

**SYMPOSIUM ON DEVELOPING A MARYLAND MODEL  
FOR HIGHER EDUCATION FUNDING**

July 9, 2007

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President, State Higher Education Executive Officers

Senator Hogan, and members of the Commission. Thank you for inviting me to be here today. Over the years I've enjoyed many visits to Maryland for business and pleasure, and it is an honor to be part of this conversation about higher education finance.

I want to spend most of my time responding directly to the core questions you've posed for the panelists, but I will begin with a brief introductory remark to provide a general context for my responses. As I reflect on my experience in higher education finance beginning in the early 1970's, three "wrong" ideas have dominated public discussions about education and money:

- A. *There is a "right amount;" we can create the perfect formula.*
- B. *The only way to get improved performance is to spend more money.*
- C. *We can get the results we need without spending more money.*

I think we will get farther ahead if we focus on three "right" questions:

- A. *What do we need from higher education?*
- B. *What can we do better with the money we now have?*
- C. *Where can strategic investments help us get the results we need?*

With these thoughts a prologue, let me turn to the specific questions you've asked us to address. I have provided your staff with a written statement for later reference, but I will speak more informally.

**RESPONSES TO CORE QUESTIONS**

- 1. What share of public higher education costs should be borne by students, government (local, state, federal), and others? How is this share determined?***

In the 1960s the questions "Higher Education: Who Benefits? Who Pays? Who Should Pay?" were at the center of a national debate. In 1972 the Carnegie Commission on Higher Education tried to resolve the debate in a well-known book with that title.

Then, as now, virtually everybody agrees that higher education generates both individual benefits and broad public benefits. But the mix is hard to measure. After considerable debate and analysis (engaging numerous economists, several of whom later won the Nobel Prize), the Carnegie Commission on Higher Education concluded: "No precise – or even imprecise –

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methods exist to assess the individual and societal benefits as against the private and the public costs.”<sup>1</sup>

The Carnegie Commission then concluded a reasonable approach would be for students to pay one-third of the direct costs, leaving government and philanthropy to cover two-thirds of the direct cost. Since students forego opportunities to earn income while studying, they also bear what economists call “opportunity costs.” When the student’s foregone earnings are taken into account, the Carnegie Commission estimated students would be bearing two-thirds of the *total* cost if government and philanthropy covered two-thirds of the *direct* costs.

The Carnegie Commission also urged financial assistance to low-income students and state efforts to narrow the price gap between private and public institutions. In practical terms, these recommendations led some states to establish one-third of instructional costs as a standard for tuition, to provide need-based financial aid, and to provide direct grants to private institutions educating state residents.

The debate in the 1960s was about the fairness of low tuition in the public sector when only 25 to 35% of the population needed higher education. Should those not enrolling pay taxes to help those who do? And should public institutions have a competitive advantage over private institutions by having lower tuition costs?

Since the 1960s the world has changed dramatically in ways that make those questions less relevant. Increasingly, virtually all individuals in the United States and other developed economies must obtain some form of postsecondary education in order to have at least a middle class income. High school students sense the new reality: 80 percent of high school sophomores surveyed by NCES in 2000 intend to obtain at least a bachelors degree, and 40 percent also plan to obtain a graduate or professional degree (NCES, 2005). Most remaining students expect to get technical postsecondary education after high school. Actual success in higher education may fall short of these aspirations, but it is increasingly clear that developed economies must have a highly educated workforce to maintain or improve their standards of living. (Friedman, 2005)

Under these circumstances, the central question for the U.S. is no longer how should we subsidize higher education for a privileged fraction of the population, but what financing strategies are most conducive to widespread, successful participation? In other words, what will it take to achieve the level of educational attainment we need in the 21<sup>st</sup> century?

This is a practical, not a philosophical question. The “right answer” is likely to be different in different places, but every state will need to confront the basic issues:

- a) How much money will it take to provide postsecondary educational opportunities for all the state’s citizens?
- b) What public investments are feasible in providing that amount of money?
- c) What level of tuition and fees will be needed to generate the necessary revenues, and what “sticker price” is feasible without discouraging participation?

- d) Given the level of tuition and fees, how much student aid is needed, and what form of student aid will generate the optimal level of success in postsecondary education? and
- e) How can all the educational resources in a state (public, independent non-profit, and independent, for-profit) be productively employed to meet those needs?

In short, the “right answer” to the share of costs question should be determined, not by a formula, but by the results you need and the results you are getting. It is useful to look at what and how others are doing (peer states, institutions, and countries) for ideas and benchmarks, but the bottom line is system results: educational attainment, research productivity, and service.

**2. *Given limited resources, what is the appropriate balance to strike between quality and access/affordability?***

This question is a little like asking what is the right balance between air and water. Both are absolutely essential, it is a mistake to consider them a trade-off. But resources *are* limited, and there is a danger of “over-investing” in one essential resource while under-investing in another. It is possible, for example, to invest generously in quality at the high end (research universities) *and* in access/affordability, while under-investing in quality in community colleges. Access without quality is not a real trade-off; it is a waste. But “quality” without access and affordability will shortchange the citizens of the state.

To get better educational attainment results, most states, including Maryland, need to invest more in need-based financial aid. Maryland is well-above the national average in tuition, and well below the national average in state supported student financial aid. States also need to invest more strategically in institutions. Both state and institutional leaders need to look closely at how they are spending existing resources, to make sure they are getting the most out of available dollars. One can over-invest or under-invest in any priority. Too often states and institutional leaders look only at the “marginal” dollar, rather than the existing pattern of resource allocation, the “base budget.” The budgeting status quo is hard to change, and it may be impossible and undesirable to change it rapidly. But it is usually necessary to change the budget at some level (institutional or state) in order to get a change in results.

**3. *The Van de Water report recommends a peer state model for guiding investment decisions over the next decade. Maryland already uses institutional peer groups to develop budget requests. Are the two approaches compatible? Should this line of thinking be extended to include international comparisons?***

Essentially these two approaches (Maryland’s use of institutional peer groups for developing budget requests and the Van de Water Consulting report) are addressing different questions. Institutional peer groups have been used across the country to address the question: What is an appropriate and “fair” budget allocation to different institutions? In addition, in Maryland the institutional peer groups have been used to examine similarities and differences in institutional characteristics and performance. The Van de Water Consulting report focuses on questions related to state needs for access and success, rather than institutional funding and performance. It then uses the practices and resource allocations in other states as benchmarks.

At the broadest level these two perspectives are essential, and therefore, they are compatible. The question is: “How can the state incorporate both perspectives into a higher education funding “model?” The sum of institutional interests and perspectives does not add up to state needs and priorities, but the state cannot achieve educational priorities without attending to institutional capacities and resources.

A useful approach for resolving this question may be to use the word “model” to mean a general set of principles, rather than a fixed formula. State funding models for higher education need to address a number of issues:

- a) Adequacy of funding to meet goals;
- b) The allocation of resources to priorities;
- c) Incentives for efficiency and productivity gains;
- d) Continuity and predictability for institutional operations;
- e) Equity or “fairness;” and
- f) Responsiveness to changing needs and priorities.

No budgeting approach really solves the “adequacy” problem, even if based on peer comparisons. Formulas provide predictability and “fairness,” but because formulas tend to be complex and inflexible, they have difficulty allocating resources to priorities, encouraging productivity gains, and responding to changing conditions. Base-plus budgeting approaches are predictable and flexible, but without some analytical “formula-like” components, they may not be equitable.

The strongest disincentives for productivity gains are budget practices that “take away” resources which institutions or individuals save by becoming more efficient. Outside pressure to become more productive combined with rewards for success works much better. Rewarding productivity gains doesn’t need to be expensive. An intrinsic reward is the freedom to re-invest savings into other high priorities, and the states willingness to invest in meeting priorities.

***4. What are appropriate mechanisms for holding institutions accountable? How have these mechanisms fared in other states?***

The typical mechanisms for “holding institutions accountable” involve substantial amounts of performance reporting, and occasionally some form of performance funding. But these procedures generally are not very satisfactory to educators or external stakeholders. Educators tend to consider “accountability” a regulatory burden, and external stakeholders are unhappy because educational progress seems to be painfully slow or non-existent.

It isn’t surprising that institutions consider accountability a burden, because too often “accountability” boils down to a massive, unproductive reporting exercise, with large, generally unread reports, and periodic finger-pointing.

A substantial amount of reporting in higher education is inevitable and necessary, but the highest purpose of “accountability” is not to measure performance, reward performance, or punish the lack of performance. The highest purpose of accountability is to improve performance. Externally imposed “accountability” has been around for a good while without getting that job done.

Two years ago the National Commission on Accountability in Higher Education issued its report, *Accountability for Better Results – A National Imperative for Higher Education*. That report discussed the challenges facing higher education, reviewed promising work around the country, and articulated an approach to accountability more likely to help us improve performance.

The ingredients are pretty straight-forward. The organizing principles are pride, not fear, and aspirations, not minimum standards. Policy makers, civic and business leaders, and educators must come together and:

- a) Adopt a few, high priority, widely shared state goals;
- b) Develop a clear sense of shared responsibility for results;
- c) Establish a division of labor reflecting the roles of different team members;
- d) Monitor results frequently; and
- e) Respond to evidence of success or failure.

This approach to accountability is designed to become a tool for self-discipline, not finger-pointing. It cannot be unfocused about objectives or uncertain about results, but the exercise is organized around collective responsibility and common purpose, not fault-finding and the avoidance of personal responsibility.

Let me suggest a few examples of focused goals and a division of labor. Appropriate goals at the state level could be improving preparation for college, increasing degree attainment, increasing participation and success of underserved groups, and promoting economic growth. States as varied as Kentucky, Minnesota, Indiana, Oklahoma, South Dakota, North Dakota, and Texas have focused their attention on large scale issues such as these in establishing state goals. These “state level” issues require supportive “state level” policies. Focusing on a few key state goals and monitoring progress toward them increases the odds of effective policies and of success in improving performance.

Within institutions broad state goals must get translated into specific responsibilities. At the institutional level effective accountability systems must have two key ingredients: a) a focus on the right priorities; and b) success in getting the “buy-in” of faculty and staff in efforts to improve performance. Putting these key ingredients in place is the responsibility of institutional presidents and trustees. Specific goals and responsibilities will and should vary within the institution among departments and individual faculty and staff. One of the most important goals, defining learning objectives and measuring learning attainment, requires faculty leadership and involvement in every academic department.

States can make accountability “administrative work” by focusing on too many details at the state level or forcing too much uniformity on accountability procedures. If accountability becomes

“administrative work” it is half way toward becoming an ineffective, bureaucratic exercise. The goal is to strike a delicate and effective balance between a focus on priorities and flexibility in pursuing them.

**5. *What types of funding models are currently in use among the states? How is performance linked to funding? What are the trends in performance-based funding?***

(The written response to this question is from a forthcoming article, “The Financing of Public Colleges in the United States.”)

Two basic techniques – formula budgeting (usually based on some form of cost analysis) and base plus/minus budgeting – have been employed to address these problems in state and system budgeting. Although institutional budget procedures may be less formally structured, formula and base budgeting techniques are also commonly used within institutions. Both approaches have their advantages and limits, and, in some respects, both must be employed to obtain good results. They also have many variations, two of which, performance funding and contracts for service, also are discussed below.

*Formula Budgeting with Cost Analysis.*

For more than fifty years, many states have used formulas which seek to establish “adequacy,” that is, what the budget “should” be based on external standards. These standards have been determined by examining actual costs, funding levels at “peer” institutions, or analytically developed standards for faculty workloads, building operations, libraries, administrative support, etc. Budgeting formulas typically base funding primarily on enrollments and the amount of space occupied, possibly (but not always) with variation depending on the level of enrollment (undergraduate lower division, upper division, and graduate) and the cost of instruction in different disciplines (McKeown-Moak, 2001).

Formula budgeting is predictable, it is generally perceived as fair, and it usually responds to changes in workload quantity and program mix. Many policymakers also consider its “automatic” features (the provision of more or less funding based on changes in workload, space occupied, or programs offered) an advantage, because these features reduce the transaction costs of decision-making from year to year. But formula budgeting’s “automatic” features can be a problem. Formulas inevitably limit the number of factors considered in budgeting, which can provide incentives for dysfunctional behavior such as excessive marketing for student enrollment growth, reduction of academic standards, mission creep, and so on.<sup>ii</sup> (Shulock and Moore, 2007) Also, when enrollments decline or grow more rapidly than available revenues, the “automatic” elements of formulas become a problem for budget predictability. In the end, virtually every formula budgeting state has made significant “non-formula” budget allocations to address “non-formula” (perhaps political) priorities.

Formula budgeting also fails to encourage gains in quality and productivity, unless such measures are added to the formula in some way. But the more formulas attempt to account for complex goals and conditions, the more they become unwieldy, incomprehensible, and mistrusted. Finally, no formula really resolves the adequacy of funding question, even when based on peer

institutions or rationalistic analysis of workload, staffing, and space requirements. Many formulas purporting to establish “adequacy” have been persistently funded at some fraction of the “adequate” amount. Then the formula becomes a straightjacket on the budget process; no discussion of priorities and issues is possible because “there is no money.” When formulas are persistently “unfunded,” decision-makers eventually will not pay serious attention to the formula “requirements” for the bottom line.<sup>iii</sup>

#### *Base Plus/Minus Budgeting.*

The starting point for base plus/minus budgeting is funding in the current year. This approach is simpler and more transparent than formula budgeting, because all changes (the pluses and minuses)—inflation, salary increases, program improvements, productivity gains or reallocation, changes in workload, etc.—are visible and justified on some basis. Base plus/minus budgeting is entirely flexible in the issues it addresses and the methods it uses. Everything is on the table or can be put there.

At its worse, base plus/minus budgeting perpetuates the status quo. Past decisions have great, perhaps undue weight, and the budget process may be inadequately responsive to quality issues, inequities, or changes in workload and priorities.

The flexibility of base plus/minus budgeting is an asset, but to work well this approach requires continuous analysis and negotiation of need, quality, productivity, and “fairness” issues, the questions formula budgeting seeks to resolve mechanistically. Consequently, base plus/minus budgeting can be more of a decision-making burden—and an occasion for attracting political heat—than some decision-makers can tolerate. This is why formulas were invented. In base-plus budgeting the decision-makers are more explicitly people, not a disembodied, pre-negotiated formula.

Finally, base plus/minus budgeting *also* has no direct way to address the question of adequacy. It can use external reference points (just like formula budgeting), but base plus/minus budgeting may be less credible than an explicit formula, even one that is flimsy in substance. These limits of formula and base budgeting and the desire to achieve better outcomes from higher education have led to many experiments, including performance funding and “contracts” between states and institutions which are briefly considered below.

#### *Performance Funding.*

Performance funding explicitly allocates some portion of an entity’s budget based on past performance. It focuses attention on outcomes, provides incentives for improvement, and rewards high or improving performance. It is difficult to argue with popular slogans offered for performance funding: “You get what you measure,” and “Money changes behavior, and a lot of money changes a lot of behavior!” Many policy makers have found these approaches very attractive, and performance funding has been advocated as a means of increasing political and financial support for higher education. (Burke, 1998 and 2002)

Performance funding is related to an earlier budget tradition of PPBS (program planning/budgeting systems) intended to guide rational resource allocations based on program goals, the evaluation of program effectiveness, and subsequent allocations of resources to the most cost-effective programs. Because performance funding is formula budgeting with an explicit allocation tied to performance outcomes, it shares the advantages and disadvantages of formula budgeting. But the disadvantages are amplified. Performance funding tends to have a high transaction and negotiating costs, because the stakes are high and indicators and measurement techniques are debatable. If substantial amounts of money are tied to performance, the systems tend to be politically unsustainable. Why? When the stakes are high, financial stability is put at risk, lower performing institutions are denied resources they may need to improve, and higher performing institutions are likely to become less efficient because they receive budget increases based on already established levels of performance. If a small fraction of the budget is involved, the stakes may be too small to have the desired effect.

After witnessing its popularity grow and then recede, Joseph Burke<sup>iv</sup>, who has written extensively and sympathetically about the performance funding movement, concluded that performance funding is more useful and feasible for budgeting purposes at the institutional level than the state level. (Burke, 2005)

#### *Contracts for Services*

A few states have recently employed yet another budgeting innovation -- a contract for services between a higher education institution and the state<sup>v</sup> -- purportedly as a means of improving accountability while reducing direct regulation. This approach focuses attention on outcomes and provides incentives for improving performance or meeting explicit state priorities, such as expanding degree production in high demand fields, greater minority participation and success, etc.

The contract for services approach has the great benefit of establishing mutual goals, but some of its drawbacks are obvious. First, a “contract” between an institution and the state for core functions is not the same as an enforceable contract for a specific task or service. Neither the state nor the institution is truly a free agent with viable options. State and public institutional contracts are like agreements between parents and children. Due to dependency and commitment, breaking the relationship or turning to another vendor is not an option. Second, contracts also tend to have high transaction costs with extensive negotiations, lots of fine print, and compliance reviews. Such an approach is hardly likely to reduce bureaucracy. Finally, like all other approaches, contracts do not resolve tension over adequacy (Breneman, 2005)

#### *Intelligent Eclecticism.*

Each of these approaches to higher education budgeting addresses an important issue, but they all fail to solve the fundamental question of adequacy, and each tends to fall short on one or more essential requirements – continuity, equity, responsive to changing conditions, and efficiency. On the question of adequacy, for example, a recent analysis at the National Center for Higher Education Management Systems (Jones & Kelly, 2005), has found wide variation among the states in spending per student and degree production, and a very small correlation between these variables.

While the amount of money available is obviously relevant, the mix of institutions in the system, student characteristics and preparation, and how money is used within institutions appear to be even more important.

Although some decision-makers persistently seek a higher education budgeting system that can run on “automatic pilot,” effective budgeting requires analysis, engagement, adaptation, and negotiation over ends, means, and values. Cost-analysis, at the core of formula budgeting, is required for fairness and efficiency. The assessment of performance is essential for improving results. Continuity and predictability are necessary for good management. And the effectiveness of the entire system requires institutions and states to agree on common purposes, to develop straightforward, transparent approaches for allocating resources to priorities, and to avoid perverse incentives.

The most important question about budgeting procedures is whether they contribute to progress toward high priority educational goals. A thoughtful, eclectic approach drawing on all of these traditions is most likely to be successful.

**6. *Maryland faces 10-year demand estimated at more than 56,000 additional students (equal to two new College Park campuses). How are other states coping with growth issues? What criteria would you suggest for guiding our response to demand?***

According to numbers I could find easily, full time equivalent enrollment in Maryland grew by 41,311 students (27%) from 1995-96 to 2005-06. An additional 56,000 students in the next ten years would be an increase of 29% over that period of time. This is not a trivial number (and the state may actually need even greater enrollment growth), but it is neither unprecedented nor as large as some states will experience.

Rather than build new institutions, most states are planning to meet growing demand by expanding and making more productive their existing institutional resources. How can those resources become more productive? The following is a list of ideas, many of which are already being employed in Maryland:

- a) Improve preparation for college, thereby reducing the need for remediation;
- b) Encourage, or require students to take some courses on-line to reduce the load on physical facilities;
- c) Develop computer-assisted course delivery systems for high-enrollment courses as a means of improving quality while reducing costs;
- d) Help institutions design and implement more sophisticated techniques to recruit and retain under-served students, including adult learners who have enrolled, but not completed degree programs;
- e) Help colleges with underutilized capacity attract more students, relieving pressure on campuses already at capacity;
- f) Eliminate low-enrollment academic programs and courses to free-up resources for higher demand areas;

- g) Increase the focus and coherence of degree programs in order to decrease the time required to obtain a degree;
- h) Provide incentives to institutions to improve course and program completion;
- i) Strengthen articulation and transfer between two and four-year institutions; and
- j) Provide incentives to students to complete programs in a timely fashion, and reduce the number of hours accumulated in a degree program.

Actions such as these to increase productivity require both institutional initiative and a state policy environment that supports institutional leadership and avoids excessive regulation. Such initiatives will help increase both quality and productivity, in my view, but there is no question that additional state resources to serve expected enrollment demand and assure necessary quality will be necessary.

### **CLOSING COMMENTS**

I'd like to close where I began with the three "right questions" for higher education finance:

- A. *What do we need from higher education?*
- B. *What can we do better with the money we now have?*
- C. *Where can strategic investments help us get the results we need?*

These questions should be the focal point of the appropriations and policy process for higher education. They cannot be reduced to a formula that runs on "automatic pilot;" to get good results states need to monitor performance and changing conditions and fine-tune their investments and policies accordingly. You may decide it is appropriate to use formulas, including institutional or state peer groups to guide decisions, but good answers to these questions require continuous attention and a degree of flexibility.

In a strong state system of higher education institutional leaders will be encouraged and rewarded when they compete for recognition and excellence in addressing public priorities, not simply prestige in comparison to other institutions. This process should be aided and abetted by state boards such as the Maryland Higher Education Commission. Statewide governing and coordinating boards for higher education were created to help governors, legislatures, and the higher education community focus on the state's broadest priorities and address them as effectively as possible. An effective state commission will be empowered and used by policy makers and educators as a source of information and objective analysis to help them achieve collective "self-discipline and accountability."

Thank you again for the opportunity to share my thoughts.

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<sup>i</sup> (Carnegie, p. 3)

<sup>ii</sup> *Rules of the Game: How State Policy Creates Barriers to Student Completion and Impedes Student Success in California's Community Colleges* provides an extensive discussion of dysfunctional incentives in the budget formulas of California's community college system.

<sup>iii</sup> C. Warren Neel's transmittal memorandum for "Measuring Performance in Higher Education," a joint study of Tennessee's Comptroller of the Treasury, Office of Legislative Budget Analysis, and Division of Budget and Department of Finance and Administration, (February 2001) illustrates this tendency in a state noted for its sophisticated budget formulas: [The Tennessee higher education budget] "formula has not been fully funded for thirteen years and this year the gap is \$102 million."

<sup>iv</sup> Former institutional president and system provost in the State University of New York System.

<sup>v</sup> As an example, please see the Colorado Commission on Higher Education's website: [www.state.co.us/cche/cof/ffs/index.html](http://www.state.co.us/cche/cof/ffs/index.html).