This report presents the results of a multi-state study of state governing structures for higher education, focusing on the complexity of general patterns of higher education governance. The study focused on higher education governance in seven states—California, Florida, Georgia, Illinois, Michigan, New York, and Texas—and was based on a review of relevant documents and interviews with over 200 administrators, faculty, staff, and policymakers. The report presents a conceptual framework that suggests that statewide governance of higher education is best understood as the result of interaction between a policy environment shaped by government strategies to achieve balance among academic and market forces and a system design that determines provider responsibilities, capacities, and linkages to each other and to elected leaders. It stresses the need to align educational policy across the macro, system, and operational levels to meet impending challenges, along with the importance of public policy and policy leadership in achieving balance among institutional and market forces in the context of continuity and change. (Contains 23 references.) (MDM)
HIGHER EDUCATION GOVERNANCE
Balancing Institutional and Market Influences

By
Richard C. Richardson, Jr.
Kathy Reeves Bracco
Patrick M. Callan
Joni E. Finney

November 1998

BEST COPY AVAILABLE

The National Center for Public Policy and Higher Education
Contents

Introduction ........................................................................................................... iv

I. The Context: A Changing Public Policy Environment ................................. 1

II. The Research: A New Analytic Model of State Higher Education
    Governance Structures ......................................................................................... 4
        The Seven-State Comparative Study .............................................................. 4
        Traditional Examinations of Governance Structures ............................... 5
        A New Conceptual Framework .................................................................... 6

III. Policy Implications ......................................................................................... 10
        State Expectations: Assessing Performance ............................................... 10
        Next Steps: Connecting Problems with Solutions ..................................... 12
        Balancing Institutional and Market Influences ......................................... 13

IV. Conclusion: Public Policy and Public Policy Leadership in
    Balancing the Forces of Continuity and Change .......................................... 21
        The Importance of Public Policy ................................................................. 21
        The Importance of State Policy Leadership ............................................. 23

Endnotes ............................................................................................................... 25

About the National Center for Public Policy and Higher Education ........... 27
Introduction

State policy leaders now face—or soon will encounter—critical decisions about their colleges and universities for two reasons: First, the success of American colleges and universities over the last half-century has given rise to high societal expectations. Second, unprecedented challenges to higher education are emerging from substantial demographic, technological, economic, and organizational transformations in our society. Two policy approaches are possible. At one extreme, most institutional pressures urge reliance on past success, and offer the advantage of organizational stability and predictability, but also the possible disadvantage of failing to meet new needs in a rapidly changing environment. At the other extreme, significant organizational changes may be required to respond to market pressures and to the pace of dramatic societal transformations, but such response can bring the possible disadvantages of organizational instability, and of unintentionally discarding hard-earned lessons of the past. This tension between continuity and change will characterize the early decades of the next century. Problems and solutions will be difficult to identify; framing them for purposeful policy adaptation will be even more challenging.

This paper is based upon a multi-state study of state governing structures for higher education.¹ For the full text of the study, including detailed specific case analyses, please refer to Designing State Higher Education Systems for a New Century, to be published in December 1998 by Oryx Press. Our purpose in this paper is to trace and summarize the complexity of general patterns in higher education governance that our study revealed. We wish to describe the structural relationships that deeply affect institutional efficacy, and therefore must inform higher educational policy decisions. Most importantly, we found that state policy strikes a balance—sometimes explicitly, sometimes by default—between the influence of the market (defined broadly as forces external to state government and higher education) and the influence of systems or institutions of higher education. An effective balance within and across three policy levels—the macro state policy environment, system design, and practical work processes—promotes the general welfare. The goal of state policy, then, is to exercise state authority to achieve public priorities by balancing, within and across complex policy levels, the influence of academic institutions and the influence of the market, broadly defined.

In Part I below, we summarize the current context of change, the challenges that led us to our study of the policy implications of structures. Part II describes the research and the conceptual framework that was developed as a result of that research. In Part III, we discuss the policy implications of this

The goal of state policy is to exercise state authority to achieve public priorities by balancing, within and across complex policy levels, the influence of academic institutions and the influence of the market, broadly defined.
research and suggest that states can improve their responses to impending challenges by developing and aligning three levels of policy direction. The concluding Part IV returns to the importance of public policy and policy leadership in achieving balance among institutional and market forces in the context of continuity and change.
I. The Context: A Changing Public Policy Environment

The issues and pressures facing higher education have changed dramatically since the state and national policy debates in the 1960s and 1970s. And these issues are still changing. What are the public purposes of higher education? What do states and the nation need from higher education? What will they need 10 or 20 years from now? How adequate for the next century are the public policies and system designs that have been adopted and refined by states over the past half-century? What policy changes—and what continuities—in structure, governance, finance, and accountability will facilitate adaptations to new circumstances and expectations? These questions are overarching ones that public policy must address.

At the threshold of the 21st century, public policy decisions must respond to a wide variety of far-reaching changes taking place throughout society. The following significant shifts will, we believe, have serious impacts on colleges and universities.

1. Higher Education and Social Stratification. Is the gap between the rich and the poor widening and hardening? Evidence is accumulating about income inequalities in America—about the contrasting life expectations of those with college degrees and those without. More than at any previous time, education and training beyond high school are necessary conditions for middle class life. For individuals and for society, public policy must assure the development of human talent, and higher education is more critical than ever to such development.

2. Increasing Enrollment Demand. After more than a decade of relative stability, the nation's high school graduating classes will begin to grow dramatically in the late 1990s, and continue to grow at least until 2008. Some sunbelt states will experience increases as large as 51 percent. Only four states and the District of Columbia are expected to have declines. Overall, the high school graduating class of 2008 is projected to reach an all-time high of 3.2 million students, 26 percent more than in 1996. This growth will occur when classrooms are already overflowing with students in many of the most impacted states, and it will be greatest in states that are also experiencing changes in the ethnic composition of their younger populations. Only recently have the implications of this potential tidal wave of new college students been recognized by policy leaders.
3. **Pressures of Cost Containment.** The last major expansion of higher education was in response to the baby boom cohort, taking place when public budgets were growing rapidly. The next dramatic increase in student numbers will coincide with projected federal and state fiscal constraints and growing public resistance to tuition increases. Competition from other social services—the public schools, health services, welfare, and corrections—will require colleges and universities to tighten their belts. In this difficult financial context, state governments will revisit policy commitments to instruction, research and public service—the broad array of benefits historically associated with higher education. For states faced with growing demand for college opportunity, whether from high school graduates or older citizens or both, new patterns of public investment and cost containment are likely to be needed.

4. **Eroding Consensus on Financial Support.** Earlier national consensus on the allocation of financial responsibility for higher education has eroded substantially. In the 1980s and 1990s, without any explicit policy decision, the nation drifted into a policy of heavy reliance on student debt financing of college, implicitly treating higher education as a private benefit for which recipients should shoulder ever larger shares of the costs. An economy that demands more and better educated citizens operates at cross-purposes with public policies that make access more difficult and more expensive.

5. **Growing Concerns About Quality.** Although access and cost appear to be the public’s main concerns, those who are most supportive of higher education’s purposes and most knowledgeable about its functions are increasingly critical of how well it works. The competence of some college graduates and their capacity to function effectively in an advanced economy is no longer taken for granted. Interviews and focus groups with leaders in communities across America show a concern about higher education’s effectiveness. Public policy does not—and should not—specify the content and design of instructional programs. But policy should include responsibility for seeing that higher education performance meets public needs, and for recognizing and supporting quality assurance mechanisms.

6. **The Powerful, Unpredictable Impact of Electronic Technologies.** Technology has already revolutionized research and has had a major impact on college and university administration. How will technology affect the quality and accessibility of instruction on- and off-campus? Technology is already stimulating greater competition and the entry of new providers of higher education. And technology threatens the efficacy and relevance of many policies that are predicated upon geography, such as institutional service areas, regional
Higher Education Governance

accreditation, and, some would say, state boundaries themselves.

These wide-ranging challenges are not trivial. So formidable are they that in 1997 the Commission on National Investment in Education found them "a time bomb ticking under the nation's social and economic foundations." The challenges are particularly daunting because so many are at the heart of public policy, where both governmental and individual aspirations intersect with the resources available to realize them.
II. The Research: A New Analytic Model of State Higher Education Governance Structures

Can existing state higher education systems meet the challenges of a new century? Elected leaders have responded to this question by showing new interest in the performance of their higher education systems. Many have called for restructuring by using terms that echo the language of the corporate and governmental sectors. Restructuring proposals have ranged from discontinuing statewide coordinating or system governing boards to creating new ones. Our seven-state study observed no clear trends in the kinds of restructuring taking place, as states approach similar problems with widely different solutions. Indeed, this absence of trends or patterns in state restructuring convinced us of the need for a deeper understanding of how performance and system design are related.

THE SEVEN-STATE COMPARATIVE STUDY

Our study defined a state system of higher education to include elected officials, executive and legislative agencies, and state procedures for regulation and finance, as well as public and private postsecondary colleges and universities. The purpose of the study was to improve understanding of how differences in state governance structures affect performance. We also wanted to explore how governance structure affects the strategies that state policy makers devise as they encourage institutions to respond to contextual change and new state priorities.

The criteria used to select the study states were designed to minimize differences among participants in terms of size and diversity of student populations, and to maximize differences in structure. The seven states selected (California, Florida, Georgia, Illinois, Michigan, New York, and Texas) were among the top 20 in the nation in terms of both the size and diversity of their student populations. Between September 1994 and September 1996, we collected documents, examined archival data, and conducted interviews. Over 200 individuals were interviewed: members of governors' staffs; state legislators; members of higher education coordinating or governing boards or commissions; current and former state higher education agency officials; state budget officers; legislative budget analysts; trustees, presidents, and staff at the campus, subsystem and system levels; and representatives of faculty organizations. In addition to our review of all available documentation, Kent Halstead of Research Associates of Washington was commissioned to identify the principal operating variables for state-level public higher education systems, and to comment on these for the seven states in the study. Case
Higher Education Governance

studies integrated all sources of data for each state, and were reviewed for accuracy by knowledgeable insiders in each state.

TRADITIONAL EXAMINATIONS OF GOVERNANCE STRUCTURES

The nature of the state role in governing higher education has been the subject of debate in the higher education literature for the last 40 years, as reflected in the widely varying approaches states have taken to organizing their higher education systems. The question has typically been framed as one of institutional autonomy versus state authority, or centralization versus decentralization. After World War II, concern about institutional autonomy focused on the state agencies that were established primarily to manage enrollment growth. As a result, the generally accepted taxonomies have distinguished three basic types of state structures: consolidated governing boards, coordinating boards and planning agencies.

Consolidated governing board states have legal management and control responsibilities for a single institution or a cluster of institutions. Twenty-four states have consolidated governing boards. Twenty-four coordinating board states assign responsibility for some or all of nine functions (planning, policy leadership, policy analysis, mission definition, academic program review, budgetary processes, student financial assistance, accountability systems, and institutional authorization) to a single agency other than a governing board. Two planning agency states, Michigan and Delaware, do not have an organization with authority that extends much beyond voluntary planning and convening.

Our study revealed that these three designations, despite their earlier usefulness, are now insufficient for examining the relationships between public policy and the state systems that overarch individual institutions. The most comprehensive efforts to classify differences in these ways fall short of capturing the full complexity of state structures during a period of change, particularly those structures in the more populous states. A new conceptual framework is needed, we believe, one that can account not only for the uniqueness of each state’s higher education structures, but also for each unique state public policy environment.

Our study addressed policy issues and complexities by considering the historical, economic, political, and demographic context of higher education in each state—by explicit attention to such factors as the constitutional powers of the governor, the various roles of the legislature and state higher education agencies, and the public and private, two- and four-year institutions in the state. As a result, we formulated a more complex and accurate model for analysis.
A NEW CONCEPTUAL FRAMEWORK

Traditional classifications of higher education structures define systems along a single dimension that contrasts centralization and decentralization—in other words, in terms of an institution's autonomy in relation to the state. The focus of most discussion has been on the state agency and the powers exhibited by that agency. While this is an important dimension, we have come to believe that additional structural relationships need to be addressed. Our study suggests that state governance structures must be considered in at least two ways. First, the policy environment determines the role that state government plays in balancing the often competing influences of professional values on the one hand and the market on the other. Second, the system design or structural environment includes the decisions that states make in designing their higher education systems.

Policy Environment

The distribution of authority between the state and higher education ultimately reflects the interests articulated by groups both inside and outside of government, as these interests are realized in public policy and policy priorities. The higher education system in each state operates in a policy environment that is the result of balancing—or altering the balance among—the sometimes conflicting interests of academic institutions and, as we define it, the market. Each state—and each state is unique—balances these influences according to its own policies and priorities; there is no ideal or permanent balance.

The interests of academic institutions are familiar influences in the history and literature of higher education policy. Our use of "market" forces is not. The "market," for our purposes, is the broad array of interests and influences that are external to the formal structures of both state government and higher education. Our concept of the market is thus much broader than that of economists. It does include economic influences, such as competitive pressures, user satisfaction, and cost and price. But it also includes other quantifiable factors such as demographic characteristics and projections, and less quantifiable influences such as political pressures, public confidence, and the availability of new technologies.

Our understanding of state policy environment draws upon the work of Gareth Williams in the area of higher education finance. Williams defines the role of government in shaping the way market forces and professional values influence the delivery of higher education services. Under Williams' model, the role of the state changes as the competing claims shift among state, market and academic interests. Among the state roles Williams
describes are promoter, referee and consumer supporter.

In reconsidering higher education governance, our study identified four state policy roles along a continuum from state-provided higher education to the state-as-consumer role described by some advocates of privatization. The state as provider subsidizes higher education services with little regard for the market, as we define that term. As regulator, the state specifies the relationship between institutions and the market by controlling user charges, constraining administrative discretion in using resources, and generally managing institutional operations. As consumer advocate, the state directs some funding for higher education to students, thereby increasing the influence of their market choices on institutional behavior. A state engages in steering by structuring the market for higher education services to attain outcomes consistent with governmental priorities. The inclusion of private higher education institutions in the design of state systems is one example of steering, as are vouchers that students may use to purchase approved services from any provider.

All states exhibit some characteristics of each of these four policy roles. Although one role will typically dominate more than others (for instance, the state may tend to lean more towards the market than to the institutions), the schematic model represents a continuum, not four distinct types.

System Design

The second dimension of our conceptual model is system design, or the structural environment. States make four kinds of decisions when they design systems of higher education:

1. Decisions about governance structures establish lines of authority and accountability between state government and providers.
2. Decisions about mission divide responsibilities for achieving higher education goals among types of institutions.
3. Decisions about capacity determine the availability, quality, and location of educational programs and services.
4. Decisions about work processes effect important day-to-day governance and administrative practices, including: (1) collecting and disseminating information about performance; (2) prescribing the framework for budgeting; (3) allocating responsibilities for monitoring program quality and redundancy; and (4) providing arrangements for encouraging higher education institutions to see themselves as a system and to work together on such tasks as school-to-college transitions and student transfer.
Our study led us to characterize state governance structures for higher education systems as segmented, unified, or federal. In the most segmented systems, multiple governing boards are each responsible for one or more institutions. There is no effective state agency with substantial responsibility for all higher education. State government reserves only the power to determine the appropriation each institution receives each year. Each governing board and its appointed executive represent institutional interests directly to state government through the budgeting process. Four-year institutions and community colleges may each have their own separate arrangements for voluntary coordination to identify areas where they are willing to cooperate in dealing with state government and with each other.

In unified systems, a single governing board manages all degree-granting higher education institutions and represents them in discussions with governors and legislators. Unified systems are characterized by interdependence, common rules, and common ways of communicating and measuring. Participants feel part of both the larger system and the institution to which they owe their primary allegiance.15

Federal systems have a statewide board responsible for collecting and distributing information, advising on the budget, planning programs from a statewide perspective, and encouraging articulation. Like their unified counterparts, federal systems emphasize interdependence, common rules, and common ways of communicating and measuring. To these characteristics, they add separation of powers and subsidiarity. Separation of powers divides responsibilities for representing the public interest (monitoring inputs, performance, and institutional accountability) from responsibilities for governing institutions (strategic direction, management accountability and institutional advocacy). The former are carried out by the coordinating board and the latter by institutional or system governing boards. Subsidiarity safeguards the legitimate roles of institutions by limiting the size and influence of central system agencies.

It is important to note that these categories of system design represent a continuum rather than discrete categories. Design characteristics tend to lean more towards one type of structure than another, but there are no absolutes.

Alignment Between the Policy Environment and System Design

The relationship between the policy environment and system design is critical to our conceptual framework. The role of the state as regulator, for example, works at cross-purposes with the deference to professional values that characterizes the most segmented systems. The regulator role is consistent with more centralized bureaucratic models, including the unified model. A
federal system may work well in a steering environment, but does not work well in an environment dominated by the state-as-provider role. In order to perform effectively, systems must be compatible with the policy environments in which they function.

Thus, our conceptual framework suggests that statewide governance of higher education is best understood as the result of interaction between a policy environment shaped by government strategies to achieve balance among academic interests and market forces; and a system design that determines provider responsibilities, capacities and linkages to each other and to elected leaders. In the following section, as we consider the policy implications of these levels of policy direction, we find it useful to separate operational work processes (defined above, page 7) from system design, and thereby consider work processes to be a third tier of policy practicum. As we reveal in the next section, this new framework allows for a more complex understanding of the overall system structure. It is more useful than traditional classifications in explaining, among other performance variables, the extent to which systems identify and respond to policy priorities, and balance public and professional interests.
III. Policy Implications

As our study makes apparent, state systems of higher education are structured in a variety of ways. Each state system offers different tools and opportunities to those charged with leading it, and some of these tools are more useful than others in adapting to conditions that are likely to dominate the future. Less obvious, but equally real, are the different incentives, explicit and implicit, offered by each state to assert its policy priorities. The first section below points out the need for each state to assess the capacity of its existing higher education system to meet the particular challenges that the state will face. The second section suggests, in broad terms, how the results of our study can be applied to policy analysis to resolve issues that arise from the assessment.

STATE EXPECTATIONS: ASSESSING PERFORMANCE

Differing combinations of policy roles and system designs result in differing capacities to meet future challenges. Some states may be well prepared for the future; others may not. Each state has the responsibility to its citizens to assess the capacity of its colleges and universities to respond to the substantial changes that the next several decades are likely to bring. The probability of seminal change in higher education is sufficiently great, we believe, for concerned policy leaders to assume that new issues and problems will arise and to take steps to explore that assumption. To prepare for this, each state should ask three fundamental sets of questions about the state as a whole, not about particular institutions or their organization.

First, what does the state need and expect of its colleges and universities, including public and private institutions? What factors—economic, demographic and technological, for example—are likely to influence future needs and expectations?

Second, how well does the current performance of colleges and universities meet state and public needs and expectations? Are there gaps in program offerings? In accessibility? In quality? Are realistic plans in place for filling these gaps? How well prepared are the state and its colleges and universities to meet projected future needs?

And third, if there is a gap between higher education performance and state needs—or if it appears that projected needs cannot be met without major changes—what options do state government and the institutions have to remedy the situation?

Implicit in these broad questions about expectations and performance are much more specific concerns about:
Higher Education Governance

- **Educational Attainment.** Does the educational attainment of the state's citizens match the state's plans or aspirations for enhancing individual opportunity and economic development? In what areas is such attainment adequate? In what areas is it lacking?

- **Enrollments.** How many students will be expected to enroll in the years 2000, 2005 and 2010? In which institutions? How, if at all, will the economic, geographic and ethnic composition of the enrollment pool differ from that at present? If the differences are substantial, what are their implications for programs?

- **Costs.** What are the present costs of educating college and university students, and how do these differ across types of institutions? How are these costs distributed between the state and the student? Based on state revenue projections, are these costs sustainable for the foreseeable future?

- **Institutional and Programmatic Adequacy.** Are the types of institutions sufficiently diverse in programs and locations to serve all people in the state? Is the current mix of programs that has evolved from past needs—graduate, professional, baccalaureate, technical, and occupational—appropriate for the future? Is the state taking advantage of the capacity and programs of private institutions? How well are the state and its institutions of higher education prepared to utilize the new electronic technologies to address access needs and the improvement of quality and productivity?

In a few states, much of the information needed to answer these kinds of questions may be readily available. In most, however, answers will not be so easy to find, and this is particularly true for questions regarding state and regional needs and costs. Because the state policy emphasis has been focused so heavily on institutions, institutional projections and aspirations are more likely to be available than aggregated information about whether the totality of current and future institutional efforts can meet current and anticipated needs. State costs of student financial aid, a non-institutional cost, must be factored in, and program cost analyses should be disaggregated by level—that is, lower division at community colleges, and undergraduate and graduate at four-year institutions. Information on the qualitative dimensions, particularly on the performance of the system, is extremely difficult to find. Despite increasing state use of performance indicators, there is little agreement on criteria for measuring institutional performance.

An initial assessment, particularly if it is based on expert opinion, may support the conclusion that higher education performance is meeting public needs, responding to state policy priorities, and poised to address foreseeable
future needs. Policy leaders—governors and key legislators—should review such findings with care. Elected and appointed higher education officers and their staffs in most states are, as we and others have found, reasonably satisfied with the status quo, and are likely to prefer it over any proposed alternative. This bias toward the "devil that is known," can keep leaders from asking hard questions that produce unwanted answers and may suggest the need for difficult action now to resolve a problem that will arise only in the future.\textsuperscript{16}

Even more troublesome for college and university faculty and administrators is the prospect of confronting adaptive problems that require responses from outside the system's existing repertoire. Clark Kerr notes:

One must be impressed with the endurance and the quiet power of the professoriate, and particularly of the senior professors, to get their way in the long run—and that way at all times and in all places is mostly the preservation of the status quo in terms of governance and finance.\textsuperscript{17}

As we learned from our study, current faculty and administrative leaders may argue that all problems can be resolved with adequate financial support while concurrently believing that needed resources will not be forthcoming.

In many states, an initial assessment of higher education performance in meeting current and projected challenges is likely to reveal several gaps, as we found among the states we studied. More students are expected than can be accommodated by existing institutions as they currently operate. Or employers believe that job applicants lack sufficient skills and that existing institutions do not offer them. Or the mix of state-subsidized programs may be skewed toward the preferences of the most prestigious institutions—that is, toward over-investment in graduate programs and research and away from undergraduate and occupational needs. There may be an over-abundance of less-than-distinguished graduate programs. Or there may be evidence of problems such as these, but insufficient information to define their seriousness with precision. Many states that face this gap in information are unable to assess the capacity of their state's public and private higher education in relation to current and future public needs—or even to agree on the appropriate information on which to base such an assessment. Such a finding in itself may point to policy or design problems, or both.

**Next Steps: Connecting Problems with Solutions**

Many problems that arise at the intersection of state government and higher education are technical issues that are routinely, often informally, resolved. The *policy* questions we are concerned with here, however, center on the strategic or adaptive capacity of a complex system to respond in the future to...
societal needs that neither fit neatly into the current pattern of institutional responses nor reflect the preferences of most academic professionals. These issues are not routine. They require the attention and response of a state’s highest policy makers, not by imposing simplistic answers, but by creating conditions that marshal the knowledge and influence of educational leaders and experts to help the public reach informed judgments about the shape and direction of their future interests.

If an initial assessment of the performance of and projected challenges facing higher education suggests a lack in capacity (as reflected in unmet needs or insufficient information), deeper probing becomes essential. We suggest two areas for such probing: the incentives and disincentives fostered by the state policy environment, and the allocation of responsibilities as determined by system design. For purposes of policy analysis in a particular state, it is also helpful to consider the most pragmatic effects of these in day-to-day governance and administrative practices, i.e. in the work processes (defined above, page 7). We can thus distinguish the tools available through the key work processes as a distinct and third level of enquiry. If a higher education system is to accomplish more than its aggregated campuses could do individually, it is in these three areas that solutions can be developed. In examining higher education’s performance relative to present and future state needs, problems and solutions appear at one or more of these three levels of analysis, and in the interactions among elements of all three.

BALANCING INSTITUTIONAL AND MARKET INFLUENCES

In each state we studied, policy direction at all three levels—policy environment, system design, and work processes—had an impact on performance, though the substance of these influences varied across the study states. At each of these three levels, public policy should seek to balance the influence of the market and the influence of institutions in ways that promote the general welfare. Societal and institutional interests are not necessarily inimical. Most of what is valued by institutions and academic professionals serves the public welfare—academic freedom, high quality instruction, competent graduates, and excellent research, for example. But educational professionals and institutions have their own interests that may not always reflect the common good. Derek Bok says it well:

No good book was ever written on command, nor can good teaching occur under duress. And yet, conceding this, the fact remains that left entirely to their own devices academic communities are no less prone than other professional organizations to slip unconsciously into complacent habits, inward-
looking standards of quality, self-serving canons of behavior. To counter these tendencies, there will always be a need to engage the outside world in a lively, continuing debate over the university’s social responsibilities.\textsuperscript{18}

The interests of institutions are usually articulated in views of quality that are expressed primarily in terms of \textit{inputs}—staffing ratios, funding and salary levels, selectivity in admissions, support of research and graduate programs—and \textit{processes}, such as shared governance. The public interest may well include many of these inputs and processes, but it concerns primarily the \textit{outcomes} or \textit{performance} of colleges and universities, and the impact of these on both individuals and society.

The goal of state policy, then, is to use state authority to achieve public priorities by \textit{balancing} the interests of institutions and educational professionals with broader societal concerns. Balancing these interests does suggest the presence of tension. Human societies are dynamic and the social structures that serve them must change as well. States that uncritically preserve policies and systems that were created to respond to a different set of priorities may be indulging either the self-serving tendencies of institutions or the most immediate demands of the market at the expense of emerging needs of greater long-term consequence.

As state policy makers attempt to strike an appropriate balance between institutional interests and market forces, they have a wide array of options to achieve their objectives, as outlined by the four policy roles we have described (see above, page 7): providing resources, regulating, consumer advocacy, and steering. For instance, states can restrict or encourage competition; they can create new providers, such as the Western Governors’ University; they can offer incentives to new or existing private or non-profit programs of higher education; or they can seek to protect the student markets of existing institutions by impeding the entry of new providers. States can fund students directly on the basis of merit or need or both, or they can fund institutions. They can support institutions on a “maintain the asset” basis, on the basis of performance, or on the basis of performance and competition. They can act as the principal owner and operator of institutions (the maintenance approach). Or they can act as a consumer in the marketplace, purchasing instruction and research from the public and private institutions that meet state access, quality and cost requirements. They can create centralized or federal governance structures, or they can leave each college and university to the exclusive guidance of its own board. They can regulate or create systems and agencies to manage and administer colleges and universities; they can have procedural accountability through extensive rules and control mechanisms;
or they can hold institutions accountable for results and outcomes.

While all of these policy-effecting options are exercised in some form somewhere, most states employ a particular combination of options that has resulted from ad hoc responses to economic conditions or political problems that appeared at an earlier time in the state's history. Few states explicitly use policy to balance market and institutional interests to assure the right combination for their current priorities. We hold that greater awareness of options at all three levels of policy direction will lead to more intentional use of public policy to pursue specific priorities, as well as to more systematic and useful policy analysis.

1. The Policy Environment: Macro Policy Level

Each state's broadest policy level—policy environment—includes a wide range of factors and conditions that current state leaders inherit as well as affect: the relative authority of the executive and legislative branches of state government, the capacity of the state to support higher education, the proportion of state budgets devoted to higher education, the status of institutions that are constitutionally protected or are exempted from taxes, prohibitions against direct financial support of non-public educational institutions, the relative emphasis upon appropriations to institutions versus direct state support to students, the existence and roles of private as well as public colleges and universities, and the ways public finance is shaped by the initiative process, including constraints upon tax revenues or expenditures. Even less malleable elements at this level are the state's political culture and traditions, as well as demographic and economic factors that affect higher education, government and the market.

The structural or governance aspects of the policy environment may direct state policies toward institutional preferences or toward responsiveness to external forces, characterized in this study as the market. Constitutional status, for instance, substantially insulates some institutions from state procedural controls, as well as from the market. Another example might be state policy that dedicates substantial portions of state financial support to portable grants to students. Such a policy would strengthen the influence of the market and enhance institutional responsiveness to students.

Constitutional status in Georgia, California and Michigan insulates some or all institutions from state procedural controls. A state policy like the Georgia HOPE scholarships allocates major financial support to students, strengthening both the market for educational services and institutional responsiveness to student demands. Georgia combines a governance model that is characterized by constitutional protection, with student financing that
Higher Education Governance

seeks to stimulate market sensitivity. In other words, Georgia is balancing institutional and market influences to encourage performance that is responsive to its policy priorities.

2. The System Design Level

In its system design, a state determines the shape and capacity of its higher education system, the assignment of specific responsibilities for achieving higher education goals, and the lines of authority and accountability between state government and institutions. System design policy direction is shaped by and interacts with the macro level (or state policy environment) above, which includes constitutional limitations on revenues or appropriations and institutional or system constitutional status. System design also gives shape to the work processes or policy direction level below it, including: defining who is responsible for collecting and reporting information about performance, prescribing the framework for budgeting, allocating responsibilities for monitoring program quality and redundancy, and specifying arrangements for collaboration across institutional boundaries.

Historically, each public college or university had its own governing board, and each dealt directly with state executives and legislatures. Over time, the number of campuses increased, as did the number and seriousness of statewide issues. Likewise, state governments grew and became more bureaucratic (we do not use the term pejoratively). As the task of managing state higher education became more complex, most states attempted to simplify and coordinate management responsibilities by aggregating or consolidating individual campuses into overall system designs. For the seven states in this study, we have characterized the system designs resulting from these historical processes as unified, segmented, or federal (defined above, page 8).

Georgia has established a unified system with a single statewide board. Other states have maintained institutional boards, but all except a very few interposed a state higher education agency between the colleges and universities on the one hand, and the governor and legislature on the other. In these states, some, but not all, institutions may be grouped under a multicampus board.

Segmented state systems are usually found where the state policy environment tends to favor academic professional interests and to isolate higher education from market forces and from government regulation. No effective state agency has substantial responsibility for all higher education, and multiple governing boards are each responsible for one or more institutions. In the four segmented structures in this study—Michigan, California, New York and Florida—the state agencies' authority over work processes appears in-
sufficient to affirm those market forces that are seen as adverse to the interests of higher education institutions. The Michigan higher education system provides the primary current example of virtually total segmentation.

In the two states in this study that have federal systems, Illinois and Texas, the state agencies appear to have sufficient authority over all four of the work processes to achieve reasonable balance—on an ongoing basis—between the interests of the institutions and the imperatives of the market.

System design is affected by the number and type of public institutions and the missions assigned to each, and it in turn affects how the private sector intersects with the public institutions. In states like California and Florida, where large numbers of students are required to complete their first two years of postsecondary study in a community college, the overall system of higher education operates more efficiently than in states such as Georgia, where two-year institutions are less effectively used. Evidence on the efficiency of utilizing the private sector is less clear, but including the private sector in higher education planning, as in Illinois, enhances student choice and limits the tensions that can otherwise flare between public and private institutions, as in New York. Where two- and four-year institutions are components of the same system, as in New York and Georgia, governing boards attend to articulation concerns. Where they are not, as in Florida and California, legislatures must find ways of requiring institutions with different missions to work together. Federal systems like Texas and Illinois have the capacity to address articulation issues, but may use that capacity reluctantly in the interests of avoiding confrontations with influential state officials and higher education leaders.

3. The Operational or Work Processes Level

Work processes include the important day-to-day practices and procedures of governance and administration: information management, budgeting, program allocation, and articulation and collaboration. Through these operational tools or levers of public policy, elected and appointed leaders strengthen either market or institutional influence.

Information Management. The lack of information about a system of higher education—particularly about institutional and overall statewide performance—weakens both market and state influence, and renders accountability difficult. Information can be collected and made available in ways to strengthen market forces if it is directed toward clients or consumers and their decisions—as in Illinois. Or information can be collected for purposes of regulation, as in New York, which may be in the interests either of the market or of some or all institutions.
**Budgeting.** The methods a state uses to allocate financial support of higher education can be nearly as important as the amount of that support. Block grants or base budgets that are uniformly adjusted for all colleges and universities are the most deferential to institutional, academic interests. On the other hand, budgets that are adjusted on the basis of institutional performance (e.g., student retention or achievement of specified outcomes) seek to influence institutional behavior in the direction of public priorities. And budgets that require institutions to compete for public support on the basis of explicit public policy objectives seek to stimulate greater responsiveness to the market. In the latter cases, the market is affected by state-established priorities and by public dollars that flow to support those priorities. State student financial aid programs represent the most aggressive market strategy because these programs move the locus of decision-making that determines the flow of state dollars outside the institution. There are many variations and combinations of these approaches.

**Program Planning.** How are the missions and programmatic allocations of colleges and universities established? How much choice is available for students? What, if any, are the constraints against redundancy and unnecessary program duplication? Is the use of private institutions or out-of-state institutions encouraged or discouraged? How is the match between public needs and available programs determined, and by whom? The policy mechanisms to respond to these questions can, at one extreme, be market-driven, encouraging competition. Or, at the other extreme, they can be institutionally driven, encouraging proliferation of high-cost programs that reflect faculty preferences (often characterized as mission creep). Most states regulate the establishment of new programs, and some extend this control to termination of existing ones. States can authorize or refuse to authorize institutions to operate within their boundaries, including private, nonprofit institutions. Some differentiation of mission—a regulatory function—is probably needed to assure a range of choices in the student marketplace. Yet excessive regulatory power can stifle competition, encourage cartel-like behavior, raise prices and costs, and diminish student choice.

**Articulation and Collaboration.** States can defer to institutions on matters of collaboration and articulation, or they can establish policies, incentives and accountability to facilitate these processes. The absence of actions fostering collaboration tends to restrict student mobility and discourage institutional cooperation. Ineffectual articulation policies defer to the preferences of those who ultimately grant degrees, primarily faculty of baccalaureate-granting institutions.
Higher Education Governance

Aligning Policy Direction across the Three Policy Levels

Usually, neither problems nor solutions are found exclusively at any one level of policy direction. At each level, state policy makers respond to incentives and disincentives using whatever tools they are given by the system’s design and associated work processes. In the short term, it is relatively easy for governmental and higher education leaders to influence matters at the work processes or operational policy level. This is one reason why solutions at this level are attractive—for example, revising a budgetary formula or giving a state agency additional authority. Tools at the operational policy level are legitimate and important ones that should be employed when appropriate. But it is essential that all work processes be informed by an appropriate system design and consistent policy directions. If they are not, inconsistency among the work processes can produce policy frustration and gridlock. Over the long term, it is the alignment of the four work processes with the state policy environment and with the system design that makes them effective or ineffective in leveraging performance.

Compared to the operational level, the system design level is more difficult to employ as an element of policy direction. We have already noted that higher education leaders almost uniformly prefer their current system design, however configured, over any possible alternative. The same can be said of most legislators. Changing a system design inevitably creates winners and losers. A number of programs and campuses of the State University of New York, for instance, would have been losers had the system been forced to respond effectively to the governor’s budget cuts. Ultimately, the New York State Senate made sure all campuses survived. At the City University of New York, professional values and the unions that represented them were outraged by the chancellor’s strategic endeavor to reduce the number of duplicative programs, and to align faculty numbers in specific fields with student interests. In California, a changing environment for higher education has so far evoked only those campus-replicating responses that each public segment had long held as a normal part of its individual repertory. Cross-segmental responses were conspicuous by their absence.

To say that changing a state’s system design is difficult is not the same as arguing that it is impossible. Illinois partially dismantled its “system of systems” during our study as part of its effort to free individual institutions from what policy leaders saw as excessive and unnecessary regulation. Texas altered its institutional alignments to give several smaller, more isolated colleges and universities the protection and political clout of belonging to a large and powerful university system. Missions were also changed in Texas to allow institutions serving significant numbers of Latinos to offer a wider range of graduate programs. We do not believe it was coincidental that our
examples of design change came mostly from the federal systems. Segmented and unified systems incorporate many principles of bureaucracy, especially tendencies to disregard environmental change and to focus on stability. Federal systems such as those in Illinois and Texas are designed to be more dynamic. To a greater extent than segmented and unified systems, federal ones allow for flexibility towards the societal environment and the possibility of change.

One of the most difficult problems for state public policy is inconsistency or misalignment of the three policy levels. Misalignment may arise from state attempts to solve a problem at one policy level by measures more appropriate to another. Tools appropriate at the operational policy level—for example, tinkering at the margins of budgetary formulas—would not achieve the desired result if the problem were at the system design level. Nor would they be effective in the presence of constitutional constraints that perpetuate inadequate funding. Misalignment may also result when state government adapts policy incentives aimed at enhancing the influence of market forces without altering the design of a higher education system that has grown accustomed to heavy regulation. Although faculty members are at the leading edge of scholarly and scientific inquiry, their institutions have sometimes been shielded from the marketplace and from state regulation by independent governing boards, sometimes bolstered by constitutional status. One traditional rationale for institutional independence was based on a long-held consensus that professional academic interests and the public interest were identical. Under this consensus, American higher education prospered and served the nation and states well for much of its history.

Recently, however, evidence of the erosion of this consensus is apparent in controversy over the costs and prices of higher education, student qualifications for admission, the appropriateness of institutional partnerships with corporate interests, and the appropriate role of technology in the delivery of instruction. With the erosion of consensus, states are increasingly at risk of having policy environments, system designs and work processes misaligned, working at cross-purposes. At the work processes level, for example, a state may offer financial incentives to encourage institutional responsiveness to the instructional needs of a more diverse group of students while the macro policy and system design levels encourage a continuing professional and institutional quest for traditional symbols of prestige. States that fail to address their systemic alignment will approach higher education reform through a series or package of discrete endeavors. Such approaches run the risks of misalignment and inconsistency. And, of most practical importance, they are unlikely to achieve the desired system performance.
IV. Conclusion:
Public Policy and Public Policy Leadership
in Balancing the Forces of Continuity and Change

The new world marketplace, the dizzying pace of electronic technology, and the growth in numbers and diversity of the college-age population are societal factors to which higher education must respond over the coming decades. To respond adequately, individual colleges and universities will require the guidance of state policy. Further, it is in their interest to seek such policy, for, in its absence, state intervention is likely to take the form of ad hoc, fragmented micro-management of institutions.

THE IMPORTANCE OF PUBLIC POLICY

As serious as the challenges facing higher education are likely to be, they can be met. A major strength of American higher education is that college and university operations are not centrally managed by either state or federal governments. Yet public policy—not governmental management—has played, and continues to play, a major role in shaping the responses of the higher education enterprise to public needs. State governments determine the governing structures of public higher education, and many states have established mechanisms for coordinating public and private institutions. Historically, public policy has been critical during the major transitions that have shaped modern American higher education—that is, the creation of land grant universities in the 19th century, the development of the American research university, the establishment of community colleges, and the expansion of access and participation in the post-World War II era.

In the international context, the American system of higher education has been appropriately characterized as “market-driven.” This feature has been particularly emphasized by scholars who have contrasted it to the roles that European central governments play in relation to their systems of higher education. They cite the decentralized character of our national system, the existence of a non-governmental private sector, and diversified funding sources. These and the U.S. federal government’s emphasis on policies that strengthen market strategies—need-based student financial assistance and competitive research funding—sharply differ from the centralized and bureaucratic models of governance and funding that represent historical patterns elsewhere.20

Although public policy concerning higher education in the United States can be distinguished by its market-like characteristics, states have been much less market-oriented than the federal government in supporting
Higher education. States have, it is true, delegated extensive authority to lay boards, and most academic and internal resource allocations are institutional prerogatives. Nonetheless, the major leaning of state public policies is towards the institution, not the market. In fact, one effect of decentralization and lay governance at the state level, especially when augmented by constitutional status, has been to insulate colleges and universities from both state regulation and market influences. In this context, most states have selectively asserted public policy priorities through regulatory statutes and varying, centralized structures for governance. Much the same can be said of state higher education finance: state appropriations to public colleges and universities are based largely on workload measures or across-the-board, incremental adjustments to prior year budgets. The bulk of research funding provided by states is not allocated on the basis of competition or peer review, but supports reduced teaching responsibilities for all regular faculty in public research universities. A very small portion of state financial support of higher education is devoted to portable student financial assistance. In these respects, the state emphasis has been mainly on institutional capacity-building and on maintaining institutional assets. One might characterize the state role as a counterweight to the market direction of federal policies. Most states have taken an approach to public policy that has been much more closely aligned with institutional strategies.

This institutional focus notwithstanding, states vary considerably in the ways their system designs and policies have combined to balance institutional and market forces. These variations are important in influencing the performance of higher education. In the 1990s, market forces both within and outside the control of state policy altered the higher education landscape. In the first half of the decade, states reduced subsidies for higher education, shifting costs to students. Federal and state student financial assistance, primarily in the form of loans, increased significantly. Technological transformations, new providers of higher education, and new federal tax policies increased competition among institutions and offered new choices for many students. Federal tax legislation in 1997 gave states an incentive to further reduce institutional subsidies by shifting costs to the federal government through higher tuition. In addition, although it is too early to identify any pattern of response, statewide governance systems are coming under increased scrutiny and pressure. Legislators in several states, including one of the seven states we studied, have adopted reorganization plans for higher education. Legislators in other states have experimented with new approaches to the public finance of higher education.

Public policy has been a major force in setting the course of colleges and universities in the past. And it will be an equally important factor
impeding or supporting American higher education's adaptation to new public needs in a changing policy environment.

THE IMPORTANCE OF STATE POLICY LEADERSHIP

It is difficult to convey a sense of urgency without sounding alarmist. But it is urgent—very urgent—that state leaders carefully assess the current and prospective performance of their higher education systems against their state's needs and policy goals. Section I above (see page 1) enumerates some of the far-reaching changes in social, demographic, and economic conditions, as well as shifting values and standards, that higher education will face in the coming years. Responding to these challenges while preserving the best of higher education's legacies will require leadership of the highest order. It will also require, we believe, higher education policies and structures that recognize the tension between external forces—characterized here as the market—and the interests and values of higher education institutions and academic professionals. Without such considered assessment, both states and the institutions will act in a policy vacuum, and will be at the mercy of short-term and short-sighted political pressures that so often lead to unforeseen, negative consequences.

Depending on the results of assessment, state policies can tilt the balance between the market and institutional interests one way or the other. There is no magic in the strategies that they can use. The appropriate role of states is to use the policy tools at their disposal at each level—policy environment, system design and work processes—that will most likely result in the desired education performance. And desired performance is more likely to be reached if policies and strategies are adopted with explicit understanding of these three levels of policy, of the tools available at each level, and of the need for coherence or alignment within and among the tools and the policy levels.

Issues of continuity and change underlie the tensions between the market and institutional or professional values. Change is implicit in policies that restructure decision-making and finance with the aim of making institutional behavior more sensitive to external forces, such as student demand, economic development needs, and state policy goals. Change is implicit also in policies that decentralize, deregulate, encourage competition, or provide financial support to students or to institutions based upon specified performance or outcomes. In these instances, market forces "steer" institutional behavior toward change. On the other hand, continuity is represented by policies and structures that insulate institutions from external demands and short-term pressures, promote constitutional protection, use central
authority to buffer campuses from societal pressures, and finance colleges and universities based on institutionally defined needs and priorities.

State policies continually, almost always implicitly, balance change and continuity. From time to time, however, it is necessary to revisit the balance or mix deliberately and explicitly. At these times, finding the appropriate balance challenges policy makers. Market-oriented strategies can promote responsiveness to societal change and ward off some of the dangers of "provider driven" institutions that are responsive primarily to their own interests at the expense of service to society. Strategies focused on institutions, on the other hand, can protect the enormous asset that higher education represents in each state, and can sustain areas of scholarship and instruction whether or not they are currently in vogue.

Each historical era may call for a different balance. The institution-building period benefited from structures and policies that insulated colleges and universities from external forces, and asserted public interests through regulation and centralized structures. Our research suggests that this institution-building period is closing. In contrast to it, the conditions of the early 21st century may call for state policies that make greater use of public investment to structure market forces, forces to which institutions, system designs and work processes will be expected to respond.

The search for balance between continuity and change thus will be wide-ranging over the coming decades, as states and colleges and universities seek to balance market forces and academic professional values. They may be assisted in this process by the experience of other states. But the balance must be struck one state at a time, in the context of each state's unique needs and capacities. We are confident that this balance can result in an array of colleges and universities that will be responsive to society's changing needs. These institutions may or may not look like those of today. But however they are governed or structured, they can be responsive to societal change, continuing to support America's place in the new world economy and educating all of its motivated and qualified citizens. At the same time, they can continue to perform their core functions, preserving knowledge of the past, passing it on to the present and creating it for the future. We are optimistic about what state higher education systems can be, but warn that what they will be depends on the present foresight and initiative of state policy leaders—our governors and legislators.
Endnotes

1 The study was conducted by the California Higher Education Policy Center from 1994 to 1997, and was funded by The James Irvine Foundation and The Pew Charitable Trusts.


11 *1997 State Postsecondary Education Structures Sourcebook*.

12 J. M. Burns, J. W. Peltason, T. E. Cronin, *State and Local Politics: Government by


15 We draw here upon a modified version of concepts used by C. Handy, "Balancing Corporate Power: A New Federalist Paper," Harvard Business Review (November–December, 1992), pp. 59–72, to describe the integrated system and to distinguish federal from unified systems.

16 The State of Washington's 2020 Commission, established by the governor in 1998, is a notable exception. In this case a commission was appointed to probe the future of a state system that is generally believed to be successful.


19 The exception here is the former teachers colleges, which were typically governed by the state board of education.


Higher Education Governance

About the National Center for Public Policy and Higher Education

The National Center for Public Policy and Higher Education was established in 1998 to promote opportunity, affordability and quality in American higher education. As an independent, nonprofit, nonpartisan organization, the Center provides action-oriented analyses of state and federal policies affecting education beyond high school. The Center receives financial support from national philanthropic organizations, and it is not affiliated with any institution of higher education or with any government agency.

This publication is available on the world wide web, at the website listed below. Single copies are also available from the San Jose office of the National Center for Public Policy and Higher Education. Please FAX requests to 408-271-2697. Ask for report #98-7.

San Jose Office: 152 North Third Street, Suite 705, San Jose, California 95112
Telephone: 408-271-2699 • FAX: 408-271-2697
Email: center@highereducation.org • Website: http://www.highereducation.org

Telephone: 202-822-6720 • FAX: 202-822-6730

Published by the National Center for Public Policy and Higher Education


98-3 Organizing for Learning: The View from the Governor’s Office, by James B. Hunt Jr., Governor of North Carolina and Chair of the National Center for Public Policy and Higher Education (June 1998). An address to the American Association for Higher Education concerning opportunity in higher education. Available on the world wide web.


98-5 The Challenges Facing California Higher Education: A Memorandum to the Next Governor of California, by David W. Breneman (September 1998). Concludes that the next governor should give serious consideration to exploring a new Master Plan for Higher Education. Forthcoming on the world wide web.

98-6 Federal Tuition Tax Credits and State Higher Education Policy, by Kristin D. Conklin (November 1998). Examines the implications of the new federal income tax provisions on students and their families, and makes recommendations for state higher education policy.
I. DOCUMENT IDENTIFICATION (Class of Documents):

All Publications: Balancing Institutional Higher Education Governance: or market Influences

Series (Identify Series):

Division/Department Publications (Specify):

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

Check here For Level 1 Release: Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 1

Check here For Level 2 Release: Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but not in paper copy.

The sample sticker shown below will be affixed to all Level 2 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

*hereby grant to the Educational Resources Information Center (ERIC) non-exclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.*

Signature: 

Printed Name/Position/Title: Heather Jack Director of Communications

Organization/Address: The National Center for Public Policy and Higher Education 152 N. 3rd Street, #105 San Jose, CA 95112

Telephone: (408) 271-2099 FAX: (408) 271-2097

E-Mail Address: Date:

(over)