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To: Milton Glick, President

From: Elliott Parker, Professor of Economics

RE: A Look at State Budgets over Time

When the Nevada Legislature meets next month, the image in Figure 1 is what some legislators will have in mind. General Fund expenditures now exceed $3.3 billion dollars per year, and have kept growing even as revenue has slowed. From 1985 to 2007, the average growth of General Fund expenditures was over 9% per year. The state-funded budget has also continued to grow for the Nevada System of Higher Education (NSHE) by roughly the same 9%, and for the University of Nevada, Reno at over 7% per year.

During the same period, however, prices rose by an average rate of 3%, as measured by the Consumer Price Index, and Nevada’s population grew by almost 5% per year. If we calculate “real” Nevada expenditures per capita, we get a very different picture, as Figure 1(B) shows.
From 1985 to 2007, real general fund expenditures per capita rose by a little over 1% per year, though the starting year is important. By 2007, real spending per capita was still less than it was in 1975, and much less than it was in 1979.

Economists generally believe that it is often more appropriate to consider spending as a percentage of total income. Consider, for example, somebody like my father, who retired in 1976 as a major in the military. In some ways, military officers are like professors, in that they provide a service whose productivity is hard to measure, they are continuously educated, and they must manage the activities of others in increasingly complex activities. Consider a major (O-4) with ten years of service in 1976, who would have earned a basic pay of roughly $1400. In 1985, after the transition to a volunteer military, the same officer would have earned almost $2400, if we do not adjust for seniority pay. Adjusting that for inflation would translate to $4600 in 2007. Instead, the basic pay for this officer, with the same ten years of service, rose to $5600.

Why did the officer’s pay increase? Even though it offers many non-pecuniary benefits and relies on a strong sense of loyalty and professionalism, the military still has to consider pay to attract and keep good people. Since average incomes in the private economy have risen by an annual rate of roughly 2% more than the rate of price inflation, so real salaries for those involved in public service must rise as well.

Our Gross State Product (GSP) has grown by an average of more than 9% per year since 1985, due to price inflation, the fastest growing population growth rate in the country, and rising real incomes. In Figure 2, which divides state expenditures by GSP, both General Fund expenditures and revenues have declined somewhat over the past couple of decades, though there was an increase in the latter due to the tax increases enacted under the Guinn administration as well as increased tax collections during the housing bubble.
Of course, the General Fund is only one component of state spending, the discretionary portion under legislative control, and state government spending is only a third of that by local governments. The Bureau of Economic Analysis (BEA) reports the portion of GSP produced by Nevada’s state and local governments, and the Tax Foundation reports the state and local tax burden paid by Nevadans, though this does not capture revenue from out-of-state sources. These are shown in Figure 3, and as I argued in my Dec. 1 memo, these are very low percentages relative to other states.

In the Sage Commission’s recent report, it was stated that Nevada’s spending had risen over the past couple of decades, even as a share of GSP. This trend is not obvious in the Figure 3. Only if one chooses the starting and ending points carefully – say 1981 to 2003 – could one show that spending has increased.
Looking at NSHE’s state budget alone, in Figure 4, it appears that the overall budget has remained relatively stable over time, at roughly two-thirds of one percent of Nevada’s GSP, with peaks in 1992 and 2003. The share of the NSHE budget going to the UNR during this period declined from 45 to 31 percent, while the shares going to UNLV, CSN, TMCC, and SCS have increased.

In Figure 5, the budget for UNR’s main campus is separated out from the budget for the School of Medicine and all other programs (including the state-supported budget for athletics, Nevada Cooperative Extension, the Agricultural Experiment Station, the State Health Laboratory, Business Center North, and statewide programs). All three shares have declined over time.

Finally, we can put things in perspective another way, by looking at UNR employment (in state-budgeted FTE) per student FTE, which are available online as far back as the 1988-1989 budget. Figure 6 shows these ratios, for UNR instructional staff on the main campus, instructional staff in the School of Medicine (SOM), all other professional staff (including administrative faculty in addition to instructional staff in Cooperative Extension and elsewhere), and classified staff in all areas of the university.
As class sizes have increased, the number of instructional staff has declined per student FTE, even as the university has increased its proportion of students in masters and doctoral programs. The largest increase in employment since 2003 came for administrative faculty on the main campus, mostly in Institutional Support and Academic Support. Recent budget cuts, which are not accounted for in the official budgets I am using, have reversed most of this increase.