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The Budget Battleground at the Public University

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Recessionary periods in a regional economy have proved to be especially difficult times for a public university to have its annual budget approved by the appropriate state legislature or higher education funding agency. We examine a number of factors that may be contributing to this trend and the efforts that public universities have initiated to offset its effects. These tactics include: increase gift giving from alumni and private foundations, encourage faculty to seek more research grants and finally, increase student fees and tuition. These tactics have proved to be reactive in nature and possibly short term in duration rather than proactive in examining perhaps the need to permanently change the role of the university in serving the region. It is proposed that the model of the future public university will be more closely aligned with increasing the economic wealth of the region through workforce development, a focus on entrepreneurship and job creation, a closer linkage with industry needs in research and development, and an increased awareness of regional community development. Should the public university not find a way to convince taxpayers and their elected officials to reverse the trend of decreased public funding, the institution may find itself largely privatized.

INTRODUCTION

The budgets of public universities have been plagued in the last four years 2000-2004 by decreased allocations from state legislatures (Selingo, 2003). Although a trend for lessened public support has been there for some time (Covaleski, 1988), this latest national recessionary period has perhaps exacerbated an already difficult situation that public universities had found challenging in the face of budget pressures from increasing enrollments, faculty and staff pressure to maintain competitive salaries and benefits, expanding curricula and rising costs for plant upkeep and expansion. Many public universities operate with multi-year contracts with administrators and faculty, service and material suppliers and in some cases, unions who form an important class of employees. Another constraining factor is that legislative mandates may hamper curtailing services or limiting enrollment over a short period of time. Hence, a public university finds it difficult to radically adjust expense levels from year to year. Perhaps the most troubling aspect in dealing with the latest period of funding difficulties is that the public university has found little empathy from the public in three important ways. First, top public officials and legislatures have declared that public universities will not be exempt from “tightening the belt” measures in these times of high unemployment and tax revenue shortfalls. The public component of a university budget has always provided a forum at which public officials and university administrators debate the value of higher education while leveraging the power and self-interest of their respective constituencies. But the recession of the early years of this century has brought on intense confrontations between the parties. Second, public university foundations have not experienced sympathetic alumni or benefactors during these difficult times despite a general national trend of increased charitable giving (Strout, 2004). Third, tuition

increases have been met with significant opposition from students, parents, faculty and the public at large.

Understandably, the public university is still associated with “affordable” college education. Thus, while a private college can raise tuition to meet market pressures and maintain its “image” with little or no adverse effect among its applicant pool, the public university is constrained in its frequency and amount of tuition increases due its “image” of affordable higher education. These reactions may be part of a societal trend to question the value of any public good, including subsidized education in general, starting with the public sentiment to limit support for primary and secondary education through property or other tax increases. Public college education is somewhat different in the educational arena in that it is not mandated for all citizens. However, since the end of World War II a college education has been touted by many as holding the key to a better job, increased personal wealth and fulfillment of business needs. This sentiment that directly involves corporate needs and investment in higher education by business has been linked to university budgets as early as 1960. (Faulkner, 1960) More than any other factor this belief in the necessity of a college education has brought on the image of the university as a resource for increased economic wealth for the region it serves. Public colleges may not have deliberately propagated this association but the increased enrollments and public support over the last fifty years give evidence of this perceived link to increased earnings over a lifetime due to the attainment of a college degree. This trend has been labeled the “massification” of higher education. As early as 1963 (Hansen, 1963), a study estimated a rate of return of 10% on the cost of going to college including foregone earnings during the time as a student. However, this conclusion has been questioned as to its implied cause and effect relationship. (Newlands, 2003) Indeed, an argument can be made that many college graduates would have been successful whether they had gone to college or not, thus implying that a college education performs nothing more than a screening process. In the present day, where many job seekers sport college degrees, there is less differentiation and it has become apparent that a college degree does not necessarily lead to a better job.

Complicating this situation is the recent attention focused on US professional jobs being lost to Asian or Latin American countries. Unlike manufacturing jobs (that did not require a college education) that have been disappearing from the US for several decades, the recession in the last four years has exposed the vulnerability of losing jobs that college educated US professionals had normally enjoyed. This observation alone has brought into question the role that a public university plays in regional economic development and the process of wealth creation.(Salazar & Kumar, 2004) The budget problems that a public university is dealing with today may be part of a bigger issue of relevance to the regional need of global competitiveness. Just as the public primary and secondary schools are facing the quality education challenges of economic, spatial and temporal efficiencies even from their most ardent supporters, the message to the public university may be just as sobering – how can the public be certain that its mission and operation are relevant and efficient and deserving of public funds? A similar question that has arisen conjures up the image of the university as a “business,” relating its educational and research services to those that can be paid for by customers or benefactors.

We examine a number of factors, both on the expense and the revenue side, that have surfaced during the latest recessionary period in the US and that have affected the budget of the public university. These factors will present a challenge for the growth and perhaps survival of the public university. In some ways, these factors contribute to the “privatization” of the public university as some authors are already suggesting.(Zemsky, 2003)(Strout, 2004) These economic

and social factors have noticeably changed the operational structure of the public university in the last few years. These changes indicate that this may be an opportune time for public universities to re-examine their contribution to society so that further changes will not be “forced” on them and they can begin a re-defined role in providing an essential service in the region they serve.

EXPENSE AND COST CONTAINMENT

To close the gap on funding and expenses some public universities have resorted to terminating programs, staff and faculty layoffs, postponing plant renovations and limiting enrollment. Understandably, these cost-cutting measures have led to poor morale among educators and administrators alike. This reaction is typical in organizations, private or non-private, where a reduction in workforce is necessary due to decreased revenue. Where staff reductions have become a matter of course for industry during the last twenty-five years in sizing down bloated staff and unnecessary overhead, the public university has been relatively immune from such organizational compression. Of course, bureaucratic organizations have been accused of complying with Parkinson’s Laws – “expenditure rises to meet income;” “work expands to fill time available,” etc., and the university, absent quantitative performance criteria, is probably subject to the laws.(Hood, 2003) Global competition has been the driver in making American industry more cost conscious and efficient by eliminating redundancy and unnecessary work. This trend has led US based companies to endorse total quality management (TQM) for continuous improvement of processes and work strategies. Although many non-profit organizations have also seen the value of efficiency metrics and have joined the quality campaign in America, few universities have adopted such methods for self examination of their efficiency in reaching their mission objectives.(Alexander, 2002)(Hood, 1996)

Unlike the changes that US industry has had to undertake in recent decades to attain a more competitive status, the operation at a domestic public university has remained basically intact over that same period despite salary increases for staff and faculty and rising operational expenses. College budgets rarely come down unless legislatively mandated. Since it is a service institution, a sizable part of the university budget is compensation related. University administration has generally been reluctant to adopt efficiency methodology such as TQM (Sachitti et al., 2002), perhaps because tenure and faculty reward systems are difficult to modify.(Engstrand, 1998)

REVENUE INITIATIVES

State Allocation from Legislatures, Governors and State Agencies

The state allocation that has traditionally supported the operational costs at a public university has been subject to the budget negotiations involving several political constituencies, namely, legislatures, governors and agencies who exercise their power in unpredictable ways. Funding for higher education is used to further a political agenda that may or may not yield approval of the budget submitted by the university. (Jones & Euske, 1991)(Pfeffer & Salacik, 1974) Wisconsin has witnessed the political struggle between state leaders and the university administration in forging an accepted method for determining a fair allocation.(Covaleski, 1988)(Lampman, 1974) While the public and political leaders believe education is important for maintaining a competitive workforce, there is disagreement as to what level of funding is really

necessary to accomplish that goal. Voters in California with Proposition 13 and Massachusetts with Proposition 2½ have declared that tax funding of public education budget increases must be capped. In parallel with the trend of limiting public funding for primary and secondary education, state funding for the public university's operational costs has also suffered a decline in the last twenty five years in the US.(Zemsky, 2003)(Selingo, 2003) Part of the problem causing the decline may be a lack of clarity in the true mission of the public university. In contrast, educational objectives of elementary and secondary schools are better understood by educators, parents and legislators.(Thomson, 1952)

Foundations.

On the revenue side public universities have stepped up efforts to solicit funds from alumni and benefactors. Unfortunately, these efforts have met with little success although charitable contributions have been experiencing growth.(Strout, 2004). Public universities in general have smaller endowments than private colleges. Several possible reasons exist for this disparity. First, would-be benefactors may see the government as the true benefactor of the public university and nobody really wants to compete with government in that role. In the same vein, private universities need the extra help because the government is missing from the benefactor list. Second, alumni from private universities come from wealthy families where charitable contributions are probably part of the culture norm. Reciprocally, alumni from public colleges generally come from less well-to-do families where large donations to an educational institution are not the norm. Third, public colleges generally do not track alumni as well as private institutions. A private college has recognized the value of continuing an association with a former student and invests heavily in assisting where it can in the graduate's career through networks and other resources.

Research Grants. & Technology Commercialization.

Another revenue initiative for covering the shortfall in public funding is an increased emphasis by public universities to engage faculty in research projects, principally in technology, that bring in grants from DARPA, NIH and other federal agencies (Hebel, 2003). Chancellor Donald Langenberg from the University of Maryland at College Park claims "conduct of research at a research university is not a money-making business."(Marshall et al., 1992) Although this strategy does increment the coffers at the university, it also does take instruction time away from permanent faculty and adjunct teaching staff is asked to fill in, thus increasing some costs but more importantly, at times compromising the instructional level of many departments, principally at the undergraduate level. The National Science Foundation has also published data that federal dollars for university research has been decreasing for years since the Apollo program and there is no sign of this trend abating. Concurrent with this trend is an unmistakable growth in commercial and industrial funding for R&D. A conclusion that can be drawn is that the federal government is letting the commercial and industrial sectors decide the level and area of research and development that should be conducted in the US. Public universities have not turned to research funding from private industry due to university policies impeding the sharing of intellectual property and legislation such as "anti-donation" clauses that make it difficult for companies to use university services and facilities (Salazar & Kumar, 2004).

Associated with the research revenue activity of a public university is technology commercialization (Schmidt, 2002). It was hoped that the Baye-Dole Act of 1980 would alleviate budget pressures at public universities by granting them ownership of intellectual

property developed with federal grants. The result after 24 years is that only a handful of universities have even gained back the investments they have made in attempting to commercialize technology and discoveries made with federal research dollars. (Kalis, 2001, p. 18). Hence, a funding strategy that emphasizes additional research grants and technology commercialization is fighting the trend of decreased federal funding for such grants and a failure to monetize the resulting technology.

Tuition and Fees

Public universities have used tuition increases and special fees, basically user-based revenue sources, as a stopgap measure to stem the tide of decreased taxpayer support and income from endowments in times of economic downturns. The “special fee” strategy has been largely successful despite the modern consumer opposition to “nickel and dime” itemized costs for services. Special fees are also unregulated by state agencies such as those that oversee higher education institutions. Tuition increases, however, fall into a category that often requires state agency and perhaps, even legislative oversight and approval. The advent of the “Hope Scholarship” in Georgia, Tennessee, New York, Indiana, New Mexico and other states has lessened the burden of tuition increases on in-state resident students who can maintain a reasonable grade point average. Still, one of the significant differences between a private and public college for students has been cheap tuition at the latter institution. Should the gap narrow in coming years, public universities will have lost an important differentiation from their private counterparts. One cost component, besides an annual revenue allocation from the state, that has allowed the tuition difference to continue is that public institutions usually do not pay for land acquisition or building construction on the campus as long as the real estate is used for education or research purposes. All such costs are usually paid by taxpayers through the issuance of tax-exempt bonds. There has been concern over the recent escalation of tuition increases. In fact, the US House Workforce Subcommittee on 21st Century Competitiveness proposed legislation recently to limit public college tuition increases beyond a federally established maximum for public colleges that accept federal grants (Zemsky, 2003).

The “One-Price” Rule

While both public and private colleges have generally imposed the “one price” rule for whatever educational track they offer, there has been some break with this entrenched tradition with the recent imposition of “fees” for laboratory or other facility usage by students following certain curricula. It is certainly the case that it is more costly to educate a student in engineering or a scientific discipline than it is in a liberal arts discipline such as history. Yet public colleges continue to charge basically the same tuition for every field of study. It can be argued that the student in engineering is being subsidized by the history student in this example. While university administrators could argue that it would be a bookkeeping nightmare to charge the student the true cost of his or her education, this type of activity cost management of services is something that industry performs almost effortlessly today. The motivation for industry to perform such detailed examination of the cost drivers of every product or service sold is evident. Price should be driven by market demand and cost of product or service. The effect at the college would be that a student looks at a “return on investment” on every course and college activity that would reflect the price that recovers the true cost of content and delivery. Colleges would be motivated to provide economically competitive offerings and so unnecessary expenses and costs would be quickly eliminated.

THE MODERN STUDENT PROFILE – WHO ARE WE EDUCATING?

Serious student demographic changes have occurred at public universities over the past fifty years. The profile of the average public college student has also changed. The typical student is not an eighteen year old as a freshman who graduates four years later. More and more students are working part-time during their undergraduate years. Some work for a few years before they actually enter college. Some of the inter-mingling of work with education is out of necessity to help meet ever increasing tuition payments and living expenses but some students choose that route for the life experience that earning a salary yields and the relevance that some courses may have to the activities at work. A great number of students choose to live off campus for a similar reason, namely, they avoid the “not real life” dormitory experience. As a result, fewer dormitories are being built at public universities, even in the rural areas where they are located, simply because students are choosing the off-campus life. Another result of the student migration to off-campus living is commuting by car. Many public universities, especially those in urban areas with poor public transportation facilities, are being challenged to find space for student commuter vehicles. This parking problem leads to unwanted investment by public universities in parking garages and parking meters and their maintenance and the ill will created by charging yet another fee to the student. Additionally, the problem causes frustration by faculty, staff and visitors experiencing traffic congestion on campus and a struggle to find a parking space almost any time of the day. Some universities have adjusted their class times to help accommodate the working student by allowing more instruction in the late afternoon hours or at night. This action also spreads out the utilization of the classrooms over a longer period during the day. Saturday classes, almost driven to oblivion, are staging a comeback for similar reasons. Of course, some departments have been slow in reacting to the modern students’ needs, in part because they do not see the students as customers.

The profile of the average graduate student has also changed. First, except for several professions that basically require a Master’s degree (pharmacy, physical therapy, etc) US workforce demands have steered college graduates to take jobs immediately after receiving their bachelor’s degree. Also, many companies find that training a newly minted college graduate is more efficient (and possibly cheaper) than sending him or her to get a master’s degree. Also, college graduates find that the return on investment for getting an advanced degree for industry work is simply not there. Hence, more and more graduate students at public universities are not native born and comprise up to half of the enrollment in many technology areas. In fact, faculty members and university-based researchers in many technology areas are foreign born as well and have since become either permanent residents or naturalized citizens because of their university affiliation. This situation is an offshoot of the “brain drain” trend of foreign born talent already well documented in the literature. This trend of having a larger percentage of foreign college students and teachers in public university graduate schools may well have continued indefinitely except that the recent 9/11 event has tightened restrictions on taking in foreign students and certifying that those that are already here are actually full-time students. Unless these restrictions are lifted, there may emerge a downward trend in foreign student enrollment in US public universities. The result may be that graduate schools will soon face smaller enrollments overall and less demand for permanent instructional staff. This in turn will produce a glut of PhD graduates that may not find university positions and will be forced to accept industry

assignments. Certainly, there has been a shortage of scientists and engineers but the market demand has been at the bachelor's degree level.

DELIVERY OF INSTRUCTION

Universities tend to make a distinction between basic education and technical training, the latter function usually associated with preparation for employment. Technical training is what companies generally associate with complex and interdisciplinary skills development and expect the mastery thereof from the college graduate. Despite protestations to the contrary, much of what universities do today is indeed training or technical education and much of what they aspire to do in education is not done well enough (Klein Associates, Section 4, 1998). This lack of clarity in the instructional mission at public universities has led to an absence of integration in learning outcomes, little or no differentiation among peer institutions and confusion among faculty members as to how their respective courses fit into the global educational objective (Thomson, 1952).

Public colleges have reacted to cuts in instructional budgets in several ways. First, the increased use of adjunct faculty has lessened the burden on full-time faculty to: (a) teach larger classes; (b) teach more classes or more topics; (c) decrease the time dedicated to research or developing new courses. The tremendous benefit derived from using adjunct faculty is that compensation is based on a credit hour basis. While a full time faculty member's median nine month salary can be anywhere from \$60 to \$80 thousand with a teaching load of two or three classes per semester, an adjunct faculty member may be paid \$2000-4000 for teaching a semester-long course. Hence, a full time faculty member may be costing up to ten times more than his or her adjunct counterpart for teaching the same class. Accreditation agencies for higher education do limit the use of adjunct faculty due to metrics they adopt for granting certification, namely that a college meets a minimum standard of instruction and research by qualified faculty, the two areas normally examined. This type of disparity in pay for performing a service would provide a business opportunity in industry and market forces would eventually create a situation in which the recipient of the service would be satisfied with the fee associated with the content and delivery of the service. Indeed, the example given may be an oversimplification of an instructional service at a public university but the intent here is to point out an area that merits further examination for increasing efficiency and quality of the instructional service provided by the university.

Efficiency metrics in college education have not been fully developed so as to validate any imposed or expected productivity goal. Observations of the State of Wisconsin's attempts to impose a productivity rule of 2.5% per year in public college education has raised the question that such a rule should not be based on productivity statistics from the private sector (Lampman, 1974). It is conceded that public universities can realize productivity gains by improving faculty utilization time, providing incentives for staff and faculty to reach higher levels of performance and by using more technology in the instructional process. Certainly the shifting of resources from one area of study to another in order to keep pace with ever expanding body of knowledge will contribute to productivity. Reward systems may have to be adjusted to encourage individuals to assist in university expense reductions. Since three fourths of the university budget is compensation related, the biggest productivity potential lies in labor utilization. Tenure and academic freedom are two concepts that have spawned fierce battles between faculty and those who would impose performance standards on university labor in general.(Engstrand, 1998) Some

authors predict that tenure will eventually fall (Miles, 1996)(Knight, 2001) and the University of Minnesota experience of 1995-1997 that attempted revision of tenure rules is a harbinger of events to come.(Engstrand, 1998) Another disturbing trend contributing to increased costs at the public university has been rising administrative costs. One explanation offered is that public university administrators have gained more budget control over the years, have required more help in revenue generation, compliance of state and federal regulations and oversight of complex initiatives, centers and research programs. At UCLA the number of faculty declined 6.8 percent in the ten year period ended in 1987 while administrative personnel increased 35.8 percent.(Leslie & Rhodes, 1995)

Distance education at the college level by means of live telecast or recordings (later called videotape) was expected nearly fifty years ago to be one method by which greater instruction efficiency could be realized. The promise of this new technology never materialized. Both students and teachers felt that the little interaction allowed by the technology compromised greatly the learning experience. Today, colleges advertise dozens if not hundreds of courses that are being offered “on-line” through the internet. Although the internet allows a certain degree of added flexibility for self study, peer level interaction through “chat rooms,” and use of web-posted resources including streaming video the technology still suffers from the absence of live interaction that a classroom experience offers.

THE CHANGING ROLE OF THE UNIVERSITY

However, the active and deliberate role in economic development that a modern public university can play now brings to light the *relevance and efficiency* of its education and research to the regional economy and well-being of the public it serves. If the public university delivers educational and research services that do not create a better economic climate in the region, who does benefit from its existence and taxpayer support? It could be argued that a *private* university delivers what its clients ask for - a quality education – as perceived by its supporters and benefactors. A private university bears no responsibility as to how that quality education is used and where it is put to use. However, the argument could be made that a public university does owe the taxpayers of the region to which it is affiliated something more – relevance. The contention here is that the public university should not forget whom it serves and the implied set of duties and obligations associated with having that aggregate benefactor – the taxpaying public. Indeed, the question of relevance perhaps even precedes the traditional roles of education and research. That is, the reason for education of youth and research is the creation or enhancement of economic wealth of the region that the public university serves.

However, unless the trend of diminished public support is reversed, public colleges and universities may become de facto privatized, at least in operational expenses. The process of privatization implies that the public university must seek revenue sources from which services will be expected in return for the compensation. The traditional goals of “academic excellence” and “knowledge scholarship” first proposed hundreds of years ago (Newman & Tillman, 2001), and whose role model for many colleges in achieving these goals has been Harvard University, will need to be revisited. These lofty goals were proposed at a time when financial support was never questioned. The question of a university as a public good is certainly at hand and relevance to regional economic prosperity may be at its center. A particular instance in which a university attempted to solicit more funds from the legislature by initiating programs in economic development has been studied (Covaleski, 1988) The attempt failed due to political forces at

work involving the state's governor, the legislature and the university administration during a recessionary period.

A NEW ROLE FOR RESEARCH

If the public university accepts increased engagement in regional economic development as a principal objective, then discovery of new knowledge through research, the teaching of any subject in a course, the service performed by any public university personnel must relate to the economic improvement of a region it serves. Education is a "sine qua non" of wealth creation but wealth creation does not happen simply because of general education, it must be relevant to the *process* of wealth creation. The opposite view has disastrous consequences, namely public university activities can consume resources to not add to, but in fact, destroy economic wealth of the society its serves. An example of this may be the subsidy of taxes from its citizens to conduct classes or university research that has no discernible or justifiable economic value for the region's citizens. The argument has been made in the past that pure research cannot be constrained by any immediate need for payoff. Otherwise it is not pure research but applied research or product or service development. However, former benefactors or supporters of "pure" research, whether funded by commercial, industrial or governmental entities, have begun to focus more and more on the "relevance" of research for the economic benefit of society. "Pure" research may become an activity funded only by federal governments at the highest level and only as a strategic necessity. The point, thus, is that the requirement of "relevance" leads to lessened support for research at a public university that does not lead to a foreseeable economic benefit for the region's citizenry.

THE NEW ROLE OF INSTRUCTION

Support for a public university is more easily solicited if its graduates display skill and knowledge in their respective fields and can begin contributing to their employers' work activities soon after graduation. This support comes in the form of endowments and a public sentiment that the school is essential to the region's welfare and economy.

The Professions

Contributions to the profession are made more rapidly by graduates who have been under the tutelage of instructors who have been practitioners of the profession as well as academicians. Unfortunately, due to reward systems in place for decades, public universities may not have instructors that have been practitioners of professional fields. Many public universities still have on their teaching staff instructors who have been academicians or researchers their entire career and who have little, if any, practical experience in their field. Business schools, as an example, have been observed to suffer from this misalignment and their situation is summarized in a recent *Harvard Business Review* article (Bennis & O'Toole, 2005). This "gap" between professional experience and the instructional academic life shows up in the need for additional training of public university graduates to perform actual work at the professional level. Many employers find themselves with the task of "orienting" or training graduates in the professions for "real" work, a task that costs time and money. Hence, public universities could enhance their contribution to workforce development if instruction at the professional schools would be performed by teachers who have had actual commercial, industrial or practical experience in the

field of study. This gap in practical experience can also be narrowed, and perhaps even closed, by an increased interaction between university faculty and industries employing the respective graduates. By forging a closer relationship with those who practice the profession, classes can be made more relevant to the profession's need and research can be directed from the abstract and more toward a discernible but professional value.

Liberal Arts & General Education

Where does the liberal arts or general arts and sciences graduate from a public university fit in the economic development equation? In the US, starting after World War II, the general belief has been that the higher paying jobs go to college graduates. Although employment statistics generally support this hypothesis, it is not clear whether many of those who did go to college would have been successful in their careers anyway.(Newlands, 2003) There are numerous examples of people who have enjoyed career success and never attended college further adding credibility to the contrary viewpoint. In the middle ages a university education was encouraged for those of noble birth to further distance them from the peasantry. A college education was not intended to further their job prospects but perhaps to enjoy life more by appreciating the arts, music and theater and fine culture. This is still true today for many who either do not have to worry about job prospects or generally don't care. A general education may still be useful for them but the question remains, should the taxpayer subsidize education for them?, or should they pay full fare in user fees? Indeed, there is need for academicians and researchers in many fields not associated with the professions listed above, but the positions are few in number compared to the enrollment in the study of those fields. A return on investment would be forced on many students in the humanities, social sciences and pure sciences when they are faced with paying full fare tuition with no public subsidy.

QUO VADIS

What then, is the future of the public university in the US and perhaps globally? If sustainable public funding for operational expenses is not possible and if federal grants for public university research will eventually be of minimal impact then where can the public university find funds to support itself? What is the model for the future "public university?" Much of the answer to this question lies inside the university itself – the students, faculty and staff and administration. These stakeholders in dialogue with the potential revenue sources – cost-based tuition, regional taxpayers, foundations, federal agencies, and employers - can best weigh the alternatives for continued operational funding and arrive in the model optimized for success. A gap analysis then would lead to a roadmap of how to get to that structure. The stakeholders will need to be creative and entrepreneurial in the sense that the problem is really one of allocation of scarce resources and facing competition on many fronts.

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