

**STATE POLICY AND
COMMUNITY COLLEGE–BACCALAUREATE
TRANSFER**

By Jane V. Wellman

August 2002



THE NATIONAL CENTER FOR PUBLIC POLICY AND HIGHER EDUCATION
AND THE INSTITUTE FOR HIGHER EDUCATION POLICY



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Executive Summary

This paper examines the role of state policy in influencing community college–baccalaureate transfer. The paper discusses the importance of two-year to four-year (2/4) transfer performance as a state policy issue, reviews national research about transfer patterns, and presents findings about state policy and transfer performance in six states. It concludes by offering recommendations to state policymakers for improving 2/4 transfer performance.

THE GROWING IMPORTANCE OF 2/4 TRANSFER

Transfer from a community college to a four-year institution is just one dimension of student transfer, but it deserves priority attention from state policymakers for many reasons. The baccalaureate degree is becoming the entry point to the workforce for the majority of students, making it increasingly important that 2/4 transfer works well. Several forces are converging to push more students to community colleges as their initial point of access to postsecondary education: growth in the number of high school graduates; demographic changes that are increasing the proportion of poor and minority students; more stringent admissions requirements in many four-year institutions; and rising college tuitions. Although progress has been made nationwide in closing performance gaps among racial groups in the transition from high school to college, the gaps widen again in baccalaureate completion. While the baccalaureate degree may not be the best or only goal for all students, there is no public policy rationale for why it should be a lesser goal for students of color than for white students. Improving the effectiveness of 2/4 transfer will be the key to national progress in closing the gap among racial groups in degree attainment—and it will affect far more students than affirmative action policy.

UNDERSTANDING TRANSFER PERFORMANCE

For many years, data problems complicated efforts to document transfer performance because institutions were not able to track students after they left

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their institutions. An elusive search for a single measure of transfer further compounded efforts to document transfer effectiveness. In the last decade, however, improvements in national as well as state data have provided useful information about student flow patterns and the attributes of students most likely to succeed in 2/4 transfer. Nationwide, roughly a third of all first-time, degree-seeking students transfer at least once within four years after initial enrollment—about one in four students who begin at four-year institutions and 43% of students who begin at two-year institutions. Approximately half of the transfer students who initially enroll at two-year institutions go on to four-year institutions. Nationwide, about 70% of students who transfer from two- to four-year colleges after taking at least a semester’s worth of credits graduate with a baccalaureate degree. Not surprisingly, students who are most successful in 2/4 transfer have similar attributes to those who are successful in four-year institutions: they have rigorous academic preparation in high school, they enroll full-time, and they do not take time off en route to the degree.

A LOOK AT STATE POLICY AND 2/4 TRANSFER IN SIX STATES

Although we now know more about student flow patterns in 2/4 transfer, there has been little research concerning the role, if any, of state policy in influencing 2/4 transfer performance. To address this, six states were selected for intensive study about 2/4 transfer and state policy. The states selected rely heavily on transfer from two-year colleges as a point of access to the baccalaureate degree for low-income students. The criteria for selection also included the states’ grades on completion in *Measuring Up 2000*, the state-by-state report card for higher education released by the National Center for Public Policy and Higher Education (2000). Three of the six states selected received high grades on retention and degree completion in *Measuring Up 2000*, and three received low grades. The high-performing states are Florida, New York, and North Carolina; Arkansas, New Mexico, and Texas received low grades. This paper describes how each of these states uses state policy to affect transfer performance, looking at several dimensions of state policy: governance, enrollment planning, academic policies affecting transfer, and data collection and accountability.

The research shows that there is not much difference between the high-performing and low-performing states in many of their basic approaches to transfer policy. All have paid a good deal of attention to the academic policy aspects of transfer, and have comparable policies in place concerning core curriculum, articulation agreements, transfer of credit, and statewide transfer guides (including web-based catalogues). The key difference between the three

high-performing states and the others seems to lie in the statewide governance structure for higher education. Arkansas, New Mexico, and Texas have institutional governing structures, whereas Florida, New York, and North Carolina have stronger statewide governance capacities. All three of the high-performing states also do a better job of using data as a tool to improve transfer performance, including state-level feedback to campuses about their performance relative to others.

The research is most telling concerning what’s missing in state approaches to transfer policies. None of the six states uses all of the tools of state policy to energize transfer. Transfer is routinely included as one of many priorities for the community colleges, but no state has set clear goals for 2/4 transfer performance for all institutions or for the state as a whole. The accountability structures typically focus on two-year college transfer performance instead of also looking at the responsibilities of the four-year institutions. The accountability mechanisms that are in place in the four-year institutions may actually work against the transfer priority, such as the requirement to report five-year retention and graduation rates. Since community college students rarely complete the baccalaureate degree in five years, this measure discourages four-year institutions from serving transfer students, particularly if they are funded on the basis of degree performance. Most of the states confine transfer reporting to public institutions, leaving out the important role played by the private sector in accepting students for transfer. Only one state, New York, has a form of incentive funding for transfer, and it is available only to private institutions. North Carolina plans to include incentive funding for transfer in performance funding for public institutions, a plan that probably will be derailed because of state budget difficulties. Beyond these slender examples, none of the states has mechanisms for rewarding institutions that are high performers in transfer effectiveness. Texas alone among the six states just recently established a small financial aid program designed to reach transfer students; none of the other states uses financial aid to create student incentives to start their education in a community college before transferring. None of the states has focused on the equity aspects of transfer performance, either as a policy priority or in its data reporting. Although the three high-performing states do a better job than the others in retaining and graduating students of color, all the states have major gaps among ethnic groups in retention to the baccalaureate degree.

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CONCLUSIONS

The paper concludes with state policy recommendations for energizing 2/4 transfer:

1. develop baseline information about statewide transfer performance;
2. clarify state policy and plans for 2/4 transfer, and set goals and measures for performance;
3. identify and invest in core resources for transfer at the institutional level;
4. perform statewide transfer policy audits, to ensure that policies are consistent and that performance measures do not inadvertently discourage transfer;
5. make sure that articulation and credit transfer agreements are in place;
6. focus state policy change on low-performing institutions;
7. use financial aid as a tool to promote 2/4 transfer; and
8. include private institutions in transfer planning and performance accountability.

Acknowledgments

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Jane V. Wellman

Introduction

This paper examines the relationship of state postsecondary policy and the effectiveness of the community college–baccalaureate transfer function. The structures of state policy that affect two-year to four-year (2/4) transfer performance include: mission statements; statewide plans; the design of governance structures, legislation, and regulation; funding, tuition, and financial aid; and data collection and accountability.

Community or two-year colleges have many functions in addition to transfer preparation, such as adult, vocational, continuing, community, and remedial education. It is not always easy to distinguish between these programs at the college level, as some vocational courses are offered for credit toward academic degrees, and many students move back and forth between the types of programs. My focus on state policy for 2/4 transfer is not intended to devalue other dimensions of community college performance. Nor is it intended to suggest that state policy is more important than institutional or program influences on 2/4 transfer effectiveness. Indeed, earlier studies of campus and program effects on transfer show that the latter are almost as important in predicting transfer performance as individual student factors. Much less is known about the relationship of state policy to transfer performance, however. Thus I begin with a discussion of 2/4 transfer and its growing importance to statewide performance in higher education. I then present a synthesis of the research on transfer, transfer rates, influences on transfer performance, and state policy designs for transfer. My survey of current approaches examines the policies of six states (Arkansas, Florida, New Mexico, New York, North Carolina, and Texas). In the final section, I discuss my findings, present an analytical framework for characterizing the dimensions of state policy on 2/4 transfer, and offer state policy recommendations to improve performance and accountability for transfer.

Studies of campus and program effects on transfer show that the latter are almost as important in predicting transfer performance as individual student factors.

The Importance of 2/4 Transfer

There are many types of student transfer activity within higher education: from community colleges to baccalaureate-granting institutions (2/4 transfer); between four-year campuses (4/4); from four-year to two-year campuses (4/2); and between two-year campuses (2/2). The 2/4 community college–baccalaureate transfer function is one of the most important state policy issues in higher education because its success (or failure) is central to many dimensions of state higher education performance, including access, equity, affordability, cost effectiveness, degree productivity, and quality. States that have strong 2/4 transfer performance will have lower state appropriations per degree. They will also do a better job of translating access into success and of reducing achievement disparities that prevent low-income and minority students from obtaining the baccalaureate degree. If the 2/4 transfer function is weak, however, students who initially enroll in a community college will be less likely to earn a baccalaureate degree, and those who do earn their degree will take longer and need more credits to do so.

There is little consensus about how to measure transfer performance, particularly at the statewide level. Disagreements about measurement have helped perpetuate technical as well as ideological arguments about the effectiveness of 2/4 transfer, and different studies using similar databases have produced different assessments. Depending on how “transfer rates” are defined, research can support the finding that transfer students persist and graduate with the baccalaureate at equal or even superior rates to native students (those who remain at and graduate from a single institution); that the transfer function faltered for some time but is now recovering; or that the false promise of transfer “ghettoizes” higher education by funneling high-risk students into poorly financed institutions where they have little hope of getting the resources they need to succeed in higher education. As this paper shows, each of these statements is true for some colleges and some students, but no one of them accurately characterizes state-level performance for any state. This implies that there is an important difference between 2/4 transfer performance and 2/4 transfer accountability. There is a much better understanding of the

The 2/4 community college–baccalaureate transfer function is one of the most important state policy issues in higher education because its success (or failure) is central to many dimensions of state higher education performance.

different dimensions of 2/4 performance at the individual institutional level than there is consensus about 2/4 accountability from a statewide perspective.

The public multipurpose community college, designed to provide academic, vocational, and adult basic and continuing education, is a relatively recent innovation in American higher education. Since the 1960s, most states have embraced baccalaureate transfer as one of the missions of the public community colleges, although the degree of emphasis on baccalaureate transfer varies considerably among institutions and states. Community colleges have

been the fastest-growing sector in postsecondary education and likely will soon be the single largest sector, overtaking the public four-year institutions (see figure 1).

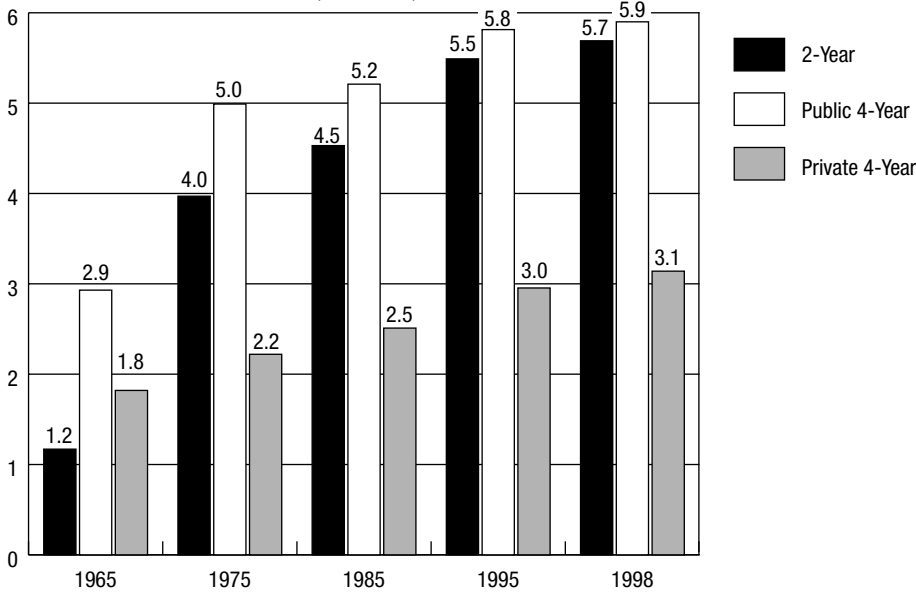
Community colleges, designed to promote access through open admission and low tuition, enroll proportionately more low-income students than any other sector of higher education. The strong correlation between race, academic preparation, and income also means that these institutions enroll the largest proportion of students of color,

particularly African-American and

Hispanic students, as well as students from first-generation immigrant families. Given the current growth in postsecondary enrollment demand (the so-called baby-boom echo), coupled with constraints on state funding, more states are planning to use community colleges as a low-cost alternative to expanding their four-year campuses. The pressure on community college–baccalaureate transfer performance will be especially acute in the Sunbelt states: California is projecting a 21% increase (from 1999 to 2010) in high school graduates, the majority of whom are expected to go on to a community college; Arizona, a 34% increase; Florida, 26%; North Carolina, 20%, and Texas, 12% (National Center for Public Policy and Higher Education, 2000).

Figure 1

Total Fall Headcount Enrollment in Postsecondary Education
(in millions)



Source: National Center for Education Statistics, 2001, table 173.
Note: Data labels rounded to the nearest 100,000.

At the same time that enrollment pressure is increasing, the rising cost of attending public and private four-year colleges and a shrinking proprietary sector may be shifting more low-income students to community colleges. Sticker prices—total tuition and fees—have increased fivefold since 1977, more than twice the rate of inflation. Tuition increases have been the steepest in the private sector, and the growing price gap between public and private institutions has created excess enrollment demand for public four-year institutions in many states, particularly at the “public Ivies.” This demand has, in turn, put more enrollment pressure on comprehensive and community colleges. Some four-year institutions have tried to maintain access through increased institutional financial aid, especially in merit-based rather than need-based aid, which has further exacerbated the net price gap between four-year and community colleges. In times of recession, public tuitions increase even faster, as institutions turn to tuition to replace lost state revenue. These price increases disproportionately affect enrollment by the lowest-income students, sending more of them to community colleges. The grim prediction from economists Michael McPherson and Morton Schapiro is that, in the event of a significant economic downturn, the prestigious institutions would be largely unaffected, but, “as always, students from the lowest income backgrounds would be most vulnerable, and their overrepresentation in the community colleges probably would increase” (McPherson and Schapiro, 2001).

Community college enrollments are also influenced by changes in admissions policies at public four-year institutions. In many states, admissions policies at four-year colleges have tightened as institutions have begun to align their entrance requirements with high school graduation standards. The enrollment boom in many states also allows high-demand institutions to be more selective about admissions. Enrollment patterns are also likely to be affected by new postadmission academic screening, placement, and remediation policies—at both two-year and four-year institutions—designed to ensure that all students are capable of doing college-level work.

At the same time, legal pressure on affirmative action has prevented public institutions from using race as a criterion in college admissions. Prior to the rollbacks on affirmative action, the gaps between racial and ethnic groups in high school graduation and college-going rates had begun to narrow, although the gaps in academic preparation as measured by the National Assessment of Educational Progress (NAEP) remain. However, when we look at students who start college but do not complete the baccalaureate degree, the differences between racial and ethnic groups have remained stubbornly wide (see figure 2).

The biggest single reason for the difference in baccalaureate degree completions is that the majority of students of color who attend postsecondary education

initially enroll in public community colleges and do not transfer

to complete the

baccalaureate degree.

Even if the roots of this disparity lie in K–12, the largest barriers to progress are internal to postsecondary education.

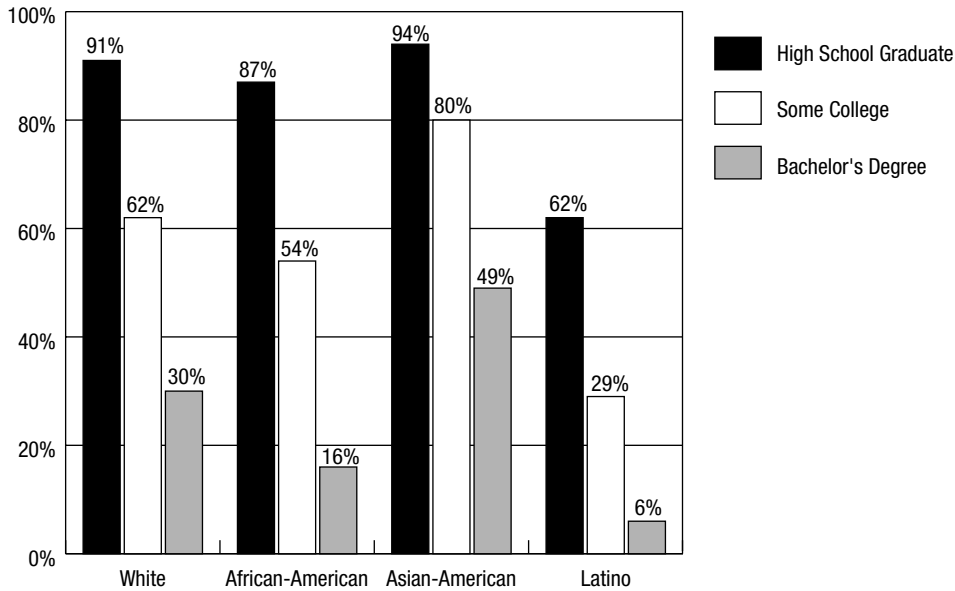
The combination of rising prices, changing academic standards, and admissions pressure threatens to increase economic and racial stratification within higher education, with the preponderance of

low-income and minority students remaining in

community colleges. In this environment, 2/4 transfer becomes a fulcrum for ensuring not just access but also success in baccalaureate degree attainment for poor and minority students. Numerically, 2/4 transfer affects many more students of color than does the more prominent issue of affirmative action admissions in higher education. Important as it is, affirmative action affects only a fraction of academically able students of color, most of whom will enroll in and graduate from college even if they do not attend a highly selective public or Ivy League college. Yet despite its much greater potential impact, improving the effectiveness of the 2/4 transfer function has taken a backseat to the more prominent social debate about admissions at the more elite colleges.

Figure 2

Educational Attainment at Age 24 (in percent)



Source: Education Trust, 2001.

The Different Dimensions of Transfer

Because transfer students attend at least two institutions, the performance and accountability data from individual institutions give an incomplete picture of transfer patterns. Improvements in collecting longitudinal student data at both the national and state levels have allowed researchers to document the types of students and institutions (or programs) associated with different transfer patterns. While the focus of this paper is 2/4 transfer, a quick review of the research provides insights into the larger dimension of student mobility in higher education.

NCES TRANSFER BEHAVIOR REPORT

Alex McCormick's research for the National Center for Educational Statistics provides a good snapshot of transfer dynamics (McCormick and Carroll, 1997). McCormick examined attendance patterns through the 1993–94 academic year for a national sample of students who began their postsecondary education in 1989–90. Roughly a third of these students had transferred at least once within four years; transfers were made by about one in four of all students who began at a four-year institution, and by 43% of students who began at a two-year institution (these figures include transfers to out-of-state and private institutions). Among students who began at a two-year institution, about half had transferred to a four-year institution. Only about a third of these 2/4 transfer students earned the associate degree prior to transfer; the rest transferred without earning a degree or credential. The bachelor's degree attainment rate was higher for those who had obtained an associate degree prior to transfer: 43% within five years, compared with 17% for those who transferred without the credential.

Of students who transferred from four-year institutions, just over half transferred to another four-year institution; the rest transferred to two-year institutions. Students who transferred from four-year institutions were less likely to have time gaps in their college education than two-year transfers, usually re-enrolling within six months after leaving the first institution. In contrast, nearly a quarter of two-year college students were out of school for

more than three years during the course of their education. On average, 2/4 transfer students spent about 20 months at the first institution. They often took a considerable amount of time off between institutions—an average of 21 months. Half of the two-year students who enrolled full-time during their first year in college subsequently transferred to a four-year institution, but only a fourth of students who enrolled part-time did so. Five years after starting college, a fourth of community college transfer students had received a bachelor’s degree and another 44% were still enrolled at a four-year institution. The overall persistence rate for community college transfer students was about the same as that for students who began in a four-year institution.

ANSWERS IN THE TOOLBOX

Answers in the Toolbox, Clifford Adelman’s report for the Office of Educational Research and Improvement in the U.S. Department of Education, combined longitudinal student enrollment and degree data with transcript analysis, and correlated characteristics of individual students and academic programs with student flow patterns (Adelman, 1999). Adelman found that the single most important predictor of future baccalaureate attainment for all students—four-year as well as two-year—is the academic intensity and quality of their high school curriculum. Adelman confirmed McCormick’s findings about student enrollment patterns, reporting that over 60% of undergraduates attend more than one institution, and 40% transfer across state lines. Because so many students attend more than one institution and take time off, Adelman reasoned that graduation or transfer rates for individual institutions are less meaningful than regional and national aggregations that capture the flow of students across institutions. He also stressed the importance of credit-based measures of retention and degree attainment rather than time-based measures, because the majority of students attend part-time and have gaps in their attendance even when they persist to the degree.

Adelman found that 63% of students who attend a four-year college attain a bachelor’s degree by age 30; for those who start at highly selective colleges, the rate exceeds 90%. Of students who begin at a community college, 26% formally transfer to a four-year institution. The graduation rate for these 2/4 transfer students is 70%, which indicates that the classic vertical transfer—in which a student earns at least a semester’s worth of credits before moving to a four-year college—produces a high likelihood of bachelor’s degree completion. Of all students who enroll in a community college and complete at least 10 credits, one in five eventually earns a bachelor’s degree.

Adelman found that the single most important predictor of future baccalaureate attainment for all students—four-year as well as two-year—is the academic intensity and quality of their high school curriculum.

SUNY TRANSFER STUDY

Ronald Ehrenberg and Christopher Smith (2002) studied 2/4 transfer performance within the SUNY system and showed how data on transfer performance can be used to develop models that will predict transfer performance. Noting the considerable disparities among the SUNY campuses in their transfer and graduation performance, Ehrenberg and Smith evaluated data for full-time students who had transferred within SUNY from a two-year to a four-year institution at the start of the 1995 and 1996 fall semesters. They also examined these students' persistence to the baccalaureate degree within three years of transfer, and they developed a statistical model to predict transfer performance by campus and for degree and nondegree two-year transfer students. This model can be used to rank colleges' transfer effectiveness, and it could also be extended to study statewide performance in both private as well as public institutions. In addition to being a tool for ranking campuses, the methodology could serve as the basis for performance and incentive funding, and also as the point of departure for an analysis of best practices to help underperforming institutions improve their transfer performance.

The Accountability Problem and Transfer “Rates”

For many years, the academic research community has struggled to identify a uniform measure of transfer activity that could be used to understand the health of the transfer function within community colleges. But because there are many different types of transfer, no single rate can capture all the transfer activity. For students who begin at two-year colleges, for example, upward vertical transfer to a baccalaureate degree institution is just one option. Researchers also disagree about which students to count in the transfer “base” (all entering students, or only those in degree-granting programs, or only those indicating a desire to transfer), and when in students’ academic careers to count them (all first-time students, after 12 units, etc.). The two studies described below are particularly important in understanding the metrics of 2/4 transfer rates.

Because there are many different types of transfer, no single rate can capture all the transfer activity.

TRANSFER ASSEMBLY PROJECT

The Transfer Assembly Project, based at the Center for the Study of Community Colleges at the University of California at Los Angeles and headed by Arthur Cohen, is the longest-standing study focusing on statewide measures of community college–baccalaureate transfer. Since 1989, the project has collected data on transfer rates initially for 18 and now for 24 states, using the following measure: the transfer rate is the percentage of all first-time community college students who complete at least 12 units at that college and who take at least one class from a public in-state university within four years of leaving the community college.* Data are collected from individual institutions within a state, sometimes through the statewide agency, and are aggregated into a statewide rate, which is subsequently reaggregated into a national transfer rate.

* Under the “12 units or more” standard, identical entry pools that produce the same number of transfer students can have vastly different transfer rates. For example, state A’s two-year colleges enroll 100,000 first-time students; 2,500 of them complete 12 or more units; 800 of those students transfer to a four-year college; and so the transfer rate is 32% (800 of 2,500). State B’s two-year colleges also enroll 100,000 first-time students, but 10,000 of them complete 12 or more units, and 800 of those students transfer to a four-year college. Here, the transfer rate is only 8% (800 of 10,000).

Because of confidentiality agreements, data are not published for individual institutions or for the states. Analysis of the changes in the rates, however, indicates that there are larger disparities in transfer rates between institutions within states than there are between states.

The Transfer Assembly Project’s base for calculating transfer rates is a subset of all first-time community college students (it excludes students who are not first-time students as well as those who fail to complete at least 12 units). But the base includes students in “vocational” as well as academic courses—not just those students who have indicated that they plan to transfer—because of the view that many students change their minds about plans after enrolling in college, and because many “vocational” courses are offered for credit that sometimes is transferable.

Although the Transfer Assembly Project has retained the same definition of “transfer rate,” the methodology for collecting data and the number of institutions in the database have changed over the years. Thus the data are not entirely comparable from year to year. The most recent study, published in 2001, tracks transfer rates for students who first enrolled in 1995. The trend data show a dip in transfer rates in the 1980s and a rise in the 1990s (see table 1), changes that the authors attribute to overall economic conditions and the emphasis on academic (in contrast to vocational) education within community colleges.

Table 1

Transfer Assembly Project: National Transfer Rates				
<i>Year Students First Enrolled in College</i>	<i>Number of Participating Colleges</i>	<i>A Number of Entrants</i>	<i>B % of Column A Completing 12+ Credits within 4 Years</i>	<i>C % of Column B Transferring within 4 Years</i>
1984	48	77,903	50.5	23.7
1985	114	191,748	46.7	23.6
1986	155	267,150	46.7	23.4
1987	366	507,757	46.9	22.6
1988	395	522,758	45.5	22.1
1989	416	511,996	44.1	21.5
1990	417	543,055	47.1	21.8
1991	424	575,959	47.3	22.1
1993	345	293,149	50.7	23.4
1995	538	619,470	52.5	25.2

Source: Szelenyi, 2001.

NCES STUDY OF ALTERNATIVE TRANSFER RATES

Under the auspices of the National Center of Educational Statistics, Ellen Bradburn and David Hurst (2001) explored the consequences of using different populations of potential transfer students in calculating transfer rates for first-time students enrolling between July 1, 1989, and June 30, 1990. “Transfer” was defined as initial enrollment in a community college followed by subsequent enrollment at any four-year institution (public or private, in any state) within the five-year period. The initial pool of “potential transfer” students included all students eligible for transfer, and the alternative definitions were increasingly restrictive. Their analysis showed that the transfer “rate” increases as the pool of students narrows (see table 2). In addition, student socioeconomic characteristics vary among the different pools, with the least restrictive pools containing the most diverse group of students, including the largest proportion of students of color from low-income families.

Table 2

Alternative Estimates of Transfer Rates		
<i>Definition of Transfer-Eligible Pool</i>	<i>Pool as % of All First-Time Community College Enrollments</i>	<i>% of the Pool Who Transferred to Any 4-Year College within 5 Years</i>
All first-time community college students	100	25
Expect to complete a bachelor’s degree or more	71	36
Enrolled in an academic program	68	36
Enrolled continuously in 1989–90	63	37
Enrolled any time during 1990–91	62	38
Pursuing academic major and/or taking courses toward a bachelor’s degree	43	43
Enrolled for 12 or more credit hours	36	40
Taking courses toward a bachelor’s degree	25	45
Academic major and taking courses toward a bachelor’s degree	11	52

Source: Bradburn and Hurst, 2001.

Research on State Policy and Transfer

There has been relatively little research on the relationship between state policy and the effectiveness of the 2/4 transfer function. Three relevant studies are briefly described below.

THE ROAD TO EQUALITY

Hungar and Lieberman (2001) were particularly interested in the effectiveness of state baccalaureate transfer policy as a tool for educational equity. They looked at state policy structures affecting transfer in seven states: California, Florida, Michigan, New York, Texas, Virginia, and Washington. They found some common patterns, but little evidence that policies were linked to the obstacles that students face in persisting through the baccalaureate degree. They argued that student aid should be used to help remove obstacles that hinder students from completing their degrees.

ECS SURVEY OF STATE POLICY STRUCTURES

The Education Commission of the States (ECS) surveyed all 50 states in order to identify the different ways that states define policies for 2/4 transfer (Education Commission of the States, 2001). The ECS report lists seven categories of policies:

1. **Legislation:** state law articulates the 2/4 transfer mission (30 states).
2. **Cooperative agreements:** statewide frameworks or networks support voluntary cooperation between institutions (40 states).
3. **Transfer data reporting:** the state collects some type of data on 2/4 transfer patterns (33 states).
4. **Students are given incentives and rewards for transfer,** such as financial aid or guaranteed admission (18 states).
5. **Statewide articulation** guides describe the requirements for course and institutional articulation between two-year and four-year institutions (26 states).
6. **Statewide common core curricula** (23 states).
7. **Common course numbering systems** (8 states).

The Education Commission of the States (ECS) surveyed all 50 states in order to identify the different ways that states define policies for 2/4 transfer.

Citing large policy gaps in many states, the report called for states to attend to the design of comprehensive statewide policies to support transfer.

STATE STRUCTURES AND DEGREE PRODUCTION

Gary Orfield and Faith Paul (1992), in a study commissioned by The Ford Foundation, examined the relation between state structures for higher education and college completion. Drawing from national data and data from five states (California, Florida, Illinois, Indiana, and Wisconsin), Orfield and Paul examined the relationship between the rate of baccalaureate attainment and a state’s reliance on community colleges as a primary point of access to the baccalaureate. They found that those states that rely the least on community colleges had higher rates of bachelor’s degree attainment; states that rely the most on community colleges had lower rates of degree attainment. This pattern held for all students, and it was particularly pronounced for minority students in urban community colleges. To increase bachelor’s degree attainment, Orfield and Paul concluded, it would be necessary to increase the proportion of students who begin at four-year colleges or universities.

They found that those states that rely the least on community colleges had higher rates of bachelor’s degree attainment.

This study has been quite controversial, because it challenges ideas about the effectiveness of the dual mission of the community colleges and the structural capacity of these colleges to invest the resources to provide not just access but equity in achievement. Orfield and Paul’s method for calculating transfer rates produced low rates, because their measure juxtaposed total two-year college enrollments with baccalaureate degree recipients. Despite the study’s vulnerability to methodological critique, the basic findings about minority student retention and graduation from community colleges match both McCormick’s and Adelman’s findings.

Six-State Focus

To examine the impact of state policy structure on 2/4 transfer, I selected six states that rely heavily on transfer as a point of access to the baccalaureate degree for low-income students. The criteria for selection included the states' grades on completion in *Measuring Up 2000* (National Center for Public Policy and Higher Education, 2000), combined with the proportion of total postsecondary enrollments in community colleges and the percentage of school-age children in poverty.* Three of these states—Florida, New York, and North Carolina—were among the better-performing states on the completion measure used in *Measuring Up 2000*; three others—Arkansas, New Mexico, and Texas—were among the poorest-performing states (see table 3). Arizona and California were not selected, despite sizable community college sectors, because they both obtained midrange completion scores in *Measuring Up*.

As one measure of 2/4 transfer effectiveness, this six-state survey compared Integrated Postsecondary Education System (IPEDS) data for first-time freshmen enrollments in degree-producing institutions in fall 1991 with baccalaureate degree recipients in 1996–97 (see table 4). While these cohorts are not identical, the comparisons show how the states differ in the relative diversity of enrollments and in degree attainment by racial and ethnic groups, with much higher populations of Hispanic students in Florida, New Mexico, New York, and Texas than in Arkansas and North Carolina. More importantly, there are disturbing and consistent patterns indicating that white students persist to the baccalaureate degree at higher rates than either African-American or Hispanic students.

* Grades on the completion measure reflect the two persistence measures and two completion measures shown in table 3. These measures are not considered proxies for transfer effectiveness, but they do capture some aspects of transfer performance, since all entering community college students are included in the base of one persistence measure, and all degree completers who started in a community college are captured in the completion measures. The other factors—the proportion of students in public community colleges and the percentage of school-age children in poverty—narrow the focus to states that use public community colleges as a point of low-cost access to postsecondary education.

Table 3

Characteristics of the Six States						
	<i>Arkansas</i>	<i>Florida</i>	<i>New Mexico</i>	<i>New York</i>	<i>North Carolina</i>	<i>Texas</i>
Completion grade (composite grade, based on the four measures immediately below)	D+	B+	D–	A–	B+	D+
% of first-year community college students who return for a 2 nd year	54%	61%	52%	62%	52%	41%
% of freshmen at 4-year institutions who return for a 2 nd year	67%	80%	69%	78%	80%	73%
% of first-time/full-time undergraduates who complete a bachelor's degree within 5 years	32%	52%	30%	53%	56%	43%
Number of certificates, degrees, and diplomas awarded per 100 undergraduate students	15	18	12	19	19	14
Public community college enrollments as a % of total postsecondary enrollments	38%	55%	55%	29%	43%	51%
Number of enrollments in public community colleges	38,997	320,710	51,674	241,502	143,006	432,362
State grant aid targeted to low-income families as a % of Pell Grant aid	12%	14%	9%	92%	8%	13%
Expected % change in number of high school graduates by 2010 (compared with 1999)	–2.1%	26.4%	5.1%	9.1%	20.1%	11.7%

Source: National Center for Public Policy and Higher Education, 2000.

Note: Enrollments reported in *Measuring Up 2000* differ slightly from those reported later in this report.

Table 4

Persistence, by Racial and Ethnic Group

(Persistence = Number of baccalaureate degrees granted in 1996–97 divided by number of first-time freshmen in 1991)

	<i>White Non-Hispanic</i>	<i>Black Non-Hispanic</i>	<i>Hispanic</i>	<i>Asian</i>	<i>Unidentified/ Other</i>	<i>Total</i>
ARKANSAS						
First-time Freshmen						
Number	16,289	3,402	130	195	341	20,357
Percentage	80.02%	16.71%	0.64%	0.96%	1.68%	100%
Baccalaureate Degrees						
Number	7,568	981	62	128	475	9,214
Percentage	82.14%	10.65%	0.67%	1.39%	1.68%	100%
Persistence	46	29	48	66	139	45
FLORIDA						
First-time Freshmen						
Number	54,775	13,303	11,988	1,955	9,689	93,162
Percentage	58.80%	14.28%	12.87%	2.10%	10.40%	100%
Baccalaureate Degrees						
Number	32,447	5,300	5,817	1,618	2,348	47,530
Percentage	68.27%	11.15%	12.24%	3.40%	4.94%	100%
Persistence	59	40	49	83	24	51
NEW MEXICO						
First-time Freshmen						
Number	7,068	555	5,319	214	100	14,771
Percentage	47.85%	3.76%	36.01%	1.45%	0.68%	100%
Baccalaureate Degrees						
Number	3,845	155	1,842	111	373	6,326
Percentage	60.78%	2.45%	29.12%	1.75%	5.90%	100%
Persistence	54	28	35	52	373	43
NEW YORK						
First-time Freshmen						
Number	108,673	20,877	16,538	8,716	20,280	175,084
Percentage	62.07%	11.92%	9.45%	4.98%	11.58%	100%
Baccalaureate Degrees						
Number	65,723	9,381	6,760	7,227	7,301	96,392
Percentage	68.18%	9.73%	7.01%	7.50%	7.57%	100%
Persistence	60	45	41	83	36	55
NORTH CAROLINA						
First-time Freshmen						
Number	40,444	12,401	504	778	947	55,074
Percentage	73.44%	22.52%	0.92%	1.41%	1.72%	100%
Baccalaureate Degrees						
Number	26,422	5,797	382	789	812	34,202
Percentage	77.25%	16.95%	1.12%	2.31%	2.37%	100%
Persistence	65	47	75	101	86	62
TEXAS						
First-time Freshmen						
Number	86,047	15,574	28,400	4,371	20,698	138,295
Percentage	62.22%	11.26%	20.54%	3.16%	14.97%	100%
Baccalaureate Degrees						
Number	48,893	5,226	11,191	3,299	2,566	71,175
Percentage	68.69%	7.34%	15.72%	4.64%	3.61%	100%
Persistence	57	34	39	75	12	51
NATIONAL						
First-time Freshmen						
Number	1,742,295	269,412	169,978	104,178	137,131	2,422,994
Percentage	71.91%	11.12%	7.02%	4.30%	5.66%	100%
Baccalaureate Degrees						
Number	878,460	91,986	60,902	67,086	74,445	1,172,879
Percentage	74.90%	7.84%	5.19%	5.72%	6.35%	100%
Persistence	50	34	36	64	54	48

Source: National Center for Education Statistics, 1991, 1997.

ARKANSAS

Arkansas is one of the poorest states in the country, and its performance on the persistence and completion criteria developed for *Measuring Up 2000* put it at or near the bottom of the 50 states. The majority of undergraduate enrollments in the state are in the public four-year sector (51%), followed by the community colleges (38%) and private four-year institutions (10%) (National Center for Public Policy and Higher Education, 2000). The average annual tuition and mandatory fees in 2000–01 were \$3,388 in the public four-year institutions, and \$1,497 in the public two-year colleges.

GOVERNANCE

Arkansas has an institutional governance structure, with individual governing boards for each of the public two- and four-year institutions, and a statewide coordinating agency for higher education whose director is a member of the governor's cabinet. The statewide coordinating board, the Higher Education Coordinating Board, has the authority to approve institutional role and scope and new degree programs. The coordinating board makes recommendations on the budget and is responsible for managing 12 state scholarship programs. Total state funding for need-based and merit-based student aid is \$46 million. Of the 23 public two-year colleges, 7 are affiliated with and under the governance structure of a four-year institution. Roughly half of the two-year colleges have chosen to have an elected board; the rest chose to have an appointed board. The Department of Workforce Education in the Department of Education is responsible for state regulation of vocational and technical institutions.

ENROLLMENT PLANNING

Arkansas expects to have flat or declining demand for higher education in the next decade, as the number of high school graduates is projected to decline slightly. Thus, the state's plans for higher education focus more on improving quality and access rather than on expanding capacity. The two-year colleges have been the fastest-growing sector in the last few years, in part owing to legislation in 1991 that was designed to strengthen both the 2/4 transfer and the economic development and community educational roles of the two-year colleges.

ACADEMIC POLICIES AFFECTING TRANSFER

State legislation on transfer, enacted in 1991, established a statewide mandatory transfer core curriculum, now in place at all public institutions. Individual institutions may vary the specific course titles in the curriculum, and may require additional course work or specific grades for transfer. Students who complete the core courses at a two-year college know that the credits will be accepted and counted toward the general education requirements at the receiving four-year institution, and students who earn an associate degree know that all units will be accepted and that they will be admitted with upper-division standing.

Arkansas has also focused on improving high school academic completion for college and reducing remediation at the college level. A statewide remediation law requires all students scoring below 19 on the ACT examination to be tested and placed, if necessary, in remedial courses. Both two-year and four-year colleges offer remedial courses.

Arkansas has also focused on improving high school academic completion for college and reducing remediation at the college level.

DATA COLLECTION AND ACCOUNTABILITY

Arkansas uses a student-based tracking system for annual reports that document retention, transfer, and graduation activity for cohorts of entering first-time freshmen for up to six years. For first-time, full-time community college students who entered in 1992 and then transferred, 33% had obtained some form of degree or certificate by the five-year mark: 18% held a certificate, 13% an associate degree, and 2% a bachelor's degree. (Comparable figures for students at public four-year colleges were associate degrees, 2%; bachelor's degrees, 25%.) Statewide data are not available for students who successfully transfer but do not obtain a degree or certificate, or for students who attend school part-time. There is no consistent statewide measurement or reporting of transfer rates, and success in 2/4 transfer is not tied to funding for either the two- or four-year institutions. Private college transfers are not included in state reporting. The 2/4 transfer rate calculated by the UCLA Transfer Assembly Project is relatively high—38%—because only 24% of first-time students are counted in the Transfer Assembly base (students who have completed at least 12 units).

FLORIDA

Florida has a reputation for a strong statewide commitment to community college transfer. The state’s community colleges have historically been the primary point of access to public postsecondary education. Close to 85% of the state’s undergraduate enrollments are in public institutions, with 55% in 28 community colleges and almost 30% in 11 four-year institutions (National Center for Public Policy and Higher Education, 2000). There is also a large private sector: 41 two-year and 61 four-year institutions. Public sector tuitions remain very low, at around \$2,000 annually for the public four-year institutions and \$1,250 for the community colleges. Florida has a large, but relatively thinly funded, need-based financial aid program, the Florida Student Assistance Grant, which provides approximately \$35 million annually to some 40,000 students. The recently adopted Bright Futures Scholarship program provides merit-based aid to high-performing high school graduates; this program was funded at \$131.5 million in 2001–02.

Florida has a reputation for a strong statewide commitment to community college transfer.

GOVERNANCE

Until relatively recently, Florida had a segmental governance structure for postsecondary education, with a statewide governing board for the public four-year colleges, and a statewide coordinating board along with local governing boards for the community colleges. In 2000 the state legislature abolished the statewide boards and created a single statewide Board of Education with policy and budgetary authority for both the public four-year and community colleges. At the same time, each of the four-year campuses was given a local governing board; the two-year colleges have had local boards for many years. The statewide postsecondary planning agency, the Council for Educational Policy Research and Improvement (CEPRI), reports to the legislature and also has an advisory role to the Florida Board of Education in budget, planning, and policy review. The legislatively mandated Articulation Coordinating Committee continues to oversee articulation and transfer policies. It is chaired by the deputy commissioner of education and includes administrators representing community colleges, technical colleges, and four-year public and independent institutions. This group monitors adherence to articulation policies and adjudicates problems.

ENROLLMENT PLANNING

Florida expects rapid enrollment growth in public institutions over the next decade and projects a 26% increase in the number of high school graduates (from 1999 to 2010). At the same time, the state has made it a general priority to increase the percentage of state residents who hold the baccalaureate degree, although there are no specific numerical goals attached to this priority. The Council for Educational Policy Research and Improvement has recommended that the state consider expanding baccalaureate authority on community college campuses; to date, this has occurred only at St. Petersburg College (a two-year institution) in the high-demand fields of nursing, teacher education, and instructional technology. Many of the community colleges maintain concurrent or dual enrollment programs with the four-year institutions, and these concurrent programs enroll some 13,000 students.

ACADEMIC POLICIES AFFECTING TRANSFER

For many years, Florida has maintained a so-called 2+2 policy for postsecondary education: students begin their college education in a community college before transferring to a four-year institution. The legislation that created the community college system, in 1957, also mandated that there be strong articulation between the two- and four-year institutions. Many of the four-year institutions began as upper-division campuses; all now offer four-year programs. The state maintains an explicit unit requirement for degrees: 120 units for the baccalaureate and 60 for the associate degree, 36 of which must be in a general education core. The framework for the general education core is common to the four-year and two-year institutions and is stated in statute as well as regulation. This common core has also been voluntarily adopted by the majority of private colleges. The core courses differ from institution to institution, within the statewide agreement about the basic five core areas. There is a common prerequisite list for each degree program, which includes courses that count toward the degree as well as any prerequisites for admission into the program. These courses are listed in a statewide electronic catalogue, FACTS (Florida Academic Counseling and Tracking for Students).

State law specifies that any student who earns an associate degree will be guaranteed admission into a public university degree program, and the units from core courses transfer as a block to any public institution. Thus students need not negotiate individual course-level transfers with the receiving institutions. They are not guaranteed admission into high-demand programs

For many years, Florida has maintained a so-called 2+2 policy for postsecondary education: students begin their college education in a community college before transferring to a four-year institution.

or into programs with special requirements, but the law requires that transfer students be treated the same way as native students with respect to admission to these programs. Students who believe they have been treated unfairly can bring their complaints before the Articulation Committee.

Florida was one of the first states to mandate college placement and achievement testing, accompanied by a law on remedial instruction for students who fail to qualify for college-level placement. Students entering college without ACT or SAT scores are required to take the Common Placement Examination in English/writing and math; the statewide cut-scores are 73 for math and 82 for English/writing. Some 8% of the students in four-year institutions require remediation—most of these are students who were special admits. Florida law requires all remediation to take place at a community college.

DATA COLLECTION AND ACCOUNTABILITY

Florida has a statewide commitment to performance funding and accountability reporting for all state institutions, including the universities and community colleges. The state has separate mandatory accountability reports for the two-year and public four-year institutions, and reporting on student transfers and transfer performance is embedded within each. Databases are centralized at the system level, use common course numbering systems, and students are identified through Social Security numbers. Accountability legislation requires all public institutions to report on transfers. The two-year colleges are responsible for reporting on course and transfer patterns to four-year institutions, and the four-year institutions report on transfer students' performance at their institutions.

Approximately half the students in Florida's community colleges are enrolled in associate programs. Of the students who transfer to a four-year institution, roughly one-third do so after completing the associate degree, another one-third prior to obtaining the degree, and another one-third with more than 60 units but no degree. Most of the state accountability reporting focuses on students who have obtained the associate degree prior to transfer. Data from the State Board of Education show that those who transfer with the associate degree remain in school and/or complete their baccalaureate degree work at slightly higher levels than freshmen students in the state university system, 68% after six enrolled years in comparison to 60% of native students. Transfer rates for 2/4 transfer are calculated and reported only for students who receive the associate degree: 62% of these students were enrolled in a

public four-year college in the year after leaving community college, and 70% were enrolled five years after leaving.

Florida also has an incentive- and performance-based budgeting process for the community colleges but not for the four-year institutions. The performance-based funding program is separate from the accountability reporting system. There are two separate pots of funds for performance-based funding, one for the A.A. degree and another for the A.S./A.A.S. degree, certificate programs, adult vocational, and continuing education, encompassing both K–12 and community colleges. The A.A. performance-based funding pool for community colleges provides roughly 1% of base funding for rewards for four types of performance: the number of students completing the A.A. degree, the number of students who complete the A.A. degree by taking less than 72 units, the number of completers from targeted populations, and the number of completers who transfer to a state university or get a job. The new State Board of Education plans to revisit the structure of accountability reporting for the four-year institutions, partly to better align K–12 accountability with postsecondary education, and partly to improve the connection between postsecondary data reporting and state policy goals for higher education. Task forces are working on a proposal for a performance-based budgeting system for the state universities.

NEW MEXICO

New Mexico is a poor state and one of the lowest-performing on the measures for high school completion, retention, and graduation used in *Measuring Up 2000*, although the state scores relatively well on both college participation and affordability. About 88,000 undergraduate students attend public colleges, with 41% of those enrolled at the 6 four-year institutions and 59% at the 19 community colleges. The 16 accredited private institutions enroll approximately 6,000 undergraduate students (National Center for Public Policy and Higher Education, 2000). Annual tuition and fees average \$668 a year at the community colleges, \$2,073 at the four-year institutions. The state spends slightly over \$34 million annually for student aid, the majority (\$18 million) for merit-based, rather than need-based, aid.

GOVERNANCE

New Mexico is an institutionally governed state with a statewide coordinating board and 15 institutional governing boards for the public two- and four-year colleges. Most of New Mexico’s earliest community colleges were established as “branch” or feeder schools to four-year institutions, and they were expected to take a 2+2 approach to baccalaureate transfer. Over the years, additional types of two-year institutions have evolved—constitutional, independent, branch, and vocational/technical—all of which view transfer as part of their mission. The state coordinating board, the Commission on Higher Education, is responsible for policy development, data collection, and analysis. Data reporting is performed both by the institutions, through university and community college collaboratives, and by the coordinating board. Budgets are based on a funding formula that is reviewed and approved by the coordinating board.

ENROLLMENT PLANNING

The state’s population is expected to grow very slowly in the next 10 years, and unless high school graduation rates improve, college demand could decline. The state’s three urban centers are growing, but the rest of the state faces declining enrollments and excess capacity for higher education.

Nonetheless, New Mexico will likely face a large structural budget deficit for higher education in the next 10 years. Over 30% of school-age children live in poverty. New Mexico has a sizable Latino population and a large population of Native Americans.

ACADEMIC POLICIES AFFECTING TRANSFER

State policy has long emphasized the transfer function for some of the community colleges, and the transfer function has been a statewide priority since the mid-1980s. Articulation and transfer legislation enacted in 1995 directed the Commission on Higher Education to collaborate with the institutions to develop a common transfer core curriculum of 35 units. This curriculum, mandated for all public institutions, has now been in place for almost seven years. Receiving institutions are required to accept additional courses as meeting core requirements, based on seven 64-semester-hour transfer modules that cover broad discipline areas and that are developed and maintained by statewide faculty groups.

New Mexico has two types of high school graduation standards—graduation standards and diploma standards—neither of which is aligned

The state’s three urban centers are growing, but the rest of the state faces declining enrollments and excess capacity for higher education.

with college admissions standards. Two of the four-year regional institutions and all the public community colleges maintain open admission. The state does not have an explicit policy on college remediation, assessment, or placement, but does regulate the classes that may be offered for college credit and state support.

DATA COLLECTION AND ACCOUNTABILITY

New Mexico has a student-based tracking system, but a relatively weak statewide capacity for accountability reporting. A recent report by the Commission on Higher Education shows roughly half of New Mexico’s bachelor’s degrees were awarded to transfer students. Of the transfer students, fewer than half had transferred from another New Mexico public institution; whether from four-year or two-year institutions is not reported. Over half of the bachelor’s degrees awarded to transfer students were awarded to students who had transferred from out-of-state colleges. Almost 87% of credits presented are accepted for transfer. Of the units denied, most were from vocational or remedial courses outside the transfer curriculum.

NEW YORK

New York is the most heavily “private” of the six sample states: private four-year colleges are the single largest sector in terms of enrollments (about 36% of total undergraduate enrollments) and number of institutions (National Center for Public Policy and Higher Education, 2000). Of the sample states, New York also has the smallest percentage of enrollments in public community colleges. The state’s pricing, subsidy, and financial aid policies reflect this strong private presence: public sector tuitions in New York, particularly in the community colleges, are among the highest in the country, with average tuition in the community colleges around \$2,500 annually in 2000, compared with \$3,850 for the four-year institutions. New York has one of the largest need-based state financial aid programs, the Tuition Assistance Program (TAP), which awards over \$600 million annually. Only full-time students are eligible for TAP and eligibility is limited to eight enrolled semesters, restrictions that significantly limit TAP assistance to low-income community college students, who are more likely to be enrolled part-time and take longer to complete degrees. The much smaller state grant program targeted to community college students, Aid to

Of the sample states, New York also has the smallest percentage of enrollments in public community colleges.

Part-Time Study (APTS), limits its awards to tuition costs only and is only for students who are enrolled at least half-time (more than six units). The State University of New York (SUNY) has some tuition waivers for transfer students, and students at the City University of New York (CUNY) may also be eligible for an award from CCTWP (City College Tuition Waiver Program), designed for New York residents who attend one of CUNY's six community colleges. New York also has the Bundy aid program, which provides funds to private colleges based on degrees awarded: \$600 to two-year institutions for associate degrees, \$1,500 for bachelor's degrees to four-year institutions, \$950 for master's degrees, and \$4,550 for doctoral degrees. The Bundy program is currently funded at approximately \$45 million annually.

GOVERNANCE

New York has 45 public four-year institutions, 35 public two-year community colleges, and 182 private institutions (119 independent four-year, 22 independent two-year, 9 proprietary four-year, and 32 proprietary two-year institutions). The governance structure is segmental, with most responsibility for planning, policy, data collection, and oversight residing in the two public governing boards—SUNY and CUNY—and statewide coordination by the New York State Board of Regents. All of the public community colleges have been governed as part of the CUNY or SUNY systems since the 1960s: SUNY has 32 four-year and 29 two-year institutions, and CUNY has 13 four-year and 6 two-year institutions. The SUNY and CUNY governing boards are responsible for statewide oversight for the community colleges within their respective jurisdictions. The Board of Regents performs a largely coordinating function, although it exercises degree review and approval authority and is the only state accrediting agency in the United States. The New York State Education Department is the administrative arm of the Board of Regents. The Board of Regents has no budget authority for higher education; budgets are negotiated individually between SUNY and CUNY with the governor's office and the state legislature.

ENROLLMENT PLANNING

Demand for postsecondary education in New York is projected to grow very slightly, at a statewide rate of approximately 1% a year. Most of the enrollment growth is in the metropolitan New York region and will be highest in the CUNY institutions; between 1990 and 2001, enrollment in New York City increased by 8%. Enrollments in the rest of the state declined by 2.6%, although three upstate regions had increases between 2.5% and 8%. Enrollment planning

is decentralized within SUNY and CUNY. Campus-level plans within each of those systems show that most are expecting very modest growth in the next 10 years, with no sustained state or sector plan to increase enrollment access through growth in the community colleges. Nonetheless, the community colleges have been the fastest-growing sector in New York over the last decade.

ACADEMIC POLICIES AFFECTING TRANSFER

Responsibility for development and oversight of transfer policies affecting the two-year institutions resides with the SUNY and CUNY Boards; the Board of Education’s primary involvement is approval of degree programs and statewide data collection. SUNY has historically been the institution with the most selective admissions requirements of the four-year institutions.

Admissions standards for many of the CUNY institutions had, during the 1970s, changed from selective to open access, but the four-year institutions are now moving back toward greater selectivity in response to the CUNY Board’s elimination of remedial education within baccalaureate programs in 2000. The Board of Regents has approved this change through 2002; at that time the Regents will consider extending CUNY’s authority to eliminate remedial courses in baccalaureate programs. The Board of Regents is closely monitoring the implementation of the new admissions requirements.

All the CUNY and SUNY community colleges, in contrast, remain open access institutions. Both systems require students who enter without ACT or SAT scores to take standardized tests to assess their preparedness for college-level coursework. Students failing to score high enough are directed to remedial courses, for which they receive college-enrollment credit but not degree credit.

Within both CUNY and SUNY, the community colleges have historically played a transfer role, and policies on articulation and acceptance of transfer credit within both institutions clearly state expectations for associate degree obtainment and transferability of credits. Within CUNY and SUNY there are separate core curriculum requirements for the associate degree. Articulation agreements must be individually negotiated between the campuses. There is no common course numbering system for either SUNY or CUNY. CUNY has in the last five years implemented a version of an electronic course catalogue for prospective transfer students, the Transfer Information and Program Planning System (TIPPS). Within both systems, policies on the transfer of credits require that community college students who complete the transfer core curriculum will have their units accepted for degree credit transfer at either a SUNY or CUNY campus, depending on where the community college is located.

Both systems require students who enter without ACT or SAT scores to take standardized tests to assess their preparedness for college-level coursework.

Students who are denied credits upon transfer have appeal rights to the SUNY and CUNY Boards. While students are not guaranteed enrollment at their first-choice campus or degree program, the relatively soft enrollment demand in many parts of the state has made four-year institutions eager to accept qualified transfer students.

There is also some evidence that the private four-year colleges play a major role in the baccalaureate transfer function in New York. Many of the private colleges maintain strong partnership programs with community colleges in their region, promising tuition assistance and other forms of aid for transfer students. The Bundy aid program, while not reimbursing the institutions for their costs of educating transfer students, nonetheless provides a positive incentive for them to pursue transfer students and encourage them to complete the baccalaureate degree.

DATA COLLECTION AND ACCOUNTABILITY

New York has no statewide “report card” or accountability report for higher education, although the Board of Regents requires reporting on some performance issues, such as graduation rates. Most of the data reporting on transfer, degree production, and other performance measures come from the SUNY and CUNY systems. The Board of Regents prepares an annual report on transfer activity for full-time students only; information about part-time transfer students must be obtained at the institutional level. The statewide transfer report was discontinued entirely between 1993 and 1999, so trend information for the 1990s must be obtained from the institutions. The statewide report shows data for sending and receiving institutions separately for CUNY and SUNY two- and four-year institutions, independent two- and four-year institutions, proprietary two- and four-year institutions, and out-of-state institutions. Data are shown separately for students who transferred from two-year institutions both with and without a degree. In 1999 out-of-state transfers constituted roughly a third of all transfer activity. Among in-state transfers, 58% went from two- to four-year institutions, and the majority of these 2/4 transfers did not obtain a two-year degree. Almost 35% of all 2/4 transfers moved to independent four-year institutions.

The Bundy aid program ... provides a positive incentive for (community colleges) to pursue transfer students and encourage them to complete the baccalaureate degree.

NORTH CAROLINA

North Carolina is largely a public sector state, although it has a strong and well-respected group of private four-year colleges. The 16 public four-year institutions serve about 39% of undergraduate students in the state; the 58 public community colleges serve about 43%; and the 43 four-year private colleges enroll about 18% (National Center for Public Policy and Higher Education, 2000). The state has long prided itself on its low tuition, and despite recent increases, tuition remains low. In 2001–02, in-state tuition and mandatory fees at public four-year institutions averaged \$2,433 annually, and in-state tuition for full-time students at community colleges averaged \$1,021. The state has been slow to build need-based state grant programs, presuming that the lowest-income students' needs were met through low tuitions and federal grant aid. After tuition rose in the late 1990s, the state created a grant program for community college students and another for public four-year students. Roughly a third of new tuition increases are allocated to these need-based aid programs. The community college grant program was instituted at the same time that the legislature increased tuition in the community colleges, specifically to take advantage of the new federal tuition tax credit.

GOVERNANCE

North Carolina has an unusual governance structure, combining segmental governance with local boards and statewide planning. The University of North Carolina Board of Governors is the statewide governing board for all the public four-year institutions, and it also has statutory responsibility for statewide planning, policy work, and data collection for all higher education, including the public community colleges and private four-year institutions. Each of the four-year public campuses also has a local governing board.

The State Board of Community Colleges is the governing board for the 58 public community colleges. Among the community colleges, some are designated as public junior colleges and others as industrial education centers, which focus on technical and vocational education. All the junior colleges have associate degree, diploma, certificate, and transition programs. In fall 2000, these programs enrolled 170,204 students; of these, 38,369 were in associate degree programs (A.A., A.S., A.F.A.). As described below, the associate degree programs are articulated with the four-year institutions and are considered the 2/4 transfer curriculum within the community colleges, although students enrolled in other programs may also be eligible to transfer to four-year institutions.

North Carolina's population is expected to grow by 13% in the first decade of this century, but the projection for growth in the school-age population is closer to 20%.

ENROLLMENT PLANNING

North Carolina's population is expected to grow by 13% in the first decade of this century, but the projection for growth in the school-age population is closer to 20%. The state has also placed a priority on increasing the percentage of residents who attend college. To meet the anticipated enrollment demand, the state is undertaking initiatives that include strengthening the community college transfer function.

ACADEMIC POLICIES AFFECTING TRANSFER

In 1995 the state legislature enacted a comprehensive statewide articulation policy that had been developed by the Board of Governors of the University of North Carolina and the State Board of the Community Colleges. To strengthen the community college–baccalaureate transfer function while ensuring the quality of academic completion for college-level work, the legislation established a general education transfer core curriculum that applies to all associate degree programs in all of the state's public institutions; each four-year campus may also require additional courses for certain majors. Students who enter community college without having completed the high school courses required for admission to the University of North Carolina must complete at least two courses in a foreign language in their A.A. or A.S. program in addition to the general education transfer core. Transfer students who have completed the core curriculum must still compete for admission to a four-year college and for acceptance into a major, but they are not required to complete work beyond that required of all continuing students or transfer students from four-year institutions.

DATA COLLECTION AND ACCOUNTABILITY

North Carolina maintains comprehensive student tracking systems as well as a systemwide accountability structure, and reports on both the sending and receiving ends of 2/4 transfer. Lateral transfer of community college students to either a public or private four-year college in North Carolina constituted roughly one-third of total transfer activity in fall 2000. Private college transfers (from both two-year and four-year institutions) account for less than 10% of transfer activity into UNC institutions, a proportion that has declined since the early 1990s. According to the UCLA Transfer Assembly Project data, North Carolina's statewide 2/4 transfer rate in 1996–97 was slightly above 15% (around 5,000 transfers from a base of 32,000 students who completed 12 units).

North Carolina also monitors the academic performance of two-year students after they transfer to UNC and reports the performance data to the sending institutions. This information can be used by the colleges and faculty to evaluate teaching programs, and it also serves as a statewide accountability measure. For the 1995 cohort, the five-year baccalaureate graduation rates for 2/4 transfer students in UNC institutions was 72%, compared with 89% for native UNC students; at the five-year mark, an additional 3% of transfer students and 2% of native students were still enrolled.

The state has experimented with performance-based budgeting systems for both the community colleges and UNC, but a tight state budget has constrained allocations for these initiatives, and the future of performance-based budgeting remains uncertain. Nonetheless, the structure is in place for both two- and four-year institutions to recognize transfer performance with funding. One of 12 performance measures for the community colleges concerns the success of transfer students at the four-year level: the performance standard requires at least 84% of transfers to attain an overall GPA of at least 2.0 after completing one year at the UNC institution. The community college performance report does not include goals for numbers of transfer students. At UNC, one of over 30 performance standards requires the system to maintain or increase transfer rates of students who earn an associate degree.

TEXAS

Texas is primarily a public state for higher education: about 90% of all college students attend public institutions. It is also the largest low-performing state (based on the completion criteria in *Measuring Up 2000*) to have at least 25% of its college students attending public community colleges. Public community colleges account for over half of total undergraduate enrollment in the state; the public universities account for around 38%; private four-year institutions, about 10% (National Center for Public Policy and Higher Education, 2000). Public four-year tuition averages \$2,741 annually, and community college tuition averages \$910.

GOVERNANCE

Texas has an institutional governing structure: there are 61 separate governing boards—6 boards for the public four-year system, 50 locally elected boards

for the public community college districts, 1 board overseeing the 8 technical colleges, and 4 single-institution boards. The Texas Higher Education Coordinating Board is responsible for overall state postsecondary planning, data collection, and policy analysis; it also has funding advisory responsibilities to the governor and the legislature. The oldest need-based grant program is the \$62 million (in 2000) Tuition Equalization Grant program, which is restricted to students in independent colleges and universities. An ambitious new need- and merit-based grant program, the TEXAS (Toward Excellence, Access and Success) program, provides needy students who complete the high school college completion curriculum with awards equal to their tuition and fees. Now in its third year, the TEXAS program has an annual appropriation of \$120 million. A portion of the program (TEXAS-II) is targeted to community college students who have not completed the high school curriculum; this portion of the program is funded at \$5 million.

ENROLLMENT PLANNING

Demand for higher education is increasing at an annual rate of around 1.5%, with slightly higher growth in the community colleges and technical institutions. The state has also placed priorities on raising the college-going rate to the national average and on eliminating disparities in attendance between racial groups. One goal of Texas' new higher education plan (*Closing the Gaps*) is to increase college enrollments by 500,000 by 2015. A second goal is to increase the total number of certificates and associate and baccalaureate degrees by 50% (from 95,000 awarded in 2000 to 163,000 in 2015). The state has no firm enrollment targets for the different institutions, but progress toward these goals will inevitably increase the enrollment demand on community colleges. There has been considerable concern about Texas' low retention and baccalaureate achievement rates, and the state has been analyzing student flow patterns within public higher education for many years.

Transfer has long been emphasized as one of the missions of the Texas community colleges, although the emphasis on transfer relative to other functions differs among the colleges, depending on local needs and economic conditions. The state has hesitated to make baccalaureate transfer and degree attainment a specific goal for community college students, because policymakers believe that many students do not want or need to obtain a degree. Some of Texas' four-year institutions were once upper-division campuses, designed to build on a 2+2 pattern with the local community college.

One goal of Texas' new higher education plan ... is to increase college enrollments by 500,000 by 2015.

ACADEMIC POLICIES AFFECTING TRANSFER

For many years, Texas colleges were encouraged to develop voluntary articulation agreements between the two- and four-year institutions. In 1987, however, the state legislature and the Coordinating Board, hoping to strengthen articulation and transfer, mandated the development of a statewide core curriculum. Legislation in 1997 expanded that concept, and Texas now has a transfer general education core curriculum that allows individual institutions some flexibility in designating core courses. The Coordinating Board reviews and approves each institution’s core curriculum every five years. If a student completes an approved core curriculum, the receiving institution must accept those courses as a substitute for its own core requirements. Receiving institutions and specific majors may require some additional courses beyond the minimum core.

Under statutory directive, the Coordinating Board has also developed “field of study” curricula to facilitate transfer of courses within high-demand disciplines; such agreements are now in place for 38 disciplines and majors. There are no statewide requirements or policies for joint admission or guaranteed transfer, but these are encouraged, and several institutions have created such policies. Many institutions—including every public college and university as well as many private colleges—have also adopted the common course numbering system for lower-division courses. Institutions that choose not to use the common course numbers are required to publish a “cross-walk” between the common numbering system and their own. Most four-year institutions have electronic degree-audit systems, and the state is considering developing a statewide electronic degree-audit system, which would allow students to see how courses would transfer to different institutions.

There is no uniform high school graduation requirement in Texas, although the legislature has specified that the college completion curriculum will be the “default” curriculum for all public schools by 2005. After public institutions were prohibited from using affirmative action admissions policies, the state legislature enacted a law that requires public universities to admit the top 10% of all high school graduates. A range of other admissions criteria are applied to students not in the top 10%, with individual institutions setting these requirements.

Students entering college with low SAT or ACT scores or without these scores are required to take the TASP (Texas Academic Skills Program) examination and may not enroll in more than nine semester credit hours before

taking the test. Students who do not pass the TASP are placed in remedial and developmental courses, either at a four-year institution or a community college. Some four-year institutions contract with their local community colleges to provide remedial instruction.

DATA COLLECTION AND ACCOUNTABILITY

Texas has a good statewide information system and data analysis capacity. Detailed reports track student retention, progress, and graduation for all public institutions as well as all types of transfer activity between all types of schools. Texas also monitors the transfer and subsequent performance of first-time freshmen who enroll for 12 or more semester credit hours before transferring to a four-year institution. The state does not calculate a statewide transfer rate. About 29% of first-time community college students transfer to or graduate from a public four-year institution after six years. Of the students who took 12 semester credit hours or more, 11% had obtained the baccalaureate degree after six years, and another 18% had transferred to a four-year institution but had not yet completed the baccalaureate degree.

In 2001 Texas completed a major study of the effectiveness of its statewide transfer policies. The study was conducted by a statewide task force that reviewed thousands of student transcripts to learn about course-taking and transfer patterns. The study found no significant difference in the quality of student performance at the receiving institutions (as measured by grade-point averages) between native students and those who transferred after completing at least 30 semester credit hours. The majority of community college credits were accepted by the receiving four-year institutions: 80% of total semester credit hours were accepted for transfer, of which 70% were applied to the baccalaureate degree major. Transfer credit was denied primarily for low grades and for remedial and developmental courses. The task force's recommendations for strengthening transfer included improvements in reporting student performance information from receiving to sending institutions; a feasibility study for a statewide electronic degree-audit system, similar to the one in Florida; and study of "best practices" in other states.

Lessons Learned about State Transfer Policy

The six profiled states vary in their approach to postsecondary policy, including 2/4 transfer policy. All have large public community college sectors and a significant proportion of poor school-age children, but their success in achieving diversity in enrollments varies widely. All have substantial disparities between racial and ethnic groups in retention and baccalaureate degree completion. The community college sectors in these states developed in very different ways, and the states' diverse approaches to the structure and funding of higher education reflect these differences. In New York, which has a large private sector, public community colleges are governed as part of the public four-year institutions. Of the "high-performing" states, New York has the smallest proportion of students in public community colleges, and tuition at community colleges approaches the cost of public four-year institutions in other states. Florida has a younger and much more publicly planned system for higher education, and its state-centered approach to transfer policy reflects this history, just as North Carolina's structure reflects its history of community colleges serving primarily a vocational function. Texas' governance structure suits the historical resistance to statewide control. Both Arkansas and New Mexico are low-growth, resource-poor states with small private sectors.

All the states are struggling with the uneven quality of high school preparation for college, which is putting more pressure on them to implement academic policy oversight on admissions testing, placement, and remediation. Three of the states—Florida, North Carolina, and Texas—are experiencing sharply increasing demand for higher education and are planning for community colleges to accommodate a large share of future baccalaureate completion. The other three states are looking at uneven patterns of growth in demand, with disparities between growing urban areas and stable or declining rural areas. All the states except New York have recently taken steps to strengthen statewide transfer policies. Nonetheless, 2/4 transfer seems somewhat of a back-burner issue in postsecondary education in all six states. Greater attention is placed on remediation and testing, high school graduation standards, affirmative action admissions, and perennial budget problems.

All the states are struggling with the uneven quality of high school preparation for college.

Despite these differences, some recurring patterns are discernible in approaches to transfer policy. For the purpose of comparison, state policies can be characterized as structural (policies that affect the overall approach to postsecondary education) and academic (policies specific to 2/4 transfer). Structural policies determine governance, institutional and sector mission and differentiation, statewide information system capacity, funding, planning capacities, and accountability strategies. These structural policies, along with demography, economic conditions, and institutional histories, determine the preconditions of student transfer activities. Academic policies, in contrast, are designed to influence the internal business of alignment between students, programs, and courses within and across institutions. Academic policies concern admissions standards, curriculum requirements, articulation, and transfer of credit.

Each of the policies listed here has been implemented in at least one of the six states, although no single state has all of them (see tables 5 and 6).

STRUCTURAL POLICIES

- Mission and role for public community colleges: 2+2; transfer and vocational; branch campuses; multiple missions.
- Governance: segmental or institutional; statewide boards for both two- and four-year colleges.
- Information system capacity: student-based cohort tracking; periodic reports on transfer performance indicators (e.g., monitoring of acceptance of credits, retention, and degree attainment).
- Accountability reporting: multiple indicators; separate data on 2/4 transfer; system or campus “report cards”; transfer rates; transfer reporting for four-year as well as two-year colleges.
- Enrollment planning: general access and capacity planning; enrollment goals; transfer goals.
- Funding: tuition and financial aid.
- Incentives: performance goals and funding rewards and sanctions.

ACADEMIC POLICIES

- Admissions policies for four-year institutions; dual admissions or transfer guarantees; testing and remediation policies.

- Statewide core curriculum (mandatory or voluntary); articulation agreements (mandatory or individually negotiated).
- Statewide catalogues; student “course audit” capability.
- Transfer of credit policies: general; core curriculum; policies oriented to associate degree; “guarantees.”
- Common course numbering.
- Common academic calendars.
- Support for voluntary agreements and cross-sector collaboration.

There is a good deal of commonality between the states on the academic policy side of the equation, as they have all adopted similar approaches to core curriculum, transfer of credit, remediation and testing, and statewide articulation agreements and course catalogues. There are larger differences on the structural side, particularly with respect to the relations between mission, planning, and accountability structures. Whether these structural issues affect transfer performance cannot be determined because the different approaches to data collection preclude comparison. It is clear, however, that the “high-performing” states (Florida, New York, and North Carolina) have stronger ties between their structural and academic policies and fewer gaps in their overall state policy approach to transfer than the three other states.

The high-performing states also have segmental governance structures: their statewide coordinating boards have policy authority and budget review responsibility, and they collect and analyze statewide cross-institutional data. For example, in New York the SUNY and CUNY community colleges report to the same governing board as the four-year institutions, which may facilitate transfer within those sectors. North Carolina, with segmental governance, has a good statewide policy, planning, and data accountability structure. Florida is now moving toward a statewide integrated structure while also strengthening local control. In contrast, Arkansas, New Mexico, and Texas rely on institutional governance, and their coordinating boards have less power in the areas of planning and accountability.

These states also differ in their approach to need-based aid for students in community colleges. Texas is the only state among the six that has designed a state aid program designed to reach community college students. The three high-performing states provide more than the others in need-based aid, but their limits on awards for part-time students dilutes the effectiveness of the

The “high-performing” states (New York, North Carolina, and Florida) have stronger ties between their structural and academic policies and fewer gaps in their overall state policy approach to transfer than the three other states.

Table 5

Cross-State Comparison of Structural Transfer Policies

	Arkansas	Florida	New Mexico	New York	North Carolina	Texas
Mission for 2-year colleges includes transfer	Yes, for community colleges, not for vocational/technical colleges	Yes, 2+2 history	Yes, for community colleges, not for vocational/technical colleges	Yes, within CUNY/SUNY systems	Yes, for community colleges, not for vocational/technical colleges	Yes, for community colleges, not for vocational/technical colleges
Governance	Institutional	Statewide, recently changed from segmental that separated 2- and 4-year	Institutional	Segmental, with community colleges and 4-years together	Segmental, separate 2- and 4-year; statewide planning and data	Institutional
Student-cohort tracking	Statewide, cross-sector, excludes private colleges	Statewide, cross-sector, includes private colleges	Within institutions only	SUNY/CUNY separately	Statewide, cross-sector, includes private colleges	Statewide, cross-sector, excludes private colleges
State-level public reports on transfer performance	Yes, public colleges only	Yes, includes transfers to private colleges	No	Full-time students only, includes transfers to/from private and proprietary institutions	Yes, includes transfers to private institutions	Yes
Campus-to-campus reports on transfer	No	Yes; performance also included in state accountability measures for community colleges	No	Within SUNY/CUNY	Yes, receiving institutions to sending	No
State “report card” includes 2/4 transfer	No	Yes, separate for 2- and 4-year institutions	No	Yes, separate for CUNY and SUNY	Yes, for both 2- and 4-year institutions	No
Enrollment plans and goals	No	General only; no specific goals for 2/4 transfer; priority on increasing B.A. attainment	No	Institutional only	Statewide general plan; general priority on increasing 2/4 transfer, but no specific goals	General
Performance funding for transfer	No	No	No	Bundy aid for private colleges	Yes, for both 2- and 4-year institutions	No
Financial aid targeted to 2/4 transfer	No	No	No	No	No	Yes

Table 6

Cross-State Comparison of Academic Transfer Policies

	Arkansas	Florida	New Mexico	New York	North Carolina	Texas
Transfer core curriculum	Yes, statewide, including private colleges on a voluntary basis	Yes, statewide, including voluntary adoption by private colleges	Yes, statewide, including many private colleges on a voluntary basis	Yes, within SUNY/CUNY, including many private colleges on a voluntary basis	Yes, statewide, including private colleges on a voluntary basis	Yes
Articulation frameworks and public catalogue	Yes	Yes	Yes	Yes, different within SUNY and CUNY	Yes	Yes
Transfer of credit policies	Yes, credits guaranteed with appropriate grades, admission to campus and major not guaranteed	Yes, includes student “course audit” capability	Yes, credits guaranteed with appropriate grades, admission to campus and major not guaranteed	Yes, credits guaranteed with appropriate grades, admission to campus and major not guaranteed	Yes, credits guaranteed with appropriate grades, admission to campus and major not guaranteed	Yes, credits guaranteed with appropriate grades, admission to campus and major not guaranteed
Common course numbering	Yes	Yes	No	No	Quasi, alternatives allowed	No
Common academic calendars	No	Yes	No	No	Yes	No

programs in reaching community college students. While none of the states has used aid to help students move through the system, they have not relied exclusively on low tuition to promote access. New York’s overall performance is also probably enhanced by the policy of rewarding the contributions made by private colleges that accept community college transfer students. Many of these institutions are in slow- or no-growth modes and are eager to have the students. The Bundy aid that rewards New York institutions for degree production provides an additional—although modest—incentive for them to recruit transfer students.

The Bundy aid that rewards New York institutions for degree production provides an additional ... incentive for them to recruit transfer students.

The states also differ in their focus on statewide performance versus institutional performance. Policy for and oversight of community college transfer have presented a particular challenge for states that measure performance in institutional or sector, rather than statewide, terms, since transfer accountability requires a statewide focus. Even those states that have the most comprehensive policy structures—Florida and North Carolina—seem to be caught between treating transfer as a statewide responsibility shared among all public institutions, and transfer as a performance matter for individual community colleges. This schism manifests itself in ambivalence about priorities among multiple missions for community colleges and, more importantly, in instances of unaligned state policies that conflict with one another. For example, the performance measures in these two states apply primarily to community colleges and not to four-year institutions. Performance measures are not related to funding incentives, except in North Carolina, where performance goals for transfer are tied to incentive funding, although the incentives are weak for increasing the volume of transfer students or for ensuring that they obtain the baccalaureate degree.

In addition, the baccalaureate performance measures in all the four-year institutions in these states measure “time to degree” rather than “credit to the degree.” This standard provides an incentive to serve first-time, full-time students, rather than transfer students. Similar incentives are created by the quality review and ratings services, which stress freshmen admissions selectivity along with retention and baccalaureate degree production as benchmarks of quality. New Mexico and New York both have weak statewide capacity for monitoring transfer, and neither focuses on 2/4 transfer as a priority distinct from other types of transfer. And several of the states treat associate degree attainment as the focal point of transfer policy and performance reporting, even though the majority of students who transfer do so without obtaining an associate degree. Research shows that associate degree

recipients are more likely to obtain a baccalaureate degree, yet none of these states provides students with incentives (such as graduated tuition structures or financial aid) to encourage them to follow this pattern. Most state financial aid is instead aimed at full-time students in four-year institutions.

Goals and performance standards for 2/4 transfer are probably the weakest link in the transfer chain in every state, and accountability for transfer is unlikely to be resolved without greater clarity about goals and performance. All six states view baccalaureate-level transfer as one of the missions of the public community colleges, yet none has articulated clear performance goals for 2/4 transfer—not even those states facing steep enrollment growth combined with structural budget deficits for higher education. Improvements in databases that have allowed the states to document the different types of transfer seem to have diffused rather than sharpened the focus on the priority of 2/4 transfer, as they count all forms of transfer (2/4, 4/4, 4/2, and 2/2) in a value-neutral way.

Finally, none of the states has focused on the most serious performance problem affecting community college transfer: the disparities in retention and degree completion among campuses and among racial and ethnic groups. The research tells us that transfer works well, sometimes remarkably well, for some institutions and some students. To the extent that there is a transfer performance problem, as distinguished from a transfer accountability problem, it arises on two-year campuses that do not have a traditional commitment to academic transfer preparation. They serve at-risk students, many have weak programs, and they may not have a reputation for transfer with high school counselors. The state profiles show no evidence that the states are systematically trying to reach at-risk students or institutions as priorities for 2/4 transfer. This means that even if states improve their accountability for 2/4 transfer, their policies may not be addressing deeper issues of performance. An integrated policy approach to transfer will require equal attention to performance and accountability.

Conclusions and Recommendations

State policy can make a difference in the effectiveness of statewide 2/4 transfer performance. States that have a comprehensive, integrated approach to transfer policy seem to do better than those that focus primarily on transfer as an academic and institutional matter. Many of the states selected for this analysis have done a good deal to strengthen their statewide transfer policies in the last few years, and these steps may improve transfer performance in the years ahead. However, states that focus only on academic policy are unlikely to energize 2/4 transfer. To focus on statewide performance as well as accountability, the states need policies that relate funding and accountability to academic strategies. This combination is particularly important for making transfer an effective tool for diversity and mobility within higher education.

The comparative analysis of this study suggests that policymakers can benefit from a fresh look at what is known about student flow and performance. No state is using all the tools available to stimulate transfer performance, tools that include student aid, setting goals, and rewarding transfer performance.

The following recommendations are intended to help states energize 2/4 transfer performance.

1. **Develop baseline information on statewide transfer performance, including retention and graduation of transfer students.** Data on transfer performance is a prerequisite to improving transfer policy and transfer effectiveness. The national data show clear patterns about the factors that correlate with 2/4 transfer success: the age, attendance patterns, and academic preparation of incoming students; the institutional emphasis on transfer programs; and the relationships (including geographic proximity) to receiving institutions. States need to understand the correlates of success within their own state, to build upon them, and to identify the missing ingredients for students and institutions that do not have a history of success. States that do not have information about transfer

States that have a comprehensive, integrated approach to transfer policy seem to do better than those that focus primarily on transfer as an academic and institutional matter.

No state is using all the tools available to stimulate transfer performance, tools that include student aid, setting goals, and rewarding transfer performance.

performance should begin by collecting baseline data, on both 2/4 and other types of transfer, for sending and receiving institutions; performance data for 2/4 transfer students at the four-year institutions; and subsets of transfer data by institution, region, and ethnic group. States that do not have student-based tracking systems need to develop them. Tracking should extend to in-state private colleges as well, since they receive state funds that play a role in transfer performance. States will also need to understand out-of-state transfer patterns for their students. In regions where out-of-state transfers are common, it may be possible for states to forge agreements about tuition reciprocity and transfer of credit, policies that will smooth the path for these students.

2. **Clarify state policy and plans for 2/4 transfer, and set goals and measures for 2/4 transfer performance.** States should set broad-based goals for 2/4 transfer, and determine how they will measure 2/4 transfer performance. This policy needs to be designed to meet the needs of the state and the students, rather than the institutions. Performance goals and measures should include four-year as well as two-year colleges. States should develop general goals for bachelor's degree attainment for 2/4 transfer students, which should address disparities in baccalaureate attainment among racial and ethnic groups. Multiple indicators of 2/4 transfer performance should be developed, as these are preferable to any single transfer rate; to be meaningful, the indicators must be monitored over time. Transfer performance reporting should not be limited to full-time students or to students who complete the associate degree prior to transfer.
3. **Identify and invest in core resources for transfer.** As long as statewide goals are met, not all public two-year institutions need to have identical goals for 2/4 transfer performance. States should identify the campuses that have weak transfer programs, and either improve the programs or ensure that transfer-potential students will have their needs met elsewhere. For example, if resources or student demand are not sufficient to maintain transferable courses on all campuses, students should be encouraged to take the courses they need on other two-year or four-year campuses through distance learning, university-centers, or other cooperative agreements. Special funding opportunities can provide incentives for other institutions to share in this responsibility.

4. **Perform statewide transfer policy audits.** States should audit their policies on transfer and evaluate how these policies relate to performance goals and measures. The policy audit should address both those academic policies designed to influence transfer and statewide policies on reporting for time to degree, remediation, financial aid, enrollment planning, tuition, funding, and accountability. The principal purposes of this audit are to ensure that policies are consistent and that performance measures (credits to degree versus time to degree) do not inadvertently discourage transfer performance. States should also use the most recent national research on student mobility in analyzing their own student flow patterns, to learn how their students and institutions compare to national data.
5. **Forge articulation and credit transfer agreements.** Students in community colleges should not have to negotiate transfer credit agreements on an individual basis with receiving institutions. States that have not already done so should work to ensure that there are common agreements between public two- and four-year colleges about the transfer core curriculum. Articulation agreements that extend to disciplines and majors should also be developed, beginning at the regional level if statewide agreements are impractical.
6. **Focus on low-performing institutions.** Improvements in educational equity will require attention to low-performing urban community colleges. States that have not already done so should create transfer improvement programs that partner the state with two- and four-year institutions to strengthen transfer in institutions that serve the highest number of at-risk students. The starting point should be an objective analysis of the factors inhibiting transfer performance in the institutions. Different program models for improving transfer performance could be tried, using cooperative arrangements between community colleges, partnership programs with four-year institutions, and student mentoring programs.
7. **Use financial aid as a tool to promote 2/4 transfer.** Financial aid programs should be evaluated to ensure that they do not exclude a large number of transfer students through limits on years of enrollment or through reductions in awards for part-time students. Financial aid can also create incentives for students to follow the enrollment paths most likely to lead to retention and baccalaureate attainment. For instance, we know that students are more likely to

persist to the baccalaureate degree if they complete their associate degree prior to transfer. A financial aid program designed to support transfer could provide a stipend or a tuition reduction at the four-year campus for 2/4 transfer students who earn their associate degree at a community college. Maryland has recently implemented such a program, which awards \$3,000 a year to students with family incomes below \$95,000 who transfer from a two-year college to full-time enrollment in a four-year bachelor's degree program with 60 units or an associate degree.

8. **Include private institutions in transfer planning and performance accountability.** Private two- and four-year institutions play an important role in serving 2/4 transfer students but are sometimes not included in statewide planning and accountability systems. High-growth states should consider creating financial incentives to encourage private institutions to recruit and retain 2/4 transfer students, such as financial aid stipends or bonuses for baccalaureate degrees awarded to transfer students.

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State Policy and Community College–Baccalaureate Transfer, by Jane V. Wellman (August 2002, #02-6). Recommends state policies to energize and improve higher education performance regarding transfers from community colleges to four-year institutions.

Fund for the Improvement of Postsecondary Education: The Early Years (June 2002, #02-5). The Fund for the Improvement of Postsecondary Education (FIPSE) attained remarkable success in funding innovative and enduring projects during its early years. This report, prepared by FIPSE's early program officers, elaborates on how those results were achieved.

Losing Ground: A National Status Report on the Affordability of American Higher Education (May 2002, #02-3). This national status report documents the declining affordability of higher education for American families, and highlights public policies that support affordable higher education. Provides state-by-state summaries as well as national findings.

The Affordability of Higher Education: A Review of Recent Survey Research, by John Immerwahr (May 2002, #02-4). This review of recent surveys by Public Agenda confirms that Americans feel that rising college prices threaten to make higher education inaccessible for many people.

Coping with Recession: Public Policy, Economic Downturns and Higher Education, by Patrick M. Callan (February 2002, #02-2). Outlines the major policy considerations that states and institutions of higher education face during economic downturns.

Competition and Collaboration in California Higher Education, by Kathy Reeves Bracco and Patrick M. Callan (January 2002, #02-1). Argues that the structure of California’s state higher education system limits the system’s capacity for collaboration.

Measuring Up 2000: The State-by-State Report Card for Higher Education (November 2000, #00-3). This first-of-its-kind report card grades each state on its performance in higher education. The report card also provides comprehensive profiles of each state and brief states-at-a-glance comparisons. Visit www.highereducation.org to download *Measuring Up 2000* or to make your own comparisons of state performance in higher education. Printed copies are available for \$25.00 by calling 888-269-3652 (discounts available for large orders).

Beneath the Surface: A Statistical Analysis of the Major Variables Associated with State Grades in Measuring Up 2000, by Alisa F. Cunningham and Jane V. Wellman (November 2001, #01-4). Using statistical analysis, this report explores the “drivers” that predict overall performance in *Measuring Up 2000*.

Supplementary Analysis for Measuring Up 2000: An Exploratory Report, by Mario Martinez (November 2001, #01-3). Explores the relationships within and between the performance categories in *Measuring Up 2000*.

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A Review of Tests Performed on the Data in Measuring Up 2000, by Peter Ewell (June 2001, #01-1). Describes the statistical testing performed on the data in *Measuring Up 2000* by the National Center for Higher Education Management Systems.

Recent State Policy Initiatives in Education: A Supplement to Measuring Up 2000, by Aims McGuinness, Jr. (December 2000, #00-6). Highlights education initiatives that states have adopted since 1997–98.

Assessing Student Learning Outcomes: A Supplement to Measuring Up 2000, by Peter Ewell and Paula Ries (December 2000, #00-5). National survey of state efforts to assess student learning outcomes in higher education.

Technical Guide Documenting Methodology, Indicators and Data Sources for Measuring Up 2000 (November 2000, #00-4).

A State-by-State Report Card on Higher Education: Prospectus (March 2000, #00-1). Summarizes the goals of the National Center’s report card project.

Great Expectations: How the Public and Parents—White, African American and Hispanic—View Higher Education, by John Immerwahr with Tony Foleno (May 2000, #00-2). This report by Public Agenda finds that Americans overwhelmingly see higher education as essential for success. Survey results are also available for the following states:

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Great Expectations: How Floridians View Higher Education (August 2000, #00-2c)

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State Spending for Higher Education in the Next Decade: The Battle to Sustain Current Support, by Harold A. Hovey (July 1999, #99-3). This fiscal forecast of state and local spending patterns finds that the vast majority of states will face significant fiscal deficits over the next eight years, which will in turn lead to increased scrutiny of higher education in almost all states, and to curtailed spending for public higher education in many states.

South Dakota: Developing Policy-Driven Change in Higher Education, by Mario Martinez (June 1999, #99-2). Describes the processes for change in higher education that government, business and higher education leaders are creating and implementing in South Dakota.

Taking Responsibility: Leaders' Expectations of Higher Education, by John Immerwahr (January 1999, #99-1). Reports the views of those most involved with decision-making about higher education, based on a survey and focus groups conducted by Public Agenda.

The Challenges and Opportunities Facing Higher Education: An Agenda for Policy Research, by Dennis Jones, Peter Ewell, and Aims McGuinness (December 1998, #98-8). Argues that due to substantial changes in the landscape of postsecondary education, new state-level policy frameworks must be developed and implemented.

Higher Education Governance: Balancing Institutional and Market Influences, by Richard C. Richardson, Jr., Kathy Reeves Bracco, Patrick M. Callan, and Joni E. Finney (November 1998, #98-7). Describes the structural relationships that affect institutional effectiveness in higher education, and argues that state policy should strive for a balance between institutional and market forces.

Federal Tuition Tax Credits and State Higher Education Policy: A Guide for State Policy Makers, by Kristin D. Conklin (December 1998, #98-6). Examines the implications of the federal income tax provisions for students and their families, and makes recommendations for state higher education policy.

The Challenges Facing California Higher Education: A Memorandum to the Next Governor of California, by David W. Breneman (September 1998, #98-5). Argues that California should develop a new Master Plan for Higher Education.

Tidal Wave II Revisited: A Review of Earlier Enrollment Projections for California Higher Education, by Gerald C. Hayward, David W. Breneman and Leobardo F. Estrada (September 1998, #98-4). Finds that earlier forecasts of a surge in higher education enrollments were accurate.

Organizing for Learning: The View from the Governor's Office, by James B. Hunt Jr., chair of the National Center for Public Policy and Higher Education, and former governor of North Carolina (June 1998, #98-3). An address to the American Association for Higher Education concerning opportunity in higher education.

The Price of Admission: The Growing Importance of Higher Education, by John Immerwahr (Spring 1998, #98-2). A national survey of Americans' views on higher education, conducted and reported by Public Agenda.

Concept Paper: A National Center to Address Higher Education Policy, by Patrick M. Callan (March 1998, #98-1). Describes the purposes of the National Center for Public Policy and Higher Education.





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