



“Billion Dollar Bets” to Establish Pathways to Careers

Creating Economic Opportunity for Every American

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PROJECT OVERVIEW

This document is part of a Bridgespan Group research project that focused on the question: *How could a philanthropist make the biggest improvement on social mobility with an investment of \$1 billion?* In answering this question, we have sought to understand “what matters most” for improving social mobility outcomes. To do this, we have drawn from extensive research conducted by leading scholars in the field. We have also outlined a range of tools to assist philanthropists seeking systemic and field-level changes that go well beyond scaling direct service interventions. Using the research and identified tools, we have created an illustrative set of “bets” that provide concrete roadmaps for high-leverage investments of \$1 billion with the potential for sustainable change at scale. (For the full report, please see [“Billion Dollar Bets” to Create Economic Opportunity for Every American.](#))

We identified a list of 15 high-potential bets through which philanthropists could have a significant impact on increasing upward mobility. In identifying these bets, we sought to elevate investments that are particularly timely, suited to the unique role of philanthropy, have the potential to create significantly outsized impact, and, as a package, could truly sum to \$1 billion. From this list, we have chosen to illustrate the following six investments. (For more information on how we selected the six bets, please see [“Overview of Research: ‘Billion Dollar Bets’ to Create Economic Opportunity for Every American.”](#)):

- Support holistic child development from birth through kindergarten
- Establish clear and viable pathways to careers
- Decrease rates of over-criminalization and over-incarceration
- Reduce unintended pregnancies
- Create place-based strategies to ensure access to opportunity across regions
- Build the capacity of social-service delivery agencies to continuously learn and improve

The concept paper below illustrates one of the six bets we have chosen to highlight.

Establish Pathways to Careers

Concept: Invest in initiatives that enhance the ability of employers to communicate the skills they need and encourage them to hire candidates who might lack the “proper” credentials but have the right attitude and competencies to do the job. At the same time, invest in and scale: a) alternative-education providers that work with low-income young adults to build career skills and b) employer/educator partnerships that are growing the market for competency-based learning

Context

The contemporary labor market in the United States is failing job seekers, particularly low-income and minority individuals and families. There is a profound lack of full-time jobs that provide pathways to careers, as well as family-sustaining wages and basic benefits, such as sick leave. Even for the “good” jobs that do exist, low-income and minority candidates face tough odds, given failing public education systems, limited social networks that link candidates to work-based learning opportunities, and cultural and racial biases that exclude them for not fitting in with the companies’ cultures. That dispiriting fact is reflected by the stark disparities in unemployment and long-term unemployment rates by race: Just 4.6 percent of whites were unemployed compared with 9.0 percent of African Americans and 6.1 percent of Latinos in the first quarter of 2016.¹

This bet focuses on making existing jobs available to low-income and minority job seekers who aim to ensure that they have access to fulfilling, life-sustaining employment through the establishment of career pathways.² It also addresses the current gap between employer needs and the skills of job seekers. Indeed, many employers do not have the right systems to identify enough workers who have the specific competencies to succeed in their companies. Much of hiring is based on the candidate’s degree, institutional selectivity, or personal connections—many of which put low-income job seekers at a disadvantage. As a result, Americans are faced with both a “skills gap” and structural unemployment—challenges that are dramatically compounded when the nation’s economy performs poorly.

1 Bureau of Labor Statistics, “Employment status of the civilian noninstitutional population by sex, age, race, and Hispanic or Latino ethnicity,” Tables E-11 and E-12. Unemployment rates for 16 years and over, first quarter 2016, household data, quarterly averages, not seasonally adjusted.

2 “Career pathways” can be defined as “a series of structured and connected education programs and support services that enable students, often while they are working, to advance over time to better jobs and higher levels of education and training.” Career Ladders Project, “A Definition of Career Pathways,” 2013, www.careerladdersproject.org/wp-content/uploads/2013/02/Pathways_def_CLP.pdf.

Why Philanthropy?

The field of career services is ripe for philanthropic investment. Many of the key solutions to this challenge, such as regional partnerships between colleges and employers, require collaboration across the private, public, and philanthropic sectors—a task that philanthropists are uniquely suited to facilitate. Also needed are infusions of capital to spur innovation and to exploit data and technology to develop new solutions, monies that philanthropists are equally well able to supply. Philanthropists interested in this area can play a major role in advocating for policy change and in providing the initial round of financial incentives to help participants get up to speed. Finally, there is a need to invest in and improve field infrastructure through funding field-specific research institutions and technical assistance providers. While private and government sources are best positioned to ultimately expand infrastructure investments, philanthropic capital can help cover start-up costs.

Why Now?

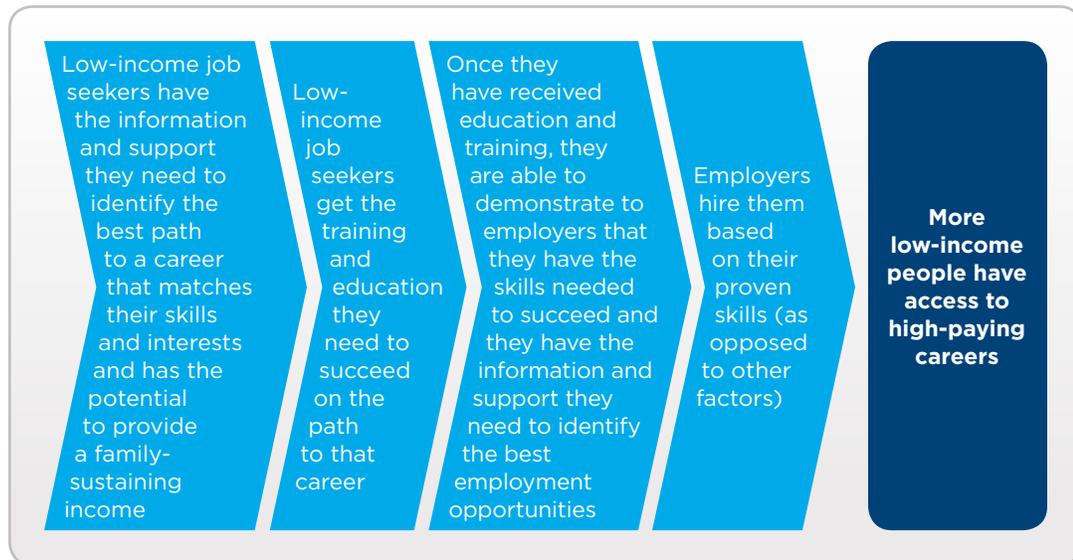
There is a dire need to build more pathways to durable careers. Fortunately, there is also considerable momentum in the field. Organizations are expending significant energy in creating alternative credentialing systems, such as boot camps, and in developing competency-based credentials, in contrast to credentials based on the number of classes a student takes. These new credentialing systems are taking off in sectors such as technology, spurring national conversations among higher education associations and professional industry groups.

Traditional high schools and community colleges are also developing new career pathways and supporting competency development. As just one recent example, The University of Texas has moved from a pilot project to a rollout of competency-based programs across its full system.³

Experimentation—and significant investments—have produced exemplars among these institutions. However, these promising practices remain relatively isolated. This is a critical moment to unlock these programs' potential by bringing them to scale—by moving from bespoke partnerships between single institutions and single employers, to more systemic, regional programs that can benefit a much broader group of job seekers and employers.

³ For more information on this program, see <http://utx.edu/initiatives/competency-based-education/>.

Ideal State



The Investments⁴

We envision a world in which a low-income young person is able to understand the education and training options available, make an informed choice about which options best suit her needs and goals, and access highly regarded training programs. She will then have knowledge of the choices her credential presents and be able to apply for a job she wants—and for which she is well-qualified. Employers will be able to review her credential, understand the skills and competencies that the credential denotes, and hire her, regardless of her race, background, or the life path she has followed.

4 To get to the set of investments detailed below, we reviewed numerous research and policy papers including reports from Jobs for the Future and the Georgetown Center on Education and the Workforce. We also conducted numerous interviews and collaborative working sessions with researchers, practitioners, policymakers, and philanthropists. Included among these individuals are Byron Auguste, managing director, Opportunity@Work; Anthony Carnevale, director of the Center on Education and the Workforce, Georgetown University; JD Hoye, president, National Academy Foundation; Nicole McDonald, strategy officer, Lumina Foundation; Christine Marson, senior program officer, Bill & Melinda Gates Foundation; Jamie Merisotis, president and CEO, Lumina Foundation; Patrick Methvin, deputy director of Postsecondary Success, Bill & Melinda Gates Foundation; Suzanne Walsh, deputy director of Postsecondary Education, Bill & Melinda Gates Foundation; Dalila Wilson Scott, senior vice president, Community Investment, Comcast and president, The Comcast Foundation.

Getting to this reality requires fundamental shifts in the marketplace linking job seekers to economically viable careers. To achieve these changes, we propose philanthropic investments that:

- Support national-level understanding of evolving job market needs and the skills these opportunities require of individuals, with a commitment from employers to hire based on these skills
- Ensure that low-income job seekers have the information and support they need to identify the best path to a career that matches their skills and interests and has the potential to provide a family-sustaining income
- Create increased market pressures on traditional postsecondary institutions by investing in alternative, competency-based programs that target low-income populations through innovation grants, seed funding, and scaling grants
- Advocate for federal and state funding to support competency-based programs

Support national-level understanding of evolving job market needs and the skills it requires of individuals, with commitment from employers to hire based on these skills

Investment #1: Nationally, convene employers, educators, and trainers to articulate the competencies required to succeed in workplaces, codify these competencies, and embed them in training and hiring practices

To make meaningful progress, today's approach to job training and employment must move from favoring candidates with access to higher education at elite institutions to one that values the competencies that individuals have actually developed. A critical enabler is a clear understanding on the part of employers, educators, and job seekers of the skills and competencies necessary to succeed in a given career.

Working toward that goal, the first investment would focus on building a shared understanding of the skills and competencies required for each career pathway. Building on the momentum of the ACT Foundation and Business Roundtable's National Network of Business and Industry Associations, for example, this investment would work with consortia of employers to map the competencies required to succeed in their industries.⁵ Choosing several industries with a great need for new talent (such as skilled manufacturing), philanthropists would bring together employers, employer associations, educators, and policymakers to align around a clear set of competencies. This mapping would be a key input into training programs that more closely align candidates' skills with the market's needs (see [Investment #4](#)).

The resulting output would represent a major step in building momentum around competency-based hiring. Through this investment, philanthropists could

⁵ ACT Foundation, "Connecting what America learns to how business works," 2015, <http://actfdn.org/what-we-do/catalyzing-action/national-network/>.

promote the case to employers that they should hire based on competencies rather than on more traditional prerequisites of employability, such as a four-year degree from an elite institution. Such a reasoned argument would amplify findings that four-year degrees often are poor indicators of whether a candidate will perform well at a job,⁶ and results in discrimination against low-income people, who are less likely to attain four-year degrees.

This approach has seen some success with such companies as Applied Software and IBM, with their “boot camps” for software coders. Competency-based learning could be particularly beneficial in sectors or regions with unmet employment needs, or in sectors needing to address concerns about workforce diversity.

Building on this initial mapping, philanthropists could also provide the start-up capital for several employers to switch to this model of hiring, and then rigorously evaluate the results. Example investments in this area include:

- Provide technical assistance to human resources departments to make these shifts
- Fund innovation and experimentation for large-scale, competency-based résumé and candidate-screening technologies
- Give employers who hire in this way preferred access to capital
- Fund research and dissemination of the business case to employers
- Build a third-party validation system for the competencies that candidates develop through training, so employers can easily understand the capabilities of candidates

These activities would build a business case to convince other employers to switch to approaches that put a premium on the candidates’ skills. The overall objective would be to develop competency-based approaches to résumé screening and interview protocols within human resources departments. The goal is mitigating structural biases that lead to under-matching candidates (i.e., selecting them for jobs below their competency levels) due to an emphasis on degree attainment over competency matching. By screening for capabilities and potential, employers could capture high-potential, longer-term candidates—even those with short-term gaps in capabilities.

Ensure that low-income job seekers have the information and support they need to identify the best path to a career that matches their skills and interests, and that has the potential to provide a family-sustaining income

Investment #2: Invest in developing and scaling advising technology that informs local guidance counselors, workforce partners, and other potential advisers of the most promising local career pathways

The first step for a job seeker embarking upon a career pathway is to understand the full range of options. The current guidance and counseling is broken; students

⁶ Based on interviews with leading industry experts.

must navigate complex systems with limited support and few interactions between counseling personnel and academic faculty.⁷ This investment would build mechanisms for getting information about the most promising pathways, and the best way to access this information, to low-income people. Momentum and experimentation have begun in the field with programs such as [College Greenlight](#) and [MyBestBets](#).⁸ However, the field has yet to reach its full potential.

An ever-increasing amount of labor market data exists, ranging from public data (e.g., Bureau of Labor Statistics) to privately collected data (e.g., LinkedIn). Philanthropists could build on the many products and programs in the field of counseling and invest in new technology systems to support the integration of data on employment opportunities with data on student education and training paths. Such technology would assist counselors and others in ensuring that students and job seekers have the most current, helpful information on the range of options available, as well as the most promising pathways to get there. Philanthropists could invest in scaling this technology through prizes and competitions for especially effective products. Philanthropists could also campaign for public funding of the technology system, once it is developed and scaled, through government monies earmarked for advising at high schools, colleges, and other educational facilities.

Investment #3: Fund a regional intermediary to support proactive advising through a variety of channels on potential education/training pathways that lead to careers

In addition to putting dollars into developing education- and employment-related data, there will be a need for investments in making the best use of data. We have to get much better at making sure students and job seekers have access to the information and advising they need to make career pathway decisions.

Philanthropists could invest in regional organizations that would train, provide data to, and otherwise support counselors at local high schools, community colleges, and other institutions of higher education. These organizations would forge closer connections between high schools and higher education, allowing the schools to support students as they pursue their career pathways. This investment would also help embed effective counseling services in institutions that serve those who are not in school, but are seeking entry or reentry to careers. This would encompass workforce institutions, as well as public libraries, community centers, and other institutions that serve a wide range of people. These organizations would train staffers to coach potential job seekers in an effective way, “meeting them where they are.” Ultimately, these capabilities would become embedded in local counselors, creating a sustainable path to impact.

⁷ Based on interviews with leading industry experts.

⁸ Scott Emerick and Clare Bertrand, “Betting on a Better Counseling Approach for College and Careers,” Vander Ark on Education (blog), December 15, 2014, http://blogs.edweek.org/edweek/on_innovation/2014/12/betting_on_a_better_counseling_approach_for_college_and_careers.html.

Create increased market pressures on traditional postsecondary institutions by investing in innovative, alternative, competency-based programs that target low-income populations through innovation grants, seed funding, and scaling grants

Most students receive a traditional education (e.g., K-12, community college). However, many of those institutions do not prepare them with the basic competencies required for a career, including such foundational skills as verbal and written communication. The following investments suggest a strategy for strengthening these institutions within a region, and better connecting them to employers and careers.

Investment #4: Fund and facilitate deep regional partnerships between high schools, higher education institutions, employers, and other community partners to align public education systems with pathways to careers, including market-aligned curricula and work-based learning opportunities

This series of regional investments would support students as they transition to and through systems of public education and training. We know that these systems (high school, community and public colleges, vocational training programs, and apprenticeships) serve the vast majority of low-income young people and job seekers. According to fall 2014 estimates, approximately 7.3 million undergraduate students were enrolled in community colleges.⁹ Many of those students represent low-income populations; 44 percent of low-income students (with family incomes of less than \$25,000 per year) choose community college as their first academic institution after high school. Additionally, 50 percent of Hispanic students and 31 percent of African-American students (as compared with 28 percent of white students) embark on their journeys to higher education via community colleges.¹⁰ Along similar lines, a majority of students in public schools are low income.¹¹

A catalytic investment in making these disconnected systems work together would have far-reaching effects on social mobility. In recent years, this idea has generated momentum. Examples include government grants that align public education systems and careers on a case-by-case basis by leveraging programs such as the federally funded TAACCCT¹² grants. TAACCCT provides community colleges and other eligible institutions of higher learning with funds to prepare program participants for employment in high-wage, high-skill occupations.

To build momentum, we see the potential for several regional investments, involving multiple employers and institutions. We suggest investing in regions with high levels of unmet employer need, high levels of unemployment, and

9 National Center for Education Statistics, “Integrated Postsecondary Education Data System Fall 2014 Enrollment Survey” (American Association of Community Colleges 2015 analysis).

10 Community College Research Center, “Community College FAQs,” 2016, <http://ccrc.tc.columbia.edu/Community-College-FAQs.html>.

11 Southern Education Foundation, “A New Majority Research Bulletin: Low Income Students Now a Majority In the Nation’s Public Schools,” (January 2015).

12 TAACCCT stands for Trade Adjustment Assistance Community College and Career Training.

current activity around workforce development and employment and education initiatives. We recommend approaches that are regional in scope, since many employers and industries are organized regionally. In the paragraphs that follow, we suggest specific regionalized investments to support initiatives that build pathways to careers.

Many elements of the regional model have already been rolled out in pilots across the country. This investment, however, would be catalytic in several ways. First, it would target several large regions, and therefore reach a large number of low-income students. Second, it would include rigorous documentation of the process of setting up these regional collaborations so that other institutions could easily follow the model. Third, a record of the challenges and opportunities encountered in the process could be tabulated as best practices that inform future policy.

Building on emerging successes like the transformation of the [City Colleges of Chicago](#), philanthropists could bring together the region's interested parties. This partnership could cement connections between employers and educational institutions, outlined below (Investments #4a-d). These partnerships would become sustainable as public funders and employers found them useful.

Investment #4a: Support colleges/institutions and employers in creating employer-informed curricula and provide capital for switching costs

As a first step, philanthropists could work with employers and institutions of higher education to understand the highest-opportunity careers available in the region, as well as the educational pathways to these careers.

Employers could work with the largest colleges and training programs within the region to more closely align their courses and curricula with the sector's needs. Employers would help translate the competencies required into curricula and instruction that institutions provide students. To facilitate this, philanthropists could fund technical assistance to employers to translate and codify skills and competencies (as in [Investment #1](#)). Investments would focus on working with employers (and expert researchers) to map the competencies required in a given industry along a career progression for targeted roles. These codified competencies would be used as the basis for training curricula within institutions, as well as for fair and accurate hiring practices (covered below).

Once these competencies are translated into curricula, philanthropists would support educational institutions in adopting and teaching them. They could provide capital to cover the switching costs incurred as institutions migrate to these new programs, along with the accompanying staff training. After these start-up costs are covered, and the programs deemed effective, the curricula would continue under public funding.

Investment #4b: Invest in building out opportunities for internships, apprenticeships, and work-based learning while students are still in high school or college

Students often benefit greatly from opportunities to have on-the-job experience before graduation.¹³ Philanthropists could invest in fostering employer partnerships with high schools and postsecondary institutions to embed work-based learning in their instruction. This would build on efforts by organizations like the National Academy Foundation through [NAFTrack](#), the [Linked Learning Alliance](#), and others.

Other significant benefits derive from pre-graduation work-based learning.¹⁴ They include developing skills and competencies, understanding the required soft skills, receiving direct feedback from supervisors, increasing social capital, and earning additional income. These programs could also involve preferred consideration for employment if students complete the career programs through which they did their internships. To increase the likelihood of that, employers would need to feel confident in the competencies these students had developed in their work experience and believe their company would benefit from hiring them. Philanthropists could support this work by helping bring effective practices to scale and then expand them into new regions. Philanthropists could also provide start-up capital for innovative work-based learning programs in various fields.

Investment #4c: Within regions, spur innovation in integrated student supports

Along the way, students will need counseling and other social services to ensure that they don't falter. Many will face a number of personal, financial, and academic challenges while pursuing their credential. Research and practice have shown that integrated student supports are critical to enabling students to complete career pathways. For example, about half of community college students drop out due to financial challenges.¹⁵

Philanthropists could invest in ensuring that students have adequate financial support. This would include assisting institutions in conducting automatic screening for public benefits for students, intrusive financial aid advising, and financial coaching programs.

Critically, philanthropists would help link financial support with academic and nonacademic advising, career services, and social services and counseling. They could do this by funding the integration of student supports into pathway programs already offered by community colleges and other institutions. These institutions would partner with community-based organizations such as Single Stop, which offer wraparound social supports for students at a low cost to the colleges. In regions with wraparound service providers, philanthropists could also

13 Mona Mourshed, Diana Farrell, and Dominic Barton, *Education to Employment: Designing a System that Works*, McKinsey Center for Government (January 2013), <http://www.mckinsey.com/industries/social-sector/our-insights/education-to-employment-designing-a-system-that-works>.

14 Ibid.

15 Jobs for the Future, *'These People Just Keep Trying to Help Me': Supporting Students to Succeed in College and Career Pathways* (June 2015).

offer prizes to those institutions most effectively delivering student supports, and use those awards as a platform for discovering and publicizing best practices.

Investment #4d: Codify the process of regional transformation to assist other communities and inform policy

For regional partnerships to have a transformative effect, the insights gained must be captured and shared with other regions that aim to change. Philanthropists could invest in codifying the process of better aligning institutions with careers. They would then support an intermediary that could share those insights broadly, allowing other regions to adopt reforms more easily. This intermediary would also provide technical assistance to institutions as they launched these programs and partnerships. Finally, this intermediary could help build momentum for policy advocacy to support these kinds of reforms. This investment would build on the work of such intermediaries as [Achieving the Dream](#), [Jobs for the Future](#), [Community College Research Center](#), and others.

Note: This investment could be sequenced within Investment #3, and focus first on collecting best practices from those places where regional collaboration is already successfully under way (e.g., Chicago, Long Beach, and Completion by Design schools).

Investment #5: Support the innovation and scaling of boot camps and alternative credentialing programs that are competency-based and aligned with employer needs

Traditional education may neither be the best fit for some students, nor can they wait for changed programs. For those people, philanthropists could work outside public education systems to spark innovation and catalyze movement toward a competency-based system of training, hiring, and job matching. This would involve creating alternative credentialing systems, such as boot camps, for building specific career skills, which are tailored to the needs of low-income people.

Recent years have seen a proliferation of alternative credentialing programs that provide a pathway to economically sustainable careers, such as tech boot camps. These programs often exist outside of formal educational institutions and target a labor market deficit. While they offer promising opportunities for economic security, many do not effectively recruit or serve low-income job seekers in a way that would support their social mobility. Some also are cost prohibitive. Moreover, gaps in alternative credentialing programs exist in sectors beyond technology.

Philanthropists could provide seed capital both to scale boot camps into new sectors and develop new models. They could concurrently subsidize other apprenticeships linked to alternative credentialing systems. Since financing is often a barrier for low-income people, philanthropists could also invest in “pay-it-forward” options (i.e., once students have graduated and are financially stable, they support loans for other students).

Investment #6: Nationally, support the development and implementation at scale of a “soft skills” curriculum

In addition to mastering specific competencies, students and job seekers need a variety of “soft skills” to succeed in the workplace. There has been some momentum around this issue, especially in regard to social and emotional learning for young children. Yet no one has yet developed a data-driven mapping of essential soft skills and the elements to build a curriculum. Philanthropists could fund research to understand the important soft skills that apply to most jobs, and the developmental psychology and brain science that underlie them. Then, they could fund the testing and codification of the best interventions that support the development of soft skills, along with creating a toolkit to assist educational and training institutions in using the most promising interventions.

Advocate for federal and state funding to support competency-based programs

Investment #7: Fund lobbying efforts for policies that more closely link the higher education curricula and career credentials and that remove barriers to competency-based credentialing

We have put forward investments that would increase the supply of, and demand for, job seekers trained in a way that aligns with the competencies employers require. In order to incentivize and sustain this model, philanthropists could advocate for public policies that support this new system of education and employment.

Specifically, philanthropists could invest in changing policies so that funding for education is based on labor market outcomes. That will prompt higher education institutions and workforce programs to ensure that participants develop market-ready skills. Philanthropists in this case would invest to speed progress—providing support and research to politicians advancing this agenda. They could work with known advocates, including politicians and advocacy organizations, to understand the support they need to move forward with this agenda. Philanthropists who are especially interested in public policy may choose to invest in advocacy that seeks to bolster momentum that’s already beginning to build. Investments could include:

- Lobbying for outcomes-based funding, such as state-level policy that incentivizes or requires public higher education institutions to rigorously track students’ post-graduation outcomes and to shift their educational models from seat time (how many hours and years students spend in classrooms) to developing competencies
- Creating a marketable “case for change,” by compiling compelling research on the mismatch between degrees and needed jobs or early successes with outcomes-based funding in states like Ohio and Tennessee
- Financing campaigns of politicians who support this agenda

Risks Involved

Philanthropists face a number of risks in making the investments outlined above. There is the risk that all these efforts might be eclipsed by such macroeconomic forces as economic downturns, decreases in wages, and automation advances leading to an overall decrease in jobs that provide a living wage. Meantime, reforming postsecondary institutions and encouraging partnerships with employers will require overcoming inertia within postsecondary education, which has been historically resistant to change. There is also the risk that these reforms won't break out of the regions in which philanthropists invest, limiting their ultimate impact. That risk would be compounded if the expected shifts in public policy do not occur, leaving fewer incentives for institutions to align their pathways with careers. Finally, the push for employer alignment and competency-based credentialing could fail to alter employer behavior, and thereby fail to improve the social mobility of low-income job seekers.

Projected Impact

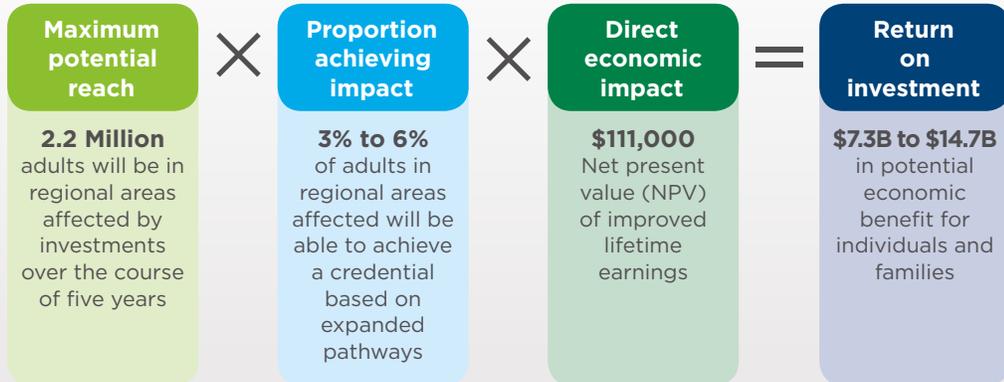
The projected impact of this bet is based on the assumption of increased earnings for individuals completing competency-based credential programs that are linked to labor market needs. For the purpose of this analysis, the concept assumes that the impact of the investments would be equivalent to the impact of completing a college degree at the associate level.

The Social Genome Model estimates that achieving a four-year degree provides an annual family income increase of \$5,106 by age 40. While the Social Genome Model does not estimate the lifetime earnings potential for a two-year degree, the concept imputes roughly \$111,000 in potential lifetime earnings, based on a ratio of similar annual income increases in adulthood and from other sources of estimating lifetime earnings, including: "The College Payoff: Education, Occupations, Lifetime Earnings" by Anthony Carnevale, Stephen Rose, and Ban Cheah; "Education Pays 2013: The Benefits of Higher Education for Individuals and Society" by Sandy Baum, Jennifer Ma, and Kathleen Payea; and "How a College Degree Pays for Itself: Financial Costs and Long-term Benefits" by Wendy Croix.

The bet assumes that the investments would be made in 15 regions covering the 15 largest cities in the United States. Within those areas, it is reasonable to estimate that there are 2.2 million adults aged 18 to 44 who have incomes less than or equal to 200 percent of the federal poverty line. We also assume that as much as 40 percent of this population could benefit from attaining a credential with labor market value, and that potentially 3 percent to 6 percent of that group would attain the credential if the bet were successful. If this happened, **between 66,000 and 132,000 individuals would attain a credential as a result of these investments, and the overall series of investments could lead to a cumulative increase in lifetime income of \$7.3 billion to \$14.7 billion.**

Aspirational individual outcome

Achievement of a postsecondary credential with labor market value



Breakout of Costs by Investment Area

In order to determine the likely cost of the investments outlined above, we researched the cost of applicable benchmark programs and investments. We then multiplied the cost of the benchmarks to represent the scale at which the above recommendations are presented. For this paper, the benchmark programs that were considered were TAACCCT Round 4, National Network of Business and Industry Associations, Achieving the Dream, FSG's Collective Impact Initiative, Complete College America, Raikes Foundation (noncognitive curriculum development and dissemination), Foundation Center, The Kresge Foundation Student Success Centers, and Atlantic Philanthropies grant Healthcare for America Now.

Pathway	Investment Area	Estimated Cost
Honing promising programs and helping them grow	Fund and facilitate deep regional partnerships between high schools, higher education institutions, employers, and other community partners to align public education systems with pathways to careers, including market-aligned curricula and work-based learning opportunities	\$760,563,000
Investing in infrastructure for systems change	Nationally, convene employers and educators/trainers to articulate competencies required to succeed in their workplace, codify those competencies, and embed them in training and hiring practices	\$10,956,000
	Fund a regional intermediary to support “intrusive” advising through a variety of channels on potential education and training pathways that lead to local careers	\$20,000,000
	Codify the process of regional transformation to assist other communities and inform policy	\$2,200,000
Shifting incentives	Fund lobbying efforts for policies that more closely link the higher education system and career credentials, and that remove policy barriers from competency-based credentialing	\$47,217,000
Spurring innovation	Support the innovation and scaling of boot camps and alternative credentialing programs that are competency-based and align with employer needs	\$100,000,000
	Invest in developing and nationally scaling advising technology that informs local guidance counselors and workforce partners and other potential advisors of the most promising local career pathways	\$14,357,000
	Within regions, spur innovation in integrated student supports	\$14,357,000
	Nationally, support the development and implementation at scale of a “soft skills” curriculum	\$30,350,000
TOTAL		\$1,000,000,000

Formerly a senior associate consultant in The Bridgespan Group's San Francisco office, Micaela Ross recently completed a Kiva Fellows Program in Costa Rica. Reilly Kiernan, a former consultant also in the San Francisco office, is pursuing a joint degree in government and business at the Harvard Kennedy School and the Harvard School of Business. Devin Murphy is a manager and Debby Bielak is a partner in Bridgespan's San Francisco office.

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