WORKING TOGETHER
ALIGNING STATE SYSTEMS AND POLICIES FOR INDIVIDUAL AND REGIONAL PROSPERITY
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FORWARD
As state educational budgets come under increasing strain from rising costs elsewhere in public budgets, states and communities across the U.S. are looking for ways to strengthen their systems of education and training and extract more value from their investments in these systems. Strategies to achieve these objectives include focusing on local economic sectors that promise the greatest opportunity for job growth and economic development; creating partnerships across institutional lines between educators, employers, social service providers and government; and developing public policies that create incentives to align these various stakeholders in pursuit of shared aims. Community colleges, industry associations, local governmental agencies and a wide range of other entities are finding common ground and common goals, and moving forward in partnership to achieve them.

As detailed in this report, a number of states have emerged as cutting-edge implementers of these strategies, including Kentucky, Ohio, Washington, Oregon and California. At the federal level, the U.S. Departments of Labor and Education are supporting these strategies by sponsoring "institutes" to share ideas, experiences and lessons around these approaches and continuing to fund the well-known Workforce Innovation in Regional Economic Development (WIRED) grants. The philanthropic community has embraced this vision as well, as demonstrated by the Joyce Foundation (the funder of this report) in their recently launched "Shifting Gears" employment policy initiative and the Ford Foundation’s Bridges to Opportunity Initiative, among others.

At Workforce Strategy Center, we share the enthusiasm for new strategic approaches to pursue the complementary goals of worker advancement and community economic development. In our 2002 report, “Building a Career Pathways System: Promising Practices in Community College-Centered Workforce Development," we introduced one such approach, known as career pathways. This model allows state and local governments to blend together policy goals that simultaneously support worker advancement and regional economic growth. Much of the work in the field since then has come at the local level, where leaders have sought to affect changes in policy and practice. At the same time, as noted above, state policymakers in growing numbers have become interested in career pathways and related efforts, and are working hard to facilitate policy improvements in their respective states. While we have long held the view that state policies can both assist and hinder local efforts, our past published work has not fully explored how state policymakers can move proactively to support local efforts.

With this in mind, WSC is proud to present this report. In its pages, we define the challenges and highlight the possibilities facing state-level policymakers who seek to align state policies and resources in support of worker advancement and economic growth. This report is the third in a series: the first report, “Career Pathways: Aligning Public Resources to Support Individual and Regional Economic Advancement in the Knowledge Economy,” introduces the series with a definition of career pathways and the economic justification for the approach. The second report, “The Career Pathways How-to Guide” seeks to provide step-by-step instructions for local practitioners working to develop career pathways. Whether you are an experienced architect of career pathways, a newcomer unfamiliar with the concept, or anywhere in between, we hope you read all three reports in the series and contribute to the ongoing development of this exciting field.

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In the globally competitive economy of the 21st century, state economies in large part will thrive or decline based on how well they cultivate and retain “knowledge workers”: individuals who possess postsecondary educational credentials (though not necessarily a bachelor degree), technical aptitudes, the ability to learn rapidly, and an entrepreneurial approach to employment.1 To produce workers with these skills, states will need to do the following:

- Increase postsecondary educational access and improve student success rates, particularly for low-wage and low-skill adults
- Weave together education and workforce strategies with economic development strategies and the needs of employers
- Build the capacity of providers and postsecondary institutions to make these improvements

Unfortunately, most states are not now equipped to meet these challenges. With few exceptions, state policies governing adult and postsecondary education, workforce and economic development, and social and human services are designed and implemented in isolation from each other. Far more often than not, these systems do not effectively work together to produce the kinds of workers needed in today’s economy. In short, our public systems—and our investments in those systems, as taxpayers and citizens—are in need of a major adjustment.

For individuals as well as communities, the stakes could scarcely be higher. Over the last 25 years, the economy has changed in ways that virtually necessitate education and training beyond high school for anyone who wants to earn a family-supporting wage. During that time, real wages have fallen by more than 18 percent for men with less than a high school degree and by approximately 2 percent for women in the same group; over the same period, wages have increased for men and women with college degrees by 21 percent and 42 percent respectively.2 Over the next decade, the number of jobs requiring some sort of postsecondary credential is projected to grow at rates that outpace jobs requiring high school or less by some 60 percent, even though jobs in the latter category will remain the largest in number. As these trends indicate, education has gained increasing value in the labor market, and demand for jobs requiring postsecondary credentials and degrees will increase faster than total U.S. job growth, though much low-skilled, low-paid work will continue to exist.

Despite the evidence that postsecondary credentials are the path to family-supporting wages, many individuals are struggling to advance in the knowledge economy. As shown in Figure 1, earnings vastly increase by levels of

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According to the United States Census Bureau Current Population Survey, more than 43 percent of adults between ages of 25 and 64 have no more than a high school diploma or GED. Nearly 25 million American adults between the ages of 18 and 64 have less than a high school degree or GED, and the U.S. Department of Education Office of Vocational and Adult Education estimates that only about ten percent of that population is enrolled in an adult education program. These individuals will find it increasingly difficult to advance beyond subsistence-level wages as the economy increases its demand for advanced skills and education. The 2003 National Assessment of Adult Literacy found that approximately 30 million American adults are unable to perform even basic literacy tasks that involve reading and understanding information in short texts. Another 60 million can read only on a basic level: they are unable to summarize, make inferences or understand cause and effect in writing. Such poor literacy will constrain the potential of these individuals to be successful in the knowledge economy.

Ideally, our public systems of K-12 education, adult literacy and workforce development should serve as effective pipelines for producing knowledge workers. But significant leaks have sprung within each of these systems. Nationally, estimates are that fewer than half of students who enter the 9th grade...
graduate from high school and enter postsecondary education soon thereafter, with many of these students failing to even complete the high school diploma. Although many of these students seek further education as adults, few actually go on to earn a postsecondary credential. Prince and Jenkins (2005) found that less than one-third of adult education and English language students in the community colleges in Washington State earned a credential beyond the GED. Despite the great need of this population for further educational attainment, our systems do not have the capacity to serve them all.

Adults who do enroll in postsecondary education often face the additional hurdle of remedial education requirements, often referred to by colleges as “developmental education.” Adult students, many of whom have been out of school for years, are often ill prepared for college-level classes and often fail to meet thresholds on college placement exams in English, math, and reading. Roughly four out of every ten low-income adult students take at least one remedial course in college, with much higher rates of remediation among students at community colleges. Although remediation clearly benefits students, those who enroll in these classes are still much less likely to persist and earn credentials. One study of a major urban community college found that among students enrolled in three remedial courses in fall 1997, only 2.1 percent had earned an associate degree four years later.

Some states are taking action to address these gaps in the pipeline and implement strategies to increase their number of knowledge workers. In Michigan, the governor has challenged policymakers and postsecondary institutions to double the number of state residents with college degrees or other “valuable” credentials in the next decade. Similarly, in Ohio, the Commission on Higher Education and the Economy recommended a 30 percent increase in undergraduate and graduate enrollments by 2015. States taking these steps recognize the growing importance of skills and education for both individuals and the economic well-being of their communities.

Research suggests that increasing the average level of education in a regional economy has economic development benefits. Correspondingly, failure to act will have consequences: according to the National Center for Public Policy and Higher Education, if current racial and socioeconomic gaps in postsecondary attainment persist, real personal income per capita in the United States is projected to decline from $21,591 in 2000 to $21,196 in 2020 (inflation-adjusted 2000 dollars)—a drop of $395, or 2 percent. Given these facts, it is crucial for other state policymakers to show leadership and make the public case for improvements in our public systems of postsecondary education and training.

Aligning Systems and Policies to Support the Knowledge Economy

The balance of this paper examines policy and system improvements that state policymakers can make to enhance outcomes for students in the educational pipeline, and thus increase the supply of knowledge workers. We focus our recommendations around six broad areas of public policy. Briefly, they are as follows:

PROMOTING ACCESS AND IMPROVING ALIGNMENT

For states looking to grow their economies and help workers earn family-sustaining wages, the first task is to increase access to education and training for populations who historically may not
have been able to attend college. Given the aging of the American workforce, finding sufficient numbers of skilled workers will require states to look beyond traditional-age college students to explore new potential sources of skilled labor.

These new sources could include lower-skilled adults and immigrants, if states increase access to workforce education. But the cost of education presents a steep barrier to low-wage workers, many of whom must pay tuition and fees and absorb lost wages when they reduce their work hours in order to attend school. Low-income adult students receive less overall financial assistance and fewer grants than traditional-age students, although those who take out loans borrow more on average than traditional-age students. Yet the majority of state financial aid policies are also not well suited for adult workers: one report found that in the 1999–2000 academic year, only 19 percent of adult undergraduates received any state grant aid. This same study found that adults at community colleges were the least likely to apply for aid and when they did, received the smallest amount of any group of students. Yet the majority of state financial aid policies are also not well suited for adult workers: one report found that in the 1999–2000 academic year, only 19 percent of adult undergraduates received any state grant aid. This same study found that adults at community colleges were the least likely to apply for aid and when they did, received the smallest amount of any group of students.

Adult students often must balance family and work demands with their classroom responsibilities; this requires flexible financial aid policies that account for their needs, circumstances and attendance.

States should also ensure that their policies and programs around adult and workforce education encourage—and are aligned with—postsecondary education. Students who complete adult or workforce education programs often find that they do not meet the entry requirements for the next level of education or require significant remediation. In order to improve the pipeline of knowledge workers in the economy, students must be able to access the next level of education as they finish their current programs of study.

SUPPORTING STUDENT SUCCESS

Increasing the number of adults with postsecondary credentials involves more than just expanding enrollments. It requires boosting the number of students who successfully complete their studies and obtain a certificate or degree. MDRC’s Opening Doors report and many other studies have shown that America’s higher education institutions, particularly community colleges, have significant room for improving retention and completion rates. According to MDRC, approximately 46 percent of students who begin their postsecondary studies at community colleges never complete a degree. Minority and first-generation American students fare even worse. According to Tom Bailey, Davis Jenkins, and Timothy Leinbach in a 2005 report published by the Community College Research Center (CCRC), only 37 percent of black community college students and 42 percent of Hispanic community college students who enrolled in 1995–96 completed either a bachelor or associate degree or certificate within six years. Overall, only 47 percent of students in the lowest income quartile finished at least a certificate or better in six years. Those seeking certificates fare better; of those starting in 1995–96, 84 percent of low-income adults aiming to earn a certificate, and 52 percent of other adults with that goal, had completed it by 2001. These results are not uniform across the country or among institutions. As “Measuring Up 2004” shows, state-by-state...
outcomes for community college students returning after the first year range from a low of 43 percent to a high of 70 percent.\textsuperscript{21}

Numerous factors contribute to these disappointing figures, but one clearly important factor is that policies and practices used to improve student retention and completion are not sufficient to address the needs of all students. As such, student retention and completion outcomes suffer. To increase the number of knowledge workers entering the workforce, state policies must address activities such as student advising, counseling and personal supports.

**ENCOURAGING TRANSITIONS**

One of the hallmarks of a well-aligned system is the seamless transition from one part to another—think, for example, of the skillful handoff between runners in a track and field relay race. Unfortunately, our current policies around educational and economic advancement rarely afford as smooth and graceful a passage for the majority of student and worker participants. Currently more than 17 million adults without a high school diploma participate in some form of formal education: 3 million within federal or state adult education and English literacy (EL) programs (Title II of the Workforce Investment Act) earned a GED in 2002 after entering the program as cited in Liebowitz and Taylor (2004). Yet at each of these levels, unacceptably high numbers of learners end their progress through the educational system. According to one study of the 16 southern states, for every 100 young adults (18 years of age or older) without a high school credential only one earns a General Equivalency Diploma (GED).\textsuperscript{23} Nationally, only 30 percent of adults enrolled in federal adult education or English literacy programs, who enter with the goal of entering postsecondary education or training, enrolled in follow-up education after exiting the program.\textsuperscript{24} Those who participate in adult education classes are only a portion of those obtaining GEDs, however. National research finds that about 40 percent of the total number earning a GED ever enroll in postsecondary education as compared to about three out of every four high school graduates.\textsuperscript{25}

To facilitate upward educational mobility for non-traditional students leading into knowledge career tracks, policymakers should place particular emphasis on creating avenues for upward transitions both within and across systems and remove transition barriers among adult and developmental education, workforce development, K–12 and postsecondary education systems.

**INCORPORATING EMPLOYER DEMAND AND STATE ECONOMIC PRIORITIES IN EDUCATIONAL PLANNING**

Public education and training systems, which prepare the supply of workers for the labor market, must work together with business and industry to clarify the demands of the labor market. They must also work closely with development agencies, coordinating efforts to support strategic growth targets on the economic development front. Specifically, economic development, education and workforce development policymakers alike must know what the current and projected workforce needs of the business community are.

Some demographic trends may be important to consider in this context. In particular, the aging and pending retirement of millions of Baby Boomers could mean that some regions will be losing many knowledge workers; communities should conduct analyses to determine what economic repercussions these retirements might have. Given the impor-
The importance of human capital and workforce capacity to economic growth, policymakers must weave economic development strategies together with education and workforce development strategies.

BUILDING CAPACITY AND FINANCING IMPROVEMENT

To address the full range of issues described above, states will need to increase the capacity of postsecondary institutions and workforce education providers to provide high-quality curriculum and instruction, support and improve student success, and work more effectively with employers. All these goals require money, but securing more resources will be a challenge in most states. Not only are officials everywhere reluctant to propose tax increases, but adult and postsecondary education has to compete with growing budgetary demands for other public sector services such as Medicaid and K–12 education. As a share of total government expenditures, state appropriations for public colleges and universities decreased by 4 percent between 1987 and 2003.26

Though states’ financial conditions are improving,27 states are not likely be able to fully expand capacity through new revenues. Rather, they will need to examine how they currently finance adult and postsecondary education—in particular, at broad access institutions such as community and technical colleges—and make strategic decisions about resource allocation.

MEASURING RESULTS

States looking to strengthen postsecondary policies to help more students to access, transition and successfully complete their studies must have a solid understanding of current outcomes and an ability to follow and report on performance over time. Many states have invested millions of dollars in building data management systems to do this. Some have even used their ability to measure institutional performance to guide budgeting and direct funding for institutions of higher education. Most states, however, cannot track student access, success and transitions as they move across various education and workforce development systems, into the workforce, and back into education—making true performance evaluation of public systems impossible.

Identifying labor market outcomes for students and workforce training participants to determine employment, earnings and occupational status requires connecting the records of students and workforce participants to Unemployment Insurance (UI) wage record files. For many states, these separate systems reside in different departments; as a result, their ability to analyze data across departmental boundaries is often limited.

Despite evidence that our public systems can better serve individual and regional economic advancement, policymakers have been slow to act. This paper discusses action steps to align policies and improve these systems. Several cutting-edge states have learned that low-skill and low-wage workers are an important untapped potential resource for regional economic growth and that enhancing the skills and employment prospects of these workers can and will benefit a state’s overall economy. Section Two of this report provides lengthier discussion on the six aforementioned policy areas and solutions to many of the issues introduced. Section Three addresses how policymakers can work together to implement this agenda in their states.
In this section, we examine ways states can improve their existing postsecondary education and training policies and create greater advancement opportunities for low-wage and low-skill workers. Recent efforts by cutting edge states as well as existing research suggests six key areas of opportunity for states focused on increasing the supply of knowledge workers.

Promoting Access and Improving Alignment
States have three primary ways to help lower skilled adults more easily and affordably access postsecondary education and training. They can take action by:

- Marketing postsecondary workforce education and financial aid to adults as a tool for getting a better job
- Making postsecondary workforce education more affordable by keeping tuition low and by having adult-friendly financial aid policies
- Aligning related policies to help lower-skilled adults access education and training

Below, we discuss these approaches with state-level examples of each.

MARKETING WORKFORCE EDUCATION AND FINANCIAL AID TO LOW-WAGE WORKERS
A 2002 survey found that as family income drops, so too does the likelihood that families know about the availability of financial aid, with the lowest-income families and Hispanic-Americans especially unlikely to know what resources are available and how to access them.29 In general, receipt of financial aid for adults varies by the type of institution they attend: adults attending community colleges are the least likely to apply for aid, and when they do, they receive the smallest amount on average.28

A number of states have created statewide campaigns to market college access. While the majority of this work has been directed at teenagers, a few states have also targeted adult learners. In Kentucky, the Go Higher media campaign was specifically directed at encouraging adults to return to school at all levels, whether that meant completing a GED, an occupational certificate or a college degree (http://gohigherky.org).30 Texas has launched a College for Texans college access campaign. While it has a greater emphasis on high school students than Kentucky’s effort, the program also has developed specific ads for adult learners, including Spanish-language ads (www.collegefortexans.com). The Pathways to College Network has created a website that includes a step-by-step guide for states looking to create a postsecondary access marketing campaign to increase college participation (www.collegeaccessmarketing.org).

Going beyond media campaigns to more personalized outreach, federally funded Educational Opportunity Centers (EOCs) across the country provide counseling and...
help in applying for college and applying for financial aid. The centers work to increase the number of adults who enroll in postsecondary education, with particular focus on first-generation college students and low-income individuals. A mix of community-based organizations and two- and four-year colleges operate the 139 EOC projects funded in 2005–06. The Council on Opportunity in Education has profiles of many of the state initiatives and projects aimed at increasing access to college (see http://www.coenet.us/statesataglance.html), including college access campaigns, EOCs and other initiatives.

MAKING POSTSECONDARY WORKFORCE EDUCATION MORE AFFORDABLE FOR LOW-WAGE WORKERS

States can increase affordability in two principal ways: by keeping tuition low and by having substantial financial aid programs that work for non-traditional students, such as low-wage workers. The biggest expense that adults face when they seek postsecondary credentials is the cost of supporting themselves (and often families) while they are in school. As shown in the Figure 2, the average cost of tuition and fees at public two-year colleges—where most low-wage workers enroll—was $2,191 in 2005. The total average cost for commuter students at those institutions, however, was $11,692, because living expenses were more than twice as expensive as tuition and fees. Thus, while keeping tuition affordable is a valuable state policy tool for increasing access, it is important to keep in mind that this addresses only one part of the overall affordability challenge.

Community college tuition and fees vary considerably across regions. For example, a 2000 survey found that these costs averaged about $3,400 in New England and the Mid-Atlantic states, about $2,700 in the Midwest and the South, and less than $2,000 in the Southwest and West. The most expensive state, New Hampshire, had average tuition and fees nearly ten times as high as the least expensive state, California. Tuition typically follows a countercyclical pattern: when the economy turns down and states cut base funding to institutions, colleges tend to raise tuition, but will keep costs level or reduce tuition when the economy rebounds and state aid increases.

Keeping tuition rates low across the board clearly makes community colleges more accessible. As an affordability strategy, however, it is a somewhat inefficient mechanism for helping lower income students. States seeking to make postsecondary education and training more affordable for adult workers and non-traditional students should look beyond tuition policies and check that state financial aid policies, which frequently are designed with traditional age students in mind, meet the needs of adult learners.

Adult-friendly state financial aid programs typically feature more inclusive standards of eligibility, making aid available for students attending less than half-time who are enrolled in certificate or degree programs, students taking remedial and non-credit occupational programs (if articulated to certificates and degrees) and those taking short modules as part of certificate or degree programs. Other common traits of adult-friendly assistance regimes are that students can combine aid with Pell grants, up to the total cost of attendance, and that aid is not merit-based and is available for year-round study.

For example, the Monetary Award Program (MAP) in Illinois is a need-based student aid program that covers tuition and fees for students who do not have a BA, including less than half-time students. In FY 05 the program paid out a total of approximately $330 million to over 150,000 students. In FY 06 the program is serving about 128,000 students at a total cost of about $350 million and its budget will increase by $34.4 million in FY 07. For the 2007–08 school year, MAP will expand to support year-round study.

Similarly, in 2003 Minnesota’s state grants provided $133 million in need-based grants to 72,000 students. As in Illinois, students taking as few as three credits can qualify. Minnesota supplements these grants with additional state funding for child care grants and state work-study jobs for needy students.

Georgia takes a different approach, providing Helping Outstanding Pupils Educationally (HOPE) Grants (not to be confused with the state’s merit-based HOPE Scholarships) to any state resident without a BA, regardless of income. The grant covers tuition, books and fees for technical certificates and diplomas (but not degrees) at public institutions. The average amount of aid is about $900 annually. HOPE Grants can cover developmental education and are available to less than half-time students; they can also be combined with Pell grants. In FY 04, the program served 116,000 students at a cost of about $102 million. Washington’s state legislature approved a pilot version of a similar aid program in spring 2006, called Opportunity Grants, which will support students to earn not only certificates and diplomas but also associate degrees and which will cover the full array of educational expenses, not just tuition, fees and books.

From 2003–05, Louisiana used welfare funds to pilot an innovative performance-based financial aid program, Opening Doors, for low-income students who are parents. Participants received an additional $1,000 in aid for each of two semesters if they stayed enrolled at least half-time and averaged grades of C or above. Early results from a rigorous evaluation of the program at two local colleges found that participants were more likely to enroll full-time, pass more courses, earn more credits, and persist longer in their studies than non-participants at the same schools.

ALIGNING RELATED POLICIES TO HELP LOW-SKILL ADULTS ACCESS EDUCATION AND TRAINING

Another way states can increase access is by ensuring that other programs serving low-skill adults have policies supportive of postsecondary education and training. These programs include Temporary Assistance to Needy Families (TANF), the Workforce Investment Act (training for adults, out-of-school youth, and adult education/ESL), Unemployment Insurance and Trade Adjustment Assistance (TAA). States should ask two questions about these programs:

1. Could these programs be providing more financial support for postsecondary workforce education than they currently do? If so, what are the barriers to expanding that support?

2. Do these programs view referrals to post-secondary workforce education and financial aid as an integral part of what they do? If not, what are the policy disincentives or alternative goals and visions for the programs that prevent more of those referrals from occurring?
When they ask the first question, many states are likely to find that they spend very little TANF funding on any kind of education and training (the national average is less than 2 percent). Similarly, the federally funded Trade Adjustment Assistance (TAA) program is typically underused even though it can provide up to six months of income support for workers in education and training, beyond the initial 52 weeks of UI benefits, if they have lost their jobs because of trade policies. (TAA can also pay for training costs, but that funding is more limited.) Many TAA-eligible workers do not know that they qualify for support under the program. In 2003, for example, more than 500,000 manufacturing jobs disappeared nationally, but only 195,738 workers were certified under TAA.

The second question can help shed light on policies that may hinder access even when funding is not a barrier. For example, about half the states have policies in place that restrict TANF recipients’ access to postsecondary education and training well short of what the federal law permits. Even in states that are more willing to count postsecondary instruction as a work activity, the overwhelming emphasis on caseload reduction and quick job placement can inhibit caseworkers from referring individuals to education and training. The net result is that few welfare recipients are in any kind of education and training nationally; in fact, states could triple the number of welfare recipients in workforce education and still have them count toward federal work rates.

Given the variation across states, each state should examine its work participation rate to see how much room there is to increase postsecondary access. It is also important to keep in mind that federal TANF policies have changed this year, with new interim final regulations that allow states to count hours in postsecondary education toward work rates for programs that are related to employment goals and are at the associate degree level or below. States may count study hours toward the rates, but only if study time is supervised. In addition, states face higher effective federal work participation rates of 50 percent beginning October 1, 2006. Increasing TANF recipient participation in postsecondary education and training can help states meet these higher rates.

States that have successfully leveraged these programs to support overall goals of increasing adult postsecondary attainment have made concerted efforts to align these policies. Kentucky, for example, allows postsecondary education as a TANF work activity, and it requires TANF caseworkers to inform recipients that postsecondary education is an option. The state also uses TANF funds to support success in postsecondary education through its Ready to Work program of campus-based case management and work-study jobs.

Supporting Student Success

States looking to increase the number of adults with postsecondary credentials must do more than just expand enrollments. They must find ways to raise the percentage of enrolled students who successfully complete their studies by obtaining a certificate or degree. Many studies have indicated that America’s higher education institutions, particularly community colleges, have significant room to improve retention and completion rates.

Researchers have found that approximately one-half of community college students fail to return after the first year and eventually fail to obtain a certificate or degree.
Experts offer a wide range of explanations for these outcomes, but one likely important factor is that student support activities, which are developed and administered by local institutions, are not sufficient to address student needs. Institutions currently give little priority to this and states do little to encourage them to do so. As a result, student retention and completion outcomes suffer. Almost across the board, colleges do not devote enough resources and attention to this area, despite evidence that suggests more and better student support services could improve rates of retention and completion.

Before considering how states can help facilitate improvement in support services, it’s helpful to briefly review just what these services are. Perhaps the most important support services are those that help students successfully navigate academic challenges as they develop. Effective programs work with students to establish educational plans that are tailored to their career interests and provide special workshops and assistance to help them learn effective study habits and receive assistance with specific courses via tutoring, study groups, and so on. Alternative instructional models, which provide students opportunities to learn in non-traditional formats that emphasize accelerated/compressed learning, non-regular hours, group/cocktail learning (e.g. learning communities), distance learning, and curriculums contextualized to career interests, are a subset of this category. A second important group could be described as personal guidance services, which help students to address personal issues that may impinge on their academic performance, through one-on-one, group and other forms of assistance. Finally, supplemental supports and services provide students access to resources that can help alleviate other family and personal needs such as work study, child care and transportation, among many others.

These activities are delivered at the institutional level. Although not extensive, some evaluative research suggests that these services can improve student success. MDRC points to an evaluation of the national TRIO program—the federal program that supports approximately 1,000 higher education institutions nationwide to help low-income students access and succeed in higher education—which found that the campus-based Student Support Services program had positive outcomes: “Both students’ grade point averages and their year-to-year retention rates increased as they were exposed to services.”

MDRC noted similar findings for two California-funded student support service programs; students receiving assistance “had better academic outcomes—persistence, retention and degree completion—than full-time students not receiving assistance.” Another review of student support services found “considerable research evidence that counseling has a significant positive effect on student retention and graduation.” Counseling, along with performance scholarships, was also a factor in improving the retention rates in the two Louisiana community colleges mentioned earlier.

States have four primary tools at their disposal to push educational institutions to improve on their delivery of support services:

- Using general institutional funding
- Targeting funding
- Focusing attention
- Rewarding successful performance
A majority of states fund their local colleges through some type of formula arrangement, based on projected needs and costs around various budget items such as instruction, financial assistance, student services, facility operations and other costs. Typically, the formula does not dictate or guide how resources should be spent by local institutions; each institution allocates the funds based on their perceived needs. One review of five states found that the approach to general state funding for institutions resulted in no specific or dedicated funding for counseling and guidance.46

States can ask two questions to determine if their approach to funding is helpful for institutions looking to improve their retention and completion rates:

1. Is the need for student services calculated in the formula commensurate to the expenditures by the institution? Often student service supports are not a high-profile item and "may be particularly vulnerable to downsizing and elimination during times of budget constraints."46 As Norton Grubb notes, such activities as guidance and counseling "have often been relatively peripheral to community colleges."47

2. Does the formula or other approaches to financing institutions differentiate among the types of enrolled students? Data suggests that lower-income, minority and first-generation students might require more assistance to improve their retention and completion outcomes. Colleges serving higher percentages of these students may warrant additional funds for student services.

Some states that do not require the allocation of general funds to cover certain important institutional functions, such as student services, have begun to use categorical programs to address specific institutional needs. California has enacted specific programs to support and encourage student support services. Although the state expects institutions to use their general formula funding to finance students supports, California also uses general funds to finance dedicated student service programs. The Extended Opportunity Program and Services (EOPS) program provides funding for institutions to assist low-income and educationally disadvantaged students with academic and personal counseling, tutoring, and grants and services for textbooks and other supportive services. The Cooperative Agencies Resources for Education (CARE) program supplements EOPS by targeting students on public assistance with children by providing them with child care, transportation and other services. Together, funding for these two programs will total $112.9 million in FY 2006–2007. In addition, California allocates approximately $465 million (including EOPS and CARE) annually to cover all student service needs.

California and other states have also tapped other sources of state funds to address students’ academic and personal needs. In 2005, the state allocated approximately $34 million in general revenue funds (down considerably from previous years) to the community colleges’ CalWORKs (California Work Opportunity and Responsibility to Kids) program to better serve TANF participants. The colleges use these resources for both academic and personal supports, as well as for redesigning instruc-

46ibid, p. 14.
47ibid.
tional programs to better accommodate non-traditional students. For FY 2006–2007, California increased the CalWORKs budget to nearly $44 million to support additional work-study opportunities. Similarly, Kentucky uses $4.4 million annually in state TANF resources to finance its Ready-To-Work and Work and Learn programs, which provides participants in community/technical colleges and adult education programs with guidance, mentoring and supports to help them succeed. Schools in Kentucky also use these funds to finance work-study opportunities for participants.

The federal Workforce Investment Act is another resource states can tap to provide supports such as childcare and transportation for participants in intensive services or training. Typically, local workforce investment boards decide whether they wish to expend WIA funds for this purpose. States, however, have the authority to guide policy on this issue.

FOCUSBING ATTENTION
States can raise the visibility of student retention and completion issues by both setting goals for improvement and requiring institutions to strengthen their student service activities and practices. Through its Closing the Gap initiative, begun in 2000, Texas committed to increasing the number of students obtaining degrees and certificates by 50 percent over the following 15 years. The state also set goals for increasing the participation and success of Black and Hispanic students. Although Texas has not provided additional funds to achieve these retention and completion goals, the state legislature has required institutions to develop and utilize a "uniform recruitment and retention strategy" to guide their efforts. The plan requires the development of special strategies for serving at-risk students that include key student support services such as advising, tutoring and mentoring. Institutions provide annual reports on how effective their retention strategies have been.

REWARDING SUCCESSFUL PERFORMANCE
Ohio is among a number of states that have begun to use incentive funds to encourage local institutions toward productive changes in policy and programming. Ohio offers financial incentives to their four-year state universities for improved completion outcomes for resident undergraduates. The Success Challenge program is funded at $52.6 million in FY 2007 and rewards universities for improving graduation rates for at-risk students and for accelerating degree completion times for all resident undergraduates. At the request of the General Assembly, the state Board of Regents is examining the possibility of implementing a similar program for Ohio’s branch campuses, as well as its community and technical colleges. States considering moving in this direction have to be careful that incentive structures account for differing characteristics of local institutions (e.g., student demographics) and lead to the types of program improvements desired.

Encouraging Transitions
Individuals looking to advance in their educational and career goals must be able to move seamlessly across different levels of education and the workforce. Unfortunately, current policies rarely provide such a smooth passage for the majority of students and workers. All too often, the transition of adults across institutions and among various educational levels is haphazard and infrequent, with particular leaks at key transition points from adult
education and English literacy to postsecondary education; developmental education to college-level coursework; non-credit workforce and technical training to credit-bearing postsecondary education; and associate degree to baccalaureate entry and completion.

The barriers all adults face in completing postsecondary programs—whether time, money, personal factors or prior preparation—all help explain why transitions often fail. But perhaps the most frequent cause is the disorganization and poor management of our public postsecondary education and training system and the many disconnects among policy and practice this system breeds.

States that wish to make improvements in this area can pursue a number of strategic approaches, including:

• Setting goals and improving data on student transitions
• Aligning entry and exit criteria across educational levels
• Promoting institutional practices that improve transitions

**COMPLETIONS, NOT ENROLLMENTS**

A number of states are reconsidering their approach to financing colleges and universities to better support student success. According to Dennis Jones, Executive Director of National Center for Higher Education Management Systems, one idea receiving increased attention is altering the financing formula to emphasize outcomes such as course completions rather than enrollments. This trend should result in institutions giving more attention to how they support students for academic success.

The Washington State Higher Education Coordinating Board articulated this as a goal in its 2004 Strategic Plan by expressing the need to “set clear and measurable goals that focus on outcomes rather than inputs alone.”

The Plan further noted that “the current state funding system for higher education is based on enrollments (inputs) rather than recognizing positive achievements like student success (outcomes).” This led to a set of proposals to restructure the financing system for higher education, including community colleges. One notable proposal was to calculate enrollment levels at the time of course completion rather than on the 10th day of classes. Under this approach, student enrollment would be counted for state funding purposes only if students completed the courses, not if they just enrolled in them. Another was to base performance contracts on the achievement of demonstrable progress toward specific student outcomes.

The legislature has yet to adopt these proposals, although the Board continues to focus on them and advocate for change. The Board has adopted a set of student success outcomes for both the community college and technical system and the baccalaureate system. For the two-year system, outcomes include targets for improvement, which are set on a biennial basis. The Board will report on the outcomes and will require institutions to submit plans describing how they will achieve measurable and specific improvements each academic year on both statewide and institution-specific performance measures.
We discuss these strategies in more detail below, with state-level examples of each. But first it is helpful to consider how a more seamless system of transitions might look. Prince and Jenkins (2005) offer the analogy of a traditional urban commuter transit system, one “that is run on the schedule of working adults and that can accommodate lots of on-and-off traffic, but still makes connections to long-term destinations (and) provide(s) a clear map of the educational pathways that adult students can follow to advance in their jobs and pursue further education.”

Such a user-friendly system would help adults determine where they want to go and how to get there, with the least number of stops, and can be easily understood and navigated even by first-time visitors. Additionally, this ideal system would reward experience and encourage effort and hard work, while also fully preparing students for the challenges of the next level of schooling or the workplace.

SETTING GOALS AND IMPROVING DATA ON STUDENT TRANSITIONS

States should start by setting a policy goal of improved student transitions at all levels, and developing indicators of success towards meeting this goal. Kentucky took this first step in 2000, when the legislature passed a comprehensive reform of adult education. Among a number of objectives, the bill committed Kentucky to improving the transitions of adult learners into postsecondary education. The law also mandates assessment and placement of students and formalizes a pathway for students from adult to developmental education and then on to credit classes. Kentucky Adult Education (KYAE) measures progress toward a number of goals, including transitions to postsecondary education. Through demonstration pilots, outreach, awareness and multiple partnerships, KYAE has improved the rate of GED graduates enrolling in postsecondary education within two years from 12 percent in 1998 to 19 percent in 2004. In FY 2005, 78 percent of adult education students who indicated postsecondary education as a goal enrolled in a postsecondary institution, much higher than the national average of 30 percent.

South Carolina has sought to improve transitions since 2002, when the Governor’s Task Force on Workforce Development identified 600,000 adults in South Carolina—one-third of the state’s workforce—as being without the skills to participate in the new economy. The state responded by developing a Memorandum of Agreement (MOA) between its adult education and technical college systems. The MOA included goals to improve transitions of adult education students to postsecondary education, reduce the placement of these students in remedial education, and develop “a more seamless adult education delivery system.” As part of this partnership, the state has created the Skills Institute, a 60-hour instructional program that offers basic math and reading skills for transitioning students to better prepare them for the technical college entrance exam. Institute classes are offered each semester on technical college campuses.

For states to measure progress toward improved transitions, they need to have data systems that provide individual student records from across K–12, adult and postsecondary education and workforce development. Such data systems must also be able to match these records with those from other systems, such as TANF, and ideally should

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54 Email correspondence with South Carolina Adult and Community Education staff.
connect to UI wage records as well. Currently, 11 states have the capacity to track student transitions from adult education into postsecondary programs. While states’ data systems have varying capacities to track student transitions across different segments of the P–16 continuum, only Florida can track students across the entire P–16 continuum and into the workforce.

ALIGNING ENTRY AND EXIT CRITERIA ACROSS EDUCATIONAL LEVELS
States can improve transitions by calibrating expectations across institutions for students to facilitate educational advancement and by ensuring alignment between curricula and assessments. Too often, transitions are hindered by curriculum gaps between secondary schooling (including GED) and higher education, and by assessments that measure knowledge and skills not taught in secondary schools or within adult education and workforce development programs. Evidence suggests that adult education instruction in particular is poorly aligned with requirements for credit courses at most community colleges. States can start to address these problems by requiring clear content standards that address the knowledge and skills needed for students to move to the next level. They can disseminate curricular and diagnostic tools to assess academic preparation and encourage local partnerships of educators to coordinate their curriculum planning. Beyond that, states can work with local community colleges and other postsecondary providers to streamline the assessment and placement process. Taking steps toward standardizing different placement exams used by colleges and setting common cutoff scores can reduce variability of expectations and increase transparency. Florida is one state that has adopted a common placement exam and common cutoff scores for all of its community colleges.

Ohio has recently developed policy to improve articulation between its secondary and adult career and technical education institutions and its postsecondary education system. The goal is to ensure that students at adult or secondary career-technical education institutions can transfer specified technical courses that meet recognized industry standards to postsecondary institutions in the state. Ohio has begun by tracking student outcomes in such fields as nursing and engineering technology, and convening faculty teams to align courses that meet standards and to facilitate credit transfer to postsecondary programs in these fields.

To improve transitions from community colleges to four-year institutions, states should develop a general education core curriculum for all two- and four-year institutions and require articulation agreements between the two. Policymakers should also consider instituting common course-numbering systems that further alignment by defining core competencies and curricular content within the general education core curriculum. Transfer has proven particularly difficult for students in Associate of Science (AS) and similar programs with strong technical content, since the courses in these programs rarely align with requirements for a Bachelor of Science (BS) and students thus must complete additional coursework. Florida has sought to address this problem by developing articulation pathways from the AS to BS in a number of occupationally focused degree programs. The Wisconsin Technical
PROMOTING INSTITUTIONAL PRACTICES THAT IMPROVE TRANSITIONS

Much of the hard work of improving transitions happens at the local and institutional level. States that wish to make improvements in this area should thus concentrate some of their energies on building the capacity of colleges and providers to do this work and catalyzing and disseminating promising practices. They can start by providing seed funding and implementation assistance to colleges and providers to collaborate on local transitions plans to meet statewide goals. Kentucky and Massachusetts are among the states that have used this strategy successfully. States can and should tie these efforts to the standards-setting, curriculum planning and alignment activities described above.

One particularly promising direction for states is to promote dual enrollment and other “blended models.” In this approach, colleges combine adult and developmental education, or develop bridge programs or learning communities that integrate basic skills with content courses, often within specific career-related fields.

Blended models offer a number of advantages for institutions and students alike. They can accelerate degree progress and promote curriculum alignment across different educational levels. They can reduce student educational costs in two ways, by using tuition-free adult education resources for most remediation, and by integrating basic education within degree programs—thus rendering more students eligible for financial aid. Finally, such models help students who are proficient in one subject, but not another, or without sufficient English literacy skills, to advance more rapidly. Blended models also benefit institutions by enrolling students in multiple systems concurrently (i.e. adult and developmental education, developmental education and credit classes), helping to meet enrollment targets and/or generate enrollment-driven student funding. Kentucky, for one, has enrolled students in adult and developmental education simultaneously.

Colleges and providers will also need significant technical assistance in implementing these kinds of innovative practices, including faculty and administrator release time for planning, standards and curriculum development and professional development. In addition to supporting capacity-building, states can also facilitate the spread of promising practices by encouraging flexibility in how local entities can use state and federal funds. States and regions, for example should support and encourage using WIA and other resources to support career pathways or other blended models.
Incorporating Employer Demand and State Economic Priorities in Workforce Educational Planning

States can partner with employers to ensure that increased adult access and success in workforce education translates into gains for both workers and businesses. To achieve these dual goals, states must be able to identify where additional investment in workforce education can make a difference both for workers and employers, and channel resources toward supporting regional partnerships between employers and providers of workforce education.

States pursuing these objectives should focus on three primary strategies:

- Building workforce education into state economic development policy
- Linking workforce education to state and regional economic priorities
- Using incumbent worker and customized training programs strategically

When partnering with employers, states should aim to strike a balance between meeting individual employer needs, pursuing

WASHINGTON’S I-BEST PROGRAM

States can use state and federal resources or private philanthropic resources to catalyze the development of blended models and other promising practices that improve transitions. In 2004, the Washington State Board for Community and Technical Colleges and the Office of Adult Basic Education and Workforce Education used state funds to develop I-BEST (Integrated Basic Education and Skills Training), a blended model demonstration project designed to help colleges become more effective in serving low-skill students. The state funded ten colleges to design and deliver demonstration programs that incorporate joint ABE/ESL and professional-technical faculty planning and instruction together in the classroom and result in gains in both literacy and workforce skills. Selected colleges were also provided an incentive for integrated classes. The model offered an institutional incentive for team teaching of basic skills and professional and technical classes by providing funding for a minimum 50 percent joint instruction and curriculum development time and by offsetting any additional costs of coordination and student supports. Colleges using this enhanced model could generate additional funding for I-BEST classes within the current funding formula, enhancing the potential for sustainability.64

A 2005 evaluation of I-BEST found that participating students earned five times more college credits on average, and were 15 times more likely to complete workforce training, than traditional ABE/ESL students. By providing tailored language training within content classes, I-BEST was particularly helpful in accelerating progress of ESL students. ESL students in I-BEST classes increased their English language skills at the same rate as students in traditional classes, suggesting that an integrated instruction model can effectively remediate skill gaps and may more quickly build the necessary language skills of students who wish to advance further in postsecondary education.65
state economic development goals and helping workers advance. The goal—indeed, the necessity—is that both public and private interests are served. Partnerships that tilt too heavily toward one side tend to diminish the chances of serving the other. States can ensure that policies to link postsecondary education and training with economic priorities benefit both employers and workers by investing in partnerships that support postsecondary workforce education benefiting workers across a group of employers—for example, by funding for-credit programs. Another useful approach is to leverage employer investments with state funds by requiring employers to provide matching funds, paid release time for training, and/or use of employer facilities or staff for training. States can also link their investments in regional partnerships to hiring preferences, wage increases, and promotions for workers participating in postsecondary education, and require that regional partnerships supported with state funds provide postsecondary workforce education to a range of workers, including entry points for those with lower skills and/or limited English.

Below, we examine the three primary strategies in more detail, and consider how states have pursued each in working with the private sector.

BUILDING WORKFORCE EDUCATION INTO STATE ECONOMIC DEVELOPMENT POLICY

States can use economic development policy to partner with employers and leverage investments in postsecondary workforce education to support economic growth and worker advancement. Very few, however, do so at any kind of scale. While states and localities give about $50 billion annually to private business and industry in support of economic development goals, anecdotal evidence strongly suggests that little of that sum is directed toward improving the skills of the workforce. Traditionally, state economic development policy has focused on bricks and mortar infrastructure, access to capital and financial incentives. States have tended to assume that success in attracting or retaining employers would naturally lead to benefits for the state’s citizens. Recently, though, states have begun taking a harder look at how they can structure economic development incentives to ensure that public subsidies lead to concrete benefits for community residents. For example, as of 2003, some 43 states had incorporated into their development subsidies standards aimed at ensuring that public investments result in creation of high-quality jobs. States are also broadening their view of what is needed to attract and retain family-supporting jobs and to recognize that workforce education can play a critical role in this. For instance, Oregon’s 49 local Enterprise Zones authorize property tax exemptions for companies in exchange for locating or expanding in the zone. Among other requirements, participating companies must enter into “first source” hiring agreements with local workforce education providers and, to receive the largest tax exemptions, compensate new workers at 150 percent of county average wages. And in Texas, the state charters local Economic Development Corporations (EDCs) which are authorized to collect and spend local economic development sales taxes on various economic development projects, including workforce education connected to job creation. A 2003 report found that supporting workforce education was among...
the best practices used by the more effective EDCs; to date, however, few EDCs have chosen to devote revenues toward funding education or training.\textsuperscript{70} From 1997–2004, Texas EDCs spent $15.8 million on job training initiatives, about 2 percent of EDCs' “discretionary” spending, or about 0.56 percent of total expenditures.\textsuperscript{71}

LINKING WORKFORCE EDUCATION TO STATE AND REGIONAL ECONOMIC PRIORITIES

States can use a variety of funding sources and mechanisms to connect postsecondary education and training to employers and sectors that can offer quality jobs and advancement potential for workers. In Illinois, the Critical Skills Shortage Initiative (CSSI) uses state WIA funds to fund regional partnerships of employers, economic and workforce development agencies, and postsecondary providers to identify occupations in which there are critical shortages of skilled workers and pull together services to address those shortages. The state has also begun to use the CSSI findings about shortages to guide other investments in workforce education, such as the Job Training and Economic Development grants (JTED) to partnerships of employers and community-based organizations.

Another example is Pennsylvania's $101 million Job Ready PA initiative, which has invested in 73 industry partnerships involving 980 companies and has directed PA Higher Education Assistance Agency funding to nearly 3,000 adult learners in postsecondary workforce education and advanced training for over 7,500 incumbent workers, all aimed at ensuring an ample supply of skilled workers for businesses and opportunities for state residents to acquire the needed skills to move up to better jobs.\textsuperscript{72} In Massachusetts, the Extended Care Career Ladder Initiative uses state funds to make grants to consortia of nursing homes, community colleges, and other providers to create career ladders and to address staff training, work environment, and quality of care issues. Industry Skill Panels in Washington State bring together business, labor, education and workforce professionals to assess current and future skill needs and how best to help workers advance and businesses prosper. The panels consider a wide range of workforce education issues, such as articulation of education and training programs, development of curricula and creation of apprenticeships.\textsuperscript{73} In Georgia's Certified Specialist Programs, the state convenes groups of large employers to develop standardized statewide for-credit curricula and credentials in key demand sectors such as construction, manufacturing, warehousing and distribution, insurance, and customer services.

States can help these regional partnerships to succeed by building an infrastructure of staff whose job it is to connect postsecondary programs with employers. Community and technical colleges in North Carolina and Georgia, for example, have both state-level and college-based staff with economic development responsibilities. In Georgia, college Vice Presidents for Economic Development not only manage customized training programs at their schools, but also market state student aid, such as HOPE grants, and for-credit occupational offerings, such as the Certified Specialist Programs, to employers and workers.
Using Incumbent Worker and Customized Training Programs Strategically

Most states have incumbent or customized worker training programs that partially subsidize employers’ costs of skills upgrade training for current workers or new hires. Twenty-three states fund training through some form of employer tax revenues, including Unemployment Insurance (UI) tax offsets, UI penalty and interest funds, and separate employer taxes. Incumbent and customized workforce education programs tend to view themselves as economic development programs whose primary purpose is to help individual employers meet workforce needs.

Some states, however, use these programs more strategically: to advance particular economic priorities, such as attracting or retaining key businesses and industries, helping dislocated workers retool skills for new careers, and advancing low-wage or low-skill workers. Minnesota’s Job Skills Partnership (MJSP), which supports incumbent worker training, has since 2001 provided Low-Income Worker Training grants to employment services providers to pay for training of individuals with incomes under 200% of poverty. These grants provide a resource to frontline providers (both nonprofit groups and the public One-Stop system) to pay for training in demand by local employers. Most grantees pay for training at multiple employers and in multiple occupations.

In addition, the Minnesota Legislature gave the MJSP board the authority in 2006 to make Special Incumbent Worker grants that are more flexible than the traditional Partnership grants: the board encourages grant applications that have statewide or regional impact, leverage the public university system’s Centers of Excellence, address the needs of multiple employers, or design services for English language learners. In California, during the 2005–2006 school year, the state’s Employment Training Panel prioritized incumbent worker training grants in sectors identified as key to the state’s future economic health, including aerospace, life sciences, high technology and other types of manufacturing.

Similarly, the Massachusetts Workforce Training Fund, the state’s incumbent worker training program, set aside a portion of its 2005 funding for grants focusing primarily on helping employers upgrade workers’ basic education and/or English language skills, thereby enabling lower skilled workers to gain access to program training. Finally, North Carolina’s New and Expanding Industries Training program and Georgia’s Quickstart program both provide customized workforce education to employers that create jobs through relocation, start-ups or expansion. This capacity to provide quick response training to support job creation is an integral part of both states’ economic development strategies.

Beyond these state-level incumbent and customized training programs, most community and technical colleges maintain workforce education departments that contract with local business and industry to provide customized training for their workers. These departments often have in-depth knowledge of local employers and their workforce needs. States could deploy this capacity to support goals of economic growth and worker advancement in targeted sectors, occupations or regions, especially if schools then articulate non-credit workforce education to for-credit certificates and degrees.
Building Capacity and Financing Improvement
To make significant improvements in their systems of education and training, states will need to greatly expand the existing capacity of postsecondary institutions and workforce education providers to provide high-quality curriculum and instruction, support and improve student success, and work more effectively with employers. This will prove challenging given the recent state fiscal environment. As a share of total government expenditures, state appropriations for public colleges and universities decreased by 4 percent between 1987 and 2003 as adult and postsecondary education has had to compete with growing budgetary demands in politically compelling areas such as Medicaid and K–12 education. Among the virtues of FTE funding formulas are that they tie financing directly to student demand for programs and colleges and provide incentives for institutions to seek out new students and thus expand access.

But the formula-driven financing model also has its drawbacks. As noted earlier, one drawback is that funding enrollments instead of completions fails to provide incentives to support student success. In addition, the model does not provide sufficient support for high-cost programs (such as nursing and engineering) that are of economic significance to the state. FTE rarely supports non-credit workforce development programs that can help low-wage workers obtain better jobs, or developmental and adult education programs that serve as important bridges to postsecondary education for low-skill adults. In most cases, FTE is not sufficiently flexible to support program and curriculum development, or other discrete start-up and capacity-building costs, and it generally does not provide incentives for institutions to improve student persistence and degree completion.

Before looking at ways for states to move forward in terms of building capacity, it helps to consider where they are now. Most states currently fund community and technical colleges and other postsecondary institutions using a funding formula that is driven primarily by student enrollment, calculated based on a full-time equivalency (FTE). The virtues of FTE funding formulas are that they tie financing directly to student demand for programs and colleges and provide incentives for institutions to seek out new students and thus expand access.

To take steps in this direction, states should consider increasing their investments in the following areas:

• Supporting occupational and workforce development programs of economic importance to the state and regions
• Supporting developmental and adult education programs that help students successfully earn credentials
• Paying for program development and other innovation costs now borne by institutions and providers
and find ways to fully support high-cost occupational programs of greater economic value to the state. Formula changes should also help states find additional dollars to support high-quality adult and developmental education programs that help low-skilled adults access postsecondary education and earn credentials. Finally, states will need to build incentives into resource allocation that encourage institutions to embrace key state policy goals.

SUPPORTING OCCUPATIONAL AND WORKFORCE DEVELOPMENT PROGRAMS OF ECONOMIC IMPORTANCE TO THE STATE AND REGIONS

States should begin by examining their current funding arrangements for occupational education and workforce development programming. According to a 2000 survey, only 17 states provide FTE resources for non-credit workforce education programs, and only 4 states fund these programs at the same rate as credit programs. No comparable 50 state survey has been conducted to determine the extent to which states provide funding for high-cost programs, though a 2005 Educational Commission of the States (ECS) survey of 11 states found that six provided some additional resources for high-cost programs.

To avoid creating perverse incentives, states should convene their economic development, workforce development and community and technical college leaders to determine which academic and training programs are of greatest importance economically to the state (and specific regions) and/or have the most potential to help low-income adults advance economically. States should then work to provide additional FTE support for these economically important programs. In the case of non-credit-workforce development programs, states should condition additional FTE support on better articulation of non-credit certificates to credit-bearing programs within colleges, to better enable adults in those programs to move on and earn associate and baccalaureate degrees.

A few states have made progress in this area. Ohio now distributes funding to community colleges on a per-student amount based on the program area in which a student is enrolled. Colleges receive between $1,048 and $4,276 per FTE in general education classes, but for students in Nursing and Engineering the FTE allocation is $7,101. As part of a larger effort to increase the proportion of state funding to colleges and better align these institutions with state economic development priorities, Pennsylvania has retooled its funding formula to provide more generous reimbursement to community colleges that train students in high-demand occupations at a higher than normal rate. The amount of additional funding varies from year to year based on the overall number of FTEs in the state.

Mississippi also has implemented changes in its funding formula for community colleges in recent years to give greater financial support to colleges with significant enrollments of part-time and vocational and technical students. The new funding formula has shifted from measuring fall headcount to using semester credit hours generated for summer, fall, and spring semesters to determine FTE. The state legislature appropriates funding for community colleges and the FTE enrollments are used to distribute the funding. Since many community college students attend college on a part-time basis and the colleges’ expenses for accommodating these students increase annually, state...
Email correspondence with staff for the Mississippi State Board for Community and Junior Colleges.

A number of states—including Wisconsin, Arizona, New Mexico, Virginia, and South Carolina—require students to pay all or most of the full cost of developmental instructions at 4-year campuses. Students who pay this general no FTE for these purposes.


Lebowitz (2005); Materials on Minnesota provided by Barry Schaeffer, State Adult Education Director.

leaders feel that converting to the new FTE formula better addresses the issue of student equity. In addition, the credit hours generated by part-time vocational and technical semester hours are included in the calculations and earn as much revenue in the funding formula as a per-semester credit hour taken by a full-time student in a general education track.

SUPPORTING DEVELOPMENTAL AND ADULT EDUCATION PROGRAMS TO HELP STUDENTS EARN CREDENTIALS

Though funded through different sources and at different levels in most states, adult education (including English literacy) and developmental education are both areas in which states should consider investing additional financial resources to support successful programs. Like high-cost occupational programs, most high-quality developmental and adult education programs require more resources and more intensive instruction than regular credit classes. Moreover, as noted earlier in Section IIC, developmental and adult education are crucial points in the transitions of adults seeking postsecondary credentials. In most states, developmental education classes earn “institutional credit” and thus generate FTE enrollment funding, although these classes generate proportionally less funding per student than regular credit classes.

According to a 2000 Education of the States (ECS) survey, 17 states provide the same level of support for developmental education in their funding formula as regular classes, while 10 do not. The ECS survey found that only three states—Arkansas, Massachusetts and Nevada—provided a higher FTE reimbursement for developmental education classes.

Adult education and English literacy programs are funded partly through Title II of the Federal Workforce Investment Act (WIA). States must provide a 25 percent match to receive federal funds, though most allocate additional state resources beyond the match. The most common providers include school districts, local community-based organizations, and community and technical colleges, with the mix varying from state to state. Adult education classes at community colleges are usually non-credit and tuition-free. In most states, however, they do not generate the same FTE as other non-credit classes and thus programs are much more reliant on federal funding and other sources of state dollars. For this reason, capacity is severely limited: most state adult education programs have long waiting lists and serve only a portion of adults without a high school diploma.

To address funding deficiencies in this area, states should begin by examining current allocation and funding formulas for both developmental and adult education. Many states should consider a more simplified funding model such as Oregon’s, which funds both developmental and adult education on an FTE basis, and at the same funding level as regular credit classes. An alternative approach, adopted in recent years by Massachusetts and Minnesota, is to use other sources of state funding to support these classes at more generous levels than currently found under funding formulas. However policymakers choose to proceed, they should target resources to those colleges and providers that are most effective in helping students transition into postsecondary education and earn college credits. As noted earlier, Kentucky has effectively tied adult education funding enrollment to performance goals for providers.
This program is discussed in greater detail in Section 3 of this paper.


PAYING FOR PROGRAM DEVELOPMENT AND OTHER INNOVATION COSTS

Most of the innovative practices described in this report require postsecondary institutions and adult education and workforce development providers to develop new practices or make significant changes to existing ones. Yet most current state funding formulas include no incentives for many of the activities that support innovation and improved practices—new program development, curriculum collaboration and alignment, faculty professional development. States, therefore, need to mimic the private sector and create small “venture capital” pools that can help seed and support innovation. States can make venture capital funding available on a competitive basis to support individual efforts by colleges and providers, or use resources more systematically to support the implementation of significant new state initiatives. Kentucky, for example, has used state customized training dollars to provide seed funding for local community and technical colleges to implement career pathways.

States have used a variety of other funding sources to support local innovation. Oregon uses WIA Title I discretionary funding to support its career pathways initiative, while Arkansas uses its TANF surplus dollars. At different times, California, Kentucky and Washington have all expended TANF surplus funds to support new worker advancement initiatives. Other states (Oregon, for one) have used WIA performance dollars (Title I and II) to support program development and other innovative local activities. However states support new venture capital pools they need to ensure that these funds support local innovations that can endure after the initial infusion of state dollars disappears. One strategy to ensure sustainability is to limit venture funding to activities that create tangible tools (new curricula), develop significant capacity among local colleges and providers (intensive, focused professional development) or create permanent structures locally (reorganized college departments, local cross-agency collaborations). States can also consider requiring local funding matches and/or clear sustainability plans as a condition of providing venture funding.

Measuring Results

To strengthen postsecondary programs by helping more students to access higher education, make transitions from one level of study to the next, and successfully complete their educations, states must possess a solid understanding of current outcomes and the ability to track and report on performance over time. Many states have invested millions of dollars in building data management systems for this purpose. Some have even used their ability to measure institutional performance to guide budgeting and direct funding for institutions of higher education. The majority, however, still struggle both to understand how well their current policies are serving these ends, and to use what knowledge they do have to push for constructive change.

The already-daunting challenge of measuring the results of postsecondary students and other participants in the workforce development and adult education systems becomes even more complex when states desire to pay particular attention to targeted student populations (for instance, minorities, low-income, adult, part-time, and working students), to follow students that move from one educational system to another, and to link educational efforts to labor market
outcomes. Longitudinal assessments—studies that track the progress and outcomes of students over time—add yet another layer of difficulty. Putting together all the pieces of a data management system is not, however, the final goal. All of this is for naught if states do not use the data to inform state policy and improve institutional operations.

A small number of states have evolved their data management systems toward real integration and value. At the current time, however, most states are giving priority attention and devoting significant resources to further developing their K–12 systems in response to the federal No Child Left Behind law. The Education Commission of the States proposes a system that encompasses students from kindergarten through college (K–16) in order to focus on the “crucial connection between secondary and postsecondary levels.”

Various experts have weighed in with recommendations for strengthening state data management and performance accountability systems. They include the following:

- Developing a comprehensive and integrated data system
- Focusing indicators on special populations and labor market outcomes
- Building in capacity for public reporting and analysis
- Rewarding successful performance
- Measuring progress toward goals

These recommendations are not simply abstractions. As we detail below, several states have taken action along similar lines, and their experiences can serve as important guides for other states seeking to move forward. A number of these suggestions, such as developing linked state data systems and more targeted indicators, mirror the challenges identified earlier. For instance, an important concept for overcoming fragmentation and limited accountability is the creation of a single authority for managing or warehousing all the data. This ultimately boils down to a state policy alignment issue.

DEVELOPING A COMPREHENSIVE AND INTEGRATED DATA SYSTEM

Although Florida’s K–20 system is the “gold standard” among states (see Florida: The Gold Standard, page 28), other states have made strides as well. In 1997, the Texas Legislature established the Texas PK–16 Public Education Information Resource data system, which requires the state’s multiple education systems, including the K–12 system and the college and university systems, to share and integrate student data. Texas was able to do this despite not having a united governance structure for its K–16 educational programs. Similarly, Maryland established the Partnership for Teaching and Learning, a K–16 alliance of the state’s Department of Education, Higher Education Commission, and the University System of Maryland. Among other things, a key priority of the partnership is to share and use data on student achievement from preschool through college.

The issue of data sharing and privacy in particular has limited some states’ efforts to develop more comprehensive, integrated and useful data systems. Concerns over individual privacy, particularly sharing student social security numbers, have proven difficult for would-be reformers to address. This is a complex matter involving state legal, technical and political issues as well as a federal law, the Federal Educational Rights and Privacy Act, which places some restrictions on the
sharing of student records and data. Jack Mills shows in a 2005 report on this issue that a number of states as diverse as Florida, Nebraska, Oklahoma, Texas and Washington have found ways to “strike a balance that protects individual privacy while also making it possible for community colleges and other higher education institutions to use individually identifiable data records to drive institutional improvement.” For example, in Nebraska, a single governing entity houses all data and matching activities to insure that only one source has direct control and that individual data such as social security numbers are not disclosed or even available to other entities within state government.

FOCUSING INDICATORS ON SPECIAL POPULATIONS AND LABOR MARKET OUTCOMES
Analyzing the performance accountability systems of five states—Florida, New Mexico, North Carolina, Texas and Virginia—Dougherty, Reid and Nienhusser concluded that states should devote more attention to measures of successful remediation and post-transfer success, including success in other institutions. They urged all of the states to develop measures that capture successful student movement from non-credit to credit programs and noted the importance of measuring student connections to and success in the labor market, which typically means connecting student record data with state wage record files. To reach the needed level of detail, states must disaggregate data by race and income to assess the outcomes of special populations and ensure that efforts to measure results do not prompt systems or institutions to shy away from students who may not easily achieve desired outcomes. States should also consider including specific performance indicators that focus on targeted populations and the outcomes related to their educational circumstances. Two examples of possible indicators that illustrate this point are: 1) the measurement of successful transitions from remedial or developmental education to the completion of a certificate or degree, and 2) the measurement of transitions from non-credit to credit programs.

BUILDING IN CAPACITY FOR PUBLIC REPORTING AND ANALYSIS
Virtually all states collect and develop reports on student data at some level of detail. Rarely, however, are those data user-friendly or prepared for public consumption. West Virginia is one state that attempts to make its data available and comprehensible by preparing a report card that presents overall state performance as well as the outcomes of individual institutions. The state posts the data and report on the website of the West Virginia Higher Education Policy Commission and presents it to the legislature each year. States might also find it useful to have an objective, non-vested entity, either public or private, that wants and uses higher education data as part of its policy research or analysis process. The Oregon Business Council is a keen consumer of Oregon state educational data; as a result, the Council not only issues policy analysis on state educational issues but is a significant proponent of a comprehensive and integrated state educational data system. Finally, it is important that state and local institutions have the capacity to conduct data analysis. Florida, which “has made notable efforts to support the institutional research capacity of community colleges,” shows how states can support such efforts to effectively use data to assess and strengthen performance.
REWARDING SUCCESSFUL PERFORMANCE

Although performance budgeting and funding may not be as powerful a tool as desired, some states do encourage institutions to focus on certain issues by offering incentives for meeting desired outcomes. North Carolina’s community college system awards additional dollars for successful and superior performance on six state indicators. The indicators focus on student success outcomes such as progress of basic skills students, passing rates on licenses and certificate exams, completions, employment status at graduation, and the performance of college transfer students. Although the rewards are not huge, the most successful community colleges have earned close to $1 million, which provides flexible money that systems can use to support new program development or other special initiatives. In addition, focusing on certain indicators of student success tends to make colleges and other stakeholders more aware of the opportunities for program improvements.

FLORIDA: THE GOLD STANDARD OF STATE DATA SYSTEMS

Florida’s data system has the ability to examine student outcomes across institutional systems and into the workforce that is unmatched anywhere else in the country. Developed over the past 20 years, the system is housed within the state’s Department of Education, which oversees Florida schools from kindergarten through graduate study. The data warehouse includes information on all students in public K–12, college, university, and career and technical students, as well as those in private colleges and vocational trade schools, casting a considerably wider net than any other state system.

The database captures outcomes for students who transition from one educational system to another, as well as for participants of specific workforce development programs such as WIA, Wagner-Peyser, TANF and Prison Industries. Outcomes are also generated for specific categories of students. For example, data is available for community college completers and leavers as well as by type of program study such as students pursuing a certificate program and those pursuing an associate degree. Importantly, the system measures the number students and program participants continuing their education into other systems and tracks employment and earnings outcomes by connecting to the state’s wage record files, a capacity that would benefit all states.

The managers of Florida’s system have carefully “developed a culture in which institutions are comfortable with providing data to a state agency that, in turn, provides valued reports and services to cooperating institutions.” The multiple purposes for which the database is used—including research, institutional evaluation, accountability, and funding—have helped create and sustain this culture. The system also provides longitudinal analysis and reports on further education and employment outcomes, thus providing educators, managers and policymakers with a wealth of information on the long-term value of program investments.
MEASURING PROGRESS TOWARD GOALS
For states, developing the technical ability to measure student outcomes is only a first step in using a performance accountability system to guide postsecondary policymaking. Using such a system to inform resource priorities and the design of institutional practices is the ultimate bottom line. A measurement system, however, is most useful when used to assess progress against articulated goals, whether statewide or institutional. Kentucky and Washington, among other states, have set statewide goals for postsecondary education and “have explicit measures of progress toward those goals.” Setting goals to assess institutional performance can also be useful provided such goals are realistic and reflect the differentiated missions and characteristics of an institution.

Again, none of these strategies will lead to real gains unless states use their data to inform budgeting, policymaking and institutional performance. A number of states, however, have found that the ability to identify, assess and report student outcomes can be useful in shaping state policy and strengthening institutional performance. In Texas, for example, some believe that student data on enrollments and completions, particularly for minority or low-income populations, helped influence the state’s “Closing the Gap” initiative. As noted earlier in this report, this effort established state goals for significantly increasing enrollments and completions for minority students by 2015. Local institutions are now developing specific plans to increase student enrollment and completion outcomes, using data to guide their efforts.

Accountability and transparency are, without a doubt, the wave of the future for higher education. State policymakers now have the opportunity to build accountability systems that can help them more effectively use limited resources while maintaining high standards for quality and access. If designed and used effectively, these systems can play an important role in helping states achieve better education and labor market outcomes.
We do not underestimate the difficulty in turning the recommendations from Section II into policy. To build systems that effectively leverage public investment and help students achieve educational and career goals, states must rethink how they do business, sometimes in very fundamental ways. Multiple state agencies and systems must work together, leaving behind old turf struggles and bureaucratic rivalries. To see this work through will thus require strong and sustained leadership that can bring together individuals of diverse backgrounds in the development and maintenance of a shared vision. Though both the process and the final product will look different in each state based on its political culture and existing policy governance arrangements, the goal of an integrated and coordinated system of education and workforce policies that can produce high-skilled workers in large numbers is one that every state shares.

That said, policymakers should undertake specific governance changes in state postsecondary education and training systems only with caution. As noted above, the various components of this system (K–12 education, adult and postsecondary education, economic and workforce development, social and human services) are usually housed in different agencies at the state level. While shifting around the “boxes” of funding and authority is often an appealing fix to policymakers, there is little evidence that such changes lead to wholesale improvement in outcomes for states, and can lead to distracting battles over resources and turf. Different governance arrangements—for example, whether states administer adult education and English literacy services through the K–12 school system or within community college/postsecondary systems or workforce development agencies—seem to matter less than whether actors and agencies cooperate and policy and practice is
In the specific case of adult education/literacy programs, most expert observers agree that both high quality and weaker programs exist across the governance spectrum. What matters more is a solid resource base, clear goals for clients, strong accountability and solid strategies for working with other relevant state agencies.

In this section, we look what can be done to develop shared agendas and long-term policy strategies that promote the action steps described in Section II. Specifically, we consider how states can support progress by:

• Setting forth a guiding vision
• Catalyzing and supporting local action
• Breaking down silos to promote local cooperation

**Setting Forth a Guiding Vision**

As with any effort to prompt wide-scale change in policy and practice, leadership is crucial to its ultimate success. Each state has a unique political environment with a greater or lesser degree of administrative centralization; accordingly, efforts to affect policy change gain traction in different ways from state to state. Leaders at the state level can help promote improvements in the postsecondary education and training system by articulating a vision that helps to change mindsets about what is possible and encourages localities to critically reevaluate the status quo. Such a vision should emphasize how citizens, employers and local communities will benefit from proposed policy changes. At the same time, the vision should include measurable goals that promote greater alignment among education, workforce development, social service and economic development agencies and entities.

**Gubernatorial Leadership**

In some instances, the governor’s office can provide critical guidance and vision. Governors can support long-term policy change by providing direct leadership to state agencies; assembling working groups or commissions to investigate problems; coordinating inter-agency work; and making recommendations.

Oregon provides an excellent example for how a governor’s vision and leadership can result in the flourishing of career pathways models across a state. In spring 2004, Governor Ted Kulongoski challenged the state’s education and workforce systems to enable “all Oregonians, residents and businesses, to have the skills and resources to achieve economic prosperity.” In response, top administrators from the Oregon Department of Community Colleges and Workforce Development and Oregon Workforce Investment Board, together with staff from the governor’s office, launched the Oregon Pathways to Advancement initiative with the aim of ensuring that “all Oregonians have access to postsecondary skills, credentials, certificates and degrees that are valued in the current and future economy leading to good jobs and higher wages.”

The agency heads formed a steering committee that set the following goals for the initiative:

- Increase awareness of the benefits of postsecondary certification and credentials
- Increase accessibility and affordability for part-time, low-income, working adults
- Increase resources for essential support services to help students achieve their postsecondary goals
- Increase alignment between the state’s education and workforce systems
WORKFORCE STRATEGY CENTER

- Increase postsecondary degrees, certificates of completion and industry certifications earned through articulated pathways.

To achieve the vision and goals, the pathways team emphasized the need to “transform education and workforce delivery systems to be customer-focused and responsive to changing student, worker and business demands—customized, just in time, just enough, just for me.”

AGENCY LEADERSHIP

Often, state agencies play leadership roles in developing guiding visions. In some cases, a single agency might spearhead the whole effort; at other times, there may be several agencies that come together and share leadership responsibilities.

The impetus for improvements to the postsecondary education and training system in Washington came from a series of studies conducted by the State Board for Community and Technical Colleges (SBCTC). One study tracked the enrollment patterns, educational experience and labor market outcomes of students who entered the state’s community and technical colleges through English-as-a-Second-Language and other adult basic skills programs. The study found that, on average, students who advanced beyond basic skills programs and then entered and completed college-level occupational certificate or degree programs had the highest earnings gains—but that too few adult basic skills students made it to that critical threshold. The SBCTC used the findings from this study, and the fact that there are as many low-skill adults currently in the Washington state workforce as there will be students in the next ten graduating high school classes in the state combined, to win support from the college presidents, the state board and the legislature for efforts to improve the transition of students in Adult Basic Education programs into college-level occupational programs leading to well-paying jobs.

LEADERSHIP FROM THE OUTSIDE

State officials seeking support in developing shared agendas can find help from the advocacy and philanthropic communities, often a source of both ideas and financial or logistical support. Additionally, those outside actors can play the role of honest broker when neutral ground is needed for discussion among disparate constituencies. In at least one case, leadership from outside of the government has even “carried the flag” in terms of moving the vision-setting effort forward and establishing a shared agenda among disparate government groups.

In Ohio, where political leadership and policymaking are more decentralized, the vision driving policy change came not from state government, but rather from the field. A stakeholder group convened by the KnowledgeWorks Foundation formed in 2002 to identify ways to assist the more than one million low-wage working adults in Ohio to move up the economic ladder while also helping the state’s employers recruit and retain qualified workers. The organizations represented in the stakeholder group included community and technical colleges, adult career-technical schools, Adult Basic Education providers, Ohio Board of Regents, Department of Education, Department of Job and Family Services, Governor’s Workforce Policy Board, local workforce and economic development entities and employers. In 2003,
this 45-member group produced a vision and strategies document that called for improved alignment among the agencies and institutions responsible for adult workforce education in the state and between those entities and agencies responsible for human services, workforce and economic development.

In an accompanying action plan, the stakeholders proposed a concurrent approach to fostering alignment; one focused on practice at the local or regional level, and the other was designed to promote state policies conducive to alignment. The stakeholder group has expanded and continued to meet. Since spring 2003, KnowledgeWorks Foundation and the stakeholder group have successfully championed legislation to increase the transition of adults from adult career technical schools in the state to community and technical colleges. In spring 2006, they helped convince Ohio Governor Bob Taft to empanel a commission to address the governance and funding of Ohio’s adult workforce education programs.

States can help catalyze change by:

- Providing a framework for local action
- Providing financial support for planning and piloting
- Offering technical assistance and opportunities for peer learning and support.

FRAMEWORKS FOR LOCAL ACTION

With state-level visions and goals in place, even the most decentralized states must set clear guidelines for local policymakers to follow. Guidelines must be flexible enough to allow local actors the leeway to develop solutions of location-specific issues, but they also must specify objectives that ensure local actors support state visions and goals. One example of a framework that allows flexible local control but can support state visions and goals is the career pathways framework (see “Career Pathways,” page 34).

FINANCIAL SUPPORT FOR PLANNING AND PILOTING

Achieving reform at the local level involves a great deal of planning, partnering and coordination. States can provide support for these activities through grants to plan and pilot efforts. State officials can issue a request for proposals (RFP) in which state leaders ask local or regional agencies to propose activities in keeping with state level visions. RFPs are particularly useful when launching new efforts for which a certain degree of local innovation and experimentation is required, allowing local agencies to customize activities to make their contexts and circumstances and giving states an opportunity to assess the different practices that result. State budgets are tight all over the country, and as such discretionary funding is hard to come by. Several states have shown great resourcefulness in using
CAREER PATHWAYS: A LOCAL STRATEGY TO MAKE THE PIECES FIT

In a growing number of communities around the country, local leaders are attempting to more closely coordinate publicly funded education, from primary through postsecondary levels, with social services and workforce and economic development programs to produce a better trained workforce and promote economic growth. Several states are actively supporting the efforts of these regional partnerships by restructuring funding, governance and other tools at their disposal to influence local policymaking decisions.

“Career pathways” describes one particular framework or approach by which regions can better align publicly supported systems and programs to build a knowledge-economy workforce customized to meet the needs of local labor markets. A career pathway is a series of connected education and training programs and support services that enables individuals to secure employment within a specific industry or occupational sector, and to advance over time to successively higher levels of education and employment within that sector. Each step on a career pathway is designed explicitly to prepare the participant for the next level of employment and education.

Career pathways target jobs in industries of importance to local economies. They are designed to create both avenues of advancement for current workers, jobseekers and new and future labor market entrants, and a supply of qualified workers for local employers. As such, they also serve as a strategy for strengthening the “supply chains” that produce and keep up-to-date a region’s knowledge workforce.

This model, however, cannot be purchased off the shelf. The specific form and content of a career pathway will depend on the particular industries targeted, the requirements for employment and advancement in the target sector or sectors, and existing infrastructure for job training and related education within those sectors. Building a career pathway is a process of adapting existing programs and services—and adding new ones—to enable participants to advance to successively higher levels of education and employment in the target sectors. Where it is most effective, the career pathways process helps to transform institutions and organizations involved in education, workforce preparation and social services. The process strengthens cooperation among them in ways that improve their capacity individually and collectively to respond to the needs of local residents and employers.

To read more about career pathways, see the Workforce Strategy Center report titled “The Career Pathways How-To Guide.”
federal dollars in programs such as the Workforce Investment Act (WIA) and Temporary Aid for Needy Families (TANF) to support pilots.

For the past two years, Oregon has used Workforce Investment Act (WIA) Incentive Award funding to support the development of “career pathways” at 17 community colleges within the state. Each college has developed efforts in one or more transition areas: high school to postsecondary, pre-college (Adult Basic Education, General Equivalency, English as a Second Language, etc.) to college, or postsecondary entry for adults re-entering the workforce or incumbent workers. With support from the Governor’s Employer Workforce Fund, one five-college collaborative developed 29 occupational “roadmaps” as tools for advisors, faculty and students.

The Governor’s fund continues to support the efforts of the five-college collaborative and recently provided funding for an additional six colleges to participate. Additionally, the U.S. Department of Labor awarded Oregon WIA incentive funds for the 2007 fiscal year, which it will use to build career pathways systems and capacity. In addition, the state has dedicated some Perkins funds for career pathways efforts. Teams from six regions were recently awarded Perkins funding to develop tools for facilitating the transition from high school to college, including websites designed for high school students that map career pathways and dual enrollment opportunities in a broad range of career areas.

Arkansas is using TANF funds to support efforts at 11 of its 22 community and technical colleges to enable career and educational advancement among the TANF population. The Arkansas Department of Higher Education (ADHE) kicked off an initiative in April 2005, with a meeting that brought together presidents and other leaders from each of the public two-year colleges in the state. A public information campaign was launched and students were enrolled in August of 2005. The ADHE intends to involve all 22 schools because it is anticipated that all Arkansas public two-year institutions and university-affiliated technical institutes will benefit from new projects and programs supported by the initiative.

Working with a TANF grant from the state of Arkansas, Southeast Arkansas College (SEARK) set out to structure career pathways for the large, low-income TANF-eligible population within the college’s six-county service area. Working with the Southern Good Faith Fund (a local community-based organization) and SEARK’s own adult education program, the college has developed career pathways leading to careers in fields with hiring demand including manufacturing, government, early childhood care, and healthcare. The TANF Career Pathways grant provides tuition, childcare, transportation and counseling support for students throughout the pathways beginning at the level of adult education. The recent focus of the program has been on establishing developmental education bridge programs to improve the ease of transition for students moving into the certificate of proficiency, technical certificate and associate degree programs in the pathways.

OFFERING TECHNICAL ASSISTANCE AND OPPORTUNITIES FOR PEER LEARNING AND SUPPORT

The sorts of collaborative work described above require partners to think in new ways about program design and delivery. Even with solid plans at the outset, partners involved in
establishing new reforms often need assistance as the work unfolds and new challenges arise. If similar work is taking place at multiple sites, state agencies can support development by providing coaches to regional sites. Coaches are experts in the relevant policy fields who help guide local actors by providing on-site technical assistance and serving as intermediaries between the local project and state officials. Sites often experience similar challenges such as creating curricula in a particular field, developing partnership agreements, engaging employers and institutionalizing sustainable funding strategies. State leaders can often assist sites in overcoming these challenges by holding workshops that offer practical assistance in these matters. Sites often find it very useful to share their challenges and learn from their peers elsewhere in the state or the country. States can facilitate cross-site meetings or electronic communications such as message boards or chat rooms to offer opportunities for sites to share with each other. State officials can jumpstart the learning process by inviting visitors from states that have previously worked on similar efforts to share their experiences, lend advice and bring new perspective to the issues.\textsuperscript{109}

For examples of technical assistance and peer learning, see Section Three of the Workforce Strategy Center report The Career Pathways How-To Guide.

**Breaking Down Silos to Promote Local Cooperation**

When state agencies break down silos and build cooperation among themselves, partnerships among education, workforce, human services and economic development entities at the local or regional level benefit.

**DEDICATING STAFF RESOURCES**

It is critical that partners not underestimate the commitment in time and resources necessary to establish new partnerships and reforms of this nature. Because new efforts tend to falter unless someone actively keeps the ball rolling, it almost goes without saying that the most demanding aspects of partnership building must receive the adequate amount of attention.

The Washington State Board for Community and Technical Colleges (SBCTC) generally has enjoyed good working relationships with other state agencies involved in Washington’s “WorkFirst” welfare-to-work program. Through its involvement in the Ford Foundation-funded Bridges to Opportunity initiative, the SBCTC has redoubled its efforts to break down silos at the state and local levels. Using money from the Ford grant, the SBCTC hired a staff person to further promote cooperation among the SBCTC and outside agencies and among colleges and their partners at the local level with the aim of facilitating advancement by students, particularly low-income adults. This staff person helped conduct the studies on expanding baccalaureate opportunities for community college students and evaluating the I-BEST integrated adult basic skills and workforce training pilots. She also led a legislative study of the potential for co-location of One-Stop career centers on community college campus, which would house the local Employment Security Department and Department of Social and Health Services. The idea was championed by the state Speaker of the House, who heads a community agency that serves low-income communities.

\textsuperscript{109} Jenkins and Spence (2006).
INSTITUTIONALIZING COOPERATION

State legislators and other political leaders can play an important role breaking down silos by mandating cooperation among agencies. In 2005, KnowledgeWorks Foundation and the stakeholder group it has organized through the Ohio Bridges to Opportunity Initiative (OBOI) successfully lobbied the state legislature to pass a measure that mandates articulation and transfer of credits among the adult career centers, the community and technical colleges and public four-year colleges and universities. The new law also requires the Ohio Board of Regents (which oversees public two- and four-year colleges) and Department of Education (which administers the adult career centers) to work more closely together to eliminate redundancies and roadblocks. In spring 2006, KnowledgeWorks and the OBOI stakeholders helped draft a recommendation to create a commission to explore a new coordinating structure for adult workforce education and training in Ohio. The governor has since issued an executive order empanelling a 13-member commission (with an employer as chair) which must submit its recommendations to the governor and legislature no later than November 1, 2006.
CONCLUSION

Despite evidence that both individuals and regions benefit economically when state systems effectively prepare skilled workers to participate in the knowledge economy, policymakers often come up short in optimizing the performance of their public systems of education and training. This paper details how policymakers can take immediate action to align policies and improve these systems, with numerous examples of best practices in numerous states. These cutting edge states have all learned that low-skill and low-wage workers are an important untapped potential resource for regional economic growth, and that enhancing the skills and employment prospects of these workers can and will benefit a state’s overall economy.

As other policymakers move forward on these issues it will be important to remember that leadership can emerge from both the state and the local level. The “career pathways” approach described above is one way states and local communities can jumpstart efforts to advance workers and support regional and state economic development. However policymakers choose to proceed, individuals at all levels—public and private—must exercise leadership and find ways to productively work together to support and grow the knowledge economy in their states.
WHO WE ARE:

Workforce Strategy Center builds responsive systems for education, training, workforce and economic development to increase the competitiveness of the American economy. We are a leading national disseminator of innovative workforce strategy, providing technical assistance and cross-site learning to policymakers, educators and industry leaders.

WSC is a pioneer in developing the career pathways model for aligning the goals and activities of education, training, workforce and economic development systems. Learn more about us at our website: www.workforcestrategy.org.