

# *Adult College Completion through the Workforce System*

*Final Outcomes and Data Report*

Education and Employment Research Center

Released September 2014

Renée Edwards  
Heather McKay

Education and Employment Research Center  
School of Management and Labor Relations  
Rutgers, The State University of New Jersey  
Janice H. Levin Building  
94 Rockefeller Road  
Piscataway, NJ 08854

[smlr.rutgers.edu/eerc](http://smlr.rutgers.edu/eerc)



**RUTGERS**  
School of Management  
and Labor Relations

## **ABOUT RUTGERS SCHOOL OF MANAGEMENT AND LABOR RELATIONS**

Rutgers' School of Management and Labor Relations (SMLR) is the leading source of expertise on the world of work, building effective and sustainable organizations, and the changing employment relationship. The school is comprised of two departments—one focused on all aspects of strategic human resource management and the other dedicated to the social science specialties related to labor studies and employment relations. In addition, SMLR provides many continuing education and certificate programs taught by world-class researchers and expert practitioners.

SMLR was originally established by an act of the New Jersey legislature in 1947 as the Institute of Management and Labor Relations (IMLR). Like its counterparts that were created in the other large industrial states at the same time, the Institute was chartered to promote new forms of labor-management cooperation following the industrial unrest at the end of World War II. It officially became a school at the flagship campus of the State University of New Jersey in New Brunswick/Piscataway in 1994. For more information, visit [smlr.rutgers.edu](http://smlr.rutgers.edu).

## **ABOUT THE EDUCATION AND EMPLOYMENT RESEARCH CENTER**

Rutgers' Education and Employment Research Center (EERC) is housed within the School of Management and Labor Relations. EERC conducts research and evaluations on education and workforce development programs and policies. EERC research expertise include community colleges, state and federal workforce developmental systems, skills development, college completion, and innovative and technology-based programs.

## **ABOUT THE ADULT COLLEGE COMPLETION INITIATIVE**

The Adult College Completion Initiative was implemented with funding from the Lumina Foundation for Education. The Lumina Foundation is an independent, private foundation committed to increasing the proportion of Americans who have received a high-quality, college-level education. The foundation's goal is to increase the proportion of Americans with college degrees, certificates and credentials significantly by 2025.

## **Introduction**

This report provides information on data tracking, enrollment, and completion results in the four states involved in the Adult College Completion (ACC) initiative led by the Education and Employment Research Center, School of Management and Labor Relations, at Rutgers, the State University of New Jersey (EERC), and the National Association of Workforce Boards (NAWB). This report updates the Data Tracking and Analysis Brief released in January 2014.<sup>1</sup> The earlier brief looked at outcomes in just two of the participating states (Pennsylvania and Mississippi). This report provides updated information for those states along with data for the other two project states, Indiana and Oklahoma. Intervention began in Mississippi and Pennsylvania in 2010, four years ago. Oklahoma's first intervention occurred three years ago (2011), but the capacity for data retrieval there was not available as the January brief was completed. Indiana's intervention (2013) was the last one to occur.

The data-tracking systems are vastly different in these four states. This variance does not, however, impede the ability to report outcomes and provide some descriptive information. That said, the variance and inconsistencies in how case managers enter data and what type of data they input across workforce centers limits outcome reporting and increases its difficulty, thus restricting the ability to produce a rigorous data analysis.

## **Data and Methods**

Five workforce areas in Pennsylvania, 3 in Mississippi, 11 in Indiana, and 2 in Oklahoma participated in the ACC initiative. All 21 of these areas have provided data for this brief. In addition, Pennsylvania reported H-1B-funded enrollee<sup>2</sup> data for the Central Pennsylvania Workforce Development Corporation. This project received technical assistance from the ACC initiative. The enrollment data for all four states are self-reported and were provided to us at the direction of the Workforce Investment Board (WIB) director of each Local Workforce Investment Area (LWIA). These directors require their areas to collect and report basic information for enrollees and degree types, along with other information made available through the state's official reporting

---

<sup>1</sup> See "College Completion through the Workforce System," January 2014 [<http://goo.gl/T6RPEB>].

<sup>2</sup> H-1B Technical Skills Training grants are supported by user fees paid by employers seeking highly skilled foreign workers under the H-1B visa program. The training grants focus on preparing Americans for the same high-skill jobs, thus reducing the dependence on foreign labor. See "H-1B Technical Skills Training Grant Awards," U.S. Department of Labor [<http://goo.gl/cBZQaC>].

system. Some areas use a second system to collect additional information about clients for their own case management. Data from the state system and, in those areas that use them, case management systems were used to generate the information presented in this report. Given the difference in data entry and collection methods for each state, we describe these methods separately here.

## **Pennsylvania**

Pennsylvania's data-entry system for collecting ACC enrollees is similar to those of the other states in the initiative but not exactly the same. The state chose to modify the system in a unique way. PA already had a statewide data collection system in place for reporting information to the U.S. Department of Labor (DOL). This provided an excellent tool for collecting data related to the ACC initiative.<sup>3</sup> However, the federal data-reporting guidelines only require workforce centers to report if a client has "some college." They do not require particulars about past education history. For this reason, the system had to be modified to capture a clear picture of clients that returned to school under the initiative. In order to do this, the system code was altered to allow centers to enter more specific information about the client with respect to college completion. The new code, referred to as a "local program code," comprises an instruction set that adds a data-entry field to the existing federal reporting fields.

Making this change to the system required a policy change at the state level that officially added the ACC local program code to the statewide system. The new code is considered "open" for any area in PA actively participating in the initiative, even though it was integrated into Pennsylvania's Commonwealth Workforce Development System (CWDS) for use by workforce centers within the state. The process for accessing the local program code consists of a call to the Workforce Development Analyst and a subsequent ACC initiative information session.

The local program code allows case managers<sup>4</sup> to enter information into the system that would otherwise go unreported, such as credits to degree completion, degree type, major, college re-entry date, degree completion date, and college name. This information, combined with the general demographic and funding data already

---

<sup>3</sup> Each state can develop its own reporting system to the DOL; thus many systems exist across the nation. In addition, many states have their own reporting systems for case managers, the local WIB, and staff. In some cases, Pennsylvania for example, the state reporting system is more comprehensive and robust than the federal system.

<sup>4</sup> Data entry is sometimes done or at least finalized by a centralized department. In most instances, though, case managers enter the data. All PA workforce areas involved in the initiative have a designated individual, usually at the WIB level, who analyzes LWIA data to create reports and ensure performance measures are met.

collected by each PA workforce center, presents a more complete picture of the client with regard to the initiative. One of the most important benefits to having more detailed client information is it allows one to ascertain whether a client completed training at a college or a vocational/technical school. This differentiation makes it possible to distinguish clients receiving degrees from those receiving a certificate or occupational diploma.

Whenever a workforce center in Pennsylvania or a WIB director wants to generate a report on clients under the initiative, they send a request to their central WIB office. Centers can, however, generate ad hoc reports on their own, although this ability varies from office to office due to staffing capacity. The generated report pulls the local program code data along with demographic and other information reported for each client. The system's one drawback is that whoever inputs information under the local program code can enter whatever they feel is appropriate. This leads in some cases to extremely detailed information and others to extremely limited information.

## **Mississippi**

Like the other states participating in the initiative, Mississippi does not use a program code to track initiative participants. The state's data collection system is unique in other ways, however. Mississippi was the first state to begin the initiative. The state dedicated funding to community colleges for ACC client tuition. As recipients of this funding, colleges were asked to participate in and in some cases run the data collection process for ACC. As the project continued and after the fund allocation was fully spent, data collection efforts began to shift to the LWIAs. The data for this report were collected directly from the LWIAs.

Currently, the ACC initiative data in MS are collected at each workforce center. Case managers enter information into the state's Mississippi Department of Employment Securities (MDES) system, which identifies the type of service a client has received. If a client is returning to college under the initiative, the institution name is entered in the "Completed Training/Service" field. In addition, the type of degree he or she is pursuing is entered in an additional field. There is no state-wide process for data entry or collection; therefore reports vary across workforce centers. For instance, one area may report a degree type as "College AA," while another may report "AA Registered Nurse." While both entries indicate the client returned to college for an Associate's degree, only the latter gives insight into the degree major.

## **Indiana**

Indiana's Track One data entry system is similar to Pennsylvania's in that the entire state uses the same data entry format. Instead of employing a code to identify and retrieve data relative to the ACC initiative, the Indiana system has been modified via a statewide policy change to better identify clients. This was accomplished by slightly altering the existing drop-down menus. The policy change makes it easier to identify clients who have some college but have not earned a degree when they are entered into the Track One system. It also makes it easier to track these clients after they finish their degree.

Prior to this change, Indiana clients with some education in their past were grouped together at an aggregate level. Clients with technical school education, for example, were grouped with clients who had made progress toward a Bachelor's degree. It is important, however, to be able to identify separately clients with some college education. Likewise, prior to the policy change, it was not possible to distinguish between clients after training who had completed a college degree and those who had completed a certificate or technical training. Case managers were expected to enter this information into the Track One "Case Notes" section. Because of this, the data entries were inconsistent, varying drastically between WIBs and offices.

For this outcomes report, Indiana's data were pulled at the state level, not by individual WIBs. This allowed for all 11 participating workforce areas to be included in the outcomes report at once. It also promoted data consistency because all areas were pulled with the same fields selected. However, because the changes to the Track One system were still being made when the data pull occurred, the "Case Notes" section was used to identify ACC clients. For this reason, the data contained in this report required extensive cleaning prior to use. In the future, data collection by LWIAs in Indiana will be much easier. Most importantly, however, the system change will allow easier identification of clients with some college education during intake, which is an important factor in helping clients finish their degree.<sup>5</sup>

## **Oklahoma**

Oklahoma's two participating areas deal with data entry in different ways. Both use the same system to report to the DOL. The Oklahoma City WIB (Central Oklahoma

---

<sup>5</sup> For more information on college completion as a training option for workforce clients, see "Adult College Completion through the Workforce Development System," Center for Women and Work, Rutgers, June 2012 [<http://goo.gl/q7Smzy>].

Workforce Investment Board or COWIB), however, uses an additional system to track more detail about their clients than the required data sent to the DOL. This system provides additional categories that allow specific client information to be entered. These additional categories include “Employment Goal,” “Any Post-Secondary Education,” “COWIB Demand Occupation Number,” “Degree Type,” and “Field of Study/Major.” Due to these additional fields, the COWIB data in this report are detailed and robust. It should be noted, though, that COWIB field “Any Post-Secondary Education” is a “Yes” or “No” question. Clients are not asked how many credits they have already completed toward a degree. This is unique among workforce centers that include this client intake question. Other offices specifically gear the query to ascertain how many credits a client may have left to degree completion. Although the COWIB field does not gather detailed information about credits earned in the past, it does allow case managers to ask pertinent questions and does not “exclude” a client from returning to college if that person has fewer credits toward a degree than others.

Tulsa’s workforce centers do not use an additional reporting system or additional fields. For this reason, their data are limited. The only means provided to note whether a client has received (or is receiving) a degree over any other type of occupational credential is the “Type of Recognized Credential” field. In this field, case managers can select “Occupational Skills Certificate,” “AA or AS Diploma/Degree,” “BA or BS Diploma/Degree,” or “Other Occupation Degree or Certificate.” Case managers choose the field that best fits their clients’ training. However, there seems to be little oversight regarding how these selections are made. One case manager may select “Occupational Skills Certificate,” while another may choose “Other Occupation Degree or Certificate” for clients pursuing the same credential. Additionally, no fields were reported for degree major or the job type the degree could lead to (for example, “nursing” or “healthcare”). It is also unclear if occupational diplomas are included in the “AA or AS Diploma/Degree” field category. They certainly could be. Some case managers see clients’ occupational diplomas, especially those that are stackable toward an AA/AS degree, as falling into the same category as the degree itself. As a result, the data entered varies between case managers at workforce centers, not just between workforce centers.

### **Data and Methods Summary**

Data entry and tracking is an important element of the ACC initiative and has proven to be one of the most challenging. Understanding a client’s past education history is

imperative to understanding if they are a good candidate for returning to college.<sup>6</sup> Many workforce data systems do not separate past technical/vocational education from past college education. By changing the data entry system to separate these details, case managers can easily identify potential candidates for the ACC initiative. In addition, if the data system is modified to identify how many credits a client has earned in the past, this makes it possible to see at a glance if a client is within 15 to 30 credits of achieving a degree. After clients have reentered college, tracking them is also necessary to determine if they graduate and what type of employment they achieve. It could also be important at some point for collecting wage data.

Changes to workforce area data systems have been made on a state-by-state basis due to the variance in state policies and procedures. In Pennsylvania and Indiana, altering the system required a statewide policy change. In Mississippi and Oklahoma, changes were made on a more ad hoc basis by individual WIBs. In Mississippi, the changes involved using the Mississippi Department of Employment Security system and the name of a client's attending college as an identifier. Pennsylvania added program code to identify clients returning to college. Indiana modified existing drop-down menus in the Track One system. This statewide policy change made it easier to identify clients with some education at intake and easier to retrieve data after clients finish their degree. Oklahoma's tracking system was modified in the Oklahoma City workforce area but not in the Tulsa area. Oklahoma City's use of separate systems for tracking client data made changes possible that more clearly identified clients who had some college education and went back to finish their degree. This tracking change was made on the instruction of the WIB director and relies on data entry at the local level.

Having more than one tracking system is not unusual among workforce centers nationally. For each workforce center, the primary function of state data systems is to collect data and report to the DOL. Any other information collection occurs at the discretion of the workforce center. Some modify the state system to include additional fields or use the "Notes" section. Others choose to add a second system for case management.

Local-level data entry varies not only in terms of what data fields are filled but also in how terms are defined. For example, what constitutes "some college" may have different interpretations among case managers. Some case managers in Oklahoma City,

---

<sup>6</sup> For more information on the importance of understanding a clients' past education history, see "Adult College Completion through the Workforce Development System," Center for Women and Work, Rutgers, June 2012 [<http://goo.gl/q7Smzy>].



for instance, count clients with credits toward a “General Education” or “Liberal Arts” degree as potential clients for ACC. However in other offices in Oklahoma and beyond, these clients are not counted because case managers feel they cannot successfully match the client to an occupation. In other instances, especially in Mississippi, clients not using Workforce Investment Act (WIA) funds are excluded from the ACC data by some case managers because they feel these clients could have gone back to college “on their own” and so did not need the workforce system. In another example, which will be expanded upon later, case managers across all four states have differing views of what counts as a degree. Surveys administered by the EERC team indicate that some case managers do not fully understand the difference between occupational diplomas and higher education degrees. These definitional issues create data entry variance across case managers that can lead to inconsistent results.

The ACC initiative has revealed how differently individual WIBs handle data entry. It has also shown that having divergent data collection systems is not a barrier to identifying or tracking ACC clients. However, in order to consider the spread of the initiative’s goals nationally, more attention needs to be paid to uniformity in data entry, especially with regard to fields indicating past college education during the intake process and to variance among workforce centers and case managers in data entry and definition of terms relative to ACC.

## **Outcomes**

For this outcomes report, data were collected for the period between Fall 2011 and Summer 2014. Each area self-reported data at various times during this period. Mississippi and Pennsylvania both reported data multiple times, allowing for updates, since they were the first states to implement the initiative. Because Indiana went through the implementation process later than the other three states, data collection for the state occurred between August 2013 and August 2014, the shortest period of time reported for any of the four states.

Data were categorized into two broad categories: Associate’s degrees and Bachelor’s degrees. Clients enrolled in an Associate of Science, Associate of Applied Science or Associate of Arts degree program were counted as “Associate’s degree” enrollees, and clients enrolled in a Bachelor of Science or Bachelor of Arts degree program were counted as “Bachelor’s degree” enrollees. One client was enrolled in a Master’s or higher degree program in the reported data. (Oklahoma City reported this enrollee, who was pursuing a Master’s Degree in Education.)

This data summary includes clients who have completed their degree programs and clients who were enrolled at the time the data were collected, including those who withdrew prior to graduation. A total of 750 clients had enrolled in or completed their degree programs in the participating Oklahoma, Indiana, Mississippi, and Pennsylvania workforce areas at the time the data were reported.

Indiana's 11 reporting areas had 294 clients (39 percent of the total enrollees reported) enrolled in or finished with their degree program at the time the data were reported [Summer 2014]; 257 of these were Associate's degrees and 37 were Bachelor's degrees. Sixteen degrees (14 Associates and 2 Bachelor's) were reported in Indiana with no regional information attached to them. Without the regional information, it is impossible to ascertain if these enrollees are from one of the ACC initiative areas. However, given that 11 out of the 12 areas in Indiana are represented in the ACC initiative, it is highly likely. These 16 enrollees were not counted as part of the initiative tallies.

Oklahoma's two reporting areas had 224 clients (30 percent of the total enrollees reported) enrolled in or finished with their degree program at the time the data were reported [Spring 2014]; 118 of these were Associate's degrees and 106 were Bachelor's degrees.

Pennsylvania's six reporting areas had 134 clients (18 percent of the total enrollees reported) enrolled in or finished with their degree program at the time the data were reported [data were updated for all areas Summer 2014 with the exception of H-1B participants, last updated Spring 2014]; 55 of these were Associate's degrees and 2 were Bachelor's degree. The remaining 77 enrollees were not reported with a degree type.

Mississippi's three reporting workforce areas had 98 clients (13 percent of the total enrollees reported) either currently enrolled in or finished with their degree program at the time the data were reported [data were updated for MS Delta and MS Partnership for Summer 2014; MS Twin Districts did not report data since Summer of 2013]; 68 of these were Associate's degrees and 10 were Bachelor's degrees. Twenty enrollees were reported without a degree type.

Enrollees by Local Workforce Investment Area and Degree Type					
State	Area <sup>7</sup>	Associate's Degrees	Bachelor's Degrees	Not Indicated	Total
MS	Twin Districts	38	0	0	38
MS	Delta	10	9	18	37
MS	Partnership	20	1	2	23
PA	Central—H-1B <sup>8</sup>	6	0	0	6
PA	North Central	0	0	34	34
PA	Southern Alleghenies	0	0	43	43
PA	Westmoreland	21	1	0	22
PA	Mercer	20	0	0	20
PA	Southwest Corner	8	1	0	9
OK	Tulsa	45	27	0	72
OK	Oklahoma City	73	79	0	152
IN	Region 1	6	1	0	7
IN	Region 2	19	1	0	20
IN	Region 3	28	1	0	29
IN	Region 4	9	1	0	10
IN	Region 5	24	8	0	32
IN	Region 6	64	6	0	70
IN	Region 7	10	1	0	11
IN	Region 8	22	10	0	32
IN	Region 10	7	0	0	7
IN	Region 11	16	2	0	18
IN	Region 12	52	6	0	58
TOTALS		498	155	97	750

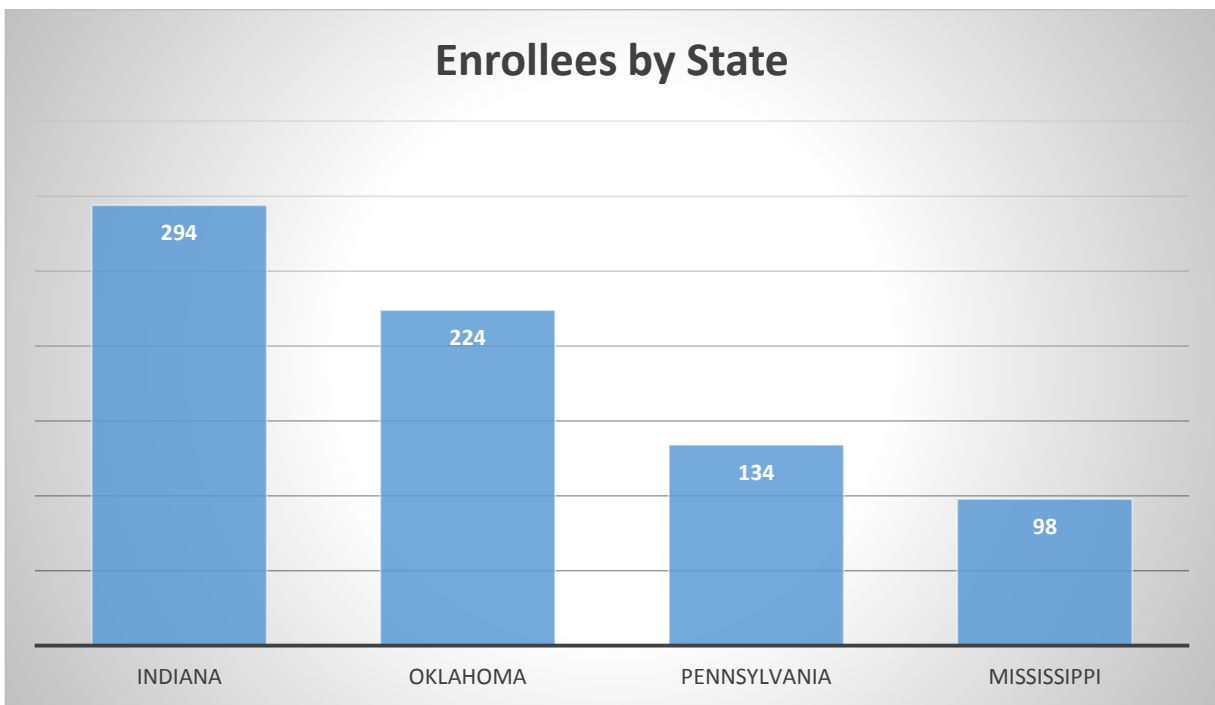
Of the individual reporting areas, the Oklahoma City (OK) area had the highest number of enrollees (N=152), followed by Tulsa (OK, N=72). Region 6 in Indiana came in a close third (N=70). Oklahoma City (OK) had the highest number of Bachelor's degree enrollees at 79, followed by Tulsa (OK) at 27 and Region 8 (IN) with 10. Considered in

<sup>7</sup> Some data were reported by LWIA, and some were reported by county. Given the numerous counties included in this analysis and the lack of consistency across offices, data are reported here by "area" in which the local offices self-reported. For Pennsylvania, reporting was done by WIB for a total of five WIBs plus the H-1B data.

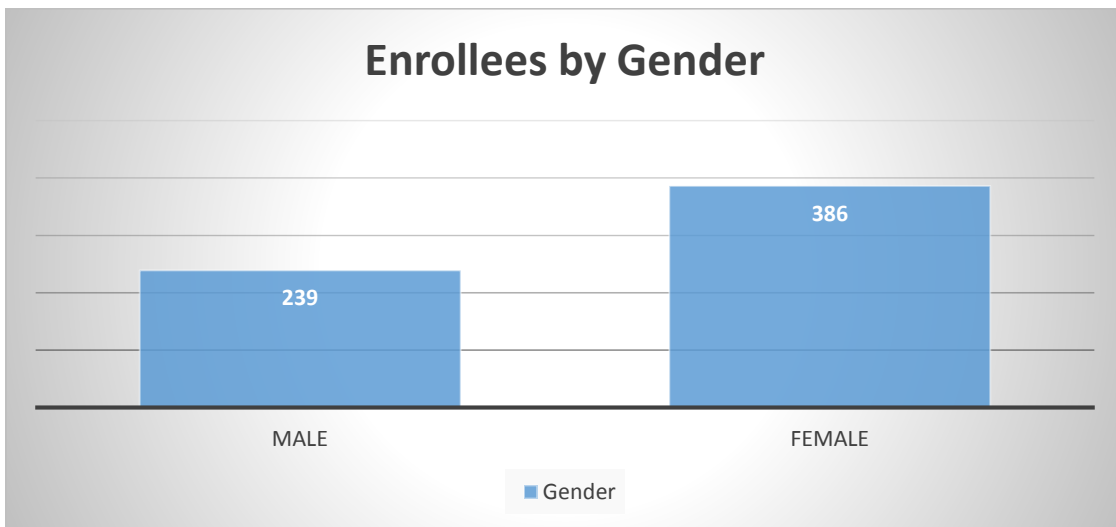
<sup>8</sup> For federal H-1B programs, the DOL has a relatively rudimentary Management Information System (MIS) collection process. Each agency (most of the H-1B grantees are not LWIAs) has an Excel spreadsheet in which it manually inputs data and then forwards the file 45 days after each quarter to the DOL in Washington. In this case, each local area having an H-1B program will develop its own sub-MIS program; usually they track manual reports and then on the 44th day after the quarter they scramble to get the data in.

aggregate by state, Oklahoma reported 106 Bachelor’s degree enrollees, Indiana reported 37, Mississippi 10, and Pennsylvania 2. Across the workforce centers, 24 percent (N=155) of the total enrollees with a reported degree type (N=653) pursued Bachelor’s degrees compared to the 76 percent (N=498) that pursued Associate’s degrees. This is likely an indication of the workforce system’s tendency to encourage (and fund) clients pursuing “short-term training” options rather than longer-term training such as Bachelor’s degrees, which can take years to finish even for clients with some prior education.

It is likely that Indiana and Oklahoma’s higher numbers of Bachelor’s degrees have been influenced by the states’ respective efforts to combine their two systems of workforce development and higher education. It also reflects their efforts to encourage clients to receive four-year degrees. Oklahoma’s “Reach Higher” education initiative and Oklahoma City’s “Project Finish Line” program encourage clients to finish their education and also encourage Bachelor’s degrees more so than other workforce centers historically have.



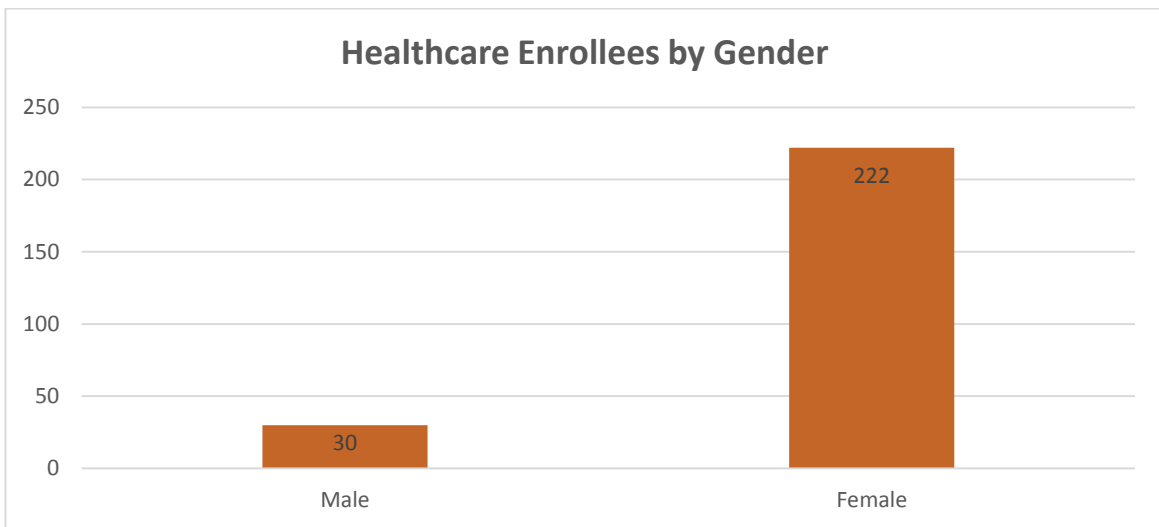
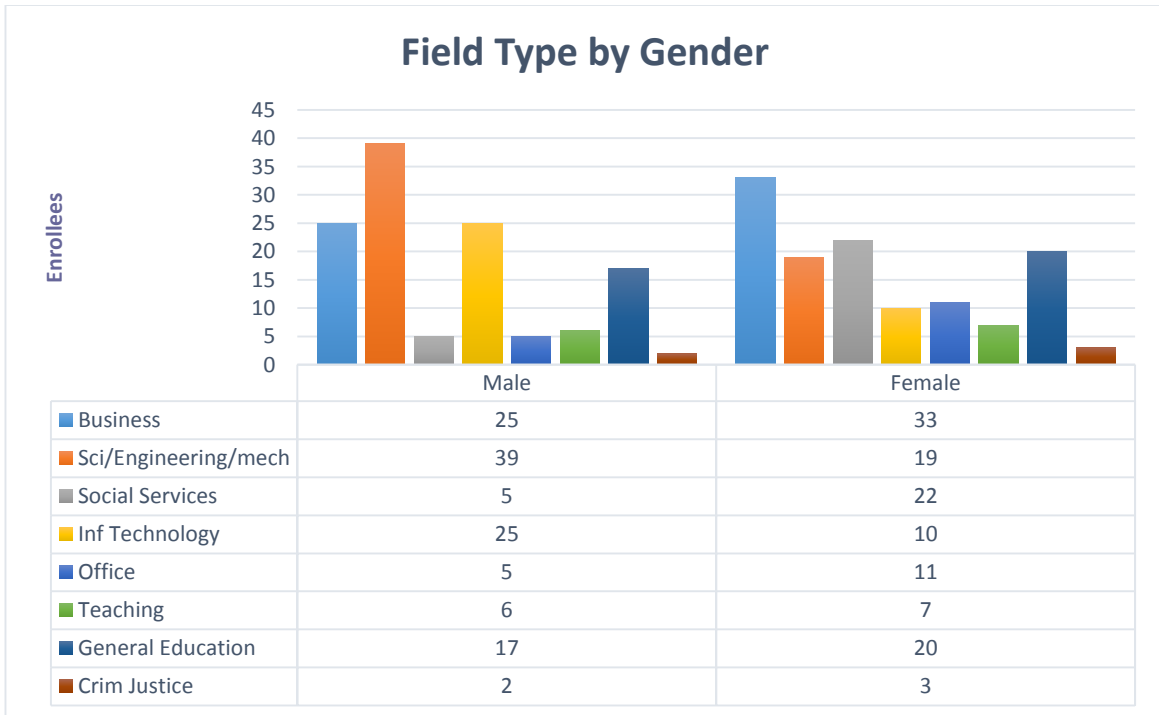
When looking at the gender dynamics of the reported enrollees (N=625)<sup>9</sup>, it is evident that more women (62 percent, N=386) were enrolled under the initiative than men (38 percent, N=239). A closer look at type of major by gender suggests this may be due in part to the number of clients that entered certain degree fields and the subsequent gender dynamics of those fields. Gender dynamics are probably at work in the fields of healthcare, social services, and office administration, commonly referred to as “traditional” jobs for female workers. Also, nationally, female students outnumber male students in most colleges and universities. This may play a role in the gender dynamics of workforce clients reentering degree programs as well.



Gender dynamics are also evident within degree types of enrollees. Of the enrollees with reported degree type and gender (N=501 with both fields complete), 50 percent (N=252) of clients were reported to have gone into healthcare fields and 88 percent (N=222) of these were women. Of the clients who went into computer technology fields (7 percent, N=35), the majority were men (71 percent, N=25). Somewhat surprisingly, this gender dynamic did not hold for enrollees in business-related fields; of the 58 enrollees in these fields (12 percent of the total enrollees), 25 (43 percent) were men and 33 (57 percent) were women.

---

<sup>9</sup> MS Partnership and Tulsa (OK) did not report gender information and, across all other workforce centers, some case managers did not report their clients' gender. In total, 625 of the 750 reported clients had gender information included.



Workforce offices using WIA funds must match degree types with their area’s Demand Occupation list.<sup>10</sup> For this reason, case managers tend to either funnel clients into degree programs that will match their areas’ demand list or choose clients as candidates for the

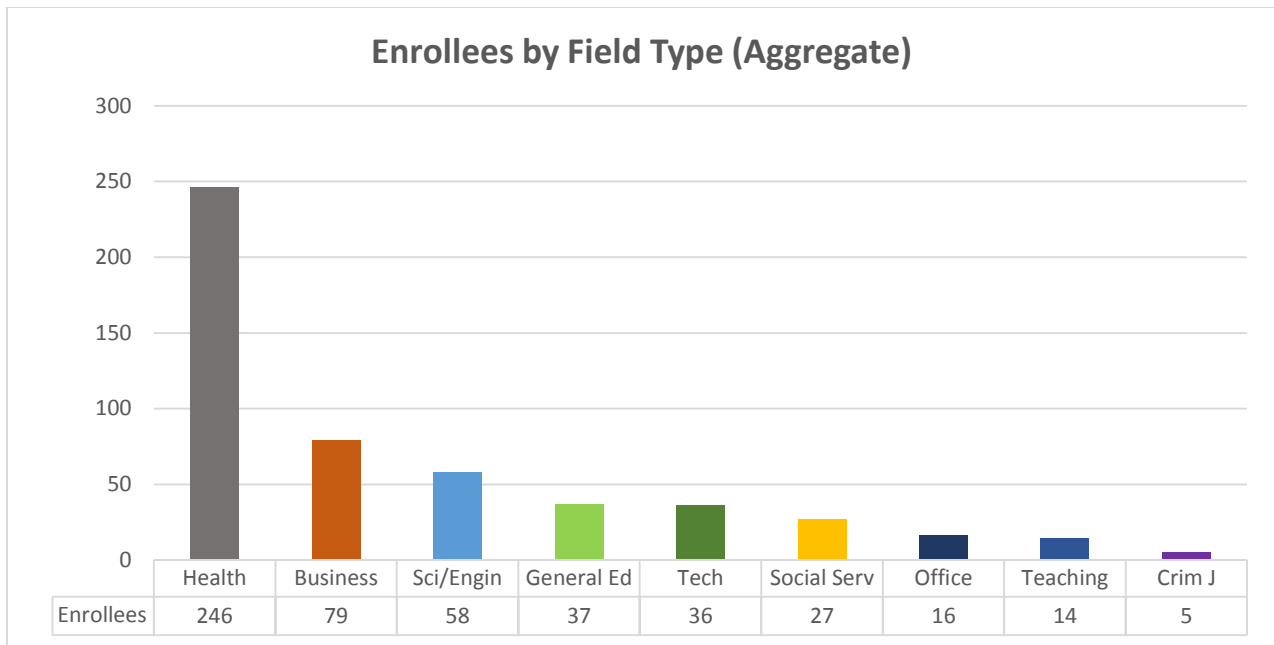
---

<sup>10</sup> This is a requirement of WIA. Local interpretation varies with each labor market, the growth potential of each labor market, and the discretion of the LWIA. All are accountable to the same standards of placement, entered employment, retention, and follow-up. For more information on how the Demand Occupation List works and how it affects training opportunities, see “Adult College Completion through the Workforce Development System,” Center for Women and Work, Rutgers, June 2012 [<http://goo.gl/q7Smzy>].

initiative if their prior degree type or current degree interest matches the area's demand list.

Sixteen of the 21 areas reported degree majors/job field types for their clients. This allows for field-type analysis of a total of 518 clients across all four states. Field types were grouped into nine categories: business, science/engineering or mechanical type-degrees (this category also included those listed simply as "Associate Science degree" or "Bachelor Science degree"), social services, information technology or computer-type degrees, office administration degrees (including paralegal), teaching and education degrees, general education/liberal arts degrees (this category also included any degree with no detail field, such as those listed simply as "Associate Arts degree" or "Bachelor Arts degree"), criminal justice degrees, and healthcare degrees.

Looking at field types, the highest number of enrollees are in the healthcare (N=246), business (N=79), and science/engineering and mechanical skills (N=58) degree fields. This ranking is not surprising since these employment opportunities are prevalent in nearly all participating workforce areas. It should also be noted that in many cases fields were not detailed enough to distinguish between them. For example, a B.S. in Biology (clearly a science degree) or an A.A.S. degree that may be an Associate of Applied Science in Accounting degree (and therefore actually a business field degree) are really quite different field types, but because of the way they were reported they are indistinguishable in the data. Therefore, the science/engineering and mechanical skills degree field may be over-reported in this data.



Employment and wage data were not available from the majority of workforce areas at this time. There was not enough information reported across workforce centers for analysis. The lack of wage data resulted in part from political changes in our partner states. In the newer ACC partner states, the delays in collecting wage data meant that analysis would not be worthwhile.

### **Conclusion**

All four of the states involved in the ACC initiative employed vastly different methods for entering and tracking clients. These differences have been useful in understanding how states operate and how they track performance. Given that the DOL reporting system does not include education tracking, states have adopted different methods to collect and track their clients' education. Variance in data tracking and collection processes can still lead to good data for outcomes reporting. The challenge lies in the variance at the individual office level; that is, how much information case managers enter into available fields can determine how robust an analysis is. Additionally, definitional issues between case managers and across workforce centers can lead to inconsistent data reporting.

In this report, for example, data entry variance by workforce office created issues in which data such as gender and degree field could not be readily compared across the reporting areas. Not all offices reported gender, nor did all offices report the degree field/major. Some fields varied so much by area or local office that summarizing the data was impossible or highly unreliable. Definitional issues certainly excluded some



clients that should have been reported. These are data entry and retrieval issues and can most likely be resolved by training workforce center staff and WIB directors. Systematic data entry and retrieval systems are crucial to robust data analysis, but the process of setting up and integrating a data-tracking system can be divergent across workforce centers and states without compromising the ability to report outcomes.