

ETA State Equity Reports

Supplemental Guide



How to use the reports



Use Cases

How can we use the State Equity Reports?

1. **Answer questions pertaining to equity.** Questions can be broad or specific. They might focus on specific programs or demographic groups.
2. **Identify successes.** The reports can identify areas of success for a state. This can merit follow-up exploration. What is the state doing? Is this something that can be scaled?
3. **Identify challenges.** The reports can identify potential areas of improvement. This can merit follow-up exploration. Are there extenuating factors that explain the disparity? Is this something that can be addressed?
4. **Inform WIOA State Plans.** States can use their reports to inform future policy and strategy for their workforce system.
5. **Evaluate policy.** States may be able to use the reports to assess whether policy is working.
6. **Strengthen grant applications.** States can use information from their reports to target funding opportunities and use data to highlight the utility of potential grants.
7. **And more?** The list of potential use cases here is not definitive.



Disclaimers

Things to keep in mind when using the reports:

1. **The reports are not an equity scorecard.** The reports do not grade states' performances or assign subjective values to the trends shown in the reports.
2. **The reports are not prescriptive.** Individuals using the reports will need to provide independent thought and follow-up consideration for anything seen in the dashboards.
3. **The reports cannot be used to compare states.** To accurately compare states, more information (including external factors beyond states' control) is required for a fair comparison.
4. **Data in the reports may not exactly match records elsewhere.** Further details on the data used in these reports are available in the Methods section of the reports.
5. **Some states have small counts of demographic groups.** If a group has a very low count, less confidence should be placed in findings for that group. Counts can be found in data tables near each chart within the reports.
6. **PY21 was a pandemic year.** The PY21 reports do not provide trends over time, but it is possible that the pandemic created and/or exacerbated previously existing inequities within a state. If something noteworthy is seen in the reports, consideration should be given to this.
7. **The reports' "equity" scope is not definitive.** Not all underserved communities are currently represented in these reports. When possible, future editions will broaden their scope to be more informative and inclusive.



FAQ



How to access the reports

How do I open the reports?

- The State Equity Reports are HTML documents. They can be opened with a web browser.
- It is strongly recommended that you open a local copy of the reports saved to your hard drive. Opening a copy saved to the web (for example, on SharePoint) can create formatting and navigation issues.

Is there a specific web browser I should use?

- Google Chrome, Internet Explorer, and Microsoft Edge all work well.
- We have not been able to test other web browsers, but they may also work.

Can I print the reports?

- You can but it is not recommended. The reports are designed with interactive navigation features, which help users quickly move from section to section.
- Printing may also cause navigation and/or formatting issues.



Demographics

What group or groups are in the “Other” racial category?

- The Other group includes participants who indicated that they were American Indian / Native American, Hawaiian / Pacific Islander, or multiracial (i.e., they indicated more than one racial category).

How are multiracial participants handled in the reports?

- Every participant is placed in only one racial category. If a participant indicated that they identified with more than one race, they were labeled as Multiracial and grouped in Other.

How is the Hispanic/Latino group defined?

- Whether or not a participant is labeled Hispanic/Latino is determined by an ethnicity data element that is separate from the determination of race. A participant can be included in the Hispanic/Latino group and one of the race groups.



Model Estimates

A few sections have “Model Estimates.” What variables are in the model?

- Data in the Model Estimates sections were derived from the Demographic and Barrier Models. These models estimate demographic group differences in services received and outcomes obtained when controlling for other available demographic and employment barrier elements. A full accounting of the different types of variables is included in the next slide.
- For more information on the purpose, structure, and application of the Demographic and Barrier Models, see the reports’ Methods section.
- For more information on how to understand the plots in the Model Estimates, see the explanations provided elsewhere in this document.



Model Estimates

A few sections have “Model Estimates.” What variables are in the model? (cont’d)

- Age
- Disability status
- Veteran status
- Employment history and status at program entry
- Unemployment insurance status
- Education
- English and literacy proficiencies
- Cultural barriers
- Migrant or seasonal farmworker status
- Displaced homemaker status
- Single parent status
- Low-income status and/or receipt of public assistance
- Homelessness
- Offender status
- Pell Grant recipient
- Pregnant or parenting youth (Youth model)
- Youth who needs additional assistance (Youth model)
- Youth in foster care (Youth model)

The factors listed here are included in the barrier models along with demographic variables (sex and race/ethnicity).

The inclusion of these variables controls for known barriers and allows for the estimation of disparity across demographics after accounting for potential confounding factors.



Report Updates

Can I request a modification or refinement of the reports?

- Yes. The team that developed the reports will issue new reports with data from the next Program Year. In addition to refreshing the data, they will also incorporate as many improvements as possible.
- To submit your request, use the link available at the bottom of the Overview section of the report.



Report Walkthrough



Overview

WIOA Equity Analysis Program Year 2021

Employment and Training Administration (ETA)
Office of Policy Development and Research (OPDR)
Division of Data Analytics and Strategic Planning (DASP)
June 30, 2023

Overview Data Quality System Reach Services Outcomes Relationship: Services & Outcomes Methods

About

This report examines data quality, system reach, and differences in access to services and outcomes between demographic groups for WIOA core programs in [REDACTED]. These analyses were produced in response to Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government.

This report focuses on program year (PY) 2021 data for the WIOA Adult, Youth, Dislocated Worker, and Wagner-Peyser programs in [REDACTED]. Comparisons to national-level data are included where appropriate. See the Employment and Training Administration website to [learn more about WIOA](#) and the programs in this report.

The report is organized to display the following equity-related data in the tabs above:

- **Data Quality** - This section shows the completeness of reported demographic and occupation data.
- **System Reach** - This section shows the makeup of program participants
- **Services** - This section shows the differences in services received by demographic groups. It includes information on select services, model estimates that show differences when controlling for other demographic elements and barriers, and information on training occupations.
- **Outcomes** - This section shows the differences in outcomes obtained by demographic groups. It includes information on WIOA outcomes and model estimates that show differences when controlling for other demographic elements and barriers.
- **Relationship: Services & Outcomes** - This section shows the differences in outcomes obtained by demographic groups when accounting for the level of services received. It includes information on the relationship between services and outcomes and model estimates that show differences when controlling for other demographic elements and barriers.
- **Methods** - This section provides technical details about the data and report. It includes information on analysis decisions, business rules applied, data treatments, and modeling methods.

Click on the tabs at the top to navigate to these different topics.

The Overview page provides brief descriptions of the other sections of the report.

It also provides information about potential additions that will be made to future editions of the report.

There is also a link to a feedback form at the bottom of the Overview page. You can use this to submit suggestions for improvements to future editions of the report.



Data Quality

WIOA Equity Analysis Program Year 2021

Employment and Training Administration (ETA)
Office of Policy Development and Research (OPDR)
Division of Data Analytics and Strategic Planning (DASP)
June 30, 2023

[Overview](#) [Data Quality](#) [System Reach](#) [Services](#) [Outcomes](#) [Relationship: Services & Outcomes](#) [Methods](#)

Data Quality

This section examines the completeness of a select number of demographic and occupation code PIRL data elements (click to see more information on the [WIOA Participant Individual Record Layout](#)) from the data reported by [redacted] and how it compares to the National level data. The completeness of this type of data is important for any analysis of programmatic equity. Missing data can bias the measurement of differences in outcomes or access to services between demographic groups.

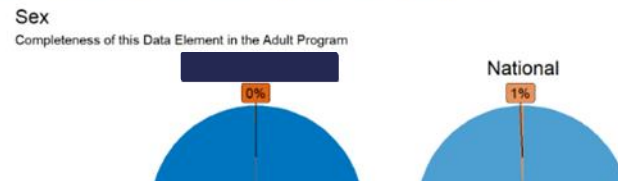
The completeness of the data sex, race, and ethnicity PIRL data elements are shown by program below. In addition, the completeness of select PIRL data elements that collect occupation code information are also shown.

[WIOA Adult](#) [WIOA Youth](#) [WIOA Dislocated Worker](#) [Wagner-Peyser](#)

The following charts show the completeness of data for the **Adult** program.

[Completeness of Demographic Data](#) [Completeness of Occupation Data](#) [Data Table](#)

The following charts show the completeness of sex, race, and ethnicity PIRL data elements.



The Data Quality section shows the completeness of reported demographic and occupation data.

A full accounting of this section's contents are available on the next slide.



Data Quality

WIOA Adult

- Completeness of Demographic Data
- Completeness of Occupation Data
- Data Table

WIOA Youth

- Completeness of Demographic Data
- Completeness of Occupation Data
- Data Table

WIOA Dislocated Worker

- Completeness of Demographic Data
- Completeness of Occupation Data
- Data Table

Wagner-Peyser

- Completeness of Demographic Data
- Completeness of Occupation Data
- Data Table

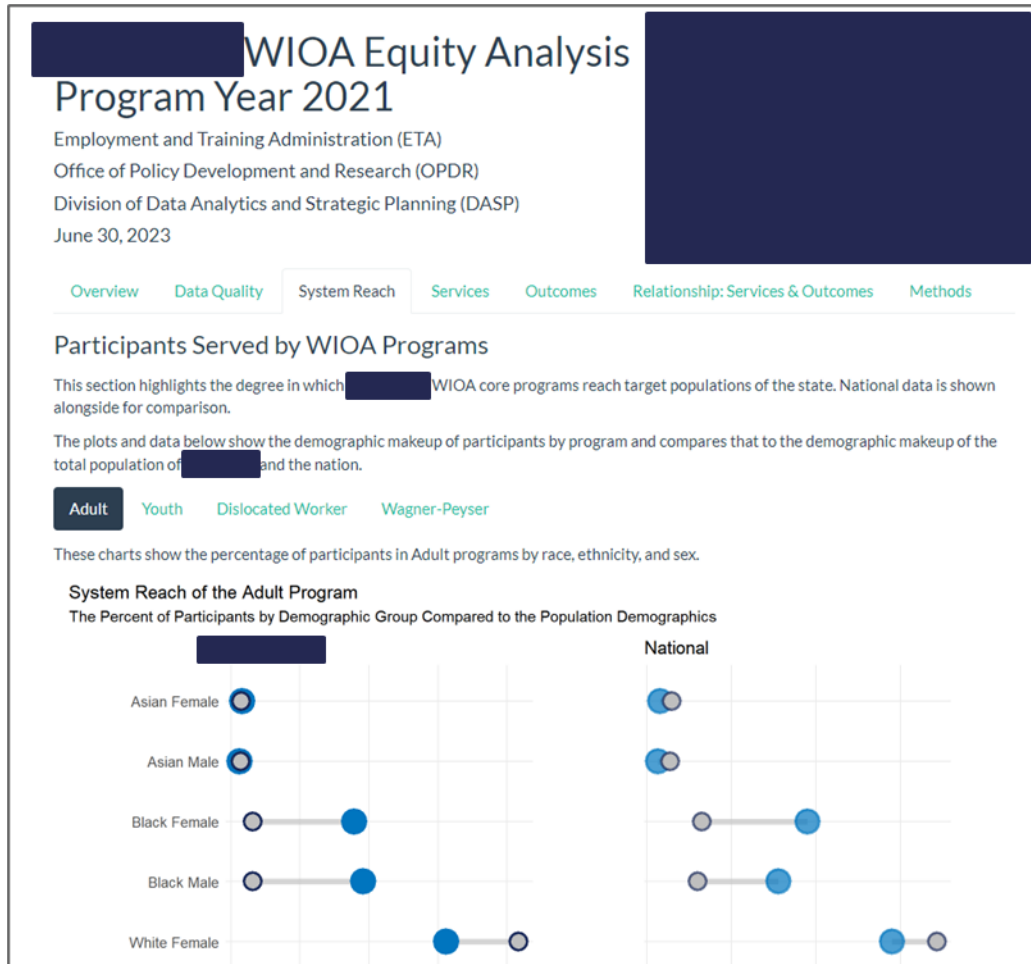
For each program, Completeness of Demographic Data includes the reporting percentages of Sex, Ethnicity, Race, and Race & Ethnicity.

Completeness of Occupation Data includes the reporting percentages of Training SOC Codes and Employment after Exit SOC Codes.

Each program's subsection also includes a Data Table tab. The data here are available in downloaded .csv format so that you have the option of further exploring the data used to generate the figures in this section. Please note that each table has its own Data Table tab. IE, if you want to look at the tables of all four programs, you will need to download the four unique data tables.



System Reach



The System Reach section shows the makeup of program participants. It includes program enrollment across demographic groups and demonstrates how these numbers compare to the state's overall populations of these demographic groups.

The same graph-type is used for Adult, Youth, Dislocated Worker, and Wagner-Peyser subsections. An example interpretation of one such graph is located on a later slide.

The data tables used to generate each graph can also be found by scrolling to the bottom of each page in this section.



Services



This section breaks down the different services received across demographics. It includes information by types of service, models that control for barriers, details by training occupation, and supplemental data tables.

A full accounting of this section's contents are available on the next slide.

Services

Adult

- Summary
- Details by Type of Service
- Model Estimates (Controlling for Barriers)
- Training Occupation

Youth

- Summary
- Details by Type of Service
- Model Estimates (Controlling for Barriers)
- Training Occupation

Dislocated Worker

- Summary
- Details by Type of Service
- Model Estimates (Controlling for Barriers)
- Training Occupation

Wagner-Peyser

- Summary
- Details by Type of Service
- Model Estimates (Controlling for Barriers)

The information to the left presents the main subsections in Services.

The **Summary subsections** provide a breakdown of the types of services received across demographic groups and by program. For Adult and Dislocated Worker, these services include Training Services and Individualized Career Services. For Youth, services include Follow-up Services, Financial Literacy, Supportive Services, and Work Experience. For Wagner-Peyser, services are limited to Individualized Career services.

The **Details by Type of Service subsections** demonstrate the distribution of services received by program in the state and compares that to national statistics. There are sub-subsections here, one for each type of service as identified in the paragraph above.

The **Model Estimates (Controlling for Participant Barriers) subsections** show differences in services participation when controlling for other demographic elements and barriers. For Adult and Dislocated Worker, these services include Training Services and Individualized Career Services. For Youth, services include Follow-up Services, Financial Literacy, Supportive Services, and Work Experience. For Wagner-Peyser, services are limited to Individualized Career services.

The **Training Occupation subsection** looks at what occupations WIOA participants were trained in and whether they were above median earnings jobs. These include subsections on Top Occupations - Participants Trained and Occupations Above Median Earnings. This is included for Adult, Youth, and Dislocated Worker programs.



Outcomes



The Outcomes section shows the differences in outcomes obtained by demographic groups. It includes information on WIOA outcomes, supplemental data tables, and model estimates that show differences when controlling for other demographic elements and barriers.

A full accounting of this section's contents are available on the next slide.

Outcomes

Adult

- Summary
- Details by Outcome
- Model Estimates (Controlling for Barriers)

Youth

- Summary
- Details by Type of Service
- Model Estimates (Controlling for Barriers)

Dislocated Worker

- Summary
- Details by Type of Service
- Model Estimates (Controlling for Barriers)

Wagner-Peyser

- Summary
- Details by Type of Service
- Model Estimates (Controlling for Barriers)

The information to the left presents the main subsections of the Outcomes section.

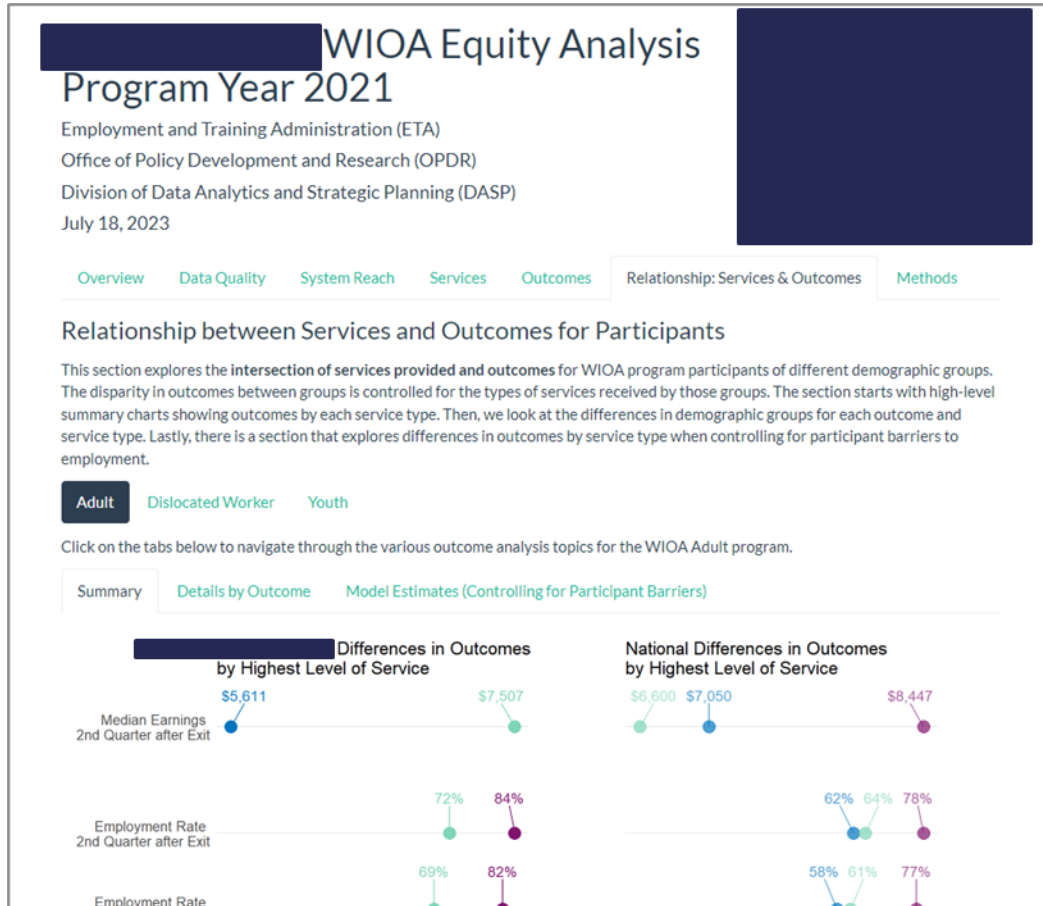
The **Summary subsections** provide a breakdown of outcomes across demographic groups and by program. For all programs, outcomes include Median Earnings 2nd Quarter after Exit, Employment Rate 2nd Quarter after Exit, and Employment Rate 4th Quarter after Exit. Outcomes for Adult, Youth and Dislocated Worker also include Credential Attainment and Measurable Skill Gain.

The **Details by Outcome subsections** demonstrate the distribution of services received by program in the state and compares that to national statistics. There are sub-subsections here, one for each type of service as identified in the paragraph above. Adult and Dislocated Worker also include additional information on Employment in Training Occupation, 2nd Quarter after Exit.

The **Model Estimates (Controlling for Participant Barriers) subsections** show differences in outcomes when controlling for other demographic elements and barriers. This subsection includes the same outcomes as described in the Summary subsection.



Relationship: Services & Outcomes



The Relationship: Services & Outcomes section explores the differences in outcomes obtained by demographic groups while accounting for the level of services received.

This section includes information on the relationship between services and outcomes, supplemental data tables, and model estimates that show differences when controlling for other demographic elements and barriers.

A full accounting of this section's contents are available on the next slide.



Relationship: Services & Outcomes

Adult

- Summary
- Details by Outcome
- Model Estimates (Controlling for Barriers)

Dislocated Worker

- Summary
- Details by Type of Service
- Model Estimates (Controlling for Barriers)

The information to the left presents the main subsections of the Relationship: Services & Outcomes section.


The **Summary subsections** show the relationship between highest level of services participants received and their subsequent outcomes. Highest services received include Basic Career Services, Individualized Career Services, and Training Services. Outcomes include Median Earnings 2nd Quarter after Exit, Employment Rate 2nd Quarter after Exit, and Employment Rate 4th Quarter after Exit. This subsection does not provide details broken down by demographics, but it does juxtapose state-level and national-level information

The **Details by Outcome subsections** provide demographic breakdowns of the initial information provided in the Summary subsection. There are subsections for each of the outcomes identified in the Summary subsection, and each subsection includes two data visualizations and a supplemental data table.

The **Model Estimates (Controlling for Barriers) subsections** show differences in outcomes based on the highest level of services participants received while also controlling for demographic elements and barriers. This subsection includes the same service levels and outcomes as described in the Details by Outcomes subsection.



Methods



WIOA Equity Analysis Program Year 2021

Employment and Training Administration (ETA)
Office of Policy Development and Research (OPDR)
Division of Data Analytics and Strategic Planning (DASP)
July 17, 2023

[Overview](#) [Data Quality](#) [System Reach](#) [Services](#) [Outcomes](#) [Relationship: Services & Outcomes](#) [Methods](#)

Analysis Methods

This section provides more details on analysis decisions and data treatments for this report. The information in this report is not simply a reflection of the data as it is reported to ETA by states. Instead, the reported data has been transformed and modeled as needed to align to the objectives of this report and improve the potential insights that can be drawn. We have divided this section into three broad categories:

- **Analysis and Data Decisions** - This section outlines the business rules we implemented in this analysis, including which participants were included, how the reported data was transformed, and other analysis decisions.
- **Data Imputation** - This section explains the imputation models that were used to account for missing data.
- **Demographic Barrier Models** - This section describes the models that were used to estimate demographic group differences for services and outcomes when controlling for other demographic and employment barriers.

Analysis and Data Decisions

A variety of decisions regarding how to properly treat, transform, and analyze the program data were made in the process of developing this analysis. These decisions are described below.

Scope of Participants

The Methods section includes technical details about the data and report. It includes information on how the data were prepared for analysis, analytical approaches, and modeling methods.

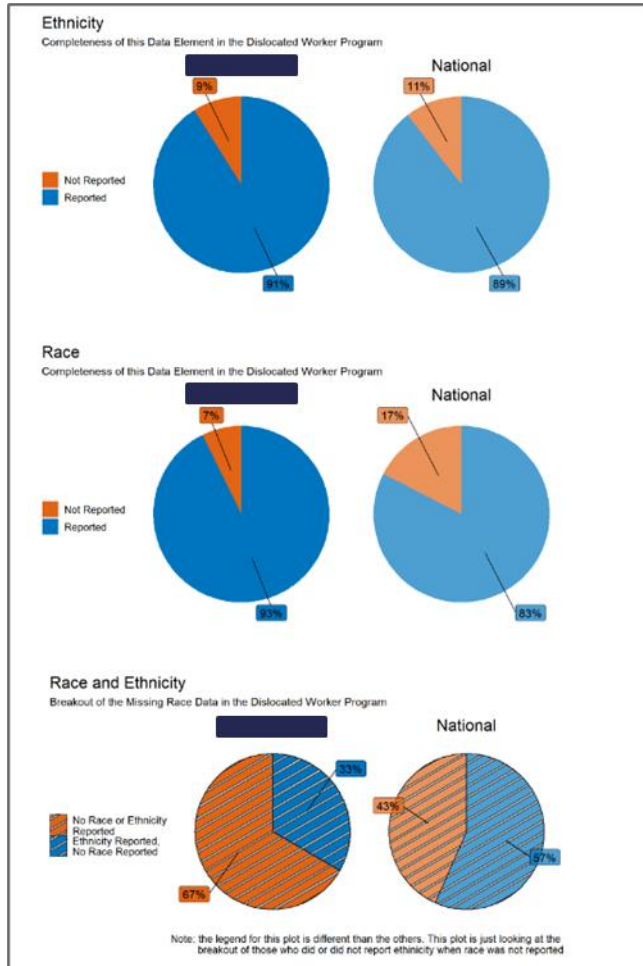
Like the Overview section, the Methods section of the report does not contain state-specific information.



Interpreting Graphs



Interpreting Graphs



This screenshot is an example of the graphs in the **Data Quality** section.

The interpretation for the “Ethnicity” graphs is as follows:

For [state redacted], 91% of participants in the Dislocated Worker program reported their ethnicity. Nationally, only 89% of participants in the Dislocated Worker program reported their ethnicity.

The graph at the bottom of this page (“Race and Ethnicity”) is slightly different than all other graphs in this section. To utilize this graph, one should also cross-reference the Race graph immediately above it. The interpretation is as follows: *Of the 7% participants in [state redacted]’s Dislocated Worker program who did not report race, 67% also did not report their ethnicity. However, in cases where a participant did not report their race, 33% did report their ethnicity. This state’s trend is different from the national trend. Nationally, 17% of participants in the Dislocated Worker program did not report their race. Of those participants, the majority (57%) did report their ethnicity.*

Interpreting Graphs



This screenshot is an example of the graphs in the **System Reach** section.

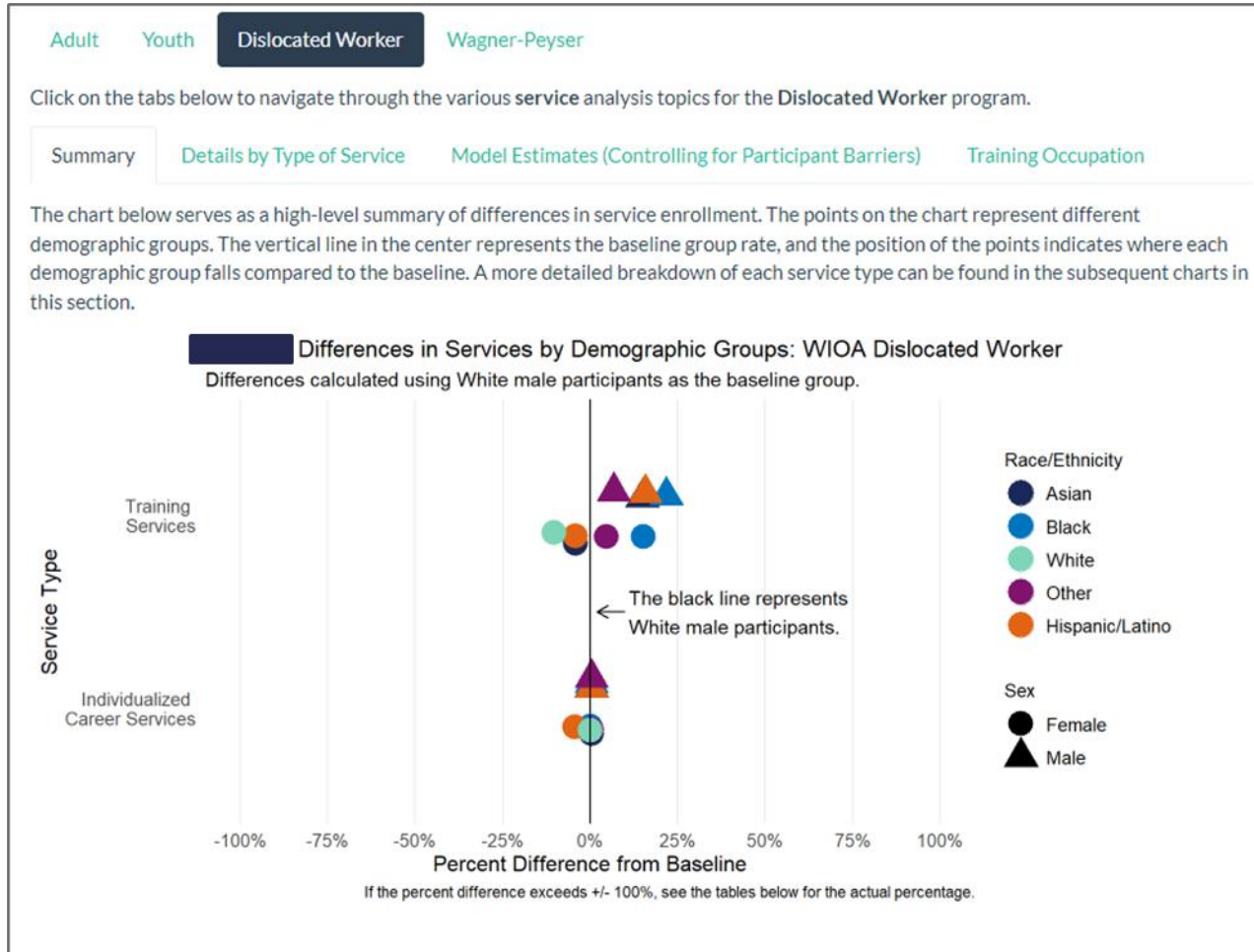
These graphs show the percentages of program enrollment of demographics (blue dots) and Census population estimates (gray dots).

An example interpretation for the System Reach graphs is as follows:

Wagner-Peyser participation rates in [state redacted] follow a pattern similar to national trends for the same program. Asian Females & Males, White Females, and those in the “Other” racial category all have lower participation rates relative to their respective population counts. Black Females & Males and White Males all have participation rates higher than their respective populations.



Interpreting Graphs



This screenshot is from the Summary subsection of **Services**, but similar graphs are also found in the Summary subsection of **Outcomes**.

This data visualization compares the types of services received by different demographics using White Males as a baseline for reference. Colors are used to indicate race/ethnicity and shapes are used to differentiate sex. Points below 0% indicate that that group received that service at a lower rate than White Males. Points about 0% indicate that that group received that service at a higher rate than White Males.

An example interpretation for this data visualization is on the next slide.



Interpreting Graphs



An example interpretation for this graph is as follows:

This graph shows the differences of training services received across demographics in [state redacted] for the Dislocated Worker program.

White Males received Training Services at a higher rate than White Females, Hispanic/Latino Females, and Asian Females. All other demographic groups received Training Services at a rate higher than White Males.

Individualized Career Services were approximately at parity for almost all groups, though Hispanic/Latino Females did receive this service at a lower rate.



Interpreting Graphs



This screenshot is from the Details by Type of Services subsection of **Services**, but similar graphs are also found in the Details by Outcome subsection of **Outcomes**.

This data visualization provides a breakdown of participants that received training services by demographics and compares state percentages to national percentages. Colors are used to differentiate sex, and each set of two bars represent a different grouping of race/ethnicity. The length of each bar represents what percent of that demographic group in the WIOA Adult program received Training Services.

An example interpretation for this data visualization is on the next slide.



Interpreting Graphs



An example interpretation for this graph is as follows:

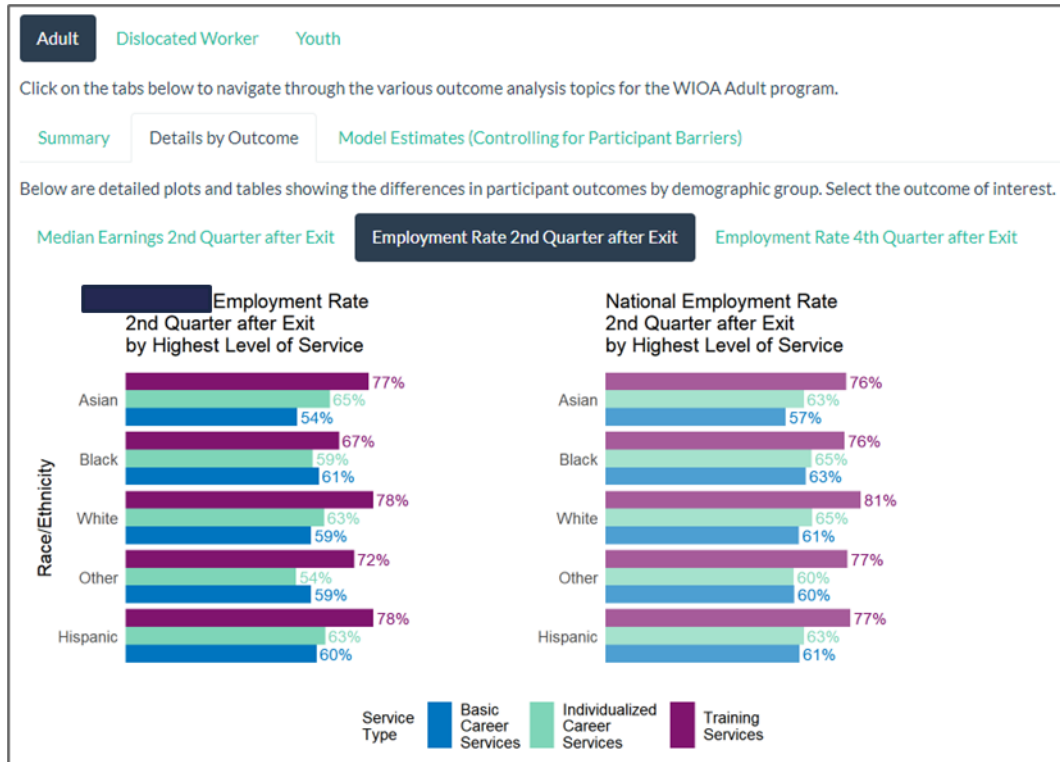
The participants in the Adult program in [state redacted] received higher than average Training Services across all demographic groups as compared to national statistics.

On average, Male participants received Training Services at slightly higher rates in this state, but only by about 1 or 2%. Notable exceptions include Hispanic/Latino and Asian Female demographic groups, a pattern which is also consistent with national trends.

Black participants tended to received Training Services in the WIOA Adult Program at the lowest percentage (76 to 77%) of all demographic groups.



Interpreting Graphs



Grouped bar graphs such as this one appear in the Details by Outcome subsection of the **Relationship: Services & Outcomes** section.

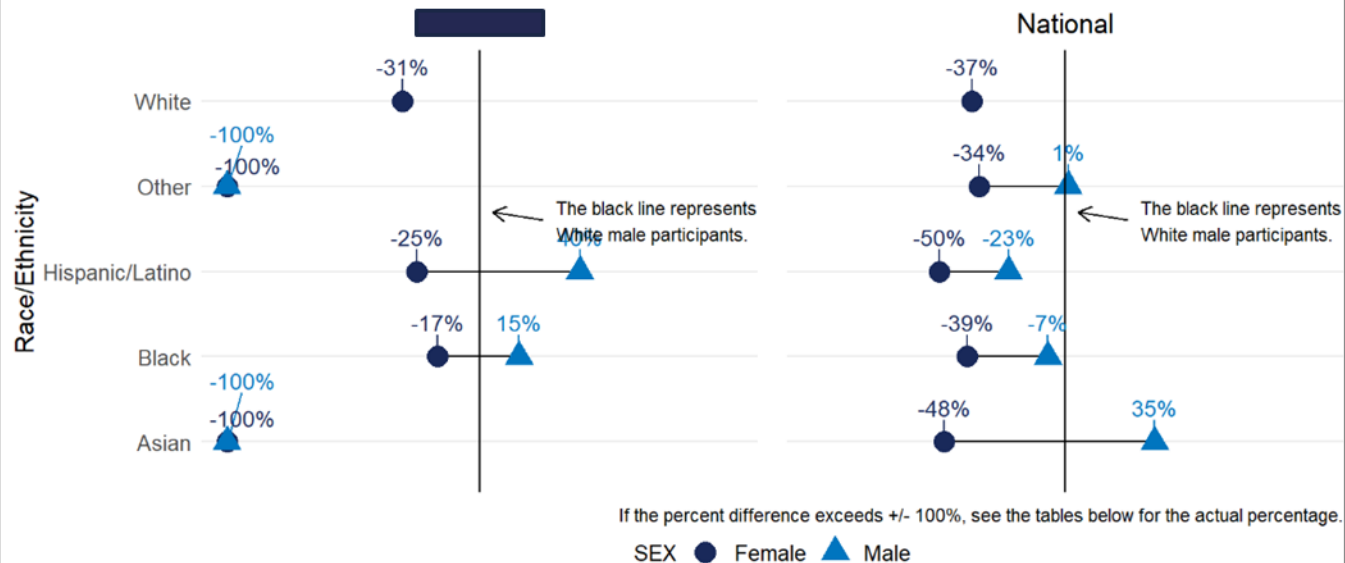
Its setup is comparable to the other grouped bar graphs, except that these demonstrate outcomes across race/ethnicity groups by the types of services received (Basic Career Services, Individualized Career Services, Training Services) instead of breakdowns by sex (Male and Female).

The method for interpreting these grouped bar graphs is likewise comparable to the other bar graphs in the report.



Interpreting Graphs

Percent Difference from Baseline Group in Participants Trained in Occupations Above Median Earnings
Differences calculated using White male participants as the baseline group

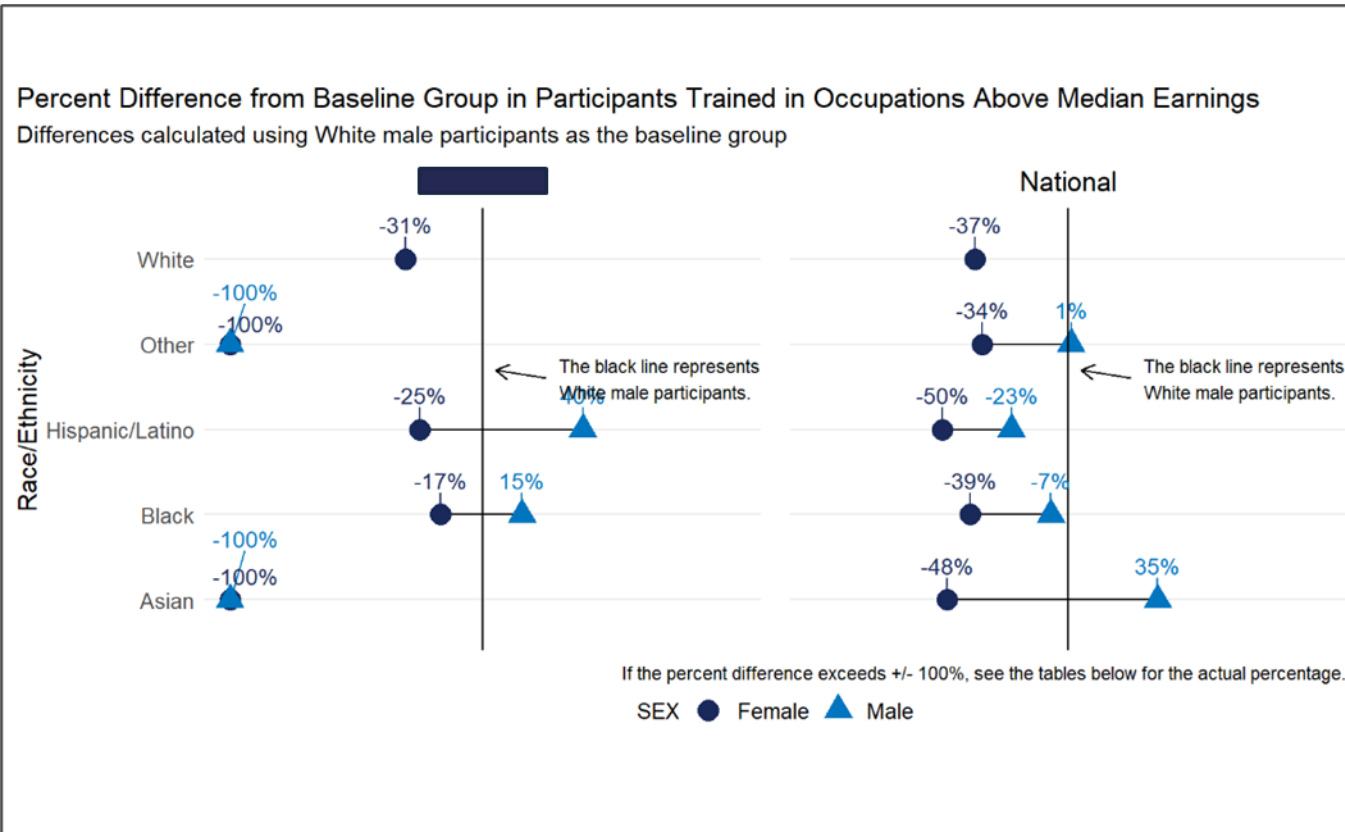


Data visualizations such as these come immediately under the grouped bar graphs in the Details subsections of **Services**, **Outcomes**, and **Relationship: Services & Outcomes** sections.

Colors and shapes are used to differentiate sex, and the black vertical line represents White Male participants, who are used as a reference case. Points to the left of the black line indicate that the group experienced an outcome at a lower rate than White Males. Points to the right of the black line indicate an outcome at a higher rate.

An example interpretation for this data visualization is on the next slide.

Interpreting Graphs



An example interpretation for this graph is as follows:

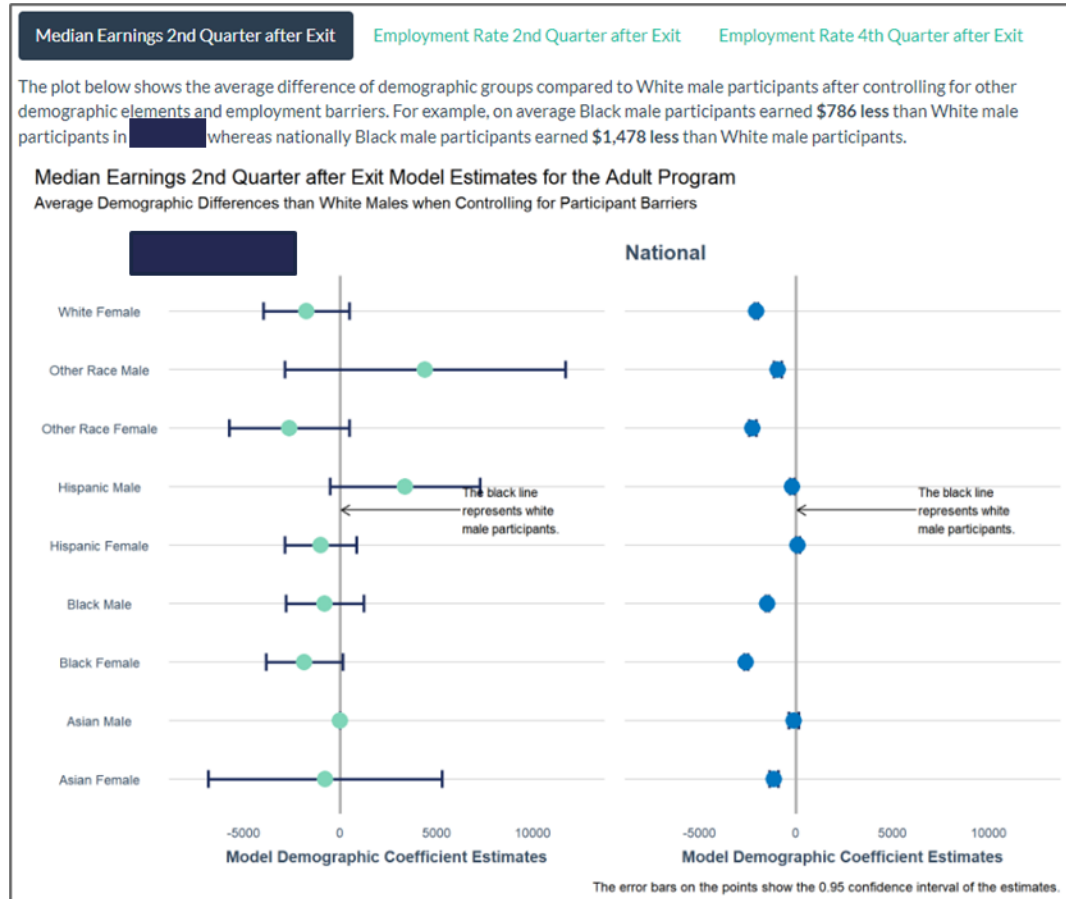
The graph to the left demonstrates the rate at which demographic groups were trained in occupations whose median earnings are above national median earnings. In [state redacted], Hispanic/Latino Males and Black Males were trained in higher-earning occupations at a higher rate than White Males. On average, all other demographic groups were trained at a lower rate than White Males in occupations with high median earnings.

The pattern in [state redacted] is somewhat different from the national average. Nationally, White Males were more likely than all other demographic groups to be trained in higher-earning occupations with the exceptions of Other Males (1% more likely) and Asian Males (35% more likely).

Nationally and in [state redacted], women were less frequently trained in higher-earning occupations than their male counterparts.



Interpreting Graphs



Data visualizations such as these appear in the Model Estimates subsections of **Services, Outcomes, and Relationship: Services & Outcomes** sections.

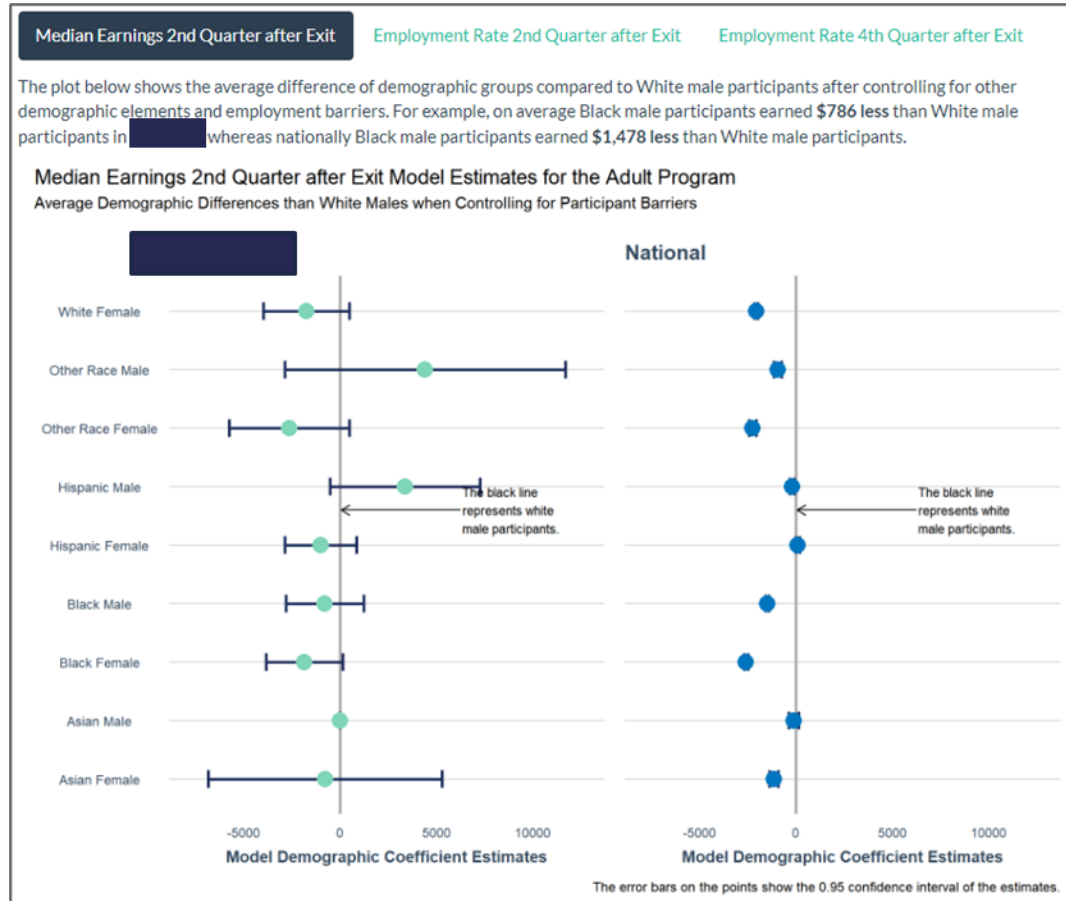
Each point represents the estimated statistical value for a demographic group after controlling for participant-specific information. Points to the left of the vertical line indicate that the variable was estimated as lower than White Males', who were used as the base case in the statistical models. Points to the right of the vertical line indicate that the demographic group's variable was estimated as higher than the base case. The farther away the point is from the line (in either direction), the greater the estimated disparity.

While the point represents the estimated statistical value using the best methods and data available, it is possible that the estimated values may not be accurate enough. The error bars that surround each estimated point communicate, with 95% confidence, the full range of possible values for each statistic. If an error bar crosses the vertical line, it indicates that one cannot confidently reject the possibility that no disparity is present.

Demographic groups with smaller sample sizes tend to have larger error bars because it is difficult to estimate precisely with small sample sizes. The national model, on the other hand, has very small error bars because of the high population counts for each demographic group.

An example interpretation for this data visualization is on the next slide.

Interpreting Graphs



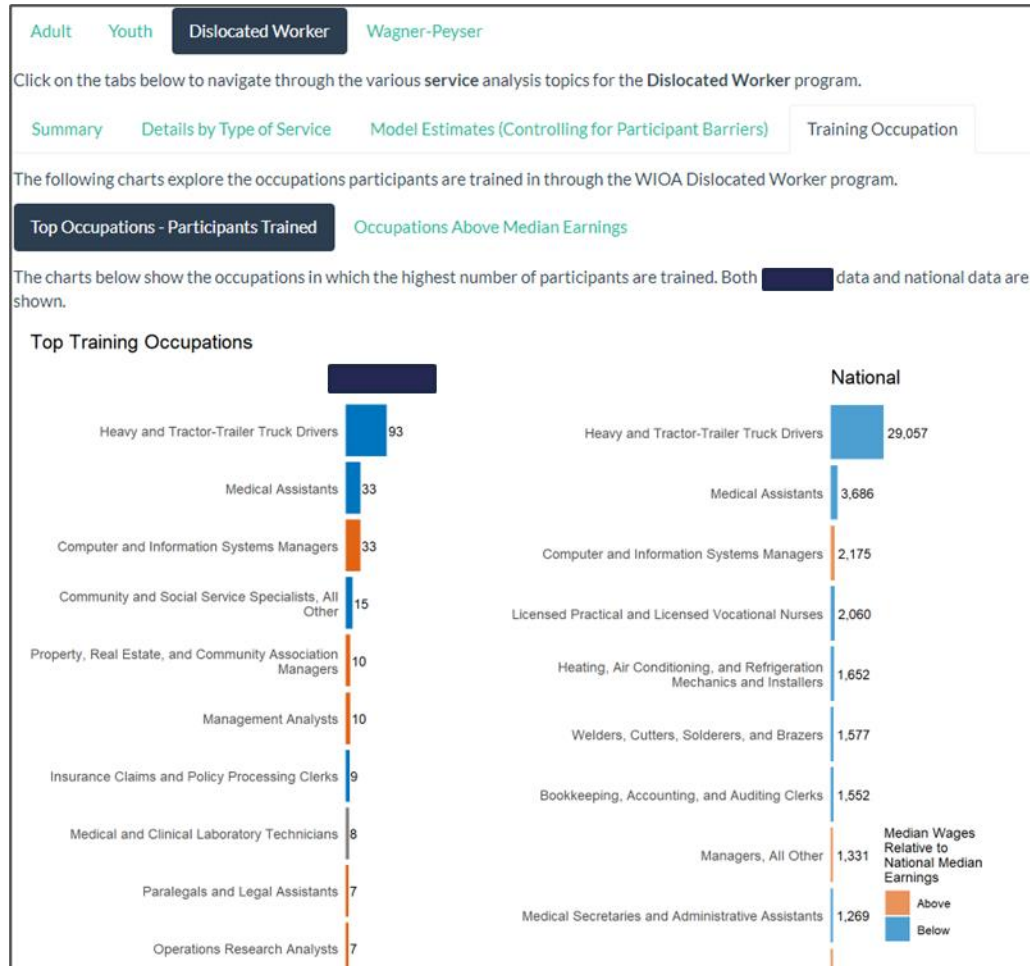
An example interpretation for this data visualization is as follows:

After controlling for barriers to employment correlated with demographic groups, the model initially estimates that median earnings (2nd quarter after exit), as compared to those of White Males', are lower for all demographics except Other Males and Hispanic Males in [state redacted]'s Adult Program. However, the model reports a low degree of confidence in each of these estimates. We cannot reject the possibility that no disparity exists in [state redacted] for median earnings after program exit.

Estimates at the national-level are more precise. After accounting for barriers to employment, Hispanic/Latino Females have slightly higher median earnings than White Males. All other demographics have lower median earnings than White Males on average. White Males had the largest disparity with Black Females for median earnings.



Interpreting Graphs



Data visualizations such as this one appear in the Training Occupation subsection in **Services**.

This data visualization displays the most common occupations that participants were trained in at the state and national level.

Bars for occupations are color-coded based on the occupation's median wages. If the average wages for the occupation are above the national median, the bar is orange. If the average wages are below, the bar is blue. The bar is gray if no wage data was available for the occupation.

These data visualizations do not provide breakdowns by demographics, but such information is available via the grouped bar graphs in the accompanying "Occupations Above Median Earnings" tab.



Interpreting Graphs



Data visualizations appear in the Summary subsections of **Relationship: Services & Outcomes**.

Points are color-coded to show the highest level of service participants received. Differences across points indicate the difference in select outcome (median earnings and employment rates) across service levels.

An example interpretation for this data visualization is as follows:

Median earnings after exit in [state redacted]'s Dislocated Worker program were highest for participants who received training services. Those who only received basic career services had the lowest earnings. Employment rates were between 70% and 80% for the 2nd quarter after exit, with differences corresponding to the services received. Differences in employment rates for the 4th quarter after exit were much less significant.

Trends seen in [state redacted] were somewhat different from national statistics. Nationally, participants in Dislocated Worker who received individualized career services had very similar earnings as compared to those who only received basic career services. Differences in employment rates for these two different service levels were also small. Individuals who received training services were much more likely to be employed and this gap widened slightly when comparing the 2nd quarter after exit employment rate to the 4th quarter after exit employment rate.

