States that want to maximize their return on every public investment dollar to prepare for long-term, sustainable economic growth can use the current moment to their advantage. By championing an integrated workforce and economic development strategy based on improving student success in community colleges and promoting regional progress through partnerships, they can ensure a stable supply of skilled workers for area employers. To that end, states should embrace the following agenda:

- Articulate a clear vision for the alignment of workforce development, postsecondary education, and economic development at the regional level, and regularly publicize progress;
- Improve student success and credential completion in community colleges; and
- Identify and target priority clusters and industry sectors critical to regional competitiveness and expansion, promoting partnerships that engage community colleges in economic development.

I. Introduction

Most economists agree that economic recovery, particularly a significant rebound in employment, will be slow after the worst downturn since the Great Depression. Over 40 percent of the unemployed have been without work for more than six months. With over 14 million Americans still unemployed and many more discouraged from even looking for a job, the United States needs to create over 300,000 new jobs per month to bring unemployment down to pre-recession levels by 2013.

Governors and other state leaders are under pressure to increase the odds that their states will exit the recession poised to be productive, attractive to employers, and competitive for jobs and wealth creation. One fact is inescapable: to achieve economic recovery and longer-run prosperity, states must produce many more skilled workers with postsecondary credentials, not merely short-term training after high school.

Educational attainment is increasingly important to the economic growth and income levels of nations, states, and regions. As a local chamber of commerce official recently noted, while real estate experts headed corporate relocation teams in the past, human resources officials now tend to take the lead: “They want to know about the quality of the workforce” before they make a decision. States and regions that figure out how to produce and attract a quality pool of skilled workers will have a competitive advantage in growing jobs and incomes. More than ever, the status quo is not a viable option.

Employers’ labor market expectations have been ratcheting up for decades. According to the Bureau of Labor Statistics (BLS), 13 of the 20 occupations projected to grow most quickly by 2018 will require some postsecondary education; 18 of the 20 occupations projected to decline most rapidly require only on-the-job training. The Georgetown Center on Education and the Workforce finds that,
over the past 30 years, all the net increase in U.S. jobs has been in positions that require at least some postsecondary education. By 2018, the Center projects that almost two-thirds (63 percent) of U.S. jobs will require postsecondary education and training.\(^6\)

Without major improvement in postsecondary completion rates, the supply of college-credentialed workers in the United States at the end of this decade will fall short of employer demand by about 3 million. Individuals without postsecondary credentials will see their real incomes continue to drop.\(^7\) States must do more than simply attract workers from other parts of the country to fill these skilled-worker gaps.\(^8\)

Employers need a pipeline of quality workers with different levels of skill and desired earnings. Almost half of U.S. jobs today can be defined as “middle skill” jobs, requiring less than a four-year degree but more than a high school diploma.\(^9\) BLS occupational projections indicate that job categories for which the associate’s degree is the most significant source of education and training will grow 19 percent through 2018, faster than any other job category. The labor market for these jobs is regional, not national. Workers seeking middle-skill positions tend to be less mobile than more highly educated jobseekers. In fact, between 60 percent and 70 percent of Americans spend most of their working life in the state where they were born and between 45 percent and 55 percent stay in their metro region of origin.\(^{10}\)

These trends place renewed priority on the performance and potential of community colleges, the primary postsecondary institution serving local and regional workforce needs. These institutions are critically important to individuals seeking higher skills and to employers looking for qualified workers. States that fail to align their community college goals with economic development efforts to address their human capital challenges run the risk of losing out in the competition for good jobs and sustainable development.

This brief describes the challenge that states face in aligning workforce and economic development strategies, and recommends a set of practical steps state leaders can take to bridge their community college and economic development agendas and advance economic recovery and long-term growth.

II. The Policy Challenge

Governors traditionally view economic development and workforce development policy as two important state levers for increasing economic well-being. However, their efforts to align these two levers have often been frustrated by differing cultures, funding streams, goals and expectations.

Today, new economic realities are creating the opportunity for change. State budget realities are propelling the two systems toward greater alignment and strategic coherence.

There is growing understanding of the importance of local community colleges to the regional economy. These institutions are well positioned to address both the evolving human capital needs of regional employers and the desire of residents for better skills and wider opportunity. Because community colleges stand at the intersection of demand and supply, they have great potential for improving the efficiency and effectiveness of their local labor market. Community colleges enroll more than 6.7 million credit students annually, more than a third of all undergraduates nationwide.\(^{11}\) Furthermore, they serve almost as many additional students through workforce training and other such non-credit courses.

Yet many community colleges have not achieved their potential as engines of human capital enhancement and regional economic development. There are two primary reasons:

**First, too many students who seek a community college credential fail to earn one. Community colleges have low retention and completion rates, especially for students who arrive unprepared to do college-level work.** Community colleges grant degrees and certificates, enable students to start college at lower cost and risk before transferring to four-year schools, deliver customized training for regional employers, and provide youth and adults not ready for college with courses that help them catch up. They frequently have strong relationships with high-demand regional employers and creative partnerships with social service organizations to help students cope with nonacademic challenges.

At the same time, these locally rooted, often quite entrepreneurial, institutions typically fall short.
Too many students who seek a credential leave before completing their course work. A recent study by the U.S. Department of Education found that after six years, only 22 percent of degree-seeking community college students had earned an associate’s degree or certificate. Another 12 percent had gone on to earn a bachelor’s degree. This leaves well over half of degree-seeking community college students frustrated in their desire to better their economic prospects.\(^2\)

For students who are academically underprepared for college work—almost two of three students need some remediation in math or English—the odds of success are unacceptably low. Fewer than 25 percent of community college students requiring remedial courses receive a degree or certificate. In a study of students from colleges in the Achieving the Dream initiative, only 16 percent of students needing developmental math completed a first college-level math course within three years.\(^3\) In communities with a high proportion of youth and adults who are not college-ready, completion rates are far lower than the national average.

State leaders who want to increase postsecondary credential attainment must address the performance of their community colleges, particularly for low-income and underprepared students. In a time of limited public resources, improvement will require changes in the way community colleges organize and deliver education.

**Second, there is a dangerous disconnect in too many states between the effort to develop the workforce and plans to strengthen the economy. Economic development strategies are not sufficiently connected with initiatives to bolster college completion and increase skills. The result is that the state fails to maximize its return on either of these public investments.** The need to graduate more students with degrees and credentials valued by employers is clear. But producing more skilled workers is only one side of the equation. The deployment of human capital in ways that meet employer needs is the key to increased productivity and opportunity for growth.\(^4\) If workforce education systems are isolated from strategies for the development of the regional economy, a mismatch between worker training and employer need can slow expansion, productivity, and economic vitality.

Economic development officials work hard to attract new firms and provide incentives for employers to expand the number of people they hire in-state. Workforce development officials judge success in terms of the skill development and employment of individuals, largely independent of the economic value-add for their region or state.\(^5\) As one National Governors Association report concluded, too often “[e]conomic developers are from Mars and workforce developers are from Venus.”\(^6\)

In this period of slow growth and limited resources, states cannot afford these disconnects between economic development and workforce development, whether based on differences in geographic focus, goals, mission, or funding streams. Community colleges and the public workforce system need to collaborate with businesses, economic development institutions, and other state agencies that help firms develop products and processes, secure and grow markets, and take advantage of a region’s competitive assets.\(^7\) Economic development efforts—whether they support competitive regional clusters, take advantage of anchor institutions, or coordinate large-scale development projects—create opportunities for workers at varied skill levels. With advance planning, effective coordination, and innovations in instructional delivery, local community colleges can improve the pipeline for local qualified workers, working closely with employers to customize curricula to specific needs and create educational programs that result in better regional labor deployment.

More consistent and strategic communication among colleges and economic development organizations can improve the quality and granularity of local labor market information, reducing mismatches between college programs and employer needs. Moreover, a strong state commitment to improved community college performance can influence firms as they make expansion and location decisions.

### III. A New State Policy Approach

Governors who want to maximize their return on every public investment dollar to position their states for long-term, sustainable economic growth can use the current moment to advantage. They can champion an integrated workforce and economic development strategy based on improving student success in community colleges and promoting regional progress through partnerships that ensure a stable supply of skilled workers for area employers.
To that end, governors should embrace a three-pronged agenda:

➤ Articulate a clear vision for the alignment of workforce development, postsecondary education, and economic development at the regional level, and regularly publicize progress;

➤ Improve student success and credential completion in community colleges; and

➤ Identify and target priority clusters and industry sectors critical to regional competitiveness and expansion, promoting partnerships that engage community colleges in economic development

**Articulate a clear vision for the alignment of workforce development, postsecondary education, and economic development at the regional level—and regularly publicize progress.** Governors must become visible advocates for an integrated workforce and economic development strategy that centers on community college effectiveness and responsiveness. They should convey urgency, emphasize jobs, stress efficiency and return on investment, and explain how this approach will increase the likelihood of strong, sustainable recovery and long-term competitiveness. They can point to this year’s budget priorities for postsecondary education as a determining factor for the state’s economic prospects for the next decade.

Governors should communicate to their constituents their frank assessment of the human capital challenge and its relationship to the state’s standard of living and quality of life. But those facts should be conveyed in the context of hope and optimism—that smarter investments will position the state and its regions for a stronger future.

The governor’s statewide vision and priorities should emphasize the importance of thinking and acting regionally. Statewide strategies must be flexible enough to maximize the particular advantages, assets, and needs of diverse economic regions. As one recent report concluded: “State investment tends to work best as a support, a ‘heat lamp’ for promising opportunistic regional and local initiatives.”

Governors may use their executive authority to restructure the alignment of workforce and economic development systems and investments. While some governors have consolidated agencies, appointed jobs cabinets, or created powerful oversight positions in the executive office, other options require a smaller expenditure of political capital. In the place of mergers and reorganizations, governors can simply make their priorities clear to workforce, postsecondary education, and economic agency officials, and direct the development of shared goals and benchmarks reflecting those priorities. They should set goals for improved educational and labor market outcomes (e.g., credential completion, average wages, employment growth) and establish and publicize these goals and related progress metrics to encourage diverse agencies and institutions to move in the same direction. One option is to include a summary of higher education performance goals in the state’s annual or biennial executive budget for higher education.

In addition to publicizing economic development-related higher education goals, states should report regularly on progress toward them. States can use their data collection capacity to report regularly on postsecondary education’s contribution to meeting educational and labor market goals. Florida, Minnesota, and Washington are beginning to use simple, powerful dashboards and report cards to make the labor market impacts of higher education institutions more visible. Minnesota Measures, for example, tracks higher education’s progress on five specific goals that address both student progress and the relationship of educational supply to economic demand.

**Improve student success and credential completion in the state’s community colleges.** In the past decade, much progress has been made in identifying how states can help improve student success in higher education and particularly in community colleges. Through foundation-funded initiatives such as Achieving the Dream, Breaking Through, and Shifting Gears, and more recently, through the Complete College America (CCA) alliance of states, more than half the states have joined ambitious campaigns to support improvements in student persistence and completion of credential programs.

At the heart of these efforts are two shifts in the role of the state: from tracking inputs to measuring outcomes—results for students and employers—and from managing compliance to supporting continuous improvement.

Governors building on what states have learned to date can consider three high leverage policy targets:

➤ Creating better student data systems and using them to drive improvement
Aligning community college expectations and standards with both K-12 and other higher education systems

Promoting innovation through performance incentives and competitive grants

**Better student data systems.** Recent years have seen rapid positive change in the design and development of databases that track students over time and provide useful guides for institutional improvement. According to the Data Quality Campaign, four out of five states can now report on the percentage of students entering postsecondary education who require remediation. Yet, much work remains. Many state data systems are still under construction and cannot yet deliver sufficiently fine-grained data to answer key policy questions. Links to workforce and employment and earnings data are more limited. Using improved data systems for strategic decision-making is a work in progress in most states.  

But governors can accelerate significant additional progress. They can continue to build out their state data systems and support the use of data by state and local stakeholders to drive improved outcomes and increased student success. In the short run, state officials can:

- **Make sure that Statewide Longitudinal Data Grants and other federal funds for data system development are being used effectively.** These significant grants to states have enabled construction of cross-sector data systems that link K-12 and higher education data and increasingly include workforce/employment data. Governors can ensure that their state’s efforts are on target, particularly the cross-sector linkages. States have opportunities through the Data Quality Campaign and the National Governors Association (NGA) to benefit from the experience of other states in this effort.

- **Adopt the NGA common metrics for assessing progress.** The NGA’s Complete to Compete initiative has defined a set of metrics that it recommends all states commit to collecting and reporting. These include completion measures (degrees and certificates granted) but also progress metrics that correlate with ultimate student success, such as success in first-year college courses, credit accumulation, and timely progress through remedial courses.

- **Take advantage of, and build on, national initiatives to help states use student data to inform continuous improvement processes at the state and institutional levels.** Complete College America (CCA) is helping its member states set specific statewide completion goals. These simple measurable goals will be reported annually against a firm deadline to help mobilize stakeholders to work together on a common improvement agenda. CCA recently announced a competitive grant program to select 10 states for $1 million innovation grants, open to any state that agrees to set a specific statewide goal and collect and report common metrics. Other national efforts, such as the Achieving the Dream initiative, have developed tools to help states use student data to engage institutional leaders and faculty, state officials, and other stakeholders in structured discussions of supporting and driving efforts to improve student outcomes.

**Realigned community college expectations and standards.** More students will earn postsecondary credentials if they start college ready for college work. Common Core standards, which over 40 states have pledged to implement, will ultimately help achieve this, but in the meantime, state leaders eager to improve K-12 and higher education alignment can promote several evidence-based strategies for helping more high school students understand college expectations. They include:

- **Administer the college placement exam to students who show academic weakness in eleventh grade so they can receive remediation courses before they enroll in college.** The Early Assessment program at California State University (CSU) reduces the probability of remediation for CSU students by 4 percentage points in math and 6 percentage points in English.

- **Provide incentives for robust and coherent early college and dual enrollment programs.** These models enable struggling young people to earn college credits and experience while still in high school. Eighty-five percent of graduates of the first cohort of Early College High Schools earned an average of a semester of transferable college credits. Texas and North Carolina are two of the states that have invested in these acceleration strategies.

- **Support summer “bridge” programs that rely on intensive sessions to prepare high school graduates to succeed in college.** Early evidence is promising and rigorous studies of several bridge programs are now underway.
Community colleges also need to better align with other higher education institutions. A growing percentage of Americans earn college credits from several different schools. They may move from one city to another, transfer schools, change programs, or combine courses from non-profit and for-profit institutions. Too often, credits earned in one school, state, or sector do not transfer to another—and students have farther to go to earn a credential. This is a significant obstacle to increasing the number of credential holders.

Clear and comprehensive transfer policies are essential to higher education productivity and efficiency. This is easier to advance in states with centralized systems of higher education, but states with very different governance structures have been able to make progress. Two good places to start are:

*Define a transfer core of general education courses* that will be accepted across the state's public four-year institutions and offered at all two-year institutions in the state.

*Statewide, or at least regionally, define the requirements and course sequence for programs of study that serve high-priority industries and occupations so courses taken in one institution will be routinely credited by others.*

**Document Innovation.** State officials working to improve community college results have a limited evidence base from which to draw. Take the critical area of developmental education: there is little hard evidence on whether and for which population groups the upside of developmental education (learning or relearning college readiness skills in English and math) outweighs the downside (slower progress).

**States Use Resources to Drive Better Outcomes**

If designed and executed well and consistently, policies that tie higher education funding to outcomes—not just enrollment—can be powerful drivers of innovation and improvement. New performance funding models tend to reward not only completion but also attainment of intermediate milestones that predict completion. They work to incorporate protections to prevent dilution of quality or bias against harder-to-serve students, and to balance pressure to innovate with support for learning what works. Some states also build into funding formulas rewards for better alignment of higher education outcomes with economic development priorities.

The **Student Achievement Initiative in Washington** is a sophisticated approach to performance funding, using student progress through intermediate milestones, “momentum points,” to reward colleges for helping students achieve basic skills, succeed in first-year courses, and complete a credential. Other states, including **Ohio**, have adapted Washington's approach, some with a more aggressive schedule for implementing large funding shifts to reward outcomes rather than enrollment. Ohio's formula also includes incentives for improved results in high-priority fields—such as science, technology, engineering, mathematics and nursing. **Indiana** now rewards the number of courses or credits completed, degrees conferred and credits transferred, as well as on-time graduation rates and low-income students' graduation rate. In 2010, Indiana used performance data to decide how and where to reduce higher education funding.

Some states have implemented a complementary incentive: innovation funds and structured competitive grant processes that encourage institutions to rethink and revise how they deliver instruction and support student success. **Texas, Connecticut** and other states in the Gates Foundation-funded Developmental Education Initiative have used this approach to spur redesign of institutional developmental education policies and practices. Requiring institutions that receive grants to track outcomes and participate in a learning network can advance knowledge and disseminate promising practices and processes statewide.

Over the next four years, the federal government, through the U.S. Department of Labor, will grant $2 billion to community colleges or consortia of colleges under the Trade Adjustment Assistance Community College and Career Training Grant program. This competitive program, with an initial $500 million of grants to be made in spring 2011, should stimulate significant innovation in the design of accelerated, better targeted, and more effective credential programs for adult workers, linked to regional labor market needs.

These opportunities are significant in a time of scarce resources. And they target key areas where institutional innovation is needed: the transformation of remediation; the restructuring of delivery systems to accelerate time to completion of credential programs, including new technology; and better links between community college programming and high-growth employment opportunities.
progress and more opportunities to stop and quit). The research literature on what it takes to scale innovative pilots is thin.

For this reason, states need to encourage institutions to innovate—to try new approaches and test their effectiveness in helping different student groups succeed. Two strategies for states to pursue are:

- **Shift community college funding incentives** from enrollment to performance.
- **Encourage innovation** through competitive grants to institutions to pursue new solutions, track outcomes, and share lessons learned.

**Promote partnerships that engage community colleges with regional economic development efforts.** Effective and efficient deployment of skills and credentials in the labor market depends upon both the supply of and demand for skilled workers. States and regions can expand and shape pockets of demand—encouraging expansion by employers of projects that generate significant numbers of good jobs, including middle skill jobs. If these development opportunities are aligned with the efforts of community colleges to help prepare a high-quality labor supply, state leadership will contribute to the preconditions for long-term economic vitality and encourage more adults to enter, persist, and succeed in training programs with a payoff.

Bringing a credential and degree completion focus to economic development efforts, which often have a short-term horizon, is not without challenges. But sustaining the economic health of any state or region demands significant increases in postsecondary attainment and completion. States can pursue four strategies in this regard:

- **Target priority clusters and industry sectors critical to the state’s competitive position and economic growth**
- **Promote regional partnerships that align employer needs and workforce and higher education capacity**
- **Leverage public infrastructure investments in support of skill development, with community colleges playing a larger role**
- **Support innovative credential programs for working adults so they can benefit from regional development opportunities**

**Target priority industry sectors.** A previous paper in this series, “Job Creation on a Budget,” proposes several high-leverage roles states can play to support regional industry clusters—geographic concentrations of interconnected firms and supporting organizations. These roles include developing and using quality labor market data to identify clusters, target policy and track performance, establishing a modest grants program to address gaps in performance, and reorienting existing economic development programs and policies to support clusters.

Identifying vital clusters and aligning resources and programs to strengthen them can ensure greater focus and impact for state economic and workforce development policies. States can provide incentives and guidance to relevant agencies on the metrics and analyses used to identify clusters and their human capital needs. States can help community colleges and the workforce system understand and work more closely with clusters and sectors that are engines of the new economy—such as creative industries, clean tech, or food-related clusters.

**Encourage regional partnerships.** A coordinated local strategy to align higher education and regional development agendas does not take shape naturally. Cities and regions that have aligned postsecondary education and training with the needs of high-growth employers have often been encouraged to do so by local partnerships, led by an entity independent of either the education community, the workforce investment system or particular industry or employer interests.

State leaders should promote these partnerships and their efforts to better coordinate labor market and skill development. Informed by the innovations described below, they can:

- **Encourage colleges and consortiums of institutions that secure new Department of Labor grants to build partnerships with regional employers**
- **Support workforce partnerships funded by the National Fund for Workforce Solutions**
- **Create a small competitive fund to seed, strengthen, and track results of regional partnerships.**

States with customized training programs should retool them to create incentives for collaboration across firms in key sectors or clusters and to align with other state education investments
Leverage infrastructure investments. Even in these lean fiscal times, there are opportunities for states and regions to benefit from the billions of taxpayer dollars and government-backed financing spent annually on infrastructure and other construction-related projects, such as roads and bridges, schools and hospitals, public housing, new transit lines and related redevelopment, clean energy, and other large projects. These investments can provide an infusion of good jobs and quality education/training opportunities for local residents.

Federal highway construction projects allow for set-asides for up to one half of one percent of funds for skill development. States can create training set-asides from their own infrastructure investments. States can also make progress visible by requiring reporting of both employment and skill development/credential outcomes related to these projects, disaggregated by typically underrepresented population groups.

States should encourage their community colleges to play an important role in the design and delivery of skill development strategies in service of these infrastructure projects. Colleges can work with employers on customizing and shaping curricula to meet the skill requirements of jobs being created—and to align with certificates and credentials of value in the labor market. They can align with apprenticeship programs, give dual credit toward credentials for apprenticeship courses, and provide pre-apprenticeship training and support services, either at the college or on-site. Given the widespread need for remedial basic skills within the adult population, states can help guide their community colleges toward the best approaches for helping underprepared adults earn credentials associated with the middle-skill jobs these investments create: bridge programs that address gaps in basic skills learning strategies; contextualized curricula that integrate basic skills into technical courses; and accelerated technical programs geared to specific jobs that need to be filled.

Support innovative credential programs for working adults. States face a timing challenge in aligning efforts to raise credential completion rates with economic development priorities. Educational programs can be unduly time-consuming, particularly if adult learners are already working or need to re-enter the labor market quickly. Pathways to credentials have to be shorter, faster, and more flexibly delivered. They must acknowledge the significant academic and nonacademic challenges many potential middle-skill workers have to overcome before they will earn a postsecondary credential.

Innovative approaches to restructing credential programs are currently being tested and scaled, including:

➤ A shorter-than-two-year technical credential, many with strong labor market payoff (see the Tennessee Technology Centers or some of Washington state's technical college offerings)
More intensive and flexible delivery models (weekend colleges, double blocks of courses, and online delivery)

- Stackable credentials, as in Oregon and Ohio, that break degree programs into smaller credential units that “stack” together into a full degree
- Integrated programs combining basic skills instruction with technical training needed to earn a credential with labor market value. The most well-studied of these is the I-BEST program for low-skill adult learners at Washington state’s community colleges
- Ways to align non-credit workforce courses and programs with courses taken for credit, so that participants who start on the non-credit side receive credit for that work when they enroll in a for-credit program

Because many individuals traditionally served by the workforce system are academically unprepared to earn any postsecondary credential, workforce innovators have also focused on creating coherent and aligned “career pathways” to support their advancement. These pathways, which target the needs of employers in a specific industry or occupational sector, connect a series of pre-college and college-level education and training programs and support services so that low-skill individuals can advance over time from non-credit basic skills courses to successively higher levels of education and employment.34

States such as Arkansas, Ohio, Oregon, and Washington have been leaders in supporting and promoting career pathway approaches through competitive incentives for innovations in program design, regional partnerships, resource allocation, and performance measurement.35 Through its ambitious No Worker Left Behind initiative, Michigan used state funds to leverage the alignment of varied federal funding streams to encourage dislocated workers to return to community college to pursue high-demand pathways in their regional economy.

IV. Conclusion

Serious attention to higher education improvement—and to community college performance in particular—is increasingly a bellwether for a state’s commitment to national and international economic competitiveness. Improving the alignment of regional workforce development, economic development, and higher education institutions is challenging, but governors and their teams can take important steps now to achieve that realignment.

They can start by articulating a new vision with clear goals for focusing state systems and resources on this end. They can promote relatively modest but well-designed incentives for better use of data to track and drive improved student education and labor market outcomes. They can seed innovations within community colleges and across human capital systems, and speed adoption of programs and processes that both enhance regional development and increase the supply of skilled, credentialed workers. In the current environment, governors will be wise to bundle and target limited state workforce and economic development resources toward unified goals, while creatively and aggressively pursuing federal and private funds available to spur innovative approaches to human capital challenges. In the end, these strategies will provide crucial momentum to efforts to secure economic recovery and long-run growth that benefit all state citizens.
Endnotes

1. Richard Kazis is senior vice president at Jobs for the Future.


7. Ibid, especially Introduction and Part I. Also, a 2005 study by the National Center for Public Policy and Higher Education concludes that if patterns of attainment by race and socioeconomic status do not change, demographic shifts alone would lower real personal income in the U.S. by 2 percent from 2000 through 2020. National Center for Public Policy and Higher Education (NCPPHE), “Income of U.S. Workforce Projected to Decline If Education Doesn’t Improve” (San Jose : NCPPHE, 2005).


10. Timothy Bartik, What Proportion of Children Stay in the Same Location as Adults: Does this Vary Across Location and Groups? (Kalamazoo: Upjohn Institute, 2009).


16. Mark Troppe and others, Aligning State Workforce Development and Economic Development Initiatives (Washington: National Governors Association, 2005), p. 3. For instance, both workforce and economic development experts recognize the importance of regional clusters of related firms in driving innovation and growth. The workforce field targets sectoral initiatives, focusing on multiple employers within particular industry sectors that are both important to regional growth and offer the possibility of advancement for lower-skilled workers. The economic development field emphasizes regional industry clusters, defined as geographic concentrations of interconnected businesses, suppliers, service providers, and associated industries. See Beth Siegel and Kari Seidman, The Economic Development and Workforce Development Systems, (New York: The Surdna Foundation, 2009).


27. MDRC is conducting a rigorous outcomes study on the Texas summer bridge program, based on promising early results.

28. For information on Washington state’s Student Achievement Initiative, see www.sbctc.ctc.edu/college/e_studentachievement.aspx


30. www.nfwsolutions.org


32. This was a key lesson of Michigan’s No Worker Left Behind initiative. The offer of two free years of community college, akin to a GI Bill right, for dislocated workers in Michigan, drew thousands of workers to community college; but many had such severe basic skill needs that the colleges were ill-equipped to help them advance efficiently to a degree or certificate.

33. For more information see www.ttcnashville.edu/ for a Tennessee example and http://www.sbctc.edu/ for Washington state.


35. Jenkins, Career Pathways.

---

**Acknowledgments**

The author would like to thank the following for their very helpful comments on early drafts: John Austin, Alan Berube, Jennifer Bradley, Robert Giloth, Amy Liu, Marlene Seltzer, Beth Siegel, and Jeffrey Terp.

The Metropolitan Policy Program at Brookings would like to thank the John D. and Catherine T. MacArthur Foundation, the Heinz Endowments, the F.B. Heron Foundation, and the George Gund Foundation who provide general support for the program’s research and policy efforts. We would also like to thank the Metropolitan Leadership Council, a bipartisan network of individual, corporate, and philanthropic investors that provide us financial support but, more importantly, are true intellectual and strategic partners. While many of these leaders act globally, they retain a commitment to the vitality of their local and regional communities, a rare blend that makes their engagement even more valuable.
States and metropolitan areas will be the hubs of policy innovation in the United States, and the places that lay the groundwork for the next economy. The project will present fiscally responsible ideas state leaders can use to create an economy that is driven by exports, powered by low carbon, fueled by innovation, rich with opportunity and led by metropolitan areas.

**About the Metropolitan Policy Program at the Brookings Institution**

Created in 1996, the Brookings Institution's Metropolitan Policy Program provides decision makers with cutting-edge research and policy ideas for improving the health and prosperity of cities and metropolitan areas including their component cities, suburbs, and rural areas. To learn more visit: [www.brookings.edu/metro](http://www.brookings.edu/metro)

**About The Rockefeller Foundation**

The Rockefeller Foundation fosters innovative solutions to many of the world’s most pressing challenges, affirming its mission, since 1913, to “promote the well-being” of humanity. Today, the Foundation works to ensure that more people can tap into the benefits of globalization while strengthening resilience to its risks. For more information, please visit [www.rockefellerfoundation.org](http://www.rockefellerfoundation.org)