

WORKING PAPER PREPARED FOR REINVENTING OUR COMMUNITIES: TRANSFORMING OUR ECONOMIES  
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# The Role of Skills and Jobs in Transforming Communities

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Virtually any proposal to transform communities in urban America lists widely shared prosperity among residents as a top goal. Indeed, this is usually the primary motivation for recommending or undertaking any such efforts.

But achieving and sustaining widely shared prosperity can be very challenging. The enormous changes that have occurred in the U.S. labor market over the past few decades have made this especially true. Specifically, the skills required by employers for good-paying jobs have increased dramatically and are frequently in flux. Residents of low-income communities in particular lack the opportunities to build the necessary skills and obtain these good-paying jobs. In many regions, good-paying jobs are either scarce in general or out of the reach of low-income residents, who may lack not only the requisite skills but also access to jobs due to weak information networks, geographic imbalances and lack of transportation, as well as discrimination.

In this paper I outline obstacles and potential solutions to achieving widely shared prosperity in the labor markets of lower income communities in the United States. I address the following:

- ➔ On the demand side of the labor market, a need for more and better jobs;
- ➔ On the supply side of this market, opportunities for better education and skill development among urban workers; and
- ➔ Access to good jobs and opportunities for skill-building for disadvantaged students and workers.

## Labor Demand: More and Better Jobs

### CURRENT STATE OF AFFAIRS AND CHALLENGES

Over the years, analysts of urban and metropolitan areas have described economic development policies to improve job availability and job quality. Recently, Amy Liu of Brookings (2016) outlined a series of necessary steps to “remake” regional development in ways that generate and sustain inclusive growth. The steps include setting appropriate goals, boosting trade (of locally produced goods and services) with other regions and countries, investing in worker skills, and connecting places to one another within the region. These strike me as appropriate goals, though challenging to achieve; other analysts agree (e.g., Bartik, Rubin et al., Nowak, and Benner and Pastor, 2016). Liu’s colleagues Bruce Katz and Jennifer Bradley (2014) describe cities and regions in the United States—including Denver, Houston, Los Angeles, New York city, and the Northeast Ohio region—that have successfully begun such transformations.

Optimistic newer voices in this area are Antoine Van Agtmael and Fred Bakker (2016), whose new book argues that Rust Belt cities and neighborhoods are becoming “...the smartest places on earth.” Surveying changes they observe in Akron Ohio and Malmo Sweden, as well as a range of other U.S. cities (like Raleigh/Durham in North Carolina, Portland Oregon, and Minneapolis), these authors outline the activities that allow dramatic changes in the economic environment. They stress the importance of connections across major stakeholders, collaboration between universities and entrepreneurs, focus on a few key industries and innovations, access to capital markets, and creating an appealing local environment (both professional and social) that acts as a “magnet for talent” to the area. Other authors, such as Harvard’s Michael Porter (2015), have also argued for decades that distressed inner cities have competitive advantages that could be much better harnessed for inclusive economic development.

Despite their great optimism, the Van Agtmael and Bakker book and others provide little evidence that the changes they describe are possible in *any* Rust Belt city. Indeed, even in the cases surveyed, we find little

evidence that the innovative industries generate employment with sufficient scale and breadth of skill demands to generate inclusive prosperity for most residents of lower-income neighborhoods.

Moreover, although low-income residents do benefit when their cities experience turnaround, the size of these benefits is in question. Edward Glaeser (2011) and other economists show that a large concentration of college-educated workers in a city generates spillover effects in the economy that raise the earnings of the less-educated there, and Enrico Moretti (2012) shows that cities that become centers of innovation also generate spillovers that raise wages of that group. In general, the overall unemployment rates and employment growth rates of cities have large effects on the employment of low-income or minority groups there (Hines et al., 2002). Still, we do not have evidence of very widespread prosperity generated by these more general increases in high skilled earnings and employment. Moreover, even though there is opportunity in these growing economies, housing prices reflect this and prevent lower-income households from accessing the better jobs that result (Acolin and Wachter 2016). Thus, achieving these outcomes alone will not create broadly shared prosperity.

In addition, new research findings should further temper optimism regarding the arguments of Van Agtmael and Bakker, among others. There are large gaps in educational attainment and achievement, as well as in earnings, between white and minority children and between those from high- and low-income families that may be barriers to positive spillovers. While racial gaps in education have declined a bit over time in the United States, they remain very large, and gaps between high- and low-income children have been growing (Reardon, 2011). Issues of access to good education are paramount (Steinberg and Quinn 2016).

Within metro areas, residential segregation by income is rising, even while it falls modestly by race (Bischoff and Reardon, 2011); such segregation likely contributes to growing gaps in educational achievement and other outcomes across children (Chetty et al., 2015). And, across cities and regions, highly educated workers are sorting themselves in ways that cause them to be much more concentrated in some places than in others; where they concentrate, housing prices rise and drive out lower-income residents (Diamond, 2016), causing further imbalance (Acolin and Wachter). Also, Autor et al. (2016) have recently created a very disturbing portrait of regions hurt by major shocks of imports (in this case, manufactured goods from China), documenting not only the degree of distress that results but also how slowly the adjustment processes (such as new jobs developing and labor migrating to areas of greater job availability) occur.<sup>1</sup> Mobility itself may be impacted by higher rents and housing cost barriers in regions with job growth (Acolin and Wachter 2016).

## OPPORTUNITIES FOR SOLUTIONS

Despite these challenges, opportunities for solutions are also apparent. First, the U.S. labor market has been recovering from the terrible effects of the Great Recession; as of mid-2016, the unemployment rate is down to about 5 percent, wages are finally starting to rise faster than inflation across the country, and even labor force participation is beginning to recover. If the recovery can be maintained, local labor markets will be tighter, and the extent to which prosperity from any new economic development can spread will rise.

Second, some markets for middle-skill jobs—which pay reasonably well for workers with less than a college bachelor’s degree—are already tight around the country. Though much has been written about the “hollowing of the middle” in the job market (Autor, 2010), a closer look at the data generates a more complex picture—where good-paying production and clerical jobs for workers with only high school education have been disappearing while others, requiring more skill, have been growing (Holzer, 2015). The latter includes jobs in health care, advanced manufacturing, information technology (IT), transportation/logistics, hospitality, and the

<sup>1</sup> The general process of adjustments of metro areas to major employment shocks was empirically documented by Blanchard and Katz (1992), though Bound and Holzer (2000) also showed slower migration responses among less-educated or minority workers than others.

higher ends of retail. Some of these jobs require technical training at the certificate or associate degree level, while others can be obtained with less technical training.

Indeed, some industry analysts claim that there are serious shortages of middle-skilled workers in these industries, though the claim is controversial.<sup>2</sup> Nevertheless, there are signs of labor market tightness in the particular occupations and industries noted above, especially in regions where worker skills are low. And, as Baby Boomers retire, the market will become tighter, creating demand that could be filled by newly trained workers in older and less affluent communities. Indeed, tighter markets are the best antidote we have for overcoming employer prejudices and reaching out to categories of job applicants that they've avoided in the past (Holzer et al., 2006).

Third, job availability can sometimes rise in response to the creation of newly skilled workers—in other words, improvements in the supply of skills can help generate demand for them. Thus below I discuss the role of generating new skills in creating job opportunities. In fact, foreign companies—such as manufacturers from Germany—are flocking to states and areas (like North Carolina and Tennessee) where they perceive sufficient skills in the population, among other characteristics. Indeed, a few years ago, Siemens famously waited to build its fairly new gas turbine engine manufacturing plant in North Carolina until they had developed arrangements with local community colleges and universities to create a steady stream of trained technicians and engineers. (Below we specifically suggest policies to encourage firms to work with communities to implement such sector based strategies.) German companies, among others from around the world, generally find the United States a positive business environment (due to low taxes, low regulation, low energy costs, and proximity to a great consumer market), though they are often reluctant to do more here until local skills problems can be solved.<sup>3</sup> In this way, job creation and skill development in high-demand fields can reinforce each other.

Fourth, separately from the *quantity* of employment growth, it is possible to upgrade its quality. Labor economists have long been aware that employers can often choose between high-wage and low-wage (or “high-road” and “low-road”) strategies to making profits, where the former stresses investments in training, high productivity, and low turnover while the latter stresses low labor costs (Andersson et al., 2005).

Firms can create good job opportunities through the upgrading of skills of their workers. Cases of firms that upgrade the quality and skills of their workers—through significant on-the-job training and promotion ladders—to create and then fill good-paying jobs are well documented. For instance, Zeynep Ton (2014) describes some well-known American companies—such as Toyota, United Parcel Services (UPS), Costco, and the Four Seasons—that have undertaken a set of strategies designed to raise both earnings and productivity among its workers, while preserving or even raising company profits. These strategies change the operations of the companies quite dramatically, in order to improve customer service and the quality of work performed there.<sup>4</sup>

Although policies to encourage and support more “high-performance workplaces” have been advocated (Kochan, 2015), in recent years, it appears as though low-road (cost-minimizing) personnel policies in the United States are becoming quite frequently used (Weil, 2014). Again the data are not absolutely clear and the trends are not immutable.<sup>5</sup> Attempts to assist and incentivize more firms to take the high road, and to learn what does and doesn't work in this regard, are certainly in order (Holzer, 2015b).

<sup>2</sup> See, for instance, the Manufacturing Institute (2013) for claims of shortages, as well as Cappelli (2014) or Osterman and Weaver (2014) for more skeptical accounts. A new report by the National Academy of Sciences (2016) strikes an appropriate balance between these competing claims. See also Holzer (2015, 2015b).

<sup>3</sup> See Nelson Schwartz (2013).

<sup>4</sup> Ton's “Good Jobs Strategy” focuses on four key goals in business strategy to improve wages and performance by workers while delivering greater “value” to customers and investors: 1) Offer fewer products to customers, with fewer sales promotions and gimmicks, perhaps at fewer hours; 2) Standardize many operations while empowering employees to make key decisions on how to implement them; 3) Cross-train workers to perform a range of duties and jobs; and 4) Operate with slack to ensure that customer service is amply provided in all circumstances.

<sup>5</sup> One macro argument that suggests an aggregate shift by employers towards low-wage, cost-minimizing strategies is the current combination of high profits and low productivity growth in the United States in the past decade. See Baily and Bosworth (2015).

Since we have very little experience to date with these types of policies, we do not know exactly what kinds and levels of incentives or assistance offered by federal and state governments would be sufficient to induce firms to adopt high-performance strategies. But governments could experiment, for example, with technical assistance organizations for a range of industries, along the lines of the Manufacturing Extension Partnership; grants or tax credits to firms that build new promotion ladders or adopt profit-sharing; or preferences in contracting for firms that engage in such practices.

Can local and metro-wide economic development policies build on these more promising trends, and strengthen the demand for workers in older communities? The body of evidence remains thin, though a few economists (like Tim Bartik) provide sensible arguments about avoiding zero-sum battles of tax reductions across states and combining customized services for firms with appropriate assistance in areas such as region-wide appropriate skill development (e.g., Bartik, 2016). How well these approaches work, and how broadly they build prosperity in combination with other development activities, remains to be seen.

## Labor Supply: Better-Educated and Skilled Workers

Really turning around declining cities and regions without improving the education and skills of its workers is impossible. This should be a focus of effort. But some major challenges plague efforts to improve education and skills, especially in areas of concentrated disadvantaged. Here we identify solutions to the challenges of skill transfer.

### CURRENT STATE OF AFFAIRS AND CHALLENGES

Job training for good-paying, high-skill jobs (requiring BAs or more) takes place at four-year colleges and universities, while training for middle-skill jobs mostly occurs at community colleges—in associate degree programs in arts or sciences (AA or AS) or certificate programs, where the latter can be for academic credit or not. Pell grants now fund much of this training—at least when the programs of study are for academic credit.<sup>6</sup>

Huge numbers of students—including those from disadvantaged backgrounds, both young (coming out of high school) and older—enroll in community colleges; completion rates, however, are extremely low. Completion rates for youth in AA/AS programs nationally are about 20–30 percent and much lower among low-income students and especially among adults. Furthermore, in some states, large percentages of students complete AA programs in the humanities (especially in programs like “general studies” or “liberal studies”) which have nearly no labor market value, while avoiding AS or certificate programs that are much better compensated (Backes et al., 2015).<sup>7</sup> And, many students emerge from programs with substantial debt, especially if they attend for-profit colleges.<sup>8</sup>

Why are these outcomes so bleak? For one thing, many students enter college with a number of disadvantages. Most obvious are their weak academic skills, resulting from poor K-12 academic work.<sup>9</sup> Entry rates into “developmental education”—or remediation—at community colleges are as high as 60 percent (Bailey et al, 2015). Students who cannot pass an Algebra I or English reading test are required to take and pass developmental education and entry exams before they can take classes for credit—even if Algebra I is

6 In previous decades employment and training for the disadvantaged were funded primarily by U.S. Department of Labor’s programs such as the Comprehensive Employment and Training Act (CETA) and its successors (Holzer, 2013). But funding for these efforts has greatly diminished over time, while Pell grants have grown in generosity and community colleges have expanded their offering of certificates and other workforce development efforts.

7 In Florida, for instance, about 45 percent of students who earn AA degrees do so in humanities, particularly General or Liberal Studies. These rates are a bit higher for disadvantaged students. Of all community college enrollees from Florida high schools, only about 22 percent transfer to four-year colleges, and about half of them earn BAs within six years. Most transfer to the four-year college nearest to their community college, though many such schools are third- or fourth-tier institutions as measured by test scores and high school grades.

8 All of these issues are discussed at greater length in Holzer and Baum, Brookings, 2017.

9 Of course, achievement gaps often begin shortly after birth in the home, well before students enter kindergarten (Magnuson and Duncan, 2016), which is why many researchers consider high-quality pre-K programs to close these gaps so critical to any future postsecondary and labor market success.

not particularly necessary in their programs of study. And traditional remediation has generally been very ineffective or even harmful at community colleges (Clotfelter et al., 2013).

In addition, disadvantaged students are hurt by a variety of other problems. First, high and rising tuition rates hurt families without substantial liquid assets, and keep many students from institutions other than the local community colleges.<sup>10</sup> Second, even when they might be qualified for admission and financial aid at better schools, first-generation college-goers lack the needed information about potential college choices, and generally lack the social capital needed to perform well there.<sup>11</sup> Third, low-income students are often (single) parents who face pressure to work full-time while they attend school, making it much harder to complete programs of study.

On top of the challenges that low-income students bring to college, the quality and behaviors of the institutions they attend often make things worse. Community (and lower-tier four-year) colleges are often strapped for resources, which contributes to worse student outcomes (Bound et al., 2010). For instance, supports and services for low-income students are limited, as are important services like career counseling for all students. Lacking information about the labor market, many students choose areas of study with weak job prospects.

In addition, the unstructured nature of most community colleges leads many students to wander aimlessly through the course curriculum without structure or guidance along the way (Bailey et al., 2015). Students also tend to overestimate the likelihood that they will complete their associate programs and/or transfer to four-year colleges and universities, which leads them to avoid technical certificate or AS programs and concentrate too heavily in liberal arts AA programs. Indeed, most AA students expect to transfer to four-year colleges and obtain BAs when they arrive, and yet only a fourth or less successfully transfer, and only half of that group earn BAs (Bailey et al., 2015).<sup>12</sup>

And, even where students understand the labor market value of programs such as those in health care, teaching capacity in high-demand fields can be very constrained, with many students not able to enroll in all of the classes they need. This occurs because of strained resources but also weak performance incentives facing the community colleges. Simply put, technical classes with labor market value are often more expensive than others, with the need for up-to-date equipment and instructors with high salaries.<sup>13</sup> Since the colleges generally receive the same per-student tuition regardless of what students study or how well they perform (in either college or the job market), the institutions have little incentive—especially given their limited financial abilities—to invest in expanding teaching capacity in high-demand fields.

## OPPORTUNITIES FOR SOLUTIONS

In response to these incentive problems, many states are starting to base their higher education subsidies to institutions on student performance to strengthen these incentives. Indeed, the National Conference of State Legislatures tracks state policies of this kind, and over 30 states have started moving in this direction.<sup>14</sup>

But, if the incentives are badly structured, unintended consequences can result—such as “creaming” students up front (in other words, admitting only those of higher ability) or reducing performance requirements to raise graduation rates at the back end (Dougherty et al., 2016). Too few states emphasize subsequent employment outcomes of their students in their subsidy formulae, especially among minority or low-income students

<sup>10</sup> State subsidies for higher education are actually declining over time on a per-capita real basis—Holzer and Baum, *op. cit.*

<sup>11</sup> Such social capital can often mean how to study and where to get help, which might be particularly unknown among first-generation college-goers.

<sup>12</sup> Of course, many avoid technical classes or management either because they don't have the necessary math/science backgrounds or they don't like these programs and jobs. Passing important “gateway” classes, like anatomy in health care, is problematic for many as well.

<sup>13</sup> Since most tenured faculty at community colleges are trained to teach liberal arts, and others with more technical background might have obsolete knowledge, community colleges rely heavily on adjunct instructors. Though adjuncts are generally paid poorly relative to regular faculty, those in health care or technical classes are often medical or engineering professionals requiring better compensation. Aside from financial issues, that makes it hard to scale successful workforce development programs.

<sup>14</sup> See <http://www.ncsl.org/research/education/performance-funding.aspx>.

(Holzer, 2014).<sup>15</sup> Movement in the direction of measuring and incentivizing student performance in terms of improved employment outcomes will be important, so that colleges will have incentives to advise more students to major in high-demand programs (like AS rather than AA) and to provide the necessary teaching capacity to absorb them.

A second approach to solving the skills gap are *sector-based training* strategies that involve partnerships between industry representatives, training providers (usually community colleges) and intermediaries who bring them together (Conway and Giloth, 2014). The training provided is therefore certain to meet employer skill needs, and employers come to trust the intermediaries to send them only well-trained students.

The sectors in which these strategies are applied are usually those that pay reasonably high wages to workers with education below the BA level, where demand growth has been consistently strong, and where employers claim to have some difficulty meeting their skill needs on their own. As noted earlier, these sectors usually include health care, advanced manufacturing, information technology (IT), transportation and logistics, and parts of the service sector such as the higher end of retail or leisure and hospitality. Rigorous evaluation of such programs (Maguire et al., 2010) shows that such training can have large impacts on the earnings of poor trainees.

A related approach involves the building of *career pathways* in these sectors, where students pursue careers through a series of steps that involve intermediate (or “stackable”) credential accumulation and work experience along the way. For example, students might begin by becoming Certified Nursing Assistants at first, ultimately aiming for Licensed Practical Nurse (LPN) or even Registered Nurse (RN) degrees. Some students take multiple steps across the pathways, when the timing is appropriate, though others do not.

Because they have some employer support and also some promising evaluation outcomes, most states around the country have adopted some such strategies, and the reauthorized Workforce Innovation and Opportunity Act (WIOA) in 2014 required states to expand sector partnerships and career pathways. Scaling the best programs is challenging. The partnerships can take years to build and become operational; in a very dynamic and uncertain labor market, where strong labor demand today can disappear tomorrow, such partnerships may not be nimble enough to be viable. And the constraints mentioned above on community colleges often limit scaling, as does general employer wariness of participating in publicly funded programs.

In addition, questions remain about who gets served by these programs and how long the positive impacts last. Successful programs mostly serve the working poor with quite strong basic skills, rather than the hard-to-employ; indeed, the latter would have difficulty mastering the training involved, and employers would quickly lose confidence in their intermediary partners if the latter did not screen out the most disadvantaged. Thus these solutions depend upon prior skill building in the pre-K-12 years of education.

Increasingly, the necessary remediation for weak skills is built into the career pathways for low-income students and workers. This skills-building augmented career pathways approach can help to compensate for prior skill development. Among the best-known and most successful remediation efforts are the Integrated Basic Education and Skills Training program (I-BEST) in Washington, where occupational classes are co-taught by substance and remedial instructors; and the LaGuardia Bridge program, where students taking their GED classes received some labor market information and counseling.<sup>16</sup> Reforms in the delivery of remediation more

<sup>15</sup> Another approach is to allow institutions to charge higher tuition for high-demand or more expensive classes, as was done in Texas (Kim and Stange, 2016). But this could easily cause lower-income students to be priced out of these fields of study, unless they receive proportionately more financial aid in these fields.

<sup>16</sup> The extent to which these kinds of programs can broadly generate access to skills training for the hardest-to-employ remains to be seen. Several states are now trying to replicate the results of I-BEST within various career pathways in the “Accelerating Opportunity,” though evaluation impacts are not yet available (Anderson et al., 2015). The U.S. Department of Health and Human Services is also testing the ability of career pathways programs to serve the least-educated workers in its Health Professions Opportunities Grants (HPOG) and Pathways for Advancing Careers and Education (PACE). Bridge programs like LaGuardia (Martin and Broadus, 2013) are also being replicated in a variety of programs, though the success rates of students in passing the GED exam under the LaGuardia program remained quite low (about 20 percent).

generally—for instance, by making developmental classes co-requisite with rather than prerequisites for credit-bearing classes, thus enabling students to gain credit more quickly—are beginning to occur in many states (Long, 2014).

Furthermore, getting the right mix of general and specific skills and credentials for workers is important here. The sector-based programs work because they meet specific employer skill requirements. But what happens when workers leave these firms and sectors to gain employment elsewhere? Some portability of the skills that workers gain across firms and sectors is important for long-run impacts, especially if the public sector will be subsidizing the training.<sup>17</sup>

Overall, the challenges of expanding high-quality education and job training options for disadvantaged workers anywhere are quite great, and especially when the disadvantaged are also residents of very low-income and racially segregated communities. Yet, having listed these problems, we should also point out some more encouraging efforts along these lines.

For instance, the National Fund for Workforce Solutions, created and funded by a set of national foundations plus some federal funding, has built over 30 such partnerships (between employers, community colleges, and intermediaries) on the local and regional level around the country, with considerable success. Evaluation evidence on their efforts has been relatively positive, and much has been learned along the way.<sup>18</sup> Newer models of programs that support low-income students at community college, like Accelerated Studies in Associate Programs (ASAP), also show that dramatically improving student completion rates is possible if sufficient resources are available.<sup>19</sup>

A third approach to skills training deserves mention here: high-quality career and technical education (CTE) that begins in high school and creates pathways into community colleges and the job market can play a much more positive role in many communities than it has to date. Historically, “vocational education” in the United States tracked low-income and minority children away from college, and thus became discredited. But newer models of CTE do not require students to avoid college; indeed, CTE can be a way of teaching strong academic skills by contextualizing them in applied projects or work. Students can take college preparatory (and even Advanced Placement) classes while they also take some classes and enter a “career cluster,” which they can further pursue at two-year or four-year colleges.<sup>20</sup> But nothing locks them into the careers that they explore. At the same time, those not bound for four-year colleges right away get stronger preparation for pathways into community college or direct entry into the job market.

David Stern (2016) has shown that, nationally, the quality of students taking CTE has risen over time, and more of them are taking high-level math and science; this will help reduce the stigma over time associated with CTE. And there are particular models that are especially promising or proven in raising earnings for CTE students.

For example, rigorous evaluations of Career Academies show long-term impacts on the earnings of at-risk students, and especially of at-risk men.<sup>21</sup> The academies of the 1990s did not reduce college-going of this population, thereby indicating that they were not tracking students away from college; perhaps newer models actually encourage more enrollments there. The High Schools That Work, popular in several southern states, have high graduation rates and high rates of student enrollment and completion of upper-level math,

17 Gary Becker’s seminal work on “human capital” formation argued that general skills will be financed exclusively by workers, since they can leave their employers at any time and take their investments with them, while specific skills will be partly financed by employers, since the external market for such skills is more limited. Subsequent theoretical models of training (e.g., Acemoglu and Pischke, 1998) blur this distinction somewhat.

18 See Michaelides (2015).

19 See Scrivener et al. (2015). The ability of other colleges to replicate ASAP is limited not only by its costs but also by the fact that it was limited to full-time students, which excludes many of the disadvantaged students who most need help.

20 The Carl T. Perkins Act, the federal legislation that distributes modest funding to CTE programs, now requires states to use career clusters and pathways to organize their CTE programs. The framework most frequently used by the states to do so includes 16 clusters, such as IT, health care, manufacturing, business, arts and education; within these 16 clusters, 79 more specific pathways are presented. The pathways extend to two-year or four-year colleges, with specific courses that should be taken in each.

21 See Kemple (2008).

science, and English classes. Linked Learning is a district-wide and whole-school model of CTE that has been developed and implemented in California. And, recently, the P-TECH programs in New York have been based on partnerships between IBM, the City University of New York (CUNY), and local high schools. This is a grade nine through fourteen model where high school students move directly into associate degree studies and get work experience along the way. It is also spreading to service industries beyond the world of IT.<sup>22</sup>

One of the most important benefits of CTE is the work-based learning that students receive. Many low-income students prefer learning on-the-job to doing it in the classroom, and are motivated by earning money while they learn. For single- or low-income parents, payment or stipends for work are critical to their continuation in training programs. Employers also sometimes prefer training on-the-job, where they know the skills generated will be the ones they seek and value.

Perhaps the best form of work-based learning is the *apprenticeship model*, which is quite popular in most European Union countries (Hoffman, 2013; Newman, 2016) and is beginning to make a comeback in the United States. Students usually combine some classroom learning with training on-the-job; they can attain a postsecondary certificate or degree, which signals more general occupational training, while also getting the specific training the employer seeks. Workers are paid, but usually below-market wages, so employers do not bear the cost of the training. A number of states, such as South Carolina, Georgia, and Wisconsin, seek to expand apprenticeships in their states using a variety of methods (such as tax credits to employers or grants to local schools), and the Obama Administration supports them through competitive grants like the American Apprenticeship Grants program (Lerman, 2014). Quasi-experimental evidence (Reed et al., 2012) shows strong impacts of apprenticeships on the subsequent earnings of workers.

But, once again, whether disadvantaged students can benefit from them depends on their ability to handle some of the more technical training provided in many cases, hence the importance of prior skill building. Pre-apprenticeship programs sometimes prepare disadvantaged students for apprenticeships in construction and other industries, though completion rates of the preparatory programs are modest.<sup>23</sup>

High-quality CTE and apprenticeships are important building blocks in the “pathways to prosperity” that some key states are trying to build.<sup>24</sup> Dual enrollment at community colleges for high school students is another. The extent to which these programs successfully expand educational attainment and subsequent earnings for disadvantaged students needs to be better understood.

## Access to Good Schools and Jobs

### CURRENT STATE OF AFFAIRS AND CHALLENGES

Creating more and better jobs in a region, as well as education and training programs to give workers the skills to fill them, are critical steps to reinventing older communities. But they alone are not sufficient to ensure that disadvantaged workers in these communities share in any prosperity generated by them.

As discussed in Acolin and Wachter (2016), in metropolitan areas that are heavily segregated by race and/or family income, access to good schooling and jobs is often limited for minority and low-income residents. Residence in highly segregated and/or poor neighborhoods often means that children attend weak public

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<sup>22</sup> See Chapter 7 in Holzer and Baum for more details on these models.

<sup>23</sup> See Conway et al. (2010).

<sup>24</sup> The Pathways to Prosperity Network includes a group of states organized by Robert Schwartz of Harvard and Nancy Hoffman of Jobs for the Future in Boston.

schools, and are also harmed by a lack of positive role models and “social capital” as well as by exposure to neighborhood violence.<sup>25</sup>

Another way that racial residential segregation can contribute to employment difficulties of neighborhood residents is through a “spatial mismatch” between residents and more decentralized employer locations (Holzer, 1991). The growth of minority and low-income populations in older suburbs around the country can ease such mismatch but not eliminate it, especially if much of the region’s economic development is concentrated downtown or in more affluent suburbs (Holzer and Stoll, 2007).

Networks of employees within firms that affect subsequent hiring patterns vary by race, and these networks appear to be influenced by locational factors (Hellerstein et al., 2013). And, racial discrimination by employers can also vary systematically by location, with suburban employers in higher-income areas engaging in more such discrimination than those located in central cities and older, inner-ring suburbs.<sup>26</sup>

## OPPORTUNITIES FOR SOLUTIONS

Improving access of poor residents of major metropolitan areas to good schools and jobs is clearly a critical additional step to ensure that economic development is inclusive and widely shared.

As Marjorie Turner (2016) notes, there are a variety of ways to improve access of poor neighborhood residents to better schools and jobs, which she broadly labels “place-conscious strategies;” these can include enhancing the mobility of residents to better neighborhoods, improving the quantity and quality of schools and jobs within poor neighborhoods, or hybrid strategies to improve residents’ access to good schools and jobs anywhere in the metro region from any location.

As put forth by Steinberg and Quinn (2016) regarding good schools, such access must begin with high-quality pre-kindergarten programs and continue through the K-12 years, in order to shrink the achievement gaps that typically develop in those years. Solutions include those put into place by the stronger models of urban charter schools, (like KIPP academies) associated with school management networks.<sup>27</sup>

Having high-quality guidance counselors in place to discuss the full range of post-K-12 training opportunities is also important and must go along with providing the options that deliver the full range of college opportunities.

The most important training for good jobs will occur in CTE programs in high schools and community colleges. Access to community colleges for low-income residents can be enhanced by providing transportation, childcare, and other necessary benefits. A nationwide organization called Single Stop, now operating in community colleges around the country, seeks to make sure that community college students are aware of and can receive a range of available benefits and supports.

Links to the job market and employer partnerships are critical if these programs are to successfully offer opportunities for work-based learning and employment. Because employers might be deterred by negative perceptions (whether justified or not) of the abilities of students in low-income schools, the active involvement of the intermediaries described above is key. These intermediaries can help generate employer confidence in the quality of students referred to them for work and generate apprenticeships and other work-based learning opportunities for low-income students; work-based learning opportunities would be especially valuable in

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<sup>25</sup> See Chetty et al., *op. cit.*; Cutler and Glaeser, 1997; and Hanushek et al., 2009. Another way that racial residential segregation can contribute to employment difficulties of neighborhood residents is through a “spatial mismatch” between residents and more decentralized employer locations (Holzer, 1991). The growth of minority and low-income populations in older suburbs around the country can ease such mismatch but not eliminate it, especially if much of the region’s economic development is concentrated downtown or in more affluent suburbs (Holzer and Stoll, 2007).

<sup>26</sup> See Stoll et al. (2000, 2004) and Holzer and Reaser (2000). One reason that suburban employers may engage in more discrimination is that the managers in charge of hiring are more likely to be black in the other locations (Holzer et al., 2004).

<sup>27</sup> See Dynarski (2015).

building employer confidence over time in the workers' developing skills and in overcoming workers' lack of work experience on their records.

In addition, students must have better access to labor market information and career counseling about available opportunities throughout their metropolitan regions. Many states are developing labor market information systems to enable students to be better advised about returns to different courses of study and about current job vacancies.<sup>28</sup> For those in community college, access to One-Stop shops (or American Jobs Centers, as they are now called) can be very important. Indeed, the recent trend of One-Stop offices co-locating on community college campuses is a helpful one.

But students might need more than access to information; counselors who can advise them about different career ladders, and where there might be good employment options, are needed as well. And some students will clearly benefit from active assistance from job developers in making connections with area employers, to overcome the barriers of information, space and race described above.

Beyond information and transportation barriers, the reality of employer discrimination needs to be acknowledged and addressed. While strict enforcement of EEO laws is critical, statistical discrimination can result from employers having too little information about specific workers or job applicants; this can be addressed by making such information more readily available, especially through intermediaries whom employers trust.

## Conclusion

As the discussion above indicates, any attempts to generate inclusive economic development will face challenges. Three such challenges are paramount: 1) generating sufficient demand for their labor in the form of good-paying jobs; 2) creating the supply of skills among workers to fill such jobs; and 3) assuring improved access to good jobs and schools. Needless to say, addressing all of these challenges is a tall order. Yet there are also reasons for optimism on each of these issues, as we develop more state and local policy options to achieve these goals.

To achieve these goals, cities and states should move ahead with “actionable takeaways” to promote inclusive economic development efforts, such as:

- ➔ Using financial incentives and technical assistance to encourage firms to create more high-performance workplaces and jobs;
- ➔ Holding community colleges more accountable for the future employment outcomes of their disadvantaged students by tying funding to these outcomes;
- ➔ Helping employer groups, community colleges, and intermediaries scale up sector-based training strategies, and career pathways in those sectors with “stackable credentials” to train students for good-paying jobs where labor demand is high;
- ➔ Using high-quality CTE, apprenticeships, and dual enrollment programs to pursue these goals as well; and
- ➔ Providing transportation, childcare, and counseling on schooling and labor market opportunities (starting in high school or earlier) to residents of all neighborhoods so they can access good jobs and skill-building opportunities wherever they are found.

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<sup>28</sup> See Zinn and Van Kluenen (2014) for more information on the potential uses of these federal and state data. Most states are linking their administrative data on individual students at public higher education institutions with quarterly earnings data from Unemployment Insurance (UI) records, to measure the extent to which different programs of study and different institutions are successfully preparing students for the labor market afterwards. These data are used both to inform students about their potential choices and also in performance-based funding strategies for states imposing accountability on their colleges and universities.

While cities and states implement these policies, researchers should rigorously evaluate the different models pursued in different areas, to determine what works most cost-effectively and for whom. The opportunity to learn from all such experiments is great and the research community should take full advantage of it.

Clearly, the challenges facing cities and states in their attempts to grow will be so great that they will need active support from the federal government. One way to provide this support is a federal “Race to the Top” strategy for our community colleges (Holzer, 2016)—along the lines of what the Obama Administration did in K-12 schooling—wherein the federal government would provide significant new resources to states that bring new accountability to their higher education budgets and systems.

States could also emphasize subsequent earnings of their students as well as their academic outcomes. In addition, states could explicitly reward colleges that promote advancement for minority and/or disadvantaged students, and could restrict the spending of these new resources to expanding teaching capacity in high-demand middle-skill fields and to raising important services and supports for low-income students. Expanding career pathways with work-based learning (especially apprenticeships) and sector-based training could also be an explicit goal.

Of course, even absent such a federal policy, states and cities can try to implement such an agenda on their own, as many are doing now through new accountability policies to distribute subsidies to public institutions of higher education. In any case, as noted earlier, accountability should be based on the subsequent earnings of students, especially the subsequent earnings of disadvantaged students, to a greater extent than they are now. Making these changes will usually require greater infusion of resources to community colleges, which are already quite strapped for resources in most states.

Other federal and state funds that explicitly promote inclusive development should also be supported with grants and technical assistance from the Departments of Education, Labor (or Workforce Development), and Commerce at each level. Federal and state governments should explicitly commit to supporting high-road workplace choices by employers in all of their forms.

With these forms of federal and state support, cities and regions can undertake the critical work of generating inclusive development. Undoubtedly, success will not be achieved everywhere, and outcomes will likely be mixed in almost all such efforts. These efforts should be viewed as part of a long-term learning strategy, where mid-course corrections would and should be encouraged. But the upside to improving opportunities for disadvantaged and minority residents in older urban areas will be great.

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