Western Pennsylvania's workforce development system:

challenges and opportunities





Preface

This report contains the findings of a cross-organizational team formed to study Western Pennsylvania's workforce needs and the workforce development system. Team members who volunteered their time include representatives from the Richard King Mellon Foundation, Claude Worthington Benedum Foundation, Three Rivers Workforce Investment Board, Allegheny Conference on Community Development, and Allegheny County Department of Human Services. McKinsey & Company supported the effort by providing a fact based analysis.

The team collected information from publicly available sources and interviewed leaders in the region's workforce development community, including employers, educators, and government and non-profit officials. The goal of this effort was not to make specific policy recommendations but rather to provide a fact base to support the region's leaders as they discuss how the workforce development system can be improved to best meet the region's workforce needs.



Jobs picture in Western Pennsylvania

100,000 number unemployed

40,000 number of unfilled vacancies

65% unemployed having high school diploma or less

50% vacancies requiring Associates degree or higher

Workforce development picture in Western Pennsylvania

\$300-350 million

funds flowing into the region for workforce development and supportive services such as child care

\$200-250 million

funds flowing to traditional workforce development activities

<10% vacancies posted on official state website

10+ funding sources

<25%unemployed registered in official state system

20+ administrators

400+ training and development providers

Western Pennsylvania's workforce development system: challenges and opportunities

Context

Job creation has been a topic of intense national focus over the past several years. While creating jobs is a critical priority, an equally important priority is establishing an effective workforce development system that is focused on preparing potential employees and matching them to available jobs. Determining the most efficient and effective approach to workforce development remains a challenge, however, due to the complexity, fragmentation, and lack of transparency of the current system. Several studies have highlighted challenges facing the workforce development system, a Pew Charitable Trust study for the city of Philadelphia¹ being a recent example. Serious discussions are also underway at the federal level on this issue, particularly around proposals to reauthorize the Workforce Investment Act (WIA) funds.

The task facing any workforce development system is daunting – it must react to both the long-term shifts in the job supply, such as migration away from industries like manufacturing and the rise of industries like healthcare and professional services², and near term shocks to the system, such as the economic downturn in 2008. Getting workforce development right is a major opportunity as the stakes are high. In 2010 alone, over \$35 billion was spent in the United States on workforce development related activities, while at the same time the national unemployment rate hovered around 9%, translating into nearly 21 million individuals unemployed. Above and beyond this, an additional 2% of the labor force (called the marginally attached population) had stopped looking for work altogether and were excluded from the unemployed population³.

Western Pennsylvania⁴ faces similar challenges. The region's economy has shifted significantly in the last few decades, moving away from a focus on steel and related manufacturing industries to include a more diverse mix of industries including education, finance, and healthcare. More recently, mining and oil and gas extraction have shown tremendous growth and are likely to continue growing over the next five years⁵ (EXHIBIT 1). This means that the skills required of workers today are very different from the skills required of workers from even a decade or two ago. The region's workforce is also one of the oldest in the nation, which will create challenges as large numbers of retirees leave the workforce in the near future.

^{1 &}quot;Philadelphia's Workforce Development Challenge ", The Pew Charitable Trust, January 18, 2012

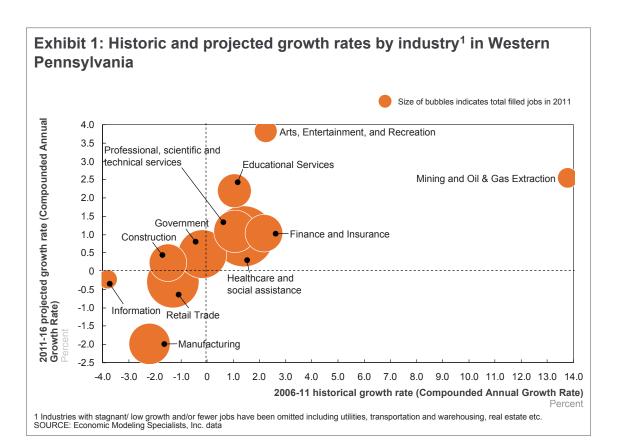
² Based on the sectors with the highest and lowest employment growth rates in the McKinsey Global Institute An economy that works report; professional services includes professional, scientific and technical service jobs (e.g., research scientists, architects)

³ United States Department of Labor - Bureau of Labor Statistics

⁴ Western Pennsylvania includes Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland counties

⁵ Historical and projected industry growth rates in terms of total filled jobs; taken from EMSI industry data at the one-digit NAICS code level





The economic downturn also took its toll on the region with the unemployment rate reaching 8.1% in December 2010, the highest in 25 years (EXHIBIT 2). This translates into ~100,000 unemployed individuals in Western Pennsylvania. Remarkably, around this time period the region had ~40,000 job vacancies. An ideal workforce development system would not only identify the long-term trends in employment and prepare the workforce accordingly, but efficiently fill those ~40,000 vacancies with qualified workers – and in doing so drop the region's unemployment rate to ~5%. While there never will be a perfect system, the opportunity for Western Pennsylvania to enhance the effectiveness of its workforce development system is clear.

Defining Workforce Development

A Congressional Research Service study defines the workforce development system as a set of programs that provide a combination of education and training services to prepare individuals for work and to help them improve their prospects in the labor market. In the broadest sense, workforce development includes secondary and postsecondary education, on-the-job and employer-provided training, and the publicly-funded system of job training and employment services. Workforce development may include activities such as job search assistance, career counseling, occupational skills training, classroom training, or on-the-job training⁶

Thus a workforce development system delivers both occupational and foundational skills training to prepare job seekers for a given industry, and then provides a mechanism to match individuals with jobs. The system also coordinates with other agencies to ensure that the appropriate resources are deployed to remove barriers to employment (such as affordable transportation, child care, and drug rehabilitation).

⁶ David H. Bradley, "The Workforce Investment Act and the One-Stop Delivery System," Congressional Research Service, January 10, 2011 and U.S. Workforce Investment Act of 1998, Public Law 105-220

⁷ Skills such as appropriate dress and demeanor, dealing with customers etc.

Many components of the existing workforce development system in Western Pennsylvania have grown organically in response to specific needs, meaning there is in fact no single, coordinated system. Rather there are hundreds of different players, all playing some role in workforce development. A clear understanding of the contours of this system, the needs of the region, and the unemployed population is critical for effective service delivery. To frame the dialogue around improving the efficiency and effectiveness of the existing workforce development system, this paper addresses four key points:

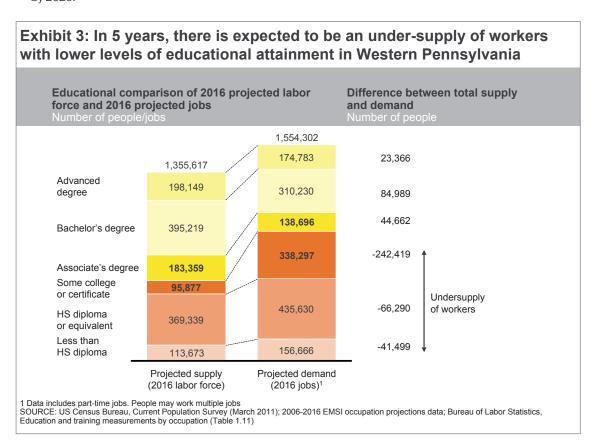
- 1. Mismatch between the region's labor supply and job demand
- 2. Description of the region's complex workforce development system
- 3. Challenges facing the existing system
- 4. Opportunities to improve the system's efficiency and effectiveness

Exhibit 2: Unemployment rate in Western Pennsylvania reached a 25 year high in 2010 Unemployment rate in Western Pennsylvania and nationally 10 9 National unemployment rate 8 10-county region 7 unemployment rate 6 5 4 3 2 1 0 1990 1995 2000 2005 2010 1985 SOURCE: Moody's analytics



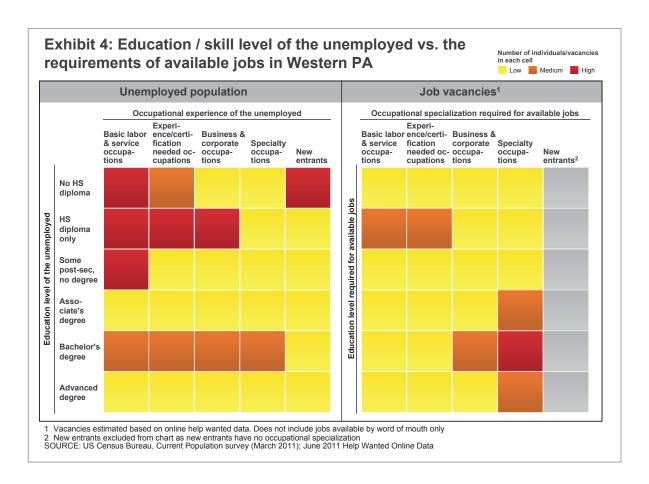
1. MISMATCH BETWEEN THE REGION'S LABOR SUPPLY AND JOB DEMAND

There is a large and widening mismatch in Western Pennsylvania between the education and occupational skill level of employees and the requirements of the region's jobs. Across the entire labor force of Western Pennsylvania (both employed and unemployed individuals), there is an over-supply of workers with bachelor's degrees and higher (i.e., more graduates than jobs requiring those skills) and an under-supply of those without college degrees (i.e., fewer individuals than jobs requiring those skills)⁸. The implication of this gap is that many people currently employed may actually be "over-qualified" for their current jobs. Forecasts from the US Census Bureau's Current Population Survey and Economic Modeling Specialists, Inc. suggest that this gap is likely to widen over the next five years (EXHIBIT 3). This has broad implications for workforce development and job creation initiatives. If not addressed, this gap will continue to fuel the net outflow of higher educated/ higher skilled workers from the region as they search for more appropriate employment in other parts of the country. This educational mismatch differs from the situation at the national level, where there is a projected shortfall of 1.5 million workers having a bachelor's degree or higher by 2020.



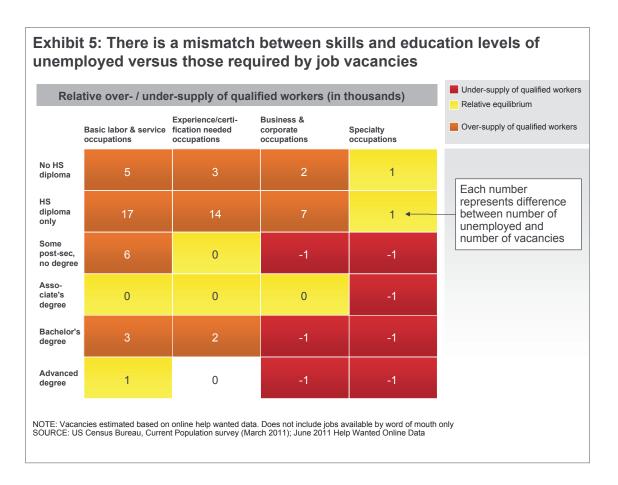
⁸ Labor supply projections calculated by applying historical trends to the US Census Bureau's Current Population Survey demographic data; demand projections taken by applying typical educational attainment distribution of individuals currently employed in a given occupation, as noted in the Bureau of Labor Statistics' Occupational Outlook Handbook, Table 1.11 (Education and training measurements by occupation) to EMSI occupation projections

A different picture emerges when the analysis is narrowed to the region's unemployed population only. The ~100,000 unemployed individuals have, on average, lower educational attainment levels than typically required by the ~40,000 job vacancies. Just ~22% of the current unemployed population has attained an associate's degree or higher while 50% of current vacancies typically require an associate's degree or higher. The unemployed also typically have experience in jobs requiring less specialization (e.g., construction laborers, cashiers and retail salespersons) while the available jobs typically require higher specialization / expertise (e.g., registered nurses, physical therapists, industrial engineers, and accounting and auditing clerks) (EXHIBIT 4).



However, because there are more than 2 unemployed people for every job vacancy, there is still a significant near-term opportunity to get people back to work. (EXHIBIT 5) To address this opportunity, the workforce development system in Western Pennsylvania needs to focus on four areas:

- Close occupational skills gaps: At every education level there are more than enough unemployed
 individuals to fill the job vacancies. However, they do require occupational re-training (e.g., a
 construction worker being trained for a job in building and grounds maintenance)
- Close foundational skills gaps: Many unemployed are held back by a lack of foundational job skills (e.g., appropriate dress and demeanor, dealing with customers) which prevents those who are otherwise qualified from getting or keeping a job
- Reduce barriers to unemployment: Some unemployed also face additional barriers to getting and keeping a job, including lack of affordable transportation or child care, history of incarceration, or inability to pass a drug test
- *Match the unemployed with jobs:* An efficient mechanism to match qualified individuals with available and appropriate jobs is not always readily available.



2. A COMPLEX WORKFORCE DEVELOPMENT SYSTEM HAS GROWN TO MEET THE REGION'S WORKFORCE DEVELOPMENT NEEDS

The workforce development system includes funders (government agencies and local foundations), workforce development providers (such as educational institutions and career management organizations), and administrators who oversee the flow and distribution of funds (such as Workforce Investment Boards or WIBs). Taken together, these organizations comprise the "workforce development system."

In 2010, \$300-350 million⁹ was spent on workforce development in Western Pennsylvania

The \$300-350 million spent annually on workforce development in the region is a significant sum. To put this amount in perspective, this spending equates to nearly \$3,000 per unemployed individual or \$7,500 per job vacancy. If it were a line item in the state's 2010-11 budget, the total funding for workforce development programs in Western Pennsylvania would rank fourth behind state-wide spending on Public Welfare, Education, and Corrections.

About 30% of all funding, or \$90-100 million, is available to all individuals. The rest is designated for specific populations, including low-income, disabled, dislocated, ex-offenders, aged, veterans, Native Americans, refugees, and single parents.

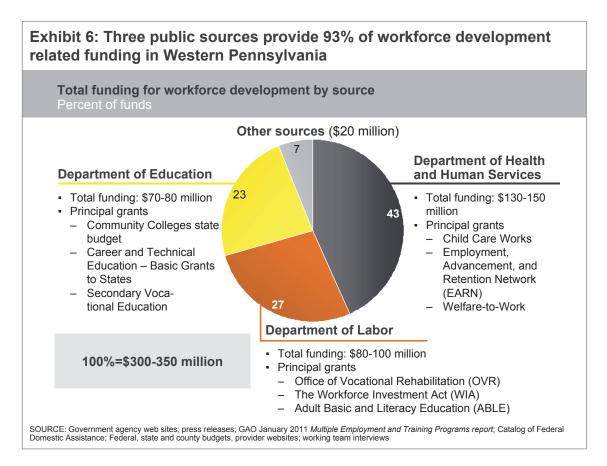
About \$95-110 million of the total funds goes towards supportive services such as child care and to employers providing in-house training. If these are excluded, the amount flowing towards "traditional" workforce activities such as occupational and foundational skills training, counseling and case management, and adult basic literacy is about \$200-250 million.

⁹ Data available on total funding in Pennsylvania; proportion for Western Pennsylvania estimated based on results from multiple methods such as proportion of population in the region, proportion of unemployed individuals in the region and WIA allocations. Funding for youth programs has been excluded.

¹⁰ Foundation funding in Western Pennsylvania is the only source of private funds discussed in this paper. Contributions from individuals, corporations, and other private organizations are not considered.

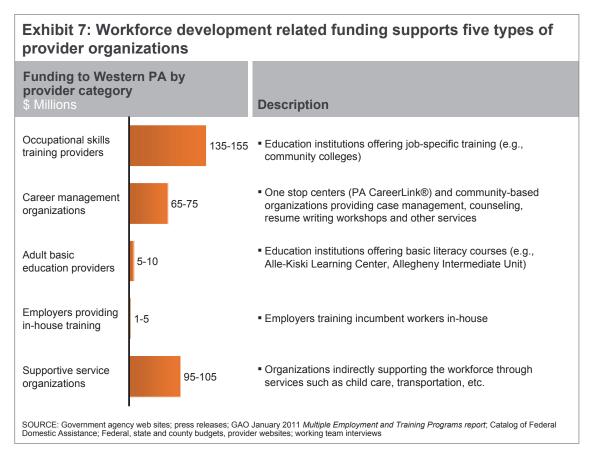
Funding is provided in the form of 120 formula and project grants. Formula grants, which account for 95% of all workforce development funding in Western Pennsylvania, are distributed based on federally mandated formulas. They typically guarantee funding to recipients for a set period and become an annual budget line item for federal and state agencies. In Western Pennsylvania, 40 formula grants account for approximately \$300 million, including the Workforce Investment Act (WIA), Child Care Works, Wagner-Peyser employment services, Trade Adjustment Assistance, and state funding of community colleges. The remaining 5% of workforce development funding comes from project grants, which are competitive and based on applications with no guarantee of award. Of the ~80 project grants available, 50 provided funds to Western Pennsylvania in 2010. They include the Job Access-Reverse Commute, Veterans Workforce Investment Program, Women in Apprenticeship, and the Allegheny Jail Collaborative.

Three public funding sources—the Departments of Labor & Industry, Education, and Health and Human Services—account for more than 90% of all workforce development funding in Western Pennsylvania (EXHIBIT 6). This includes federal grants flowing through the respective state departments as well as grants made by the state departments. Local foundations also support workforce development in the region, providing at least 27 grants worth roughly \$4.5 million in 2010.



This funding supports about 400 different workforce development providers

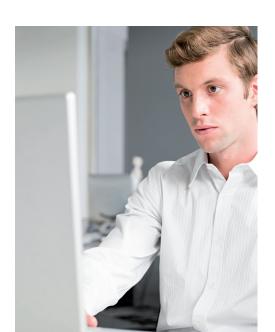
Workforce development funds support regional development providers, such as educational institutions and community based organizations, who prepare job seekers for employment and help match them to available vacancies. About 400 providers exist in Western Pennsylvania and fall into one of five categories: occupational skills training, career management, adult basic education, employer in-house training, and supportive services (EXHIBIT 7). In addition to these providers, several organizations offer project management services and workforce-related consulting.



Most funding flows through more than 20 local administrators

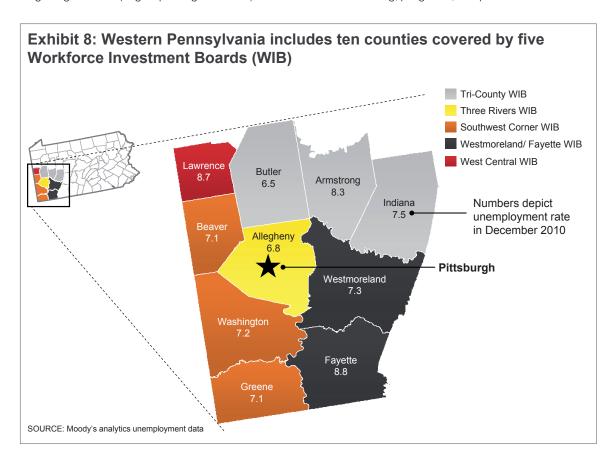
Of the 120 workforce development grants, 75 grants accounting for about three-quarters of total funds flow through some type of administrator who allocates money to programs and providers and monitors their use and effectiveness. The rest of the money flows straight to the development providers (e.g., Department of Education grants to community colleges). Western Pennsylvania has more than 20 administrators, including local Workforce Investment Boards (WIBs), Child Care Information Services, Local Management Committees, Goodwill of Southwestern Pennsylvania, and the Greater Pittsburgh Literacy Council.

The WIBs were established by the Department of Labor as part of the Workforce Investment Act (WIA) in 1998 to oversee major regional workforce development initiatives (EXHIBIT 8). They are responsible for allocating funds, establishing goals, monitoring performance, and collecting and reporting on local labor market information. The WIBs also select operators for the associated one-stop centers called



PA CareerLink® and fund other, smaller workforce development programs. One-stop centers were established as part of the WIA to bring together job seekers, employers, and training and development providers. The one-stop centers are accessible to all job seekers including people with disabilities. Services offered include information about job vacancies, career counseling, training on basic skills (e.g., computer literacy, soft skills, resume writing), and referral to specific training programs and unemployment insurance claims processing.

Just 25% to 30% of all funding flows through the five independently operated WIBs and the associated one-stop centers in Western Pennsylvania. This figure increases to only ~40% if the ~\$95-110 million flowing to supportive service organizations and employer in-house training is excluded. Consequently there is no single organization (or group of organizations) with a full view of all funding, programs, and performance.



3. CHALLENGES FACING THE EXISTING SYSTEM

During the course of collecting the factbase described above and conducting more than two dozen interviews with employers, foundation leaders, development providers, etc., three common challenges emerged:

- System fragmentation
- Limited employer engagement
- Inconsistent service delivery in local one-stop centers

System Fragmentation

The current workforce development system is highly fragmented at every level. Ten public and several private organizations provide money through 120 grants. These grants flow through more than 20 administrators with even the largest administrators controlling less than 5-6% of total funds. The 400 development providers offer overlapping or similar services.

Fragmentation is not necessarily a drawback. In many cases, a decentralized system could be better at innovating or serving a diverse and widespread population. However, this advantage would require transparency into results and efficient allocation of funds to winning models. Instead, the degree of fragmentation of the workforce development system makes it very difficult for organizations to work together to maximize available resources and leads to four sub-optimal outcomes:

- Lack of common vision and understanding: With so many different players, it is difficult to agree on, let alone execute against, a unified strategy and vision. Many groups have specific issues they are focused on, with no single organization having a full understanding of how all funds are allocated. Furthermore, no central repository of information exists to help funders and administrators make allocation decisions.
- Potential redundancy of efforts: Several grants / programs have overlapping objectives and similar service offerings. Because there is no unified strategy to encourage collaboration, no database with grant information, and few established communication channels, there may be redundancy in purpose and use of grant money (EXHIBIT 9)

Exhibit 9: One tangible result of fragmentation is a potential redundancy in efforts

Several grants target similar populations. . .

- 9 grants target disabled individuals including:
 - Life's Work of Western Pennsylvania
 - Disability employment policy development
 - Projects with industry
- 13 grants target formerly incarcerated individuals including:
 - Second Chance Act
 - Reintegration of Ex-Offenders
 - Allegheny Jail Collaborative
- 5 grants target veterans, including:
 - Local veterans Employment Representative Program
 - Veterans Workforce Investment Program
 - Transition Assistance Program
- 4 grants target native Americans including:
- Native American Employment and Training
- Native American Employment Works

...and these grants typically offer similar services

| ٠. | | | |
|----|---|-----------------------|--|
| | Grant | Funding source | Services offered |
| | Life's Work of Western Pennsyl- vania | | Job placement servicesSupportive services |
| | Disability employ- ment policy develop- ment | Dept. of labor | Employment/ counseling and assessment Job readiness training Occupational skills training Job placement services |
| | Projects with industry | Dept. of education | Employment/counseling and assessment Job readiness training Occupational skills training Job placement services |

SOURCE: Government agency websites; press releases; GAO January 2011 Multiple Employment and Training Programs report; Catalog of Federal Domestic Assistance; Federal, state and county budgets, provider websites; working team interviews

- Inability to track and manage performance: Funders and administrators often find it difficult, if not impossible, to understand and measure the true performance of development providers, or to calculate the impact of their contributions. Because each funding source collects data and measures performance in different ways, it is difficult to compare performance across different organizations. There is also no transparent source of quality outcome information available to the public on training providers to help guide enrollment decisions.
- No systematic way to share best practices: There is no systematic way to share valuable information and best practices, making it difficult for organizations to benefit from lessons learned by others. For example, while the five WIBs in Western Pennsylvania admittedly serve different communities, communication among them is limited, potentially causing them to miss opportunities to share information on employer engagement methods and internal processes such as counseling techniques.



Increasing employer engagement with the workforce development system is a clear opportunity. One tangible example is that less than 10% of employers post jobs within the CWDS system¹¹ (the official data repository used by one-stop centers) and only about 10% of all vacancies in the region are included in the CWDS database.



There is also limited engagement of employers when it comes to design of the curriculum for training and educational programs. Many training and education programs are created and delivered without considering input from employers. This is despite the fact that occupational training has been proven to be most effective when it directly trains an employee for a specific job. Employers who have an opportunity to tailor training find it more valuable and have shown a greater willingness to share in the cost and hire graduates. For example, a manufacturer who helped define the curriculum for a course called Mechatronics¹² offered each employee a \$5,000 bonus for completing the training. While some educational programs rely on employers throughout the process, from identifying a need to designing and delivering curriculum, other programs do not collaborate with employers in any way.

Yet every employer interviewed as part of this effort reported a desire to improve their engagement with the system. So what explains the current lack of engagement? Three main reasons were identified:

- CWDS System usability: Employers state that the state CWDS system is cumbersome to use and slow to navigate. They cannot automatically upload jobs from existing postings via RSS feeds and are required to refresh postings every month.
- No access point: Employers cannot always find ways to connect with the workforce development system. Employers reported that with so many different organizations involved in workforce development, they don't know where to start. Meanwhile, education providers and one-stop centers don't know which employers want to be involved in providing data on future job outlook or in curriculum design—or whom to contact at a given company.
- Employer fatigue: The primary channel used by education providers to solicit employer input on curriculum design is education advisory boards, which include a panel of employers. While some of these boards are efficiently run, employers are largely disillusioned with the lack of clarity in objectives of advisory board meetings and lack of evidence of how their input is incorporated into actual curricula. Many employers interviewed cited reluctance to get involved with these boards in the future.

¹¹ CWDS is the State Department of Labor and Industry's central data repository used by one-stop centers. Numbers extrapolated based on Allegheny county results

¹² Mechatronics is a multi-disciplinary field of engineering which brings together various branches of engineering (e.g., mechanical engineering, electronic engineering, computer engineering)

Strong educator-employer collaboration can improve participants' learning experience and increase their chances of finding jobs upon graduation / program completion, particularly in high-growth, high-wage, and high-career mobility sectors. Similarly, improving employer-back data on current and future needs by industry sector will enable providers to better plan and prepare workers to meet employers' future needs.

Inconsistent service delivery in local one-stop centers

WIBs and one-stop centers have also cited challenges in delivering high quality services to job seekers. While each one-stop center has different strengths and improvement opportunities, three overarching challenges surfaced across multiple interviews:

Developing an understanding of job-seeker need: There is no consistent methodology used across one-stop centers to screen visitors and offer services based on specific needs. Multiple assessment tools are used, including Tests of Adult Basic Education (TABE), O Net, Career Decision Maker, My Skills My Future, and the American College Testing Program's (ACT) WorkKeys, but there is no common agreement on a single screening tool or on the downstream processes that should be driven by the results of the screening. In addition, each one-stop center has a different paper-based form which the job seeker has to fill-in, in addition to registering in CWDS and taking the above mentioned assessment tests.

Delivering effective counseling: One-stop centers across the region report that they are constrained in their capacity to properly counsel the unemployed. In one county in Western Pennsylvania, only ~7% of all individuals entering the one-stop centers received counseling. The one-stop centers in Allegheny County had about 13,000 visitors in 2011 yet only 39 counselors, translating to over 300 job seekers per counselor. In order for each current visitor to receive one-on-one service, counselors would need to see ten times the number of people they currently see per year.¹³

Counselors in CareerLink® offices are employed by different entities – some work directly for the Department of Labor and report to managers at the local CareerLink® site, while others work for other funders such as the Office of Vocational Rehabilitation and do not report to the local site manager. This makes it difficult to institute common training methods or manage performance in a consistent way.

Effectiveness of data systems and tools: The CWDS system contains limited information on job seekers and vacancies, and the information that is there is often incomplete. Only ~24% of unemployed individuals are registered as job seekers in the system and just ~10% of vacancies in the area are posted in the system. This compares to other job search sites, such as Indeed.com, which captures nearly 70% of vacancies in the area¹⁴. Information available on training providers is also limited, with no measure of quality of service. Finally, usability is a pain point for both job seekers and employers. The CWDS web page takes about 10 seconds¹⁵ to load – several times slower than Monster.com (0.17 seconds), CalJobs (0.42 seconds) and CareerBuilder (0.66 seconds). Each job seeker has to navigate 31 pages to create their profile on CWDS compared to 18 on Monster.com and 6 on Indeed.com.

4. OPPORTUNITIES TO IMPROVE THE SYSTEM'S EFFICIENCY AND EFFECTIVENESS

While the challenges facing the workforce development system are significant, there are real opportunities to increase the system's efficiency and effectiveness. Four main improvement opportunities were identified through this effort:

Improve data capture and use: Data in general is underutilized across the entire system. There is an opportunity to ensure that the right data is captured, is easily accessible, and is used to inform decisions,

¹³ All figures taken from Three Rivers Workforce Investment Board Briefing Book, a report covering the 4 PA CareerLink® offices in Allegheny County. Unemployed per counselor estimations based on estimates of unique customers and number of counselors on staff in Allegheny County CareerLink® offices.

¹⁴ Data taken from CWDS home-page. Figures available for all of Pennsylvania, assumed 23% of total for Western Pennsylvania (proportional to population) and 80% of all users are unemployed (proportion of visitors to CareerLink® that are unemployed). Indeed.com figures based on search of Indeed for jobs within a ~75 mile radius of Pittsburgh.

¹⁵ Page load speeds measured using iwebtool.com and results replicated using other tools

for example, in curriculum design, selection of training and human services programs for the unemployed, and matching unemployed to available jobs.

Transform one-stop centers: Implement a "door-to-job" transformation of the one-stop system, incorporating known best-practices to increase job placement and retention. Changes could include better understanding and segmentation of job seekers, creative means to increase counseling capacity (e.g., volunteer based counseling, group counseling), and tools and applications to improve counseling and matching.

Increase employer-driven curriculum and training. Make tactical changes to energize the business community's involvement in workforce development. This will require commitments from both "the system" and the region's employers. For example, there is an opportunity for key development providers and administrators to better demonstrate the ability to capture employer input regarding job requirements and rapidly bake those into training programs. In turn, employers have the opportunity to provide necessary information and increase their utilization of the system to source job candidates.

Ensure better system-wide collaboration: Establish formal mechanisms to identify opportunities for cooperation and coordination, agree on common strategies, and identify and remove roadblocks. Example mechanisms could include a high-level steering committee to oversee regional initiatives, collection and reporting of funding and performance information, consolidating some funding at the local and/or state levels, or channeling more funding through a single administrator.

Exhibit 10: Communities around the world are taking steps to address similar challenges

Chicago – Data transparency

Chicago has dealt with the issue of data transparency with the support of the University of Chicago's policy research group, Chapin Hall. As a third-party, Chapin Hall is able to compile information from across the system and offer unbiased perspective into all workforce related initiatives. The group frequently publishes reports, updating the public on different parts of the system.

Germany – Employer, educator collaboration Roughly 50% of students coming from secondary education in Germany enter a 2-3 year training program co-designed with the employers. This program is structured such that students spend half their time working on-the-job and half in classroom programs with curriculum tailored to the needs of the industry.

Singapore and Germany – Segmentation of job seekers In Singapore, counselors have been able to offer more tailored services to job seekers by completing an initial assessment along motivational and skill dimensions. All job seekers are given the same assessment. Based on gaps in motivation and technical skills, different intensities of support and counseling are offered. Similarly Germany segments job seekers into very granular "micro-segments" to tailor services offered.

As the region considers options to address these improvement areas, several elements should be considered to ensure successful implementation of any major program. These include identifying leadership and resources, gaining support from key stakeholders, and ensuring project management disciplines are in place to drive and monitor implementation. Initiatives undertaken may in some cases represent a considerable departure from status quo, requiring thoughtful change management to ensure outcomes are sustainable.

However, the region does not have to start from scratch. There are several individual initiatives already underway in Western Pennsylvania which could serve as examples for the workforce development system.

- The Human Services Integration Fund combined the efforts of local foundations to support the Allegheny County Department of Human Services
- There are several examples of effective employer-educator collaboration (for example, the Mechatronics course mentioned earlier in this paper) which have been cited by some employers
- The Talent Match system component of the ShaleNET program is a recent effort to design a comprehensive recruitment, training, placement, and retention program for high priority occupations in the natural gas drilling and production industry.
- The Allegheny Intermediate Unit (AIU) has been able to improve the reach of their counseling and training efforts by leveraging video conference technology
- Pennsylvania's recent investment in developing "spidering technology" could potentially eliminate the need for employers to enter job postings into multiple systems

These, and other local examples should be studied, along with case studies from around the world (EXHIBIT 10), to assess their applicability to the workforce development system.

The employers, educators, non-profits, and community-based organizations who participated in this effort all share a passion for workforce development and have expressed a desire to work together to enhance the system. This energy can hopefully be channeled to continue the dialog on the opportunities to improve the workforce development system in Western Pennsylvania.

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