State Fiscal Crises and Cuts in Higher Education: The Implications for Access, Institutional Performance, and Strategic Reengineering

A Project for the Western Interstate Commission for Higher Education

Gabriel E. Kaplan
University of Colorado
Graduate School of Public Affairs

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The Western Interstate Commission for Higher Education (WICHE) is an interstate compact created by formal legislative action of the states and the U.S. Congress. Its mission is to work collaboratively to expand educational access and excellence for all citizens of the West. Member states are:

Alaska	Idaho	Oregon
Arizona	Montana	South Dakota
California	Nevada	Utah
Colorado	New Mexico	Washington
Hawaii	North Dakota	Wyoming

WICHE's broad objectives are to:

- Strengthen educational opportunities for students through expanded access to programs.
- Assist policymakers in dealing with higher education and human resource issues through research and analysis.
- Foster cooperative planning, especially that which targets the sharing of resources.

This publication was prepared by the Policy Analysis and Research unit, which is involved in the research, analysis, and reporting of information on public policy issues of concern in the WICHE states.

This report is available free of charge online at http://www.wiche.edu/Policy/Ford/index.asp.

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Executive Summary

This paper examines how states facing budget shortfalls have implemented cuts in higher education finance and the implications of these changes on access and higher education organization. It reviews the budget shortfalls that have faced a noteworthy group of states over the five fiscal years 2000 through 2004, the subsequent budget cuts that were adopted, and how those budget cuts were distributed across public higher education.

Budget cutting is a noteworthy crisis for higher education because it forces on institutions a Hobbesian choice between cutting particular programs and divisions or progressively distributing the pain across the board, weakening some of the vital centers of intellectual achievement at a specific institution. This paper asks what states and, subsequently, institutions did when it came time to trim public spending on higher education. It examines whether differences in the structures of state systems of higher education had an effect on the outcomes, whether certain strategies were favored, and if these responses changed the state population's access to higher education.

Tap Tuition and Other Revenues

This work finds that states and institutions resorted to a number of common strategies. Chief among these was to raise tuition. In some cases state officials urged this response, while in other instances, they looked the other way. Many institutions also sought to find new revenues and to redistribute particular programs among different revenue sources, moving some programs off of the state's budget.

Offset Tuition Increases with Financial Aid

Some states and many institutions sought to offset tuition increases by increasing their funding of financial aid. But the budget situation limited how much they could do this; and in almost every instance, states were cutting financial aid allocations, as well as almost everything else in higher education, by the end of the period. Still, enrollment effects, from the institutional perspective, were minimal. Few saw large drop-offs in their headcounts. However, fewer still sought to see if these effects were being expressed in the composition of their student bodies and if lower-income students were turning away from four year higher education. An accurate assessment of the impacts on access would require a more detailed analysis of enrollment data. Some administrators report a suspicion that the composition of the student body did change, but the supporting evidence is thin in both directions.

Limit the Human Costs

When institutions trimmed spending they tended to do it in particular and predictable ways. They choose short-term cuts over long-term reorganization of priorities. The tended to favor salary and hiring freezes over program reorganization and position elimination. They sought cuts from infrastructure budgets, maintenance, and capital before they took money from administrative and academic units. They favored across-the-board cuts in budgets rather than taking the money from particular purposes or units. They rarely laid-off personnel and almost never laid-off faculty. Rather, they employed early retirement incentives or eliminated open positions.

Preserve the Core

Many of the institutions expressed a common commitment to preserve the "core." For them, this meant taking money from nonacademic parts of the university and protecting the academic units. If they did implement budget reductions on the academic side, they took less from the academic units than from the administrative ones. If they looked to reorganize a unit, they looked at the administrative units before they looked at the academic ones. In some institutions, leadership explicitly instructed budget cutters to leave core units, such as the College of Arts and Sciences, untouched.

Leadership Dominates Structure

Rarely did schools and the states engage in comprehensive strategic restructuring. Although such a response to a changed economic environment is a commonplace of the business world, the thinking in higher education tended to be shorter term and less strategic. Typically, burden sharing was favored over targeting.

This study sought to examine closely different kinds of institutions, institutions from different parts of the country, and institutions from states with different governing structures. However, none of this built-in variance appeared to correlate with observed institutional and state behaviors. Where strategic thinking and action did occur it was a rarity and generally attributable to outstanding institutional leadership. This suggests that personalities and human relations tended to be more influential in shaping policies than did the structural details of the decision and planning process.

Recommendations

Six policy recommendations flow from the analysis in this report.

1. **Commit to Monitoring Enrollment Effects of Tuition Increases**. As states increase their reliance on private payment of tuition to fund their public institutions, they need to be more attentive to the access issue and how it becomes affected by this policy development. Given the current demand for higher education, enrollment effects are unlikely to manifest themselves in sheer numbers. Rather, they are more likely to be subtle and appear in changes in the numbers of the students who attend college from different income quintiles and from in-state or out-of-state populations.
2. **Make Tuition Increases More Progressive with Financial Aid Commitments**. Preserving access to higher education is likely to require that states up their spending on financial aid much more significantly than they have so far been successful at doing. If they want to see the current patterns of attendance remain unchanged and particularly if they want to try and improve enrollments among economically and socially disadvantaged groups, they will need to commit more resources to scholarship, grant, and loan programs. Populations with traditionally lower levels of higher educational participation tend to respond differently to alterations in the aid/ tuition mix and greater outreach into these communities and changes to financial aid mechanisms will be necessary when tuitions rise.
3. **Leadership Dominates Structure**: Although states spend a good deal of time thinking about how to structure their public systems of higher education, the evidence compiled here suggests that much of this is wasted effort. Few of the variations they arrive at seem to account for differences in the way institutions handle fiscal crises. Rather, strong, personable leadership seems to be the most effective tool for achieving efficiency and strategic goals for state policymakers.
4. **Recognize the Differences between Higher Education and the Business World**. Many leaders, such as board members, who come into higher education from the business world express bewilderment at the sector's inability to respond strategically to changes in the revenue environment and to realize efficiencies and savings. But the differences between higher education and the business world are not accidental and can be attributed to the populations involved and the principles of shared governance in academia. If community leaders want higher education officials to impose human costs

such as layoffs and terminations, they need to recognize the key role they themselves will need to play in supporting such efforts.

5. **Reward, Arm, and Support Leadership**. Leaders need to be encouraged and developed. First, they need to have the task of strategic planning clearly defined for them. Few state officials did anything to communicate a desire to see institutions realize efficiency goals. There is little in the structure of higher education to think schools will uniformly arrive at this conclusion by themselves. Rather, state officials need to ask institutional leaders for strategic planning and greater attention to efficiency. They also need to understand that higher education leaders will encounter resistance, so they must be supported and not undermined by those outside the campus. Finally, they need to reward and penalize leaders and institutions so as to promote this policy objective.

6. **Pay Attention to Detail and Think Long Term**. Successful, deliberate reorganization emerges when leaders think long term and attend to the details of the process of restructuring. The procedures of shared governance are more than just an inconvenient reality. Strategic retrenchment is more likely to succeed when the principles and details of shared governance are honored and when outsiders recognize how disruptive a disregard of these principles can be for a campus. Many cost savings will not occur overnight, and little financial benefit will occur in the midst of a fiscal crisis. But long term, leaders can produce significant efficiencies for taxpayers and better align institutions with the public's goals for state higher education.

Introduction

Our states, it appears, have finally emerged from the most serious budget crunch many have faced since the Great Depression.[1] In 2003, 37 states faced serious shortfalls in the midst of their budget cycles.[2] For many states, fiscal year 2004 looked even bleaker; when the appropriations process was wrapped up in 2003, total allocated expenditures for fiscal year 2004 came in below levels of the previous fiscal year, the first time this had happened since 1983.[3] The long-term projection of budget gaps for many state and local governments extends over the next decade.[4] To deal with such shortfalls, states had to make cuts to discretionary spending programs, among the largest of which was their system of public higher education.

This paper examines how states facing budget shortfalls have implemented cuts in higher education finance and the implications of these changes for access and higher education organization. It reviews the budget shortfalls that faced a noteworthy group of states over the four fiscal years, 2000 through 2004; the subsequent budget cuts that were adopted; and how those budget cuts were distributed across public higher education systems.

The main focus of this paper is on the process by which states and state institutions implemented these cuts in higher education. Were cuts in state subsidies directed towards budget categories such as financial aid and direct aid to the institutions or toward a particular group of institutions? How were the eventual cuts distributed across the institutions within states? How then did the institutions distribute those cuts? What institutional strategies did institutions employ to cope with shortfalls in funding from their states? Did they shift costs onto students by increasing tuition? Did they make cuts in staff or faculty? Did they reorganize academic programs? How did these fiscal actions affect students, especially in terms of access to four-year higher education?

A second focus is on the ways that organizational factors related to a state's system of higher education, the governance structure of its political system, and the governance structure of its higher education institutions shaped the budget cuts that were implemented. What role did governance at the state and institutional level play in the way that state higher education confronted the particular exigencies of budgetary crises?

Fiscal downturns are part of the cycles of state budgets and economic ebbs and flows. But the recessionary crisis of the early years of the 21st century proved particularly protracted and severe at the state level. Changes in the political climate nationally made discussions of tax increases a particularly thorny issue for elected officials. The increasing role played by the service sector in the nation's economy has placed greater burdens on state revenue systems that are oriented to taxing goods production and struggle to realize revenues from services activity.[5] Federal mandates together with the structure of state and federal entitlement programs have removed a large portion of state budgets from the realm of possible cuts in expenditures. The realities of the justice system – mandatory sentencing, incarceration terms, and state prisons filled to capacity – offer states minimal financial flexibility on year-to-year prison expenditures. Political constraints and in some cases constitutional provisions often make K-12 funding inviolable. All this has meant greater pressure on discretionary portions of state budgets, of which state higher education is often the largest component.[6]

Institutions of higher education that face cuts in state funding can react in one of two ways. They can cut their expenditures, or they can seek to find revenues from other sources. The most common source of new revenues generally comes from increases in tuition and fees. Hence, the most commonly observed sequence of reactions to fiscal crisis in public higher education consists of periods of state spending cuts and attendant tuition increases that are used to offset their impacts. Indeed, much of the run-up in public higher education tuition in the last two decades can be attributed to economic cycles and offsetting efforts to cope with attendant state budgetary downturns.[7] The implications for student access have been widely noted.[8]

Tuition increases, however, rarely offset public-sector funding cuts entirely. Hence, public institutions have fallen progressively behind many of their elite private counterparts in what they can pay to professors and the amenities that they can offer to students.[9]

The implications for the structure of higher education and the modes of delivery can be profound, yet few have examined how such budget cuts have been implemented at the state and, more particularly, the system or institutional level.[10] State funding cuts can also have desultory impacts on such matters as access and time to completion. Again, the impact of budget cuts on questions of access remains under-explored.

Budget cutting is a noteworthy crisis for higher education because it forces on institutions a Hobbesian choice between cutting particular programs and divisions or progressively distributing the pain across the board, weakening some of the vital centers of intellectual achievement at a specific institution. Of course, such choices face many businesses whenever their economic fortunes take a downturn. The literature regarding how organizations make such difficult choices is a rich one. The decision structures of private firms, however, involve sufficient levels of socially and legally sanctioned hierarchy that such organizations appear to cope with these challenges without great organizational upheaval. Furthermore, private firms are often embedded in a sufficiently competitive market that organizations which cannot face the economic challenge imposed by retrenchment are squeezed from an industry. In higher education, such cuts can be contentious and are a continuing challenge for executive leadership. Employee turmoil that leads to a crisis of confidence in organizational leadership is typically rare in the business world, but is almost a commonplace in the pages of higher education–oriented journalism. The higher education market is sufficiently insulated from competition that schools are unlikely to be punished for failing to follow best practices in retrenchment.

Budget cutting, while painful and often difficult, nevertheless offers an opportunity to engage in serious strategic thinking about organizational direction and priorities. For institutions of higher education, particularly public institutions, such an imperative is an important one. As communities become concerned about the costs of providing higher education and about the costs of obtaining it, society must confront higher education's intellectual arms race, which is dictated by the perverse incentives and sociological pathologies of the process by which academics reproduce themselves and measure success.[12] Coverage of this pursuit in The Chronicle of Higher Education highlights the drive to achieve top-tier status among research universities, a goal to which many aspire but few reach.[13] Thinking about how states can reduce overlap, can identify opportunities for program amalgamation, or can initiate collaborative efforts across campuses could yield significant savings.

Such decisions, however, can be particularly problematic for colleges and universities. They are not well structured to reach decisions that pit parties against each other and the general preference is to minimize conflict. Particularization in selecting programs or departments for elimination or reduction is not a noted specialty of such institutions.[14] State systems of higher education, because of their decentralized nature and the multiple layers at which decisions are made, face a similar problem. Such institutional structures have been identified as a source of budgetary expansion and a barrier to strategic contraction in the literature of political science.[15] As much of this budgetary research has shown, when pain is concentrated but the benefits of a cut are diffuse, the resulting concentration of opposition within a participatory decision process can overwhelm the collective interests of the group. Hence, decision makers often have a predilection for diffuse cuts in which pain is spread across an organization. This, however, does not constitute strategic thinking and serves as a recipe for gradually weakening institutions by subtracting from strong and weak programs in equal proportion.

The goal of this research has been to examine how state systems and the schools within those systems made budget cuts. The questions considered here include:

- Did states and institutions adopt a generalized strategy of across-the-board cuts?
- Did any engage in strategic reductions and reorientations in mission and program scope?
- Which decision structures and processes were associated with the courses that were adopted?
- Does one particular kind of budgetary and strategic process seem to have served higher education the best?
- How have such cuts and their implementation affected access?

Such an investigation can teach us much about how public universities confront operating challenges and, by extension, about the processes that lead to budgetary expansion and organizational growth. But it might also allow us to see how campus decisions regarding budget constraints are related to the particular kinds of decision structures that exist at the state and institutional level. Previous research has shown that states with coordinating bodies have often been the most successful at restraining rapid growth in institutional expenditures.[16] It is not clear if they limited institutional growth or were more aggressive in implementing budget reductions. Nor is it clear what factors are responsible for this success with regard to costs.[17] This study provides a more detailed analysis of the budget-cutting process in public higher education and shows how the process differed across a group of states.

Background

This research took a qualitative approach, in order to gain a richer understanding of budget cutting and campus thinking about retrenchment than would be provided by a quantitative analysis of data from a large survey. The goal was to identify a number of states where budgetary problems were sufficiently severe that sharp cuts had to be made in higher education spending. Sizable cuts in this area afforded a better opportunity to see if states chose to target their cuts or if some aspect of state governance shaped the manner in which cuts were made. States which experienced a sustained period of budgetary retrenchment also offered a chance to see if campus strategies towards state funding cuts evolved over the period of study. Successive years of state budget cuts may have forced schools to rethink the campus mission and approach to higher education.

The study sought states from a variety of U.S. locations and states which had various means of organizing their higher educations systems. To the latter end, it employed the classification framework created by the Education Commission of the States – ECS – to identify system variations across the states. ECS has long had a classification system for state systems of higher education, distinguishing states with centralized governing boards, those with coordinating boards with planning authority, those with coordinating boards with advisory authority, and those with little formal coordination of higher education.[18]

The study sought a subsection of states that would provide an opportunity to assess whether such state structures or geographic or political variables shaped the size and form of cuts made to higher education. Looking at a sufficiently varied set of states offers a chance to identify if and how state cuts to higher education varied across states or institutional types. I gathered state level and institutional funding data from legislative analysts within state fiscal offices or legislative counsel offices. I also spoke with officials in state boards of higher education to collect information about the kinds of discussions that were held in regards to state funding for higher education and the role various state actors played. Newspaper articles from the largest papers in each state also provided five years of background political and historical information, which placed much of this data in a narrative context.

Finally, I conducted phone interviews with representatives from four to five campuses in each state to discuss how the campus budgeting process had been affected by state cutbacks. In general, I spoke with vice chancellors of administration and finance, budget office directors, or directors of institutional research. I made sure to speak with a representative from the flagship institution in each state, as well as to representatives from smaller state colleges within the four-year system. Limitations of time precluded a chance to look at how retrenchment affected community colleges.

Results

I selected eight states for this study. I consulted documents on state fiscal matters that were put out by the American Association of State Colleges and Universities (AASCU), the State Higher Education Executive Officers (SHEEO), the National Governors Association (NGA), the National Conference of State Legislatures (NCSL), and the National Center for Public Policy and Higher Education (NCPPHE). I used these documents to identify which states were repeatedly cited for reductions in higher education funding from FY 2001 to 2004. This generated the list in presented in Table 1.

Table 1. States studied in this report*

1. Colorado	2. Massachusetts
3. Missouri	4. Nebraska
5. **Oregon**	6. Virginia
7. Washington	8. **Wisconsin**

* Note: Central governing board states indicated in bold; coordinating board with consolidated budgeting authority in italics; coordinating board with an advisory budget role in normal font.[19] This graphical aide is utilized in subsequent tables to remind the reader of each state's manner of arranging its higher education system.

These states were selected because of the severity of the budget cuts to higher education they implemented or considered. A few other states had cuts of a similar magnitude to some of the states on this list. But this list cuts across Eastern, Central, Southern, and Western regions. Two of the states have central governing boards that administer all of the institutions in the state, and six have coordinating boards with regulatory authority.[20] Among the states with coordinating board structures, half give the coordinating body authority to present a consolidated higher education budget to the legislature, while the other half give that body the chance to review institutional budgets and make recommendations to the legislature.

The budget cuts these states were forced to make, particularly in the area of higher education were significant. As Table 2 shows, each of the eight states ended the five-year period spending less in both nominal and real terms than they spent in FY 2001. Colorado imposed the largest two-year cuts in state funding for higher education, reducing expenditures by 22 percent between 2003 and 2004. But cuts of over 20 percent over a two-year period were also experienced in Massachusetts and Virginia. Furthermore, these cuts (calculated from Table 2 and shown in Table 3) represent reductions in nominal amounts. Base-level funding consists of the amount of funding the institution needs to merely continue offering services at the same level it did in the previous year. When cuts to the base are examined, the cutbacks appear even sharper. Funding for higher education in Wisconsin was cut by 10 percent. The University of Missouri lost almost $150 million in state funds. Schools in Washington face growing enrollments from year to year, so base funding contracts absent a significant real increase in funding. Massachusetts posted some of the largest increases in public tuition to make up for budget shortfalls. Nebraska drew headlines for closing some departments. Each of these states drew attention in the preliminary review due to the nature of the cuts imposed.

Table 2. State by state higher education funding (general fund appropriations)*

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Colorado	$ 716,058,536	$ 747,562,014	$ 750,030,496	$ 685,529,236	$ 591,428,310
Massachusetts	$ 1,046,849,000	$ 1,076,291,000	$ 1,019,819,299	$ 972,081,567	$ 815,016,161
Missouri	$ 957,990,409	$ 1,003,145,513	$ 877,026,868	$ 893,163,074	$ 888,985,312
Nebraska	$ 497,431,652	$ 527,154,955	$ 516,111,894	$ 521,477,779	$ 493,224,697
Oregon	$ 632,912,000	$ 691,207,000	$ 664,930,000	$ 553,499,000	$ 590,681,000
Virginia	$ 1,445,104,944	$ 1,557,474,647	$ 1,585,678,240	$ 1,356,113,351	$ 1,275,261,872
Washington	$ 1,221,612,000	$ 1,321,614,000	$ 1,364,023,000	$ 1,369,447,022	$ 1,317,794,999
Wisconsin	**$ 1,156,547,700**	**$ 1,241,118,300**	**$ 1,208,109,200**	**$ 1,266,558,400**	**$ 1,195,353,100**

*Note: Net of subsequent midyear supplementals or rescissions.

Sources: Colorado Commission on Higher Education; Massachusetts State Legislative Counsel; Missouri Department of Higher Education; State of Nebraska Annual Budgetary Report, June 2004; Legislative Fiscal Office, Oregon State Legislature; State Council of Higher Education for Virginia, 2005; Washington State Higher Education Coordinating Board; University of Wisconsin System office.

The starkness of the cuts is most evident in Table 4. Here, actual expenditures in nominal dollars in FY 2004 are compared to each of the four previous fiscal years. The table uses an index that is created by dividing the nominal expenditure on higher education in FY 2004 by the expenditure in that fiscal year. The table shows that of the eight study states, Massachusetts experienced the sharpest drop in public funding for higher education. Funding in FY 2004 for higher education was just 75 percent of what it was in the high point year of FY 2001. In Colorado, the situation proved only slightly better. There, funding in FY 2004 constituted less than 80 percent of what it was in FY 2001. States such as Oregon and Virginia also experienced sharp reductions in state aid. None of the study states spent more in FY 2004 on higher education than they did in FY 2001.

Table 3. Percent declines in state higher ed funding, year over year:

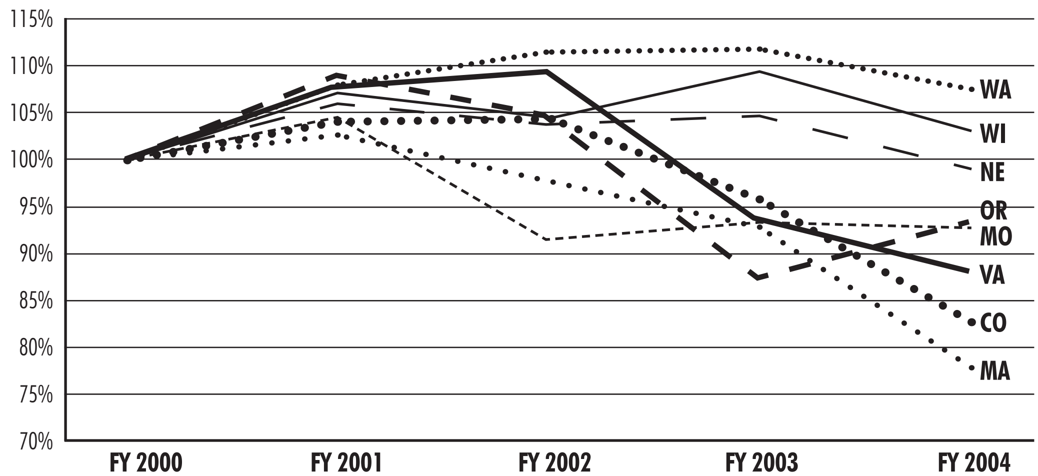
	FY 2001	FY 2002	FY 2003	FY 2004
Colorado	4.40%	0.33%	**-8.60%**	**-13.73%**
Massachusetts	2.81%	**-5.25%**	**-4.68%**	**-16.16%**
Missouri	4.71%	**-12.57%**	1.84%	**-0.47%**
Nebraska	5.98%	**-2.09%**	1.04%	**-5.42%**
Oregon	9.21%	**-3.80%**	**-16.76%**	6.72%
Virginia	7.78%	1.81%	**-14.48%**	**-5.96%**
Washington	8.19%	3.21%	0.40%	**-3.77%**
Wisconsin	7.31%	**-2.66%**	4.84%	**-5.62%**

Table 4. Index of 2004 funding relative to prior fiscal year funding

	FY 2000	FY 2001	FY 2002	FY 2003
Colorado	82.59%	79.11%	78.85%	86.27%
Massachusetts	77.85%	75.72%	79.92%	83.84%
Missouri	92.80%	88.62%	101.36%	99.53%
Nebraska	99.15%	93.56%	95.57%	94.58%
Oregon	93.33%	85.46%	88.83%	106.72%
Virginia	88.25%	81.88%	80.42%	94.04%
Washington	107.87%	99.71%	96.61%	96.23%
Wisconsin	103.36%	96.31%	98.94%	94.38%

Figure 1 maps out these cuts, using 2000 at a starting point. An index figure for each year for each state is calculated by dividing the spending in that year by the spending in 2000 and setting each state's higher education spending in that year to 100. Hence, the index figure for Colorado in 2004 is about 83 percent, indicating that FY 2004 spending was 83 percent of what it was in 2000. Figure 1 provides a way of visualizing the impacts of cuts to state funding relative to a standardized starting point. It shows which states received the largest relative cuts (Massachusetts and Colorado) and how the budget cuts unfolded over the five years. Washington and Wisconsin ended the period at a higher level of nominal funding (if a lower level of real funding), comparing FY 2000 to FY 2004 numbers. However, both of these states ended the period at lower levels of state aid than they reached in FY 2001. All of the other states ended the period spending less in nominal terms in FY 2004 than they had in FY 2000.

Figure 1. Higher ed funding relative to 2000



All of the indices above represent nominal cuts in spending. In other words, they do not take into account basic pressures on prices, such as core inflation. Nor do they account for the fact that operating costs in higher education tend to rise faster than consumer inflation.[21] Like most service industries, higher education is unable to make rapid increases in productivity, so cost inflation typically plagues it in the same way that it does similar industries such ashealth care or social services.[22] But over the last few years, higher education operating costs have faced severe strain from increases in the costs of medical insurance, technology replacement, and publishing. Since labor comprises such a significant portion of overall expenditures, increases in the area of health insurance are especially pernicious to the bottom line. Relative to the base funding that would have been necessary to maintain operations at the same level as 2000, the cuts in funding were even more drastic than what is shown in the tables and figures above.

The subsequent effects on higher education spending within the eight study states are delineated in tables 5-12. These tables focus on state allocations and expenditures of general funds towards four-year higher education institutions in each of the states. In some cases funding for related programming is indicated, as well as funding for the state coordinating body. Funding for the state coordinating body is not listed for every state.

Table 5. Colorado

	FY 2000 GF Allocation	FY 2001 GF Allocation	FY 2002 GF Allocation	FY 2003 GF Allocation	FY 2004 GF Allocation
University of Colorado System	$ 126,786,625	$ 132,503,095	$ 133,105,534	$ 121,119,743	$ 99,188,775
Colorado State University System	$ 95,566,168	$ 98,174,368	$ 96,701,231	$ 84,487,844	$ 71,836,233
Adams State College	$ 10,019,617	$ 10,162,052	$ 10,024,899	$ 9,609,028	$ 10,316,691
Mesa State College	$ 14,837,204	$ 15,118,950	$ 15,865,136	$ 14,245,693	$ 15,775,165
Metropolitan State College	$ 39,540,438	$ 40,495,788	$ 41,208,778	$ 38,144,374	$ 33,951,845
Western State College	$ 6,502,050	$ 6,374,307	$ 6,194,223	$ 6,002,173	$ 6,896,788
Fort Lewis College	$ 9,685,442	$ 9,574,293	$ 9,354,415	$ 8,967,628	$ 7,435,161
University of Northern Colorado	$ 39,454,391	$ 41,959,738	$ 42,352,302	$ 36,974,939	$ 33,590,909
Colorado School of Mines	$ 18,624,568	$ 19,495,658	$ 19,308,287	$ 16,952,620	$ 17,187,980
Community Colleges of Colorado	$ 124,464,488	$ 129,803,119	$ 139,604,591	$ 117,315,311	$ 106,279,979
TOTAL	$ 485,480,991	$ 503,661,368	$ 513,719,396	$ 453,819,353	$ 402,459,526

Source: Colorado Commission on Higher Education.

Table 6. Massachusetts

University of Massachusetts	FY2000 Spending	FY2001 Spending	FY2002 Spending*	FY 2003 Spending**	FY2004 Spending***
University of Massachusetts	$ 455,655,374	$ 483,626,523	$ 460,599,228	$ 436,276,144	$ 355,770,020
Toxics Use Reduction Institute	$ 1,686,146	$ 1,686,146	$ 1,717,447	$ 1,631,575	$ 1,139,853
UMass Chair Endowment Program				$ 2,000,000	$ 0
Commonwealth College	$ 1,750,000	$ 1,750,000	$ 1,715,000	$ 1,715,000	$ 1,715,000
Subtotal	$ 459,091,520	$ 487,062,669	$ 464,031,675	$ 441,622,719	$ 358,624,873
State colleges					
Bridgewater	$ 32,251,933	$ 33,884,620	$ 34,902,717	$ 34,169,355	$ 29,536,751
Fitchburg	$ 24,405,931	$ 25,671,095	$ 26,334,284	$ 25,741,421	$ 22,251,457
Framingham	$ 20,295,268	$ 21,384,821	$ 22,118,430	$ 21,186,628	$ 18,314,192
Mass. College of Art	$ 12,965,265	$ 13,557,911	$ 13,934,465	$ 13,501,766	$ 11,671,228
Massachusetts Maritime Academy	$ 10,710,027	$ 11,189,980	$ 11,261,055	$ 10,883,874	$ 9,408,263
Mass. College of Liberal Arts	$ 12,421,698	$ 12,970,529	$ 13,179,861	$ 12,750,234	$ 11,021,585
Salem	$ 31,530,536	$ 33,017,454	$ 34,942,413	$ 33,983,078	$ 29,375,729
GTE/Sylvania Property - Salem	$ 593,677	$ 780,929	$ 782,177	$ 703,959	$ 708,468
Westfield	$ 20,143,048	$ 21,041,743	$ 21,928,010	$ 21,331,663	$ 18,439,563
Worcester	$ 19,671,052	$ 21,378,512	$ 22,179,006	$ 21,550,298	$ 18,628,557
Latino Education Institute		-	$ 250,000	$ 200,000	$ 200,000
Subtotal	$ 184,988,435	$ 194,877,594	$ 201,812,418	$ 196,002,276	$ 169,555,793
Total GF spending 4-year insts.	$ 644,079,955	$ 681,940,263	$ 665,844,094	$ 637,624,995	$ 528,180,666

Source: Massachusetts State Legislature, Office of Legislative Counsel.
*FY Spending after 9C rescission.
**FY 2003 spending after two rescissions.
***FY 2004 budget (includes tuition retention for UMass & Mass. Art).

Once again, the cuts shown are dramatic. The University of Massachusetts general fund appropriation in FY 2004 constituted less than 74 percent of the level appropriated in FY 2001. General fund allocations for the University of Colorado System in FY 2004 represented less than 75 percent of the appropriation in FY 2002. The Colorado State University System faced similarly draconian cuts over these two years. In Missouri, funding for Linn State Technical College, Central Missouri State, and Southeast Missouri State in FY 2004 was less than 85 percent the general fund appropriation in FY 2001. The cuts in Virginia among some state institutions matched the level of cuts in the University of Massachusetts system. The University of Virginia, William and Mary, Virginia Tech, and Virginia Commonwealth University all saw their state appropriations for FY 2004 reduced below 75 percent of the level they were at in FY 2001. Some of the four-year branch campuses of the University of Wisconsin also saw cuts of this magnitude. University of Wisconsin (UW) Whitewater, saw funding fall below 80 percent of its 2001 level, while the UW Eau Claire, Lacrosse, and Oshkosh campuses fell below 85 percent of their 2001 funding levels. While other four-year institutions in the eight states were spared cuts of this magnitude, their nominal funding levels for FY 2004 hovered around 90 percent of FY 2001 levels in most cases. The cuts across the states were, in general, sweeping and significant for almost all institutions.

Table 7. Missouri

School	FY2000 Expenditures	FY2001 Expenditures	FY2002 Expeditures	FY2003 Expenditures	FY2004 Expenditures
Linn State Technical College	$ 4,680,594	$ 5,345,212	$ 4,227,892	$ 4,390,886	$ 4,300,870
Central MO State University	$ 57,194,340	$ 59,849,214	$ 51,052,139	$ 52,057,676	$ 50,990,454
Southeast MO State University	$ 46,582,089	$ 48,939,445	$ 41,636,732	$ 42,390,847	$ 41,521,803
Southwest MO State University	$ 83,021,879	$ 84,701,773	$ 73,907,358	$ 75,182,099	$ 75,424,476
Lincoln University	$ 16,646,134	$ 17,924,082	$ 16,226,925	$ 16,196,698	$ 15,869,632
Truman State University	$ 41,608,526	$ 43,987,230	$ 38,640,024	$ 39,427,734	$ 38,619,433
Northwest MO State University	$ 28,780,370	$ 31,246,355	$ 26,620,143	$ 27,145,517	$ 28,292,300
MO Southern State University-Joplin	$ 20,349,540	$ 20,754,608	$ 17,665,070	$ 17,988,593	$ 19,762,577
MO Western State College	$ 20,876,979	$ 21,249,586	$ 18,119,376	$ 18,460,744	$ 19,482,162
Harris-Stowe State College	$ 9,442,226	$ 10,280,779	$ 9,558,144	$ 9,488,114	$ 9,293,601
University of Missouri	$ 407,245,720	$ 428,767,008	$ 378,816,342	$ 384,968,925	$ 377,076,764
Total inst. GF support	$ 876,438,166	$ 920,256,547	$ 800,833,013	$ 815,877,952	$ 806,754,975

Source: Missouri Department of Higher Education. (Includes general revenue and lottery funds)

Table 8. Virginia

	FY 2000 General fund	FY 2001 General fund	FY 2002 General fund	FY 2003 General fund	FY 2004 General fund
The College of William and Mary	$ 46,353,273	$ 50,682,144	$ 51,874,348	$ 41,290,324	$ 38,360,884
University of Virginia	$ 154,193,524	$ 162,899,336	$ 166,266,422	$ 127,947,149	$ 117,154,812
Virginia Tech	$ 183,262,125	$ 193,645,887	$ 196,592,437	$ 156,057,520	$ 144,498,474
Virginia Military Institute	$ 14,721,753	$ 15,517,326	$ 15,689,022	$ 13,928,040	$ 12,490,196
Virginia State University	$ 24,169,031	$ 27,955,400	$ 29,081,664	$ 28,504,098	$ 27,637,351
Norfolk State University	$ 38,065,680	$ 43,145,583	$ 43,400,066	$ 42,949,587	$ 42,173,228
Longwood College	$ 19,916,293	$ 21,839,267	$ 22,004,208	$ 19,315,977	$ 18,342,442
Mary Washington College	$ 18,075,562	$ 19,325,707	$ 19,613,421	$ 15,515,927	$ 14,583,069
James Madison University	$ 61,636,127	$ 68,650,192	$ 69,987,826	$ 60,068,634	$ 55,788,014
Radford University	$ 39,810,583	$ 42,561,732	$ 42,870,668	$ 37,415,908	$ 35,668,714
Melchers-Monroe Mem. [1]	$ 513,224	$ 573,738	$ 574,027	$ 454,921	$ 410,925
Old Dominion University	$ 89,562,313	$ 92,461,367	$ 93,439,849	$ 79,933,390	$ 76,427,646
VA Coop. Ext. and Ag Exp St [2]	$ 56,187,265	$ 60,334,719	$ 61,027,452	$ 55,772,175	$ 51,858,612
Virginia Commonwealth University	$ 170,162,645	$ 184,379,518	$ 186,560,862	$ 155,217,909	$ 143,719,705
Richard Bland College [3]	$ 4,547,459	$ 4,983,056	$ 5,065,837	$ 4,646,655	$ 4,443,833
Christopher Newport University	$ 23,207,363	$ 24,597,578	$ 24,812,272	$ 22,124,608	$ 21,049,911
Clinch Valley College [4]	$ 9,560,241	$ 10,652,817	$ 10,820,540	$ 9,910,846	$ 9,506,912
George Mason University	$ 106,837,224	$ 116,908,636	$ 123,895,817	$ 102,255,368	$ 96,772,528
Virginia Community College System	$ 289,332,928	$ 315,616,601	$ 318,378,067	$ 290,842,048	$ 275,980,700
VA Inst. of Marine Sciences [5]	$ 15,980,893	$ 17,528,761	$ 17,898,275	$ 16,325,076	$ 14,839,238
Medical College of Hampton Roads	$ 15,434,025	$ 13,434,025	$ 13,434,025	$ 12,462,528	$ 11,847,875
Roanoke Higher Education Authority	$ 162,500	$ 662,500	$ 662,500	$ 583,332	$ 518,075
Southeastern Univ. Res. Ass'n, Inc.	$ 821,275	$ 821,275	$ 821,275	$ 711,708	$ 642,238
Southwest VA Higher Ed Center	$ 1,192,834	$ 1,640,375	$ 1,640,381	$ 1,565,941	$ 1,327,963
State Council of Higher Education	$ 61,398,804	$ 64,727,489	$ 67,334,095	$ 58,073,128	$ 57,916,484
Totals	$ 1,445,104,944	$ 1,552,420,879	$ 1,580,621,200	$ 1,353,872,797	$ 1,273,959,829

Source: State Council of Higher Education for Virginia;

Note: [1] Mary Washington College; [2] Virginia Tech; [3] William and Mary; [4] UVa's College at Wise; [5] William and Mary.

Some states identified a handful of institutions and spared them more draconian cuts, reducing their appropriation only modestly in nominal terms. Oregon, for instance, spared the campuses at Oregon State, Eastern Oregon, and the Oregon Institute of Technology from sharp cuts in funding. Virginia reduced funding for Virginia State and Norfolk State by 2 to 3 percent between 2001 and 2004, far less than the cuts imposed on other institutions. The University of Wisconsin, Parkside and the University of Wisconsin, Superior, saw cuts (in nominal terms) of around 6 to 7 percent over this three-year period, while the other UW campuses saw cuts in the double digits. Washington modestly increased its appropriation for community colleges while cutting funding at the four-year institutions.

Only Nebraska and Colorado broke significantly from the pattern of these states. Nebraska increased funding by 3 percent at the University of Nebraska, Kearney, and by 8 percent at the University of Nebraska Medical Center. More surprising still, Colorado actually increased nominal funding for three of its state colleges (Adams State, Mesa State, and Western State), even though it cut funding for the other institutions and cut overall higher education subsidies by a significant amount.

Table 9. Oregon

School	FY 2000 General fund	FY 2001 General fund	FY 2002 General fund	FY 2003 General fund	FY 2004 General fund
University of Oregon	$ 66,426,378	$ 71,362,718	$ 69,545,258	$ 70,133,744	$ 61,611,256
Oregon State University	$ 132,135,789	$ 137,989,278	$ 138,344,466	$ 129,414,649	$ 129,488,035
Portland State University	$ 62,200,151	$ 67,143,648	$ 64,906,069	$ 64,118,008	$ 57,150,012
Western Oregon University	$ 15,820,796	$ 17,180,330	$ 17,479,704	$ 16,443,689	$ 14,705,141
Southern Oregon University	$ 18,305,303	$ 18,710,612	$ 18,364,807	$ 16,947,531	$ 14,509,747
Eastern Oregon University	$ 12,808,283	$ 13,539,233	$ 13,985,944	$ 13,081,928	$ 12,461,922
Oregon Institute of Technology	$ 15,152,131	$ 16,357,101	$ 17,071,916	$ 15,712,219	$ 14,929,785
Central Oregon	$ 39,246,142	$ 34,576,785	$ 37,387,540	$ 27,044,073	$ 30,213,943
TOTAL OUS	$ 362,094,973	$ 376,859,705	$ 377,085,705	$ 352,895,841	$ 335,069,841

Source: Oregon University System office.

Table 10. Nebraska

State colleges	2000 actual	2001 actual	2002 actual	2003 actual	2004 actual
CHADRON Total	$ 11,566,901	$ 13,415,364	$ 13,530,777	$ 13,808,611	$ 13,069,441
PERU Total	$ 6,088,010	$ 6,322,201	$ 7,226,062	$ 6,605,657	$ 6,826,761
WAYNE Total	$ 12,837,187	$ 13,704,027	$ 14,972,436	$ 15,722,122	$ 14,211,321
TOTAL state colleges	$ 31,173,472	$ 34,433,126	$ 35,729,275	$ 36,136,390	$ 34,107,523
University of Nebraska	**2000 actual**	**2001 actual**	**2002 actual**	**2003 actual**	**2004 actual**
TOTAL U. Neb. Lincoln	$ 190,818,767	$ 200,337,304	$ 206,592,358	$ 206,940,019	$ 196,101,398
TOTAL U. Neb. Medical Center	$ 86,090,413	$ 91,661,707	$ 96,341,971	$ 101,252,480	$ 98,935,467
TOTAL U. Neb. Kearney	$ 27,959,247	$ 29,283,955	$ 31,627,638	$ 31,879,466	$ 30,154,762
Total U. Neb. Central Administration	$ 17,173,199	$ 17,527,250	$ 17,505,490	$ 19,272,381	$ 16,016,489
TOTAL U. Neb. Omaha	$ 51,855,061	$ 53,629,270	$ 54,923,379	$ 53,298,073	$ 48,711,426
TOTAL U. Nebraska	$ 373,896,687	$ 392,439,486	$ 406,990,836	$ 412,642,419	$ 389,919,542

Source: State of Nebraska Annual Budgetary Report, June 2004.

Table 11. Washington

General fund-state	FY 2000	FY 2001*	FY 2002	FY 2003	FY 2004*
University of Washington	$ 316,575,000	$ 335,811,000	$ 345,477,000	$ 333,762,000	$ 312,047,000
Washington State University	$ 183,312,000	$ 197,708,000	$ 201,270,000	$ 194,178,000	$ 187,044,000
Eastern Washington University	$ 41,668,000	$ 43,970,000	$ 45,592,000	$ 43,906,000	$ 42,021,000
Central Washington University	$ 42,130,000	$ 44,322,000	$ 44,144,000	$ 41,599,000	$ 40,840,000
The Evergreen State College	$ 22,388,000	$ 24,870,000	$ 25,414,000	$ 24,342,000	$ 23,121,000
Western Washington University	$ 53,392,000	$ 57,095,000	$ 59,840,000	$ 57,966,000	$ 54,645,000
TOTAL four-year institutions	$ 659,465,000	$ 703,776,000	$ 721,737,000	$ 695,754,000	$ 659,719,000

Source: Washington State Higher Education Coordinating Board.

Table 12. Wisconsin

GF funding by institution	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
UW-Madison	$ 366,749,233	$ 399,324,792	$ 408,314,049	$ 399,057,361	$ 380,441,492
UW-Milwaukee	$ 116,041,361	$ 127,250,045	$ 132,797,833	$ 137,686,949	$ 126,265,474
TOTAL Mad. & Milw.	**$ 482,790,594**	**$ 526,574,837**	**$ 541,111,882**	**$ 536,744,310**	**$ 506,706,966**
UW-Eau Claire	$ 44,435,853	$ 48,896,024	$ 49,691,628	$ 49,202,568	$ 43,484,598
UW-Green Bay	$ 23,099,596	$ 25,142,475	$ 25,508,782	$ 25,214,667	$ 23,181,287
UW-Lacrosse	$ 37,329,424	$ 41,052,859	$ 41,031,311	$ 40,844,966	$ 35,548,840
UW-Oshkosh	$ 43,588,257	$ 47,480,718	$ 48,270,224	$ 47,275,884	$ 41,478,409
UW-Parkside	$ 22,790,918	$ 24,846,928	$ 25,964,868	$ 25,656,334	$ 23,937,829
UW-Platteville	$ 26,866,094	$ 29,315,093	$ 29,654,932	$ 29,591,174	$ 27,474,636
UW-River Falls	$ 26,532,618	$ 29,132,068	$ 29,806,413	$ 29,263,380	$ 26,161,867
$ UW-Stevens Point	$ 40,042,866	$ 43,734,518	$ 44,061,472	$ 42,879,311	$ 38,560,051
UW -Stout	$ 36,018,136	$ 39,764,123	$ 40,679,598	$ 40,229,347	$ 34,747,271
UW-Superior	$ 15,034,243	$ 16,390,095	$ 17,268,683	$ 16,814,730	$ 15,226,531
UW-Whitewater	$ 36,439,230	$ 40,101,396	$ 40,441,773	$ 39,332,242	$ 34,527,436
TOTAL other UW campuses	**$ 352,177,235**	**$ 385,856,297**	**$ 392,379,684**	**$ 386,304,603**	**$ 344,328,755**
UW Colleges	$ 29,135,415	$ 32,724,296	$ 33,856,487	$ 34,802,291	$ 26,769,419
UW Extension	$ 56,216,582	$ 60,462,262	$ 61,100,595	$ 62,291,694	$ 60,967,729
UW System Admin.	$ 9,641,345	$ 10,329,088	$ 10,036,318	$ 9,878,584	$ 9,738,692
UW Systemwide	$ 31,135,265	$ 18,930,149	$ 28,926,886	$ 50,483,157	$ 54,276,065
TOTAL four yr. higher ed.	**$ 961,096,436**	**$ 1,034,876,929**	**$ 1,067,411,852**	**$ 1,080,504,639**	**$ 1,002,787,626**

Source: University of Wisconsin System Office.

Generalized Observations

Discussions with over 40 officials at the state and campus level across the eight states provided over 30 hours of interview data about the process by which each campus tried to cope with such radical decreases to their state funding. This interview data was reviewed and summarized into discrete strategic responses related to cuts in spending, efforts to expand revenue, and subsequent effects on access. Each of these discrete strategies was then categorized into a set of similar approaches by each school and given an overall descriptive name. For instance, if a school described a strategy to postpone new hires and another commented that it froze all faculty searches for several years, these were classified as hiring freeze strategies to reduce institutional spending. When all strategic responses by the institutions were recorded and categorized for all the institutions, they were sorted to identify any emergent patterns. This process of classifying rich, qualitative information suggested a number of generalized observations about the budget-cutting process in higher education among the eight study states. The tabulations are recorded and represented in Tables 13, 15, 16, and 17.[23] The tables provide a visual representation of the strategies and actions of various institutions. Most strikingly, the lack of a pattern in the tables suggests that strategies were not related to the state's structures for organizing their systems of higher education. The general strategies adopted in the face of budget constriction are identified and explained in greater detail below.

When It Rains, It Pours

One easy and painless strategy when state resources began to deteriorate, for those with the ability, was to initially tap institutional reserves as a source of revenue. However, success with this strategy required both the foresight among institutional planners to set aside a fraction of resources each year from all revenue sources into such a fund and the authority to create and tap such resources. In general, institutions faced several hurdles in establishing rainy-day or reserve funds. First, they had to be legally allowed to set aside a reserve fund with monies that could possibly include tax dollars. Second, they had to have the political clearance to set up and tap contingency funds: some legislators are strongly opposed to seeing excess tax and tuition dollars being gathered and set aside over what is immediately needed. They get particularly upset when they see both state funding and in-state tuition increase in the same year that reserve funds expand. And finally, the institution had to be in a financial position to accumulate reserves and possess the organizational leadership to set this up.

Pressures against reserve funds come from within and without the university. Legislators, as well as journalists and taxpayers, can oppose such strategies by asking why taxes are so high when schools do not urgently need every dime allocated to them. There are also likely to be pressures from within the institution from faculty and staff who may want to tap all resources immediately to award larger raises or increase spending on institutional improvements. Only those institutions which could successfully navigate these multiple pressures were able to have reserve funds available to them when the fiscal contraction began.

About one-third of the institutions contacted expressed that they tapped rainy-day funds as part of their institutional adaptation strategy towards declining state revenues. Colorado State University (CSU), for instance, accumulated a contingency fund over a few years prior to 2002, when the first signs of fiscal constraint appeared in Colorado. When the state legislature met in an emergency session to rescind already appropriated funds in fiscal year 2003, the initial cut to CSU's budget was covered by these contingent funds. The University of Colorado at Boulder was also able to tap a reserve fund in FY 2003 and only had to make budgetary restructuring decisions in the following fiscal year. The University of Northern Colorado had been setting aside a contingency fund of about 2 percent of revenues for a number of years; when fiscal problems at the state level became evident, they took money back from departments so that they would have a larger amount to roll forward in the year when larger cuts loomed.

This practice extended to institutions in other states, such as Massachusetts, Missouri, Oregon, Virginia, and Washington. But, as can be seen in Table 13, the use of reserve funds was not widespread across each state. Northwest Missouri State University, for instance, had a significant amount of money in reserves, and officials were able to transfer these dollars in response to a budget cut of $1.2 million from the state. Later cuts were larger than what reserves could cover, but these contingency funds reduced the amount the school had to otherwise cut. At the University of Massachusetts at Lowell, no spending cuts were necessary in the first year of fiscal retrenchment since the school drew down from its quasi-endowment and unrestricted funds. A quasi-endowment was used in a similar way to fill holes at Washington's Evergreen State College and Western Washington University, at the University of Virginia, and at Western Oregon University.

Table 13. Incidence of revenue-oriented institutional strategies

School*	State	Tap reserve funds	Raise tuition	Revenue diversification cross-subsidization strategies
Colorado State University	CO	X	X	X
Fort Lewis College	CO		X	
Mesa State College	CO		X	
Univ. of Colorado Boulder	CO	X	X	X
Univ. of Northern Colorado	CO	X		
Framingham State College	MA		X	X
UMass Amherst	MA		X	
UMass Boston	MA		X	X
UMass Lowell	MA	X	X	X
UMass System office	MA		X	X
Northwest Missouri State Univ.	MO	X	X	
U. Missouri System	MO		X	
Central Missouri State University	MO	X	X	X
Lincoln University of Missouri	MO	X	X	
U. Nebraska Lincoln	NE		X	X
U. Nebraska System	NE		X	X
Chadron State College	NE		X	
U. Nebraska Kearney	NE		X	X
George Mason Univ.	VA		X	X
Univ. of Virginia	VA	X	X	
William and Mary	VA		X	X
Virginia Commonwealth University	VA		X	
Evergreen State College	WA	X	X	X
Univ. of Washington Seattle	WA		X	
Washington State University	WA		X	
Western Washington University	WA	X	X	
University of Oregon	**OR**		X	X
University of Oregon System	**OR**		X	
Western Oregon University	**OR**	X	X	
Oregon State University	**OR**	X	X	X
Univ. Wisconsin, Parkside	**WI**	X	X	
Univ. Wisconsin, River Falls	**WI**		X	X
Univ. Wisconsin System	**WI**		X	
Univ. Wisconsin, Madison	**WI**	X	X	X
Univ. Wisconsin, LaCrosse	**WI**	X	X	

Sources: Phone conversations with officials at the institution.

*Note: States with central governing boards indicated in bold; states operating with coordinating boards that had budget review and recommendation authority only are indicated in italics. Those states with coordinating boards that consolidate or aggregate the state higher education budget are indicated in normal font.

Cost and Revenue Shifting

Tuition and Fees

Higher education economist Estelle James has commented that universities and colleges are vehicles for cross subsidization.[24] Nowhere was this clearer than in the strategies taken to respond to state budget cuts and, in particular, in the reliance on tuition and fee revenues to offset lost monies. Table 13 demonstrates the pervasiveness of this approach of turning to tuition revenues to offset losses from the state. Tuition and fees, as many parents know, go up year after year, but it was the scale of the increases in public tuition during these years which was important. Respondents from every state and almost every single institution commented that not only had they raised tuition and fees over the last five years, but they had raised them more than they otherwise would have had to as a result of the state cuts to their funding. The increases to in-state tuition could be staggering. As Table 14 shows, the increase in tuition among the schools in the study ranged from 3 percent to almost 100 percent. Tuition and fees increased the most in Massachusetts, the state that saw the largest cuts in state aid.[25] They increased the least in Colorado, the state which ranked second in terms of cuts in state funding, indicating the extent to which these institutions were under significant financial strain.[26]

Table 14. Tuition levels by institution, 2000-2004

Colorado institution name*	2000	2001	2002	2003	2004	2005	% Increase
Adams State College	$ 2,092	$ 2,186	$ 2,278	$ 2,384	$ 2,482	$ 2,602	24.38%
University Of Colorado At Denver	$ 2,353	$ 2,723	$ 2,934	$ 3,152	$ 3,478	$ 4,093	73.95%
Univ. Of Colorado At Colorado Springs	$ 3,002	$ 3,154	$ 3,376	$ 3,420	$ 3,845	$ 4,502	49.97%
University Of Colorado At Boulder	$ 3,118	$ 3,188	$ 3,357	$ 3,566	$ 4,020	$ 4,341	39.22%
Colorado School Of Mines	$ 5,211	$ 5,412	$ 5,621	$ 5,946	$ 6,433	$ 7,082	35.90%
Colorado State University	$ 3,054	$ 3,133	$ 3,252	$ 3,435	$ 3,745	$ 3,790	24.10%
Fort Lewis College	$ 2,219	$ 2,331	$ 2,520	$ 2,632	$ 2,789	$ 2,270	2.30%
Mesa State College	$ 2,122	$ 2,185	$ 2,288	$ 2,373	$ 2,515	$ 2,724	28.37%
Metropolitan State College Of Denver	$ 2,857	$ 3,002	$ 3,025	$ 3,315	$ 3,640	$ 3,768	31.89%
University Of Northern Colorado	$ 2,754	$ 2,783	$ 2,842	$ 2,984	$ 3,242	$ 2,850	3.49%
Colorado State University-Pueblo	$ 2,284	- -	$ 2,450	$ 2,620	$ 2,899	$ 3,190	39.67%
Western State College Of Colorado	$ 2,209	$ 2,270	$ 2,403	$ 2,479	$ 2,564	$ 2,763	25.08%
Colorado total	**$ 2,772.92**					**$ 3,664.58**	**31.53%**
Massachusetts institution name	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**% Increase**
Bridgewater State College	$ 3,029	$ 2,954	$ 2,775	$ 3,735	$ 4,390	$ 5,248	73.26%
Fitchburg State College	$ 3,018	$ 3,018	$ 2,988	$ 3,688	$ 4,186	$ 4,588	52.02%
Framingham State College	$ 2,976	$ 2,916	$ 2,770	$ 3,334	$ 4,324	$ 4,654	56.38%
University Of Massachusetts-Lowell	$ 4,255	$ 4,255	$ 4,255	$ 5,213	$ 7,338	$ 7,891	85.45%
University Of Massachusetts-Amherst	$ 5,212	$ 5,212	$ 5,880	$ 6,660	$ 8,410	$ 9,186	76.25%
University Of Massachusetts-Boston	$ 4,227	$ 4,227	$ 4,227	$ 5,227	$ 6,227	$ 8,034	90.06%
Massachusetts College Of Art	$ 3,808	$ 3,878	$ 4,128	$ 4,952	$ 5,768	$ 6,400	68.07%
Massachusetts Maritime Academy	$ 2,923	$ 2,873	$ 2,913	$ 4,063	$ 4,663	$ 4,963	69.79%
Massachusetts College Of Liberal Arts	$ 3,432	$ 3,432	$ 3,597	$ 4,297	$ 5,397	$ 5,417	57.84%
Salem State College	$ 2,904	$ 3,098	$ 3,038	$ 3,937	$ 4,138	$ 5,454	87.81%
Univ. Of Massachusetts-Dartmouth	$ 4,129	$ 4,129	$ 4,129	$ 5,129	$ 6,129	$ 7,802	88.96%
Westfield State College	$ 2,974	$ 2,916	$ 2,956	$ 3,755	$ 4,557	$ 4,557	53.23%
Worcester State College	$ 2,458	$ 2,508	$ 2,573	$ 2,962	$ 4,123	$ 4,579	86.29%
Massachusetts total	**$ 3,488.08**					**$ 6,059.46**	**72.72%**

Missouri institution name	2000	2001	2002	2003	2004	2005	% Increase
Central Missouri State University	$ 2,970	$ 3,210	$ 3,510	$ 3,240	$ 3,984	$ 5,340	79.80%
Harris-Stowe State College	$ 2,064	$ 2,160	-	$ 3,040	$ 3,280	$ 3,436	66.47%
Lincoln University	$ 2,477	$ 2,717	$ 2,966	$ 3,326	$ 3,783	$ 4,065	64.11%
Missouri Southern State University	$ 2,265	$ 2,370	$ 2,700	$ 3,720	$ 3,810	$ 3,810	68.21%
Missouri Western State College	$ 2,774	$ 3,026	$ 3,224	$ 4,064	$ 4,464	$ 4,778	72.24%
University Of Missouri-Columbia	$ 4,299	$ 4,436	$ 4,586	$ 5,208	$ 6,150	$ 6,622	54.04%
University Of Missouri-Kansas City	$ 4,247	$ 4,462	$ 4,613	$ 5,238	$ 6,317	$ 6,752	58.98%
University Of Missouri-Rolla	$ 4,678	$ 4,818	$ 4,988	$ 5,646	$ 6,782	$ 7,238	54.72%
University Of Missouri-St. Louis	$ 4,514	$ 4,650	$ 4,816	$ 5,814	$ 6,866	$ 7,378	63.45%
Truman State University	$ 3,544	$ 3,680	$ 3,800	$ 4,300	$ 4,756	$ 5,482	54.68%
Northwest Missouri State University	$ 3,068	$ 3,330	$ 3,600	$ 4,410	$ 4,845	$ 5,325	73.57%
Southeast Missouri State University	$ 3,010	$ 3,390	$ 3,525	$ 4,035	$ 4,575	$ 4,875	61.96%
Southwest Missouri State University	$ 3,400	$ 3,564	$ 3,748	$ 4,274	$ 4,636	$ 5,128	50.82%
Missouri total	**$ 3,331.54**					**$ 5,402.23**	**63.31%**

Nebraska institution name	2000	2001	2002	2003	2004	2005	% Increase
Chadron State College	$ 2,263	$ 2,361	$ 2,008	$ 2,356	$ 2,624	$ 2,828	24.97%
University Of Nebraska At Kearney	$ 2,892	$ 3,032	$ 3,204	$ 3,606	$ 4,000	$ 4,618	59.68%
University Of Nebraska At Omaha	$ 2,815	$ 3,020	$ 2,638	$ 3,552	$ 4,082	$ 4,533	61.03%
University Of Nebraska At Lincoln	$ 3,278	$ 3,522	$ 3,790	$ 4,125	$ 4,771	$ 5,268	60.71%
Peru State College	$ 2,251	$ 2,379	$ 2,526	$ 2,908	$ 3,580	$ 3,708	64.73%
Wayne State College	$ 2,265	$ 2,513	$ 2,735	$ 3,014	$ 3,432	$ 3,672	62.12%
Nebraska total	***$ 2,627.33***					***$ 4,104.50***	***55.54%***

Oregon institution name	2000	2001	2002	2003	2004	2005	% Increase
Eastern Oregon University	$ 3,303	-	$ 3,621	$ 3,678	$ 4,839	$ 5,508	66.76%
Oregon Institute Of Technology	$ 3,378	$ 3,459	$ 3,672	$ 3,843	$ 4,443	$ 4,974	47.25%
Oregon State University	$ 3,561	$ 3,654	$ 3,987	$ 4,014	$ 4,869	$ 5,319	49.37%
University Of Oregon	$ 3,810	$ 3,819	$ 4,071	$ 4,230	$ 4,914	$ 5,490	44.09%
Portland State University	$ 3,468	$ 3,525	$ 3,720	$ 3,885	$ 4,278	$ 4,761	37.28%
Southern Oregon University	$ 3,234	$ 3,369	$ 3,555	$ 3,687	$ 4,153	$ 4,697	45.24%
Western Oregon University	$ 3,276	$ 3,342	$ 3,660	$ 3,720	$ 4,305	$ 4,332	32.23%
Oregon total	**$ 3,432.86**					**$ 5,011.57**	**46.03%**

Virginia institution name	2000	2001	2002	2003	2004	2005	% Increase
College Of William And Mary	$ 4,693	$ 4,770	$ 4,863	$ 5,888	$ 6,430	$ 7,096	51.20%
Christopher Newport University	$ 3,048	$ 3,096	$ 3,192	$ 4,072	$ 4,600	$ 5,314	74.34%
George Mason University	$ 3,756	$ 3,768	$ 3,792	$ 4,416	$ 5,122	$ 5,448	45.05%
James Madison University	$ 3,926	$ 4,000	$ 4,094	$ 4,458	$ 5,058	$ 5,476	39.48%
Longwood University	$ 3,924	$ 4,003	$ 4,226	$ 4,661	$ 5,877	$ 6,440	64.12%
University Of Mary Washington	$ 3,204	$ 3,246	$ 3,340	$ 3,934	$ 4,688	$ 5,128	60.05%
Norfolk State University	$ 3,014	$ 2,856	$ 2,916	$ 3,295	$ 3,840	$ 4,925	63.40%
Old Dominion University	$ 3,064	$ 3,160	$ 3,248	$ 3,442	$ 3,974	$ 4,248	38.64%
Radford University	$ 2,887	$ 2,950	$ 3,069	$ 3,344	$ 4,140	$ 4,762	64.95%
Uva's College At Wise	$ 3,192	$ 3,330	$ 3,470	$ 3,844	$ 4,530	$ 4,782	49.81%
Virginia Polytechnic Inst. & State Univ	$ 3,620	$ 3,640	$ 3,664	$ 4,736	$ 5,095	$ 5,838	61.27%
Virginia Commonwealth University	$ 3,587	$ 3,730	$ 3,740	$ 3,930	$ 4,700	$ 5,260	46.64%
University Of Virginia-Main Campus	$ 4,130	$ 4,160	$ 4,421	$ 5,165	$ 6,149	$ 6,790	64.41%
Virginia Military Institute	$ 6,214	-	$ 6,294	$ 6,617	$ 7,584	$ 8,054	29.61%
Virginia State University	$ 3,086	-	$ 3,312	$ 3,554	$ 4,350	$ 4,544	47.25%
Virginia total	***$ 3,689.67***					***$ 5,607.00***	***53.35%***

Washington institution name	2000	2001	2002	2003	2004	2005	% Increase
Central Washington University	$ 3,063	$ 3,162	$ 3,348	$ 3,792	$ 4,023	$ 4,278	39.67%
Eastern Washington University	$ 2,724	$ 2,790	$ 3,150	$ 3,357	$ 3,812	$ 3,822	40.31%
Evergreen State College	$ 2,757	$ 3,001	$ 3,024	$ 3,441	$ 3,651	$ 3,900	41.46%
Washington State University	$ 3,530	$ 3,658	$ 3,898	$ 4,894	$ 5,280	$ 5,628	59.43%
University Of Washington	$ 3,638	$ 3,761	$ 3,983	$ 4,636	$ 4,968	$ 5,286	45.30%
Western Washington University	$ 2,997	$ 3,102	$ 3,288	$ 3,702	$ 4,182	$ 4,452	48.55%
Washington total	***$ 3,118.17***					***$ 4,561.00***	***45.79%***

Wisconsin institution name	2000	2001	2002	2003	2004	2005	% Increase
University Of Wisconsin-Whitewater	$ 3,016	$ 3,146	$ 3,367	$ 3,633	$ 4,279	$ 4,816	59.68%
University Of Wisconsin-Eau Claire	$ 3,086	$ 3,249	$ 3,469	$ 3,720	$ 4,305	$ 4,858	57.42%
University Of Wisconsin-Green Bay	$ 3,147	$ 3,306	$ 3,648	$ 4,023	$ 4,654	$ 5,154	63.78%
University Of Wisconsin-La Crosse	$ 3,113	$ 3,314	$ 3,530	$ 3,804	$ 4,358	$ 4,897	57.31%
University Of Wisconsin-Oshkosh	$ 2,998	$ 3,021	$ 3,225	$ 3,460	$ 4,040	$ 4,612	53.84%
University Of Wisconsin-Parkside	$ 3,042	$ 3,090	$ 3,292	$ 3,532	$ 4,072	$ 4,648	52.79%
University Of Wisconsin-Stout	$ 3,152	$ 3,286	$ 3,502	$ 3,758	$ 5,679	$ 6,263	98.70%
University Of Wisconsin-Superior	$ 2,971	$ 3,001	$ 3,230	$ 3,461	$ 4,270	$ 4,802	61.63%
University Of Wisconsin-Madison	$ 3,735	$ 3,788	$ 4,086	$ 4,423	$ 5,136	$ 5,862	56.95%
University Of Wisconsin-Milwaukee	$ 3,741	$ 3,761	$ 4,054	$ 4,353	$ 5,104	$ 5,831	55.87%
University Of Wisconsin-Platteville	$ 3,008	$ 3,286	$ 3,483	$ 3,720	$ 4,251	$ 4,808	59.84%
University Of Wisconsin-River Falls	$ 2,976	$ 3,133	$ 3,380	$ 3,670	$ 4,225	$ 4,748	59.54%
University Of Wisconsin-Stevens Point	$ 3,047	$ 3,163	$ 3,375	$ 3,631	$ 4,148	$ 4,711	54.61%
Wisconsin total	**$ 3,156.31**					**$ 5,077.69**	**60.92%**

Source: National Center for Education Statistics, IPED's data, http://nces.ed.gov/ipeds/ accessed April 28, 2005.

* Note: States with centralized governing boards highlighted with shading; states with coordinating boards with budgetary review authority indicated in italics; and states with coordinating boards that submit consolidated higher education budgets to the governor indicated with normal font.

To one extent, the states and institutions were merely doing what they could to offset reductions in state aid. In some states, the politicians were explicit about the cost shifting, signaling their expectations that the institutions should raise tuition and fees. In Washington and Massachusetts this seemed to be the case. School officials from other states who discussed this time period indicated that it was understood at the state capital that budget cuts would be offset by tuition increases. One respondent stated that this reflected an emerging attitude among lawmakers in her state that higher education is a private good and should be funded accordingly. In a handful of other states, however, politicians stood as a barrier against tuition increases. In Virginia, tuition increases were constrained until 2002, when the new governor allowed the schools to make up for losses in state aid by lifting an 8 year cap on tuition. In Colorado, the governor repeatedly vetoed state budget line items and budget footnotes that allowed schools to raise tuition when he felt the levels were unreasonable. And the constitutional provisions limiting public sector spending growth, known as TABOR (the Taxpayer's Bill of Rights), also constrained how much lost public subsidy could be recaptured through tuition increases.

Revenue Diversification and Cross Subsidy

Another strategy which was favored by institutions to maintain operational integrity of the core functions in a time of lean state resources was to shift cost items among different budget categories. They also sought to increase the levels of cross subsidization across areas that drew different sources of revenue. Some academic programs that had relied on state financial support were shifted onto a fee-based finance system. For instance, a school might move a continuing education program into a fully fee-supported account; the administration would then raise the tuition prices for the shifted program to fully finance it and transfer the savings on the state subsidy side back into regular undergraduate education. Another tactic was to ask auxiliary programs that did not rely on state funding to bear an equal share of the budget cuts, thereby reducing the amount of cuts in state aid necessary among the state-funded programs. Finally, some institutions sought to transfer budgetary items from their operating budget onto the capital side. They might use capital funds to perform maintenance and infrastructure repairs rather than draw resources from operating activities.

The University of Nebraska took the first approach, making a number of programs self supporting that had been state supported. The University of Massachusetts System adopted a similar course. At the University of Colorado's Boulder campus, the engineering department transferred two programs into the continuing education budget, which was financed as an auxiliary program. George Mason University asked their auxiliary programs to take budget cuts and transfer the savings back into the education and general budget (E&G) so that it would have more.

Other institutions made efforts to enhance their revenue stream. Framingham State College in Massachusetts became more "entrepreneurial in their course offerings" by offering courses in new locations and offering new online courses. University of Massachusetts Boston did the same. University of Massachusetts Lowell created profit centers from online education and continuing education and tried to increase the revenues from intellectual property and fundraising activities. In Washington, Evergreen State also sought to diversify its revenue stream. Some institutions moved personnel who had been classified under the E&G line into budget lines that were supported from research funds, grants, and indirect cost recovery. Colorado State University took this tact. The College of William and Mary in Virginia allowed divisions to supplement money they had lost as a result of state budget cuts with indirect cost recovery funds and equipment trust money.

Framingham State also rolled its debt over since obtaining authority for borrowing proves more difficult among the state colleges than the five University of Massachusetts campuses. Hence, they rolled over and refinanced their debt obligation rather than retiring it, taking advantage, as did many families during this time, of the lower interest rates available to them. They also moved items from their operating budget onto the capital budget.

Revenue diversification strategies invite further discussion among state policymakers about where public subsidies within a public institution might be applied. For instance, requiring that expenditures of subsidy dollars be limited to certain areas defined to be of public benefit could encourage institutions to think about further revenue diversification strategies that would reduce the public sector's financial obligations without threatening the total revenue pool. To date, schools only appear to consider revenue diversification when they observe constraints on their public dollars.

Books and Bricks Won't Squeal

When it came time to make spending cuts, a number of common principles emerged among the schools consulted for this projected. The first operating principle can be called "The books and bricks won't squeal (when you cut their funding)." As one respondent put it, "We use the infrastructure as a buffer in hard times." At the University of Northern Colorado, the institution reduced outlays from the operating budget for capital-related upkeep, cutting what it spent on the physical plant and reducing the size of that unit by shrinking the number of staff. Framingham State College did the same, as well as reducing outlays for equipment purchases. As a result, the initial cuts made to the institution's funding were not felt elsewhere in the university. William and Mary and the University of Virginia both deferred spending on the maintenance budget. In some cases this involved cutting the grass less frequently or reducing the number of flowers planted on campus. In others, it involved postponing additional acquisitions for the library or eliminating less-frequently-used scholarly journal subscriptions. The University of Virginia, as one example, cut back on library purchases and even planned to close the library an hour earlier each night, but students objected and they reversed their decision.

Table 15. Institutional incidence of overall budget cutting approaches

School*	State	Centralized spending controls and/or cutting decisions	Across-the-board cuts	Target admin. over the academic core	Admin. program reorg.	Academic program reorg.	Strategic cuts through backfill
Colorado State University	CO				X		
Fort Lewis College	CO	X	X	X			
Mesa State College	CO	X			X	X	
Univ. of Colorado Boulder	CO			X	X		
Univ. of Northern Colorado	CO				X		
Framingham State College	MA				X	X	
UMass Amherst	MA		X	X	X		X
UMass Boston	MA			X	X		
UMass Lowell	MA	X		X			
UMass System office	MA		X				X
Northwest Missouri State Univ.	MO						
U. Missouri System	MO	X		X	X		
Central Missouri State University	MO	X	X			X	
Lincoln University of Missouri	MO	X	X	X	X	X	
U. Nebraska Lincoln	NE	X	NO	X	X	X	
U. Nebraska System	NE	X	NO		X		
Chadron State College	NE		NO	X	X	X	
U. Nebraska Kearney	NE	X		X			
George Mason Univ.	VA			X	X		
Univ. of Virginia	VA			X	X		
William and Mary	VA	X	NO	X			
Virginia Commonwealth University	VA	X	X	X	X	X	X
Evergreen State College	WA		X	X			
Univ. of Washington Seattle	WA		X			X	
Washington State University	WA	X		X			
Western Washington University	WA	X					
University of Oregon campus	**OR**			X			
University of Oregon System	**OR**	X	X	X			
Western Oregon University	**OR**	X		X	X		
Oregon State University	**OR**	X		X		X	
Univ. Wisconsin, Parkside	**WI**	X	NO	X		X	
Univ. Wisconsin, River Falls	**WI**	X	X	X	X		
Univ. Wisconsin System	**WI**	X			X		
Univ. Wisconsin, Madison	**WI**		NO	X			
Univ. Wisconsin, LaCrosse	**WI**	X			X		

Sources: Phone conversations with officials at the institution

* Note: States with central governing boards indicated in bold; states operating with coordinating boards that had budget review and recommendation authority only are indicated in italics. Those states with coordinating board that consolidate or aggregate the state higher education budget are indicated in normal font.

But such efforts, while less painful and often less noticed, are not without their costs. Officials at the University of Massachusetts Amherst campus confessed that their budget cutting in library acquisitions set back their efforts to become a top 10 flagship public institution by about 10 years. In many cases, infrastructure spending reductions can involve canceling restoration projects on old buildings and deferring repair of structural deficiencies in campus buildings. A number of the schools have employed this strategy over the years, but periods in which state funding returns are rarely long enough or adequately funded enough that institutions can catch up on all the work they have deferred. As a result, many institutions have emerged from the period with crumbling facilities and a sense that the buildings that surround them are, at best, not adequate to their needs and, at worst, a threat to public safety. On one Massachusetts campus, administrators recently walked state officials underneath the central administration building and through the parking garage to expose the serious cracks and falling debris from the foundation to underscore the gravity of the situation.

Often, decisions related to delaying capital spending and projects are taken at the campus level. But in some cases they can occur at the state level, as well. In Colorado and other states, for instance, the state simply did not fund any capital projects during the period of budgetary retrenchment. In Missouri, the state reduced funding for the Missouri Bibliographic Information User System (MOBIUS), an electronic infrastructure project linking all of the university libraries in the state, by over 75 percent.

Share the Pain

A second common principle for reducing institutional spending involves sharing the pain of such reductions across the board. As discussed earlier, schools have a number of choices in how they take cuts. Traditional business principles call for organizational restructuring in such cases, strengthening what the organization does best and reducing emphasis on areas where it is less successful.[27] But as is often the case, business principles may not translate well to higher education. In academia, a different approach emerges which involves reductions across the board and institution-wide policies to limit discretionary spending. If the state cuts funding by a certain percentage, the central administration might reduce the budget allocation to each department by an equal amount rather than targeting cuts in the allocation by unit. As will be seen, across-the-board cuts were favored by a wide margin over targeted cuts.

In some cases, such limitations and restrictions emerge from central sources of authority. But in others, a common response across the institutions emerged as a result of a more decentralized decision process in which each unit decided how it would take reductions on its own. Yet in both cases, the strategies adopted were typically the same. Essentially, the campus asked each unit to adopt the same spending limitation policy to save money without regard to unit needs or departmental standing on the campus. All divisions then followed the same overall policies and restrictions over the time period.

For instance, a common strategy was to institute a freeze on discretionary spending by campus units. In some cases, particularly among the smaller institutions, such as the state colleges, this might be done through a decree out of the central administration. At Mesa State College in Colorado, any expenditure beyond $500 had to be approved by the central office of finance and administration. The University of Missouri System placed a moratorium on certain expenditures and limited travel. In some states, moratoriums on travel or other kinds of discretionary spending came from the governor and/or legislature, who imposed such rules on all state agencies, including the state institutions of higher education. In states such as Oregon, Wisconsin, Virginia, and Missouri state rules or instructions on how to take cuts restricted institutions' abilities to spend money on certain budget items. Restrictions on faculty travel were often loose and could be reversed if a faculty member needed to go to a conference or conduct other university business. On some campuses, the institution of new technologies, such as the switch to PeopleSoft programs for budgeting, while costly and painful at first, allowed some institutions to realize significant purchasing savings.

Other expenditure savings were realized through hiring freezes or what some termed "vacancy savings." Rather than fill unoccupied positions, schools left them open and saved on the budgeted salary for that line. What this meant was that many public institutions were not "present in the academic hiring cycle" for several years. Schools either cancelled faculty searches when the cuts came down or, in anticipation of impending cuts, postponed searches and held positions vacant. In some instances, vacant slots remained opened for several years. Schools either made do with the faculty they had or they hired adjuncts to teach the necessary classes. Again, in some cases, this resulted from state policy, as in the case of Colorado. In other cases, institutions adopted such policies on their own. As Table 16 shows, hiring freezes were a widespread policy across the schools consulted in this study and were often adopted across the institution, regardless of departmental needs or staffing requirements. When merged with other policies such as early retirement programs (discussed below), this could mean that departments could find themselves under severe stress, since vacancies were not the result of a strategic decision process.

Yet another common approach to reducing spending in public higher education was the salary freeze. This could result from state policies and decisions regarding all state related employees, or it could be a decision of the institution. But public institutional faculty at many of the institutions consulted for this study went several years without pay raises or experienced only modest increases in compensation. In Oregon and Virginia, salaries were frozen for several years in a row through a governor's directive or through state guidance in budget legislation. In Missouri, some institutions reduced their contribution to the state pension fund from 11.51 percent to 8.81 percent. In Massachusetts, where faculties are unionized, the state took two approaches. When union contracts expired, the state simply left them open and faculty worked without a contract, remaining under the provisions of the previous contract. The state also placed a hold on collective bargaining agreements it had signed before the severity of the budget problems had fully emerged and did not fund the increases called for in the contracts. The state is now trying to back date pay-raises to those faculty by increasing compensation in upcoming years. In some cases the freeze on salaries went across the board, but in others it fell mostly on classified staff, who were subject to state decisions rather than institutional ones.

Table 16. Institutional incidence of particular budget cutting policies

School	State	Freeze discret. spending	Use infra-structure as buffer	Hiring freeze	Salary freeze	Early retirement incentives	Eliminate open lines/ vacancy savings	Explicitly no academic layoffs
Colorado State University	CO			X	X	NO	X	
Fort Lewis College	CO			X			X	
Mesa State College	CO			X	X		X	
Univ. of Colorado Boulder	CO				X	X		X
Univ. of Northern Colorado	CO		X	X	X		X	X
Framingham State College	MA	X	X		X	X	X	
UMass Amherst	MA	X				X	X	X
UMass Boston	MA				X	X		X
UMass Lowell	MA	X		X		X		X
UMass System office	MA	X			X	X		
Northwest Missouri State Univ.	MO		X	X	X			
U. Missouri System	MO	X			X	X		X
Central Missouri State University	MO	X		X	X			
Lincoln University of Missouri	MO	X		X	X			X
U. Nebraska Lincoln	NE		X			X		
U. Nebraska System	NE			X		NO	X	
Chadron State College	NE			X		X	X	
U. Nebraska Kearney	NE							
George Mason Univ.	VA	X		X	X			X
Univ. of Virginia	VA	X	X	X				X
William and Mary	VA	X	X	X	X			
Virginia Comm. Univ.	VA			X	X	X	X	
Evergreen State College	WA		X					
Univ. of Washington Seattle	WA				X			X
Washington State University	WA				X			X
Western Washington University	WA	X		X	X			X
University of Oregon	**OR**	X		X	X			X
University of Oregon System	**OR**	X			X		X	
Western Oregon University	**OR**	X			X			X
Oregon State University	**OR**	X		X	X			
Univ. Wisconsin, Parkside	**WI**			X	X		X	X
Univ. Wisconsin, River Falls	**WI**	X		X			X	X
Univ. Wisconsin System [1]	**WI**							
Univ. Wisconsin, Madison [2]	**WI**							
Univ. Wisconsin, LaCrosse	**WI**	X		X	X			

Sources: Phone conversations with officials at the institution.

*Note: States with central governing boards indicated in bold; states operating with coordinating boards that had budget review and recommendation authority only are indicated in italics. Those states with coordinating board that consolidate or aggregate the state higher education budget are indicated in normal font.

[1] The implementation of budget cuts within the University of Wisconsin System was a decentralized process and each campus decided on appropriate policies.

[2] Each of the policies mentioned in this table were implemented at one school or another on the Madison campus, however, because of the institutions highly decentralized budget cutting process at the time, none of them were implemented across the board by the administration.

Some schools had the chance to self-fund raises even if the state did not authorize them. Often, schools crafted such increases with an eye towards institutional maintenance by rewarding their best faculty at levels above those given to other faculty. Colorado State University, for instance, found money in their reserve funds for a 2 percent raise in the base and a 2 percent additional raise for the top 40 percent of performers. Among Washington state institutions, one-year retention bonuses were offered to some faculty in lieu of a pay raise in their base salary. But the more common response was an across-the-board freeze and/ or the across the board, modest raise.

Soften the Hard Choices

A third common principle observed in academic budget retrenchment consists of minimizing the human costs of budget cutbacks to the furthest extent possible. It is hard to overemphasize how often this was heard in interviews about implementing budget cutbacks on campus. Perhaps this is due to the collegiality inherent in academic governance. It may be simply the result of the very different ethic about work and organization found among people, faculty, staff, and administrators in academia. A respondent from Washington, for instance, reported that there was "a culture of trying to protect employees" which minimized the number of layoffs. Or it might be that such institutions are patently and structurally incapable of making decisions which might elicit strong personal objections from one quarter of the institution or another.

Rather than seek to reorganize certain departments and reduce emphases in some educational areas on the basis of strategic planning, schools more often operate with a different set of priorities. Typically, when staffing reductions are necessary they take these in a number of predictable ways.

1. They seek to eliminate open positions rather than filled positions.
2. They prefer to lay off staff and administrative or institutional support personnel before they lay off faculty.
3. They seek to adopt voluntary separation programs to avoid having to implement layoffs.

But in general the widespread principle is to avoid laying off individuals to the greatest extent possible.

The elimination of open faculty and staff lines was a preferred strategy in Colorado, Massachusetts, Missouri, Nebraska, Virginia, and Wisconsin. Colorado State University eliminated 45 faculty lines as permanent reductions. These were open slots. In the case of staff, they eliminated 160 positions. Most of these were vacant but a few were not. A significant number of the schools reported that despite strenuous efforts, they were unable to avoid a handful of staff layoffs, but the subsequent (very small number of) layoffs were minimized in many cases with reassignments.

As can be seen in Table 16, a significant proportion of institutions reported that they had managed to avoid laying off a single tenure-track faculty member. As one respondent from Colorado indicated, the institution sought to "minimize the impact on existing employees." In Massachusetts one respondent reported "our whole goal was no layoffs to faculty. Only teaching departments were put aside from a comprehensive review of spending." The reductions in the number of open lines could be quite striking. One institution used a rule that any position left open for two years would be cut. But at other institutions the cuts were made where the institution could find them – that is, wherever there was an open slot.

How those slots became open could vary. In the typical case, the position became vacant through organizational attrition. But some states and some institutions instituted early retirement or separation incentive programs to open slots. Massachusetts went through two early retirement plans at the state level and these had profound impacts on some campuses. As many as 300 faculty left the University of Massachusetts System in the two years of the program. At the University of Massachusetts Boston campus, a large cohort of faculty had joined the institution right around the time of its founding in the 1960s, and so they were ready to depart through the incentive program. The school may have lost about 100 faculty members because of this. The same was true at some departments on the flagship University of Massachusetts Amherst campus, where the administration calculated that perhaps 179 tenured senior faculty members departed through the incentive program, leaving some departments, such as the math department, decimated in their numbers.[28] The program added additional years to a faculty member's existing years of service, hastening the point of pension vestment for many. For those who were already "maxed out" in their pension position, the institution paid them a bonus to retire. Faculty could depart from their permanent positions at 80 percent of their last salary and then return to teach courses on campus as adjuncts or on a visiting basis. On net, state savings from higher education, then, could be quite minimal as the retirement program mostly shifted around the costs of personnel and who would bear them. But the gross savings to the state general fund from the entire program across all state employees were sufficient to merit it from the state's perspective.

Early retirement programs were found to be less popular as the interview process for the project moved westward. At Colorado State University, the administration made a conscious decision to not implement such a program since they felt it sweetened the pot for the best faculty (those who had funding from other sources, for instance) to leave, while those without funded research might be more inclined to stay. Administrators at the University of Nebraska and universities in Washington, Wisconsin, and Oregon felt the same way – that such programs were just incentives for the best faculty to leave – and ruled out a retirement incentive program.

The reluctance to engage in assertive rather than passive employment reduction made academic or administrative reorganizations a rarity. The program reductions identified in the course of this study, as shown in Tables 15 and 16, inevitably fell on the administrative side of the organization. For instance, some programs were eliminated or reorganized from administrative services at the University of Colorado, Colorado State University, Mesa State College, UMass Boston, Western Oregon, the University of Virginia, and William and Mary. In some cases two departments were combined. The University of Massachusetts Boston campus shut down its central purchasing division. University of Colorado at Boulder centralized human-resource functions and created a miniature financial services center. University of Massachusetts Amherst cut its extension service in half. University of Virginia combined the human resources department with the payroll division. A handful of schools indicated some merging of departments or consolidation, but this was infrequent since the savings were considered minor. When two departments merge, the school usually saves only one administrative assistant salary and the departmental chair bonus paid to faculty who serve as chair. An equally small number of schools reported eliminating a program or department but stated that this was more an ongoing process of reevaluation than it was anything induced by retrenchment. As an example, one school indicated that it has a policy that if a program does not graduate more than five students per year, on average, then the program is eliminated, regardless of budget conditions.

Preserve the Core

Another budget principle that protected individual employees was the notion of preserving the core academic functions of the institution. At Fort Lewis College, the school sought to minimize the impact on the academic functions of the institutional core. Leadership on that campus decided that the public service mission and outreach activities of the college, for instance, were not core activities and gave academic areas precedence over them when looking for places to make budget cuts. While some schools adopted a strategy of making

Table 17. Institutional incidence of access-related issues

School	State	Observed few enrollment effects	Changes to state aid	Increased institutional aid
Colorado State University	CO			
Fort Lewis College	CO	X	decrease	
Mesa State College	CO	X	decrease	
Univ. of Colorado Boulder	CO	X	decrease	
Univ. of Northern Colorado	CO	X		X
Framingham State College	MA	X	increase	
UMass Amherst	MA	mixed		
UMass Boston	MA	X		
UMass Lowell	MA	mixed	decrease	X
UMass System office	MA	X	increase	
Northwest Missouri State Univ.	MO			X
U. Missouri System	MO		decrease	X
Central Missouri State University	MO			X
Lincoln University of Missouri	MO	X		X
U. Nebraska Lincoln	NE			X
U. Nebraska System	NE			
Chadron State College	NE	mixed		X
U. Nebraska Kearney	NE	mixed		X
George Mason Univ.	VA	X		X
Univ. of Virginia	VA	X	decrease	X
William and Mary	VA	X	decrease	X
Virginia Comm. Univ.	VA	X		X
Evergreen State College	WA	mixed		X
Univ. of Washington Seattle	WA	X	increase	
Washington State University	WA	X		
Western Washington University	WA	X	increase	X
University of Oregon	**OR**			X
University of Oregon System	**OR**	X		
Western Oregon University	**OR**	mixed	decrease	
Oregon State University	**OR**	X	decrease	X
Univ. Wisconsin, Parkside	**WI**	X	increase	X
Univ. Wisconsin, River Falls	**WI**			
Univ. Wisconsin System	**WI**		increase	
Univ. Wisconsin, Madison	**WI**		increase	
Univ. Wisconsin, LaCrosse	**WI**	X		

Sources: Phone conversations with officials at the institution.

*Note: States with central governing boards indicated in bold; states operating with coordinating boards that had budget review and recommendation authority only are indicated in italics. Those states with coordinating board that consolidate or aggregate the state higher education budget are indicated in normal font.

equal cuts across the board, particularly in the early rounds of budget cutting, others asked the administrative side to bear a larger burden than the academic size. The University of Massachusetts Amherst, for example, had to ask its divisions to return appropriated money in the wake of a midyear supplemental budget reduction by the legislature. The central finance administrators asked the academic side to give 3 percent back and asked all other units to give back 5 percent. When the University of Massachusetts' Boston campus initiated a process of budgetary review campus wide, they asked units to look for savings but to not touch academic programs. A similar rule emanated from the central office of the University of Massachusetts System president. The University of Missouri System reported that they made sure to look first at the administrative side for savings and then at the academic side. At

Western Oregon, the budget cutters decided to set aside 2 percent of money on the academic side while trimming 10 percent from the student services side.

Again and again, the comment that came back was that the institutions sought to trim the administrative side more than the academic side. “We wanted,” one administrator from an institution in the state of Washington declared, “[to] maintain the integrity of the academic programs.” A respondent from a Virginia University stated that “we try to run as lean and mean as we can on the administrative side and generally cut proportionally more from the administrative side than the academic side.” It is worth noting, however, that the core was similarly defined among most of the campuses. In other words, the institutions all saw the core the same way. This homogeneity of approach suggests that the budget crisis either was not severe enough to merit a reconsideration of the core or schools don’t tend to think strategically about positioning their core differently from other institutions in order to derive some comparative advantage or reduce programmatic overlap within the state.

The Concern for Access

Financial Aid Commitments

States and institutions, for the most part, recognized that the increases in tuition endangered higher education access for their more economically disadvantaged students. Hence, they often attempted to pair tuition increases with a number of policies aimed at minimizing enrollment effects. Some states sought to increase their allocation to financial aid, knowing that students in economic need would need more assistance. Many schools took the same tact, setting aside a set portion of the increased revenues resulting from a tuition increase to be placed into the institutional pot for financial aid. In Massachusetts, the campuses of the University of Massachusetts System set aside 15 to 20 percent of their fee increase so that it got fed back into financial aid. Evergreen State College set aside a similar amount and increased its use of tuition waivers. The University of Missouri committed a portion of newly realized tuition revenues into financial aid at the same rate as their overall discount rate.

Some schools began new financial aid programs during this time. Northwest Missouri State, for instance, funded a new scholarship program targeted at families with incomes below $30,000. It provided a grant that covered costs of tuition, room and board, textbooks and a notebook computer, with the student being expected to work only 10 hours a week. The University of Virginia began a new program called Access UVA by investing an additional $18 to 20 million in financial aid. In Washington, a new state program provided full funding to those whose family income was less than 55 percent of the median family income in the state. This was part of Washington's strategy for dealing with the budget crisis. In the words of one school official in the state, the "state increased funding for need-based aid and told the schools to raise tuition."

Other states, however, cut back on financial aid or did not increase funding at rates sufficient to keep pace with the increases in tuition. Colorado, Massachusetts, Missouri, and Nebraska all reported decreases in the state revenue directed towards state financial aid programs. In Virginia, funding for such aid, given to the schools directly in the form of a separate line item, remained flat throughout the period. And a significant portion of this aid was allocated to merit scholarships, further reducing progressive efforts to expand opportunities for lower-income families in the wake of tuition increases. In other states, politicians not only failed

Table 18. State financial aid allocation

State	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Colorado	$73,012,073	$78,559,264	$85,256,320	$91,020,000	$76,140,754
Massachusetts	$108,983,030	$117,923,832	$100,392,324	$99,489,011	$84,380,053
Missouri	$39,801,603	$35,639,234	$36,302,912	$36,684,669	$35,868,341
Nebraska [1]	$6,484,145	$8,007,569	$7,967,795	$6,855,249	$6,821,076
Oregon [2]	$96,592,019	--	$107,470,319	--	$116,251,192
Virginia [3]	$110,243,000	$117,587,000	$126,065,000	$126,591,000	$122,946,000
Washington [4]	$75,706,000	$80,664,000	$98,546,000	$102,469,000	$123,102,000
Wisconsin [5]	$60,553,200	$63,073,500	$66,148,300	$70,689,100	$72,408,200

Sources: Colorado Commission on Higher Education; Massachusetts Board of Higher Education; Missouri Department of Higher Education; Nebraska State Annual Budgetary Report, 2004; Oregon Legislative Fiscal Office; Chronicle of Higher Education; Wisconsin State Budget Office.

[1] Combination of funds for student incentive, state scholarship award, scholarship assist program, Postsecondary Education Award Program (PEAP), and postsecondary education fund.

[2] Oregon's budget is biennial, and amounts represent dollars allocated for that year and the following.

[3] Washington funds do not include non-grant aid dollars.

[4] Financial aid dollars are included in monies distributed directly to the schools. Excludes non-grant aid dollars.

[5] Dollars allocated to the Higher Educational Aids Board.

to increase state aid, they specifically directed schools to not increase their allotment towards financial aid. When the University of Missouri added a tuition surcharge to deal with state cuts, the state did not allow the school to direct financial aid money to help with the cost. In Oregon, the state placed a limit on how much institutional aid could be raised. As one official noted, "The state said if we cut student funding it's because the students should pay for their education.'"

Enrollment Effects

As a result of the increases in tuition, states and institutions expressed concern that they could begin to experience enrollment declines. By and large, most school officials commented that they had not seen enrollment effects over the last five years, but the accuracy of this observation is hard to gauge. Few schools have looked at the question systematically. Mostly, officials look at overall enrollment or application figures and in most cases these do appear to be unchanged. The number of officials who commented they had not observed negative effects on enrollment can be seen in Table 17. The comments of a finance office official at William and Mary summed up the sense most school officials had of the enrollment impacts. "There is no apparent impact on enrollments and application," she said. "[William and Mary] is still a bargain for in-state students." Given its reputation as a 'public Ivy,' she is right. At a cost of $7,000, the tuition is less than half that of a similarly selective and prestigious private institution. An official in a similar position at George Mason University commented, "There have been no discernible enrollment effects. We have been growing enrollments throughout the period, and many people, particularly graduate students, come to school during an economic downturn." She went on, "It is hard to say if low-income students have been affected because we tried hard to increase aid and get the word out. There have probably been some students affected, but we are not aware of any big shift." At Framingham State College in Massachusetts, one official commented, "We have noticed few enrollment effects. We are operating at full capacity. We are the lowest cost of all the state colleges, with the highest GPAs, and are the most selective. If anything, we have more applicants and are increasing our admission standards."

At many institutions, it was not possible to know whether there had been a change in the make-up of the student body, or whether there were more low income students seeking educational opportunities elsewhere, and or whether their places were being filled by middle and upper class students who had turned away from higher cost private education. Overall during this period, the net change in enrollment could be zero at an institution, but the changes in the economic and social composition of the student body could be profound. At some institutions, officials have clearly thought long and hard about the question. An officer of the University of Oregon system commented:

> We are not clear on the enrollment effects. Obviously, there has been no change in numbers over all, but it is not clear how tuition increases affected the lower-income [students]. We believe they have been affected, but we have no data on that. We do know that 21.8 percent of high school graduates went on to college, and that is now down to 20.8 percent of high school grads four years later. That is a 4 to 5 percent decline so some young people are going into the workforce instead of college.

Hence, Oregon may have seen some small effects on undergraduate enrollment. In other states that have reasonable data on the issue, the case remains undetermined. A respondent from the University of Washington commented that "we did not want the percentage of unfunded need to increase, and by and large we have succeeded. Enrollment looks okay. It has stayed where we wanted it to. The same percentage of students is on Pell Grants, and we have noticed nothing unusual with loan numbers either. Nor has there been a change in the population of part timers."

Where enrollment effects were observed, they took a number of different forms. First, some schools saw a decline in the numbers of students coming from out of state. For many institutions in public higher education, raising out-of-state tuition is far more politically palatable than raising in-state undergraduate tuition, but the price sensitivity of such students is likely to be greater. Fort Lewis College in Colorado observed declines in its out-of-state population, as did the University of Colorado at Boulder, which saw a sharp drop in out-of-state applicants in 2005.[29] The University of Massachusetts also raised tuition significantly and changed financial aid rules for out-of-state students; subsequently, they too saw declines in their out-of-state numbers. Another enrollment impact was noted among the urban campuses. For instance, at the University of Missouri, officials felt enrollment did suffer on the Kansas City and St. Louis campuses since students could also attend community colleges in those cities for less than the cost of the four-year education. Officials at the University of Wisconsin's Madison campus became concerned with the income mix of the student body. Although overall enrollments were unchanged, they did observe an increase in the wealth of the student body, drop-offs in the representation of students from lower income quintiles, and a decrease in the number of talented out-of-state students. Nebraska institutions observed more noticeable enrollment effects and attributed these directly to the tuition increases and to constraints on their ability to fully fun financial aid need. Officials at the Lincoln campus reported that the 2004 freshman class was smaller than the previous year by about 500 students.

Also affected by tuition increases and the economic downturn were part-time students and graduate students (who often are enrolled part time). Since they often cannot qualify for financial aid because they do not have enough credits per semester, they are the most price sensitive population. Officials at the University of Massachusetts Boston campus noticed limited effects on the full-time undergraduate numbers, but as one person from the institutional research department commented:

> The major effect has been on our part-time enrollment. Oddly enough...the resident full time undergraduate population has remained stable, wiggling up and down 50 students but nothing more. Nonresident enrollment has really plummeted, especially the international [portion] but the part-time [enrollment] has really gone down. We went down 34 percent in part-time undergraduates, 1,310 students. And we went down 19 percent in part-time grads, which [are the] majority of our grad enrollment. In 2000, 40 percent of our undergraduates were part time. In 2004 it was 31 percent.

Western Oregon University saw slight declines in enrollment but officials there were unsure if this was attributable to tuition increases.

But many respondents to this study did indicate that if tuition was not yet affecting enrollment numbers, it soon would. Economists speak of price elasticity to describe the sensitivity of individuals to price increases. Many respondents echoed the feelings of one respondent, who expressed that "we are right up to the max in terms of elasticity." Evergreen State College may have already passed that point in regards to its out-of-state population. Officials there noticed a shift in the undergraduate population from out-of-state to in-state students, and the net effect on revenues was negative. They found that the shift in enrollment among the students resulted in a net loss of revenue of $2 million.

State Effects Minimal

The sample of states and schools represented a mix of public higher education systems with different mechanisms for organizing delivery and management. As noted earlier, Oregon and Wisconsin had central governing boards for all four-years schools in the state. Colorado, Massachusetts, and Missouri had coordinating boards with consolidated budgeting authority while Nebraska, Virginia, and Washington had coordinating boards with authority to review budgets only. Respondents ranged from flagship institutions to small four-year liberal arts colleges. States examined here were from the South, Midwest, East Coast, and West. Yet despite differences in the population of states and of schools, few noticeable effects were attributable to the system governance structure. Essentially, government structures and system governance did not appear to play a role in defining the differences between states and between schools in the way they responded to the situation.

The various retrenchment approaches recorded in Tables 13 to 17 provide limited evidence of a pattern in the visual presentation of the data, despite the varieties of strategies and policies pursued here and the variety of states and state structures considered. States with centralized governing boards (Oregon and Wisconsin) did not pursue strategies that were radically different from those of the coordinating-board states. Nor did states with coordinating-board structures but different ways of running the budget process demonstrate differences with each other. Colorado, Massachusetts, and Missouri were not patently different in the decisions they reached from Nebraska, Virginia, and Washington. In addition, the universities which were arranged as systems did not appear to adopt strategies and policies that were different from the single-campus institutions. The University of Massachusetts, with five separate institutions scattered across five autonomous campuses, ran its budget-cutting process in much the same manner as the University of Washington, with three branch campuses under one institutional framework and Western Washington University with a single campus. An administrator at Western Washington University described the process of implementing retrenchment decisions as a “combination of written and unwritten rules and a [campus-wide sense] that we will emphasize these areas” over others.

Decentralization over Centralized Control

In fact, the most noteworthy observation from the study was the uniformity of institutional and system reactions to the budget crisis. One campus approach to trimming spending was near universal. It consisted of a decentralized process for making decisions regarding how and where to cut. The decentralized nature of the process was characterized by two related aspects. First, as noted earlier, schools tended to favor across-the-board cuts over targeted cuts. When they made a distinction in the level of their cuts, it was a rough one. Rather than look at specific functional areas or academic departments, they preferred to adopt different levels by which they cut administrative spending and academic core spending. Alternative approaches were exceptional because of their infrequency.[30]

Second, at most schools, the central administration – senior executives, such as chief executives, vice-chancellors, provosts, or vice presidents would make a decision about the overall level of the cuts but then leave the decisions about how to take the cuts to the units themselves. Sometimes, the central administration decided to do this right from the start. At other campuses the suggestion bubbled up from below. At the University of Missouri system, for example, one respondent stated that the central administration created a task force on how to change the campus-based business model and make cuts, but the campuses responded, “Tell us our share and we will figure it out.” A centralized process was quickly abandoned. In almost all cases, decentralization was favored over centralization. One exception was illustrated by Mesa State College, a small liberal arts college in Colorado. An official there commented that "departments did not have discretion on how to spend money. Controls to curb spending were made at the institutional level. There was lots of micromanaging, but the departments did have some input. However, this may have been, among the almost 40 institutions reached for this study, the exception that proved the rule.

A decentralized approach was justified on two grounds. For one, the units were seen as having better information about how to take the cuts and what their needs were. For another, this gesture was consonant with the principles of shared governance. Each hierarchical layer tended to make the most general decision it could and left specifics to the units below. The central executives would tell the provost how much needed to be cut from the academic side. The provost would inform the deans of the various schools and colleges of this amount, and the deans would inform the department chairs, who would make decisions about how to arrive at the reduced spending figure. A budget manager at the University of Virginia described the system as a decentralized budget model. The money comes straight to University of Virginia in the appropriation without passing through any state body. "We use a targeted budget approach. The vice presidential level is given a budget and told to meet it and these numbers get passed onto the division heads and then the deans. Plans on how to spend money come up from bottom." Her counterpart at the University of Washington summarized the process thusly: "How colleges took their budget cuts depended on their own decisions. Arts and Sciences chose to cut 50 to 60 vacant faculty positions." Staff from the finance unit at the University of Massachusetts Amherst echoed this view. "Cuts in the University of Massachusetts System were prorated by campus according to their share of the annual system budget. Within the campus we made across-the-board cuts to each VC [vice chancellor], and the VC had to make decisions where the money comes from." At Western Oregon University a senior staff person stated, "Each internal unit made its own decisions about how to make the cuts so the strategies that emerged from this process may have differed. Some units had more room to cut supplies and services, while others had to go down to the institutional level."

Most strikingly, this approach was repeated across state higher education systems. With few exceptions, the politicians and governing boards provided little direction on how to take the cuts. Within multi-campus systems, the president's office would arrive at a figure and prorate the cut across the campuses, generally according to their share of the system budget, and leave the cutting decisions to the campuses. This was true at the University of Colorado, University of Missouri, University of Nebraska, University of Massachusetts, and University of Wisconsin systems. At the University of Oregon system office, deciding how to take the cuts was left to each campus. Within large universities, the chancellor or president would follow the same approach and allow the provost and the vice chancellors of each unit to decide implementation issues. Even at some of the smaller colleges, such as Evergreen State or Framingham State, the process was decentralized in a similar fashion.

Ironically, despite the absence of central control, the strategies implemented within the divisions were similar to those in other divisions and to those across the sample of schools examined here. Central administrators rarely abdicated all authority on these matters, and in many cases they would review the units' proposed reductions to make sure they conformed to institutional mission and values. On the academic side the provost often reviewed proposed cuts. On the administrative side, the task often fell to the vice chancellor for administration and finance. The budget official from George Mason University gave one example: "The CAS [College of Arts and Sciences] dean, the unit head, decided how the unit would take the cuts… with the central administration and finance office reviewing the plan to make sure this conformed to institutional objectives." At the University of Virginia, each unit had to propose cuts upward to the unit [vice president] and if the [vice president] did not agree with the cuts, then the unit would have to take them from someplace else. The same was true at Colorado State University. One benefit of this oversight was that the central office could prevent cost shifting strategies, whereby one unit would try to shift its costs onto another unit in its proposed cuts. At William and Mary the cuts "emerged from an ongoing dialogue" between each unit [vice president] and the central administration and finance office.

By this process, many institutions were able to get faculty to buy into the process and gain cooperation in trimming budgets or at least minimize the discontent of the faculty, who could see that the decision to cut was imposed from above but the decision of where to cut remained under closer control and was more open to their influence. Numerous respondents indicated that on their campuses, faculty cooperated with this process, understood the political imperatives coming from the state government, and sought to support the administration rather than to resist. This was true regardless of whether decisions were made in the context of the campus governance structure or in conjunction with union representatives.

Politics Levels All Structure and Rules

The lack of structural influences on the strategies adopted at the state and institutional level suggests the following adage: "Politics levels all structures and rules." This was best seen in the decisions around increasing tuition charges. Ultimately, the ability to raise revenue from charges to students was constrained more by politics than any structural components of governance, either at the state or institutional level. Authority to raise tuition in Colorado rested with the governor and legislature, but it was the governor's veto which set the level of increases. The institutions wanted to raise tuition more. The legislature essentially supported them. But the governor used his line item veto authority to disallow levels he felt were too high. In Oregon the campuses would propose tuition increases to the central governing board, but they had to do this within a range of parameters set by the legislature and governor. And the legislature could give directions to the campuses through legislative footnotes in the budget bill. In Massachusetts, tuition revenues flow to the state rather than the schools and are then returned via the budget process. Tuition has been strictly capped by the legislature and governor as a consequence. But fees have gone up steadily so whatever the legal arrangements, the economic burden on students remains unaffected.[31] In Virginia statutory authority to increase tuition rests with the campus' Board of Visitors; but under Virginia law, the budget bill takes precedence over all other statutory provisions, so the legislature and governor would use language in the budget to limit tuition increases, despite the ostensible autonomy of the governing board.

No matter how the rules were written, state control over the subsidy placed a limit on the ability of a school or governing board to raise tuition as it saw fit. Even a school that could operate in this area with complete independence, according to the law, faced the reality that a legislature which disliked the levels chosen could reduce state aid dollar for dollar. If the politicians felt tuition was $500 too high, they could always reduce the state subsidy by $500 per full-time equivalent so that the institution realized no net benefit from increasing tuition.

The Idiosyncrasies of Political Personality

If structural features did little to distinguish the states or make one set of policies stand out from another, the personalities of political figures were more significant. Regardless of whether the public higher education system was a centralized one or not, a political leader who wanted to shape campus decision making could find a way to do so. In Virginia, the most significant change affecting the course of higher education policy was the inauguration of the new governor in 2002 after the sitting governor's single four-year term expired. The new governor quickly lifted the caps on tuition increases that his predecessor had stipulated in the annual budget legislation. He also campaigned across the state for new taxes to close the deficit and address urgent state needs. In Oregon, the board and the state generally let the institutions decide how to handle the budget-cutting process. But the governor decided he wanted to cut administrative spending throughout the state and specified that every related state agency had to cut its administrative expenditures by a certain percentage. The legislature in Oregon decided that schools were spending too much on technology and demanded a state audit. The governor in Wisconsin expressed similar desires to curb administrative spending in order to preserve academic functions, but his auditor clashed with the universities over what constituted administrative spending and what constituted academic spending. In addition the governor instructed them to take cuts in procurement, and his administration went so far as to dictate that institutions had to unload their food delivery services and use state vendors – often the same vendors who were providing food service to the state correctional system.

State Reorganization

Revenue contraction and economic difficulties are often interpreted by business as a signal to reorganize and engage in strategic thinking about the organization. The evidence compiled for this study echoed the findings of earlier studies that such an approach to fiscal retrenchment was a rarity in higher education. At the state level, however, in several instances cuts were accompanied by a sequence of events and policy discussions centered around the future of higher education. The scope and scale of the discussion varied. Some states had an absence of wholesale rethinking about the public higher education delivery system. Nebraska did not have conversations about reorganizing the system of delivery or funding, nor did they consider rearranging the constitution of their four year campuses. Others considered moderate changes. In Missouri, there was some talk of merging Northwest Missouri State into the University of Missouri System. In Wisconsin, some attempts were made to eliminate the body responsible for distributing financial aid, the Higher Education Aids Board, and folding its responsibilities into the department of administration. Oregon reduced the central Oregon University System administrative structure by 50 percent and began a discussion about better coordinating the two-year and four-year sectors. In Washington, they discussed breaking apart the multi-campus system of the University of Washington and Washington State by making the satellite campuses autonomous institutions.

Some states entertained proposals for more dramatic overhauls. The proposals differed in many respects, but a common theme consisted of stepping away from the traditional means of organizing and delivering public higher education in the state. The proposals considered moved towards greater decentralization and an increased emphasis on autonomy at the campus level, with attendant responsibilities (and opportunities) to grow revenue streams, such as tuition and fees. While stopping short of privatization, the moves marked a step back from public control and delivery of higher education, a confidence that market-like arrangements would improve organizational efficiency and performance and that access goals could be enhanced rather than hindered by such approaches.

In Massachusetts, Governor Mitt Romney, a Republican, proposed eliminating the central administration for the University of Massachusetts. Faced with cutting a deficit of several billion dollars early in his administration, he suggested closing the main office of the system and using the accompanying savings to reduce how much the state would have to trim the funding for the campuses in the state higher education system. He encountered strong opposition from legislative Democrats and system officials, and the proposal garnered little support from among the other institutions and the University of Massachusetts campuses. In the end the proposal went nowhere.

Several institutions in Virginia approached legislative leaders and the governor about gaining status as charter universities at the height of the budget crisis. Echoing a burgeoning movement in K-12 education, the University of Virginia, the College of William and Mary, and Virginia Tech petitioned state officials to dissolve many of their ties to state government to gain flexibility and the chance to operate at a greater distance from the state. They promised that this would actually save the state money in the long run since they could find new ways of funding their services. However, lawmakers and the governor were skeptical and worried that the institutions might wander from their chartered purposes if given too much freedom. In the end, the legislature crafted a legislative proposal that gave greater flexibility to all of the state's four-year institutions while falling short of awarding the charter status for which the three institutions had initially asked.

Colorado saw perhaps the most dramatic effort to overhaul its higher education system, entertaining and eventually marrying two quite different policy proposals. The first was an effort led by University of Colorado President Elizabeth Hoffman to obtain enterprise status for the three-campus system. She argued that state funding had fallen below levels that specified the schools would operate as public agencies of the state and that the schools were therefore entitled to become exempt from the state's fiscal limitations specified in the constitution and known as the Taxpayer's Bill of Rights (TABOR). Enterprise status would have allowed the university to raise tuition more easily, since it would no longer be subject to the revenue growth limitations of TABOR and could operate at a greater distance from state control. The governor was reluctant to cede so much control to the university and its board, and he challenged President Hoffman's estimates of state support.

At the same time, though, the governor and his supporters in the legislature were advancing a proposal for higher education vouchers, which would have altered the way the state delivered its funding to public institutions. The Republican proposal was to create a flat subsidy amount for all public higher education institutions (and, in some cases, a reduced subsidy for in-state residents attending a private Colorado institution) in the state regardless of level. Students who chose to attend a community college would receive the same amount as those who decided to attend the flagship institution at Boulder. Advocates argued that by extending a subsidy across all public institutions and some private ones, students would vote with their feet and schools would have to increase their responsiveness, efficiency, and quality. In addition, they claimed the highly publicized voucher amount would help the state address the low level of enrollment in higher education among high school graduates in the state. Students who might otherwise have ignored their educational opportunities would realize that they could afford many educational opportunities in state such as the two year programs at community colleges. Although each proposal failed in 2003, in 2004 they were joined as a single legislative package after the governor struck a deal with higher education advocates and made the chance to get enterprise status available to all. Enterprise status has had little practical significance so far as the governor has kept close control over the tuition setting process. But it has removed tuition revenues from the TABOR restrictions by designating them exempt funds. The vouchers legislation is just now completing its first year of implementation.

Leadership Counts

Although the institutions and states examined here exhibited a dearth of restructuring responses to declines in state aid, there were several efforts to approach the fiscal challenges with a strategic orientation. One case in particular (described below) was exemplary for the comprehensiveness with which the institution faced the economic challenges while at the same time continuing to pursue strategic goals to enhance particular areas. In contrast, many institutions reported that the economic austerity had set back institutional improvement efforts, such as goals to reduce class size or build up certain areas. A review of whether and how institutions incorporated strategic responses to fiscal constraint suggests that leadership plays a crucial role in academic governance and organizational direction. In other words, leadership counts – a great deal.

For good or ill, academia takes a different approach to retrenchment than the private-sector firms of the business world. Tables 13 to17 illustrate that most institutions tried their best to avoid layoffs, particularly layoffs to faculty, and instead chose to eliminate vacant positions, regardless of whether these were in areas the institution should have been growing. They sought to spread cuts across the institution and adopted policies that inhibited growth and challenged schools aspiring to keep pace with the wealthy and selective private institutions. By and large they resisted reorganizing academic programs and preferred to focus reorganization efforts on the administrative side of the organization. Administrative program elimination was rare and academic program elimination was almost nonexistent. Despite this disregard of opportunities to strategically restructure, some schools demonstrated awareness that strategic approaches to these challenges could yield organizational rewards. A review of these approaches reveals that most of these efforts were modest in nature and crafted to minimize organizational conflict.

Modest Reorganization Proposals

Both the University of Massachusetts Boston and University of Massachusetts Amherst campuses engaged in a process that aimed to minimize the need to cut across the board and instead identify areas that might be eliminated or pared back. On the Boston campus this response emerged as the cutbacks in state aid became progressively severe. At first the school tapped reserve funds. Then it froze hiring and salary increases and participated in the state's early retirement program. Finally, it initiated a campus-wide effort to realize programmatic savings on campus through program elimination. It convened the Committee for University Revenues and Expenditures (CURE), composed of administrators, faculty, and staff. They looked at savings in a number of areas, but much of what emerged represented small steps, such as increases in parking fees, policies for canceling classes with limited enrollment, and paring administrative programs. At one point, the group did prepare a discussion about a particular college's survival, but the chancellor "took it off the table." On the Amherst campus the chancellor convened a three-stage process for identifying similar reductions. Again, these cuts were aimed at the administrative side only. Academic programs were left untouched.

George Mason University used a decentralized process for implementing savings, but a centralized decision about the overall level of cuts, which differed from other schools in that the administration targeted different units for different levels of cuts. Overall, the cuts in institutional spending averaged 5.3 percent, but this amount varied across academic and support units. It was set as low as 2.2 percent in the College of Arts and Sciences and reached 5.2 percent in other academic divisions. It was as low as 4.3 percent in some administrative units and as high as 7.3 percent in other support divisions.

Virginia Commonwealth University also engaged in some strategic application of budget cutting. Initially, it tried across the board cuts, but as the cuts increased in severity the administration initiated a process of strategic planning. The president convened workgroups to engage in discussion about budget trimming. The school eliminated one state supported program – the Center for the Advancement of Generalist Medicine – and reduced another – the Family Practice Residency Program. The school also initiated a round of lay-offs.

The leadership of the University of Wisconsin Madison also engaged in a decentralized process for making decisions about what to cut, but they provided guidance by ordering units to think strategically and avoid the kinds of non-strategic thinking that tends to dominate in academia. For instance, they prohibited across-the-board cuts and the elimination of open positions and asked units to rethink how they organized service delivery. But a senior official conceded that despite their best efforts and intentions, they had mixed success.

Backdoor Restructuring

Some institutions identified ways to introduce a strategic perspective to the situation without engendering the kind of organizationally rooted hostility that might have come if the administration tried to trim the institution by design. In response to the holes that emerged from passive cutting strategies such as early retirement, the central administration exercised strict control over how fund to fill emerging gaps were used. At the University of Massachusetts Boston, the large number of retirements created a need to hire some new faculty. This "de facto academic restructuring opportunity," as one official called it, allowed the deans and provost to make final decisions about allocating new resources and growing particular areas without having to provide close consultation with the faculty. They also experienced little backlash.

At Washington State University, a similar strategy developed around the allocation of additional funds. The institution put all the savings from cutbacks throughout the institution into a pool. After retiring the deficit that resulted from cuts in state funding, the funds were then reallocated to those areas with the highest need. As one official put it, "Increased funding decisions were made centrally, and cuts were made locally, at the area level." Essentially, strategic orientation emerged around the backfill policies and needs that confronted institutions after successive years of cuts. It may have taken some of them some time, but ultimately, strategic decisions concerning organizational units did occur in some places. Virginia Commonwealth used the return to funding normalcy to strategically fill back the areas that had received the sharpest cuts, restoring funding on a case by case basis to reflect presidential priorities.

Why They Don't Cut

Why are institutions so reluctant to eliminate academic programs, to rethink mission and the organization's approach to delivery and fund distribution? Respondents at several schools afforded a number of insights. It is not as if individuals don't think about it. One school official commented that "we have lots of discussion at the board level about [things like] why can't we have just one math program. Or more collaboration and resource sharing [across campuses]." But the decisions in that instance remained based at the campus level. At the

University of Wisconsin, an official in the central system office commented that the central governing board gives the appearance that "we have more power than we actually have." Most individuals felt that tenure represented the largest barrier to realizing reductions from academic program elimination. One respondent from Massachusetts offered that "sure, we can eliminate an academic program, but faculty will still be here so what is the point?" In Washington another official echoed her point: "We had no academic program closures, no administrative program closures, either. There were a number of academic programs where the funding model changed, but …[program elimination is] hard to do because there are a number of legal issues. We have to let the students finish, and because of tenure we can't eliminate faculty. That … [represents] most of our labor costs, so it wouldn't do us much good."

But another rationale has to do with the collegial structure of higher education and the reluctance of participants to allow discussions about program reduction, layoffs, and identifying individuals and individual areas for reduction. In one departmental meeting, when it was suggested that the faculty urge the administration to use strategic thinking in retrenchment decision making, a more senior faculty member strongly refuted the idea. He argued that faculty should not want to initiate a process of cutting certain programs since there was no way to know or control how the process might unfold. And that it was against the spirit of the academic endeavor to pick winners and losers. Instead, the institution needed a collective approach to bearing the costs of state cuts.

Two Singular Examples

Nevertheless, two examples emerge at the state and institutional level during this time period of exceptional leadership in the face of dire fiscal circumstance, proving that leadership still matters and plays a large role in distinguishing one actor from another on the policy and organizational stage. In Virginia, when Mark Warner assumed the governorship, he faced a large budget deficit that would necessitate sharp cuts in state aid. His predecessor had passed tax cuts and tax base reductions that some argued the state could barely afford in good times. These worsened the fiscal crisis of the early part of the decade. Warner lifted the cap on tuition instituted by his predecessor and allowed the public institutions to replace lost state revenues with increased tuition. At the same time he asked the legislature to initiate a number of financial aid programs in order to mitigate the negative consequences of increased college costs for lower-income students and their families. Most importantly, he distinguished himself from other state leaders in the nation by going before the voters in a bipartisan effort to ask for a tax increase to help close the budget deficit. At a time when tax increases were seen as being completely off the table in most states, Warner was able to successfully pass revenue increases in his fiscally conservative state.

Nebraska saw some of the smallest reductions in the nominal level of state assistance to higher education among the eight states looked at during this time. Despite this, it also distinguished itself for the boldness of the state university's response to the fiscal crisis. One official from the university describe the strong role played by President David Smith:

> President Smith had read and been influenced by *Prioritizing Academic Programs and Services* by Robert Dickeson.[33] We did a session with Dickeson. The president asked each chancellor…to identify programs to grow and excel. So when cuts from the state came, the chancellors were challenged to make cuts [strategically]. The chancellors were told to identify good programs that distinguish us.

The institution's leadership decided they were not going to make across-the-board cuts: "The state's demographics are not good. We need to be more efficient. We have to balance accessibility with across the board cuts so the latter is not desirable." Another respondent commented that "[we felt] it was not right to dilute the whole enterprise. So we identified programs of excellence. So some units were getting cuts during this time while others were getting rewarded. Our president operated under the principle that we 'can't be all things to all people.'" The president and the chancellors asked their vice chancellors to prepare for an across-the-board budget reduction and asked each unit to cut their operations budget by the same amount and identify and prioritize their targets for cuts. But in deciding which cuts to accept, the administration choose selectively among the full list. The institution could be implementing the second tier of cuts in one area such as infrastructure without having made any first round cuts in another area, such as academics. As a respondent on the Lincoln campus stated, "The units started out proportionally but when the administration put the list together the cuts did not reflect proportionality." Although infrastructure ended up bearing a larger burden than academic functions, just as it did on other campuses, the academic side was not immune from program elimination and involuntary faculty reductions. As a result, in a time of contraction in state aid the institution continued to award salary increases, to conduct faculty searches, and to build programs of excellence.

The Lincoln campus in particular distinguished itself by the boldness of its approach and decisions. The program worked because of the commitment of the president and the chancellor to the idea of making selective cuts in particular areas and because of the skill and talent of the Lincoln chancellor in implementing this goal. He was widely respected for his years of service on campus and previously had been dean of the Law School for a number of years. He had been internally groomed for the post and was a familiar and trusted face.

The outreach strategies by the institutional leadership were aggressive and sustained. The president kept in close contact with constituent groups through a series of "fireside chats by email." The chancellor convened an academic planning committee. After compiling all the proposals from the vice chancellors and coming up with a series of proposed cuts, the committee reviewed and commented on the chancellor's list. He ended up taking most of their recommendations and in a few instances adopted a modified form of his proposed cut in the wake of their comments. But he also ignored the faculty input in a few of his decisions. As a result, the Lincoln campus closed its museum studies program. It reworked the teaching centers and eliminated some continuing education programs. It closed a campus hotel and framed decisions around the question "Are these programs critical for educating Nebraska students?" The chancellor worked closely with the American Association of University Professors (AAUP) to make sure the school followed the guidelines for dismissing tenured faculty. In the wake of program reduction, some faculty chose to retire, a number were placed in other departments, some were retrained and relocated within the institution, and a few were laid off.

Some of the chancellor's decisions generated disgruntlement within the academic senate, and at one point there was a proposal to call for a censure vote on his leadership but it was postponed. However, decisions about cuts for the coming fiscal year still needed to be made, and the chancellor was reluctant to make decisions with the vote hanging over his head. So he called for a nonbinding vote of confidence from the faculty and said he would abide by the faculty vote. He called in the Lincoln Board of Elections to administer the vote and asked the tenured and tenure-track faculty whether they approved of his strategic cuts or not. He emerged from this with a 90 percent approval from the faculty.

The study leads to two overwhelming conclusions. Institutions of higher education often do things the same way and confound the best efforts of policymakers to place their stamp on the system. Despite the creativity of academia's members, organizational responses were strikingly uniform in this study. At the same time, making generalizations about higher education policy is enormously challenging because actions, whatever their similarity, may emanate from many different causes or justifications. Two states can do exactly the same thing for different reasons, which makes applying a common criticism to the sector difficult. Without knowing what an organization's goals are, criticizing particular decisions and strategies becomes harder. Hence, drawing policy conclusions that are applicable across the sector is difficult, and such conclusions are of less value the more general they become. Nevertheless, the effort is worthwhile. This review of budget-cutting policies suggests several policy conclusions.

1) Whether Higher Education is Viewed as a Private or a Public Good, Recognize and Address the Access Issue.

The sharp increases in public higher education tuition rates is consonant with a national shift towards seeing higher education as a private good, and this has profound implications for public higher education. This trend may be a rationalization for the poor financial prospects for state higher education, but it also connects with the increasing personal returns from advanced degrees, limited evidence that higher education represents a public good, and the dominant political tenor of the times. Nevertheless, there remains a need to temper the enthusiasm for treating higher education as a private good by keeping in mind the realities of household finance and of higher education economics. Finding financing for college costs can be very difficult, and many families are liquidity constrained. Financing the cost of attendance through debt requires governmental programs to fill incomplete provision by the private market, and debt financing is less attractive to lower-income families.

So if a state faces the necessity of cutting funding for higher education, it should avoid cutting funding for financial aid and, in most cases, increase it. In other words, if higher education is seen as a private good, the state would be well advised to shift from institutional-centered funding to individually based subsidies, calculated on the basis of income. This argument can rest on principles of progressivity, but it also accounts for the realities of higher education access among lower-income families. Although numerous respondents at the state and institutional level recognized this point, Table 18 reminds us that few of these states succeeded in significantly increasing their financial aid commitment over the full period.

2) Progressivity with Regard to Tuition.

Such a shift also presents a chance to improve the progressivity of the public higher education system though tuition policies of high aid and high tuition. Nationally, in the wake of repeated cycles of cuts to state funding and increases in public tuition prices, the emerging trend is in that direction, but financial aid programs have typically failed to keep pace with these developments. A 10 percent increase in tuition that brings in an extra $10 million is not equivalent in policy terms to a 10 percent increase in financial aid that adds only $1 million to the aid pot. Lawmakers should realize they are likely to encounter resistance from politically potent middle- and upper-middle-income families. Every dollar reduction in the list price of public higher education costs financial aid programs millions. States would get far more policy bang for their buck by focusing resources where they are most needed; but the political costs of such policies typically outweigh their benefits.

3) Leadership Dominates Structure.

Recent years have seen a lot of attention and energy at the state level spent on restructuring the governance of the entire state system of public higher education. The evidence gathered here suggests that much of these efforts have yielded uncertain benefits for the states involved. This conclusion suggests that higher education policymakers and concerned citizens might better spend their time focusing on personnel and leadership issues. Oversight of executive performance, shaping the hiring process to achieve particular organizational objectives, and emphasizing state goals with regard to potential periods of restructuring are probably more important than structural tinkering and more socially useful. In other words, rather than attending to the relationship between the cart and the horse, policy makers might instead focus on giving clear signals and incentives to the drivers and concerning themselves with the quality of the race and the nature of the achievements.

4) Confront the Human Element in Higher Education Decision Making.

The retrenchment policies summarized here underscore that institutions of higher education are loathe to inflict human costs. It could be the institutions are not prepared to cope with personal conflict. It could be that there is a socially sanctioned commitment to people and to limiting the human costs of retrenchment. Rather than scold colleges and universities, perhaps we should praise them. Deciding that higher education's alternative approach to economic pressures should be commended is perfectly acceptable, but if policymakers want a different set of responses to fiscal crisis, they are going to have to confront the reasons why their system of higher education and their institutions are not thinking and acting strategically. Is it the system of academic governance? Is it the organizational culture? Is it the leadership and a lack of vision? Policymakers will need to decide what the state's values are, and where their objectives should lie with regard to human-resource management, and then pursue those commitments in the way they approach governance and oversee their institutional leadership.

The similarity of policy responses across states and across institutions underscores that political leadership can play a significant role in shaping outcomes. Very rarely did one hear of political leaders who gave strong signals that they expected to see serious organizational change or comprehensive strategic thinking. Policymakers need to recognize the sector's instinctive tendencies to protect the entire workforce by asking many people to sacrifice a little rather than asking a few to sacrifice a great deal. Policy makers need to provide better guidance about the kinds of institutional and system responses they want to see. And they need to provide better follow up.

5) Reward, Support, and Arm Leadership.

One university official noted that there is always a significant backer for a program that gets targeted for elimination, whether it is a cohort of students, a faction of alumni, or a segment of faculty. "We back down," he confessed, "more often than we are comfortable with."

If bold, strategic leadership is what politicians and policymakers want, then they need to reward, support, and, oftentimes, explicitly ask for it. They have to recognize that such leadership is particularly difficult in higher education, and it is made more so by the failure of state officials to both communicate their desire to see more strategic responses to challenging economic circumstances and to support such behavior when it occurs. They need to recognize that program reorganization or elimination, academic restructuring, and involuntary dismissals of personnel are difficult and will engender resistance from participants. This resistance could come from a small minority within the organization, but such groups can be vocal and destabilizing. And this resistance is characteristically different from the kind seen in the business world because the shared governance structure requires smooth relations among the parties to prevent breakdowns in cooperative action.

Hence, policymakers need to recognize that in higher education, unlike the private sector, there are often not external actors or market forces to sanction strategic thinking and act as a counterweight to internal resistance. Therefore they need to be supportive and attentive. If they want more strategic planning, thinking and action, they need to demand and then reward this behavior. They will need to single out superior examples of this thinking and behavior and, yes, punish those who resist. The system of oversight, reward, and sanction needs to reinforce the public agenda, not become separated from it. Rarely, did state officials work closely with administrators on campus to implement the response to fiscal contraction. Much of the political leadership's lack of initiative in this area seems to stem from an overly broad application of the notion of institutional autonomy. But exercising oversight over managerial performance does not violate academic freedom.

6) Dot Your I's and Cross Your T's.

The most frequent responses given for why institutions did not do more academic program restructuring were that shared governance and tenure presented too great an obstacle. Hence, most respondents revealed a faith that the institution would muddle through the downturn as best it could and then revenues would rebound once the economy recovered and strengthened. Surely, the experience of the mid 1990s did nothing to dampen this faith. The efforts to engage in strategic restructuring which failed and those which succeed are both instructive here, however. Few administrators seem to see a value in closing departments if tenured faculty remains, but they are focused on the short-term budget problem and are ignoring the long-term benefits from eliminating a department or program that could grow or suck away future resources. Once a former faculty member of a closed department does retire, that line can either be eliminated or dedicated to a program area of greater value. And the efforts of Nebraska leadership to work with the AAUP to ensure that their program reductions conformed to its principles ensured labor relations stability and removed the threat of outside agitation for policy reversal.

Other campuses often foundered at this point because the leadership failed to follow all the procedures of the employment contract, the faculty handbook, or the documented rules of shared governance. Program reduction is not impossible. But it requires a carefully orchestrated effort which coordinates with outside stakeholders, pays close attention to procedural details of the campus policy process, and remains cognizant that much of the gains may be deferred and long term.

This paper focused on the process of budgetary contraction. Hence, its conclusions will say nothing about which decision structures or approaches are best for restraining cost growth. Nor will its conclusions tell us which states are best at strategically evaluating and adapting systems of higher education when fiscal circumstances are good. Some states might have avoided serious cuts to higher education because they were so successful at keeping their costs from escalating too fast in the first place (although there is very limited evidence that this might be the case). These states might be at the forefront of efforts to develop mechanisms for strategic planning and rationalization of state higher education systems. Hence, they would not show up in this study because they would not have needed to make large cuts.

Hence, the absence of significant strategic planning illustrated here may be because the strategic planning states might have been the most successful at avoiding serious cuts in public funding. They may have been the best at controlling costs or they may have earned favorable funding levels in these lean years as a reward for their innovative efforts. Such states and institutions would have been excluded from this study because the states examined here were selected precisely because of the severity of their cuts. Having had to make tough decisions does not guarantee that a state is at the forefront of strategic-planning efforts.

There is little evidence that there is a group of states with such compelling and farsighted strategic-planning efforts. Still, it would be remiss to not mention that this paper only deals with the implementation of expenditure reductions. This is as much a political question and a question of governing structure at the level of state government as it is a question of institutional or system-wide governance. The states which appear here do not do so because of poor policy planning in higher education. Rather, they tend to share the experience of poor fiscal policy thinking, which takes into account the realities of the state tax base.

Of course, several issues are worth thinking about. First, an emerging consensus that higher education has more private good elements than public good elements is likely to further constrain state commitments to higher education. States already face a challenge in this area from revenue limitations, resentments about taxes, and commitments to health care, corrections, and K-12 education. The ability of higher education to stop the declining share of state funds that it receives will rest on the continued commitment of officials and voters to the idea that a public higher education infrastructure is a desirable policy goal.

One must also wonder why strategic restructuring among campus policymakers appears to be even rarer today than it was just 10 years ago, since the long-term future for public higher education would seem to demand it. State finance problems for this item are only going to become more and more constrained, particularly in light of the systemic long-term structural deficits in many state budgets. But perhaps leaders in higher education felt that the recession of 2001 to 2002, with its three-year decline in state revenues, was merely a downturn like any other and that they would have ample opportunity to recoup their losses once state revenues recovered. This may be a holdover sentiment in the wake of the roaring '90s. So far, such thinking seems to be rewarded as state revenues recover substantially in the wake of an economic upturn. But such thinking ignores that demographics and future increases in enrollment pose as substantial threats as public sector fiscal arrangements.

Finally, higher education exhibited a strong predilection to minimize the human costs by spreading the burden of reductions as thinly as possible. But the political question which arises from this approach concerns whether one can ever convince voters that cuts are actually harming the system, harming the state, and harming them. If a library suspends some journal subscriptions while the institution freezes salaries for one year and raises tuition by $200 a semester, then most state residents will barely be aware that state cuts have had an impact.

Changes in delivery, access, and quality will emerge gradually. In some ways, if institutions can overcome their reluctance to impose the particular rather than the diffuse costs of cuts, they may enhance their chances to avoid such cuts in the future by making the evidence plainer for voters.

Author Biography

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[1] Robert Pear, "States Are Facing Big Fiscal Crises, Governors Report," in *The New York Times* (26 November 2002), A1. See also Timothy Egan, "States, Facing Budget Shortfalls, Cut the Major and the Mundane," in The New York Times (21 April 2003), A1.

[2] Will Potter, "State Lawmakers Again Cut Higher-Education Spending," in *The Chronicle of Higher Education* (3 August 2003), A22.

[3] National Governors Association (NGA), *The Fiscal Survey of States* (Washington, D.C.: NGA, 2003).

[4] Don Boyd, "State Spending for Higher Education in the Coming Decade," paper prepared for the National Center for Higher Education Management Systems, October 2002.

[5] Phillip Longman, "Squeezed in a Service Economy," in *The Washington Post* (14 January 2002), A19. See also American Association of State Colleges and Universities (AASCU, *State Issues Digest* (Washington, D.C.: AASCU, 2002).

[6] Jeffrey Selingo, "The Disappearing State in Higher Education," in *The Chronicle of Higher Education* (28 February 2003), A22.

[7] Patrick Callan, "Coping with Recession: Public Policy, Economic Downturns, and Higher Education," paper prepared for the "Forum for the Future of Higher Education," Ford Policy Forum, Aspen Institute, 23-26 September 2001 (Washington D.C.: National Center for Public Policy and Higher Education, 2002).

[8] See National Center for Public Policy and Higher Education (NCPPHE), *Purposes, Policies, Performance, Higher Education and the Fulfillment of the State's Public Agenda* (San Jose, CA: NCPPHE, February 2003). For a further view on this trend, see Arthur Hauptman and Jamie P. Merisotis, *The College Tuition Spiral: An Examination of Why Charges Are Increasing*, a report to the College Board and the American Council on Education (Washington, D.C.: Macmillan Publishing, 1990). See also Lawrence E. Gladieux, "Federal Student Aid Policy: A History and an Assessment," in F*inancing Postsecondary Education: The Federal Role – October 1995*. Accessed 5 May 2005 at <http://www.ed.gov/offices/OPE/PPI/FinPostSecEd/gladieux.html>.

[9] See Gabriel Kaplan, "Between Politics and Markets: The Institutional Allocation of Resources in Higher Education," unpublished doctoral dissertation, Faculty of the Graduate School of Arts and Sciences, Harvard University, 2002. For journalistic accounts of this process, see Scott Smallwood, "The Price Professors Pay for Teaching at Public Universities," in *The Chronicle of Higher Education* (20 April 2001), A18. See also Sara Hebel, Peter Schmidt, and Jeffrey Selingo, "States Face Year of Famine After a Decade of Plenty," in *The Chronicle of Higher Education* (11 January 2002), A20.

[10] One notable exception to this has been the work of Joseph Burke and colleagues at the Rockefeller Institute of Government, which, as recently as 1998, conducted national surveys of budget practices at public institutions facing state cuts in funding. See Joseph Burke, *Managing Campus Budgets in Trying Times: Did Practice Follow Principles?* (Albany, NY: The Nelson A Rockefeller Institute of Government, 1998).

[11] For a review of the literature, see Juliet Davis, Grant Savage, and R. Thomas Stewart, "Organizational Downsizing: A Review of Literature for Planning and Research," in *Journal of Healthcare Management* 48, no. 3 (May/June, 2003), 181-201. For a historical perspective on downsizing, see James R. Morris, Wayne F. Cascio, and Clifford E. Young, "Downsizing After All These Years: Questions and Answers about Who Did It, How Many Did It and Who Benefited From It," in *Organizational Dynamics* 4 (1999), 78-87. For a perspective

on retrenchment in the public sector, see Lawrence Spizman and James Cicarelli, "Unions, Politicians, and the Public Interest: Retrenchment in the Public Sector" in *Journal of Labor Research* 5, no. 4 (1984), 413-418. For a view of downsizing issues in higher education, see Steven H. Appelbaum and Eric Patton, "Downsizing the University: Bonne Chance!" in *The International Journal of Educational Management* 16, no. 3 (fall 2002), 126-132.

[12] Robert Frank, "Higher Education: The Ultimate Winner-Take-All Market?" in *Forum Futures: Exploring the Future of Higher Education: 2000 Papers*, edited by Maureen Devlin and Joel Meyerson, Forum Strategy Series 3 (Cambridge, MA: Jossey-Bass, 2001).

[13] Joye Mercer, "As Elite Universities Increase Spending, Many Others Strive to Keep Pace," in *The Chronicle of Higher Education* (9 October 1998), A45. See also Michael Arnone, "The Wannabes," in *The Chronicle of Higher Education* (3 January 2003), A18.

[14] Burke, *Managing Campus Budgets.*

[15] For an analysis at the state level, see Robert C. Lowry, James E. Alt, and Karen E. Ferree, "Fiscal Policy Outcomes and Electoral Accountability in American States," in *American Political Science Review* 92, no. 4 (1998), 759-74. For a review of this phenomenon cross-nationally, see Torsten Persson and Guido Tabellini, P*olitical Economics: Explaining Economic Policy* (Cambridge, MA: MIT Press, 2002).

[16] Kaplan, "Between Politics and Markets."

[17] Carolyn Waller, Ran Coble, Joanne Scharer, and Susan Giamportone, *Governance and Coordination of Public Higher Education in All 50 States* (Chapel Hill, NC: North Carolina Center for Public Policy Research, 2000).

[18] Education Commission of the States (ECS), *State Postsecondary Education Structures Sourcebook: State Coordinating and Governing Boards* (Denver, CO: ECS, December 1997). An earlier publication with the same typology, also by ECS, is *State Postsecondary Education Structures Sourcebook: State Coordinating and Governing Boards* (Denver, CO: ECS, 1994).

[19] ECS, *State Postsecondary Education Structures* (1997).

[20] ECS distinguishes between states that employ coordinating bodies with regulatory and advisory authority. It is important to note, however, that regulatory versus advisory authority refers to the ability of the board to approve academic programs. In the context of budgetary issues in state higher education, such as state funding cutbacks, this authority seems less relevant a distinction than the powers of the coordinating board vis á vis budgetary matters. Here, the six coordinating board states represent three states in which the coordinating board presents a consolidated budget to the legislature and three states in which it reviews the budgetary requests from the institutions and makes recommendations to the legislature. Hence, the fact that all six states are identified by ECS as coordinating states with regulatory authority seems less important than the broader distribution of academic powers. See ECS, *State Postsecondary Education Structures* (1997).

[21] Kent Halstead, "College and University Higher Education Price Index: 2004 Update" (Washington, D.C.: Research Associates, 2004).

[22] William Baumol and William Bowen, *The Performing Arts: The Economic Dilemma* (Cambridge MA: The Twentieth Century Fund, 1967).

[23] Tables 13, 15, 16, and 17 come with an important caveat. The strategies reported for each institution do not represent a complete accounting of that institution's actions. Rather they represent institutional strategies and actions that were volunteered by respondents in

answer to open-ended questions concerning how the institution coped with budget cuts. In other words, the tables do not record every action taken by each institution. Some actions, such as a hiring freeze or a salary freeze, may have been adopted on some campuses but are not shown here. This is because the data arose from semistructured interviews rather than a detailed survey designed to record whether or not one action or another was taken. The interest in the interview was in capturing as wide a variety of strategies as possible and a pre-set survey may have missed some institutional responses. In addition, the interest here lies with the strategies that were most salient on each campus; the primary concern rested in the actions respondents recalled. A survey form would likely have prompted and primed responses of a certain type. Further research in this area should shift toward comprehensive survey data collection with a large number of institutions based on the strategies elicited here.

[24] Estelle James, "Cross-Subsidization in Higher Education: Does It Pervert Private Choice and Public Policy?" in *Private Education and Public Policy*, edited by Daniel C. Levy (New York: Oxford University Press, 1986).

[25] Tuition in Massachusetts is paid to the state and is controlled by the state, as are tax revenues. Politicians keep a tight lid on tuition levels, and so schools tend to ignore tuition as a revenue source. Hence, tuition in Massachusetts is actually quite low, but fees are among the highest in the nation. The combined effect is a public education with one of the highest price tags in the country.

[26] Colorado also cut the state contribution to financial aid significantly.

[27] Burke, *Managing Campus Budgets.*

[28] Patrick Healy, "Budget Cuts at UMass Undermine Ambitions," in *The Boston Globe* (17 March 2002), A1.

[29] In the case of the Boulder campus, it is not clear whether this was due to the increases in out-of-state tuition (the annual cost for an out-of-state student is now over $20,000) or if this is due to the negative publicity surrounding the sex scandal in the athletic department and the controversy over Professor Ward Churchill's statements.

[30] The question of an alternative cutting approach is taken up later in the paper.

[31] In fact, Massachusetts had some of the highest in-state tuition levels in the country for public universities when fees are taken into account.

[32] While promarket advocates had initially wanted to extend the voucher to all higher education organizations in the state to better stimulate the forces of market competition between schools, the final proposal which passed and was signed only extended the public voucher to students who enrolled at one of three private institutions in the state – Colorado College, University of Denver, and Regis University. While this remained controversial, the last two institutions drew particular concern from observers, since they are Roman Catholic–sponsored institutions.

[33] Robert C. Dickeson, *Prioritizing Academic Programs and Services: Reallocating Resources to Achieve Strategic Balance* (Jossey-Bass Publishers, in association with the USA Group Foundation, 1999.

[34] Boyd, State Spending for Higher Education."