Illinois Talent Pipeline Management
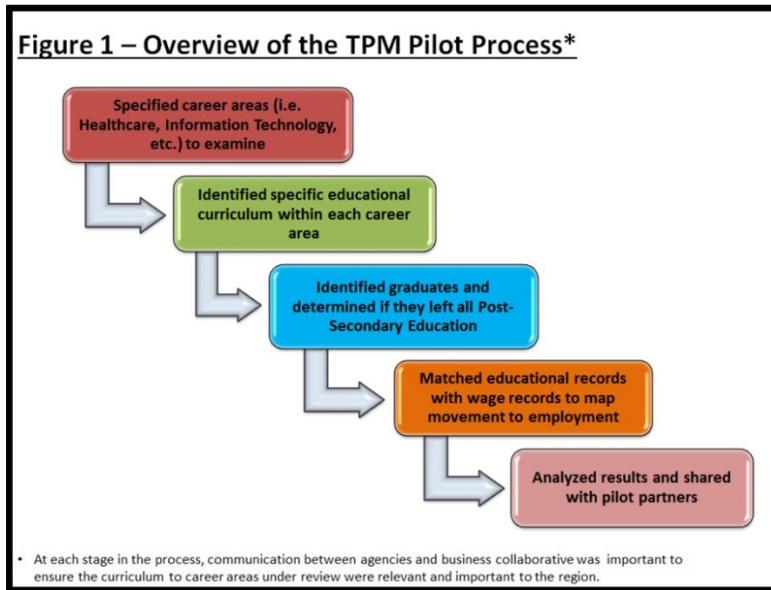## Pilot Project Summary

December 2016

Illinois Talent Pipeline Management Pilot Project

The Department of Commerce and Economic Opportunity (DCEO), the Illinois Community College Board (ICCB) and the Illinois Department of Employment Security (IDES) recently partnered with Vermilion Advantage to pilot a Talent Pipeline Management Project (TPM). The project mapped flows of qualified workers from talent suppliers, i.e. a community college, to assess utilization and the rates graduates stayed in or left the labor market area in the Vermilion County region.

Vermilion Advantage (a single, strong collaborative of business, government and education in Vermilion County, IL) includes over 60 employer members, representing one-third of its county's labor force. The employer-members willingly collaborate and invest time and resources to address the area's skill gaps, enhance Vermilion County's current and future workforce, and improve their profitability. The

Figure 1 – Overview of the TPM Pilot Process*

- At each stage in the process, communication between agencies and business collaborative was important to ensure the curriculum to career areas under review were relevant and important to the region.

collaborative includes a variety of employers including Advanced Manufacturing, Logistics, Technology Services, and Health Care, which was the primary industry analyzed within the pilot. Vermilion Advantage regularly utilizes data with its members to validate national, state and local workforce projections to identify high-demand skills and occupations. This data is used to determine how local, state and federal funds are invested in career development programs targeting primary and secondary students to build a robust talent pipeline. To build on those data efforts Vermilion Advantage was, for the first time, able to analyze the job placement and retention of community college graduates for their employer members and county via the TPM pilot through the usage of state agency data systems.
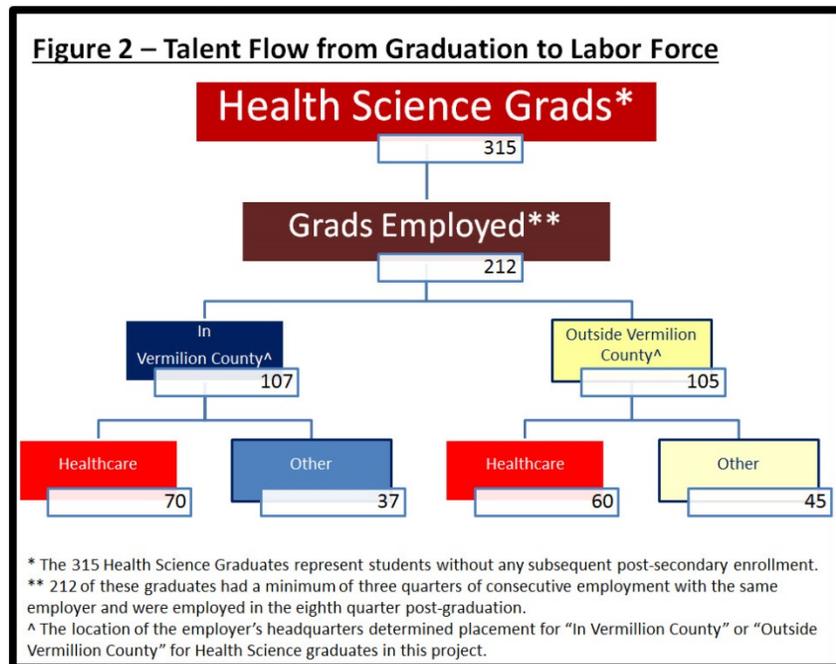
The customized, evidence-based Illinois TPM analysis builds on previous and current supply and demand efforts in Illinois, as well as work through the U.S. Chamber of Commerce Foundation and National Governors Association (for more information please see www.TheTalentSupplyChain.org and the NGA Talent Pipeline Policy Academy). The project promotes the application of state agency data systems to maximize state resources to inform students, parents, educators, and employers about their return on investment. The TPM project is innovative on two fronts:

1. Through collaboration with Vermilion Advantage, health sector employer members of Vermilion Advantage were identified and college graduates were tracked to those specific employers to determine the rate the graduates were employed through the collaborative and within Vermillion County. The college graduates in a Health Science field were mapped to employment post-graduation by linking ICCB student records with (IDES) Employer Unemployment Insurance (UI) Account data.

Data Sources: ICCB Centralized Data System, IDES Workforce Data System, and National Student Clearinghouse (NSC).

Page 1

2. To accurately map career job flows to industry and earnings, new and enhanced IDES career outcomes measures were applied to accurately examine job stability and attachment of Health Science graduates to career jobs by industry sector. The methodology is aligned with the US Bureau of Census to allow comparison between graduate outcomes to Illinois worker outcomes. Job Stability is defined as the time lapse between job hire and job separation. For this project individuals were considered connected to a specific career when they were employed for at least three consecutive quarters with the same employer.

Initial findings as part of the project, as illustrated in Figure 2, focused on 315 individuals identified as Health Science graduates who did not have subsequent enrollment in post-secondary education. Of the 315 individuals tracked, 212 (67%) were employed in any sector (including healthcare) in the eighth quarter (i.e. two years) post-graduation. Of these, 130 (61%) were employed in healthcare two years post-graduation. Furthermore, by applying the Employer UI Account Number to the career job for each college graduate, we were able to determine 70 graduates were employed in healthcare within Vermilion Advantage or Vermilion County and 60 graduates were employed in healthcare outside the Vermilion County area. Beyond employment in healthcare, Figure 2 shows additional employment activity into the local area and beyond associated with healthcare as well as other industries.

Figure 2 – Talent Flow from Graduation to Labor Force

Health Science Grads* — 315

Grads Employed** — 212

In Vermilion County^ — 107
Outside Vermilion County^ — 105

Healthcare — 70
Other — 37
Healthcare — 60
Other — 45

* The 315 Health Science Graduates represent students without any subsequent post-secondary enrollment.
** 212 of these graduates had a minimum of three quarters of consecutive employment with the same employer and were employed in the eighth quarter post-graduation.
^ The location of the employer's headquarters determined placement for "In Vermillion County" or "Outside Vermillion County" for Health Science graduates in this project.

Area college graduates in a Heath Science field during fiscal year 2011 or 2012 were selected based on their Health Science Classification of Instructional Programs (CIP) codes of completion. From ICCB's Centralized Data System, a total of 622 individuals earned 681 certificates and/or degrees associated with Health Science during the fiscal year 2011 and 2012 timeframe. The project then isolated students into two subgroups. Group One consisted of the 315 individuals outlined in Figure 2 that received a higher education credential and had no subsequent enrollment activity in post-secondary education. Group Two included 307 students that received a higher education credential, but appear with subsequent higher education enrollment after graduation through February 2016. Subsequent enrollment in higher education was determined by linking ICCB student data with National Student Clearinghouse (NSC) data. For purposes of this project, primary analysis only focused on Group One.

By utilizing robust state agency data systems at ICCB and IDES, the project was able to maximize state resources and have a standardized approach to pair college graduate data with Employer UI Account

Data Sources: ICCB Centralized Data System, IDES Workforce Data System, and National Student Clearinghouse (NSC).

Page 2

information. This approach, coupled with the collaborative employer engagement of Vermillion Advantage, helped to better define the local labor market for conducting analysis. The key to this approach was connecting student outcomes to career-based employment rather than simply checking to see if a student was employed in a follow-up quarter at some point in the future.

HIGHLIGHTS OF INITIAL FINDINGS

Employment was tracked for four quarters prior to the certificate/degree attainment quarter, the quarter the award(s) was earned and eight subsequent quarters post-award. Findings included the following:

- Employers within the collaborative or the local area see the largest percentage of talent flow into their businesses from the students graduating from the local community college.

- Two years post-graduation 71% of those employed in the Vermilion area are employed by Vermilion Advantage member businesses.

- Two years post-graduation 61% of all employed healthcare program graduates are working in the healthcare industry.

- In examining outcomes for those who did not have any subsequent post-secondary activity, job placement in the local labor market generated nearly 30% greater earnings return (approximately $600 per month) than for those not in the local market.

- Wage earnings measured through job attachment show greater earnings returns and control for employment in partial quarters and multiple jobs during a quarter.

- The employment rate increased by 20% from the fourth quarter prior to the award to the time the award was earned for all students. This increase persisted for the eight subsequent quarters reviewed in the project.

- Job stability increased for all students in both the first and second year post-completion and even more so for those with no subsequent post-secondary enrollment.

LESSONS LEARNED

- Employer engagement is critical - Connect with local employer collaborative organizations to further define and understand local economic and employer needs and better identify employers in the area regardless of where UI Account Number locates the employer based on home office.

- Obtaining a more complete picture - Enhanced employment outcomes provide a more comprehensive picture of earnings and job attachment by looking at multiple quarter employment and connecting completer records with UI Account Numbers.

- Accessing the right data sources - Utilize state data systems and cross agency collaboration to maximize resources and standardize approach.

- Understanding the talent pool – Understanding all the sources that feed into the talent flow are critical. This includes stackable credentials and the impact of subsequent post-secondary enrollment.

Data Sources: ICCB Centralized Data System, IDES Workforce Data System, and National Student Clearinghouse (NSC).

Page 3