected by some measures. He thought these were the things that were hard to catch in performance criteria, but were important in terms of outcomes. Mr. Stephen said equity could be grounded in a rich consideration of the skills that mattered for the future of the state. He thought there was a practical way of addressing questions regarding comprehensive institutions that produced students with the right mix of skills. SRI could not resolve longstanding disagreements about the relevant weight of funding; however, there was a joint interest in resolving those questions because of the long-term commitment and shared goals. Mr. Stephen explained where the state might have shortcomings in the commitment by the taxpayers was perhaps the suspicion the goals were not shared. He said SRI was proud of the work it did for Brookings and hoped it set a shared agenda for the state to go forward.

Mr. Page had heard SRI developed the technology software Siri that Apple used for its iPhone.

Mr. Stephen said yes that was true. It was developed in Menlo Park, California where SRI did large-scale basic research in the biosciences, information technology and artificial intelligence. He relayed that Siri was an artificial intelligence project, which was ongoing and funded by a branch of Defense Advanced Research Projects Agency (DARPA).

Chairman Horsford was intrigued by SRI's timeline because it started with providing the deliverable associated with the alignment with the NGA matrix, which was not the case with the other proposals. He was not sure if Heidi Gansert, Chief of Staff to the Governor would agree whether that timeline worked with the other deliverables.

Mr. Stephen said that in seeking to make a clear response to the RFP, his team reordered the timeline based on the dates of the deliverables. He said SRI was not set on that timeline and by agreement the specifications would have to be rewritten, but would be willing to deliver the information in any order. He added that most of the work would be performed concurrently anyway.

Chairman Horsford asked if SRI was partnering with or subcontracting any part of the project to anyone else. He noted that a lot of reference went to the Brookings partnership.

Mr. Stephen replied that SRI was a full-service independent shop that did its own research. He said the work SRI did with Brookings on economic development was a partnership; however, this project was not.

Chairman Horsford asked if SRI had any contracts or if SRI was working with the Nevada System of Higher Education or any of its individual institutions directly. Mr. Stephen said no.

Chairman Horsford said because SRI performed work on the economic development and workforce alignment study, he asked was SRI open to negotiating that deliverable because the committee would expect the whole thing. In addition, he asked if SRI would need the amount of time indicated in the bid on economic and workforce alignment since there was already work done on the subject.

Mr. Stephen said SRI was always open to negotiation including both optional deliverables.

Mrs. Gansert complimented SRI on the work it did with economic development and the report it produced in partnership with Brookings was excellent. She noticed from the proposal SRI had a high level of expertise in economic development and workforce alignment, but the question was the experience with formula funding. Mrs. Gansert wanted to look at formulas versus analysis of workforce development and science technology.

Mr. Stephen explained the formulas required a generic set of skills and SRI had staff with substantial econometric and data skills. He said the existing formulas and data were transparent and well known. As part of the diligence of preparing the response to the RFP, SRI had already identified staff with the necessary skills to look at the formula funding so he did not think there would be a problem providing the information. He thought the most important part was asking the larger questions about formulas and

the goals that they served, which SRI would include in the analysis. Mr. Stephen said there was a great deal of available data for all systems of higher education at the individual institutional level and at the system level. The state would look how the formula funding could be changed a little bit here and a little bit there, but the opportunity for the state of Nevada was perhaps larger. He thought Nevada could be a leader in a mix between formula, performance and then, beyond that, economic development alignment. Mr. Stephen emphasized that SRI was the most suited consultant for that mix.

Chairman Horsford wanted to clarify that SRI had the capacity, expertise and knowledge base to perform data deliverable number one, the inventory and analysis of both the current formula and well as NSHE's proposed alternative formula.

Mr. Stephen said absolutely, and he had no reservations because of SRI's relatively large staff with experience in a wide range of areas and a team had already been identified who were ready and available to do the work.

Stillwater Consulting Group Inc. - Patricia Burch, Managing Principal

Ms. Burch said the project was timely, because like Nevada, other states had either suspended or abandoned traditional funding formulas largely due to financial pressures and constraints. At the same time there were many states in the process of developing new approaches that were similar to or had elements of the focus of the RFP, including performance budgeting, funding based on outcomes rather than inputs, completions, and tuition autonomy. She indicated tuition autonomy could be a "double-edged" sword, but many states were taking different approaches. Stillwater was excited about engaging in an analysis and a discussion of those important policy issues and thought the project had great potential to move Nevada forward focusing more on accountability of higher education with its resulting outcomes. The team of practitioners and experts with a national perspective Stillwater had brought together for the project included herself, Joni Finney and Robert Zemsky. All three principal consultants had a broad range of experience working with public universities, with state systems and legislatures, who understood from various different perspectives what was being done in other states, what worked and why it worked. As highlighted in the proposal, Ms. Finney's five-state study, which was currently being published, looked at five states that had tried various aspects and efforts at performance funding. The study examined the outcomes, the reasons for the outcomes, the policies and the environment behind whether the outcomes were successful, and if the outcomes were achieved. Ms. Burch indicated Stillwater's job would be to provide information and objective analysis, in order for the committee to evaluate NSHE's alternative funding formula proposal and how it compared, or fit with Nevada's goals for higher education. She said Stillwater had a tag line, "clear thinking for higher education" and they aimed to deliver that to the committee. Ms. Burch said Stillwater was committed to thoroughly research, document and clearly present the 50-state inventory requested in the RFP. The analysis of best practices would look at not only what other states were doing, but why and what were

deemed to be critical success factors. Examples of success factors included whether the state had established goals and how the performance budgeting component fit with those state goals; whether or how institutional mission differences among institutions were recognized; and the plan for phasing, which was important in the success or failure. She noted that Stillwater would also look at the various kinds of performance measures used in other states, the definition of student enrollment, and whether the state utilized credit enrollments or enrolled versus completed. The components would be completely researched and Stillwater would offer advice and insight into what would be most appropriate for the state. Ms. Burch said one of Stillwater's strengths was in financial modeling, and included in the proposal as part of the deliverables, was financial analysis and projections of what various formulas or scenarios might affect the distribution of resources among Nevada institutions.

Assemblyman Hickey said Ms. Burch likened tuition retention to a double-edged sword and asked her to elaborate on that concept.

Mr. Burch explained tuition retention on one hand could be a very good thing to give institutions control over their tuition revenues and, depending on the institution, they might be able for example to offset tuition increases by changing their financial aid policies. She said it gave the institution a certain amount of flexibility and incentive, but at the same time if the funding from the state was not increasing or went down then that put upward pressure on tuition. There needed to be some sort of balance or countervailing forces.

Chairman Horsford noticed that Stillwater's proposal did not include the optional deliverable components.

Ms. Burch said as mentioned in the proposal, Stillwater intended to address economic development and workforce development and the NGA matrix where it was a salient factor or element of a state's funding formula; however, they did not plan to provide it as a separate deliverable, which looked at that in all the states.

Chairman Horsford asked if Stillwater was doing any work for NSHE or any of the individual institutions.

Ms. Burch responded the group was not currently doing any work in Nevada. The proposal disclosed that Stillwater had worked with NSC approximately two years prior on some possible reconfigurations of the institution and what the financial implications might have been and how that might also affect their performance in the performance statistics. She said Stillwater was able to gain insight into the inner workings of the current funding formula while working on that project and it was more elaborate than seen in other states.

Chairman Horsford thought she was diplomatic about Nevada's funding formula. He asked how Stillwater would ensure objectivity based on any work that may have

been done for individual institutions in the past. He explained it was a legislative committee so impartial and objective findings were important.

Ms. Burch said Stillwater liked the fact it was a legislative committee and being able to look at the system as a whole. She stressed that Stillwater did not have any particular loyalty or invested interest in any particular institution. As a consultant, it was part of the professional ethics to disclose any sort of conflict, or anything that would interfere with objectivity for the client.

Western Interstate Commission for Higher Education (WICHE) – David Longanecker, President

Dr. Longanecker thanked the committee for the opportunity to present the proposal from WICHE and the State Higher Education Executive Officers (SHEEO) organizations, both of which were located in Boulder, Colorado. He said the two organizations were well qualified to do the work and brought a great deal of experience, expertise and background to the higher education study. In existence since 1952, WICHE was the cooperative of the 15 western states and worked to expand access to high quality post-secondary education for the citizens of the west. WICHE provided direct services to the states through programs such as student exchanges, as well as policy and technical analysis with and for the states. Dr. Longanecker indicated WICHE was also known for its enrollment projections and work in financing post-secondary education, with a strong focus on the use of technology in post-secondary education.

Continuing, Dr. Longanecker said the SHEEO organization included the 50 heads of state higher education systems in the United States and was led Dr. Paul Lingenfelter, who was slated to partner with Dr. Longanecker on the higher education project. SHEEO was well known for its work in higher education finance and provided annual finance information that most other organizations utilized when looking at comparisons of state appropriation and tuition revenues for the states. He thought the two organizations and the individuals involved brought great strength to the committee study. He noted that Dr. Lingenfelter and he were generally recognized experts in this area of work. Dr. Longanecker presented information regarding his education and work experience in various aspects of post-secondary education and finance, as well as the education and work experience of Dr. Lingenfelter. He said the project team would also include Dr. Brian Prescott (WICHE), Director of Policy Research working on data analysis, and Andy Carlson (SHEEO), Policy Analyst, working on higher education finance. Dr. Longanecker noted both organizations were familiar with the state of Nevada, were the contractors on the 2003 Legislature's higher education study implemented through Assembly Bill 203, and had substantial experience working with the Legislature and NSHE.

Dr. Longanecker thought WICHE and SHEEO had a particular advantage with the task of the national comparison of the states, which used funding formulas and those that did not use funding formulas. He said that SHEEO periodically collected data on the ways

every state used its funding formula and had done a survey two or three years prior. Part of the higher education study would include updating the survey to ensure the most contemporary information about how states appropriated funding through the use of a funding formula, how the states that did not use a funding formula appropriated funding, and information regarding the use of performance factors. In addition, he noted, WICHE would access its state higher education policy database, with eight domains, to gather information regarding post-secondary education finance and tuition policy. Dr. Longanecker said WICHE and SHEEO had exceptional connections within the community to get the level of detail required regarding policies and the way states practiced, especially since that was not usually captured in entirety in written documents. He and Dr. Lingenfelter were recognized leaders in performance funding and recognized for their work on performance funding activities and outcomes based funding. Both had served as faculty or advisors to the NGA Complete College of America, the NGA Complete to Compete and the Lumina Foundation for Education's Making Opportunity Affordable projects. Dr. Longanecker said performance funding in the past was considered enrollment funding, which equated to paying for enrollments. The new generation of performance funding focused more on the desired outcomes rather than the inputs, and focused on new ways of looking at productivity and funding strategies for states. He and Dr. Lingenfelter had worked with numerous states, but closely with three major performance funding models considered by the states of Ohio, Tennessee and Louisiana, as well as Washington's effort with community colleges. In addition, some newer ideas were being considered in the states of Arizona and New Mexico. Since WICHE did not have strong expertise in economic development, Dr. Longanecker said his organization would work with the Georgetown Center for Education in the Economy to utilize state-by-state data it had developed. He thought the NSHE Alternative Funding Formula Model was a very strong Twenty-First Century approach to funding, and WICHE and SHEEO would evaluate the alternative model. He proposed to use National Center for Higher Education Management Systems (NCHEMS) for the data analysis, but not the policy analysis of the alternative model. Dr. Longanecker disagreed with Chancellor Klaich's comment earlier in the meeting that the alternative model was a cost based funding formula and not a policy based formula. Dr. Longanecker said all formulas were policy based and the assumptions built into the formulas said a great deal about the values held by the System. He used completed courses, not initiated enrollments as an example from the NSHE alternative model and stated that was a strong policy statement about the value of course completions, which he thought was a positive value.

In conclusion, Dr. Longanecker said the circumstances that faced Nevada were as difficult as any of the states in which he worked. He said the "good old days" were gone and the state had to adjust to a "new normal," which meant working with the funding the state had and, within that amount of money, having a formula that had an equitable way of distributing those funds to the institutions. He thought the institutions would do the best job with whatever amount of funding was available and it was the states' responsibility to make sure that each institution got an equitable share of the distribution. The state also wanted a formula that would provide the right kind of incentives and, potentially, even the rationale for investing more money. He said if the

state was able to provide additional revenue in the future it needed to be spent in the most effective and efficient way possible. In the future, even if the state was able to return some funding to higher education it would not be enough to cover the increasing demand for higher education services in Nevada. Dr. Longanecker indicated Nevada had one of the largest growing and most disadvantaged populations. He thought the population would not be easy to serve, but was imperative to do so if Nevada wanted to be globally competitive in the future. Dr. Longanecker stressed that Nevada needed a formula that helped reinforce increased productivity in the higher education system in a way that was fair to the faculty and the institutions, but drove the institutions to change the way they did business for more productivity than in the past. He said WICHE and SHEEO's experience would be helpful to Nevada to meet that objective.

Chairman Horsford understood that WICHE worked very closely with the state of Nevada and other member systems throughout the West. He appreciated Dr. Longanecker being at the meeting to present the proposal from WICHE.

Mr. Wixom said it was indicated in the presentation that WICHE did not have as much experience in the area of economic development as it did with higher education, but would partner with another entity to address that issue. He asked for more information on that part of the proposal.

Dr. Longanecker did not want to underplay what WICHE had already done in the area of economic development. He said WICHE had worked closely with the states of New Mexico and Arizona as they developed outcomes based funding formulas that included economic development as a major component. However, WICHE would work with Georgetown Center, who he thought was doing the best work in the country on helping to assess the needs of states. Georgetown Center was progressive in building traditional workforce development projections into their analysis. They looked backwards at jobs and job requirements, but also at workforce development projections, which looked forward at retirements. From that information, Georgetown Center tried to match those needs. Dr. Longanecker said in almost every field of endeavor skill requirements had increased for people working in a particular area. He cited manufacturing as an example; running an effective manufacturing plant required employees with a higher skill level necessitating more training and education than was traditionally needed. He explained that Georgetown Center took the increases in skill level requirements that traditionally occurred in the past and built those into the future Using that method of assessment provided information that nationwide 65 percent of the population needed to be educated with some form of post-secondary education, such as a high-value certificate, an associate's degree or bachelor's degree or above. Dr. Longanecker said the nationwide numbers for post-secondary education showed areas the nation would examine and he suggested for Nevada to do the same in order to become the state its citizens wanted it to be in the future. It would be important to explore the types of industries to build, and what it would take, as well as the incentives required, for the higher education system to develop a workforce. He noted the state would have to recognize that much of the talent needed would come from somewhere else and the talent created in Nevada would go somewhere else, but overall it was necessary to have a higher education system that was strong enough to provide what was needed in the state.

Assemblywoman Smith asked him to address why he only mentioned the faculty and the institutions when he referred to fairness, but did not mention the students.

Dr. Longanecker said he absolutely should have mentioned the students. He thought the students who spoke during the public comment earlier in the meeting were very poignant in their presentations. He said almost all the work WICHE had done included trying to get states to think about the three legs of their financing stool as critically He pointed out that Nevada did two of the three well in its report, appropriation and tuition revenues. Dr. Longanecker explained that tuition revenue was both an affordability and resource issue. Absent adequate tuition revenue, the institutions could not perform the needed job but with too much tuition revenue, the students could not afford to pay for school. However, the third piece that states spent much time talking about was financial assistance. He pointed out that Nevada had a large merit-based program, but not a need-based financial aid program. WICHE considered affordability as a multi-faceted issue. The first issue was whether students could afford to go to college, not whether it was easy to go to college, and he said there was a difference. The second issue was how the system handled it for those students who could not afford to go to college and the third issue was if it was affordable to the state. In an ideal system, from a student affordability standpoint there would be infinite amounts of state resources so the system did not have to charge tuition and he pointed out to some extent that had been the case in the West until about 15 years prior. Dr. Longanecker noted that Nevada was no longer a small state, but rather a growing state with a much larger disadvantaged population. He said it would take smart public policy to be able to address the balance in what students can afford to pay, what the state could afford to pay, bringing that together, and assuring that the institution could afford to provide a quality experience.

Chairman Horsford made clear for the record that the Board of Regents passed and the Legislature required a set aside from any tuition increase based for needs based scholarships.

Assemblyman Hickey said Dr. Longanecker referenced in WICHE's response to the RFP a clear differentiation of mission between the institutions, which would result in discouraging unproductive competition between institutions. He asked for more information on that subject.

Dr. Longanecker said presently in America there was a sense that competition was always good and should be fostered, which held some merit. In the public arena where there was limited funding and the natural affinity for institutions to try to be something other than what they were, a state needed to manage that concept so there was mission differentiation. He pointed out there were three types of institutions in Nevada with different reasons for existing. The community colleges served an exceptionally key role both in terms of workforce development and in preparation of students to move on

to 4-year universities. That mission made financial sense from a production side, but it was important for there to be good transition points for students along the way and to make sure that those community colleges were not trying to become more expensive and not focused on their mission. Dr. Longanecker said Nevada State College was the second type of institution with an efficient production process for baccalaureate degree recipients and the state needed to make sure that fit into the mission. Finally, there were three research institutions, two with large instructional components. He thought the difficulty for Nevada was that UNR and UNLV were the state's access institutions originally and now that the state had grown it made logical sense for them to become more differentiated, but it was hard to change the past philosophy. Earlier in the meeting, the committee heard that 30 years prior UNLV was not a research university. He noted it was a baccalaureate college for all practical purposes and now it was a research university, which was a different roll and mission to be protected and reinforced. Dr. Longanecker thought it was very important to have clear mission differentiation.

Chairman Horsford asked whether WICHE had included a cost component for the optional deliverable on the alignment with the NGA.

Dr. Longanecker said was not included as an optional deliverable, but it would be provided at no additional charge. WICHE considered it an important component of the overall analysis, which would be incorporated within the work that they would perform.

Chairman Horsford inquired if WICHE was going to subcontract with the Georgetown Center on workforce development.

Dr. Longanecker said WICHE did not anticipate subcontracting with the Georgetown Center. He indicated the Georgetown Center had done a 50-state analysis of the workforce demands by field of study and WICHE expected that work would provide a strong enough foundation to utilize for the economic development part of the study. If more information was needed WICHE would see about subcontracting with the Georgetown Center within the price of the contract with Nevada.

Chairman Horsford wanted to understand if the State Higher Education Executive Officers (SHEEO) provided a baseline of data to every system and the information was readily available, because Chancellor Klaich was a part of that organization.

Dr. Longanecker said the information was readily available, but it was not entirely up-to-date. They intended to survey the 50 states regarding the financial systems they used and would perform the survey using the original survey questions, and add additional questions the committee asked for in the RFP.

Chairman Horsford asked when the last survey was performed and Dr. Longanecker replied in 2008.

Chairman Horsford wanted to know how WICHE would ensure a level of objectivity for this legislative study because NSHE was a member of WICHE and Chancellor Klaich served on SHEEO. He stressed that a great amount of objectivity was need so that whatever findings were discovered they would be credible and not viewed as skewed one way or another. Chairman Horsford added that the state had a great relationship with WICHE and so it was a difficult situation.

Dr. Longanecker commented that the issue of maintaining objectivity was a legitimate and standard question whenever WICHE was working in a state, because generally they worked with all of the constituents in a state and had a relationship with many of the states. He said WICHE was committed to giving the committee an impartial analysis. Dr. Longanecker said WICHE tried to speak truth to power and provide the best analysis possible. That was the way WICHE built its reputation over the prior 50 years and he noted the only way to sustain that reputation was to provide an impartial analysis.

Returning to the subject of updating of the SHEEO data, Chairman Horsford inquired whether that data would be readily available for SHEEO to share with anyone else who wanted it after all the 50 states were updated in the course of the scope of work for Nevada's study.

Dr. Longanecker said the data the states provided would be available. It was a potential dilemma for both WICHE and SHEEO to provide such information in the public domain. However, the analysis, the perspective of how Nevada compared to the other states would be exclusive information only to be shared by the state if it wished. He thought it was going to be a unique work product that could be valuable to other states and could be valuable to Nevada to be known to be working in this direction. If it turns into a piece of legislation that WICHE could share and perhaps write a case study that would be useful to other states to learn from then that would be great, but entirely up to the state whether to do that or not. Dr. Longanecker thought this was a potential leadership role for Nevada.

Chairman Horsford called for a recess of the meeting at 12:31 p.m.

The meeting reconvened at 1:27 p.m.

After hearing all the presentations from the potential consultants, Chairman Horsford asked the committee members to provide their overall thoughts, along with any issues or concerns regarding the selection of one of the bidders as the committee's consultant for the study. He wanted to determine from the members if there was a consensus on a particular consultant before the actual selection. Based on direction from Legislative Counsel, Chairman Horsford explained it was intended for the committee to select a consultant as a first choice and to authorize staff to negotiate with that consultant on a contract. He said the committee also was charged with selection of another consultant as a second choice in case the contract negotiations with the first consultant were not successful.

Mr. Anderson said that as he listened to the presentations he reviewed the original intent of the committee. He thought the committee should make a recommendation that would be fair, transparent and defensible to students, faculty and administration, and ultimately effective. Mr. Anderson said the committee should focus on the work product of a potential consultant as the goal of the committee's decision, to provide a conclusion divorced from politics as much as possible. Lastly, the committee should focus on the desired outcomes as it related to education, a work-ready student graduate population and all the intended components the committee needed to address, including research and the community colleges.

As the committee made its decision on selection of the consultant, Mrs. Smith was concerned with the issue of potential conflicts or bias in order to be successful in the committee's mission. She also addressed the issue of the state potentially paying the consultant to gather information that was already available to Nevada and whether the information that was garnered as part of the study might be used by any of the contractors. Mrs. Smith stressed that the committee should keep the process of the selection and negotiation with the potential consultant as pure and clear as possible. She indicated reservations based on the proposals and cautioned the committee to keep those in mind when deliberating on whom to select.

Chairman Horsford agreed with Mrs. Smith. He said the issue of funding formulas and allocations was a sensitive topic along with people's perceptions, either real or perceived. Chairman Horsford stressed it was important that the consultant the committee selected be viewed as credible, third party and independent, otherwise the committee would be doing itself a disservice. He was concerned that whatever findings were determined there would be someone wanting to attack those findings, which was his experience from other studies of this nature. The current formula was dead and he thought the committee would decide on a revised or new approach so it was imperative to select a third-party provider to help the committee understand it options. Chairman Horsford noted much had been gained from work with the Governor, the Legislature and the private sector to create a more specific long-term vision for the state especially from an economic development standpoint related to the role of higher education and its programs. He said the study was not about the Nevada System of Higher Education, but rather about the students who attended Nevada's colleges and universities and the faculty at those respective institutions and the Desert Research Institute, which was why the system of higher education existed. Chairman Horsford thought the committee had a great opportunity to select a consultant who would balance those goals and for the study to be a fair and credible process. The study would help determine the future role and the goals of Nevada's colleges and universities, and how the state would support those goals.

Continuing, Chairman Horsford thanked the consultants for their interest in the study and for travelling to Las Vegas to make presentations to the committee. He observed there were some consultants, which had a lot of knowledge or awareness of Nevada's higher education system because of doing work in the past with a particular

institution, with NSHE as a whole or with the Fiscal Analysis or Budget Divisions. Chairman Horsford thought that awareness and knowledge was positive; however, he was sensitive to the issue of not having too many direct affiliations and it concerned him personally because the study needed to be independent. Chairman Horsford provided the following observations on the various consultants. He said MGT of America had a wealth of knowledge and expertise in higher education, but he was not impressed with their alignment with the economic development goals. He viewed it as a weakness of MGT's proposal and surmised that MGT would use SHEEO as a data source, which was the same was indicated in the WICHE proposal, but it was a matter of whether the state would pay to update the information. The PFM Group had much experience and background in public finance particularly with state and local governments and partnerships with some Nevada based firms. He did not did not feel strongly about PFM's explanation of their approach on the evaluation of either the current formula or NSHE's alternative model and thought it should have been a more aggressive Chairman Horsford said SRI International's strength was on economic development, based on their work with the Governor's Commission on Economic Development, which provided a tool for Nevada to use to help position itself to compete for new industries and businesses. He thought that gave them an advantage because they knew where Nevada was trying to go from the cluster and industry perspectives. SRI assured the committee the firm had the expertise to perform the evaluation on the formula and to collect the data, but that would be the area of concern if the committee selected them for the study. Chairman Horsford did not find the Stillwater Group as compelling and thought it was problematic they were not interested in either of the optional deliverables on economic development or the alignment with the NGA. Chairman Horsford noted that WICHE was a well-known organization with a lot of history and since the state and the university system were members of WICHE there was a familiarity. However, he was concerned with WICHE's association with SHEEO because he viewed that Nevada would be paying to update the baseline data that was used in the course of SHEEO's mission and then that data might be used for purposes beyond what the state was potentially asking them to provide. WICHE was also the highest bid amount at \$200,000, which was over the budget for the study.

Dr. Geddes thought all the consultants possessed integrity and addressed the issues and was not as concerned as Chairman Horsford and Mrs. Smith regarding conflict of interest. He was interested in finding the consultant that was the right fit for the intent of the study, which was a study of the formula. SRI International did a great job in preparing the economic development study for the state and that information was being utilized to develop how to best implement the higher education component for the state. Dr. Geddes said the RFP only asked for economic development to be a component of the study and the issue was getting the right formula for distributing the funding with equity as the goal in making sure that funding is provided to the campuses and then using performance to incentivize moving forward for each of the economic development goals. He noted that the committee would want any of the consultants to validate numbers, but the decision would be up to the committee and the Legislature regarding policy. Dr. Geddes wanted the consultant to provide the best available data in order for the committee to make the best decisions and the best recommendation to the

Legislature. He thought MGT America or SRI International could do the work, but WICHE was the best fit because they had access to the data utilized by the Legislature and the Board of Regents. WICHE was asked by the Board of Regents in 2011 during its strategic planning to provide advice and Dr. Geddes said their representatives were frank and direct in information of what the system was doing right, what it could do better and what it was doing wrong. He appreciated their honestly and said the committee could take what MGT America and SRI International had done and build on it by going with WICHE as the consultant for the study.

Mr. Anderson said all the consultant presentations were exceptional and recognized the depth of experience, knowledge and practical application of their histories. For him, the SRI International proposal stood out in its elegance in terms of directly focusing on where the state wanted to end up. In relation to the issue of the development of the appropriate formula, he thought the committee would have the flexibility to implement it if the formula was comprehensible. Mr. Anderson recalled he was surprised to find out in the first committee meeting that the formula was not even being used because it was so badly broken. He said a well-conceived formula would be transparent and easily workable to manage according to the state's needs. Mr. Anderson thought the solution proposed by SRI had the most direct application to where the state wanted to end up and it was a compelling argument on their behalf.

Mrs. Gansert thought all of the different bidders were excellent but among them that SRI International and WICHE stood out. SRI did an excellent job with economic development and was very good at analyzing data and thinking big, which she appreciated. She said SRI's expertise was in economic and workforce development and the original intent of the RFP was for that component to be an optional deliverable. Mrs. Gansert said the committee's focus was on the formula, with the primary goal of analyzing where the state was today relative to other states, and information on other formulas. She thought WICHE had looked at that type of information for a long time and their expertise could not be matched. Although it had been suggested that the state would be paying for information that would already be gathered, she said the committee was asking for information that was beyond typical. WICHE primarily focused on the western states and the contract would dictate for the consultant to look at the entire United States, which required substantial data analysis and that was one of their She indicated her ideal pick would be WICHE for the main contractor because of their depth of knowledge and expertise on higher education and then bring SRI on for the economic development component because of their outstanding work in that area. Mrs. Gansert thought WICHE had the level of expertise needed for gathering and analyzing the data, especially on the limited timeframe, allowing the committee to make the policy decisions and recommendations.

Mr. Page pointed out the fact that only two of the five proposals came in at or below the amount budgeted for the study and it should be taken into consideration how much the consultants focused on how much funding the state had to spend on the study. He would select SRI in the case of the outputs they added value because it was about the students and getting jobs for the students and where their future was going. Then

he would select WICHE for their access to data, but his overall selection would lean toward SRI.

Mr. Wixom supported either SRI or WICHE, but leaned toward WICHE for the same reasons that were identified by other members. He said SRI was a very credible organization and would be very helpful to the committee. However, he pointed out the limited timeframe for conducting the study and thought WICHE provided the depth of expertise, which would be invaluable in dealing with formula issues. Mr. Wixom indicated that during the presentations there were two competing interests, economic and workforce development, and the formula study. He thought that economic and workforce development was one component of a larger issue, which was the formulaic study. The formula study was the committee's dominant concern and predominant interest. Mr. Wixom said if the formula study was the committee predominant interest then he thought that would lead the committee to WICHE.

Dr. Geddes thought SRI-Brookings did a fantastic job on economic development in preparing a roadmap for Nevada on how the state should integrate it with higher education. In the last Legislative interim study conducted by the Nevada Vision Stakeholders Group, which was tasked with crafting a vision for Nevada, many chapters were identified such as the economy, energy, environment, transportation, education, health and wellbeing and public safety. He said higher education dealt with all of those areas including training police officers, firefighters, first responders and teachers, which were not necessarily related to economic or workforce development around the clusters in the economic development model. Workforce development was a key component of what the state needed to build a better Nevada, but it was not the only component if the committee was talking about performing arts, teachers, environmental scientists and hydrologic engineers, which were not in workforce development. Dr. Geddes thought the state needed a bigger picture and WICHE would help to create the bigger picture of how the formula funded all of it when the state funding was equitably distributed.

Mr. Aizley heard from the other members that WICHE would be the better consultant for the collection of data about what was happening today, but SRI was the better choice to take Nevada to the future. He pointed out that SRI mentioned the research triangle and if the state wanted to do workforce development, not just train workers, but to develop new business, new ideas and new jobs, the state needed to look to the science community where the state would get something new from it and that described the research triangle. The concept sounded like it leaned more toward the universities and less toward the community colleges, but Mr. Aizley thought the spinoff from the revenue generated by new research and new business would take care of that and improve all of education, including higher education.

Chairman Horsford said there seemed to be a consensus among the members for SRI and WICHE as the top two choices for selection of a consultant. There was some priority given to the ability of SRI to perform based on the limited timeframe and for consideration of WICHE because they were the entity that kept data or worked with organizations like SHEEO to capture information. Chairman Horsford commented that

he had a hard time using taxpayer resources to pay for something NSHE and Chancellor Klaich already received as a member affiliate of WICHE and SHEEO. In the committee's selection of a consultant, from a contractual standpoint, he asked legal counsel if there was any perception of bias where there was a direct affiliation such as the case with WICHE and SHEEO because Nevada already had direct affiliation with those organizations.

Brenda Erdoes, Legislative Counsel, said that was a difficult question. She thought there was a direct affiliation between NSHE and the organizations both because NSHE and the higher education institutions were members and that they paid for support of the organizations. Ms. Erdoes indicated there was a perception that there could be bias in terms of the organizations ability to act independently. She said it was something the committee would have to take into account in making the ultimate decision on selection of a consultant.

Chairman Horsford noted that the representative from WICHE said on the record during his presentation that there could be a conflict or at least a perceived conflict. He also heard in WICHE's presentation that the data would be updated and shared with other entities, except the data that was requested beyond the norm, which would be used for just this study. Chairman Horsford said it was important to be clear with any contractual terms out of protection of the state's interest because in using taxpayer resources it was imperative to keep things separate to the best of the committee's ability. He explained there were not any issues with WICHE and thought everyone supported WICHE as an organization 100 percent.

Chairman Horsford asked for public comment about any of the potential consultants before the committee made its selection, but no one came forward.

SENATOR PARKS MOVED TO SELECT SRI INTERNATIONAL AS ITS FIRST CHOICE AS THE CONSULTANT TO ASSIST THE COMMITTEE IN THE STUDY OF THE FUNDING OF HIGHER EDUCATION AND TO AUTHORIZE STAFF TO NEGOTIATE THE CONTRACT TO BE SIGNED BY THE DIRECTOR OF THE LEGISLATIVE COUNSEL BUREAU. IF TERMS OF THE CONTRACT COULD NOT BE AGREED UPON WITH SRI INTERNATIONAL, THE COMMITTEE SELECTED THE WESTERN INTERSTATE COMMISSION ON HIGHER EDUCATION AS ITS SECOND CHOICE FOR THE STUDY. MR. PAGE SECONDED THE MOTION.

Mr. Hickey voiced concern over possibly paying SRI for work they had done on economic development. He wondered if there was any interest from the committee for a hybrid relationship to use both consultants for the study. Mr. Hickey agreed with Mrs. Gansert regarding staying focused on the main task, which was a study of the formula and thought it was important to select the best group to help the committee with that mission. He suggested to possibly amending the bid(s) to include SRI to help with

the economic development information and utilizing WICHE for their expertise on the formula.

Chairman Horsford deferred to legal counsel but thought that the committee was at the point in the consultant selection where amending or modifying the bids that had been submitted was not an option. However, in the course of the negotiation or after the selection was made, he thought the committee was clear in its direction and intent of the important value of WICHE and SHEEO as data sources and that if SRI was selected they would have the ability to contract with those organizations if they chose.

Ms. Erdoes said the committee in making its selection for a consultant was bound by the proposals that were submitted as shown in the meeting packet (<u>Exhibit A</u>) starting on page 63. She indicated the flexibility came as the contract was negotiated with the selected entity based on their current proposals, but the selected entity would be free to enter into other types of agreements afterward.

Although, SRI and WICHE had strong merits and were both potentially good contractors, Mrs. Gansert was concerned about not picking WICHE as the first vendor because of the committee's short timeframe and WICHE's level of expertise. She really liked SRI, but because their expertise was not in higher education and in formulas was apprehensive about their ability to get the work done in the necessary timeframe. She thought it would be ideal if the two organizations could partner, but understood that was not an option at the meeting.

Mr. Anderson did not want to oversimplify the formula objective, which was the mainstay of the committee, but SRI was a data driven organization and the representative from the firm committed to the committee's timeframe. Agreeing with Mr. Aizley's comments earlier in the meeting, Mr. Anderson stated that it was time for Nevada to be bold, aggressive and to fulfill the big picture mission by laying the foundation to get that job done. It was all about the students who were entering the workforce in the coming years and the state needed to give them the brightest opportunity possible and he thought SRI could fulfill that mandate.

Chairman Horsford agreed with Mr. Anderson and said if Nevada did not have a positive track record with SRI he would be more concerned, but the work they did with the Governor's Commission on Economic Development clearly showed the firm had the ability to deliver and meet tight deadlines. He said the company's representative affirmed they have the skill set to do the work and understand the committee's charge. In addition, the committee provided the message that it wanted SRI to work with organizations like WICHE and SHEEO on the data element to make sure that requirement was met, which would be all the more beneficial to the end product.

Mrs. Smith thought the committee has allowed itself to get focused on the economic development component, but SRI's submitted proposal showed clear intent and capacity to carry out the committee's mission as stated in the RFP and was not based just on economic development. She thought the SRI staff listed in the proposal had

plenty of higher education experience as well as public policy experience. Mrs. Smith was comfortable with SRI as the first choice selection, noting that the committee had clearly outlined its expectations of SRI if chosen as the consultant.

Chairman Horsford asked for a roll call vote in favor of approving SRI as the committee's first choice consultant and WICHE as the second choice consultant. The voting was as follows:

Senator Parks	⁄ea
Ochaloi Faiko	
Assemblyman Aizley	⁄ea
Assemblyman Hickey N	Nay
Assemblywoman Smith	⁄ea
Mr. Anderson	⁄ea
Mr. Dillon	Nay
Mrs. Gansert	Nay
Dr. Geddes	Nay
Mr. Page	⁄ea
Mr. Wixom	Nay
Chairman Horsford	⁄ea

THE MOTION CARRIED 6 YEAS TO 5 NAYS.

Chairman Horsford thanked all the bidders and the committee. He appreciated all the members input because it was an important part of the work the committee would do going forward.

Mrs. Gansert commented that SRI did an excellent job on Nevada's economic development plan and she had full confidence in their ability.

VI. DISCUSSION REGARDING FUNDING OF HIGHER EDUCATION FROM NEVADA SYSTEM OF HIGHER EDUCATION STAKEHOLDERS:

- a. STUDENT REPRESENTATIVES
- b. FACULTY REPRESENTATIVES
- c. OTHER INTERESTED STAKEHOLDERS

Tim Porter, Dean of the College of Sciences, Physics Professor, UNLV thanked and appreciated the committee, the Chancellor's Office and the Board of Regents for taking on the important task of examining the funding formula. His background was in science so his comments would primarily focus on science and engineering at UNLV, which was a research-intensive university, but the remarks would also be applicable to other scholarship-oriented disciplines within NSHE. He had the upmost respect for all the

institutions that comprise NSHE and their good work for the state of Nevada. Dr. Porter said a large component of a research university's mission was to invent new knowledge and in science and engineering, the conduct of research was expensive. The university must be at the cutting edge in terms of laboratories, instrumentation and equipment in order to participate meaningfully in the creation of knowledge. He thought that research was worth the investment. Dr. Porter indicated through the conduct of research performed in the laboratories primarily by students under the direction of faculty the university was able to contribute to the solution of scientific, medical, engineering and technical problems faced by the world, the nation and the state of Nevada. Every technology, medical device, form of transportation, type of energy, everything that defined the world was likely created in a laboratory in the last 200 years. Dr. Porter explained that all the new breakthroughs yet to happen in any field would probably be invented and developed by today's well-trained students. Research conducted by Nevada's students represented the highest possible form of student learning. He said the students trained on learning in the laboratory would leave Nevada's research universities with the investigative tools, the knowledge and experience needed to lead, grow and shape society in the coming decades. In his opinion, there was no higher form of learning than participation in research, but even outside the lab in the classroom, many students chose research-intensive universities such as UNLV to learn from professors who were creating the knowledge at the cutting edge of their fields. Dr. Porter expressed that research universities faced unique additional costs, including faculty costs. Research activities could be as high as 40 percent of the workload of a research professor. Other costs included maintaining a laboratory based physical plant, as opposed to simply a classroom based physical plant; the instrumentation within those laboratories; and the maintenance associated with the science and engineering. He indicated the students cost were also high and many of the students received assistantships in order to conduct their research. External grant production mitigated some of the actual costs of research and scholarship, but it did not pay the entire bill. The additional costs of research could run into the millions of dollars at some of the research universities. Dr. Porter asked that the funding formula the committee considered reflect not only the value of research to Nevada's students and to society, but that it actually modeled the costs of conducting research and scholarship at the state's research universities.

Tom Piechota, Civil and Environmental Engineering Professor, Associate Vice President for Research, UNLV, thanked the committee for taking public comment. He had been involved in research at UNLV for 13 years and had received research funding from various funding agencies, national science foundations, state agencies and local agencies over the years, with much of the support going to students at all levels of education. The four points Dr. Piechota intended to make were that research faculty strengthened the educational experience for students; research contributed to the economic development of the state; research had embedded costs associated with it; and the return on investment at research institutions was high. Dr. Piechota said students gained valuable knowledge from engaging with research faculty and faculty who were involved in research, which strengthened the educational experience for students. Through his research, Dr. Piechota was able to expose his students to

interesting issues regarding water resources and the lack of water in the region bringing that information to the classroom for his students to learn. He also said students were performing other sector related research and noted that students from UNLV had been selected as 1 of 20 teams from around the world to participate in the 2013 Solar Decathlon where collegiate teams were challenged to design, build and operate solar-powered houses that were cost-effective, energy-efficient and attractive. He stated that UNLV would not have been selected if the university had not been engaged in energy related research and not only would students be gaining valuable experience from the project but it also raised the university's portfolio. Dr. Piechota pointed out that UNLV students in the water sector worked for the Southern Nevada Water Authority Bureau of Reclamation gaining valuable research experience working in different places, and students studying national security issues worked for the Nevada National Security site on complicated issues that impacted national security of the nation. He thought all of these activities contributed to the economic development of the state. Dr. Piechota noted that UNLV was closely aligning what it did as a university with the economic development sectors of the state and faculty participation in relevant work in those different areas was also important for workforce development. The work and research also contributed to economic development by creating new technologies, new businesses and led to commercialization opportunities. Workforce development occurred at all the institutions, at different levels, and research was an important part of that experience for students to gain knowledge. However, there were embedded costs associated with research as students worked in the different labs; faculty needed time to mentor students, while focusing on their research and balancing the administrative loads; and the core facilities on campus that supported the research needed to be maintained. Dr. Piechota stressed that all of the institutional dollars invested in higher education had a high return. For every dollar invested, \$4.00 to \$5.00 went back into the economy and he thought that was a great case for further investing in higher education and research institutions. He asked the committee to consider his points as part of the evaluation of a new funding formula that reflected different institutions and their different missions.

Omar Quassani, Engineering Student, CSUN Senator for the College of Engineering, UNLV thanked the committee for thinking about the students. He thought the formula should reflect the quality of the education and the quality came from available resources on the campuses and time value of the student's education. Mr. Quassani pointed out that after not having much direction when he started college he chose Civil Engineering as his major and had learned so much about his field. Although he had not been a part of any research opportunities, he was aware of them, and some of those projects trickled down to the undergraduate students including himself. Mr. Quassani said students learn so much during college from all their classes and the resources they are exposed to and he thought the time students spent on obtaining their degrees should be reflected in the funding formula with respect to all the institutions. He was not trying to favor research institutions over all other institutions but he picked UNLV because it was a research institution and knew that he would have an advantage in his chosen career because of his experiences. He asked the committee consider his thoughts as a

student and when making decisions to think about the quality of the education and the overall benefits to students.

Casey Stiteler, ASUN President, read the following testimony:

On behalf of the Nevada Student Alliance I would like to take a moment to thank the members of the committee for their time and effort. We understand that evaluating the funding formula for higher education is no small task, and we appreciate the commitment you have made to this process. I would also like to take a moment to thank Chairman Horsford and the committee for providing students an opportunity to be heard.

With that said, I would like to share some of the concerns and thoughts that the Nevada Student Alliance has in terms of the proposed funding formula.

- 1. With regard to the cost of higher education for Nevada's Students: The Nevada Student Alliance would like to see extra care put into cost analysis for Nevada's students and families. While tuition in the state of Nevada may have been comparatively low to neighboring states, many of Nevada's students are not in the market for a higher education in another state and their needs and ability to pay for an education in the state of Nevada should be paramount in this process.
- With regard to the retention of funds by NSHE institutions: The retention of student fees by NSHE institutions is widely supported by the Student Body Presidents. However, we are very interested in if or how this will change the role of the Board of Regents in budget appropriations at each institution. Specifically, will this have an effect on institutional autonomy in budget decisions? Will the retention of funds eventually cause need for changes in the NSHE and Board of Regents administrative structure?
- 3. With regard to performance based funding: While the Nevada Student Alliance understands the desire for performance based funding and the desire to incentivize the persistence, retention, and graduation of more students, we believe that this should be addressed with specific concerns in mind.
 - a. Performance factors must exist outside of granting degrees to students.
 - b. Nevada's community colleges and state colleges must have unique, specific metrics for success that can be met given their specific missions and goals.

- c. The committee should consider approaching the funding matrix with the individual institutional goals in mind. The diverse missions and goals of the institutions should not be a limiting factor in terms of funding for any institution. Further, the institutions should not be made to change or alter those goals in search of more funding. If this approach cannot meet the needs of each institution, the option of using different formulas for different institutions should be examined.
- 4. With regard to funding for graduate and undergraduate research: The Nevada Student Alliance does not feel that research can be adequately funded solely through differential funding as a result of weighting. The Alliance would like additional clarification on how state-funded research dollars will be allocated. It is our belief that state funding for research should not be limited to AB 449 and the state Knowledge Fund.

Funding for higher education in the state of Nevada has historically been a contentious issue. Perceived inequities and differences in funding have become both a partisan and regional issue in past discussions. We encourage the committee to set aside those regional and partisan arguments and to strive for a formula that will ensure the strength of the Nevada System of Higher Education. The system, as a whole, must meet the needs of Nevada's students, Nevada's economy, and Nevada's families in these difficult times and we want to thank you in advance for your thoughtful consideration of our concerns.

Chairman Horsford wanted to ensure that an opportunity was provided for the student alliance and the faculty alliance to connect with the consultant so many of the procedural items could be addressed.

Gregory Brown, spoke on behalf of the NSHE Council of Faculty Senate chairs, encompassing the bodies on each campus. Although his testimony was not a statement on which the campus Senates worked collectively together, he said these were principles on which they all agreed. The widespread sense outside of the community was that this was a largely regional fight and NSHE Council of Faculty Senate chairs thought it was really about being able to work together more effectively and more strategically than they had in the past. The following is Mr. Brown's written testimony:

I am Gregory Brown, chair of the UNLV Faculty Senate, and I am pleased to welcome the committee to UNLV and grateful for this opportunity to address you today. I speak today on behalf of the NSHE Council of Faculty Senate chairs and by extension the faculties of all 8 NSHE campuses.

I'm particularly honored to be able to speak to you in this role, in conjunction with my colleagues, Professor Tracy Sherman of the College of Southern Nevada and Joanna Shearer of Nevada State College, because it allows me to make a point that is essential for all involved in this process: NSHE faculty do not see this committee's important work - nor do we want others to see it -- as an expression of regional rivalry or political score-settling.

Indeed, after decades of working within the constraints of a structurally flawed formula, and in the aftermath of the past four years of unprecedented cuts in public support, we faculty cannot afford to withstand further the cost to our collective credibility and to our academic mission that would result from any attempt to "deliver" for one region or institution over another.

The existing formula has become a labyrinthine black box widely perceived to be politicized and which has cost us, as faculty, dearly in terms of our System's credibility with our students, with the state, with local governments, and with the community. Faculty have seen our programs and students bear the burden of the credibility crisis brought on by the old formula, and we urge you to seek as the highest priority for a new formula to restore to the System of Higher Education the credibility that our collective academic achievement deserves.

We as academics deal with each other by making our evidence known and subjecting our work to rigorous peer review; we believe the formula should be approached in the same way -- with transparency, clarity, comprehensibility as credibility as the utmost goals.

Credibility means in the first instance dealing honestly with our students – and their parents – when it comes time to pay tuition and fees. Considering money paid by students as "state support" for purposes of formula accounting has led to significant confusion. This can be ended by letting the formula distribute state dollars in support of only Nevada students – letting campuses determine how many non-residents should pay their full fare and how many should be on scholarship without impact on formula funding – and then, letting all students from in-state as well as out of state distribute their share of the cost of the education by their choice of campus and program.

Credibility also means prioritizing academic issues over the political. And indeed, the faculties of NSHE do not oppose, indeed we welcome, a formula that promotes educational attainment and degree completion. Despite what is often presumed, faculty do not fear these goals will create irresistible pressure to inflate grades (though such a fear, if it exists, is likely to be felt among contingent faculty on part-time or non-

continuing contracts). We take seriously – every week of every semester – our responsibility and our ability to be the guarantors of academic rigor and degree quality and of precise and nuanced assessment of student learning outcomes. (Indeed, at the suggestion of our UNR colleague David Ryfe, the Council of Senate Chairs have formed a faculty task force to advice the Chancellor on ways to measure degree quality for purposes of the formula and beyond.)

Above all, we welcome these new principles precisely because the perverse consequences of the old formula were so deleterious to our work as faculty. The old formula led campuses to push to grow enrollment above all goals; there were no incentives towards or safeguards of degree quality built into that formula whatsoever. So a new formula that encourages degree completion also represents an opportunity to improve our focus on rigor and quality -- rather than diminish it.

Another way in which the formula can restore credibility is to address, reasonably and realistically, but empirically, the cost of degree programs to determine adequate levels of funding. The purpose for which funding formulae were introduced in other states that have multi-tiered systems of higher education, beginning in Texas which remains the model nationally, was to determine the real cost or at least the ratio of costs among different degree programs on different campuses.

The flaws of our old formula are evident in that even in the best of years, Nevada provided only about 85% of what the formula calculated to be the cost of our programs. A credible new formula would not be one that simply presented a bill to the state for the costs of our programs. But a process that finds a way to begin studying real costs on an empirical basis, or at least builds the study of cost into how the formula will operate once in place, is a crucial step towards long-term credibility. Only in that way can the state, can local governments, can students and can the community understand what the faculty know – that we are operating highly efficiently, at lower cost than comparable institutions in many other states. We know that because our course loads and advising and research workloads are higher than national averages, at costs (primarily faculty compensation and infrastructure) that are slightly lower.

Determining empirically the cost ratios of our programs is essential to achieving another cardinal goal of the faculty for the new formula – ensuring each of our campuses can pursue and fulfill its distinct mission within the System's strategic plans, both current and future. The actual costs of research universities, of an urban access college that serves largely high-risk students, of one of the nation's largest community colleges that stretches across three campuses, and of two institutions

that serve large rural regions, all have distinct costs associated with those missions.

On behalf of the UNLV faculty, I can say there is significant hope that the new formula will better express the real benefit, and the real cost, that a research university brings to its students at all levels and to the region and the state.

Finally, a formula that respects and reflects mission differentiation is also crucial, because it is essential to our work together as a coherent System. We faculty do not fear or recoil from competition and indeed, a formula that allows each campus and program to retain student tuition and fees would reward excellence and prominence, by allowing programs that attract regionally, nationally and internationally to thrive and serve more students, both Nevadans and non-residents.

But as we compete among programs, we do not want performance-based funding to undermine the work we do together across campuses. We work on curricular issues such as course catalog articulation; we collaborate across campuses on research grants and contracts; we support joint efforts to facilitate faster degree completion; and we do not want the current process to become a competition among campuses. We believe that performance-based funding need not and should not pit campuses against each other in a fight to divvy up a smaller pie, but rather encourage collaboration and strategic partnership through additional investment, as reward for achieving an individual campus' mission.

A new formula cannot do everything to address the challenges facing higher education in our state, but a new formula can and, faculty believe, should be a platform from which a future blueprint for higher education in Nevada can emerge. The current strategic plan, suited to the current environment, is entirely about increasing the number of degrees conferred in Nevada; however, the are other imperatives for the state in higher education including research, including personal development opportunities, including rural and urban access.

The new formula can, and we hope, will allow future NSHE strategic planning to be based not upon one-sized-fits-all goals but to be based upon our multi-tiered, differentiated missions. Investment in higher education can, and we hope will, come to be seen not as a burden to be avoided or as political patronage; with a new formula, it will come to be seen for what faculty know it is: an investment in student learning, in innovative research that leads to economic development, and in an enhanced quality of life and a stronger civic engagement for our state.

Sarah Saenz, CSUN Student Body President, UNLV thanked Senator Horsford and the committee for the work they would be doing and for holding the meeting at UNLV, as it was an honor to have the members on campus. She said the Chancellor had been very open about the proposed funding formula and transparency that had already come from the committee and the Chancellor regarding the proposal was appreciated. If there was another proposed funding formula or changes to the Chancellor's proposal Ms. Saenz requested for students to be able to receive the information prior to the committee meeting. She thought it was important to give students time to review and analyze it so the students could respond and bring their discussion to the meeting. Ms. Saenz indicated the students wanted change that was fair and equal throughout the state of Nevada. The students needed a chance to see what effects the formula would have if and when it was implemented, she commented if a test run of the numbers had been done, the students had not been shown the result. Ms. Saenz said students liked charts, graphs, timelines and colors - they wanted to know where their lives would be in two years or five years with the proposed funding formulas. All those tools would help her to take the information to her constituents. She said students cared but not all understood because they had not been through the process. It was important for the freshmen to know what would be happening in the future with their money and the budget. Ms. Saenz thought it was crucial for all the institutions to work together when advising students about their path to graduation. With the proposed research component there might be some gaps between the community colleges, the state college and the research institutions, which was fine except the students wanted advising in order to be prepared and make it easy in the event they wanted to transfer among the institutions. She indicated she had talked with President Smatresk and was told one advisor had been hired between CSN and UNLV, which was great, but there needed to be more advisors. Ms. Saenz understood what the students were asking for was not easy, but Nevada was unique and something that separated its institutions was distance and space, but something that united the institutions was one NSHE, one Board of Regents and one funding formula. She said if there were not going to be three different formulas for the various institutions – she quoted Chancellor Klaich "we need to generate a pool of money for each institution to use as they see fit," - then she hoped the new formula would allow institutions to look at their weak points in order to focus on such issues as retention, graduation rates, advising and programs to keep students. Lastly, Ms. Saenz wanted to see keeping fees on campus in the formula and for out-ofstate tuition made part of the formula so that campuses kept the money that they It was important to strive for equality and fairness between Nevada institutions. She thanked the committee for their time and offered for the members to contact any of the Student Body Presidents for help or information.

Chairman Horsford informed Ms. Saenz that the agenda and the timeline for the committee was set; however, as the deliverables and the presentations from the consultant were made available for review of the committee they would be made public on the legislative website in advance of the committee meeting.

Michael Gordon, Graduate and Professional Student Association President, UNLV, thanked the committee for meeting on campus and for bringing the government to the

people, making democracy real. He echoed the points that Casey Stiteler, NSA Vice-Chair had made, but wanted to add two points. Mr. Gordon pointed out the value of research and thought the 1.1 research component in NSHE's proposed formula funding model did not adequately fund to align with the goals in the SRI-Brookings report. That specific report identified the lack of a top tier Carnegie ranked university as a weakness in Nevada, while identifying that infrastructure for innovation was in place at UNR, UNLV and DRI, it was not sufficient. Although this was not new information, it needed to be addressed especially to ensure that Nevada moved in the right direction in the future. He said research at lower division, upper division and graduate level courses needed to be funded. Mr. Gordon's second point was regarding blindsides and he thought the committee's blindside was to hold four out of the seven committee meetings when the colleges and universities were not in session – January 11, May 23, June 27 and August 15. He indicated when the committee was going to be making its major decisions affecting students and faculty there would not be representation at the meetings.

Chairman Horsford said Mr. Gordon had a good point, but unfortunately, some things were out of the committee's control due to the Legislature only meeting every other year. The interim committee only had a limited time to meet in advance of the 2013 Legislative Session and the findings produced by the study had to be turned into bill drafts along with other processes that took time. He thought that the information could somehow be shared with the faculty and the student leaders for review and then they could disseminate it to the other interested parties.

Tracy Sherman, Faculty Senate Chair, CSN, provided the following written testimony (read by Judy Stewart at the meeting):

If you have taken your pet to the vet in Las Vegas, chances are - a CSN student or graduate helped care for that important part of your family. If you have enjoyed an evening of gambling in this gaming meca - you likely came into contact with a CSN graduate, not only dealing the cards, but tinkering with the machines. If you find yourself ill while playing - the odds are, a CSN graduate will pick you up in the ambulance and deliver you to a patient representative at a local hospital who may have been in that paramedics English class.

For 40 years CSN has been a part of Southern Nevada, funded by a murky formula that only our fantastic mathematicians could unravel. I presume you have all experienced a world class meal in Las Vegas? It is highly unlikely any of you have not eaten food prepared by an award winning CSN graduate. If you should find yourself near our Cheyenne campus - perhaps on a date to our amazing planetarium or to hear a concert, watch our dancers, check out our artwork, or see a great play (for example) - know that some of the Las Vegas greats started with us - you might be looking at a future star. Be sure to take your glasses - the lenses of which you can probably thank a CSN student for.

Please note that the majority of our faculty members over the years have been part time faculty and while we have done very well with these teachers, think of how much further we could go with more full time, dedicated faculty members instead of the 60/40 ratio we have been working with.

Health care in Clark County is extremely dependent on high quality graduates from the Nevada System of higher education. And while several institutions have a few of these programs – no College has as many as CSN, nor has anyone produced as many graduates as we have. From Respiratory Therapists, to nurses, radiation therapists, ultrasound technicians, to dental assistants and hygienists and many, many more ...CSN has produced more healthcare individuals than any place else in Nevada - during times when we have NOT been funded equitably as compared to our sister institutions. The message to the students may not necessarily have been the one that was intended.

If your Southern Nevadan children can read, if they have played a fun video game - CSN probably helped. If you have enjoyed a good article in a magazine and perused the accompanying photos in a local publication - CSN was there. If those same children can play in safe streets - we helped. If those children have used reverse psychology on you and convinced you to take them on a trip you might not be able to afford ...we can help you! From travel plans to economics and finance we can help you figure out how to pay for it - then you'll need to study marketing and geography, right? Along with anthropology, global studies, and a foreign language, to be on the safe side.

It would make things more comfortable if the funding formula assured we had safe, comfortable learning space. In return for the funding for operations and maintenance - we will train people to keep buildings cool, up to building code and should the tragic happen - our guys will know how to put out the fire.

We admit that research is important for the future of Nevada, we promise to educate research assistants in hard sciences, math and social sciences so they are ready to help. In the meantime though - let CSN help put Nevada back to work - this is front line stuff we offer you. We are your ticket to winning the next election. In high school, I asked my grandmother what she remembered of FDR - she said (50 years later) "OHHH RooooSevelt - he gave all the people jobs!" She would have voted for him a dozen more times.

CSN has been very good to Southern Nevada - we are everywhere - a million strong and growing. THANK YOU for finally recognizing we may

be worth more than you have been giving us. We will continue to grow stronger - and as we do that Cardiorespiratory Sciences program won't be just the 9th best in the nation ... we will be the very best before long!

Please fund our equity problem. Please give us equal funding for an equal course, please allow us to keep our tuition and please - above all - allow NSHE to create a new formula that will allow all NSHE institutions to become stronger in the future - taking Nevada with us.

Judy Stewart, Interim Chair, Biology Department, CSN, was a biologist with a research background. She strongly believed that research was critical to the future of a strong Nevada. Ms. Stewart asked that the committee, when deciding on the funding formula, to consider the unique aspects of the community colleges including access and workforce training, which contributed a great deal. As long as the state asked the community colleges to be open access institutions she wanted to be sure that could be accomplished with research addressed in multiple places in the funding formula. She also asked that the committee consider the community college's access mission and job training mission in the funding formula. Ms. Stewart said many jobs were required to keep the economy strong and the community colleges contributed a large amount to the economy. The community colleges would do their best in whatever the state asked them to do, but she asked the committee to do the best it could on the funding formula in order for the colleges to succeed in those areas.

Matthew Mahrt, President, CSN Chapter of the Nevada Faculty Alliance, Biology Professor, CSN provided the following written testimony:

I am Matthew Mahrt, President of the CSN Chapter of the Nevada Faculty Alliance. Like my preceding colleagues, I wish to thank the committee for the opportunity to speak on the need to replace the current formulas used to fund the Nevada System of Higher Education.

There are two major points that I want to address. The first of these is that current formulas are too complex, and thus contain hidden biases. The second is that the current practice of offsetting the general fund money allocated to an institution by student tuition and fees paid to that institution is fundamentally unfair to students. In combination, these features give the current formulas a decided lack of credibility among students, faculty, administrators, and the public we serve.

I am a biologist that specializes in modeling complex biological processes such as animal behavior. One of my graduate degrees is in statistics, and I have worked as a statistical/mathematical consultant. I also have experience with resource allocation models in other states, most notably Oregon.

A fundamental principle in mathematical modeling and statistics is Occam's razor - i.e., given a choice between competing models, the simplest model is typically the best one. While the current formulas are superior to the methods used to fund academic institutions in Nevada used prior to 2001, they are extraordinarily complex. Indeed, the current formulas are so complex that I cannot predict, *a priori*, what they are supposed to do. I can only see what they actually do when realistic enrollment numbers are run through them.

An a posteriori analysis shows that the current formulas are biased in a number of ways. For example, student support formulas have size break cutoffs that provide CSN with fewer dollars per student than any other institution in NSHE. The long term result has been a significant decline in student services that are critical for many of our students to succeed. This problem is exaggerated by limitations that the current formulas impose on where allocated dollars can be invested - i.e., the current formulas do not allow CSN to invest its dollars where they are most needed.

The fact that general fund dollars allocated to CSN are offset by tuition and fees paid by our students gives the impression of purposeful dishonesty to the types of biases noted above. In effect, the money that students pay to CSN cannot be used in the ways that provide the greatest benefits to them. More importantly, the discounting of general fund dollars by student tuition and fees means that college students are effectively subsidizing the other functions to which general fund dollars are allocated. In short, college students are being selectively taxed in an effort to help Nevada deal with its continuing financial crises. Arguments to contrary are simply arguments of semantics. A rose is still a rose by any other name.

In closing, it is time to do away with the current funding formulas and replace them with a system that is simple, transparent, and fair. In particular, any new system should allocate general fund dollars only. Student tuition and fees should be retained by the institutions they are paid to; and institutions should have a greater degree of flexibility in where they invest their money. CSN, not the legislature or NSHE, knows how to distribute in a way that will most effectively benefit its students.

Carolyn Collins, Chemistry Professor, CSN, provided the following written testimony:

Chair Horsford and members of the committee. Thank you for the opportunity to speak this morning. My name is Carolyn Collins and I have been a faculty member at CSN for more than 30 years. During that time I have been very involved in the Funding Formulas logging many hours on money committees at both the institutional and system level.

Over the last 5 years, my efforts in spearheading the push to get the "EQUITY" issue at CSN recognized and addressed has led me to dig deeply into the arcane and convoluted world of our funding formulas in search of what is wrong that has resulted in CSN being underfunded to the tune of 15 - 25 million dollars depending on which year, which study and which yardstick we use. In this process, I have learned much about what is broken and what I think needs to be fixed in the higher education funding formulas and I would like to share a couple of these points.

What I discovered was that the current funding formulas did not create the Equity problem. Much of it was a legacy of older funding models which had not kept up with growth (hurting the southern institutions) and had woefully underfunded student services (all the things you hear the students talking about today). When the current formulas were adopted in 2001 to address these historical inadequacies, CSN was already underfunded by an estimated \$15 million mostly in the areas of student services and instructional support. The current formulas were a big improvement but they are by no means perfect. Their complexity obscures many built-in biases that continue to perpetuate some inequities across the system, and serve to undermine their credibility. But our biggest problem was not the formulas but the way the formulas were implemented in 2001. A critical decision was made not to redistribute system resources in alignment with the new formulas -- thus locking existing inequities into the base budget. Since our only hope of improving things was based on new dollars and we haven't seen many of those over the last 5 years, the way the funding mechanism now works has us trapped in a hole with no way out.

We at CSN have been eternally grateful to Chancellor Klaich, the Regents and to many legislators like Senators Lee and Horsford for recognizing the fact that we have this EQUITY Problem and for trying to take steps to fix it. After several legislative sessions of trying, I believe it is highly unlikely we will resolve this problem without some fundamental changes in how we fund higher ed.

- 1. Student Fees must be retained by the institutions. This is the cornerstone. The funding formulas developed should work on top of that to allocate state funds. Students and colleges should not be punished for increasing fee by receiving less state dollars.
- 2. Base Funding Formulas should be simplified to a matrix that provides the same state funding for any student taking a course like EN G 101 no matter where it is taught.
- CSN Equity needs to be addressed. We are encouraged by attempts to create a more equitable funding formula. But we have been severely underfunded for many years and our students have

suffered. We hope that when new formula are implemented that there will be the needed redistribution of resources to address our long-awaited equity issue. We do not wish to repeat the mistakes of the past in the implementation process.

Jennifer Reed, Ph.D. student, Sociology, Graduate and Profession Student Association representative, thanked the committee for revisiting the funding formula and being willing to address an outdated formula. She wanted to see the funding formula changed to keep the student fees on campus and funding for a research component. Ms. Reed said there were 5,500 graduate students at UNLV and thought the 1.1 factor for research included in the NSHE proposed formula did not represent enough funding. She thought funding for a research component could be considered an upfront investment which could generate more long-term revenue and future revenue in research because it could generate more research to help businesses grow and launch them in a new direction. Ms. Reed expressed concern with the performance and output measures in the proposed funding formula because the institutions needed to have enough resources in order to perform. In terms of performance, she said graduation could be a way to look at things, but students may not be able to get to the point of graduating because of fewer classes, full classes, eliminated classes or affordability. Ms. Reed said as much as she understood the change from enrollments to completion at some level there had to be a support structure in place for students to be able to complete their education. She noted that the graduate students were pushed into taking higher teaching loads because there were not enough tenured professors to handle the amount of students, which then did not allow the graduate students to make quick progress to finishing their degrees. Before the budget cuts, the Sociology Department had 17 full-time professors and currently there were 11 full-time professors. Ms. Reed explained the student enrollment was the same so with the reduced amount of professors the bulk of the teaching load fell to graduate students. She asked the committee to consider her points when deciding on the funding formula and thanked the committee for their work.

Chairman Horsford thanked staff and said the committee had accomplished its work at the meeting. He noted the next meeting was scheduled for April 25, 2012, and the first set of deliverables would be reviewed. Chairman Horsford told the members to contact staff if they had any presentations or ideas to explore at the next meeting, beyond what the consultant was working on, to decide whether to add it to the agenda. In order to provide some direction to the consultant, he thought the committee should discuss factors related to the community colleges in regard to measuring performance differently than what would be expected at other institutions.

Mrs. Smith reiterated for students and faculty to be intimately involved in the process and did not think there was enough available information for them. She encouraged Chancellor Klaich to develop a formalized process to involve faculty and students as much as possible and provide as much information as possible in advance because the months ahead were going to be critically important to build support for the outcome of

this work. Anything that can be done during this time would be important to the success of the study.

Chairman Horsford wanted people to understand the role of the committee and its recommendations to the Board of Regents, the Governor and the Legislature and how that was very different from the implementation, once the allocations were made. He noted that sometimes the legislators heard comments regarding what were management decisions made at the institutional level so having a greater awareness among faculty and students was important. Chairman Horsford pointed out the committee meetings were a venue for ideas, but the real decisions were made at the institutional level in many regards. He appreciated everyone's time and thanked UNLV for hosting the meeting and for the videoconferencing at the other sites.

VIII. PUBLIC COMMENT.

There was no further public comment.

IX. ADJOURNMENT.

Chairman Horsford adjourned the meeting at 3:08 p.m.

Respectivity submitted,
Patti Sullivan, Committee Secretary

Despectfully submitted

Copies of exhibits mentioned in these minutes are on file in the Fiscal Analysis Division at the Legislative Counsel Bureau, Carson City, Nevada. The division may be contacted at (775) 684-6821.

NEVADA HIGHER EDUCATION: Connecting Policy and Productivity

Dr. Mario C. Martinez

Overview of Presentation

- ☐ What is "productivity" and assumptions associated with it
- □ The Role of Policy Priorities
- Productivity Strategies
- Addressing Concerns

Productivity

Maximizing the achievement of goals and priorities through the strategic use of available resources

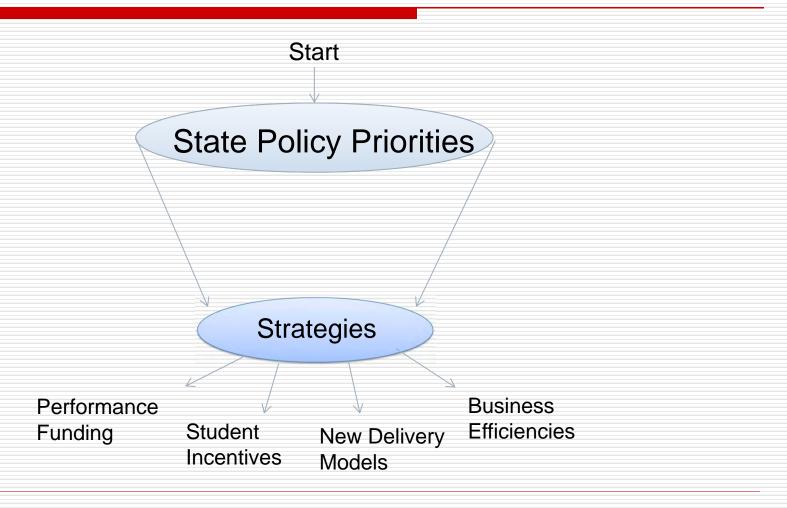
Four Lumina Productivity Strategies

- Performance Funding
- Student Incentives
- New Models
- Business Efficiencies

Major Assumption underlying productivity strategies...

States have defined their **Policy Priorities** for higher education

Connecting Policy Priorities and Strategies



The Necessity of Defining Policy Priorities

- How many organizations are successful without establishing priorities?
- Without priorities, strategies are short-lived
- Priorities (state level) are the "ends" and strategies (funding, incentives, etc.) are the "means"

Policy Priorities

- □ Do we, as a state, have:
 - State goals and priorities for higher education?
 - Goals and priorities that coalesce around multiple stakeholder input (including but not exclusive to higher education leaders)

Other States Have Prioritized— We Can as Well

- □ Texas "Closing the Gap": participation, attainment, prestige, research funding
- Washington's plan: connect higher education to workforce
- Indiana's plan: access, attainment, affordability
- Kentucky: Priority #1: Increase # of college ready Kentuckians

Once Policy Priorities Have Been Set

effective strategies can be detailed...

- Performance Funding: Targeted institutional incentives to focus on outcomes (completion)
 - Ohio: 2009 introduction of different performance funding for universities, regionals and community colleges
 - Pennsylvania: 2002, 8% based on performance—result is 10% increase in graduation rates
 - Indiana: 2007, 2009 move toward credit completion, not just credits attempted

- Student Incentives: Student incentives, in the form of tuition and aid, targeted at course and program completion
 - Louisiana's Opening Doors offers scholarships to low-income students, but 3 payments are spaced out after student has achieved milestones
 - Florida offers merit scholarships but requires students to refund money if they withdraw after the drop/add deadline
 - Texas requires in-state students to pay out-ofstate tuition for "excessive" credits beyond degree requirements

- New Models: Alternative approaches to increase capacity to serve students
 - Colorado State University has started CSU Global, an online option of programs
 - Washington, Texas, and Indiana have adopted state models of Western Governor's University to serve adult learners
 - University of Maryland University College systematically assesses competencies and knowledge attained through work and life and awards credit for prior learning

- Business Efficiencies: Savings through efficient institutional business practices
 - Ohio: statewide efficiency council; cost-savings collaboration across institutions initiative
 - Maryland: Board of Regents Work Group for Effectiveness & Efficiency proactively streamlines system's cost structure and develops a national model for efficiency and effectiveness. Result—6 year savings of \$208 million

Addressing Concerns

Concern	Response
Performance funding should come from new funding sources instead of the base	First, this is not today's fiscal reality. Second, success should be CORE. Third, implementation can be phased in and "stop-loss" measures can be built in.
Colleges need predictability to engage in responsible fiscal planning. Performance funding is unpredictable	Does success fluctuate more than enrollment? This assertion has never been substantiated. Student success should be core to institutional mission and improving over time, not declining.

Addressing Concerns slides adapted from Dr. Nancy Shulock's Policy Brief: Concerns About Performance-based Funding and Ways that States are Addressing Concerns

Addressing Concerns

Concern	Response
Rewarding completion penalizes some colleges and especially those who serve the underserved	Award progress. Use baselines (measure each institution's improvement against itself) instead of benchmarks. Incentivize to serve underserved or those state defines as priority.
Incentivizing completion will lower standards, pressure faculty	Use multiple measures. Assume professional and ethical standards of faculty and staff
Performance based funding hasn't worked in the past	Incentives were so marginal they did not have an effect, but we have learned. And current efforts are indeed promising and producing results

Addressing Concerns slides adapted from Dr. Nancy Shulock's Policy Brief: Concerns About Performance-based Funding and Ways that States are Addressing Concerns

Do We Have the Will to Change?

"The only way to understand a "system" is to change it. Then you can understand the dynamics that are preventing or keeping it from changing."

Kurt Lewin



CollegeProductivity



FOUR STEPS TO FINISHING FIRST

An Agenda for Increasing College Productivity to Create a Better-Educated Society



POLICY FOCUSED ON THE PUBLIC GOOD



The United States faces a period of opportunity for reinvention unlike any other, and the need for dramatic reform extends to higher education. Today, the United States is at a crossroads, facing unprecedented challenges in meeting expectations and upholding values that have long distinguished the nation. For the benefit of every American, decades-old approaches to structuring and paying for education beyond high school must be altered to ensure the nation produces enough graduates capable of contributing fully to society and to the communities in which they live. Political leaders responsible for meeting this rising demand for a skilled workforce and educated citizenry are seeking fundamental changes in higher education, which has long served as an engine of opportunity and economic mobility in the United States.

Longstanding approaches for providing college and other postsecondary education cannot be scaled affordably to meet a growing need for better-educated adults. To ensure the nation has enough people with meaningful workforce credentials and high-quality associate or bachelor's degrees, the United States must develop lower-cost, high-quality alternatives capable of delivering education to millions of students whom colleges and universities are not serving as well as they could. If we fail to respond adequately, the United States will not be prepared for the future global environment, and all of us will share in the consequences.

The good news is that smart, creative thinking about how to reinvent the academic enterprise is catching on among government and higher education leaders, prompted in part by the deep recession and slow recovery. These leaders recognize that the efficiency, effectiveness and overall productivity of U.S. higher education must significantly increase to ensure the nation is prepared to meet future challenges. This productivity agenda is championed by officials across the political spectrum, from President Obama and Maryland Gov. Martin O'Malley to Indiana Gov. Mitch Daniels and Arizona Gov. Jan Brewer. Within the academy, those leading the way include education pioneers

such as William "Brit" Kirwan of the University System of Maryland, John Cavanaugh of the Pennsylvania State System of Higher Education, Rufus Glasper of the Maricopa Community Colleges in Arizona and William "Bill" Powers of the University of Texas at Austin. These leaders share a commitment to broadening participation in the economic and civic life of the nation by raising educational attainment among adults, first-generation collegegoing students and other students whose access to resources is limited.

The leaders of this productivity movement are coalescing around an array of policies that address facets of higher education, from state funding of colleges and universities and better uses of student financial aid to developing lower-cost, high-quality academic delivery models and instituting more efficient business practices to identify cost savings that can be allocated to serve more students. This emerging productivity agenda embraces the primary mission of higher education as benefitting American society by helping as many students as possible receive quality educations with available resources. Quality degrees and credentials, in turn, benefit individuals by creating clear and transparent paths into the workforce or to further education.

NEEDED: MORE GRADUATES

The need to better deploy scarce resources arises from increasing demand for workers with knowledge and skills typically developed in college or postsecondary certificate programs. Not long ago, the United States led the world in the share of working-age adults with college degrees. In recent decades, however, other nations have embraced the economic imperative of a bettereducated workforce and have initiated efforts to ensure a larger share of their populations earns college degrees. Nearly 40 percent of workingage adults in the United States have earned an associate degree or higher; that's roughly the same degree-attainment rate the nation has reported for the past 40 years. Today, however, other nations are at 50 percent degree attainment and higher, while substantial numbers of people in China and India also hold postsecondary credentials. To meet the challenges of the 21st century, the United States will need to do a much better job of educating its people, and this will have to be done without a lot of new money.

If the United States is unable to affordably increase the share of the nation's population with college degrees and postsecondary credentials, Americans who want to earn good livings and support their families and communities will face serious consequences. Since 1975, average earnings for college graduates have increased by 19 percent, adjusted for inflation, while high school graduates have experienced an average decline in earnings of 1 percentage point. According to the Georgetown University Center on Education and the Workforce, adults with a high school diploma or less will be shut out of nearly two-thirds of all U.S. jobs by 2018, and these are the jobs that will pay the most. This represents a fundamental economic shift: During the mid-1970s, less than a third of all jobs required education beyond high school. The recession and slow recovery have made abundantly clear the importance of a college degree or meaningful workforce credential. While the nation's unemployment rate has remained stubbornly high, less than 5 percent of college graduates were without jobs at the height of unemployment during the recession.

HOW TO BOOST PRODUCTIVITY

During the latter half of the 20th century, policymakers' attention to higher education chiefly focused on increasing access to college through financial aid and the creation of community colleges. The nation as a whole benefited from the ensuing economic activity and social change as the GI Bill for returning World War II veterans created widespread opportunities for millions of new students to attend college.

Access to college remains a critical concern, particularly for students with the least access to educational resources. But even as record numbers of students enter colleges and universities, too many of them are leaving without the degrees and credentials they had sought. Many find a series of obstacles on the path to graduation—institutions with financial incentives to enroll them but not to see that they complete courses of study; weak advising and academic supports; institutional spending on costly items with little discernable connection to education that help drive up the price of college; and academic models that fail to conveniently serve them, fail to account for what they already know or fail to deliver lowercost and accelerated programming.

Several years ago, Lumina Foundation directed its mission toward a single, overarching "Big Goal:" to work together with its partners across the country to increase the percentage of working-age Ameri-

cans with high-quality degrees and credentials to 60 percent by 2025. Lumina and its partners identified key policies and practices that research or recent experiences indicate can increase higher education productivity so that available resources can be used to graduate many more students. These strategies, embodied in The Four Steps to Finishing First: An Agenda to Increasing College Productivity to Create a Better-Educated Society, highlight examples of productivity enhancements that assume an environment in which demand for education increases even as significant new investments in higher education are unrealistic. The Four Steps agenda also is compatible with increasing higher education quality and includes:

1. **PERFORMANCE FUNDING:** Targeted Incentives for Colleges and Universities to Graduate More Students with Quality Degrees and Credentials.

Traditionally, states build higher education budgets based on assorted inputs—often prior years' funding levels, plus current-year enrollment growth. Instead, policymakers should provide financial incentives to schools that help students clear certain milestones on their academic journeys or finish work toward their degrees or credentials. Limited evidence from Florida and Pennsylvania, where this type of funding has been in place for a decade or more, shows degree completion increasing. ²

- 2. STUDENT INCENTIVES: Strategic Use of Tuition and Financial Aid to Incentivize Course and Program Completion. States should use tuition discounts and need- and merit-based financial aid policies to give students more reasons to complete efficiently and should allocate limited public aid dollars to achieve the greatest effectiveness. For example, Texas students receive \$1,000 if they complete bachelor's degrees within three credits of minimum degree requirements. Other states limit aid to 120 credits for bachelor's degrees, providing a completion incentive while making dollars available to serve more students.
- 3. NEW MODELS: Lower-Cost, High-Quality Approaches Substituted for Traditional Academic Delivery Whenever Possible to Increase Capacity for Serving Students. To increase their capacity to graduate students, many colleges and universities are instituting high-quality online, blended and other non-traditional forms of instruction, as well as new approaches for recognizing students' prior acquisition of knowledge and skills. The

- current costly system of higher education cannot be scaled to meet the increasing demands of individuals, society or the U.S. economy.
- 4. BUSINESS EFFICIENCIES: Business Practices that Produce Savings to Graduate More Students. Surveys show faculty members are willing to tackle productivity in the classroom when they've seen strong evidence that colleges and universities have squeezed efficiencies out of non-academic operations. Improved efficiency through joint purchasing and back-office consolidation are two such approaches. By meeting annual cost-savings targets, the University System of Maryland improved its relationship with state policymakers and received funding for its public institutions that allowed it to freeze in-state undergraduate tuition for several years. Ohio and other states have shielded their university systems from deep state funding cuts by finding business-side efficiencies and otherwise demonstrating good stewardship of public funds.3



A COMMITMENT TO QUALITY

From our perspective, productivity gains are achieved when quality has been maintained or improved as money spent on each graduate decreases, all without sacrificing important principles such as access and equity. Increasingly, Lumina is working with higher education partners to redefine quality in terms of measurable learning outcomes. From the student's perspective, quality should not be measured primarily in terms of subjective rankings or higher spending per degree. Rather, the degrees and credentials students earn should provide clear paths into further study or to middle-class employment. Degrees and credentials should signify the attainment of knowledge and skills that equip graduates

to navigate the complexities of a rapidly changing world. Lumina and its national partners are exploring two approaches to assure that an increasing emphasis on productivity gains does not diminish quality. Tuning, for example, engages faculty members in determining what students should learn and be able to apply generally and specifically from their studies of specific academic disciplines. The Tuning process can be coupled with use of a Degree Qualifications Profile (Degree Profile) to measures quality in terms of acquired skills and competences that associate, bachelor's and master's degrees should represent. Insights gained will enable states to select and refine the best productivity strategies to meet their goals.

NETWORKING AND SHARED LEARNING

More than 30 states are pursuing elements of the Four Steps productivity agenda to build a 21st century higher education system that serves 21st century students, including adults, students who are the first in their families to attend college and others with less access to educational resources. Lumina has awarded productivity grants to seven states—Arizona, Indiana, Ohio, Maryland, Montana, Tennessee and Texas—intended to produce sustainable examples of productivity enhancements that can be scaled or transferred to other state settings. These seven states and others also are receiving assistance from Lumina's Productivity Strategy Labs, which

offer technical assistance, nonpartisan research and analyses, and peer networking opportunities to state policymakers and higher education leaders. The Strategy Labs are staffed by former higher education or government officials. Among sponsored activities are meetings and workshops in which legislators, policymakers and higher education leaders share knowledge and advice about adopting and implementing elements of the Four Steps for improving higher education productivity.

For more information on Strategy Labs, go to: http://collegeproductivity.org/strategy-labs.



STEP 1: PERFORMANCE FUNDING



Targeted Incentives for Colleges and Universities to Graduate More Students with Quality Degrees and Credentials.

ost states draft higher education budgets without a clear statement of the public return they want for their investment. As a result, states typically fund colleges and universities based mostly on student enrollments. Not surprisingly, colleges and universities respond by enrolling ever higher numbers of students without regard for whether they can graduate. As a result, fewer than 60 percent of first-time, full-time students earn bachelor's degrees within six years; a much lower percentage of community students earn associate degrees within three years.

From the most traditional funding mechanisms to least, states finance their higher education systems through 1) incremental changes to base appropriations, 2) credit hours attempted related to enrollment relative to cost factors, 3) benchmarking of peer institutions, 4) performance funding tied to metrics and 5) vouchers. 4 However, policymakers increasingly are looking at institutional funding that ties state money to course and degree completion because public higher education is a major economic contributor that should be aligned with public priorities. Growing public concern about the price of college, a lack of accountability and educational quality also are behind the renewed focus on performance funding. With a "New Normal" in public higher education finance, in which demand for high-quality education with the same or fewer resources is increasing, policymakers need to think differently about public higher education spending. Policymakers and the public increasingly believe colleges and universities can—and should—be more efficient, effective and productive. Institutions that commit to measurably improving performance tend to do better in public funding discussions.

Of the nearly 30 states that have adopted performance funding, more than a dozen have dropped it. Factors contributing to failures included a lack of buy in from college and university leaders, departure of key legislative supporters, overly complex formulas, state budget challenges or funding that was seen as an optional "add-on" to state support. To build support, states should provide technical assistance to help struggling institutions do better, incentives for institutions to serve students who require extra help academically, and rewards for improvements in closing specific academic gaps highlighted by disaggregated achievement data.

Stable, successful performance funding models begin with broad state goals. These models keep it simple and fair. They involve, engage and consult higher education leaders. They are designed to protect colleges and universities from volatile, unpredictable funding shifts. They take differences in the students that institutions serve into account. They rely on timely, relevant data, and they put a significant share of funding at stake in the base.⁵

More recent experience has shown that performance metrics can be used to allocate state budget cuts across institutions more fairly; that extra weight can be assigned to at-risk students to encourage graduation; and that open-access institutions can be incentivized to help students reach "momentum points" that propel them toward graduation.

For instance, institutions could be asked to choose from an array of seven to ten metrics disaggregated by race/ethnicity, income, gender, age and language. These metrics could cover inputs such as total enrollment, the proportion of adults enrolled, etc. (note that a disproportionate focus on graduation rates could promote the unintended consequence of increased selectivity in student admissions); process or intermediate measures such as transfers among sending/receiving institutions; productivity metrics such as those recently released by the National Governors Association; and outcome metrics such as year-to-year increases in numbers of graduates, increases in students graduating on time and additional formula weighting for students who are harder to serve. In some cases, for example, performance funding recognizes the achievements of needy students eligible for Pell Grants and the award of degrees and credentials in high-demand science, technology, education and mathematics (STEM) fields.6

College Productivity

89

There is much colleges and universities can do to increase the likelihood students will finish their studies, including providing more structure and direction and less choice for students; focusing on what students need to know and be able to do to earn degrees and credentials; offering a thorough student orientation, coupled with learning plans; increasing opportunities for student engagement with faculty members and other students; promot-

ing more proactive academic advising and use of analytics that provide early warnings that permit customized intervention; and adding student support.⁷ Performance funding can serve as a catalyst for scaling efforts to promote greater student success. Concerns such as a heightened risk of grade inflation and incentives to admit only better students can be addressed through state-level monitoring.

STATE SUCCESS IN ACTION

Below are examples of state efforts that illustrate how performance funding can leverage change. Where performance funding has remained in place over time, policymakers have worked in partnership with colleges and universities to customize a funding model and have jointly monitored the formula's effectiveness.



Florida initiated performance funding for community colleges in the 1990s. Under its Performance Based Budgeting program, the state awards a sliver of its higher education budget

to colleges based on three performance measures: number of students who complete certificate programs and associate degrees; number of graduates for whom English is a second language, disabled or economically disadvantaged or who are placed in jobs in targeted fields after graduation; and the number of associate degree students who graduate with fewer than 72 total attempted credit hours.

Another Florida initiative, the Workforce Development Education Fund (WDEF), created incentives for completion and job placement. Established in 1997 by the state legislature, WDEF allocated community colleges and district-operated technical centers 85 percent of their prior-year appropriation up front. The remaining 15 percent was distributed based on completion and student placements in high-wage, high-demand fields. The formula also rewarded institutions when economically disadvantaged students completed courses or programs. Although discontinued in 2002 when institutional and political support waned, the program had a significant effect from 1996 to 2007; community college completion rates increased by 43 percent during this period. This program demonstrated that linking significant funds to performance can influence college actions that improve student outcomes.



In 2009, **Ohio** introduced major new funding formulas for its colleges and universities. For main university campuses (excluding certain doctoral and medical programs), Ohio

based funding on course and degree completion, with 95 percent of FY 2010 funding allocated for course completion and 5 percent allocated for degree completion, both weighted by total cost of the course or degree program. Over time, additional funding will depend on institutions' ability to graduate higher numbers of students. At regional four-year campuses, where funding historically had been tied to enrollment, the state created a new funding formula based on course completion, weighted by cost of the course; Ohio plans to phase in additional funding incentives for degree completion at these campuses. Adjustments are also made to provide increased funding for at-risk students, defined as those eligible for Ohio's need-based aid program.

At Ohio's community colleges, student enrollment will remain the foundation for state funding. However, the state is introducing incentives based on what policymakers describe as "momentum points"—that is, student success measures that take into account the community colleges' open-access missions and the backgrounds of students who enroll. Community colleges earn points when their students reach milestones, such as completing remedial coursework and becoming eligible for credit-bearing courses. These momentum points will determine 5 percent of community colleges' allocations, with the percentage increasing over time.

The three new formulas will be phased in. A "stoploss" provision maintains the majority of an institution's funding as the higher education system adjusts to performance-based models. Stop-loss levels were 99 percent in FY 2010, and 98 percent in 2011.



In 2002, the **Pennsylvania** System of Higher Education (PASSHE) began allocating a portion of the state appropriation for institutions based on performance. In January 2011,

PASSHE revised the formula to align it with new strategic objectives. The formula was developed to ensure 1) the funding criteria were transparent; 2) the focus was on outcomes; and 3) the data would be accessible. PASSHE uses performance criteria to allocate about 8 percent of the total state appropriation for institutions.

Pennsylvania officials say their institutions have realized significant gains because of performance funding from 2002 through 2008, the most recent period for which figures are available, while increasing enrollment by nearly 20 percent. The state's accomplishments include a nearly 10-percentage-point increase in four-year graduation rates (including increases of 6 and 9 percentage points for black and Latino students, respectively) and a jump in second-year persistence rates (especially for Latino students, who were 15 percentage points more likely to continue with their studies.).



Since 2007, **Indiana** has adopted and refined legislation that links financial incentives for all public higher education institutions to a set of performance indicators. The

2007 legislation left the base funding for colleges and universities tied to credit hours enrolled. Performance incentives were provided that encouraged colleges and universities to help increase the number of students who finish their degrees, graduate on time and pursue transfer from community colleges to bachelor's programs.

In 2009, working with the Indiana Commission for Higher Education, the legislature began to tie base funding to performance. Over time, an increasing portion of the enrollment component of the state's funding formula will be based on credit hours completed—and not just credits attempted. By 2010, 90 percent of enrollment funding was based on credit hours attempted; the remaining 10 percent was based on hours completed. This ratio is expected

to continue to shift over time; by 2014, enrollment funds are expected to be based entirely on completed credit hours. In addition, Indiana's institutions are funded based on five other performance priorities: 1) increases in the number of degrees awarded; 2) increases in students graduating on time; 3) levels of degree completion by students from low-income families; 4) increases in students transferring from community colleges to bachelor's degree programs; and 5) the amount of non-credit workforce training provided by Ivy Tech Community College and Vincennes University.



The **Washington** State Board for Community and Technical Colleges sponsors the Student Achievement Initiative. Under this program, the state defines four levels of student

success, rewarding colleges for:

- Students building toward college-level skills as evidenced by basic skills gains and pass scores in pre-collegiate writing or math;
- 2. First-year retention (15 college-level credits per quarter, then 30);
- 3. Students completing college-level math; and
- 4. Students who complete degrees, certificates or apprenticeship training.

These measures focus institutions on helping students achieve intermediate outcomes that provide meaningful momentum toward degree and certificate completion, regardless of the point at which students begin. Colleges track students' progress each quarter, which offers administrators frequent feedback and opportunities for intervention.

The legislature approved a relatively modest \$3.5 million for the program in its 2009-11 budgets. The initial payments—totaling \$500,000 in fall 2009—were tied to performance during 2008-09. Each college received funding based on annual improvement in total student achievement. The Washington board has published results showing steady improvement between 2006-07 and 2009-10, with total student achievement increasing by 12 percent from 2008-09 to 2009-10 alone.



STEP 1: LESSONS LEARNED

Keep it simple.

During the past 20 years, 26 states experimented with performance funding. Researchers contend that many programs failed because there were too many performance measures and too much money was at stake. This made funding outcomes unpredictable and complicated; it also diluted the emphasis on generating more graduates. States exploring this policy option should focus squarely on student momentum points and course and program completion while limiting performance indicators to those that best measure progress toward these objectives.

Establish clear state- and campus-level goals for completion of degrees and credentials that contribute toward state attainment goals.

State goals for college attainment help establish clear expectations for policymakers, higher education leaders, faculty members and the public. These goals often are linked to the state's economic needs. With clear goals, states can align higher education policies with expectations. An example: In Ohio, the governor and legislature called for enrolling 230,000 more students and increasing graduation rates by 20 percent by 2017—all of which would result in 100,000 more degrees per year. This ambitious goal reflected that prior targets were either too low or too vague to influence the actions of colleges and universities.

Focus on year-to-year increases in the overall numbers of completers, not just on graduation rates that can conceal movements toward increased selectivity in admissions.

To avoid a focus on graduation rates that could lead

to increased selectivity or sudden funding shifts each year, funding should be tied to year-to-year increases in completion at each institution, in addition to typical comparisons of performance across peer institutions. Rolling averages also may be used.

Engage college and university leaders in the development of a performance funding system.

The success and longevity of performance funding ultimately will depend on building institutional support. Policymakers should begin working with college and university leaders and key faculty members early in the development of a funding model. Their input is especially useful for establishing appropriate performance indicators and measures that recognize the differing missions of institutions and rely on timely, relevant and accurate data. Institutional leaders, including provosts and faculty members, can become guardians of quality rooted in student learning.

Provide colleges and universities with room to maneuver and recognize institutions that get good results.

Research shows that support for performance funding will increase if colleges and universities can decide for themselves how to reach performance goals. They also should be lauded for successful outcomes and offered technical assistance if they fail to meet completion goals.

■ Take institutional differences into account.

The structure of performance funding should vary according to the missions and student characteristics of the institutions. Washington state's funding formula, for example, rewards progress before students earn their degrees or credentials. States also could allow institutions to choose differing weights for various metrics that reflect their unique roles and the students they serve.

 Provide incentives for colleges and universities to enroll and graduate more 21st century students.

Such incentives are critical because Black, Latino and Asian students, along with those from low-income families, make up a growing share of state workforces. Demographers project that by 2050 the United States will be a "majority-minority" nation in which whites are no longer the dominant racial group. In addition, states should ensure financial incentives are in place for institutions to enroll and graduate working-age adults, many of whom will require some form of education beyond high school.

Continue to innovate public financing of higher education even in the face of unexpected results or reduced revenues.

Some previous attempts at performance funding ended when institutions argued that the additional or new money wasn't sufficient to support the effort being required. More successful systems have considered financial incentives for completion a part of the base budget. Governors and legislators should establish at the outset that performance funding is not primarily a means of allocating new funding as it becomes available; rather, performance funding must be defined as a mechanism for aligning public spending with clear state priorities. In Indiana, performance metrics have been used to allocate spending reductions in tight budget times. Taxpayers have a right to expect that all monetary investments in higher education and not just newly available resources— are spent to educate the workforce each state needs.

ENABLING LEGISLATION, REGULATIONS OR RESOLUTIONS

■ Florida

The Government Performance and Accountability Act of 1994 (Ch. 94-249, Laws of Florida) established performance-based program budgeting in Florida (legislation archived)

Indiana

FY2009-11 budget legislation: www.in.gov/legislative/bills/1092/HE/HE1001.1.html. See also: www.in.gov/che/files/Disc_A_-_Report_on_09-11_budget_-_FINAL_VER.pdf.

Ohio

FY 2012-13 budget legislation: Am. Sub. H.B. 153 of the 129th General Assembly http://www.legislature.state.oh.us/BillText129/129_HB_153_EN_N.html

Washington

Student Achievement Initiative resolution: www.sbctc.ctc.edu/college/education/proposal_to_board_sept07.pdf.





STEP 2: STUDENT INCENTIVES



Strategic Use of Tuition and Financial Aid to Incentivize Course and Program Completion.

tudents respond to financial incentives. Tuition discounts, reduced fees and generous aid policies can persuade them to choose certain institutions over others. Dynamic pricing policies also can encourage students to complete their degrees on time. Students receiving need-based financial aid could be better motivated to complete courses and degrees if completion incentives were built into their awards packages. States and the federal government should make better use of financial resources flowing to students to promote completion of quality degrees and credentials to meet attainment goals. This can occur by rewarding desired student achievement or creating financial disincentives for pursuing actions that unnecessarily increase the costs to the public of subsidizing colleges and universities.

State financial aid policies should be simple and predictable. These policies should give high school students well-publicized incentives to complete rigorous college-level courses while in high school. In college, students receiving aid dollars should receive financial incentives for completing full course loads, for completing courses and for completing degree programs or training for credentials. When financial aid money is limited, public funds should initially be spent on lower-income students who are less likely to finish coursework without the assistance. The lion's share of state aid should not flow to talented students whose parents can afford to pay. Research shows that financial incentives make the greatest difference for average students who are capable of graduating but also are at risk of dropping out for financial reasons.

As demand for education beyond high school grows, physical constraints increasingly are limiting the capacity of colleges and universities to serve students. One approach some institutions are experimenting with is off-peak pricing, which can be used to reduce average costs by making better use of available building space. Such pricing can promote course-taking on nights or weekends. In addition, some states require students to pay higher tuition after they have accumulated more than 140 credit hours towards bachelor's degrees that require only 120 to 132 credits; this limits tax funds used to subsidize what some policymakers view as "excess-credit" accumulation. Policies also limit the number of courses students can enroll in but fail to complete and encourage students to complete their degrees on time.

STATE SUCCESS IN ACTION



Louisiana's Opening Doors was introduced by MDRC, an advocacy and research nonprofit, to incentivize course completion among morechallenging-to-serve students. The

program operated at two New Orleans-area community colleges—Delgado Community College and Louisiana Technical College, West Jefferson—from 2004 until 2005, when Hurricane Katrina struck and the experiment was cut short and remaining funds were disbursed to students. The program offered \$2,000 scholarships to students, especially those from low-income families, if they enrolled at least half-time and maintained a "C" average or better. Students received payments three times a semester, which represented milestones for counselors to review their performances. The state paid for these scholarships using surplus funds available through federal Temporary Assistance for Needy Families (TANF).

An evaluation of the Louisiana scholarship initiative found it held promise. Scholarship students were more likely to register than similarly situated students without the incentive aid—and they were more likely to register full time. In addition, they were more likely to stay in school at least four semesters. The scholarship also resulted in greater credit accumulation and higher grades for these students, who reported higher levels of involvement and interest in their education and higher levels of perceived support for their academic pursuits from their colleges and universities.

The Bill & Melinda Gates Foundation and other funders are supporting an MDRC evaluation of similar scholarship programs in California, New Mexico, New York City and Ohio.



Oklahoma supports a unique state financial aid program aimed at promoting awareness among high school students of the need to enroll in higher education and complete work on

degrees or credentials. Oklahoma's Promise offers eighth-, ninth- and 10th-grade students with family incomes of \$50,000 or less scholarship aid to attend in-state community colleges and bachelor-degree granting institutions. Eligible students must have minimum grade-point averages of 2.5 in certain college preparatory courses—a criterion consistent with research that indicates rigorous high school coursework and full-time college enrollment improve the likelihood of degree completion. These scholarships expire for each student after five years, giving them incentive to enroll and attend college full time.

Oklahoma's Promise recipients earn higher college GPAs and demonstrate higher-than-average college enrollment and persistence rates. In 2006, 82 percent of Oklahoma Promise-eligible high school students enrolled in college, compared to 57 percent of all Oklahoma high school graduates. Eightynine percent of scholarship students had GPAs of 2.0 or higher as freshmen (compared to 70 percent of all freshmen), while 86 percent stayed in college through their sophomore years (compared to 76 percent of all freshmen). In 2007, the Oklahoma legislature provided more permanent funding from the state's General Revenue Fund.



Texas has enacted and tested a number of promising financial incentives for students to complete courses and programs in a cost-effective manner. The College for All Texans \$1,000

Tuition Rebate encourages students to graduate with very few "excess" credits. The rebate is available to students at public four-year colleges in Texas who take no more than three credit hours beyond the minimum number required to earn their degrees. The rebate also provides an incentive to students to complete college-level courses in high school or elsewhere before they enroll in a college or university.

Additionally, Texas requires state colleges and universities to charge out-of-state tuition to in-state undergraduates who have accumulated excessive credit hours by the start of a new semester (30 or more credit hours beyond degree requirements is considered excessive). Once a student reaches this limit, the institution also loses state subsidies for additional credit-bearing courses these students enroll in.



Florida saved \$15 million and reduced dropped courses by half after requiring recipients of its Bright Futures merit scholarship to refund money if they withdrew from courses

after the drop/add deadline. In an effort to trim the budget of the financially strained scholarship program, the state legislature zeroed in on data revealing students were failing to complete 7 percent of courses they had enrolled in. Cutting taxpayer support of such withdrawals was a strategic choice that prevented deeper cuts in the program. Within the first year after this change, students withdrew from courses after the deadline at half of the former rate and those who withdrew repaid the state \$14.7 million.

STEP 2: LESSONS LEARNED

Create student-centered aid policies that target dollars efficiently.

Awards that are too small or linked to a particular type of institution limit students' options.

State aid policies should allow students to transfer between institutions without affecting their eligibility for aid. States are better positioned than colleges and universities to use financial aid to ensure completion for the largest number of low-income students. When financial aid is distributed by institutions, it's often spent to bid for the "best" students academically rather than to attract students whose financial need is greatest; however, research has shown incentives for students with fewer available resources benefits them more than other students by increasing college access and degree completion.

Retain state authority to establish tuition levels or provide tight parameters for institutions that set tuition.

States that deregulate tuition pricing forfeit strategic opportunities to influence student behavior.

Fund student success, not just enrollment, with aid programs, including aid to needy students.

Financial aid should explicitly promote student completion. Need-based aid programs that encourage students' academic preparation and push them to reach early milestones—such as earning the first 15 or 30 credits toward a degree—help remove known barriers to completing degrees.

Eliminate tuition or financial aid policies that discourage students from receiving academic credit through innovative, costeffective academic delivery models.

Pricing policies should promote participation in online, blended and other non-traditional academic delivery models that can accelerate learning or facilitate cost-effective education. In many states, online courses and programs offered at public institutions are priced higher than traditional instruction even though the marginal cost of providing such instruction can be significantly lower. Financial aid policies should treat similar learning opportunities similarly. In addition, student fees for awarding credit for prior learning demonstrated through testing, portfolios and other means should be discounted to the extent possible.

Target the largest financial incentives to those students least able to pay.

Louisiana's Opening Doors program targeted scholarships to lower-income single parents who typically must give up significant income to enroll in and complete college courses. Spread more widely among all students, the scholarships would likely have less impact and be more expensive to administer.

Ask for evidence.

Colleges should widely share evidence of cost savings as well as patterns in enrollment and completion. Financial aid administrators and institutional researchers should cooperate closely and share data to enable honest evaluations of tuition and aid programs. Policymakers should use this information when writing budgets.

ENABLING LEGISLATION, REGULATION OR RESOLUTION:

Oklahoma

Oklahoma Higher Learning Access Program (OHLAP) legislation—original: http://sde.state.ok.us/Law/LawBook/law/Chapter7/C_7-A_III.htm

Funding (SB 820): http://webserver1.lsb.state. ok.us/2007-08bills/SB/sb820_enr.rtf

Texas

SB 532 (2005): http://www.legis.state.tx.us/tlodocs/79R/billtext/html/SB00532F.htm

College for All Texas Tuition Rebate (Education Code, Chapter 54.0065): http://www.statutes.legis.state.tx.us/SOTWDocs/ED/htm/ED.54.htm

Florida

Bright Futures Program Legislative History: http://www.floridastudentfinancialaid.org/SS-FAD/bf/newsrenew.htm

Senate Bill 1696 Legislative Staff Analysis http://www.myfloridahouse.gov/Sections/Documents/loaddoc.aspx?FileName=2009s1696.hi.docx&DocumentType=Analysis&BillNumber=1696&Session=2009



STEP 3: NEW MODELS



Lower-Cost, High-Quality Approaches Substituted for Traditional Academic Delivery Whenever Possible to Increase Capacity for Serving Students.

he Big Goal of ensuring that 60 percent of working-age Americans have earned high-quality degrees or credentials by 2025 has been widely embraced. To reach this goal, the nation must graduate 23 million more citizens than its current pace.⁸ The existing higher education system cannot be scaled to meet this level of demand. At current rates of spending in higher education, the United States would need an additional \$33 billion beyond what the nation is projected to spend.⁹ Neither taxpayers nor students or their families can bear such expense.

Responding to this challenge by adding more bricks and mortar is unrealistic. Nor does it serve the millions of 21st century students who juggle work, families and education in traditional models. To increase higher education's capacity to meet national needs, policymakers and higher education leaders must embrace lower-cost, high-quality academic delivery models. Colleges and universities must implement cost-effective practices that support accelerated

completion by creating clearly defined pathways toward degrees and credentials that limit course options; by allowing students to complete segments of failed courses; and by simplifying credit transfers. ¹⁰ Institutions also should offer students multiple opportunities to earn credits for demonstrating their prior acquisition of knowledge and skills. Such steps could conserve public money and even win faculty approval by limiting student debt. ¹¹

STATE SUCCESS IN ACTION: COMPLETION EFFICIENCY

Governors from more than 25 states share a commitment to increasing completion efficiency as members of Complete College America's Alliance of States. ¹² They are working to improve graduation rates, reduce excess credits and redesign instruction—steps that will generate significant savings that can be used to enroll more students.

For example, initiatives to improve graduation rates by building structured pathways to a credential that limit course options can bring down the average cost of a degree by 11 percent; providing the right kinds of student supports can cut the cost of a degree by a third. A 10 percent reduction in excess credit accumulation would provide savings equivalent to nearly percent of the additional \$33 billion investment needed to meet the Big Goal by 2025. Redesigning academic delivery models could improve average degree productivity by between 17 and 26 percent.



Florida's longstanding guaranteed statewide transfer agreement promises that students who complete 60 credits as part of an associate degree will be admitted to Florida's public

four-year universities as juniors. The agreement has increased the number of transfer students admitted to Florida's universities, and participating students end up graduating with the same number of credits as they would have if they had started at these bachelor-degree granting institutions as freshmen. After drawing lessons from Florida's experience, Louisiana created a similar guaranteed-transfer degree, implementing the program and communications plan within a single year. 17



California has reduced growth of excess academic credits by requiring that no bachelor's degree program can exceed 120 semester hours without making an evidence-based case

for doing so. Thanks in part to campus monitoring systems, three-fourths of California State University programs now require no more than 120 credits; to achieve this result, nearly 85 percent decreased their total credit requirements.¹⁸



Arizona has more than a thousand lower-cost bachelor's degree pathways that involve students beginning their studies at community colleges and completing them at universities. Stu-

dents in these programs can pay up to 50 percent less in tuition than if they spent the entire four years at main university campuses. In addition, Arizona's universities offer lower-tuition options at extended campus sites and through accelerated and online degree programs. These lower-cost options enroll more than 11,000 students across Arizona.¹⁹



Maryland has launched a statewide redesign of freshman- and sophomore-level courses in which students have high failure rates. Under a plan the state university system adopted

based on the National Center for Academic Transformation course-redesign model, every public college and university is redesigning at least one course. The results have been promising. After redesigning an introductory psychology course, Frostburg State University reduced its cost-perstudent by 71 percent even as pass rates increased.²⁰ Towson University redesigned a non-credit-bearing math course for students in need of remedial work and increased the pass rate by 17 percentage points, from 33 percent to 50 percent.²¹ Student transcript reviews can be used in such efforts to target courses

likely to generate the greatest savings and gains in student learning. Like Maryland, states should focus on redesigning "bottleneck courses" that trip up many students. States also should require colleges and universities to show how they are using savings from course redesigns to serve more students.

Carnegie Mellon University's Open Learning **Initiative (OLI)** creates low-cost, web-based courses taught by leading faculty members and accessible to any student or institution in the world. OLI's library of online courses includes some of the common courses freshmen must take. In addition to reducing the cost of providing instruction, open-learning courses can enhance learning and significantly reduce the time required to master content by providing the right level of instruction at the right time. Studies show students accessing open courses can learn the same material as in a traditional semester-long course in half the time.²² Creative course redesign efforts make more effective use of available space, technology and faculty time and create mechanisms for sharing promising practices across institutions. Faculty members are drawn 1) to the idea that transforming how the curriculum is delivered could free them up to focus on upper-division courses; 2) to the prospect that these technology-enabled courses could be delivered in more exciting and effective ways; and 3) to the opportunity to learn about new techniques for engaging students' learning that also could improve outcomes in the lower-division courses that help interest students in their disciplines. Redesigned courses can provide individualized support targeted to students' specific needs, including the use of open-source educational resources. They also provide professional development and specialized online course resources for instructors, and make use of the best available research into how students learn complex material.23

STATE SUCCESS IN ACTION:

LOWER-COST, HIGH-QUALITY MODELS

Below are public, nonprofit and for-profit programs that represent lower-cost, high-quality models for delivering education. States should aggressively explore these alternative approaches for increasing their capacity to graduate more students at a much reduced cost to students and taxpayers alike.

National nonprofit **Western Governors University** is a competency-based online university serving more than 20,000 students. WGU's relatively low costs—about \$6,000 per year for most degrees—have increased slowly compared with traditional institutions. The institution's cost per degree has dropped since 2002. The average time to a bachelor's degree is only 30 months. Indiana and Washington State have added state-branded WGU programs through an executive order and enabling legislation, respectively. WGU Indiana is on track to serve 3,000 additional students within three years in its business, education, IT and nursing programs.

To help adult students earn their degrees more rapidly, the University of Maryland University College (UMUC) systematically assesses competencies and knowledge obtained through life and work and awards academic credit for this "prior learning." The university is the largest postsecondary provider for the U.S. armed services, including returning veterans. Policymakers should strongly encourage institutions to widely advertise the availability of such assessments and to award low-cost academic credit for demonstrated proficiency in critical areas of learning. At UMUC, faculty advisors assess prior learning, with credit often awarded for even upperdivision courses. The college also uses prior-learning assessment as a recruiting tool, advertising it on the web and through broadcast and cable commercials aimed at working-age adults.

Rio Salado College, originally developed as a campus of Maricopa Community College in Arizona is now one of the nation's fastest growing public colleges, offers more than 500 online courses, with most starting every two weeks. Its shorter course schedules mean students can accelerate their learning. Rio Salado uses analytics to determine with 70 percent certainty within the first eight days of instruction whether students are at risk of failing without interventions.

The **Southern Regional Education Board's Electronic Campus** is a central marketplace for some 28,000 courses and more than 800 degree programs offered online by colleges and universities in the South. Under a reciprocity agreement among participating states, the Electronic Campus offers courses and programs that have won approval from regulators within their home states. This approval is based on a set of commonly developed "principles of good practice" consistent across the states and functioning as a regional certification of course or program quality.

In 1987 the Western Interstate Commission for Higher Education created the **Western Undergraduate Exchange (WUE)**, a program which offers enrollment in many community colleges and colleges and universities in 15 states at tuition levels roughly midway between the institutions' in-state and out-of-state tuition rates. The WUE network is the largest program of its kind in the country, with more than 143 two- and four-year public institutions serving 28,000 students.

The Midwestern Higher Education Compact's Student Exchange Program offers reduced interstate tuition at public and private institutions. The Southern Regional Education Board's Academic Common Market offers discounted tuition regionally at public and private nonprofit institutions. The fourth regional compact, the New England Board of Higher Education, also features a New England Regional Student Tuition Break Program for students within its states attending public institutions in other participating states.

STEP 3: LESSONS LEARNED

Conduct policy audits to determine which regulations and other policy barriers impede the growth of lower-cost, high-quality models. State policies sometimes create barriers that hinder the growth of innovative models. Policymakers

State policies sometimes create barriers that hinder the growth of innovative models. Policymakers should make expanding low-cost, high-quality technology-enabled models while protecting consumers a top priority. Common policy barriers include: laws or regulations that prohibit online institutions; costly, confusing regulatory oversight and unclear consumer protection provisions; prohibitions against using state student financial aid at high-quality online institutions, including nonprofit providers; and professional licensing boards' lack of familiarity with online degree programs.

Create a guaranteed-transfer lower-division core or degree.

Developing a statewide lower-division core or associate transfer degree guarantees students completing up to 60 credits at lower-cost institutions will not have their time or money wasted. A guarantee core assures students they will be admitted to a four-year institution as an upper-division student with all credits counting toward earning a bachelor's degree. Making this commitment a reality for students can lead to unprecedented cooperation among faculties and institutions to eliminate barriers that prevent students from successfully transferring between postsecondary institutions.

Identify and eliminate degree-program credit creep.

Establishing a system or statewide standard for the maximum number of credit hours needed to obtain a particular degree can lead to lowered costs to both students and institutions. In addition, periodic academic program reviews can lead to the identification and elimination of programs that are not strategically connected to state needs and priorities, produce low numbers of graduates, or are duplicative.

When redesigning the high-volume, lowerdivision courses, set deadlines and target a limited number of courses

By restricting course redesign efforts to a limited number of large-enrollment, introductory courses a college or university can still impact nearly every student who attends. Improved retention, enhanced quality and expanded access are typical results of such efforts. As some course redesign efforts have taken years to complete, it is advisable to set deadlines and provide adequate resources to faculty to assure timely implementation.

Award academic credit for prior learning that can be documented through testing, portfolios, demonstration or other methods.

Maximizing the number of ways a student can earn academic credit utilizing Prior Learning Assessment (PLA) increases the likelihood a student will be able to progress more rapidly toward a postsecondary degree or credential. In addition to saving the student both time and expense, promoting widespread PLA credit opens pathways for lower-cost models, including postsecondary education delivered in the workplace.

Form innovative partnerships across state lines to create flexible, student-centered programs.

It is increasingly common for students to attend multiple institutions prior to earning a degree or credential. This pattern of student "swirl" or "double-dipping" (concurrent enrollment at multiple institutions), coupled with increased mobility and the rise of online accessible courses, provides added incentive for developing collaborative initiatives that bypass traditional geographic barriers and deliver quality education at a lower cost.

ENABLING LEGISLATION, REGULATION OR RESOLUTION:

Florida

Policy on Transfer Associates Degree: http://www.calstate.edu/acadaff/codedmemos/ AA-2007-37.pdf

Louisiana

http://collegeproductivity.org/sites/default/files/LA_Transfer_Associate_Degree_-_one-pager[1]toKC[1].doc.pdf

■ The California State University

120-credit degrees: http://www.calstate.edu/acadaff/codedmemos/AA-2007-37.pdf

University System of Maryland

Course Redesign: http://www.usmd.edu/usm/academicaffairs/courseredesign/

Carnegie Mellon University

Open Learning Initiative: http://oli.web.cmu.edu/openlearning/

■ WGU Indiana (Western Governors University)

Executive Order: http://www.in.gov/legislative/iac/20101229-IR-GOV100781EOA.xml.pdf

University of Maryland University College http://www.umuc.edu/

■ Rio Salado College

http://www.riosalado.edu/

Southern Regional Education Board

Electronic Campus: http://www.electronic campus.org/

Principles of Good Practice: http://www.ecinitiatives.org/publications/Principals_2004.pdf

Midwestern Higher Education Compact

Midwest Student Exchange: http://www.mhec.org/MidwestStudentExchangeProgram

New England Board of Higher Education

New England Regional Student Program: http://www.nebhe.org/programs-overview/ rsp-tuition-break/overview/

Western Interstate Commission for Higher Education

Western Undergraduate Exchange: http://wue.wiche.edu/.





STEP 4: BUSINESS EFFICIENCIES



Business Practices That Produce Savings to Graduate More Students.

axpayers and policymakers are more willing to invest in higher education when colleges and universities demonstrate they are good stewards of public money and manage spending decisions well. Colleges and universities should systematically review and prioritize programs from campus operations, academics and athletics to 1) reduce or eliminate lower-priority programs and services, and 2) consolidate or outsource non-core programs and services. Over the years, institutions have added courses and programs without systematically analyzing their relative contribution to the overall welfare of individuals, society and the economy. In a quest for smarter students, better reputation and financial support, many institutions unrealistically strive to be all things to all people instead of focusing on what they do best. As a result, the vast majority of U.S. institutions are overprogrammed for their available resources. One frequently overlooked source of money for making new investments is the reallocation of an institution's existing resources.

Without faculty support, achieving the kind of change in higher education the country needs to prepare for the future simply won't be possible. The nonpartisan research firm Public Agenda has found that addressing business-side efficiencies is a classic "first-things-first" issue for faculty members.²⁴ In part, this is because only about a third of faculty members today are in tenure-track positions; the remainder are part time or contingent. Meanwhile, the numbers of people in highly compensated administrative positions has grown dramatically, according to the American Association of University Professors. This imbalance must be addressed if faculty members are to be persuaded to participate in productivity efforts. In the case of the University System of Maryland, cited earlier, the Effectiveness & Efficiency Initiative began with a major focus on systems operations rather than on academics; this approach cleared a path for effective faculty engagement around course redesign.

At the state level, policymakers should limit the number of research institutions; focus regional, four-year campuses on teaching; and rely on community colleges to provide lower-cost education for students enrolled in general education coursework and those receiving workforce training. So-called "mission creep" can be a problem at institutions that aspire to attract research funding, because fulfill-

ing these aspirations can increase costs and reduce productivity in terms of serving undergraduate students. Competitive athletic programs almost always require substantial subsidies from colleges and universities that pull money away from academics.²⁵

To spur efforts to reform business practices, governors and legislators should eliminate any policy that prevents joint or bulk purchasing in areas such as health care, information technology, equipment, supplies and energy. Instituting administrative efficiencies in payroll, purchasing and other non-core functions also can make more money available to serve students. Employee contributions to health care and retirement plans also deserve scrutiny and should be measured against other private sector, competitively established contribution and benefit levels. Campuses should be required to consider consolidating back-office operations through use of common technology, with institutions reaching beyond higher education or even state borders to partner with K-12 school districts, government agencies and quasi-public entities to achieve economies of scale and scope.

Institutions should be required to show how they reallocate savings toward increasing the number of students who complete high-quality undergraduate degree and credential programs.

STATE SUCCESS IN ACTION



Maryland formed the University System of Maryland Board of Regents Work Group for Effectiveness & Efficiency (E&E) in 2003. The group reviewed all aspects of the academic

enterprise to "improve academic quality, maintain access, replenish the USM fund balance, implement measures for dealing with budget difficulties, and publicly demonstrate efficient and effective operations."26 Driven by Regents chair Clifford Kendall and Chancellor William "Brit" Kirwan, this effort aimed to streamline the system's cost structure and develop a national model of effectiveness and efficiency. Initial projects targeted administrative functions with immediate savings, including auditing, construction management and procurement services. By 2006, E&E had evolved to address academic productivity, establishing new policies and system-wide practices regarding faculty workload, course redesign, credit-hour caps on programs, requirements for off-campus study to increase capacity to serve students and a trimester pilot.

The E&E initiative generated \$208.4 million in savings from FY 2004 through FY 2010. Buying electricity collectively saved \$5 million within three years, while a joint purchasing agreement with Microsoft saved an additional \$1 million a year. More savings were realized from maintenance contracts and a system that allowed students to enroll in courses on more than one campus through a "one-stop" registration process. This process also can smooth students' efforts to transfer credits.

The Midwestern Higher Education Compact

(MHEC) received an \$800,000 grant from Lumina Foundation in 2008 to implement regional initiatives aimed at improving productivity for colleges and universities that face increasing costs for energy, utilities and health care for employees and students. To date, the three-year effort has led to the release of an RFP for group contracts that can save money on energy-conservation retrofitting components purchased by a broad range of institutions in an effort to reduce their energy costs. MHEC is also considering bundling energy services and products to enhance the value of cutting-edge energy-reduction products and make them available to a broader range of institutions at a reduced cost. In health care, MHEC is exploring a regional student health-benefit program in which large and small institutions pool together to purchase quality student health insurance at reduced expense. Additionally, to find practical solutions that don't significantly disrupt current employee health plans, MHEC is working to identify niches, such as pharmacy benefits, where collective purchasing can

achieve cost savings. These new initiatives will add to MHEC's past successes in saving institutions and students more than \$441 million on joint computer hardware and software purchases, property and casualty insurance and telecommunications services. MHEC's services are available to higher education institutions, K-12 schools and nonprofit organizations across the country.



Ohio has instituted several cost-cutting initiatives designed to improve efficiency throughout the state's higher education system. These initiatives include: a statewide shared

purchasing consortium, statewide cost-savings collaborations across multiple institutions and efficiency-oriented formulas for distributing public funds. State colleges and universities identified key priorities, developed strategic plans, adopted cost-containment practices and implemented best practices. As a result, campuses reported a combined savings of \$322 million in FY 2005 and FY 2006. The state mandated an additional 1 percent efficiency savings in FY 2008 and 3 percent increases in FY 2009, FY 2010, and FY 2011. Campuses reported more than \$186 million in efficiencies in FY 2008, \$200 million in FY 2009 and \$285 million in FY 2010.

In FY 2010, the chancellor created a Statewide Efficiency Council comprising a variety of stakeholders, including faculty and students. The council meets regularly to monitor and promote achievement of business efficiencies and cost-saving collaborations within the University System of Ohio. The work is focused on five areas: energy efficiency; IT and educational technology; human resources and administrative efficiency; academic efficiency; and procurement.

In addition, the Ohio Inter-University Council, an association of public colleges and medical schools, manages several cooperative purchasing programs to promote and manage high-volume purchases such as through pooling risk to obtain lower-cost property and casualty insurance. Ohio already has a statewide electronic library system, and campuses are looking to create collaborative arrangements involving information technology and administrative computing. Further, the Rx Ohio Collaborative drug-benefit program will be available to all Ohio public-sector employees, including government workers, public school employees and higher education employees. Within the first year, Ohio State University saved 9 percent on prescription drugs spending through a bulk purchasing agreement. The program was expected to save \$300 million by 2011.

STEP 4: LESSONS LEARNED

- Articulate statewide priorities that create clear and measurable efficiency expectations tied to state workforce and economic development goals.
- Focus institutions on what they do well and push them to eliminate duplicative or lowdemand academic programs.
- Demand evidence that savings are promoting increased degree completion.

- Outsource the delivery of non-academic functions whenever possible.
- Set expectations for governing board appointees to prioritize and reallocate in an academically responsible way.
- Support a common technology platform.
- Institutionalize efficiency efforts and expectations through the creation of a standing state efficiency council.

SELECTED NATIONAL ASSOCIATIONS AND INITIATIVES

- The National Association of College and University Business Officers (NACUBO)
 http://www.nacubo.org/Business_and_Policy_
 Areas/Organizational_Effectiveness.html
- The National Consortium for Continuous Improvement in Higher Education http://www.ncci-cu.org/
- The Kuali Project http://kuali.org/

■ The National Association of Education Procurement

http://www.naepnet.org/iMIS15_prod/public/default.aspx

- The Shared Services Benchmarking Association http://ssbenchmarking.org/
- The National Association of State
 Procurement Officers http://www.naspo.org/
- The National Association of Energy Service Companies http://www.naesco.org/

ENABLING LEGISLATION, REGULATION OR RESOLUTION:

Maryland

USM Board of Regents Effectiveness & Efficiency (E&E) Charge: http://www.usmd.edu/usm/workgroups/EEWorkGroup/initiative.html

E&E Policies: http://www.usmd.edu/usm/work-groups/EEWorkGroup/eeproject/eepolicy.html

E&E Reports: http://www.usmd.edu/usm/work-groups/EEWorkGroup/eeproject/eereports.html

Ohio

USO Advisory Committee on Efficiency Directive: http://regents.ohio.gov/actions/documents/Dir2008-027.pdf

General information: http://regents.ohio.gov/policymakersguide/efficiency.php

The Rx Ohio Collaborative: http://www.rxoc.org/

Disclaimer

This report provides a nonpartisan analysis of lessons learned from implementation of college productivity strategies aimed at increasing the percentage of Americans with high-quality degrees and credentials to 60 percent by 2025. For more information, see CollegeProductivity.org. Lumina Foundation does not lobby or make grants to support lobbying activities. The views expressed in this report are those of the authors and do not necessarily represent those of Lumina, its officers and directors or employees.

College Productivity 740

ENDNOTES

- 1 National Center for Higher Education Management Systems and Delta Cost Project, "Rethinking Conventional Wisdom about Higher Education Finance," at http://www. deltacostproject.org/resources/pdf/advisory_10_Myths.pdf
- 2 Albright, Brenda, "Tip sheet on Performance Funding," at http://www.collegeproductivity.org/sites/default/files/resources/TipsheetonPerformanceFunding.pdf and http://www.makingopportunityaffordable.org/sites/default/files/resources/TipsheetonPerformanceFunding.pdf.
- 3 Marcus, Jon, case study of the University System of Maryland. National Crosstalk: Effectiveness and Efficiency: The University System of Maryland's campaign to control costs and increase student aid at: http://www.highereducation.org/crosstalk/ct0206/front.shtml, and University System of Ohio: Second Report on the Condition of Higher Education in Ohio, at http://www.uso.edu/downloads/reports/ConditionReport2009.pdf.
- 4 2010 MGT of America study for Arizona's Getting AHEAD initiative. http://nca2010.arizona.edu/documents/Criterion%202%20Future/Lumina%20Phase%20I%20Report%20Finance%20Committee-Revised.pdf
- 5 2010 MGT of America study for Arizona's Getting AHEAD initiative. http://nca2010.arizona.edu/documents/Criterion%202%20Future/Lumina%20Phase%20I%20Report%20Finance%20Committee-Revised.pdf
- 6 Performance-based Funding: A Re-Emerging Strategy in Public Higher Education Financing, Thomas L. Harnisch, June 2011, American Association of State Colleges & Universities, Washington, DC.
- 7 Concerns About Performance-based Funding and Ways that States are Addressing the Concerns, Nancy Shulock, May 2011, Institute for Higher Education Leadership & Policy, Sacramento State University. www.csus.edu/ihelp
- 8 Navigating the New Normal, http://www.collegeproductivity. org/sites/default/files/LuminaNewNormalRptFnlRv.pdf
- 9 ibid.
- 10 Changing the Conversation About Productivity: Strategies for Engaging Faculty and Institutional Leaders, 2010, Public Agenda, New York, NY. http://www.publicagenda.org/ files/pdf/changing-conversation-college-productivity.pdf
- 11 Ibid.
- 12 Complete College America advocates for increased college completion with consistent state policy recommendations for performance funding, developmental education reform, time-to-degree policies, and accelerated, more structured
- 13 Auguste, Byron G., Adam Cota, Kartik Jayaram, and Martha C. A. Laboissière, McKinsey and Company, *Winning by Degrees* at http://collegeproductivity.org/sites/default/files/Winning_by_degrees-Report.pdf

- 14 Navigating the New Normal, http://www.collegeproductivity.org/sites/default/files/LuminaNewNormalRptFnlRv.pdf
- 15 Auguste, Byron G., Adam Cota, Kartik Jayaram, and Martha C. A. Laboissière, McKinsey and Company, *Winning by Degrees* at http://collegeproductivity.org/sites/default/files/Winning_by_degrees-Report.pdf
- 16 Shulock, Nancy and Cristy Jensen. Crafting a Student-Centered Transfer Process in California: Lessons from Other States at http://www.csus.edu/ihelp/PDFs/R_Transfer_Report_08-09.pdf
- 17 Louisiana Transfer Associate Degree: Creating Systemic Success, HCM Strategists at http://collegeproductivity.org/sites/default/files/LA_Transfer_Associate_Degree_-_one-pager[1]toKC[1].doc.pdf
- 18 Minnesota State Colleges and Universities Report of the Task Force on Degree Credit Caps at http://www.academicaffairs. mnscu.edu/academicprograms/resourcedocuments/ resources-taskforceondegreecredi.pdf
- 19 Arizona University System Makes Significant Progress on Regents' Plan for New Low-Cost Degree Options for Students at http://www.thekc.org/system/files/ABOR_ PR_LowCostOptionsProgress_FINAL.pdf
- 20 HCM Strategists, Tracking Momentum: Higher Education Productivity in America Edition 2 at http://www.hcmstrategists. com/Momentum_2.pdf
- 21 ibid.
- 22 Lovett, Marsha, Oded Meyer, and Candace Thille, *The Open Learning Initiative: Measuring the Effectiveness of the OLI Statistics Course in Accelerating Student Learning* at http://oli.web.cmu.edu/openlearning/files/theinitiative/publications/jime-2008-14.pdf
- 23 Changing the Conversation About Productivity: Strategies for Engaging Faculty and Institutional Leaders, 2010, Public Agenda, New York, NY. http://www.publicagenda.org/ files/pdf/changing-conversation-college-productivity.pdf
- 24 Changing the Conversation About Productivity: Strategies for Engaging Faculty and Institutional Leaders, 2010, Public Agenda, New York, NY. http://www.publicagenda.org/ files/pdf/changing-conversation-college-productivity.pdf
- 25 Jack Gillum, Jodi Upton and Steve Berkowitz, Amid funding crisis, college athletics soak up subsidies, fees, 2010, *USA Today* at http://www.usatoday.com/sports/college/2010-01-13-ncaa-athletics-funding-analysis_N.htm
- 26 http://www.mus.edu/board/meetings/RegentsWorkgroup/MDSiteVisitSummary_FNL.pdf
- 27 http://www.mhec.org/pdfs/0910mhecsavings.pdf





 $\hfill \Box$ Lumina Foundation for Education, Inc.



NEVADA SYSTEM OF HIGHER EDUCATION

Fresh Look at Nevada's Community Colleges Task Force

REPORT TO CHANCELLOR DANIEL KLAICH

SUBMITTED BY BRUCE JAMES TASK FORCE CHAIRMAN

August 17, 2011

Nevada Community Colleges

College of Southern Nevada

Great Basin College

Truckee Meadows Community College

Western Nevada College

I. OVERVIEW

In June of 2010, Nevada System of Higher Education (NSHE) Chancellor Daniel Klaich established the Fresh Look at Nevada's Community Colleges Task Force to determine if our colleges were truly aligned with the future employment and learning needs of Nevadans. While the state's four community colleges in Carson City, Elko, Las Vegas and Reno seemed to be responsive in meeting the needs of their respective communities, the larger issues are whether, as a state, we are adequately preparing our learners with the skills and knowledge that will be required by employers, and whether we have enough learners in the educational pipeline to fulfill their requirements.

By tradition, each of our community colleges operates more or less independently, following the federal and state laws, regulations and rules governing higher education. This is similar to community and junior colleges throughout the country, each of which, for the most part, has been created over the last 50 years by local communities to meet the educational needs of their citizens. For the most part, these colleges are funded by local property taxes and governed by locally elected boards, which help keep their institutions tuned to the changing requirements of their local citizens and businesses. However, in Nevada, it's different. While one of our four colleges was started and funded in part by local citizens, the colleges were collectively moved under the governance of NSHE and are funded by the legislature through the state's General Fund.

The Task Force began its work by considering state population and employment trends. In particular, it looked at where the state population will likely be in ten years, what types of jobs are likely to be available, and what level of educational attainment, including associate and baccalaureate degrees as well as vocational and technical education, will be needed to fill the available jobs. While our community colleges have

taken on many roles over the years to meet their communities' needs, the state's primary reasons for supporting the community colleges with public funds are, first, because of their importance in preparing Nevadans to obtain the first two years toward a baccalaureate degree; secondly, to prepare those who wish to enter the workforce directly with skills and abilities that are matched to employers' needs; and thirdly, as a means of working with employers to refresh those skills and abilities as workplace requirements change.

The importance of our community colleges to the economic vitality of their own communities and to the state overall cannot be overemphasized, especially as new and emerging technologies are rolled out at an ever-increasing pace. Our community colleges, under strong leadership, have carved out a critical niche in providing learning opportunities for our citizens that would not otherwise be available, and in enabling our employers to succeed and expand their enterprises. They have been responsible for raising the overall level of educational attainment for our citizens and will be critical to the state's future economic success.

This report focuses on how we can continue to evolve our community colleges to meet the needs of the next generation of learners within the resources that are likely to be available.

II. BACKGROUND

Chancellor Daniel Klaich appointed Bruce James as chairman of the Task Force because of his background in business, public service, and higher education governance. Together, they sketched out the various backgrounds that would be needed by members of the Task Force to have an informed and balanced group (see appendix A). These included individuals from businesses who employ the colleges' graduates, K-12 leaders who prepare students for the colleges, university leaders who accept graduates for continuing higher education, and public policy leaders. The Chancellor selected and appointed 14 members, including the chairman, to form the Task Force. In addition, he appointed Dr. Magdalena Martinez, Assistant Vice Chancellor for Academic and Student Affairs, herself a former student of the College of Southern Nevada, to support the Task Force and be its liaison with NSHE.

Mr. James and Dr. Martinez initiated the Task Force by meeting in Washington, DC with federal education leaders and the heads of several higher education associations that are focused on community colleges. They sought an informed, macro-perspective on the nature and state of community colleges throughout the United States, national trends, challenges faced by all, best practices, and federal and private resources available to support both students and colleges.

The first formal meeting of the Task Force took place July 22, 2010 at NSHE headquarters in Reno. The Chancellor hosted and led the meeting, making certain that all understood his

charge and what resources were available from NSHE in support of the work of the Task Force.

Thereafter, the Task Force met in 11 monthly all-day sessions, rotating locations to include each of the community colleges, Nevada State College, businesses, a major hospital, a union training facility, and a high school technical academy (see appendix B). At each location, the host organization provided Task Force members a comprehensive overview of its operations and, in the case of employers, a vision of its current and future educational needs and requirements.

In addition, at each meeting, the Task Force invited local leaders as well as representatives of various state and federal organizations to share their views on subjects of interest to the Task Force. Altogether, the Task Force heard from nearly 100 individuals, who shared their views on issues ranging from programs to improve college graduation, to the emerging use of technology in teaching and learning, to private sector colleges helping us to understand how they see their roles in higher education, to community leaders sharing their views on the importance and relevance of their respective college.

At the Task Force's final meeting on June 16, 2011, members concluded that the hallmark of Nevada's community colleges has been their flexibility in meeting the ever-changing needs of citizens, communities, and employers in the state.

However, Nevada's community colleges now find themselves at a point in time when their traditional resources are not sufficient to meet the needs of learners or employers today, and are not apt to be sufficient tomorrow without serious changes. Assuming that there will be no large influx of new

money, the Task Force considered how the colleges' resources, collectively, can be better deployed, how they can work as a group to reduce costs, how they can deploy technology to create more options for learners, and how the private education sector might be engaged in ways that expand postsecondary learning opportunities. The Task Force also examined changing the state's funding formula for community colleges to put less emphasis on student enrollment numbers and more on student success. Members looked at how variable, or flexible, pricing can be used to help achieve statewide higher education goals while offering incentives for students to succeed.

The Task Force's recommendations were derived from dialogues with the administrators and faculty of the four community colleges, the communities they serve, Nevada K-12 administrators, university faculties and administrators, employers, and higher education leaders in Washington, DC and throughout the country.

III. OBSERVATIONS

A) The Big One

At the Nevada 2.0 Conference in 2011, Robert Lang, UNLV Director of Brookings Mountain West, highlighted how Nevada has one of the highest average wages of any state, relative to the population's level of education.

Nevada's high wages were a function of supply and demand while the state's boom growth led the country in population growth for 15 years. However, Nevada's population growth slowed dramatically with the national recession; labor force supply and demand changed, leaving Nevada with the largest percentage of unemployed people in the nation. The outlook is for modest employment growth in the hospitality and service related industries, including construction, for the next few years.

Yet, many Nevada jobs go unfilled because our employers cannot find people with the skills, experience, and educational credentials needed for today's jobs. This mismatch has short and long term implications for the recovery of our state and for the quality of life of our citizens.

B) Shortage of Trained Workers

State officials are undertaking a serious effort to diversify Nevada's economy by attracting new businesses to the state that offer good paying job opportunities and careers. To meet the educational needs of the state's existing employers, as well as to attract new ones, we must develop strategies to measurably increase postsecondary education for Nevada's high school students. We must also offer viable educational opportunities for returning adult learners so that they can remain competitive in their job skills and be prepared for new career opportunities.

Indeed, the Task Force heard from its own members who are now expanding and locating new manufacturing facilities in other states because of their inability to find technically trained, available workers in Nevada. Most of their available jobs now require, at entry, a minimum of an associate degree or meaningful certification in an occupational or technical specialty.

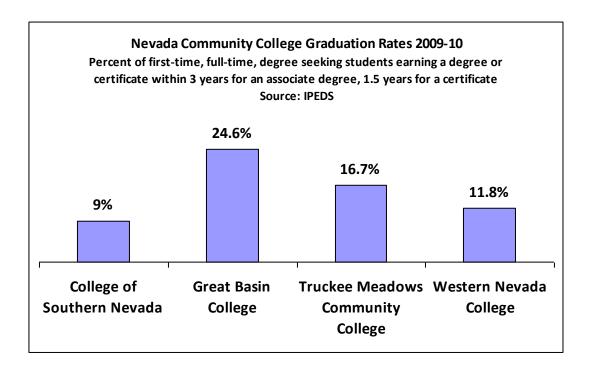
C) Workforce Trends

Georgetown University researchers from the Center on Education and the Workforce recently forecasted by state and by job category, the workforce educational requirements that will be needed through 2018. In Nevada, they estimate 54 percent (or 938,000) of all jobs will require some type of college degree or meaningful certification of occupational/technical competency. Between now and 2018, considering retirements, new jobs in Nevada requiring a postsecondary degree or certificate will grow by at least 490,000. According to the National Center for Higher Education Management Systems, in 2009 only 30.37 percent of Nevada's adults aged 25 to 64 have a college degree. From all sources, both public and private, 12,008 Nevadans graduated from college, in state, with certificate, associate and bachelor's degrees in 2010. At this rate, we will fall short by nearly 400,000 college graduates in 2018. Graduation rates for all Nevada institutions, particularly community colleges, will have to increase significantly to keep pace with workplace demands and worker training needs.

D) National Emphasis on College Completion

The U.S. Department of Education has prioritized its efforts to focus on the national problem of college-goers who do not complete their college educations. Nevada has a more serious problem in this regard than other states. For 2008-09, the community college graduation rate within three years for students who entered one of Nevada's community colleges with

the intention to pursue an associate degree or certificate, ranged from 4.5 percent to 25.5 percent. While recognizing that this may not be the whole story—some may take longer than three years, some may transfer before completion to a university, or there may be other factors—Nevada's community colleges must do a much better job in helping students complete their degrees or certificates in a timely fashion so that they are prepared to enter the workforce in well-paying careers.



E) Remediation

According to NSHE, for 2008-2009 at least 32 percent of students entering Nevada colleges and universities directly from high school needed subject area remediation before being prepared to take college level courses. Coupled with the remediation needs of adult learners returning to pursue a college degree, our community colleges are now devoting significant resources to remedial instruction. This impacts the colleges' capacities to accept additional learners and help current students complete degrees and certificates.

F) Pathways to College

Nevada has the lowest high school graduation rate in the country. According to the National Center for Education Statistics, only half of Nevada's 9th graders will graduate from high school in a timely fashion; of those who do graduate from high school, a little over half enrolled in postsecondary education immediately after graduation.

Nevada's community colleges receive about half of those college-goers. And, of those who enter our community colleges, close to half will require some form of remediation.

The Task Force looked carefully at this situation to understand why so many high school students are uninterested in or underprepared for college. First, there is a lack of alignment in courses between Nevada's high schools and colleges; high school students earning high grades in some subject areas find themselves unprepared for the follow-on college courses. Second, there are no clear career pathways presented early enough to students to help them choose and follow an articulated path from high school through college or an advanced occupational/technical education; many do not understand the connection between education and obtaining a good job. Third, even many of the brightest and best high school students believe that neither they nor their families can afford college, and never consider the possibility of pursuing a degree or certificate; they are not aware of or do not understand the financial aid opportunities available to them.

G) New Technologies

Our community colleges are usually among the first to feel the impact of technology on employers in their areas. As a group, they have a good track record of responding to employer needs by creating specialized classes and programs. This is important as the speed of technological

changes in our workplaces and in society is accelerating at an ever faster pace.

What's not as clear is whether our community colleges are adjusting their core curricula fast enough to account for these changes.

Technology is also impacting college teaching and learning allowing student flexibility with regards to time and place and allowing faculty to develop curricula and to teach from a variety of new sources. One example currently being explored for expansion in community colleges is blended or hybrid classes where courses are presented to students partially in a traditional classroom environment and partially online.

An entire new sector of higher education has grown up nearly overnight, by not only embracing technology but more importantly offering students an entirely different type of learning experience that is focused on achieving competency in a self-paced, virtual environment.

Traditional colleges, including Nevada's community colleges, have been slow to embrace technology coupled with a focus on competency based outcomes, as have non-profits such as Western Governors University and for-profits such as Phoenix, Kaplan and DeVry Universities. Smart use of technology with a focus on competency outcomes is one way Nevada can dramatically expand its postsecondary educational opportunities and improve graduation rates for both first-time and returning learners.

H) Input vs. Outcome

For the first time in a generation, the Northwest Commission on Colleges and Universities, the agency which accredits Nevada's colleges and universities, has changed its accreditation standards. Formerly, they measured each college's preparation to deliver on its self-defined mission by assessing inputs such as libraries, classrooms, classroom hours, homework hours, percentage of tenured faculty, and the like. The

Commission's new accreditation process, supported by the U.S.

Department of Education, asks colleges to provide data demonstrating their focus on student learning outcomes and timely degree completion.

Evidence-based course and program outcomes are now being emphasized throughout higher education, supported by accrediting agencies and the federal government.

I) Strategic Planning

Nevada's 1971 State Plan for Community Colleges defined their missions as "university transfer, occupational/technical education, developmental, community service, and counseling." While the colleges have expanded their missions over the last 40 years to meet community and state expectations, Nevada does not have a focused, statewide, strategic plan for the state's community colleges which prioritizes their various missions, sets measurable goals for each, and allocates resources accordingly. In the absence of such a plan, there is no objective way to determine the level of success for each mission, each college, or the colleges as a group, in regard to the state's public education needs.

J) Open Access

Most community colleges throughout the nation were founded on the principle of "open access" and continue to champion this principle today. They provide every person residing within their jurisdiction low-cost access to college courses and student services, subsidized with public funds.

In most communities outside Nevada, local community colleges are supported by local taxes and governed by locally elected boards. In Nevada, there is no local tax support--all public costs are paid by the state through the General Fund. There is no local governing body prioritizing programs and matching community wants to financial realities. Because the state pays most of the costs for new community college programs, there are only

positive financial outcomes for local communities when they persuade their college to take on a new mission or expand an existing one. NSHE needs to prioritize the offerings of community colleges to make the best use of available funds.

K) State Funding Formula

The state's cost reimbursement policy is focused on inputs--student headcounts and credit hours delivered. The more credit hours a college can generate the more money it receives from the state, regardless of the nature of the course or the outcome for the learner. There is no financial incentive offered by the state to the colleges for better student outcomes, degree and certificate completion.

L) Collaboration and Cooperation

The word "System" in NSHE may be a misnomer. The system is in reality a collection of eight separate institutions, each with its own CEO, administration, missions, course offerings, programs, priorities and goals; each competing for the same, fixed pot of resources. There is value in allowing Nevada community colleges to shape their own enterprises in order to respond flexibly and quickly to community requirements. However, there also is value in collaboration and cooperation to avoid duplication, lower costs, and improve efficiency and effectiveness. New technologies, in particular, are creating opportunities to share best practices, rationalize course offerings, improve student counseling, increase federal aid for students, consolidate back office functions, coordinate purchasing and provide outreach to rural communities.

M) Tuition and Fee Strategy

To encourage people to seek postsecondary education, the state has adopted a policy of keeping tuition and fees exceptionally low and below market price--Nevada has among the lowest student costs in the country.

Nevada also has among the lowest college-going rates in the country. The strategy of keeping tuition and fees low has not translated into higher college-going rates in Nevada.

There is an opportunity to increase overall financial resources for Nevada community colleges by selectively bringing tuition and fees to parity with the rest of the country and, at the same time, offering meaningful need-based financial aid.

N) Limited Postsecondary Choices

While we have one of the lowest college going rates in the nation, Nevada has the highest percentage of college-going students attending public higher education institutions. The state of Nevada educates more students with public funds than is the case in any other state, because of the scarcity of private sector postsecondary alternatives.

In order to meet Nevada's goal of substantially increasing the number of citizens with college degrees and meaningful postsecondary occupational/technical education, with the available public resources, the state needs to find new means to do so, including encouraging the private higher education sector to expand its capacity within the state.

IV. TEN KEY RECOMMENDATIONS

1) Create a Strategic Plan Focused on Student Learning Outcomes

NSHE, in cooperation with the state economic development authority and the college presidents, needs to create a ten-year, annually updated, *Strategic Plan for Student Learners* for the state's community colleges as a collective. The plan should set forth short-term and long-term measurable objectives, goals, strategies, plans and timetables, all focused on successful milestones and outcomes for learners. From this overall plan, each institution will be able to derive its plan meeting the new NWCCU standards.

Establish a position within NSHE with the responsibility for overseeing the creation and updating of the Strategic Plan, and with the authority to oversee its implementation in reaching statewide goals for community colleges.

2) Focus on Future Technology Needs

Establish an NSHE Community Colleges Technology Board, charged with creating an annual Technology Plan for the community colleges as a collective. The technology plan should focus on the best ways to use technology, especially emerging technologies, in implementing the *Strategic Plan for Learners*. The Board's annual plan should identify new technology trends and suggest ways to incorporate these into academic programs and courses. The annual technology plan should also keep faculty abreast of new and innovative ways that learners are using technology in their everyday lives and suggest what effects these technologies might have on future teaching and learning.

A suggestion is to establish a 14-person board, with three-year rotating terms (1/3 new members coming on every year), including NSHE's chief information officer, both public and private sector senior and junior faculty,

senior technology leaders from private companies headquartered both in and out of the state, an executive from a social networking firm, a technology venture capitalist, a leader from a major foundation focused on educational change, a technology writer for a national publication, a state economic development official, and a technology-savvy union official.

Bring the higher education community into further partnership with the business community by asking business leaders to organize, manage and finance the Technology Board, perhaps through a statewide alliance of Chambers of Commerce.

This plan would bring guidance to the advisory committees at each college to make certain the colleges are meeting both local and statewide needs.

3) Leverage Resources to Benefit Learners

Establish Nevada Virtual College (NVC) to deliver e-courses for associate degree seeking students. As a separate entity from any existing community college, courses can be priced to students on a full-cost recovery basis. Senior faculty from each college, working as a collective, can define outcomes expected for each course as part of a degree program; NSHE can select a vendor who will develop and deliver curriculum, and engage a separate entity for student outcome assessment. The vendor would be paid as students successfully complete each course, with bonuses paid for timely degree completion. A request for proposal for such virtual learning instruction can be solicited from each of Nevada's community colleges, Nevada State College, Sierra Nevada College, Western Governors University, and carefully selected for-profit institutions. Partnering between institutions, including public-private partnering, should be encouraged in the proposal process. Implementation of NVC should not require the initial outlay of any new funds from NSHE. The award winner would assume all capital, startup, and operating costs and only be paid as each student

demonstrates successful course mastery to an independent third party chosen by NSHE.

This concept, once established, can be broadened to include upper division courses leading to bachelor's degrees, expanding the higher education capacity of the state without incurring new fixed costs.

4) Create Pathways for K-16 Learners to Succeed

NSHE needs to strengthen its partnership with K-12 in developing clearer pathways from high school, to college, to careers. This includes the articulation of high school courses with first-year college courses at all system institutions--community colleges, the state college and the universities. NSHE should develop, in partnership with K-12, supportive mentoring programs for students and their parents to demystify college planning and preparation. Most importantly, educators at every level need to inspire students to strive for education beyond high school.

The new Common Core State Standards (CCSS) for K-12, now being embraced by states throughout the country, should be embraced by higher education to align college readiness. CCSS offers a framework for K-16 curriculum alignment that is worth investigating and further implementing.

Nevada should reinvigorate the established P-16 Advisory Council with clear responsibility for overseeing the integration of high school and college curriculum within clearly defined pathways for successful and timely completion of college.

5) Remake Remedial Education

Remedial education serves two constituencies: first, recent high school graduates who have not been adequately prepared for college courses; second, returning adult learners who do not have the preparation to succeed in college courses.

A significant portion of Nevada's community colleges' teaching resources are devoted to remedial education of students planning to enter one of the community colleges, the state college or the universities. Community colleges need to be as freed as possible from this important, but burdensome, responsibility in order to open their pipelines for more prepared students seeking college degrees.

Remedial education of recent high school graduates should return to the high schools. Articulation of high school courses with college courses will help solve this problem.

Most remedial education of returning adult learners can be contracted by NSHE to the private sector, utilizing both place-based facilities and elearning, as appropriate, under fixed-price schedules based on successful outcomes. Consideration should be given to allowing private sector partners in this endeavor to make use of under-utilized campus facilities, particularly the summer semester, to further reduce costs.

The state should decide what, if any, subsidy it will provide for remedial education of returning learners.

Part of the assets freed from remediation should be redeployed into expanded, campus-based, general programs aimed at preparing high school students and returning learners for college success. Additionally, freed funds should be used to greatly expand professional counseling for both high school students and adults seeking to further their education, ensuring that both have clear pathways to successful learning outcomes and understand the financial aid available to them.

6) Implement Variable Tuition Pricing

To protect the concept of open enrollment in Nevada's community colleges, given the state's limited higher education resources, community colleges should move to student tuition pricing based on the highest and

best use of teaching resources, aligned with the state's needs as defined by a strategic plan.

For instance, such a variable tuition pricing plan can price the same courses differently depending on whether the learner is a recent high school graduate or a returning adult learner; whether the learner is seeking a degree/certificate or taking ad hoc courses; or, whether the learner is a full-or part-time student.

For full-time learners, consideration should be given to pricing by the semester, rather than by the course. Acknowledge the value to both the student and the college of timely degree completion by rebating part of the tuition to encourage timely degree completion.

And, importantly, colleges should require as part of the application process, a completed FAFSA form.

7) Increase Meaningful Certificates

Community colleges offer a variety of occupational and technical education programs to prepare students for jobs. These need to be more closely aligned with actual career opportunities within the state, with course and program content connected to explicit employer needs. In this regard, the Task Force recommends that each college partner closely with the Nevada Department of Employment, Training and Rehabilitation (DETR).

The successful completion of all programs should result in the award of a meaningful certificate signifying mastery of the curriculum, measured by competency examination. The existing workforce boards at each college should approve all programs leading to certificates and regularly review curriculum for relevancy. Other vocational courses and programs should be considered for elimination as obsolete.

The workforce boards at each college should work more closely with their respective foundation boards to fund their programs with scholarships, capital grants, and endowed programs.

Certificate programs at community colleges should be stackable and encourage students to aspire for later completion of degree programs.

8) Expand Dual High School and College Enrollment

Expand cooperative programs that enroll prepared 11th and 12th graders simultaneously in both high school and college with a ten-year goal of having one-third of Nevada's 12th graders graduating at the age of 18 with a high school diploma, as well as an associate degree or certification in an occupational/technical specialty. Coupled with clear college and career paths beginning in the 9th grade, dual enrollment will help raise high school graduation rates in the state as well as substantially increase the number of college graduates in the state.

As an incentive for students to participate, the state should consider rebating tuition and fees for the program upon successful graduation with an associate degree, guaranteeing admission to baccalaureate programs at UNR, UNLV, NSC or the community colleges, and guaranteeing a scholarship that pays all or a portion of tuition and fees to the institution of their choice.

Have the college level courses delivered to dual-enrollment students by Nevada Virtual University, which will result in a substantially reduced cost. High school teachers can become on-the-ground guides and counselors to ensure student success.

9) Change the State Funding Formula for Community Colleges

Re-evaluate the state funding formula for community colleges. Rather than funding community colleges for enrolled students, partially fund for the

successful completion of key milestones and courses, with incentives on a sliding scale for timely degree/certificate completion.

A revised state funding formula should encourage community colleges to enroll committed learners prepared for college work, and find ways to counsel and help students in degree and certificate completion. The ultimate winners will be our students, our community colleges, and the state overall.

10) Move Governance to the Source

Nevada's community colleges could be more responsive to community needs by bringing the governance of each to the communities it serves, as is the case in most other states. The Board of Regents should consider delegating part of its authority to local governing Councils to oversee the implementation of the *Strategic Plan for Learners*, to include the curriculum and technical advisory committees for all career and occupational degrees and certificates.

Each Council might have five to seven members appointed by the Board of Regents to six-year staggered terms. Members could be drawn from local business, civic, government and K-12 education leaders, and each college's foundation board.

The following section identifies goals and measurements associated with the ten key recommendations in the report.

V. GOALS

To be meaningful, goals must be measurable. The Task Force offers the following goals for your consideration:

10-Year Goals

- A) Double the number of degrees, both associate and bachelor's, awarded each year
- B) Triple the number of meaningful certificates awarded each year
- C) Graduate one-third of Nevada's 12th graders at the age of 18 with a high school diploma, as well as an associate degree or certification in an occupational/technical specialty

5-Year Goals

- A) Double the number of declared degree seekers
- B) Triple the number of declared certificate seekers
- C) Offer half of all place-based courses as blended combinations of classroom and e-instruction

3-Year Goals

- A) Align certificate programs with actual career opportunities and double the number of declared certificate seekers
- B) Deliver 25 percent of all courses by e-instruction through NVC
- Standardize among colleges course offerings for associate degrees, with uniformly defined goals, curriculum and outcomes assessment
- D) Create statewide articulation of all high school course curriculum with first-year college curriculum; offer every Nevada 11th grader the opportunity for dual enrollment

- E) Replace remedial education at colleges with enhanced student counseling programs directing and coaching successful learning outcomes
- F) Establish variable student tuition pricing for courses and programs
- G) Change state funding formulae for colleges to reward successful milestones and timely degree/certificate completion

2-Year Goals

- A) Complete strategic plan in conjunction with the Technology Board and begin implementation
- B) Complete technology plan and begin implementation
- C) Begin operations of Nevada Virtual University

1-Year Goals

- A) Create NSHE position and begin strategic planning process
- B) Establish a Technology Board

VI. Building on Success

As indicated throughout this report, Task Force members recognize and applaud the leadership of Nevada's community colleges. We acknowledge that Nevada community colleges are at the forefront of innovative and cutting-edge approaches to improve curriculum, student outcomes, teaching and learning, and partnerships with business, industry, and government to meet their workforce needs. What follows are exemplars of how Nevada institutions are building on successes and paving the way for future success.

1) College of Southern Nevada

Founded in 1971 and educating thousands of students a semester, the College of Southern Nevada is the state's largest and most ethnically diverse higher education institution. CSN offers more than 200 degree and certificate options in more than 130 areas of study, including 25 degree and certificate programs available entirely online.

Starting fall 2011, the College of Southern Nevada will take part in a landmark research study on the impact of simulation training in nursing education. The study, conducted by the National Council of State Boards of Nursing, will determine if simulated clinical experiences used as a replacement for a portion of the time spent in traditional clinical education, may better prepare nurses for the field. The National Council of State Boards of Nursing selected CSN, which educates approximately one-third of Nevada's nurses, among 10 prestigious nursing programs across the country to take part in the study. CSN will join educators at Johns Hopkins University, Florida International University, Ivy Tech Community College, Johnson County Community College, Lancaster General College, Metropolitan Community College Penn Valley, University of South Carolina, University of Southern Mississippi and Washington State University in this important study. Approximately 154 full-time CSN Associate Degree of Nursing students have volunteered to

take part in the study. The longitudinal study will end in 2013 as the CSN students starting the study this fall prepare to graduate.

Another example of CSN's partnership includes the City of Las Vegas Fire Station and CSN Instructional Center. This unique partnership combines state and local resources to efficiently generate services for students and Southern Nevada residents. The 15,400 square-foot building located on the southwest corner of the West Charleston campus houses Las Vegas Fire & Rescue Station 6, as well as 4,600 square feet of general classroom space for CSN students. Located across from Bonanza High School, the fire station also will provide learning opportunities to interested high school students through future collaboration among Las Vegas Fire & Rescue, Clark County School District and CSN officials.

2) Great Basin College

Great Basin College was the first community college established in the state of Nevada. The College services an area of approximately 62,000 square miles using state-of-the-art distance learning technologies. A unique program is the Bachelor of Applied Science (BAS) degree designed specifically for students who have earned an associate degree from any regionally accredited college. Students enrolled in BAS programs become "scholar practitioners," professionals with theoretical background and hands-on skills in their area of expertise. Emphases offered in the BAS program are Digital Information Technology, Instrumentation, Management Technology and Land Survey-Geomatics.

In addition, the Registered Nurse to Bachelor of Science – Nursing (RN to BSN) is designed for RNs with an associate degree credential who want to continue their education in nursing while still engaged in practicing their profession. The program responds to critical shortages of nurses throughout Nevada in both clinical and administrative positions. GBC's RN to BSN program is on pace of the national trend toward bachelor's

prepared registered nurses, and ahead of the pace of other NSHE institutions. Much of the course work in BAS programs and all of the course work in the BSN is offered online or via interactive video. More than any other institution in the Nevada System of Higher Education, GBC makes use of "NevadaNET" and its own vast distance learning technological infrastructures. The existing capital infrastructure and the innovative skills of the college's faculty, guarantee high-quality instruction for all students, including those enrolled in GBC's BAS and BSN programs.

3) Truckee Meadows Community College

The TMCC Summer Bridge Program is a comprehensive and immersive approach to student success. Started in summer 2010, the program provides an intense college readiness experience primarily for new high school graduates. To be selected for this immersive college program, students must test into the program and sign a contract of participation. The Program includes two college courses, stipends, tutoring, advising and skills workshops. Early results indicate the Summer Bridge Program can have a positive impact on students' college experience and academic outcomes. For instance, student persistence (for program participants) from fall 2010 to spring 2011 was 91percent.

Improvements continue to be made in the Summer Bridge Program. Math remediation will be provided in the Math Skills Lab at no charge for the 2011 Summer Bridge students. To assist in college expenses, students receive stipends upon participation and completion. All students are registered for a required sequence of courses to assure ontime completion. To ensure appropriate advisement and timely completion, program participants may not register for courses in their next three semesters without seeing a counselor first. Success Coaches are also key to the success of the program and meet with program participants during each semester.

While initial investment for this type of program is high (much of the support came from grants) the return is clearly evident and worthwhile when one considers timely degree or certificate completion and employability of students. Efforts are underway to address increasing the number of participants while containing costs. Funds are raised through grants, foundations and matching college dollars to support this effort to increase graduation rates.

4) Western Nevada College

Over the last five years, Western Nevada College developed a program loosely modeled on the National Learning Communities initiatives. A key predictor of student success is involvement in campus activities and general college engagement. Western Nevada College promotes student engagement via a number of learning communities and cohorts. These include:

- 1) An active student government and organizational structure;
- 2) Two intercollegiate athletics programs (women's softball and men's baseball);
- 3) Academic interest communities such as the nursing and construction management clubs, the peer mentors, and the astronomical society; and
- 4) Affinity groups like the Latino, American Indian and rural student cohorts and the Veterans' Club.

The effectiveness of this method is validated by regular reports on student success rates and retention rates for these groups. People involved in any of the groups benefit from cohort success rates that are higher than the overall college average.

VII. End Note

Over the last 20 years, Nevada has grown from a small to a middle-size state. Many of the support services for citizens have struggled to keep pace

with the growth, none more so than higher education. To ensure that Nevadans have the same educational opportunities that others enjoy, the Task Force recommends that NSHE fully engage in national initiatives with its peers from other states. For community colleges, such national initiatives include Achieving the Dream, Aspen Institute innovations, Voluntary Framework of Accountability (VFA), and League of Innovation and efforts of the American Association of Community Colleges (AACC).

Such participation will not only assist our institutions in providing a full range of high quality educational opportunities for students, it will elevate the national stature of Nevada and our institutions of higher education.

APPENDIX A

Fresh Look at Nevada's Community Colleges Task Force Active Members

Bruce R. James, Chairman

Mr. James is President and CEO of Nevada New-Tech, Inc., which invests in early stage technology companies in Nevada. He served in Washington from 2002 to 2007 as Public Printer of the United States and CEO of the United States Government Printing Office. He was chairman of the Nevada Spending and Government Efficiency (SAGE) Commission. He is board chairman-emeritus of Rochester Institute of Technology, his alma mater, and Sierra Nevada College. He was a founding member of the Dean's Advisory Board at the Boyd School of Law at UNLV and a DRI Foundation board member. He has served as a commissioner of the Northwest Commission on Colleges and Universities and as a member of the board of directors of the Association of Governing Boards of Universities and Colleges.

Brent Chamberlain

Mr. Chamberlain recently retired from a career in the mining industry. His most recent position was that of Corporate Director of Human Resources and Health and Safety for start-up mining company. He has served in numerous professional and civic roles including, The Federal Mine Safety and Health Research Advisory Committee, the Nevada State Commission on Sports, Elko Chamber of Commerce, Northeastern Nevada Regional Hospital Board, Elko Federal Credit Union Board of Directors, and Boy Scouts of America. Mr. Chamberlain has served for more than 17 years on the Great Basin College Community Advisory Board. He presented the commencement address at Great Basin College's commencement exercises in June of 2011.

Jill Derby, Ph.D.

Dr. Derby has devoted her entire public career to advancing education. She was elected to Nevada's Board of Regents in 1988 where she served 18 years, including three terms as Board Chair. As an extension of her higher education leadership, she has served 12 years as a Governance

Consultant with the Association of Governing Boards of Universities and Colleges located in Washington D.C. In this role she leads and facilitates planning and performance reviews with higher education boards and leaders around the country. Dr. Derby received a Ph.D. in cultural anthropology from U.C. Davis and taught at Western Nevada College, Lake Tahoe Community College and Sierra Nevada College before joining the Board of Regents.

Barbara Fraser, RN

Mrs. Fraser is a Registered Nurse, licensed in Nevada with a BSN and a MS in Health Services Administration. She serves as Director of Education at Sunrise Hospital in Las Vegas where she coordinates nursing orientation and continuing education programs, the American Heart Association (AHA) training center, and student clinical experiences. She is also the system administrator for Sunrise's online learning management system, and is a current AHA BLS instructor. She was previously Manager and Director of Emergency and Medical/Surgical/Telemetry Services.

Mrs. Fraser received the 2004 Southern Nevada March of Dimes
Distinguished Nurse of the Year award and 2003 Nurse Week Far West
Nursing Excellence Award/Advancing the Profession. She is a member of the Nevada State Board of Nursing Education Advisory Committee; the nursing advisory boards the College of Southern Nevada, Nevada State
College and University of Southern Nevada; and a member of the Desert Sage Auxiliary of the Las Vegas Assistance League.

Scott Huber

Mr. Huber has taught biology at Truckee Meadows Community College since 1996. He is past Faculty Senate chair for TMCC, 2009-11, and past state board president of the Nevada Faculty Alliance 2009-11. His research interest includes clinical biology and cultural anthropology.

Collie L. Hutter

Mrs. Hutter is Chief Operating Officer of Click Bond, Inc. a Carson City based manufacturer of aerospace fasteners that was founded by Mrs. Hutter and her husband Charles. She is a past president of the Nevada Manufacturers Association and the Brewery Arts Center. She is currently

serving on the boards of the National Association of Manufacturers and the Carson City Chamber of Commerce. Mrs. Hutter received her BS in Physics from Carnegie-Mellon University and her MBA from the Wharton School of the University of Pennsylvania.

Robert Jorden

Mr. Jorden is Director of the OSHA Training Institute & Education Center at the College of Southern Nevada. He has worked in the construction industry since 1976. Since 1998, he has served as an instructor, apprenticeship coordinator, training director, and union official for construction related unions. In 2008, he was appointed Director of Training for District Council 15 of the International Union of Painters and Allied Trades where he supervised craft training and safety programs for members in Denver, Las Vegas, and Phoenix. Mr. Jorden has attended Saddleback Community College in Mission Viejo, CA, Marshall Community College in Huntington, WV, College of Southern Nevada, and the National Labor College in Silver Spring, MD. He is currently finishing his degree in Construction Safety and Industrial Hygiene.

Matthew LaBranch

Mr. LaBranch is Senior Vice President of Manufacturing Operations for International Game Technology. He oversees world-wide support of all of IGT's manufacturing operations, supply chain, master scheduling, planning, order administration, quality assurance, manufacturing engineering, logistics and warehousing. IGT's manufacturing operations are located in both Reno and Las Vegas supported by a global supply chain. Prior to this role, he was Vice President of Materials at IGT and has been part of the IGT team for 17 years including time in IGT's Australia subsidiary. Mr. LaBranch's work experience spans 35 years in operational disciplines of planning, supply chain management, logistics and production. Under his leadership, IGT Operations has achieved significant cost reductions and greatly improved IGT's inventory management performance and manufacturing efficiency. He has been a member of the American Production and Inventory Control Society (APICS) for 28 years and a member of the Institute for Supply Management (ISM) for four years.

Pedro Martinez

Mr. Martinez is Deputy Superintendent of the Clark County School District, overseeing the district's 357 schools and academic departments. Prior to joining CCSD, he served as the deputy superintendent of the Washoe County School District, overseeing the district's 102 schools. In Washoe County, he was at the forefront of the district's strategic plan, including the implementation of a K-12 College and Career Readiness Pathway, and school based score-cards and dashboards. Mr. Martinez led a graduation initiative which resulted in the district's high schools increasing graduation rates by an average of seven percent. Previously he served as a regional superintendent at the Chicago Public Schools (CPS). He also was the chief financial officer for CPS for six years overseeing a \$5.2 billion operating budget and a \$1 billion capital budget. Under his leadership, the district increased its financial reserves, received bond rating upgrades and implemented academic initiatives that resulted in significant student achievement and graduation gains. Before joining Chicago Public Schools, Mr. Martinez was the director of finance and technology at the Archdiocese of Chicago, and an audit manager at Deloitte & Touche and Price Waterhouse Coopers. He is a certified public accountant and holds a bachelors degree in accounting from the University of Illinois at Urbana-Champaign and a masters degree in business administration from DePaul University. He is a graduate of the 2009 class of The Broad Superintendents Academy.

Patricia Miltenberger, Ed.D.

Dr. Miltenberger is a former college and university administrator in Nevada and California. She was a Dean and Vice President at Western Nevada College, Truckee Meadows Community College, University of Nevada, Reno, and Santa Rosa Junior College in California. She also served as interim president of Nevada State College in Henderson. Dr. Miltenberger is currently Professor Emerita at the University of Nevada, Reno and teaches part-time in the Educational Leadership department. She has served as a commissioner of the Northwest Commission on Colleges and Universities and participated in over 40 evaluation team visits. Dr Miltenberger was recognized by the University of Nevada, Reno

with the Distinguished Service Award in 2002 and received the President's Medal in 2006.

NSHE Staff Support:

Magdalena Martinez, Ph.D.

Dr. Magdalena Martinez is Assistant Vice Chancellor for Academic and Student Affairs for the Nevada System of Higher Education. Prior to joining the Nevada System of Higher Education, Dr. Martinez worked at the National Forum of Higher Education for the Public Good at the University of Michigan. In her role she was responsible for contributing to the research, planning and implementation of multiple national dialogues which focused on issues related to postsecondary access, equity and student success. In addition, she served as a program evaluator for a three-year, W.K. Kellogg Foundation funded leadership program to prepare individuals for the presidency at Minority Serving Institutions. The program was spearheaded by the Alliance for Equity in Higher Education. Other professional experiences include serving as a community college administrator at the College of Southern Nevada and policy and management analyst at the City of Las Vegas. Dr. Martinez's interests encompass three interconnected areas focused on underrepresented students' educational experiences, the role of community colleges and persistence, and leadership and public policy to increase postsecondary access and success.

APPENDIX B

TASK FORCE CONTRIBUTORS

May 19-20, 2010 Washington, DC

David Baime, Vice President for Government Relations, American Association of Community Colleges Dr. Frank Chong, Deputy Assistant Secretary for Community Colleges, US

Department of Education

Dr. Michelle Cooper, President, Institute for Higher Education Policy Jee Hang Lee, Director of Public Policy, Association of Community College Trustees

Rick Novak, Association of Governing Boards Senator Harry Reid Jose Rico, Deputy Director, White House Initiative on Educational

August 2010 College of Southern Nevada, Las Vegas

Excellence for Hispanic Americans

Patty Charlton, CSN Senior Vice President
J.T. Creedon, ASCSN Student Body President
Lucy Flores, Assemblywoman
Joyce Haldeman, CCSD Associate Superintendent
Dr. Michael Richards, CSN President

September 2010 Great Basin College, Elko

Paulette Batayola, GBC Student Body President (SGA)
Carl Diekhans, GBC President
Jack French, Elko County School District, Director of Secondary Education
Mike McFarlane, GBC Vice President for Academic Affairs
Bret Murphy, GBC Dean of Applied Science
Sara Negrete, GBC Education Department Chair & Faculty Senate Chair
Dr. Margaret Puccinelli, GBC Dean of Health Sciences & Human Resources
Vic Redding, NSHE Senior Fiscal Operations Officer
John Rice, GBC Director of Institutional Advancement & Executive
Director of the GBC Foundation

Sonja Sibert, GBC Budget and Human Resources Officer Mark Stevens, NSHE Interim Vice Chancellor for Finance Nicole Volk, Northeastern Nevada Regional Hospital, Director of Public Information

October 2010

Truckee Meadows Community College, Reno

Elena Bobnova, TMCC Director of Institutional Research Fred Lokken, TMCC Associate Dean, TMCC WebCollege & Chair of Instructional Technology Council Miguel Martinez, TMCC Student Theresa Mrockowski, TMCC Student Dr. Jane Nichols, NSHE Vice Chancellor for Academic and Student Affairs Ted Plaggemeyer, TMCC Dean of the School of Sciences Delores Sanford, TMCC Vice President of Finance & Administrative Services Dr. Maria Sheehan, TMCC President

November 2010 Western Nevada College, Carson City

Jean-Paul Torres, TMCC Senior Student Ambassador

Sergio Arteaga, WNC Peer Academic Coach Deborah Case, WNC Director of Counseling Services Jason Gill, WNC Student Body President (ASWN) Robert C. Hooper, Northern Nevada Development Authority Al Jurkonis, President of American AVK Carol Lange, WNC Interim Vice President Academic & Student Affairs Carol A. Lincoln, Achieving the Dream – Senior Vice President Adam Loomis, WNC fourth-year student in Bachelor of Technology Ann Louhela, WNC Specialty Crops Institute, Director Dr. Carol Lucey, WNC President Helaine Jesse Morres, WNC Vice President Development & External **Affairs** Julia Murillo, WNC student & member of the Latino cohort program Construction Management Program

Joe Quiroga, WNC Peer Advisor

Lupe Ramirez, WNC Executive Assistant to Dean of Student Services Mike Sady, WNC Professor of Chemistry

Marilee Swirczek, WNC Professor of English ("Wall of the Dead" Project)

December 2010

Joint Apprentice & Journeyman Training Center, Las Vegas

Crystal Abba, NSHE Associate Vice Chancellor for Academic and Student Affairs

William Anderson, DETR Chief Economist

Lleta Brown, Department of Labor Apprenticeship & Training Division, Apprenticeship Training Representative

Darren Divine, CSN Vice President of Academic Affairs

Murray Dominguez, Pipe Trades Joint Apprentice & Journeyman Training Coordinator

Dan Gouker, CSN Exec. Director of Apprenticeship Studies & Southern Nevada Workforce Development Board member

Colleen Henry, U.S. Department of Labor, Office of Apprenticeship, State Director

Dr. Mike Richards, CSN President

Frank Woodbeck, Nevada Commission on Economic Development

January 2011

International Gaming Technology, Reno

Paul Diflo, IGT Vice President and Chief Information Officer Duke Golden, IGT Director of Production Fred Lokken - TMCC Instructional Technologies (already listed above)

February 2011 Sunrise Hospital, Las Vegas

Minta Albietz, Sunrise Hospital, Chief Nursing Officer Laurie Turner, Sunrise Hospital, Vice President, Quality & Medical Staff Sylvia Young, Sunrise Hospital, CEO

March 2011

WCSD Academy of Arts, Careers & Technology (AACT), Reno

Crystal Abba, NSHE Associate Vice Chancellor for Academic and Student Affairs

Linda Heiss, NSHE Director of Institutional Research

Caroline Macintosh, Lyon County School District, Superintendent Janis McCreary, AACT, Principal Pat Partridge, Western Governors University, Vice President, Marketing & Enrollment

April 2011

Meeting canceled due to UNR President Milt Glick's passing

May 2011 Nevada State College, Henderson

Dr. Lesley DiMare, NSC President Lynn Gillette, Sierra Nevada College Richard Rubsamen, Sierra Nevada College, President Jacqueline E. Woods, DeVry Inc., Senior Partnerships Advisor

June 2011 Truckee Meadows Community College, Reno

July 2011 James' Residence, Northern Nevada

Additional Contributors

Nigel Bain, Underground Mine Manager, Barrick Goldstrike Mine
Randy Buffington, General Manager, Barrick Goldstrike Mine
Milton Glick, Former President of University of Nevada, Reno
Dennis Jones, President of the National Center for Higher Education
Management Systems (NCHEMS)
Dwight Jones, Superintendent of the Clark County School District
John La Gatta, President of the Catamount Fund
Brian Hall, Former Chairman of Thomson Publishing and former Chairman
of the Colorado Commission on Higher Education
Christine Haynes, Nevada System of Higher Education
Tom Kerr, Director Human Resources, Newmont Mining
Robert Lang, Executive Director of Brookings Mountain West Institute at
UNLV

Rick Legon, President of the Association of Governing Boards of Universities and Colleges

Paul Lingenfelter, President of the National Association of State Higher Education Executive Officers

David Longanecker, President of the Western Interstate Commission for Higher Education

Heath Morrison, Superintendent of the Washoe County School District Keith Rheault, Superintendent of Public Instruction for Nevada Louis Schack, Director, Communications and Community Affairs, Barrick Goldstrike Mine

Neal Smatresk, President of University of Nevada, Las Vegas Peter Smith, Senior Vice President for Academic Strategies & Development, Kaplan University, and founding president of California State University at Monterey Bay

Frank Snyder, Former Vice Chairman of McGraw-Hill and Director of College Publishing

AGREEMENT

This Agreement is hereby made this // day of March, 2012, by and between the Legislative Counsel Bureau ("LCB"), 401 South Carson Street, Carson City, Nevada 89701 and SRI International ("SRI"), 333 Ravenswood Avenue, Menlo Park, CA 94025.

WITNESSETH

WHEREAS, The 2011 Session of the Nevada Legislature enacted Senate Bill No. 374 (S.B. 374), which created an interim Committee to Study the Funding of Higher Education ("Committee") and included funding for the conduct of the study; and

WHEREAS, S.B. 374 authorized the Committee to employ consultants as it deemed necessary for the study; and

WHEREAS, On January 11, 2012, the Nevada System of Higher Education presented to the Committee a proposal for an alternative funding formula ("proposed alternative funding formula"); and

WHEREAS, On February 29, 2012, the Committee selected SRI, which submitted Proposal No. PDH 12-050, to assist the Committee with its study; and

WHEREAS, Pursuant to NRS 218F.110, the Director of the LCB may contract for the services of technical consultants; and

WHEREAS, SRI represents that it is duly qualified, properly licensed and able to provide the necessary services as hereinafter described;

Now, Therefore, in consideration of the mutual covenants herein set forth, the parties agree as follows:

L TERM OF AGREEMENT

The term of this Agreement shall commence on the date on which it is signed by all of the parties and shall continue in full force and effect until September 30, 2012, unless this Agreement is terminated earlier pursuant to Section XVII of this Agreement.

II. DUTIES OF THE LEGISLATIVE COUNSEL BUREAU

The staff of the LCB will be available to assist SRI in the gathering of Nevada-specific information and data needed to carry out the requirements of this Agreement to the extent that the assistance does not interfere with the daily workload of or require overtime by the staff.

III. DUTIES OF SRI

- (A) Report on States' Budgeting Practices Pertaining to Student-Derived Revenues:

 On or before April 13, 2012, SRI agrees to provide a report analyzing the current budgeting practices of each formula and non-formula state detailing whether student-derived revenues, such as student per-credit hour registration fees, non-resident tuition and miscellaneous student fees, are budgeted through the legislative process in conjunction with state general fund appropriations or are excluded from the calculation of public funding of higher education in a particular state.

 SRI will develop a framework for defining and evaluating these practices and apply the framework to the experiences of states that incorporate such practices in addition to the current Nevada funding formula and the proposed alternative funding formula. The analysis will identify the strengths and weaknesses of these practices and focus on the variety of incentives, desirable and perverse, created by the way student-derived revenues are treated to identify best practices and lessons learned.
- (B) Report on States' Use of Student Enrollments as a Basis for Higher Education Formula Funding: On or before May 7, 2012, SRI agrees to provide a report on the use of "input measures" such as Full-Time Enrollment (FTE) and course completion as frequently employed elements in state funding formulas. The report must include the definitions of "a full-time equivalent student," "completed course" and "student success" used by states. In this task SRI agrees to develop a framework for defining and evaluating these measures. The framework will then be applied to the experience of states that employ funding formulas that incorporate such measures, as well as to the current Nevada funding formula and the proposed alternative funding formula. The analysis will identify the strengths and weaknesses of these measures and focus on the variety of incentives, desirable and perverse, created by the operation of student-based formulas. The report will identify best practices and lessons learned by states that employ these measures.
- (C) Report on States' Inclusion of Performance Related Components in Higher Education Funding Formulas: On or before May 7, 2012, SRI agrees to provide a report analyzing the use of performance criteria in higher education funding formulas. SRI will develop a framework for analyzing the strengths and weaknesses of different approaches and will identify trade-offs that may exist, such as the trade-off between metrics that emphasize and foster efficiency and metrics that focus on quality. This framework will be used to analyze the experience of states that currently use performance criteria in addition to states that previously used performance criteria but no longer do so due to budgetary and other challenges. In addition, SRI will analyze the current Nevada funding formula and proposed alternative funding formula under this framework.

SRI agrees to compare its analysis of states that use performance criteria with the metrics developed by the National Governors Association (NGA), through its Center for Best Practices as part of the "Complete to Compete" initiative, and by the Board of Regents of the University of Nevada in the "Strategic Directions for the Nevada System of Higher Education" adopted on January 20, 2012, and hereby incorporated by reference and included as Attachment "A." The NGA metrics are included in such reports as "Common College Completion Metrics" and "From Information to Action: Revamping Higher Education Accountability Systems." SRI agrees to

also incorporate into its analysis the work now being done by NGA's policy academy on higher education, in which Nevada is a participant. This task will produce a report with the goal of identifying best practices and lessons learned to inform the Nevada Legislature as it considers changes to its higher education funding formula.

(D) Report on States' Methods of Funding Higher Education: On or before June 8, 2012, SRI agrees to provide a report on state's methods of funding higher education with the objective of informing the debate around Nevada's funding of higher education. SRI recognizes that many reports have been produced that simply inventory higher education funding formulas based on data from a wide range of sources, including the National Center for Higher Education Management Systems, State Higher Education Executive Officers, and the Lumina Foundation – so this report will not attempt to reproduce the work that has already been done. Rather, SRI will review and leverage these existing inventories of state funding methods and, where necessary, augment with more detailed research and evaluation of individual state practices, to identify any notable trends and developments across the country in higher education funding.

Based on existing data (augmented as necessary by additional research), SRI will provide a matrix displaying whether or not each state uses a formula for higher education funding. For states using a funding formula, SRI will indicate the primary determinative factors and components of the funding formula by the following specific budgetary functional areas: instruction (including remedial instruction), research, public service, academic support, student services, institutional support, operations and maintenance of physical plant, and scholarships (excluding capital expenditures). For states not using a formula, SRI will provide, if possible, a summary statement of the general considerations guiding higher education funding. To the extent the information is available, SRI shall provide for each formula and non-formula state information that is general as well as specific for each institution or institution type (community college, four-year institution, research university and research institution), in particular if the funding methods differentiate among types of institutions.

The analysis will highlight specific higher education goals associated with different types of funding methods. From the above analysis, SRI will choose states as illustrious examples for each funding method with respect to comparability to Nevada or especially relevant lessons learned. For these states, state documents will be reviewed and state officials will be interviewed to report on the primary determinative considerations (such as institution type) and budgetary mechanisms and the above-described functional areas used in determining the level of appropriated and authorized funding for higher education. Where no formula is used, some estimate will be made and reported of the major considerations driving budgeting. Where a formula is in use, it will be parsed in order to identify the most important variables for determining funding levels. To the extent feasible, SRI agrees to collaborate with the Western Interstate Commission for Higher Education and the State Higher Education Executive Officers Association in this task.

SRI agrees to use these analyses as the basis for distilling best practices for further consideration. Here the findings from earlier deliverables, especially as they relate to the performance criteria developed by the National Governors Association, will be incorporated into

the analysis. The result will be a framework with clearly defined criteria that can be used to judge different approaches (including the proposed alternative funding formula).

SRI agrees to analyze the existing Nevada funding formula, and the proposed alternative funding formula, with respect to how they align with the state's economic and workforce development goals and priorities. This analysis will be informed by and reference other relevant state examples and lessons learned in this area. SRI agrees to reference the economic development plan entitled "Unify / Regionalize / Diversify: An Economic Development Agenda for Nevada."

http://www.brookings.edu/~/media/Files/rc/papers/2011/1114_nevada_economy/1114_nevada_economy.pdf prepared on behalf of the state of Nevada.

The deliverable from this task (D) is a report that will analyze the main types of funding methods, trends and best practices, to inform the assessment of Nevada's current funding formula and proposed alternative funding formula, and recommend modifications where appropriate.

- (E) Attendance at Meetings of the Committee: SRI agrees that the Project Manager and other appropriate personnel of SRI will attend in person at least three (3) meetings of the Committee and will present and answer questions pertaining to its duties under this Agreement. The next tentatively scheduled meeting dates of the Committee are:
 - April 25, 2012
 - May 23, 2012
 - June 27, 2012

SRI agrees that the Project Manager and other appropriate personnel will attend by videoconference the final meeting of the Committee, which is tentatively scheduled on August 15, 2012, and will present and answer questions pertaining to its duties under this Agreement, unless, at least 10 business days before the meeting, the Chair of the Committee requests the Project Manager or other appropriate personnel of SRI to attend the meeting in person. If the Chair of the Committee makes such a request, SRI's travel expenses will be paid by the LCB at the appropriate federal reimbursement rate for the location of the meeting, within 10 days after SRI submits an invoice for such travel expenses. The parties agree that any amount paid as reimbursement for travel expenses pursuant to this paragraph is in addition to the total fixed rate for this Agreement set forth in Section VI of this Agreement.

- (F) If SRI has not received any portion of the Nevada-specific information necessary to complete a report required pursuant to Section III of this Agreement, SRI agrees to promptly submit a request for assistance to Alex Haartz, Program Analyst, Fiscal Analysis Division of the LCB, indicating the information that was not submitted and the entity that has failed to submit the required information.
- (G) The deadlines for the reports set forth in this section are based on a start date of on or before March 16, 2012, and on the assumption that SRI will receive the completed proposed

alternative funding formula by April 2, 2012. If SRI does not receive the completed proposed alternative funding formula by April 2, 2012, the parties agree that SRI is relieved of its duties set forth in this Agreement with respect to the proposed alternative funding formula.

IV. PROJECT MANAGER

SRI agrees to appoint Roland Stephen as the project manager pursuant to this Agreement. As project manager, Mr. Stephen will be the person primarily responsible for carrying out the duties and obligations of SRI required by this Agreement. Any replacement or substitution of Mr. Stephen as a project manager must be approved in advance in writing by the LCB and that person must possess at least the same degree of skill and expertise as the project manager he or she is replacing.

V. PROGRESS COMMUNICATIONS

SRI agrees that the Project Manager or his designee will communicate with Alex Haartz, Program Analyst, Fiscal Analysis Division of LCB, throughout the term of this Agreement to provide such information as is necessary to assure Mr. Haartz that SRI is making sufficient progress on all deliverables and that the deadlines in this Agreement will be met.

VI. PAYMENT SCHEDULE

- (A) SRI agrees to be compensated at a total fixed rate of \$150,000. The payments must comply with the provisions of this section.
- (B) Within 10 business days after the execution of this contract by both parties, the LCB agrees to pay SRI \$30,000, less ten percent (10%). Thereafter, within 10 business days after the acceptance of a report required by Section III of this Agreement by the Committee pursuant to Section VIII of this Agreement or by the LCB after rework pursuant to Section VIII of this Agreement, the LCB agrees to pay SRI \$30,000, less ten percent (10%). The total amount of the ten percent (10%) withholdings pursuant to this paragraph will be paid to SRI upon the performance by SRI of all its duties and responsibilities under this Agreement.
- (C) Except as otherwise provided in Section III of this Agreement, the payments provided pursuant to this section shall constitute the entire compensation for the services rendered by SRI and shall be deemed to cover all of the costs of SRI, including, without limitation, costs for professional services, overhead, travel expenses, supplies, printing, taxes and other related expenses, if any.
- (D) No additional charges of any kind will be allowed unless specifically agreed to in writing, in advance, by the LCB.

VII. STANDARD OF PERFORMANCE

SRI agrees to work faithfully, industriously, and to the best of its ability, experience, and talents in the performance of its duties under this Agreement.

VIII. STANDARD FOR REVIEW OF REPORTS

- (A) At the next scheduled meeting of the Committee after receipt of a report required by Section III of this Agreement, the Committee will determine whether the report is:
 - (1) Accepted; that is, meeting the specifications of this Agreement;
- (2) Accepted with a rework; that is, essentially to specification of this Agreement, but requiring some correction by SRI; or
- (3) Rejected; that is, failing to meet the specifications of this Agreement in ways indicating that major improvements are needed.
- (B) LCB agrees to provide written confirmation of the Committee's action within 10 business days after such action is taken.
- (C) If the Committee accepts a report with a rework or rejects a report, LCB agrees to provide SRI with a comprehensive list of all revisions required by the Committee that must be completed by SRI to make the report meet the specifications of this Agreement within 10 business days after the determination of the Committee on the report. SRI agrees to submit one (1) rework of the report to the LCB for reconsideration within 15 business days after receipt of the list. LCB agrees to provide written confirmation of LCB's determination on the rework within 10 business days after receipt of the rework. The LCB agrees that it will act as expeditiously as reasonably possible in making its determination and will not unreasonably withhold acceptance. If the LCB fails to provide SRI with written confirmation of its determination on or before the 10th business day after receipt of the rework, the report shall be deemed accepted by the LCB. For purposes of this Agreement, deemed acceptance has the same legal effect as actual acceptance by the LCB. Final payment on the report shall be withheld until the report is accepted by the LCB without a rework.
- (D) After a report is accepted by the Committee pursuant to subparagraph (1) of paragraph (A) of this section or accepted after rework by the LCB pursuant to paragraph (C) of this section, SRI shall be paid in the manner specified in section VI of this Agreement.

IX. INDEPENDENT CONTRACTOR

The parties agree that SRI is an independent contractor and is not an employee of the State of Nevada. There will not be:

- (A) Withholding of income taxes by the State of Nevada;
- (B) Coverage for industrial insurance provided by the State of Nevada;
- (C) Participation in group insurance plans which may be available to employees of the State of Nevada;

- (D) Participation or contributions by either the independent contractor or the State of Nevada to the Public Employees' Retirement System;
 - (E) Accumulation of vacation leave or sick leave; or
 - (F) Coverage for unemployment compensation provided by the State of Nevada.

X. CHANGE REQUESTS

- (A) The LCB or SRI may request a change in the Agreement. Such a request must include a description of the provision(s) to be modified, the rationale for requesting the change and an assurance that the final product will be equal to or better than the specifications set forth in this Agreement. If SRI submits such a request, the LCB will approve or deny the request within ten (10) business days after receipt of the request. The LCB agrees that it will not unreasonably withhold such approval.
- (B) Any change in the work processes or services provided by SRI without prior written permission from the LCB shall be at SRI's own risk. The cost and expense will be the responsibility of SRI and SRI may not submit a claim for compensation for work, materials or equipment in connection with such changes, unless authorized by the LCB.

XI. AUDIT REQUIREMENTS

SRI agrees to preserve and make available any books, records and documents relevant to the performance of the Agreement for a period of three (3) years after the date of final payment under this Agreement. If the Agreement is completely or partially terminated, the books, records and documents relating to the work terminated shall be preserved and made available for a period of three (3) years after the date of any resulting final settlement.

XII. NOTICE

All notices under this Agreement shall be deemed sufficient if sent by registered mail, return receipt requested. The representative for receipt of notices for the LCB is:

Alex Haartz, Program Analyst Fiscal Analysis Division Legislative Counsel Bureau 401 South Carson Street Carson City, NV 89701

The representative for receipt of notices for SRI is:

Lisa Kralovic, Senior Contracts Administrator SRI 1100 Wilson Blvd., Suite 2800 Arlington, VA 22209-3915

XIII. CONTRACT ADMINISTRATION

The LCB hereby designates as the person to be contacted during the period of performance of this contract for contract administration:

Director of the Legislative Counsel Bureau Legislative Counsel Bureau 401 South Carson Street Carson City, Nevada 89701

SRI hereby designates as the person to be contacted during the period of performance of this contract for contract administration:

Lisa Kralovic, Senior Contracts Administrator SRI 1100 Wilson Blvd., Suite 2800 Arlington, VA 22209-3915

XIV. STATE OWNERSHIP

- (A) All work performed and all materials, products and deliverables developed or prepared for the LCB by SRI are the property of the State of Nevada and all title and interest therein shall vest in the LCB and shall be deemed to be a work made for hire and made in the course of the services rendered hereunder. To the extent that title to any such works may not, by operation of law, vest in the LCB or such works may not be considered works made for hire, all rights, title, and interest therein are hereby irrevocably assigned to the LCB. All such materials, products and deliverables shall belong exclusively to the LCB, with the LCB having the right to obtain and to hold in its own name copyrights, registrations or such other protection as may be appropriate to the subject matter, and any extensions and renewals thereof. SRI shall not use, willingly allow, or cause to have such materials, products and deliverables used for any purpose other than the performance of its obligations under this Agreement without the prior written consent of the LCB.
- (B) SRI agrees to give to the LCB and any person designated by the Nevada Legislature, reasonable assistance, at the expense of the State of Nevada, required to perfect the rights defined in this section. Unless otherwise requested by the LCB, upon the completion of the services to be performed, SRI shall immediately turn over to the LCB all materials and deliverables developed pursuant to this Agreement.

XV. PUBLICITY

SRI shall not use any data, pictures or other representations of the State of Nevada, the Nevada Legislature or the LCB in its external advertising, marketing programs or other promotional efforts, unless SRI obtains the specific advance written authorization of the LCB. The provisions of this paragraph do not preclude SRI from disclosing its client list, including the State of Nevada, the Nevada Legislature and the LCB.

XVI. NO ASSIGNMENT, TRANSFER OR DELEGATION

SRI agrees not to subcontract, assign, transfer or delegate, or otherwise dispose of any rights, obligations or duties under this Agreement without the prior written consent of the LCB.

XVII. TERMINATION

- (A) The LCB may at any time, for its convenience and without cause, terminate all or part of this Agreement. To terminate this Agreement pursuant to this paragraph, the LCB must deliver to SRI a notice of termination without cause. Termination of this Agreement pursuant to this paragraph shall be within the sole discretion of the LCB and shall become effective upon receipt by SRI of the notice of termination without cause. The LCB's liability to SRI with respect to termination without cause is limited to the reasonable costs incurred by SRI before the effective date of the termination, but not to exceed the total fixed rate for this Agreement set forth in Section VI of this Agreement. If requested, SRI shall substantiate any cost submitted for payment with proof satisfactory to the LCB. This paragraph does not apply to termination for cause.
- (B) SRI is in default of this Agreement and the LCB may terminate the Agreement for cause if the LCB determines that:
 - The quality of the work performed by SRI does not meet the specifications of this Agreement;
 - (2) SRI fails to comply with the terms of the Agreement to the satisfaction of the LCB;
 - (3) The project is more than 30 days behind schedule, without the approval of the LCB;
 - (4) SRI has breached this Agreement in any other respect; or
 - (5) SRI has sought, or been forced to seek, protection under the Federal Bankruptcy Act.
- (C) The LCB is in default of this Agreement if, at any time, the LCB materially breaches any term of this Agreement.
- (D) To terminate this Agreement for cause, the nondefaulting party shall send to the defaulting party a notice of default. Termination shall become effective 10 days after the defaulting party receives the notice of default unless during those 10 days the defaulting party cures the default.
- (E) If the LCB terminates this Agreement for cause, the LCB is not liable for any costs incurred by SRI and the LCB may procure the services from other sources and hold SRI liable for any excess cost occasioned thereby.

XVIII. LIABILITY INSURANCE

- (A) During the term of the Agreement, SRI shall maintain comprehensive public liability and property damage insurance coverage of not less than \$1,000,000 in a form and with an insurer or insurers that have received a rating of "A" or better by A.M. Best Company. The policy shall be a combined single limit, bodily injury and property damage, against liability arising out of the services of SRI, its officers, employees, subcontractors and agents, on the Project. SRI agrees to name the State of Nevada, the Nevada Legislature and their officers, employees and agents as additional insureds on the policy. SRI may comply with the requirements of this section by endorsement to any blanket policy of insurance carried by SRI, provided that the blanket policy meets the requirements of this section.
- (B) Evidence of the policy or policies required by paragraph (A) must be furnished to the LCB at the time of the signing of the Agreement and thereafter from time to time as reasonably requested by the LCB. Such evidence must show that the policy or policies shall not be modified or terminated without at least 30 days prior, written notice to the LCB.

XIX. INDEMNIFICATION

- (A) SRI agrees to hold harmless, indemnify and defend the State of Nevada, the Nevada Legislature and their officers, employees and authorized agents against any claim, action, loss, damage, injury, liability, cost and expense of any kind or nature arising from SRI's breach of the representations, warranties or obligations under this Agreement or from SRI's negligent acts or omissions in performing this Agreement.
- (B) In any claim against the State of Nevada or the Nevada Legislature, their officers, employees and authorized agents, by any employee, any subcontractor of SRI, or any person directly or indirectly employed by any of them, or any person for whose acts any of them may be liable, this indemnification shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for SRI or any subcontractor under workers' compensation acts, disability benefits acts, or other employee benefit acts.
- (C) The remedy provided by the indemnification set forth in this section is in addition to, and not in lieu of, any other remedy. This indemnification must not be diminished or limited in any way to the total limit of insurance required by this Agreement or otherwise available to SRI.

XX. COMPLIANCE WITH LAWS

SRI shall comply with all applicable State, County, and Local Laws, Ordinances, Regulations, and Codes in the performance of its duties under this Agreement.

XXI. CONFIDENTIALITY OF INFORMATION

SRI agrees to maintain the confidentiality of any information, records, and data obtained for the purpose of performing its duties under this Agreement. SRI further agrees not to use such information for any purpose other than its performance under this Agreement and that it will require its employees to comply with the confidentiality requirements of this section.

XXII. CONTINGENCY/FORCE MAJEURE

- (A) The parties will not be held responsible for any delay or failure in performance hereunder caused by fires, strikes, embargoes, requirements imposed by government regulations, civil or military authorities, acts of God or by the public enemy or other similar causes beyond the party's control.
- (B) If such a contingency occurs, the party injured by the other party's inability to perform may elect to:
 - (1) Terminate this Agreement or any part thereof; or
 - (2) Suspend this Agreement for the duration of the delaying cause, with the option of extending the period for performance for not longer than the length of time the contingency endured.
- (C) Unless written notice is given within thirty (30) days after the injured party is apprised of the contingency, suspension of the Agreement as set forth in subparagraph (2) of paragraph (B) shall be deemed selected.

XXIII. SEVERABILITY

If any provision of this Agreement is for any reason held unenforceable in any respect, all other provisions of the Agreement remain in effect, and this Agreement shall be construed as if the unenforceable provision never had been contained herein.

XXIV. INTERPRETATION\VENUE

- (A) This Agreement shall be construed, interpreted and enforced in accordance with the laws of the State of Nevada.
- (B) Any cause of action brought by or against the State of Nevada, the Nevada Legislature or their officers, employees or authorized agents arising out of the performance of this Agreement must be instituted and maintained in a court of competent jurisdiction in the County of Carson City, State of Nevada.

XXV. REMEDIES NOT EXCLUSIVE

No remedy provided herein shall be deemed exclusive of any other remedy allowed or provided by law.

XXVI. ENTIRE AGREEMENT

This Agreement sets forth the entire agreement between the parties hereto and no representation or promise not specifically set forth herein shall affect the duties or liabilities of either party hereunder, unless set forth in writing and agreed to by the parties.

IN WITNESS THEREOF, and intending to be legally bound, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

SRI INTERNATIONAL

March 19, 2012

Liea N

Senior Contracts Administrator

LEGISLATIVE COUNSEL BUREAU NEVADA STATE LEGISLATURE

Date

ome I. Malkiewich

Director of the Legislative Counsel Bureau

ATTACHMENT A



STRATEGIC DIRECTIONS FOR THE NEVADA SYSTEM OF HIGHER EDUCATION

December 2011

In its recent publication, Complete to Compete: from Information to Action, the National Governors Association identified the "triple threat" facing public colleges and universities nationwide:

- 1 A greater percentage of jobs requiring postsecondary education;
- 2. A continuing squeeze in state budgets, particularly from the cost of health care; and
- A growing population of students from groups that have historically not successfully completed postsecondary programs.

Nevada on a grander scale faces these same challenges. Nevada's public colleges and universities have historically been successful in serving large numbers of Nevadans, but many students fail to graduate and those who do often take too long to do so. As a result, degree productivity across NSHE institutions is extremely low. In a state that needs more educated workers in the future, the NSHE faces the daunting challenge of producing more degrees in a shorter period of time using fewer resources and ensuring quality.

In response to these pressures, the Nevada Board of Regents initiated a strategic planning process to sharpen the focus of its current master plan, *Building Nevada's Future: A Master Plan for Higher Education in Nevada*. The Board set student success as its primary goal, that is graduating more students with meaningful degrees and certificates, thus positioning the graduates for fulfilling and productive careers and positioning the State with an educated citizenry required for supporting and maintaining economic development and diversification. The following initiatives are designed to support that goal and provide a reasonable plan for achievable implementation.

STRATEGIC INITIATIVES

I. INITIATIVE #1: Increase Student Achievement, Retention and Success

- Improve remediation efforts and develop new instructional strategies and strengthen K-12 partnerships to ensure students are adequately prepared for the rigors of college level coursework.
- 2. Focus research activities in areas with high probability of success and recognition; review and streamline research activities in areas of lower demand or success.
- Increase student mentoring and advising efforts to ensure that students are aware of and understand the steps necessary for success.
- Remain responsive to faculty concerns in order to attract and retain qualified faculty to carry out strategic direction and achieve institutional goals.

- Re-examine all courses in order to utilize transformative teaching methods that benefit students.
- Require institutions to examine and establish procedures and goals to ensure that all students admitted receive the essential access to classes and support services that will allow them timely progress to degree.
- Require the development of academic degree plans for all degree-seeking students through mandatory advising.

II. INITIATIVE #2: Increase Transparency, Accountability and Performance

- Adopt the Complete College America (CCA) goals, including goals for enrolling and graduating students from diverse backgrounds.
- Reward institutions for progress in achieving adopted performance standards, including goals agreed upon through the National Governor's Association Policy Academy and the CCA completion metrics.
- Establish institutional protocols for reviewing student performance and determining the extent to which they are pursuing and completing educational programs and acquiring the skills demanded of Nevada employers.
- 4. Develop and implement institutional assessment plans and effective measures of student learning outcomes for all academic programs—these plans should define student learning outcomes, assess student performance and be used to improve teaching and learning.
- Utilize data to identify obstacles to student success and take appropriate steps to correct those obstacles.
- Develop incentives for recruiting and retaining high performing and innovative faculty.
- 7. Establish performance metrics to set budget parameters, determine system priorities and allocate performance funding dollars.
- 8. Establish institutional incentives that reinforce behaviors that lead to student success.

III. INITIATIVE #3: Continuous Review and Revision of Programs to Support Innovation and Responsiveness

- Develop new degree and certificate programs to provide students with career and technical options consistent with current and forecasted economic development and workforce goals of the state.
- Examine whether, for students who do not meet university admission requirements, to require a transferable associate's degree (AA, AS or AB) to transfer to a university.
- Develop appropriate public/private partnerships with community, businesses, and K-12 to support innovation connectivity, including enhanced collaborative R&D efforts between industry and higher education research institutions.
- Establish goals for increasing the number of and revenue from grants for research and workforce development in areas of high demand/success, including R&D that will support intellectual property and commercialization.
- Seek funding for innovative and cutting-edge research, including funds to support the Nevada Knowledge Fund and that leads to invention disclosure, licenses and related income, including spin-off companies.
- Align overarching research and workforce development priorities with the state plan for economic development
- Strengthen degrees and certificates that link to identified future jobs sought by Nevada in its economic development plan
- 8. Participate on the State Board of Economic Development

IV. <u>INITIATIVE</u> #4: Ensure that Higher Education is Accessible and Affordable for All Nevadans

- Increase the college participation rate for students from low income and first generation families through transparent and predictable financial aid programs.
- Focus financial aid programs on students seeking degrees who engage in patterns of success, including full-time enrollment.
- Establish financial aid programs that address the unique challenges faced by underrepresented students.

PLAN FOR IMPLEMENTATION

In response to the strategic directions of the Board, the Chancellor and Presidents, with the support of a broad cross section of staff and faculty, have begun work on the following initiatives and projects:

INITIATIVE #1: Increase Student Achievement, Retention and Success

- National Governors Association Policy Academy Metrics Project
- Complete College America
- Efficiency & Effectiveness Committee
- Remedial Education Project
- PEBP Task Force
- Salary and Benefits Schedule Review
- P-20 Initiatives \ Alignment
- Diversity/EDIC Council Recommendations adopted September 2011

INITIATIVE #2: Increase Transparency, Accountability and Performance

- National Governors Association Policy Academy Metrics Project
- Complete College America
- Formula Funding Study
- iNtegrate Wrap SIS and Launch iNtegrate2
- NSHE data warehouse
- Code Review Task Force
- Statewide Longitudinal Data System
- Government Relations/Communications Plan

INITIATIVE #3: Continuous Review and Revision of Programs to Support Innovation and Responsiveness

- Nevada Health Care Sector Council
- Community College Task Force Implementation
- Health Sciences Council
- Low Yield Policy Proposal
- Academic Health Center partnership with University Medical Center
- Efficiency & Effectiveness Committee savings reinvestment

INITIATIVE #4: Ensure that Higher Education is Accessible and Affordable for All Nevadans

· Access & Affordability Committee

TIMETABLE FOR IMPLEMENTATION

The following timetable for the completion of the projects outlined herein, including the primary staff person at the System and institution level, will be completed upon the Board's adoption of the defined initiatives.

Project	Lead Staff	Estimated Time of Completion
1. NGA Policy Academy - Metrics		Completion
2. Complete College America		
3. Efficiency & Effectiveness Committee		
4. Remedial Education Project		1
5. Salary & Benefits Schedule Review		
6. P-20 Initiatives/Alignment		
7. Diversity/EDIC Council Recommendations		
8. Formula Funding Study		
9. iNtegrate - Wrap SIS and Launch iNtegrate	2	1
10. NSHE Data Warehouse		
11. Code Review Task Force		
12. Statewide Longitudinal Data System		
13. Government Relations/Communications Pla	en en	
14. Nevada Health Care Sector Council		
15. Low Yield Policy Proposal (eff. Fall 2012)		
16. Academic Health Center - UMC partnership	0	
17. Access and Affordability Committee		
18. State Board of Economic Development		



IMPLEMENTATION OF STRATEGIC DIRECTIONS

March 2012

At the January 20, 2012, meeting of the Board, the Regents adopted strategic directions that the System and its institutions will use as a road map for meeting the Board's various goals and initiatives. The following is a timetable for the completion of the projects outlined in the strategic directions document (attached), including the primary staff person at the System and institution level, will be completed upon the Board's adoption of the defined initiatives.

Project	Lead Staff	Estimated Time of Completion
NGA Policy Academy – Metrics	Crystal Abba	December 2012
2. Complete College America	Crystal Abba	On-going
Efficiency & Effectiveness Committee	To Be Determined	To Be Determined
4. Remedial Education Project	Crystal Abba	December 2012
5. Salary & Benefits Schedule Review	Brooke Nielsen Christine Casey	December 2012
6. P-20 Initiatives/Alignment	Crystal Abba	On-going
7. Diversity/EDIC Council Recommendations	NSHE Presidents	On-going
8. Formula Funding Study	Mark Stevens	September 2012
9. iNtegrate – Wrap SIS and Launch iNtegrate 2	Steve Zink	On-going
10. NSHE Data Warehouse	Steve Zink Crystal Abba	2014
11. Code Review Task Force	Brooke Neilson	December 2012
12. Statewide Longitudinal Data System	Steve Zink Crystal Abba	On-going
13. Government Relations/Communications Plan	Renee Yackira	September 2012
14. Nevada Health Care Sector Council	Marcia Turner	On-going
15. Low Yield Policy Proposal (eff. Fall 2012)	Crystal Abba	Adopted 12/11
16. Academic Health Center – UMC partnership	Marcia Turner	On-going
17. Access and Affordability Committee	Crystal Abba	September 2012
18. State Board of Economic Development	Renee Yackira	On-going

(BOARD OF REGENTS' AGENDA 03/01/12 & 03/02/12) Ref. BOR-28, Page 1 of 4

NSHE STRATEGIC INITIATIVES

Adopted January 20, 2012

I. INITIATIVE #1: Increase Student Achievement, Retention and Success

- Improve remediation efforts and develop new instructional strategies and strengthen K-12 partnerships to ensure students are adequately prepared for the rigors of college level coursework.
- Focus research activities in areas with high probability of success and recognition; review and streamline research activities in areas of lower demand or success.
- Increase student mentoring and advising efforts to ensure that students are aware of and understand the steps necessary for success.
- 4. Remain responsive to faculty concerns in order to attract and retain qualified faculty to carry out strategic direction and achieve institutional goals.
- Re-examine all courses in order to utilize transformative teaching methods that benefit students.
- Require institutions to examine and establish procedures and goals to ensure that all students admitted receive the essential access to classes and support services that will allow them timely progress to degree.
- Require the development of academic degree plans for all degree-seeking students through mandatory advising.

II. INITIATIVE #2: Increase Transparency, Accountability and Performance

- 1. Adopt the Complete College America (CCA) goals, including goals for enrolling and graduating students from diverse backgrounds.
- Reward institutions for progress in achieving adopted performance standards, including goals agreed upon through the National Governor's Association Policy Academy and the CCA completion metrics.
- Establish institutional protocols for reviewing student performance and determining the extent to which they are pursuing and completing educational programs and acquiring the skills demanded of Nevada employers.
- 4. Develop and implement institutional assessment plans and effective measures of student learning outcomes for all academic programs—these plans should define student learning outcomes, assess student performance and be used to improve teaching and learning.
- Utilize data to identify obstacles to student success and take appropriate steps to correct those obstacles.
- Develop incentives for recruiting and retaining high performing and innovative faculty.
- Establish performance metrics to set budget parameters, determine system priorities and allocate performance funding dollars.
- 8. Establish institutional incentives that reinforce behaviors that lead to student success.

III. INITIATIVE #3: Continuous Review and Revision of Programs to Support Innovation and Responsiveness

- Develop new degree and certificate programs to provide students with career and technical options consistent with current and forecasted economic development and workforce goals of the state.
- 2. Examine whether, for students who do not meet university admission requirements, to require a transferable associate's degree (AA, AS or AB) to transfer to a university.

(BOARD OF REGENTS' AGENDA 03/01/12 & 03/02/12) Ref. BOR-28, Page 2 of 4

- Develop appropriate public/private partnerships with community, businesses, and K-12 to support innovation connectivity, including enhanced collaborative R&D efforts between industry and higher education research institutions.
- Establish goals for increasing the number of and revenue from grants for research and workforce development in areas of high demand/success, including R&D that will support intellectual property and commercialization.
- Seek funding for innovative and cutting-edge research, including funds to support the Nevada Knowledge Fund and that leads to invention disclosure, licenses and related income, including spin-off companies.
- Align overarching research and workforce development priorities with the state plan for economic development
- Strengthen degrees and certificates that link to identified future jobs sought by Nevada in its economic development plan
- 8. Participate on the State Board of Economic Development

IV. <u>INITIATIVE #4: Ensure that Higher Education is Accessible and Affordable for All Nevadans</u>

- 1. Increase the college participation rate for students from low income and first generation families through transparent and predictable financial aid programs.
- Focus financial aid programs on students seeking degrees who engage in patterns of success, including full-time enrollment.
- Establish financial aid programs that address the unique challenges faced by underrepresented students.

PLAN FOR IMPLEMENTATION

In response to the strategic directions of the Board, the Chancellor and Presidents, with the support of a broad cross section of staff and faculty, have begun work on the following initiatives and projects:

INITIATIVE #1: Increase Student Achievement, Retention and Success

- National Governors Association Policy Academy Metrics Project
- Complete College America
- Efficiency & Effectiveness Committee
- Remedial Education Project
- PEBP Task Force
- Salary and Benefits Schedule Review
- P-20 Initiatives \ Alignment
- Diversity/EDIC Council Recommendations adopted September 2011

INITIATIVE #2: Increase Transparency, Accountability and Performance

- National Governors Association Policy Academy Metrics Project
- Complete College America
- Formula Funding Study
- iNtegrate Wrap SIS and Launch iNtegrate2
- NSHE data warehouse
- Code Review Task Force
- Statewide Longitudinal Data System
- Government Relations/Communications Plan

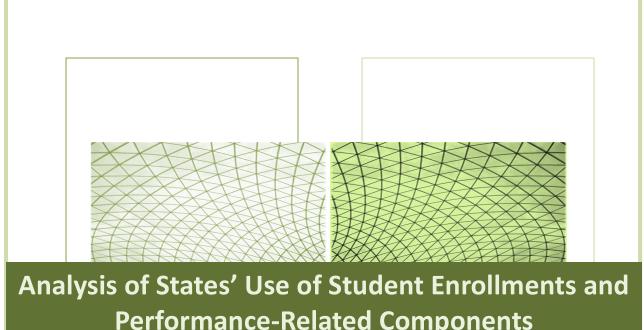
(BOARD OF REGENTS' AGENDA 03/01/12 & 03/02/12) Ref. BOR-28, Page 3 of 4

INITIATIVE #3: Continuous Review and Revision of Programs to Support Innovation and Responsiveness

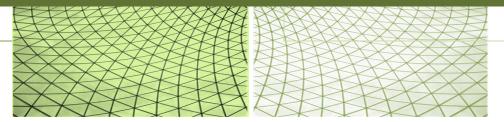
- Nevada Health Care Sector Council
- Community College Task Force Implementation
- Health Sciences Council
- Low Yield Policy Proposal
- Academic Health Center partnership with University Medical Center
- Efficiency & Effectiveness Committee savings reinvestment

INITIATIVE #4: Ensure that Higher Education is Accessible and Affordable for All Nevadans

Access & Affordability Committee



Performance-Related Components



Reports B and C May 7, 2012

REPORT FOR THE NEVADA LEGISLATURE'S COMMITTEE TO STUDY THE FUNDING OF HIGHER EDUCATION





Table of Contents

OVERVIEW	3
DISCLAIMER	3
BACKGROUND	4
STATES' USE OF STUDENT ENROLLMENT AS A BASIS FOR HIGHER EDUCATION	<u>FORMULA</u>
FUNDING	6
STATES THAT USE STUDENT ENROLLMENT NUMBERS IN THEIR FUNDING FORMULA	7
THE NSHE PROPOSED FORMULA	7
STRENGTHS AND WEAKNESSES OF THE USE OF ENROLLMENT	8
STATES' USE OF PERFORMANCE-RELATED CRITERIA	10
BACKGROUND	10
TYPES OF PERFORMANCE CRITERIA USED BY STATES	11
OUTPUT METRICS	11
PROGRESS METRICS	11
ECONOMIC DEVELOPMENT METRICS	11
NATIONAL GOVERNORS ASSOCIATION COMPLETE TO COMPETE METRICS	12
STATE THAT USE PERFORMANCE CRITERIA IN THEIR FUNDING FORMULA	12
STRATEGIC DIRECTIONS FOR THE NEVADA SYSTEM OF HIGHER EDUCATION	14
STATUS PERFORMANCE CRITERIA DISCUSSIONS	15
ILLUSTRATIVE STATE NARRATIVES	16
Arizona	16
Indiana	16
New Mexico	16
Kansas	17
Оню	17
Tennessee	18
TEXAS	19
Washington	19
PERFORMANCE FUNDING RESULTS	19
POLICY CONSIDERATIONS	20
STRENGTHS AND WEAKNESSES OF PERFORMANCE CRITERIA	20
EVALUATING THE EXISTING NSHE FORMULA	22
THE NEW MODEL FOR FUNDING HIGHER EDUCATION	23
APPENDIX A: RESOURCES CONSULTED	26



Overview

This report contains the second and third of four deliverables that, taken together, will comprise SRI International's evaluation of existing and proposed funding mechanisms for Nevada's System of Higher Education (NSHE). This report will address states' use of student enrollments as a driver for higher education funding as well as states' inclusion of performance-related components. Its conclusions may be usefully considered in isolation; however, as with the first report, all such budget practices occur in the context of the overall approach to funding higher education adopted by any particular state.

The findings reported here, therefore, will evaluate existing practice and proposed alternatives in Nevada without offering specific alternatives. This analysis, and the analysis from the first deliverable, will be folded into SRI's final report. That report will contain not only a general, combined analysis of the current model for funding higher education in Nevada, and of proposed alternatives, but also a complete set of specifications for any future higher education funding model. These specifications address and reflect the policy priorities of the state, as defined by core strategic documents such as "Envisioning Nevada's Future: Goals and Strategies for Advancing Our Quality of Life," "Unify, Regionalize, Diversity: An Economic Development Agenda for Nevada" and "Strategic Directions for the Nevada System of Higher Education." These specifications may reflect or approve present practice in Nevada or proposed alternatives, but it is likely that they will also include more or less substantial amendments or additions to present practice or proposed alternatives.

The report begins by describing existing practice in Nevada. It then summarizes and compares the practices of states that have formulas and that use or have used performance-related criteria in their funding methods. It then reviews the policy considerations associated with performance-related criteria.

Disclaimer

The findings and observations contained in this report are those of the authors and do not necessarily reflect the views of the Nevada State Legislature, its members or staff, or the Nevada System of Higher Education, its members or staff.



Background

The Nevada System of Higher Education (NSHE) provides higher education to both Nevada residents and nonresidents through the following institutions:

- University of Nevada, Reno (UNR)
- University of Nevada, Las Vegas (UNLV)
- Nevada State College at Henderson (NSC)
- College of Southern Nevada (CSN)
- Western Nevada College (WNC)
- Great Basin College (GBC)
- Truckee Meadows Community College (TMCC)
- · UNR School of Medicine
- UNLV Law School
- UNLV Dental School
- Desert Research Institute (DRI)

A 13-member Board of Regents governs the system, representing 13 districts covering the state. The system is headed by the Chancellor's Office.

The bulk of state support for NSHE institutions is based on a set of formulas (which many, including this report, refer to as a single, higher education funding formula). The design of this formula is currently the subject of statewide debate, and is a major focus of a new funding proposal by the Chancellor. Previous debate on the funding formula occurred in the late 1990s when the legislature decided the 1986 methodologies used to fund the University and Community College System of Nevada (UCCSN) "did not adapt well to the explosive growth experienced on several of the UCCSN campuses." The 2001 Legislature revised the higher education funding formula as a result of a 1999 Committee to Study the Funding of Higher Education report. The resulting Committee recommendations kept the basic funding formula that had been in use since the 1960s, but revised it in attempts to "focus on the equitable distribution of available funding."

The revised funding formula is comprised of four formulas that independently calculate funding levels for Instruction, Academic Support, Institutional Support, and Operation and Maintenance of Physical Plant. Each formula has many complex elements; however, each formula is driven by a few main components:

• The formula for instruction is mainly based on student-to-faculty ratios using full-time equivalent (FTE) student counts. Notably, this counts both in-state and out-of-state students. From 2001-2009 the FTE counts were based on a three-year rolling average; however, for the 2009-2011 biennium, the Legislature approved utilizing campuses' FY fall 2008 actual and spring 2009 preliminary enrollments for each year of the 2009-2011 biennium for purposes of allocating formula funding.³

¹ Nevada. Committee to Study the Funding of Higher Education. *Legislative Counsel Bureau Bulletin No.* 01-4. January 2001. Web. 6 Aug 2011.

² Nevada. Ibid. p. 2

³ Fiscal Analysis Division, Nevada Legislative Counsel Bureau. Education. *2009 Appropriations Report.* p. 147-148.



- The formula for academic support is based partly on the number of full-time equivalent faculty members and staff members, number of library volumes, and the instruction budget.
- The formula for student services is based on combined headcount and FTE enrollment.
- The formula for institutional support is based on total operating budgets.
- The formula for operations and maintenance of physical plant is based on maintained square feet calculation.

In addition to the revised formulas, the 1999 Committee recommended a performance pool to be distributed to institutions that achieved specific performance goals. In 2001, the Governor recommended an allocation of \$3 million for the FY 2002-03 performance pool; however, the 2001 Legislature denied the request because "a comprehensive plan was not provided that specified how the proposed funded would be allocated." The pool has not been funded since then.

The Nevada 2011 Legislature created the Committee to Study the Funding of Higher Education in Nevada to examine certain funding issues related to the Nevada System of Higher Education. The members of the committees are required to:

- 1. Compare the existing method of funding higher education in Nevada with the methods used in other states;
- 2. Determine whether the other methods would be appropriate and useful in Nevada, whereby different missions of universities, state college, colleges and research institutes are appropriately considered in the funding of public higher education in Nevada;
- 3. Review the funding of remediation in the context of instructional delivery methods;
- 4. Consider the retention of resident registration fees and nonresident tuition outside of the state-supported operating budget;
- 5. Consider funding in the context of completed courses in contrast to the current method of funding enrollments;
- 6. Consider rewarding institutions within higher education for achieving defined goals for graduating students; and,
- 7. Submit to the Legislative Commission a report of its findings and recommendations for legislation before the commencement of the 77th Session of the Nevada Legislature in February 2013.

To achieve these goals, the Legislative Committee has contracted with SRI International to assist them in their work. This report comprises of the second and third in a series of four reports reviewing both other states' mechanisms of funding their higher education systems and existing best practices. In many cases higher education funding policies are a historic mash-up of different priorities and strategic decisions. The report that follows utilizes an extensive review of state legislation, publications, and reports as well as telephone interviews with state officials performed over the past six weeks. Please see Appendix A for a list of the sources for each state.

⁴ Fiscal Analysis Division, Nevada Legislative Counsel Bureau. Education. *2001 Appropriations Report.* p. 20.



States' use of student enrollment as a basis for higher education formula funding

Many states use formulas to fund their higher education systems. These formulas are based on student credit hours attempted (also known as student course enrollment) or student credit hours completed (also known as course completion). Some states, such as Maryland, do not use a formula to fund their higher education system; however, increases in appropriation are based on enrollment growth. Enrollment calculations are based on a census, the timing of which varies from state to state. Some states use enrollment data taken two weeks into the term, while Indiana has used enrollment data taken on the last day of the term. Enrollment is generally reported as semester credit hours, which is a measure of how many classes (and number of students enrolled in these classes) institutions deliver.

As reviewed above, each sub-formula of the 1999 Nevada formula for funding higher education is driven by a main metric, such as FTE enrollment or maintained square feet. However, the Nevada formula is highly dependent on FTE student enrollments. Though some of the sub-formulas do not directly list FTE enrollment as an input, each sub-formula's driver depends on FTE enrollments in the following ways:

- Instruction is directly based on FTE enrollments.
- The formula for academic support is based on the number of full-time equivalent faculty members and staff members, number of library volumes, and the instruction budget.
 These input themselves are based on FTE student enrollments
- The formula for student services is directly based on combined headcount and FTE enrollment.
- The formula for institutional support is based on total operating budget, which is determined by FTE student enrollment
- The formula for operations and maintenance of physical plant is based on maintained square feet calculation. For instructional space, this is directly tied to FTE student enrollments.

The vast majority of enrollment-driven formulas are based on a beginning of the term census. They do so based on the theory that the cost of courses being provided does not change after that time period, regardless of the number of students that withdraw. However, some states have moved to funding course completions.

This report uses the following definitions:

- Full-time equivalent student means either a single student who carries, or several
 students who together carr carry among them, within a single academic year, a
 minimum number of clock hours of instruction. The minimum hours of instruction differ
 from state to state. Generally, full-time equivalent student numbers are generated by
 calculating one FTE for each 15 semester credit hours attempted in undergraduate
 lower division courses, one FTE for each 12 semester credit hours attempted in
 undergraduate upper division courses, and one FTE for each 10 semester credit hours
 attempted in graduate courses.
- A completed course is a course for which a letter grade or pass/fail mark has been entered. Some states fund only on successfully completed courses that have grades above a D (or D- where applicable).



Student success is defined by the states as including degree completion, on-time
graduation, transfer from a 2-year institution to a 4-year institution, course completion,
and credit accumulation. Each state's preferred measures of student success are
reflected in their performance criteria summarized in a later section.

States that use student enrollment numbers in their funding formula

Twenty-nine (29) states use some type of funding formula. Some states use funding formulas for all universities, 4-year colleges, and 2-year colleges. Other state use funding formulas only for 2-year institutions, as indicated in Table 1. These formulas are driven by one main criterion: full-time equivalent enrollment (referred to as simply enrollment through the report) or completed credit hour (also knows as course completion). For the vast majority of the states, enrollments drive criteria. However, Louisiana and New Mexico employ inputs of all course completion, failing or otherwise. (New Mexico is currently implementing their formula for fiscal year 2013.) Ohio and Tennessee employ inputs of only successful course completion. Many state employ course completion funding in their performance-based portion of the formula; however, course completion does not drive the formula. Please see the next section for discussion on course completion as a performance criterion.

Connecting state general fund appropriations to the number of student served by a university seems straightforward, which is why it is the dominant method. Funding based on enrollment incentivizes institutions to grow, which can encourage access. However, the missions of different institutions within a higher education system may differ widely. Some institutions may have a mission to provide access to higher education to all students, while other institutions have research missions; therefore, it may be desirable to incentivize other activities other than enrollment. Conversely, rural institutions may not be able to grow their enrollments even when incentivized, and are unable to take advantage of economies of scale, so using enrollment-based formulas may underfund operations. Moving from an enrollment-based formula to a course completion-based formula moves a funding formula away from funding "inputs" only and towards funding success in the form of completed courses. However, a completed course is still an input measure rather than a true measure of success.

The NSHE proposed formula

The Nevada System of Higher Education Office of the Chancellor proposed a new funding formula in 2012. This funding formula uses only credit hours for resident students who complete courses where a grade had been posted, including a failing grade. These credit hours are used to calculate instruction support and operation and maintenance support, as well as determining the application of a small institution factor.



Table 1. States using formulas to fund their higher education systems.

	"End of Course"	Successful course
Full-time enrollment is the driver	Course completion is	completion is the
	the driver	driver
Alabama	Louisiana	Ohio
Arizona	New Mexico (for new	Tennessee
Arkansas	funding only)	
California (CSU, CCC)*		
Connecticut		
Georgia		
Hawai'i (2-year institutions only)		
Idaho		
Illinois (2-year institutions only)		
Indiana**		
Kansas (2-year institutions only)		
Maryland (Regional Higher		
Education Centers only)		
Michigan		
Minnesota		
Mississippi		
New Jersey (2-year institutions only)		
New York		
North Carolina		
Ohio (2-year institutions only)		
Oklahoma		
Oregon		
Pennsylvania		
South Carolina		
Tennessee (only CC Dual		
Enrollment)		
Texas		
Virginia		
West Virginia		

Strengths and weaknesses of the use of enrollment

Many states, like Nevada, use student credit hours enrolled as opposed to student credit hours completed under the theory that the cost of providing services in a term does not change when students withdraw. However, if funding is based on course enrollment, institutions may be incentivized to enroll students regardless of their ability to succeed. The opportunity cost to the individual student is large in terms of both time and money. In addition, institutions and states waste money paying for a student who will not complete the class and their degree.



A way to mitigate low completion rates is to incentivize institutions to support course completion by funding only successful course completion. This policy may encourage institutions to provide more academic support such as tutoring and teaching assistants. On the other hand, if course completion is the driving factor behind state general fund appropriations, institutions may be incentivized to lower the standards required for course completion. Faculty members may feel pressure to give higher grades so students do not get discouraged and quit.

Alternatively or concurrently, institutions may become overly stringent in admission standards, which could reduce access for students.

A third alternative funding alternative uses enrollment numbers taken at the end of the term or course completion including failing grades, which may incentivize institutions to provide academic support for students to help them stay in the class, while tempering the pressure to pass students so that the institution gets paid for the time invested in the student. However, these types of formulas have the same weaknesses as those listed at the outset of this section. The NSHE funding proposal falls into this category since the proposal allocates money to credit hours completed with any grade except a withdrawal.

Before deciding if course enrollment should drive funding, the Committee should consider what they want to incentivize. Historically, funding based on enrollment has incentivized getting students into class, sometimes to the detriment of both the school and the student. In addition, Nevada's historic funding method appears to have resulted in all institutions embracing an access mission because it was financially advantageous, rather than each institutions embracing a differentiated mission. The Committee should take care to consider the incentives created by different kinds of enrollment-based funding formulas and by performance criteria such as successful course completion.

⁵ Jacobs, Joanne. "More States Utilize Performance Funding for Higher Education." *US News and World Report.* February 24, 2012.



States' use of performance-related criteria

Background

Higher education policy makers, foundations, and other organizations have recently emphasized the use of performance funding; however, it is not a new policy. Since 1979, states have experimented with different types of performance-based funding that went beyond funding systems based simply on enrollments. The results were mixed, and programs were cut due to lack of alignment with state politics, complexity, lack of available data, or lack of funding.

But as college enrollment has risen over the past 20 years, so has the cost of attending college, these costs are shared by taxpayers who fund public institutions as well as by students and their families. At the same time, questions have accumulated about the performance of institutions of higher education. For example, across the country only about 50% of students that enroll in an institution of higher education will graduate with a degree in the expected amount of time. In Nevada, it takes 6 years for about half of those students enrolled in a bachelor's program to get a degree. Many don't graduate at all. This has generated a great deal of concern among policymakers, magnified by the sense that these expensive institutions play an increasingly critical role in the economic future of the country. As a result, there has been a decisive return by policy-makers and higher education leaders to the study and adoption of performance criteria.

Some policy organizations have focused their attention on improving completion rates, such as the National Governors Association's *Complete to Compete* initiative and the similar *Complete College America* initiative. This focus on completion has highlighted the increasing amount of time it takes to graduate. Time is viewed as the enemy of success. Most current plans with performance criteria incentivize successful completion, and "time to degree" or "progress" metrics are also being considered. But performance goes beyond completion, to include a variety of output and outcome measures, for example the production of specific credentials that fulfill state workforce needs, and the attainment of specific skill sets.

In practice states link public funding to campus outcomes in three general ways. First, output-based systems are funding formulas that incorporate counts of inputs and/or outputs into future budgets. A second type is performance contracts where institution enters into an agreement with the state regarding performance improvement in exchange for their state appropriation. The third type is performance set-asides that are a separate portion of the state appropriation doled out to institutions in a competitive way. The last type of funding was popular during the good economic times of the 1990s; however, they were the first to be cut during economic slowdowns.

Though many states collect performance-related data, relatively few states incorporate performance-related criteria into their funding decisions. In some states, performance metrics are reported to the legislature as part of the system of higher education's annual or biennial budget request, a practice termed "performance budgeting" by Joseph Burke. This differs from those states that explicitly tie funding levels to performance-related criteria through a formulaic

⁶ Complete College America, http://www.completecollege.org/state_data/



process (true performance funding). Furthermore, to be effective states need to tie performance-related funding to a significant share of an institution's overall income if the criteria are to have an impact on behavior. While there is considerable debate about what constitutes a "significant" share, in the past those states that have implemented performance-based funding have done so at levels too low to truly incentivize behavior.

In other cases, the performance pool was formally adopted but never implemented. This is true of the current Nevada funding formula, which included a performance pool that was never employed due to unclear performance metrics. Indeed, the development of clear metrics was not pursued because the performance pool was relatively small. The upshot was that the lack of clear metrics led to the performance pool being returned to the NSHE's general fund appropriation. For performance criteria to change behavior, the metric must be clear and the dollar amount significant.

Types of performance criteria used by states

Output metrics

- Degrees awarded: annual number and/or percentage of certificates, associate's
 degrees, bachelor's degrees, master's degrees, doctorate degrees, and other
 professional degrees. Exactly which degrees are tracked depends on the state and
 institution.
- Graduation rates (also know as time to degree): number and/or percentage of
 certificate- or degree-seeking students who graduate in a predetermined length of time.
 On-time rate are defined as two years for associate's degrees and four years for
 bachelor's degrees. Extended time usually refers to three years for associate's degrees
 and six years for bachelor's degrees.
- **Research incentives:** metrics related to the amount of federal research and development money brought into the university.

Progress metrics

- **Transfer rates:** annual number and/or percentage of student who transfer from a two-year to a four-year institution.
- Successful course completion: a course for which a letter grade above a D- or pass has been entered.
- Time and credit to degree: average length of time in years.
- **Student progression (as known as credit accumulation):** students are weighted more for funding purposes after they pass credit hours thresholds.
- Advancement through remedial and adult education.
- Job placements.

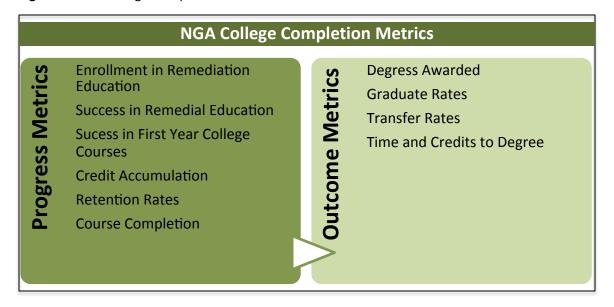
Economic development metrics

- Earned research dollars.
- **Degrees linked to workforce development goals**: high demand degrees generally in science, technology, engineering, mathematics and healthcare.

⁷ As accounted in Carey, K. and C. Alderman. *Ready to Assemble: A Model State Higher Education Accountability System.* Education Sector Report. December 2008.



Figure 1. NGA College Completion Metrics



National Governors Association Complete to Compete Metrics

Figure 1 displays the National Governors Association (NGA) *Complete to Compete* recommended metrics. Progress metrics allow policymakers and the public to track if the state and its public institutions are on track to meet future goals, while outcome metrics show how the state and institutions are currently performing against the completion goals. NGA simply recommends that these metrics be collected and published. A later NGA brief recommends that states "include performance measures (e.g. degrees awarded, degrees awarded to low-income and minority students) as part of the regular budgeting process for higher education. State funding for public colleges and universities should be based on measures of student program and success and not on just enrollment or what other colleges spend."

State that use performance criteria in their funding formula

Table 2 shows the states that SRI found use performance funding, where at least one performance-based criterion is directly linked to funding. Every one incentivizes completion by funding degrees or certificates. Four states fund based only on the NGA-defined outcome metrics, while the rest fund both on outcome metrics and progress metrics. The two most common progress metrics are credit/course completion and transfer rates between 2-year and 4-year programs. No states funds on all NGA completion metrics, though movement toward budgets based on course and degree completion align with the later NGA funding brief.

⁸ Reyna, Ryan. *Complete to Compete: Common College Completion Metrics*. NGA Center for Best Practices. June 2010

⁹ Conklin, Kristin. "Follow the Money: Strategies for Using Finance to Leverage Change in Higher Education." *Complete to Compete Briefing Paper.*



Table 2. States that include performance related components in higher education funding.

Table 2. States that include performance related components in higher education funding. States using performance.		
States using performance criteria	Elements/Description	
Florida (2-year institutions only)	Degree completion; degree completion and employment of at-risk students	
Hawai'l (2-year institutions only)	Credit completion; degree/certificate completion; degree/certificate completion for Native Hawaiians; STEM degrees/certificates; number of at-risk students; transfers to 4-year institutions	
Illinois (2-year institutions only)	Degree/certificate completion; degree/certificate completion for at-risk students; transfer to 4-year institutions; remedial & adult education advancement	
Indiana	Credit hours; overall degree change; low-income degree student change; on-time degree change	
Kansas	Criteria vary, as each institution creates its own performance agreement: increasing diversity; improving student achievement test scores; aligning the higher education system and the needs of the Kansas economy; increasing institutional quality; providing student services.	
Louisiana	Course completion; STEM degrees; health degrees; research	
New Mexico	Credit completion; degrees/certificates completion; STEM degrees/certificates; health degrees/certificates; at-risk student degrees/certificates	
Ohio	Credit completion; degree completion; at risk student completion; STEM degrees	
Oklahoma	Course completion; retention; degree/certificate completion	
Pennsylvania	4-year institutions only: course completion; self-developed criteria	
Tennessee	4-year & 2-year institutions: student progression; degree/certificate completion; transfers out with 12 Hours 4-year institutions only: research & service; 6-year graduation rate 2-year institutions only: dual enrollment; degrees/certificates; job placements; remedial & developmental success; workforce training	
Texas	Degrees awarded with special weights for critical fields and at-risk students.	
Washington	2-year only: gains in basic skills; passing pre-college writing or math; earning 15 credits the first year; earning 30 credits; completing college-level math; finishing apprentice training; or earning a degree or program certificate.	



Strategic Directions for the Nevada System of Higher Education

In January 2012, the Nevada Board of Regents adopted *Strategic Directions for the Nevada System of Higher Education* in response to the NGA's Complete to Compete Initiative. The Board of Regents stated its primary goal to be to "graduate more students with meaningful degrees and certificates, thus positioning the graduates for fulfilling and productive careers and positioning the State with an educated citizenry required for supporting and maintaining economic development and diversification." The Board of Regents spells out four initiatives. The second initiative speaks to performance-related funding criteria stating the goals of "reward[ing] institutions for progress in achieving performance standards, including goals agreed upon through the National Governors Association Policy Academy and the CCA completion metrics" and "establish[ing] performance metrics to set budget parameters, determine system priorities, and allocate performance funding dollars."

Many of the performance criteria used by other states align with the *Strategic Directions* initiative. Course and degree completion by low-income and under-represented students are performance criteria that align with Initiative #2.1 "Adopt...goals for enrolling and graduating students from diverse backgrounds." Performance criteria base on workforce needs align with Initiative #2.3 "Establish institutional protocols for reviewing student performance and determining the extent to which they are pursuing and completing educational programs and acquiring the skills demanded of Nevada employers."



Status performance criteria discussions

Table 3 summarizes the states that have implemented performance criteria in their funding models. However, it also shows that other states also have definite plans to switch to performance-based funding. In addition, ten states are publicly considering implementing performance-based funding. The shift to the use of performance based funding is clear, and it is picking up speed. The concerns of taxpayers, parents and policymakers discussed above will likely ensure that this development is here to stay.

Table 3. States currently using and states considering performance-based funding (illustrative, not exhaustive).

States which currently use, or have a definite plan to switch to, performance-based funding		States considering performance- based funding
Arkansas	Montana	Connecticut
Colorado ¹	New Mexico	Arizona
Florida ²	Ohio	Georgia
Hawai'i ³	Oklahoma	Idaho
Illinois ⁴	Pennsylvania	Kentucky
Indiana	South Carolina	Massachusetts
Kansas	Tennessee	Mississippi
Louisiana	Texas	New York
Maryland	Washington	Nevada
		North Dakota
		Oregon
		Michigan
		Virginia
		West Virginia

¹CO will only switch to PBF if the state meets a target funding threshold.

² 2-year institutions only; 4-year institution plan under development

³ 2-year institutions only; 4-year institution plan has been developed but not yet implemented due to lack of funding

⁴ 2-year institutions only; 4-year institution plan under development



Illustrative State Narratives

Arizona

Arizona uses a base plus funding formula to fund its universities. The increase in funding is based on enrollment by a 22:1 ratio where an increase or decrease in 22 full-time equivalent students results in the addition or subtraction of 1 faculty member. Arizona is currently discussing incorporating performance criteria in its funding methods.¹⁰

Indiana

Indiana's base formula is driven by enrollment and accounts for the bulk of all funding provided to each college. Notably, enrollment numbers have been based on enrollment on the last day of class. In 2003, Indiana added an incentive fund to reward the state's research universities for federal research funds awarded. In 2007, performance-based funding was expanded to include all institutions. The formula provides incentives for an increase in the number of degrees, increase in on-time graduation rates, increase in transfer rates from 2-year colleges to 4-year colleges, types of degrees, degree completion by low-income students, and dual credit hours, as well as research grant incentives. Performance funding was implemented within the increase in funding given to the system of higher education. The base funding based on enrollment remained intact in 2007; however, in 2009 10% of the enrollment-based funding was shifted to successfully completed credit hours with a grade of at least a D-. In 2012, the Indiana state budget was cut and performance criteria were used to distribute budget reductions. Institutions with better performance and lower costs received smaller cuts than those with high costs and low completion rates. 11 In 2014, the enrollment component will shift to 100% completed credit hours. For the 2011-12 budget, Indiana allocated 5% (\$61.4 million) to fund its performance pool. The allocation of funds emphasizes degree production with 60% of the pool awarded for degree completion.¹²

New Mexico

New Mexico's Higher Education Department (HED) implemented a new funding formula for fiscal year 2013 as required by legislative action in 2011. The new funding formula is used for calculating workload and funding needs for the budget recommendation submitted to the executive and legislative branches. The State of New Mexico uses three separate funding formulas for research universities, regional or comprehensive universities, and two-year colleges to reflect the mission differentiation of each type of institution. This formula is a *base plus* model that defines the base as each institution's fiscal year 2012 instruction and general

¹⁰ Arizona Board of Regents. *Funding Enrollment Changes*.

https://azregents.asu.edu/Documents/FUNDING%20ENROLLMENT%20CHANGES.pdf (accessed 1 May 2011); MGT America. Options for Funding Arizona Higher Education. Phase II Report. March 15, 2011. http://gettingaheadaz.org/assets/Phase II Report combined 3 29 2011.pdf (accessed 1 May 2011).

¹¹ Lederman, Doug. "Performance (De-)Funding." *Inside Higher Edu. 28 Dec 2009* http://www.insidehighered.com/news/2009/12/28/indiana (accessed 1 May 2012).

¹² HCM Strategists. "Performance Funding in Indiana: An Analysis of Lessons from the Research and Other State Models." Report to Indiana's Commission on Higher Education. 8 August 2011. http://www.hcmstrategists.com/content/Indiana_PFReport2_8.2.11.pdf (accessed 8 May 2012); Bautsch, Brenda and Ronald Williams. "Recommendation Nine: College Completion." *The College Completion Agenda State Policy Guide*. CollegeBoard Advocacy & Policy Center. 2010.

http://completionagenda.collegeboard.org/sites/default/files/reports_pdf/Policy_Rec_Nine.pdf (accessed 2 May 2012)



appropriations adjusted for utility costs. Any future increase in budget request will be calculated by a performance formula unique to each type of institution.

New Mexico's formula for research universities is based on completed student credit hours for all courses for which a student received a letter grade, pass-fail grade, incomplete, or audit complete. There is an additional funding factor based upon the total number of undergraduate and graduate degrees and postgraduate certificate awarded by each institution. For fiscal year 2013, this funding factor is 2% of total cost of generating the degree produced at each institution. Degrees and certificates in STEM fields are an additional funding factor that is funded at 3% of the total cost to produce degrees. The funding formula also includes a factor for at-risk student degrees (defined as students those expected family contribution would make them eligible for Pell grants). This factor is funded at 3% of the total cost to produce degrees. Currently the interim committee is looking at expanding the formula including sector-specific formula factors includes a research factor, a quality factor, a progress factor, and a factor that rewards success of transfer students.

New Mexico's comprehensive universities are regional universities that produce master's degree and bachelor's degrees. A few also produce associate's degrees and certificates. The funding formula is identical to research universities, except that comprehensive universities completed student credit hours also include developmental, remedial, or vocational/technical courses, which research universities do not offer.

Community colleges provide vocational and technical education, general academic preparation leading to associate's degrees and certificates, remedial education, and adult basic education. The community college funding formula includes completed student credit hours, number of degrees and postgraduate certificates awarded, workforce needs, and degrees awarded to atrisk students.¹³

Kansas

Kansas uses a base plus method to fund the 4-year universities. Any new money distributed to the institution is based on compliance with performance agreements that the Kansas Board of Regents signs with each institution. Performance metrics are based on improvement. Though the exact criteria differ from institution to institution, they address increasing diversity, improving student achievement test scores, aligning the higher education system and the needs of the Kansas economy, increasing institutional quality, and providing student services.¹⁴

Ohio

Ohio uses a funding formula to calculate the state appropriation for higher education, which is termed the State Share of Instruction (SSI) formula. Ohio has different formulas for different

¹³ Educating Tomorrow's Workforce: New Mexico's Higher Education Funding Formula for Fiscal Year 2013. New Mexico Higher Education Department. 14 Oct. 2011. http://www.nmsu.edu/~budget/PDF%20Files/HED_Ed_Funding_Formula_FY2013.pdf (accessed 3 May 2012).

¹⁴ 2011 Performance Agreements. Kansas Board of Regents. http://www.kansasregents.org/resources/PDF/1698-BoardDec2011PerformanceAgreements.pdf (accessed 3 May 2012).



types of campuses: university main campuses, university regional campuses, and community and technical college campuses. The University Main Campus funding model consists of three components: (1) a course completion component, (2) a student success component, and (3) an institutional specific goals and metrics component. The University Regional Campus funding model will be allocated entirely based on enrollments based on course completions, weighted for at-risk students. The Community and Technical College funding model consists of three components: (1) an enrollment component, (2) a student success component, and (3) an institutional specific goals and metrics. Successful completions of undergraduate courses are weighted by campus, subject, and level. The student success component consists of degree completion in general, by at-risk students, and in STEM fields.

At-risk degrees are defined as those from above that were earned by students with any of the following characteristics:

- Age: over 25 at the time of graduation
- Less than \$2,190 in the last 3 years prior to degree attainment
- Less than 17 on ACT Exam in either the Math or English
- Any developmental course at any time before the degree was awarded on any USO campus.
- Race: African American, American Indian, or Hispanic.

For community colleges in fiscal year 2012, 7.5% of funding was tied to successful completion of developmental activities, progress from remedial to college-level courses, completion of first 15 credit hours, then 30 credit hours, degree completion, and transfer to 4-year public institutions. ¹⁵

Tennessee

In 2010, the Complete College Tennessee Act requires the development of a new funding formula that emphasized student retention and degree completion. The new funding method has a formula for universities and another formula for community colleges. Each institution has a fixed line item appropriation of 15-18% with the balance of the funding tied to performance metrics. University performance metrics include degree completion, progression metrics, research and service, transfer rates, and a six-year graduation rate. Community college metrics include progression metrics, dual enrollment, degree and certificate completion, job placement, completion of remedial and developmental studies, and workforce training. The Tennessee funding framework allows for different weightings for each institution to reflect the different missions of each institution. Hence, no two institutions have the same weightings. ¹⁶

Tennessee's change from a primarily enrollment-driven approach to an output approach has resulted in campuses bring in extra student advisors, increase tutoring and remedial classes, fast-track majors, and develop extra courses between semesters.¹⁷

¹⁵ Ohio Board of Regents. *State Share of Instruction Handbook: Providing the Methodology for Allocating State Share of Instruction Funds for Fiscal Year 2012 and Fiscal Year 2013.* 31 October 2011.

¹⁶ Tennessee Higher Education Commission. *Outcome Based Formula Explanation*. Jan. 2011. http://tn.gov/thec/complete_college_tn/ccta_files/outcomes_based_ff/Outcomes_Based_Formula_Expla_nation.pdf (accessed April 27 2011).

¹⁷ Harnisch, Thomas. "Performance-based Funding: A Re-Emerging Strategy in Public Higher Education Financing. *American Association of State Colleges and Universities: A Higher Education Policy Brief.*



Texas

The bulk of funding for higher education in Texas is distributed through a funding formula driven by enrollment. However, in 2007 the Texas Legislature appropriated \$100 million in fiscal year 2009 to establish the Higher Education Performance Incentive Initiative. Eighty million dollars were distributed for increases in degrees awarded with special weights given to critical fields and at-risk students.¹⁸

Washington

In 1997 Washington incorporated performance-based funding for both its 2-year and 4-year public institutions through an appropriation act that required the state to withhold a small portion of appropriation from each institution. The withheld amount was distributed if institutions achieved performance targets. Four-year institutions' targets included persistence, completion, faculty productivity, and graduation efficiency (credits completed versus credits need to graduate). Two-year institutions' targets included transfer rates, course completions, wages of occupational training graduates, and graduation efficiency. The use of performance criteria for both types of instructions was abandoned in 1999 due partly due to politics, but also due several issues that have been found to contribute to the failure of performance-based funding across applicable states:¹⁹

- Higher education's lack of support for performance funding systems,
- Difficulty in meeting performance criteria,
- Insufficient attention to institutional diversity; and
- Incongruence between the goals of the legislature and the goals of the institutions.

In 2007 the Washington State Board for Community and Technical Colleges resurrected performance-based funding by allocating a portion of its institutions' budgets based on student success. The system rewards colleges when students reach various achievement points in their academic careers including gains in basic skill, passing pre-college writing or math, earning 15 credits the first year, then 30 credits, completing college-level math, finishing apprentice training, or earning a degree or program certificate.

Performance funding results

Like any policy, time is required for results to be shown. Many of the current uses of performance-based funding are too new to evaluate; however, a few are old enough to see results. Though recently Ohio has expanded its performance-based funding, the state started incentivizing graduation rates in 1998. Since then, Ohio has reported the median time to degree for bachelor's degrees decreased from 4.7 years in fiscal year 1999 to 4.3 years in fiscal year 2003. The other programs are too new to show clear results; however, the act of developing and implementing performance-based funding raised awareness of state priorities among campus officials.

¹⁸ Texas Legislative Budget Board Staff. *Financing Higher Education in Texas: Legislative Primer.* January 2011.

¹⁹ Dougherty, Kevin and Rebecca Natow. "The Demise of Higher Education Performance Funding Systems in Three States." *CCRC Working Paper No. 17* May 2009



Policy Considerations

Strengths and Weaknesses of Performance Criteria

Since the Second World War, higher education in the United States has been the engine of economic growth and social mobility. It is accustomed to worldwide recognition and emulation. This success was built on an ethic of access, first embodied in the G.I. Bill and then sustained by the expansion of low-cost state institutions, federal financial aid and other student loan programs. This ethic was also furthered by a conviction among middle class families that college was the best path to economic security.

Although getting students into college (increasing the participation rate) is still a crucial issue, especially among low-income and underserved population groups, it is fair to say that an inflection point has been reached. Access is no longer the only, or even the primary challenge facing states and institutions of higher education. In Nevada, roughly 40% of students who enroll full-time in a four-year college fail to complete—the numbers are worse for part-time and two-year programs. It is a serious waste of public resources to admit students to college who then drop out without a qualification, and grossly unfair to the students themselves who are left with dashed hopes and (often) painful burdens of debt. Nevada, along with all other states, needs performance criteria that will change this dynamic.

As we observe in the tables above, all states support higher education to some degree or other based on the number of students enrolled and taking classes. This has the effect of biasing decisions by campus leaders towards greater access. More students in seats mean more money. If access is the goal, then enrollment is an appropriate performance criterion. But once the focus shifts to other goals, as it has, then paying for enrollment is deficient in a variety of ways. It encourages the admission of students unprepared to succeed, it provides no incentive to help those students, or to ensure quality, and it generally fails to align programs and curricula with workforce and other economic development goals. (While many formulae recognize differences in costs associated with different programs, these costs are paid without evaluating the purpose or success of a program.)

Performance criteria that go beyond access, therefore, and that address the deficiencies noted above, fall into three broad categories:

- Alignment: It is striking how often funding models for higher education are not clearly aligned with policy goals. Yet how money is spent is policy, whether acknowledged or not. Any higher education funding model should reflect the expressed policy goals and foundational values of the state and its institutions. For example, land-grant universities—a distinctively American institution—were established with the explicit purpose of promoting "useful learning". The alignment of higher education's teaching, research and engagement with the needs of society, including a state's social and economic goals, is a basic performance test for all policymakers.
- Attainment: Educational attainment—the percentage of the adult population with a
 college degree—is such a strong predictor of a region's economic success that it
 represents a goal in its own right, apart from questions of broader questions of
 alignment. In Nevada only 22% of the adult population have a bachelor's degree, which



ranks the state 46th among the states and the District of Columbia, although the 7.5% attainment rate for associate's degrees is close to the national average. Raising the number of graduates produced is a straightforward way to raise attainment and so constitutes a key metric, in one form or another, for many performance criteria.

Quality: This issue is not often addressed by performance criteria actually in use, but it
has been the subject of a great deal of discussion, for example, in the Spellings
Commission Report of 2004. As the focus on attainment and on graduates grows, there
will inevitably be a concern with quality control. In the long run it is surely unwise to
provide significant incentives for the production of degrees without, at the same time,
providing incentives for maintaining quality.

Degrees and GPAs are proxy measures of the skills and competencies students acquire through their education. As students and their families pay more, and as employers become more demanding of new entrants to the workforce, they will all want to know if the degree means what it says. Various independent measures of learning have already been developed and tested, for example, the Collegiate Learning Assessment, and their use as performance criteria in one form or another is inevitable.

Many specific metrics are subsumed into these three broad categories, and some may be especially important in Nevada's case. For example, criteria that reward institutions for remediation—efforts to accelerate and ensure the graduation of students who are under-prepared—contribute to the overall purpose of graduation and attainment. In Nevada's case, remediation is especially important, with almost 30% of freshman at 4-year institutions and over 41% of freshman at two-year institutions requiring it. Another example is using time to degree, or some other measure of academic progress, as a criterion. Progress is a strong predictor of eventual success (although what is an appropriate measure will vary by program and institution and must be chosen with care). As noted above, at present it takes too long to get a degree in Nevada.

Three other issues matter in the design and adoption of performance criteria. They are operational rather than substantive.

- Clarity: It is very easy to design a complicated set of performance criteria that answer to every felt need. However, a complicated formula is hard to implement, more likely to yield unintended consequences and, most important perhaps, difficult to explain to policymakers, stakeholders, and citizens. Extremely complex formulas have doomed past performance-based initiatives.
- Differentiation: Any set of performance criteria will be applied to a highly
 differentiated set of institutions. The way the criteria operate, along with the
 incentives created, should have the effect of maintaining and even enhancing
 differentiation and the division of labor. This will encourage efficiencies in the use of
 resources. Performance funding that does not account for the different missions of
 institutions has also been attributed to performance funding failures.
- **Scale:** As noted at the beginning of this section, the resources subject to performance criteria should be significant enough to shape behavior. This means that even if fees



and tuition revenues are properly separated from public monies, the overall income of an institution or system should be considered in determining what percentage of public funds is dedicated to performance. Furthermore, these funds should be drawn from the overall budget for higher education and not budgeted separately. Otherwise, as seen in the past, the monies set aside will disappear whenever the state budget is under stress.

The three substantive categories discussed above, along with the three operational considerations also identified, provide a simple framework for evaluating any existing or proposed system of performance criteria, at least a framework designed to go beyond access and enrollment as a primary driver. Indeed, the three categories can be ranked in the order presented. Alignment should be the starting point for any understanding or evaluation of a funding model. Failure to design a system of funding without careful reference to policy goals and foundational principles may yield unexpected and undesirable practices and outcomes. Second, no other purpose is more important than a laser-like focus on the production of graduates. Various metrics may capture different aspects of success in this area, but such success is, and should be, at the heart of any set of performance criteria. Finally, quality control is also important, but may require more deliberate adoption given the need to collect new kinds of data.

If these categories are systematically addressed, then operational questions become important (especially important when developing entirely new models of funding). Furthermore, the timing and character of the implementation plan is critical. However, implementation will be discussed in the next deliverable, as it is likely to be enmeshed in other policy choices beyond any particular formula and performance criteria.

Evaluating the Existing NSHE Formula

The "current" funding formula has not been directly employed to calculate state funding levels for the last two biennia. It is very complicated (one of the most complicated among all states), but, as noted above, its several elements are driven directly or indirectly by student enrollment. In short, it reflects the principle of access, in which institutions are rewarded for enrolling students in classes. It is sensitive to the mission and size of institutions, but otherwise it is not "outcome-based." As a recent report notes:

"The current funding model does not have a performance component, or an incentive funding component, and could be improved by additions and changes to incorporate performance. There is no linkage to the goals for the colleges and universities, nor any measure of accomplishment, and no link to performance standards."²⁰

These are serious objections from the point of view of the first and second criteria discussed above. It was never tightly linked to larger policy goals, or explicit principles. This deficiency is revealed in areas of the formula unrelated to students: Research is not funded based on a formula or any guiding set of principles, but based on incremental payments. No economic development goal is attached to it. Operations and maintenance is based on the size of existing buildings, as if heating and cooling buildings is an important policy goal of the state. As noted elsewhere, the performance criteria were never adopted, and there is no consideration at all of quality, in the form of skills, competencies or anything else.

²⁰ "Evaluation of the NSHE Funding Formula" MGT of America, (May, 2011) p. ES-2



Serious claims exist concerning the lack of equity in the way this formula has worked. In our view the objections to this formula are more fundamental. It is a model without a guiding rationale, based on students in seats, deficient in its support for remediation and student success, and combined with a large number of out-of formula payments of an arbitrary and unplanned kind. It should be abandoned, or so completely re-worked as to be unrecognizable.

The New Model for Funding Higher Education

The NSHE work on an alternative formula is grounded in the strategic planning process noted above, which yielded the strategy document "Strategic Directions for the Nevada System of Higher Education." Having clearly articulated goals as a point of departure helps meet the test of alignment described above, although the incentives created by the formula should, of course, align with these goals.

In addition to emphasizing the increased production of meaningful degrees and certificates as a critical metric of success, this strategy document is distinguished by the fact that it also identifies numerous initiatives and practices that will contribute to success, but are not directly related to state funding. This underscores an important point. While the NSHE funding formula is very important, it is far from the only element required to produce more degrees in less time (and with fewer resources). We note, for example, the focus on new and improved data systems as one area that will make an indispensible contribution to measuring success or designing interventions to avert failure. (While Nevada has made progress in data collection centered on student unit records, a P-20 State Longitudinal Data System is not yet mandated or funded.²¹)

The NSHE leadership has worked closely with the National Governor's Association (NGA) in devising the performance criteria or pool for its new formula. A particular virtue of the way the NGA approaches metrics, which is especially important in the case of Nevada, is that they have focused on metrics that apply to all kinds of students—traditional students in a residential, four year college, transfer students, part-time students, and students requiring remediation. This last kind of student presents a tremendous challenge for the NSHE, where over 40% of two-year college freshmen require remediation, and almost 30% of four-year college freshman require it. But current remediation efforts aren't working, with less than 10% who get help in two-year colleges, and less than 40% who get help in four-year colleges completing their degrees in a timely manner. Nevada cannot achieve its goal of increased graduates unless it is successful in remediation.

The work on this performance pool continues, and what is contained in the proposal is preliminary. The comments that follow are designed to contribute to that work by evaluating its broad direction, identifying ways in which it might be reshaped, and suggesting new elements that could be included. While everyone recognizes that the NSHE performance pool is a work in process, the commitment to a performance pool as part of a new funding formula is an important and valuable improvement over the present formula, and a change consistent with developments in many other states.

www.DataQualityCampaign.org/DFA2011



As noted above, the outcome metrics identified by the NGA provide information about current performance, while the progress metrics help flag the direction of future performance, and also—when based on individual student records—provide administrators with the tools for targeting where exactly individuals go off track.²² When used in combination they allow for measurement of progress and for understanding of how that progress was achieved.

The metrics proposed by the NSHE focus largely on one outcome: degrees awarded. This particular outcome has the virtue of being a simple number, directly related to the goal being pursued, easy to collect, difficult to manipulate, and intuitive—therefore easy to explain to citizens, students, stakeholders and policymakers. It meets the operational test of clarity described above.

But this approach is subject to some shortcomings. Nevada needs more graduates, but it also needs to produce them more efficiently—in other words by patching leaks in the pipeline—and with no loss in quality. Rewarding raw numbers produced may create incentives to admit even more unqualified students, hoping some stick, or to lower standards to get students out the door.

Progress metrics, and what the NGA refers to as "context" metrics, can serve as a check on this potential problem. For example, retention rates—the number of students who enroll consecutively from fall-to-spring and fall-to-fall—will indicate pipeline problems, as will the completion ratio—the ratio of degrees granted to full-time enrolled undergraduates. However, the proposed performance criteria include progress metrics for the community colleges only. Without progress metrics, the emphasis on graduates is at odds with the requirement for quality identified above.

In that spirit, another metric that we believe should now be seriously considered by Nevada (as well as by other systems of higher education) one identified in the discussion on quality, is the independent assessment of learning outcomes. This is the best kind of quality control. We do not specifically recommend the Collegiate Learning Assessment, but it has been shown to be an independent, valid measure for student skills across time and across groups of students. Any metric chosen should be equally valid and allow Nevada to compare its students' skills against national scores. No such measure is in the proposed performance pool. It will require some years to accumulate the necessary data for implementation, but the future adoption of such a metric should be allowed for in the design of the pool.

Rewards for achievement in research are also included in the performance pool. We will reserve most of our analysis of research funding for the final deliverable, as that is tightly tied to economic development alignment, which will be generally addressed at that time. However, the way in which research funding is treated in the proposed alternate funding formula is worth a preliminary discussion because it appears twice. In the "base" formula higher costs are assigned to the two research universities for upper division and graduate level classes by applying a 10% increase in the weight of these classes. In the performance pool research is rewarded based on a very broad definition of dollars received for sponsored and external research expenditures (for

²² A more conventional way to describe the outcome metrics chosen by the NGA could be as output metrics. An outcome might be thought of as a graduate having the skills and competencies for which the possession of a degree is a proxy measure.



example it includes dollars received for student services). Neither approach addresses directly the economic development goals of the state. Dollars earned through sponsored research (which is appropriately defined) should be rewarded, but perhaps not almost any kind of external grant, at least not under the rubric of research. This important area is not clearly aligned in ways consistent with stated goals.

Remediation is another important issue that SRI is contracted to address in the final deliverable, but it is worth noting here that the proposed alternative funding model pays only a modest amount of attention to this critical issue. The "base" formula provides no extra support for remedial courses at the colleges, even though successful remediation is a relatively costly activity, and does not support remedial courses at the universities at all (at present the universities provide remedial courses without using state support, a situation that will remain unchanged under the new system). There is a premium weight applied to "basic skills" classes, and there is a progress metric with a modest weight included in the performance pool that rewards successful remediation at the college level. Remediation is an area in which a formula should accentuate differentiation. It is not clear that the proposed formula achieves this.

In summary, our evaluation offers the following main points for consideration as the work on the performance pool continues:

- The commitment to a significant performance pool is important and must be continued.
- The focus on graduates as an outcome has several benefits.
- The focus on graduates should be tempered by a greater use of progress metrics.
- A metric that captures learning outcomes should be adopted in the future, and data collection begun immediately.
- Research is incorporated into the model in a somewhat idiosyncratic manner without clear alignment to economic development goals.
- The alternative model does not use (modest) financial support for remediation in ways consistent with differentiated institutions.

Finally, implementation and scale are critical questions for any new model. These have not yet been addressed in any detail by the proposed alternative model, but will be addressed by SRI in the final deliverable.



Appendix A: Resources consulted

Alabama

Alabama Commission on Higher Education. FY 2011-2012 Consolidated Budget Recommendation. http://www.ache.alabama.gov/CBR2011/Index.pdf

Arizona

Arizona Board of Regents. (2011). Getting AHEAD Committee Provides Recommendations for Modernizing Arizona's Higher Education Funding System.

https://azregents.asu.edu/palac/newsreleases/Getting%20AHEAD%20Committee%20Provides%20Re commendations%20for%20Moderning%20Arizona%27s%20Higher%20Education%20Funding.pdf Arizona Board of Regents. Funding Enrollment Changes or the 22 to 1 Formula.

https://azregents.asu.edu/Documents/FUNDING%20ENROLLMENT%20CHANGES.pdf

Arizona Board of Regents. Outcome-based (Expenditures) Funding Formula.

https://azregents.asu.edu/enterpriseinitiativesfinancestrategicplanning/Strategic%20Planning%20Committee%20Documents/Rich%20Stanley%20Model_Outcomes%20based%20funding%20formula%20%28used%20in%204-08%20meeting%29.pdf

MGT of America. (2011) Funding Model for Arizona Higher Education, Final Report.

http://gettingaheadaz.org/educators/Funding_Model_AZ_Higher_Education_Report_7_21_2011.pdf

Arkansas

Arkansas Senate Bill 766. (2011).

http://www.arkleg.state.ar.us/assembly/2011/2011R/Bills/SB766.pdf

Association of Governing Boards. (2011). Arkansas Senate Bill 766.

http://agb.org/ingram/policy/arkansas-senate-bill-766

California

California Senate Bill No. 724 (2005). http://www.leginfo.ca.gov/pub/05-06/bill/sen/sb_0701-0750/sb_724_bill_20050922_chaptered.pdf

California State Auditor. (2011). *University of California, July 2011 Report 2010-105. Sacramento, CA.* Conversation with Deborah Obley, UCOP.

Conversation with staff member, CSU Media Office.

Legislative Analyst's Office. (2005). Proposition 98 Primer.

http://www.lao.ca.gov/2005/prop_98_primer/prop_98_primer_020805.htm

Colorado

Brodhed, Patrick.(2012). Colorado Department of Higher Education FY 2012-13 Staff Figure Setting (JBC Working Document). Denver, CO.

Colorado Commission on Higher Education. (2011). Agenda Item III, B: Proposed FY 2012-13 General Fund Allocation.

Colorado Senate Bill 11-052. (2011).

http://www.leg.state.co.us/clics/clics2011a/csl.nsf/fsbillcont3/63B087D7A1DC83D687257801006051 AC?open&file=052_enr.pdf

National Conference of State Legislatures. (2011). Higher Educaiton Legislation in 2011.

https://www.ncsl.org/issues-research/educ/highereducationlegislation2011.aspx

Connecticut

Connecticut House Bill No. 6651, Public Act No. 11-48 (2011).

http://www.cga.ct.gov/2011/ACT/PA/2011PA-00048-R00HB-06651-PA.htm

State of Connecticut, Department of Higher Education. (2011). *Connecticut Public Higher Education 2011 System Trends.* Hartford, CT.

Thomas, Jacqueline R. (December 16, 2010). Lawmakers propose tying higher education funding to performance. *CTMirror*. Retrieved from http://ctmirror.org/story/8735/lawmakers-recommend-restructuring-how-public-colleges-are-funded-state



Florida

Dougherty, Kevin J., Rebecca S. Natow, Rachel J Hare, and Blanca E. Vega. (2010). *The Political Origins of State-Level Performance Funding for Higher Education: The Cases of Florida, Illinois, Missouri, South Carolina, Tennessee, and Washington*. Community College Research Center Working Paper No. 22

Florida Higher Education Coordinating Council. (2012). *Higher Education Coordinating Council 2012 Work Plan.* http://www.floridahighereducation.org/_doc/The-2012-HECC-Work-Plan-8.pdf

Georgia

University System of Georgia Funding Formula Overview November 2011. http://www.usg.edu/fiscal_affairs/documents/Consolidated_Formula_Presentation___November_Board_-_Final.pdf

Hawai'i

Act 188 Task Force. (2011). *University of Hawai'i System Report.* Conversation with John Morton, UH.

Idaho

Coffman, Mitch. (December 12th, 2011). State Board of Education may look to performance-based funding to fix higher education equity problem. *Idaho reporter.com. Retrievd from* http://www.idahoreporter.com/2011/state-board-of-education-may-look-to-performance-based-funding-to-fix-higher-education-equity-problem/

Coffman, Mitch. (December 1st, 2011). Committee told state has no clear definition of higher education funding equity levels. *Idaho reporter.com*. Retrieved from

http://www.idahoreporter.com/2011/committee-told-state-has-no-clear-definition-of-higher-education-funding-equity-levels/

Idaho State Board of Education. (2011). Draft Minutes State Board of Education December 7-8, 2011.

Illinois

Correspondence with Matt Berry, IBHE

Indiana

Indiana Commission for Higher Education. (2011). 2011-13 CHE Higher Education Budget Recommendation. http://www.in.gov/che/files/2011-

 $13_CHE_Higher_Education_HWM_Committee_Flat_Line_1-6-11\%281\%29.pptx$

Kansas

Conversation with Diane Duffy, KBOR.

Kentucky

Conversation with Bill Payne, KCPE.

Louisiana

Louisiana Board of Regents. Funding Formula for Louisiana's Public Postsecondary Institutions. https://www.ladelta.edu/institutionaleffectiveness/sacs/bor_funding_formula_report.pdf

Maryland

Maryland House Bill 1228 (2012). http://mlis.state.md.us/2012rs/bills/hb/hb1228f.pdf

Michigan

Confer, Karen. (March 28th, 2012). MSU, U-M advocate alternative higher education funding metric. *Michigan policy.com*. Retrieved from

http://www.michiganpolicy.com/index.php?option=com_content&view=article&id=1185:msu-u-m-advocate-alternative-higher-education-funding-metric&catid=74:state-budget-blog&Itemid=111 Correspondence with Robert Murphy and Beth Bullion, Michigan Department of Technology, Management & Budget.

Eisler, David L. (2011). Performance-based Funding, House Appropriations Subcommittee on Higher



Education, Ferris State University.

http://www.ferris.edu/HTMLS/administration/president/presentations/2011-

2012/Performance based funding.pdf

Jen, Kyle I. (2012) FY 2012-13: Higher Education, Summary: As Passed by the Senate, Senate Bill 955 (S-1) as Amended.

http://www.house.mi.gov/hfa/Summaries/12s955s1%20Higher%20Ed%20Summary_senate%20passed%20w%20attach.pdf

Minnesota

Educationminnesota.org. (2007). General Description of Allocation Framework Components.

http://www.educationminnesota.org/en/events/polconference/~/media/Files/Sections/events/polconference/2011handouts/MNSCU%20allocation%20framework.ashx

Minnesota Statute 135A.101. (2007).

 $https://www.revisor.mn.gov/bin/getpub.php?pubtype=STAT_CHAP_SEC\&year=current\§ion=135~A.101$

Mississippi

Ccweek.com. (2012). State Strategies Vary Amid Budget Squeeze.

http://www.ccweek.com/news/templates/template.aspx?articleid=2939&zoneid=7

Crisp, Elizabeth. (May 4, 2011). State College Board wants funding formula revisited.

www.cdispatch.com. Retrieved from https://www.cdispatch.com/news/article.asp?aid=11136

Joint Legislative Committee on Performance, Evaluation and Expenditure Review (PEER). (2008). An

Analysis of the Allocation of FY 2009 State Support Funds to Mississippi's Institutions of Higher

Learning. http://www.peer.state.ms.us/reports/rpt516.pdf

SREB. (2011). Legislative Report - 2011 Final Report.

http://publications.sreb.org/2011/11S09_Final_Leg_Rep.pdf

State Board for Community and Junior Colleges. (2007). 2007 Mississippi Legislative Session.

http://www.sbcjc.cc.ms.us/pdfs/pb/LegBook2007.pdf

Montana

Montana State University. (2010). Perf Based Funding.

http://techsci.msun.edu/strizich/perf_based_funding.htm

New Jersey

New Jersey Higher Education Task Force. (2010). *Report of the Governor's Task Force on Higher Education*. http://www.state.nj.us/highereducation/documents/GovernorsHETaskForceReport.pdf

New Mexico

Conversation with Brigette Russell, NMHED.

New Mexico Higher Education Department. (2011). *Educating Tomorrow's Workforce: New Mexico's Higher Education Funding Formula for Fiscal Year 2013*.

https://www.nmsu.edu/~budget/PDF%20Files/HED Ed Funding Formula FY2013.pdf

New Mexico Legislature. (2011). LFC Hearing Brief, June 17th 2011.

http://www.nmlegis.gov/lcs/lfc/lfcdocs/Higher%20Education%20Funding%20and%20State%20Lessons%20on%20Funding%20to%20Outcomes.pdf

New York

Bultman, Matthew. (February 26, 2012). SUNY funding changes concern Potsdam College Council. *Watertowndailytimes.com*. Retrieved from

http://www.watertowndailytimes.com/article/20120226/NEWS05/702269853

Conversation with Wendy Gilman at SUNY System Administration.

Potent, Jacob D. (January 25, 2011). SUNY still looking for autonomy. The Legislative Gazette.

Retrieved from http://content.yudu.com/Library/A1qsg7/TheLegislativeGazett/resources/3.htm

North Carolina



Parmley, Kelli, Bell, A., et al. (2009). State Budgeting For Higher Education In the United States - As Reported For Fiscal Year 2007. http://www.sheeo.org/finance/Budgeting_For_Higher_Ed.pdf

North Dakota

Conversation with Laura Glatt, Vice Chancellor for Admin Affaris North Dakota Univ. System. Parmley, Kelli, Bell, A., et al. (2009). *State Budgeting For Higher Education In the United States - As Reported For Fiscal Year 2007.* http://www.sheeo.org/finance/Budgeting_For_Higher_Ed.pdf

Ohio

Crellin, Matthew, Aaron, D., et al. (2011). *Catalyst for Completion: Performance-Based Funding in Higher Education - A case study of three states*.

http://www.nebhe.org/info/pdf/PerformanceFunding_NEBHE.pdf

Oklahoma

Conversation with Sheri Mauck at Budget and Finance Oklahoma State Regents for Higher Education. http://completionagenda.collegeboard.org/state-performance/state/oklahoma?quicktabs_2=1 Oklahoma State Legislature. (2012). *Lawmakers Seek to Reform Higher Ed Funding*. http://www.okhouse.gov/okhousemedia/news_story.aspx?NewsID=4236

Oregon

Conversation with Jan Lewis.

Oregon University System. (2011). FAQs: Senate Bill 242.

http://www.ous.edu/sites/default/files/state board/workgroups/gpc/files/SB242FAQsFINAL.pdf

Pennsylvania

Conversation with Lois Johnson, Director of Financial Management PA State System of HE. Harnisch, Thomas L. (2011). *Performance-based Funding: A Re-Emerging Strategy in Public Higher Education Financing*.

http://www.congressweb.com/aascu/docfiles/Performance_Funding_AASCU_June2011.pdf--> see pg.7

Pennsylvania State System of Higher Education. (2003). Allocation Formula Overview.

http://www.passhe.edu/inside/anf/budget/Pages/Allocation-Formula.aspx

South Carolina

Community College Research Center.(2010). The Political Origins of State-Level Performance Funding for Higher Education: The Cases of Florida, Illinois, Missouri, South Carolina, Tennessee, and Washington. http://ccrc.tc.columbia.edu/Publication.asp?UID=819

Harnisch, Thomas L. (2011). *Performance-based Funding: A Re-Emerging Strategy in Public Higher Education Financing.*

http://www.congressweb.com/aascu/docfiles/Performance_Funding_AASCU_June2011.pdf McLeod, Harriet. (April 11th, 2011). South Carolina Moves to Define Performance-based Funding Formula for Higher Education. *Diverseeducation.com*. http://diverseeducation.com/article/15010/

Tennessee

Tennessee Higher Education Commission. (2010). *Tennessee's Outcomes Based Funding Formula*. http://www.state.tn.us/thec/Divisions/Fiscal/funding_formula/1-Funding%20Formula%20-%20Updated%20for%20Website.ppt

Tennessee Higher Education Commission. (2011) *Outcomes Formula Definitions 11-4-11 Revised*. http://www.state.tn.us/thec/Divisions/Fiscal/funding_formula/Outcomes%20Formula%20Definitions%2011-4-11%20Revised.xlsx

Tennessee Higher Education Commission. (2011). 2012-13 Outcomes Formula.

http://www.state.tn.us/thec/Divisions/Fiscal/funding_formula/dynamic_model/2012-13%20Outcomes%20Formula%20email.xls

Texas

Legislative Budget Board. (2011). Financing Higher Education in Texas.



http://www.lbb.state.tx.us/Higher Education/HigherEd FinancingPrimer.pdf

Washington

Washington State Board for Community and Technical Colleges. *Student Achievement Initiative*. http://www.sbctc.ctc.edu/college/e_studentachievement.aspx

Virginia

State Council of Higher Education for Virginia. Senate Finance Committee Education Subcommittee Presentation

http://sfc.virginia.gov/pdf/education/SCHEV%20SF%20 presentation%20 on %20 base%20 adequacy%20 (1-18-07).pdf

West Virginia

Financing West Virginia's Future: A Funding Model for Higher Education. WVHEPC Efficiencies Project. January 21, 2011. https://www.wvhepc.org/efficiency