

# **EQUITY TASK FORCE DATA ANALYSIS WORK RESEARCH SUMMARY**



**ILLINOIS  
WORKFORCE  
INNOVATION  
BOARD**

**DATE: October 6, 2021**





# Data Analysis Review Agenda

## Objective:

- Review the analysis completed by the Data Workgroup and discuss which elements of the analysis are most insightful/critical to the Program Workgroup
- Data in this presentation includes participants that exited the adult program between January 1, 2018 and March 31, 2020

## Key insights/metrics

- Who does the WIOA Title 1 Adult Program serve? (demographics)
- How is the workforce system helping customers overcome barriers (equity)
  - What services to customers access?
  - What outcomes do customers achieve?

# Analytical Technique: Disproportionate Impact Analysis

- Disproportionate Impact Analysis examines how certain groups of people have been disproportionately impacted based on characteristics such as race, gender, disability, and socioeconomic status
- This analysis uses the *80% Rule Index* (Sosa, 2017).
  - Step 1: identify the subgroup with the highest rate of success, referred to as the “reference” group. This group is highlighted in green in the data tables
  - Step 2: divide the success rate of each subgroup by that of the reference group:  $80\% \text{ Index} = \text{Cohort Group Rate} / \text{Reference Group Rate}$
  - Step 3: Disproportionate Impact (DI) is evident if the performance outcome rate of any subgroup is less than 80% of the group with the highest outcome rate. These groups are highlighted in red in the data tables

Source: Sosa, G. (2017). *Using Disproportionate Impact Methods to Identify Equity Gaps*. The RP Group Retrieved from [Using Disproportionate Impact Methods to Identify Equity Gaps.pdf](#).

# Title I Adult Participants Demographics

Total Participants Served		Title I Adult		
		Total Participants Served	Percent of total Participants	Percent of Unemployed Persons in Poverty
Sex  Race/Ethnicity	Total Statewide	8,534		
	Female	5,030	58.9%	48.8%
	Male	3,487	40.9%	51.2%
	Asian	312	3.7%	1.2%
	Black / African American	4,179	49.0%	40.2%
	Hispanic / Latino	1,282	15.0%	12.4%
	White	3,239	38.0%	53.1%
	American Indian	55	0.6%	0.1%
	Other Race	102	1.2%	5.3%

- Female participants in Title I Adult programs comprise nearly 59% of total participants, compared with about 49% of Unemployed Persons in Poverty
- Black participants make up nearly 50% of total participants, compared with about 40% of Unemployed Persons in Poverty

# Title I Adult Participants

## Pre-enrollment education levels

	Female				Male			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
ADULT Educational Attainment at Enrollment								
Participants	1,788	2,473	574	206	1,303	1,792	602	160
HS Equiv or less	48.7%	65.2%	65.9%	55.8%	65.0%	73.8%	76.4%	50.6%
Assoc/Some College	42.6%	25.5%	28.2%	23.8%	20.8%	18.8%	17.8%	16.9%
Bachelors or higher	8.7%	9.3%	5.9%	20.4%	14.2%	7.4%	5.8%	32.5%

- Black and Hispanic participants have lower education levels at entry than other groups
- Females have higher attainment rates than males
- Asians are more likely to have a bachelors degree or higher

# Title I Adult Participants

## Pre-enrollment earnings levels

	Female				Male			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
	ADULT Average Quarterly Wage 3 Quarters Prior to Enrollment							
HS Equiv or less	\$ 2,830	\$ 3,133	\$ 3,294	\$ 2,577	\$ 3,033	\$ 2,531	\$ 3,538	\$ 3,355
Assoc/Some College	\$ 3,131	\$ 3,413	\$ 3,263	\$ 2,377	\$ 3,241	\$ 2,728	\$ 3,794	\$ 2,568
Bach or higher	\$ 3,738	\$ 4,095	\$ 4,300	\$ 2,463	\$ 3,960	\$ 3,982	\$ 2,867	\$ 2,300
All Exiters	\$ 3,037	\$ 3,294	\$ 3,345	\$ 2,506	\$ 3,208	\$ 2,676	\$ 3,544	\$ 2,879
Low Income	85.0%	90.6%	80.6%	57.8%	74.0%	81.7%	69.7%	65.1%

- Hispanics tend to have higher wages 3 quarters prior to enrollment
- For most race/ethnicity groups, males tend to have higher pre-enrollment earnings
- However, for Black participants females had higher pre-enrollment earnings

# Title I Adult Participants

## Services Accessed

- White females are significantly more likely to receive all types of services relative to other groups.
- Asian females are significantly less likely to enter training
- Males are generally more likely to successfully complete training

	Female				Male			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
	ADULT Percentage of Participants							
Self Services	43.2%	33.0%	27.9%	23.4%	33.2%	27.9%	21.9%	24.0%
Staff Services	64.5%	45.3%	47.1%	47.7%	54.0%	44.2%	46.2%	52.0%
Rec'd Training	85.0%	70.1%	74.8%	51.4%	79.8%	74.1%	80.1%	68.6%
Training Completed	77.7%	76.7%	77.1%	81.3%	81.1%	79.3%	82.8%	94.2%

## Spotlight on Participants with a H.S. Degree or Less

	Female				Male			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
	ADULT Percentage of Participants							
Self Services	38.2%	28.1%	25.0%	21.5%	31.7%	26.6%	20.8%	16.9%
Staff Services	57.0%	43.6%	44.1%	52.1%	53.3%	43.9%	44.8%	52.8%
Rec'd Training	83.1%	68.9%	76.0%	49.6%	83.3%	75.3%	81.4%	58.4%
Training Completed	74.7%	76.0%	75.2%	80.0%	79.1%	78.2%	82.1%	94.2%

# Title I Adult Participants

## Services Accessed

	Female				Male			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
	ADULT Average Quarterly Wage 2 Quarters After Exit							
All Adult	\$ 7,352	\$ 6,367	\$ 6,540	\$ 6,687	\$ 6,842	\$ 6,232	\$ 7,066	\$ 7,137
Self Services	\$ 7,712	\$ 6,767	\$ 7,317	\$ 6,129	\$ 7,123	\$ 5,603	\$ 6,941	\$ 7,283
Staff Services	\$ 8,001	\$ 6,608	\$ 7,469	\$ 7,319	\$ 6,953	\$ 6,097	\$ 7,220	\$ 7,917
Rec'd Training	\$ 7,895	\$ 7,043	\$ 7,090	\$ 7,512	\$ 7,022	\$ 6,705	\$ 7,095	\$ 7,608
Tng Completed	\$ 8,939	\$ 7,961	\$ 7,976	\$ 8,332	\$ 7,658	\$ 7,398	\$ 7,426	\$ 7,737
Tng Not Compl	\$ 4,264	\$ 4,022	\$ 4,114	\$ 3,961	\$ 4,301	\$ 4,047	\$ 5,500	
No Training	\$ 4,272	\$ 4,779	\$ 4,910	\$ 5,814	\$ 6,131	\$ 4,876	\$ 6,952	\$ 6,109

- Participants that received staff assisted career or training services tended to have higher post-exit earnings
- Those that received training had higher post-exit earnings than those that did not
- Training completion was strongly associated with higher earnings
- The higher earnings for White females appear to be driven by higher education levels at entry

## Spotlight on Participants with a H.S. Degree or Less

	Female				Male			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
	ADULT Average Quarterly Wage 2 Quarters After Exit							
All Adult	\$ 5,999	\$ 5,738	\$ 5,875	\$ 6,636	\$ 6,393	\$ 6,143	\$ 6,888	\$ 6,023
Self Services	\$ 6,238	\$ 5,934	\$ 6,548	\$ 5,758	\$ 6,894	\$ 5,485	\$ 6,178	\$ 5,226
Staff Services	\$ 6,241	\$ 5,892	\$ 6,431	\$ 6,911	\$ 6,661	\$ 5,827	\$ 7,022	\$ 7,307
Rec'd Training	\$ 6,450	\$ 6,369	\$ 6,310	\$ 7,392	\$ 6,582	\$ 6,527	\$ 7,036	\$ 6,443
Tng Completed	\$ 7,378	\$ 7,180	\$ 7,010	\$ 8,179	\$ 7,214	\$ 7,287	\$ 7,520	\$ 6,499
Tng Not Compl	\$ 3,705	\$ 3,798	\$ 4,192	\$ 4,245	\$ 4,195	\$ 3,795	\$ 4,820	
No Training	\$ 3,781	\$ 4,338	\$ 4,499	\$ 5,892	\$ 5,448	\$ 4,972	\$ 6,240	\$ 5,432



# Title I Adult Participants

## Credentials Earned

- Asians that entered training were more likely to earn a credential
- White females were significantly more likely to earn an AA/AS or BA/BS degree
- Males were less likely than females to earn an AA/AS or BA/BS degree but more likely to earn an Occupational License or Certificate

	Female				Male			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
	ADULT Type of Recognized Credential							
Earned Any Credential	71.9%	67.8%	66.3%	73.7%	69.1%	69.4%	69.5%	82.6%
AA or AS Diploma/Degree	15.1%	4.2%	7.8%	3.9%	5.0%	1.0%	1.1%	1.2%
BA or BS Diploma/Degree	5.7%	2.7%	1.3%	3.9%	1.2%	1.7%	0.3%	2.3%
Occupational Licensure	15.6%	14.4%	11.9%	17.1%	22.2%	19.2%	19.4%	10.5%
Occupational Certificate	32.3%	40.4%	42.2%	36.8%	37.2%	42.7%	45.2%	58.1%
Occupational Certification	2.3%	4.5%	1.6%	10.5%	2.7%	3.8%	2.8%	9.3%
Other Recognized Credential	0.9%	1.7%	1.6%	1.3%	0.8%	1.0%	0.8%	1.2%

## Spotlight on Participants with a H.S. Degree or Less

	Female				Male			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
	ADULT Type of Recognized Credential							
Earned Any Credential	68.2%	66.5%	64.2%	69.8%	70.0%	68.6%	70.6%	91.9%
AA or AS Diploma/Degree	10.3%	3.0%	4.2%	4.7%	3.2%	0.7%	0.4%	0.0%
BA or BS Diploma/Degree	0.4%	0.5%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Occupational Licensure	13.8%	14.9%	10.8%	7.0%	23.2%	19.3%	19.1%	5.4%
Occupational Certificate	39.2%	42.1%	46.2%	41.9%	39.9%	44.3%	47.9%	70.3%
Occupational Certification	3.1%	4.4%	1.5%	14.0%	2.6%	3.0%	2.1%	13.5%
Other Recognized Credential	1.3%	1.6%	1.5%	2.3%	1.0%	1.2%	1.1%	2.7%

# Title I Adult Participants

## Credentials Earned

- Black participants that earned an AA/AS or BA/BS degree generally earned less than other groups
- Degree recipients generally had higher post-program earnings than license/certificate recipients

	Female				Male			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
	ADULT Average Quarterly Wage 2 Quarters After Exit							
No recognized credential	\$ 4,395	\$ 4,754	\$ 5,089	\$ 5,536	\$ 5,936	\$ 4,854	\$ 6,408	\$ 6,625
AA or AS Diploma/Degree	\$ 11,536	\$ 10,107	\$ 11,943		\$ 10,172	\$ 7,072		
BA or BS Diploma/Degree	\$ 13,082	\$ 10,743			\$ 11,247	\$ 8,684		
Occupational Licensure	\$ 9,865	\$ 9,575	\$ 9,502	\$ 12,958	\$ 8,522	\$ 8,691	\$ 7,792	\$ 7,180
Occupational Certificate	\$ 7,208	\$ 7,391	\$ 6,660	\$ 7,585	\$ 6,764	\$ 7,084	\$ 7,669	\$ 8,085
Occupational Certification	\$ 6,394	\$ 6,576			\$ 6,640	\$ 6,106	\$ 6,155	

## Spotlight on Participants with a H.S. Degree or Less

	Female				Male			
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian
	ADULT Average Quarterly Wage 2 Quarters After Exit							
No recognized credential	\$ 3,933	\$ 4,313	\$ 4,842	\$ 5,528	\$ 5,378	\$ 4,777	\$ 5,869	\$ 5,259
AA or AS Diploma/Degree	\$ 9,893	\$ 8,877	\$ 10,533		\$ 9,212			
BA or BS Diploma/Degree								
Occupational Licensure	\$ 7,867	\$ 8,544	\$ 8,784		\$ 8,326	\$ 9,210	\$ 7,743	
Occupational Certificate	\$ 6,848	\$ 6,914	\$ 6,115	\$ 6,977	\$ 6,456	\$ 6,776	\$ 7,717	\$ 6,913
Occupational Certification	\$ 5,382	\$ 5,879			\$ 6,292	\$ 6,135	\$ 7,136	

# Title I Adult Participants – HS/less Training Occupations

- About 65% of females enter training in Healthcare Practitioner or Healthcare Support.
- About 76% of males enter training in Transportation or Production

	Female				Male				Female	Male	Average Post-exit Wage
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian	All Participants		
	ADULT Percent Receiving Training										
Received Training, total	40.5%	44.8%	48.8%	27.5%	54.0%	55.6%	62.3%	29.7%	72.8%	77.9%	\$ 6,532
Management	1.4%	6.7%	2.9%	38.3%	1.0%	2.6%	1.0%	23.1%	5.5%	2.5%	\$ 5,722
Computer and Mathematical	1.9%	2.3%	2.6%	1.7%	5.6%	3.2%	3.7%	0.0%	2.2%	4.1%	\$ 5,864
Healthcare Practitioners and Technical	41.3%	41.1%	23.9%	35.0%	3.3%	2.2%	2.9%	1.9%	39.9%	2.8%	\$ 8,525
Healthcare Support	29.1%	24.5%	33.5%	5.0%	1.8%	0.7%	1.0%	0.0%	26.2%	1.2%	\$ 4,879
Office and Administrative Support	4.1%	3.1%	6.8%	6.7%	1.6%	2.9%	2.0%	0.0%	3.7%	2.0%	\$ 5,032
Installation, Maintenance, and Repair	1.0%	0.2%	0.6%	0.0%	12.1%	3.6%	8.8%	7.7%	0.5%	7.4%	\$ 6,017
Production	7.9%	3.6%	11.9%	8.3%	19.6%	12.6%	22.6%	34.6%	5.5%	16.4%	\$ 5,978
Transportation and Material Moving	8.3%	11.7%	12.6%	1.7%	49.5%	69.3%	55.8%	26.9%	10.5%	60.0%	\$ 6,690
All other	4.9%	6.7%	5.2%	3.3%	5.5%	2.9%	2.2%	5.8%	6.0%	3.7%	

# Title I Adult Participants – HS/less Training Occupations Outcomes

- Those that enter training in Healthcare Practitioner occupations (primarily females) tend to have higher wages than other occupations
- Males that enter training in Transportation have earnings that are similar to the overall average for males

	Female				Male				Female	Male
	White	Black	Hispanic	Asian	White	Black	Hispanic	Asian	All Participants	
	ADULT Average Quarterly Wage 2 Quarters After Exit									
Received Training, total	6,450	6,369	6,310	7,392	6,582	6,527	7,036	6,443	6,484	6,579
Management	3,679	5,654	7,048	5,315	6,981	4,885	10,073	5,571	5,596	6,007
Computer and Mathematical	5,652	6,925	5,649	0	5,482	5,855	8,029	#DIV/0!	6,342	5,598
Healthcare Practitioners and Technical	8,352	8,455	7,902	11,867	5,990	10,405	8,383	1,923	8,541	8,300
Healthcare Support	4,941	4,622	5,673	4,913	5,282	4,910	3,516		4,864	5,153
Office and Administrative Support	4,879	4,498	5,057	4,806	4,793	4,782	5,934		4,976	4,898
Installation, Maintenance, and Repair	5,179	5,612	2,670	#DIV/0!	6,600	4,821	7,506	5,863	4,969	6,089
Production	5,637	5,856	6,930	6,784	6,419	5,329	6,867	9,549	5,810	6,046
Transportation and Material Moving	6,088	4,793	6,338	33	6,855	6,983	6,868	3,879	5,444	6,914

# Title I Adult Participants – HS/less Training Occupations Outcomes

- Those trained in Healthcare occupations are more likely to have wages (wages > \$0)
- About one-quarter of those trained in Computer/Mathematical and Transportation have no wages
- When only those that are employed (have wages >\$0), the disparity between Healthcare Practitioner and Transportation earnings narrows considerably

	Received Training Average 2Q Post-exit Wage		
	All	With Wages	% No Wage
Received Training, total	\$ 6,532	\$ 8,039	18.8%
Management	\$ 5,722	\$ 7,351	22.2%
Computer and Mathematical	\$ 5,864	\$ 7,651	23.4%
<b>Healthcare Practitioners and Technical</b>	<b>\$ 8,525</b>	<b>\$ 9,408</b>	<b>9.4%</b>
<b>Healthcare Support</b>	<b>\$ 4,879</b>	<b>\$ 5,533</b>	<b>11.8%</b>
Office and Administrative Support	\$ 5,032	\$ 6,265	19.7%
Installation, Maintenance, and Repair	\$ 6,017	\$ 7,456	19.3%
<b>Production</b>	<b>\$ 5,978</b>	<b>\$ 7,268</b>	<b>17.7%</b>
<b>Transportation and Material Moving</b>	<b>\$ 6,690</b>	<b>\$ 9,110</b>	<b>26.6%</b>

# Title I Female Adult Participants

## – HS/less

### Training Occupations Outcomes – Healthcare

- About 65% of females enter training in Healthcare Practitioner or Healthcare Support.
- About 25% of ALL females enter training for Registered Nursing or Licensed Practical Nursing
- More than 25% of ALL female participants enter training in Healthcare Support (primarily Nursing or Medical Assistants), in which exiters earn about half the average wage of Registered Nurse/LPN

Registered Nurses  
 Licensed Practical and Vocational Nurses  
 All Other Healthcare Practitioner  
 Healthcare Support

Female			
White	Black	Hispanic	Asian
ADULT Percent Receiving Training			
15.6%	5.3%	4.2%	11.7%
11.3%	20.2%	4.8%	18.3%
12.7%	15.3%	14.2%	5.0%
29.1%	24.5%	33.5%	5.0%

Received Training, total  
 Registered Nurses  
 Licensed Practical and Vocational Nurses  
 All Other Healthcare Practitioner  
 Healthcare Support

Female			
White	Black	Hispanic	Asian
ADULT Average Quarterly Wage 2 Quarters After Exit			
\$ 6,450	\$ 6,369	\$ 6,310	\$ 7,392
\$ 9,148	\$ 9,441	\$ 12,575	
\$ 9,116	\$ 10,837	\$ 9,264	
\$ 6,975	\$ 5,343	\$ 6,880	\$ 2,028
\$ 4,941	\$ 4,622	\$ 5,673	\$ 4,913

# Title I Male Adult Participants – HS/less Training Occupations Outcomes – Production and Transportation

- About 76% of males enter training in Transportation or Production
- Black males are more likely to enter Truck Driver training
- For the most popular Production occupation (Computer-Controlled Machine Tool Operators), Black males earn significantly less than other groups
- Asian males are much more likely to enter training in CNC Machine Tool Programmers, which have higher earnings outcomes than most other productions occupations

	Male			
	White	Black	Hispanic	Asian
	ADULT Percent Receiving Training			
Production	19.6%	12.6%	22.6%	34.6%
Team Assemblers	1.0%	2.1%	2.2%	1.9%
Computer-Controlled Machine Tool Operators	6.9%	4.4%	10.6%	11.5%
CNC Machine Tool Programmers	1.4%	0.7%	2.2%	17.3%
Machinists	1.6%	0.3%	0.5%	0.0%
Welders, Cutters, Solderers, and Brazers	3.6%	1.3%	1.2%	0.0%
Welding Machine Operators	2.0%	0.9%	1.0%	1.9%
All other Production	3.1%	2.8%	4.9%	1.9%
Transportation and Material Moving	49.5%	69.3%	55.8%	26.9%
Heavy and Tractor-Trailer Truck Drivers	43.3%	62.0%	49.6%	26.9%

	Male			
	White	Black	Hispanic	Asian
	ADULT Average Quarterly Wage 2 Quarters After Exit			
Received Training, total	6,582	6,527	7,036	6,443
Production	6,419	5,329	6,867	9,549
Team Assemblers		8,165	8,116	
Computer-Controlled Machine Tool Operators	6,330	4,055	6,131	
CNC Machine Tool Programmers	7,129	6,416		7,827
Machinists	4,365			
Welders, Cutters, Solderers, and Brazers	5,532	4,932		
Welding Machine Operators	5,941	3,589		
All other Production	8,731	5,358	8,416	
Transportation and Material Moving	6,855	6,983	6,868	3,879
Heavy and Tractor-Trailer Truck Drivers	7,089	7,280	7,137	3,879

# Title I Adult Participants

## Takeaways

### Participant characteristics prior to program enrollment

- Educational attainment differed among race/ethnicity groups
  - Asian participants were more likely to have a bachelors degree or higher
  - Black and Hispanic participants were more likely to have attainment of HS or less

### Services accessed

- White participants (especially white females) tended to be more likely to access career and training services
  - Males of all race/ethnicity group were slightly more likely to complete training

### Post-exit earnings

- Training was associated with higher earnings for all participant groups
  - But those that entered training but did not complete had lower post-exit incomes than those that did not enter training
- Training occupation matters: White females had higher earnings largely because they chose to train in higher-paying healthcare occupations
  - Nearly two-thirds of Black males chose Truck Driving, which resulted in lower wages and a higher likelihood of having no wages