Funding, Fairness, and the Formula
The University of Nevada, Reno in the System of Higher Education

Elliott Parker & Bruce Shively
University of Nevada, Reno

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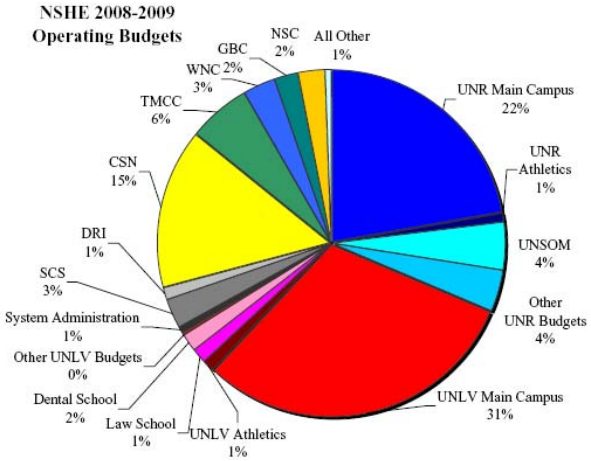
For most of its first century, Nevada's system of higher education consisted of only one institution, which was originally located in Elko as the State University of Nevada. The university graduated its first class of three students from the new Reno campus in 1891. Almost 120 years later, the university graduates roughly 2000 students per year, and has a total enrollment of almost 14,000 student FTE (full-time equivalence).

After the Second World War, however, the state's population grew rapidly, and new educational institutions were created. The university's sister campus, the University of Nevada, Las Vegas, began as an extension effort of the Reno campus in the 1950s. It became independent as Nevada Southern University in 1965, and in 1968 the Board of Regents granted it equal status with the University of Nevada, Reno. The Desert Research Institute (DRI) was created in 1959 to focus on specific areas of grant-funded research, becoming independent from the University of Nevada in 1969. Community colleges were also created around this same time, beginning in 1967 with Nevada Community College in Elko, later Great Basin College. Though still referred to in state law as the Board of Regents of the University of Nevada, this elected body now oversees a Nevada System of Higher Education (NSHE) consisting of eight different institutions of higher education.

At present, the state-supported operating budget of UNR's main campus totals almost $200 million per year, 22% of the total NSHE budget. In addition, UNR also has separate budget authority for intercollegiate athletics, statewide programs, the University of Nevada School of Medicine (UNSOM), the State Health Laboratory, Nevada Cooperative Extension, the Agricultural Experiment Station, and Business Center North. All together, these eight operating budgets account for 32% of the NSHE budget.

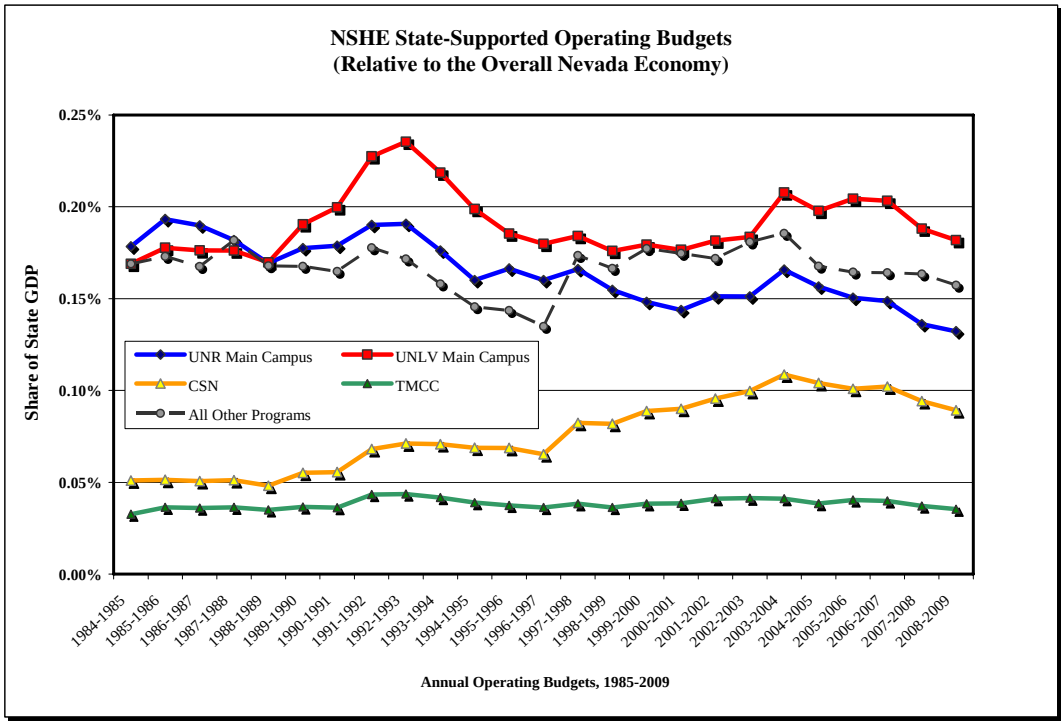


UNLV has an operating budget that accounts for 31% of the NSHE total, plus authority over intercollegiate athletics, statewide programs, the Boyd Law School, the School of Dental Medicine, and Business Center South. All together, these sum to 35% of the NSHE budget. The five other colleges – College of Southern Nevada (CSN), Truckee Meadows Community College (TMCC), Western Nevada College (WNC), Great Basin College (GBC), and Nevada State College (NSC) in Henderson – have a combined operating budget of roughly $250 million, or 28% of the total. Finally, the state-supported operating budgets for DRI, system

administration, Student Computing Services (SCS), and everything else accounts for the remaining 5% of the NSHE total.

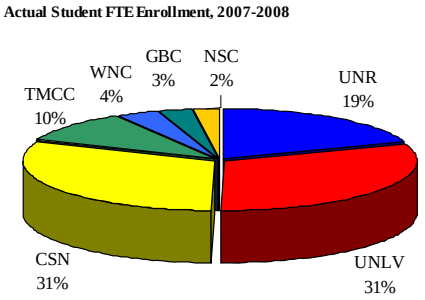
Between 1985 and 2009, NSHE's total operating budget grew from $102 million to $886 million, and some have suggested that this is extraordinary growth. To put this in its proper context, however, we need to adjust for inflation, population growth, and rising real incomes. As a share of state GDP, therefore, the total operating budget for higher education in Nevada has remained constant over the past quarter century, but with much fluctuation. The total share grew from 0.60% in 1985 to 0.71% by 1992, then fell back to 0.58% in 1997. By 2004 it had risen again to 0.71%, only to return again to 0.60% in the current budget year. Recent budget cuts requested by the Governor mean that the actual expenditures for 2009 will come in significantly below this original budget, but these figures are not yet widely available.

UNR's share of this total spending declined considerably, from 45% to 32% over the same period, or from 30% to 22% if we consider only the main campus. In 1985, UNR's operating budget was larger than UNLV's, even if we exclude the related operating budgets for athletics, UNSOM, cooperative extension, et cetera. By 2009, UNLV's budget was almost 40% greater than UNR's. Las Vegas, however, has been the center of growth in the state, and enrollments at UNLV and CSN have grown rapidly. With an enrollment of almost 20,000 student FTE, UNLV now accounts for 31% of total state enrollment, equal to that for CSN and considerably larger than that for UNR. As a result, some members of the Legislature and the Board of Regents have wondered if UNLV was being treated fairly.



The Legislature tried to address this concern with reliance on a formula-based approach to funding higher education. The current funding formula is the result of the 2001 Committee to

Study the Funding of Higher Education in Nevada. The stated purpose of this committee,[1] which was chaired by Senator William Raggio and included several regents, was "to develop funding formulas that would address the equitable distribution of funds for institutions within the University and Community College System of Nevada." The study also included the development of peer groups for each institution, and the implementation of the funding formula largely resolved many legislative concerns.



What emerged from the funding study was a formula that uses common calculations as well as a common set of drivers, to develop institutional appropriations. The formula relies on student enrollments and other factors to cover salaries for new faculty positions, fringe benefit rates, student faculty ratios, library volumes per degree program, the number of classified employees per faculty member, and even the number of square feet per custodial employee. The formula even includes a salary equity pool to rectify historical differences between UNLV and UNR in average salaries for existing faculty. The formula was supposed to achieve internal equity between the two universities, and considerable effort was even made to improve equity among other NSHE institutions.

The committee was also clear that equity did not necessarily mean equality, and institutions would receive different funding based upon the mix of programs and the extent to which they engaged in graduate education. The formula recognizes, and funds, differences in mission among the two universities, the state college and the community colleges. The student faculty ratios for lower division instruction at the universities are the same as those used for the state college, and nearly equal to those used by the community colleges.[2] In addition, the cost classifications for the various academic programs are also similar for all institutions. Science and engineering courses are considered high cost courses, while English and foreign languages are considered low-cost regardless of whether they are taught at the universities, the state college, or the community colleges.

The "guts" of funding formula is a 16-cell matrix. This matrix is divided into clinical, high, medium and low cost programs and lower division, upper division, masters and doctorate levels of instruction. Institutions receive funding based upon the distribution of students between high and low cost programs and the concentrations of students at the lower, upper and graduate levels of instruction. The members of the study committee, Senator Raggio in particular, clearly recognized those institutions with a greater proportion of their students enrolled in high-cost programs (e.g., science and engineering) have higher costs of instruction than those institutions with greater concentrations of enrollment in business and the social sciences. Similarly, costs increase by level of instruction. Graduate instruction is

[1] Legislative Counsel Bulletin 01-4, Committee to Study the Funding of Higher Education in Nevada, 2001, p.39.

[2] The community colleges have a more favorable student-faculty ratio for lower-division high-cost programs than do the two universities.

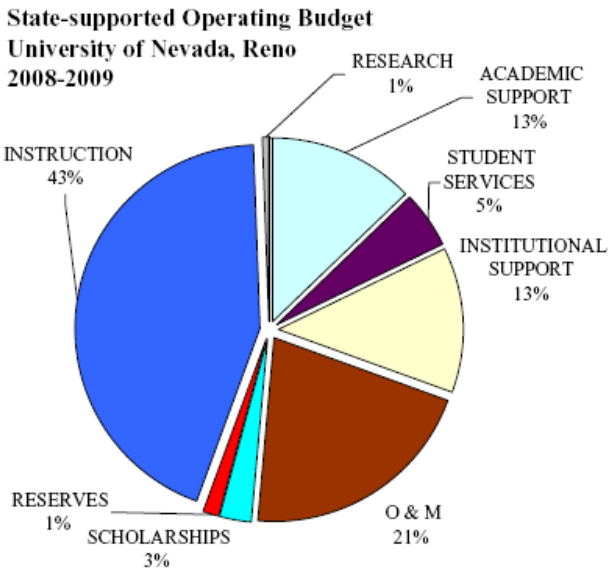
more costly than lower division instruction. The current formula attempts to provide funding appropriate for the types of programs and level of instruction offered at the various NSHE institutions. The ability to provide equitable funding within a mechanism that recognizes mission differentiation is major goal of the formula.

The current funding formula also includes economies of scale particularly related to administrative costs, provides increased O&M support for aging facilities which is an issue for an increasing number of NSHE campuses. The formula also recognizes the need for increased instructional and support costs associated with students with disabilities. Similarly, the library formula calculations provide increased library resources required by graduate instruction based upon the number of masters and doctoral programs at each institution.

Finally, the funding formula is responsive to shifts in enrollment, using a three-year weighted average for enrollment. Growing institutions are rewarded for increasing enrollments, while institutions whose enrollments are declining will ultimately receive fewer resources. UNLV, for example, experienced significant increases in funding because of strong enrollment growth in the 2002, 2004, and 2006 biennium periods. Not only does the formula react to overall changes in enrollment, it also responds to shifts in enrollment within a unit. If a campus experiences a shift in enrollments from low cost programs to high cost programs, the formula will react appropriately and produce increased funding. Resources thus follow student enrollments in the current funding formula.

The three-year weighted average is based upon actual enrollment data rather than institutional projections. The use of institutional projections prior to the adoption of the formula resulted in a tendency for some institutions to overestimate their enrollments, and the discrepancy between funded and actual enrollments created significant credibility issues for NSHE. As structured, the three-year weighted average serves to buffer sharp increases or decreases in enrollments.[3] This feature of the formula has lessened the initial impact for campuses experiencing declining enrollments during previous legislative sessions.

Nonetheless, the total operating budget per student is still higher at UNR than at UNLV, even when we subtract out the other areas of budget responsibility that are not primarily engaged in the instructional mission. To better understand why, it is important to distinguish that the operating budget covers different categories of spending, including instruction, research, public service, academic support, institutional support, operations and maintenance (O&M), scholarships, and reserves. Academic support includes such areas as the budgets for the offices of the provost



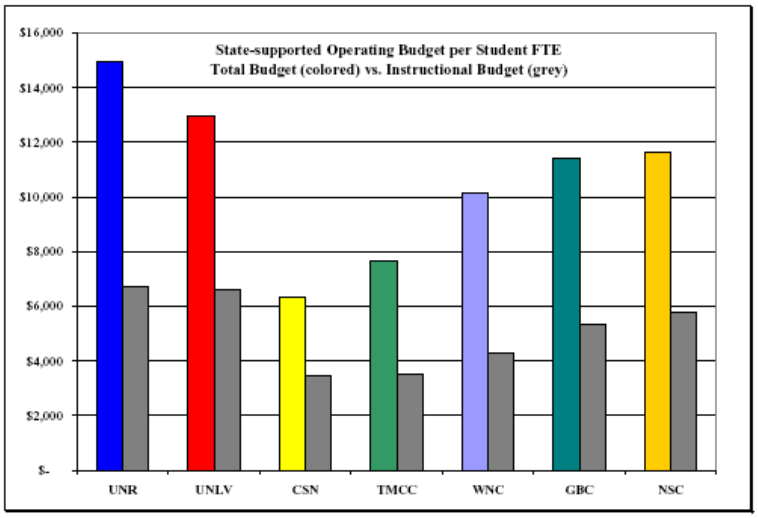
[3] Enrollment is weighted 50% for the most recent year, 30% for the prior year, and 20% for the year prior to that.

and the deans, instructional technology and campus computing. Institutional support includes the offices of the president and vice-presidents, along with other administrative functions such as budgets and finance, personnel, alumni relations, and campus police. Of these, instruction is the largest component of the budget at UNR, followed by O&M, which includes utilities, custodial services, groundskeeping, plumbing, et cetera.

UNLV's budget is divided into the same general areas, though there are small differences of what is included where. The first major difference between UNR and UNLV is that UNLV spends a smaller proportion (17%) on O&M, largely because UNR has older, less energy efficient buildings, and UNR must also manage the extensive facilities of UNSOM, Cooperative Extension, and the Agricultural Experiment Station. UNR also spends a larger proportion on institutional support (8%). As a result, UNLV spends a larger proportion of its budget on instruction (51%) and student services (6%).

Why does UNR spend more on institutional support? As with O&M, one reason is that UNR administers a larger proportion of other budgets, including faculty and personnel services for UNSOM, which has a self-supporting budget that is much larger than its state-supported budget. The other operating budget areas for UNR total 45% of the main campus budget, while UNLV's other budget areas total only 13% of its main campus budget. It is also likely that there are some economies of scale in administration, as well as in O&M, as UNR spends less in total on these areas than does UNLV.

Disparities in per-student-FTE funding, which are shown in the chart to the right, in the colored bars, are largely reduced if we look at only the costs of instruction (shown in grey bars). UNR and UNLV have almost identical budgets per student FTE for instruction, even though UNR has a higher ratio of graduate students.



Both universities have greater costs per student FTE than the community colleges. Partly this is because the formula funds higher levels of instruction, particularly graduate courses, at higher rates. The community colleges, however, are also given proportionately fewer full-time positions. Even though full-time faculty are expected to teach more courses than in the universities, due to differential research expectations, these colleges are expected to rely more on part-time faculty who earn considerably less per section. The colleges also appear to have some economies of scale in instruction, with the largest of them having the lowest cost per student, and GBC the highest of them. Meanwhile, NSC has an instructional cost per student FTE that is closer to that for the universities.

A weakness of the current formula structure is that it currently includes the entire operating budget, whether funded by the state or by student tuition. This has reduced the incentive of

institutions to increase tuition to cover a larger share of expenditures or to provide a better education for students. Since higher tuition and fees will ultimately reduce the number of students attending, this therefore reduces total funding for the universities. Students who pay more are not likely to get more, because state support for the university will ultimately fall significantly more than tuition revenues rise.

While the formula is not perfect, it has nonetheless helped to reduce disparity between the two universities in instructional funding. As the system of higher education has grown, the University of Nevada, Reno has claimed a decreasing proportion of the total state-funded operating budget. It would be a poor choice for those advocating to educate more of Nevada's underserved population to try to set the institutions fighting each other. Infighting over resources may benefit political interests, but it would not serve the interests of either university, and is not really justified by the available data.