A Sound Investment: The Community College Dividend

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EXECUTIVE SUMMARY

Educating and training a highly skilled workforce is essential to America's prosperity. Policymakers concur on the need for most Americans to obtain a postsecondary education credential of some type, and community college enrollments have risen dramatically over the last few years. At the same time, however, public support for these institutions has suffered. To meet the demands of the economy and the needs of students, sustained and increased investments in community colleges are desperately needed. These investments will yield substantial returns to both students and society.

Current projections show that between now and 2018 more than 46 million jobs will need to be filled in the United States, with nearly two thirds of them requiring at least some postsecondary education. These same projections show that the country is not producing nearly enough workers to meet this demand. Understanding this reality—in which education is the critical factor in occupational development and advancement as well as workplace productivity and efficiency—necessitates the creation and expansion of localized, high-quality learning opportunities that are accessible for traditional-age college students as well as for working adults. Providing access to these opportunities is a hallmark of community colleges.

The cost of expanding and enhancing the community college infrastructure is properly viewed as an investment. Investments in higher education, particularly

investments in community colleges, yield a wide array of economic and societal returns that far outweigh the initial costs to students and the public. Low tuitions at community colleges help ensure broad access to students who would otherwise forgo higher education; these students emerge with no or low student debt loads.

With higher education come greater earnings, which in turn translate into more tax revenues and lower unemployment. These and other factors translate into tremendous economic returns on the public investment. Between increases in tax revenues and decreases in government expenditures, such as unemployment benefits and incarceration, the taxpayer benefit over a lifetime for having a student complete postsecondary education compared to high school ranges from \$24,000 to \$51,000, depending on race and gender.

Although many of the benefits of investing in higher education apply to all other sectors of higher education, the return on public investment in community colleges is enhanced because of their local focus. Community college students are more likely to stay in their communities after graduation. These colleges also provide noneducational services that help their students and the community as a whole. Finally, community colleges are providing these benefits to society with an absolute and proportionately smaller share of public resources than are other public institutions.

A Sound Investment: The Community College Dividend

Introduction

As America emerges from the Great Recession, one reality has become abundantly clear: Educating and training a highly skilled workforce is essential to America's prosperity (Business Champions, 2010; National Commission on Fiscal Responsibility and Reform, 2010). Policymakers, including President Obama, have issued the call for institutions of higher education, community colleges in particular, to produce more graduates and skilled workers (Galston, 2010; Obama, 2009). The American people also increasingly value postsecondary education: Polls show that the percentage of people who believe that college education is needed to become successful in today's work world has grown from 31% in 2000 to 55% in 2009 (Immerwahr, Johnson, Ott, & Rochkind, 2010).

This increased need for higher education, coupled with the effects of the economic downturn, has resulted in droves of new community college enrollees (Mullin & Phillippe, 2009; Phillippe & Mullin, 2011). At the same time, state support for these institutions has been reduced, often dramatically so.1 These two trends are clearly at odds. To meet the demands of the economy, the goals set by policymakers, and the needs of students, sustained and increased investments in community colleges are needed. These investments will yield substantial returns to the

students themselves and to society as a whole.

Investments in community colleges and their students will produce these results at a low cost to the student and taxpayer alike, also providing direct benefits to the communities they serve.

The Economy Demands More Postsecondary Education and Training

Projections indicate that, by 2018, 13.8 million new jobs, in addition to 33 million jobs that will open due to retiring incumbents, will need to be filled (Carnevale, Smith, & Strohl, 2010). One third of these jobs will require a bachelor's degree or higher. Roughly 30%, or 13.9 million, of these jobs will require a postsecondary education below the bachelor's degree. An additional 28% of jobs will require a high school diploma, an area where community colleges also play a role through the provision of adult basic education, general equivalency diploma (GED) preparation, dual credit, and dual enrollment programs.

Many new jobs, however, will not be in the same occupations that saw job losses over the past decade. As the economy continues to evolve, so will the jobs. Workers will have to retrofit their current skills, acquire and apply interdisciplinary knowledge and skills, or be able to engage in nonroutine tasks that require an

expanded foundation of knowledge (Wagner, 2011).

Understanding this reality, in which education is the critical factor in people's occupational success as well as overall workplace productivity and efficiency, necessitates the creation and expansion of localized, highquality learning opportunities that are accessible for working adults—a hallmark of community colleges. (Nearly 78% of community college students over the age of 25 are enrolled part time, compared to 44% and 15% at private nonprofit and for-profit institutions, respectively; National Center for Education Statistics [NCES], 2010b).

Investments in Community Colleges Yield Positive Private and Public Returns

Investments in higher education, particularly in community colleges, yield a wide array of economic and societal returns that far outweigh the initial costs to the student and the public. Community colleges provide postsecondary education at the lowest cost to students and taxpayers, while providing high-quality pathways to jobs as well as to the bachelor's degree. In the 2009–2010 academic year, tuition and fees at a community college were \$2,713, compared with \$7,605 and \$13,935 at 4-year public and for-profit institutions, respectively (College Board, 2010). The low-cost model is important: Research has shown that cost influences postsecondary enrollment

and remains a substantial barrier for low-income students (Institute for Higher Education Policy, 2010). In addition to low tuition levels, institutional practices and priorities set by community college leaders and their governing boards contribute to a smaller proportion of students taking out loans than in all other sectors of higher education. This is a critical point, because student loan debt substantially affects the student's disposable income, and default affects the student's ability to access credit. Research suggests that those who default before completing their program "may be left behind in the nation's economy" (Gladieux & Perna, 2005, p. 1).

It is clear that greater educational attainment results in higher earnings.

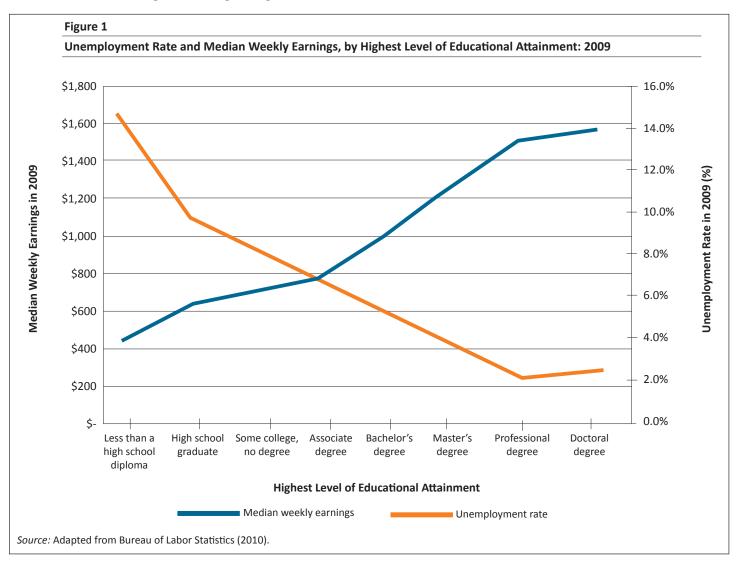
In 2009, annual median earnings for an associate degree holder were \$7,020 more than for a high school graduate. For those who completed some college, such as a certificate, the annual gain in median earnings compared to that for a high school graduate was \$3,796 (see Figure 1).

Moreover, earnings for some sub-baccalaureate programs outstrip even those from a bachelor's degree. In fact, 23% of bachelor's degree holders earn less than those with a license or certificate but not an associate degree, and 25% of those with bachelor's degrees earn less than those with associate degrees (Carnevale, Strohl, & Smith, 2009).²

Figure 1 illustrates how attaining higher levels of education reduces

the likelihood a student will be unemployed. In addition, survey data from NCES (2010a) show that a greater percentage of public community college graduates were employed than graduates from other 2-year institutions (see Table 1).³

With higher earnings come higher tax revenues and other societal benefits. Community colleges assist students in earning associate degrees, certificates, and, for those lacking a high school diploma, high school equivalency credentials. Each successive level of education results in increases to tax revenues both in absolute terms (median taxes paid) and in comparison to students who have not completed a high school credential (see Figure 2).



Between increases in tax revenues and decreases in social program costs, such as unemployment and incarceration, the taxpayer benefit over a lifetime for having a student complete postsecondary education as compared to high school ranges from \$24,000 to \$51,000, depending

on race and gender (in 2002 dollars). When community colleges assist in moving a student from no high school to a high school equivalency credential, the net lifetime benefit to society ranges from \$51,000 to \$134,000, depending on race and gender (Carroll & Erkut, 2009).

Table 1
Percentage of Graduates Employed, by First Institution and Attainment Level: 2006

First Institution	Attainment Level	
	Certificate	Associate degree
Public 2-year	83.2%	88.5%
Private, nonprofit 2-year	_	_
Private, for-profit 2-year	68.1%	69.5%

Source: Adapted from National Center for Education Statistics (2010a).

Figure 2 Median Taxes Paid, by Highest Level of Educational Attainment: 2008 \$10,000 \$9,000 \$8,000 \$7,000 **Median Taxes Paid** \$6,000 \$5,000 \$4,000 \$3,000 \$2,000 \$1,000 Non-High School **High School** Some College, Associate Graduate Graduate No Degree Degree **Highest Level of Educational Attainment** Source: Adapted from Baum, Ma, and Payea (2010).

Other studies have documented a positive return on public investment in community colleges. One study found that the return on investment to state and local governments from providing funds to community colleges averaged 16.1% nationally in 2007 (EMSI, 2007). A study of subbaccalaureate education in Indiana showed that every \$1 invested by students, their families, and the government in postsecondary education and training returned \$9.32 to society (Hollenbeck, 2009). Additional private and public returns include decreased dependence on social support programs, more engagement in societal activities, and high levels of job satisfaction (Baum, Ma, & Payea, 2010).

Investments in Community Colleges Result in Uniquely Local Benefits

Whereas many of the benefits of investing in community colleges and their students also apply to other types of higher education institutions, for states and localities the return on public investment in community colleges is especially enhanced because of their local focus. First, community college students are more likely to stay in their communities after graduation, allowing states to obtain a greater return on their investment. Researchers conducting a study in Oregon, for example, estimated that 87% of former community college students stayed in the region 30 years after leaving college (Robison & Christophersen, 2006). Also, 75.5% of those who became registered nurses through associate degree programs continued to reside in the state in which they were educated, compared with 65.2% of bachelor's degree nurses (Health Resources and Services Administration, 2010).

Community colleges not only provide local access for those

with aspirations toward higher education, but also help continuing education workers keep up with the latest changes in technology and workplace demands. Furthermore, companies benefit by having immediate access to the training they need to be competitive, giving them reason to invest in the community. For example, international retailer Cabela works with Western Nebraska Community College to provide the credit-bearing education their employees need. The arrangement has also helped to keep the large retailer's headquarters in Sidney, Nebraska—population 6,500 (Shaffer & Wright, 2010).

A consortium of five community colleges in Alabama developed a certificate and degree program in automotive manufacturing technology to meet the needs of the state's growing automotive industry, including Mercedes, Toyota, Honda, and Hyundai (American Association of Community Colleges & National Center on Education and the Economy, 2009). Similarly, St. Clair County Community College's offer to ensure that every worker had an associate degree was a leading factor in Chrysler's decision to move an axle plant to Marysville, Michigan (Dembicki, 2007). Simply put, community colleges continually work on behalf of the residents they serve to revitalize and reshape local economies.

Many community colleges subsidize public services, such as public transit. Transportation costs for off-campus, independent community college students often exceed the cost of tuition (Orozco & Mayo, 2011). Programs such as the Rio Hondo Community College's Go Rio! program have helped to mitigate this barrier to access and success while saving the taxpayer money

by subsidizing public transportation costs. (A recent survey found that 27% of community colleges provide similar services [McIntosh, Gaalswyk, Keniry, & Eagan, 2008]). Additionally, many community colleges have their own campus police to enforce laws or promote public safety, thereby reducing the demands on local enforcement agencies.

No less important, but difficult to quantify, is the role of 2-year public colleges in the maintenance of local communities. This is achieved through service learning opportunities where students apply classroom learning to address local needs identified by the community, community events such as Cuyahoga Community College's (Ohio) annual Veteran's Day Celebration, and museums such as Quinebaug Valley Community College's (Connecticut) Spirol Art Gallery. (According to the American Association of Community Colleges [AACC], 2011b, 60% of community colleges offer service learning opportunities.)

Community College Benefits Come at a Low Cost to the Taxpayer

It is difficult to accurately quantify the cost to taxpayers of community college education: The leading source of national data—NCES's finance survey component of the Integrated Postsecondary Education Data System—has changed five times since the 1970s (Snyder & Dillow, 2010). It also can be difficult to discuss costs, because the definition of "cost" is dependent on the audience. To society writ large, "cost" in this case refers to the amount of public money being used to support the postsecondary enterprise.

Community colleges have diverse revenue streams, which distributes

the responsibility to all who benefit from an educated citizenry as heretofore expressed. While this diversification is a strength, the inequitable distribution of these funds shows that community colleges are providing the benefits to society detailed above with an absolute and proportionately smaller share of public resources. Community colleges educate nearly half of all undergraduate students and award nearly 925,000 degrees and certificates a year (AACC, 2011a), yet the following facts remain:

- In 2007–2008, community colleges received 27% of total federal, state, and local (operating and nonoperating) revenues for higher education (Mullin, 2010).
- Community colleges have historically received approximate ly 20% of state tax appropriations to higher education (Mullin, 2010).
- Community colleges received 4% of all federal earmarks for higher education during FY 2010 (Lederman, 2010).

Moving Forward

There is a clear need for a more highly educated and skilled workforce in America. From the data provided in this brief, it is clear that the taxpayer as well as the student benefits from the education and training community colleges provide. Finally, given the diverse beneficiaries of an educated population, direct support of community colleges should continue to be a partnership between federal, state, and local governments; students and their families; and, when appropriate, business and industry. In sum, strong public investments in community colleges are more than justified.

Notes and References

Notes

¹Currently, data on state support for community colleges are limited. What is known is that state tax appropriations for higher education decreased 2.5% from FY 2009 to FY 2011 (Palmer, 2011). Given that community colleges have historically received 20% of these revenues (Mullin, 2010), it is reasonable to conclude there were cuts in state funding for community colleges. Furthermore, 32 states made midyear program cuts after FY 2010 and 2011 budgets passed (National Governors Association & National Association of State Business Officers, 2010).

- ² For a recent review of the literature on the private returns of a community college education, see Belfield and Bailey (2011).
- ³ Please note that I do not suggest a causal relationship, merely that a greater percentage are working. While employment is likely the result of earning a credential, it may also be the result of working while in school, differences in local employment rates, or other factors. Data for non profit 2-year institutions were not available.
- ⁴ To the research community, cost is often framed in terms of how much an institution spent on some combination of services including but not limited to instruction, student services, public service, maintenance and operations, research, and institutional support. When examined through expenditures on a per student basis, the conversation shifts to a focus on productivity, which is an important aspect to consider when discussing public investments. For some types of institutions that are focused solely on producing degrees, a simple cost-per-completer calculation may be appropriate. However, when an institution's mission extends beyond degree "production" to activities such as providing courses for students to transfer or workforce development, determining productivity becomes much more nuanced. The federal government has acknowledged this point, noting that the metrics of student success traditionally applied to higher education are not appropriate for community colleges; as a result, the government has charged a committee to examine the issue (U.S. Department of Education, 2010). Furthermore, when state funds are used for noncredit courses, the total cost value in the numerator of the equation is artificially inflated. These issues, and others, are currently being examined to better inform an appropriate and transparent conversation regarding productivity.

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