EEOC Explore for Pay Data

User Guide

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Introduction

EEOC Explore is an interactive data query and mapping tool that gives the public access to aggregate data collected by the U.S. Equal Employment Opportunity Commission (EEOC) consistent with the EEOC's confidentiality obligations under Title VII of the Civil Rights Act of 1964 (Title VII). The user-friendly tool enables users to explore and compare data across a number of categories, including geographic location, sex, race or ethnicity, and industry sector without the need for experience in computer programming or statistical analysis.

As part of its mandate under Title VII, the EEOC collects workforce demographic data from eligible employers. The EEO-1 Component 1 report is a mandatory annual data collection that requires private sector employers with 100 or more employees, and federal contractors with 50 or more employees meeting certain criteria, to submit workforce demographic data, including data by job category, sex, and race or ethnicity, to the EEOC.

In 2016, the EEOC added a pay data collection, known as "Component 2," to the EEO-1 report. The EEOC collected 2017 and 2018 pay data, across 12 pay bands, from private employers and certain federal contractors with 100 or more employees. The EEO-1 Component 2 collection includes compensation data from approximately 70,000 employers in each collection year, covering over 100 million workers.

This document provides information on using the EEOC Explore dashboard for EEO-1 Component 2 data (EEOC Explore for Pay Data).

EEOC Explore Overview

Features

EEOC Explore uses Tableau software. The following features are available in the release of the EEO-1 Component 2 data dashboard:
- Five interactive tabs, which provide a specific view of data using relevant maps and graphs.
- Dynamic visual graphs that respond to filters and actions on maps.
- Ability to filter and sort data.

- Ability to select and highlight data points.
- Ability to export screen display to PDF.
- Ability to download underlying data from visual objects.

Source Data

EEOC Explore for Pay Data uses de-identified public use files as the source data. The EEO-1 Component 2 public use files contain aggregated employee counts at national and state levels for 2017 and 2018. Aggregated employee counts are categorized by sex, race/ethnicity, job category, salary band, and geographic areas. The files were processed through a series of data protection techniques to suppress identifiable information. As a result, employee and employer identities are protected in the released data.

User Interface

EEOC Explore for Pay Data uses integrated tabs to display data. As shown in Figure A below, tabs are displayed along the top panel of the user interface and the filters are shown below the tabs and across the screen. The tool presents information based on selected filter(s).

Figure A. Home Screen Layout
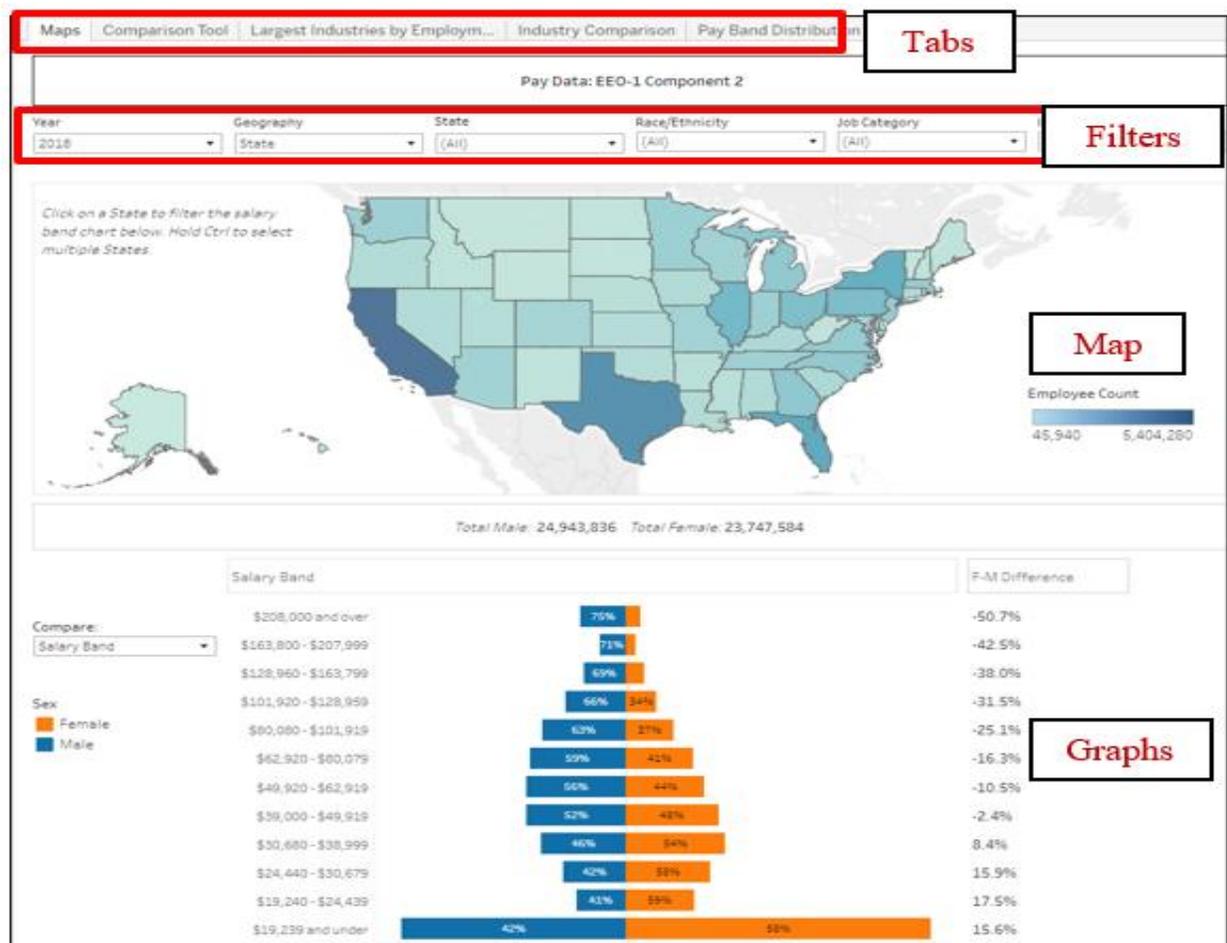
There are two ways of visualizing the data on the Home Screen:

1) Navigation through filters: Changing a filter will affect the information displayed in the graphs.

2) Navigation through maps: Clicking states on the map will change information on the graphs for a given set of filters.

Tabs

EEOC Explore for Pay Data has five tabs:

1. Maps (Home Screen)
2. Comparison Tool
3. Largest Industries by Employment
4. Industry Comparison
5. Pay Band Distribution

A brief description of each tab begins on the next page.

1) Maps (Home Screen)

This tab provides an overview of EEO-1 Component 2 data. It contains filters, an interactive map, and a bar chart/graph. The map displays the number of employees by State or Core Based Statistical Area (CBSA) and acts as an interactive filter for the bar chart/graph. To learn more about CBSAs, visit Glossary (census.gov). The bar chart/graph beneath the map displays the number of employees of each sex by salary band, job category, or race/ethnicity. The data can be filtered by any of the following:

   a) Year
   b) Geography
   c) Race/Ethnicity
   d) Job Category
   e) Industry (by North American Industry Classification System (NAICS) 2-digit code)

Figure B below shows an example of this tab:

**Figure B.**   Screen Layout for the Maps Tab
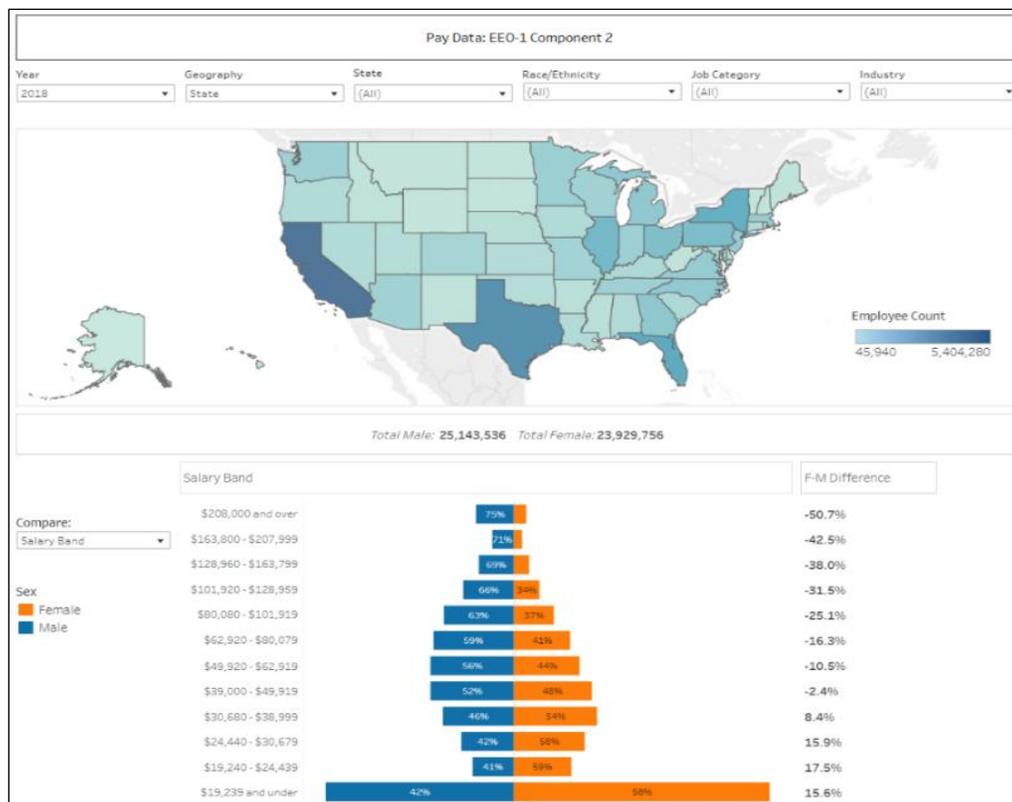
2) Comparison Tool

This tab allows the user to compare two salary band distributions. The tab contains two separate sets of filters that each correspond to a salary band distribution bar chart. Each chart can be filtered according to:

a) Geography Level (State or CBSA)

b) Year

c) Sex

d) Race/Ethnicity

e) Industry (NAICS 2-digit code)

f) Job Category

Figure C below shows an example of this tab, comparing Black or African American workers and White workers in the health care industry in 2018:

Figure C.   Screen Layout for the Comparison Tool Tab
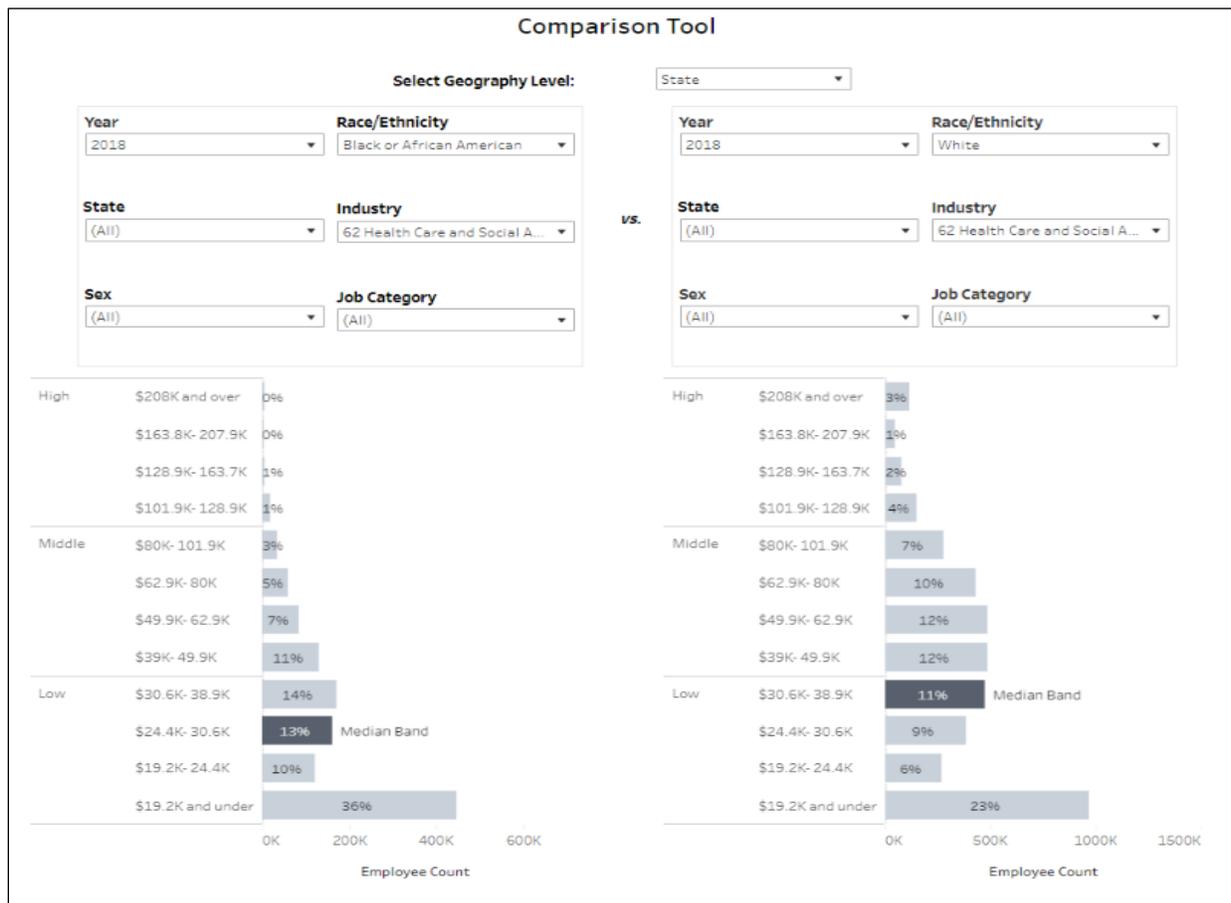
3) Largest Industries by Employment

This tab displays the median salary bands by industry and sex -- male (represented by diamonds) and female (represented by circles). It contains a filter for Year, a filter for Industry Employee Count, and a chart with data points for each combination of Industry and Sex. The Industry Employee Count slider controls which Industries are displayed according to the total count of EEO-1 Component 2 employees reported by Industry in the selected year.

Figure D below shows the layout of this tab:

Figure D. Screen Layout for the Largest Industries by Employment Tab

4) Industry Comparison

This tab allows for an overview of every available industry, job category, or race/ethnicity. The tab contains a set of filters that includes:
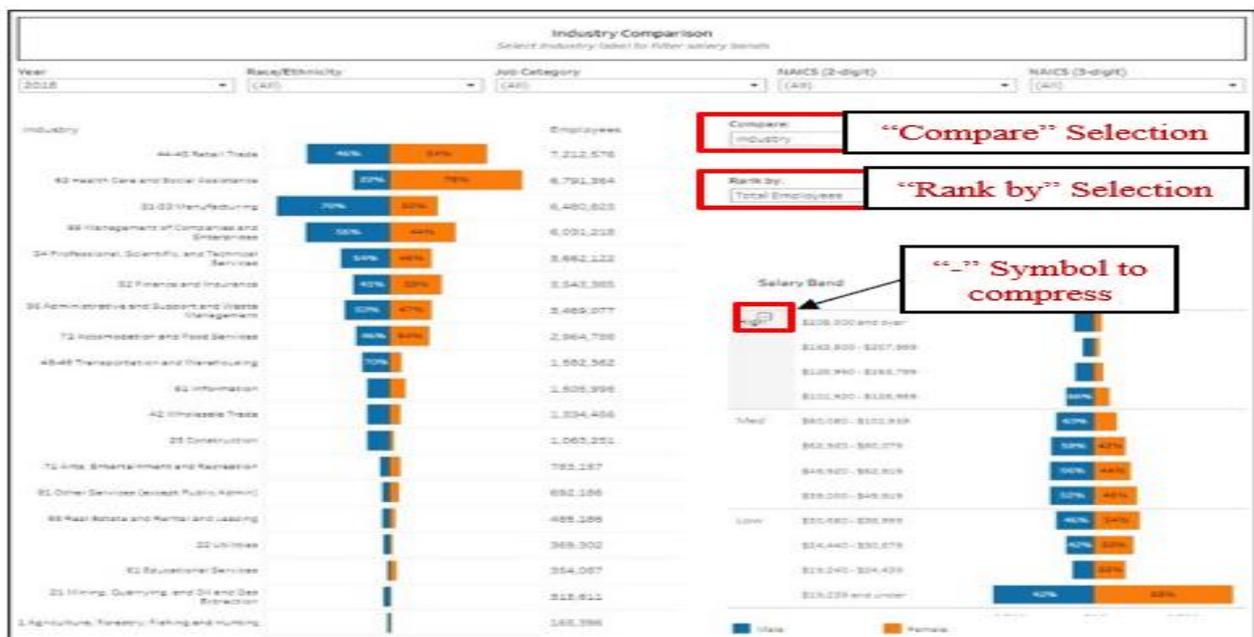
a) Year

b) Race/Ethnicity

c) Job Category

d) NAICS (2-digit)

e) NAICS (3-digit)

The chart on the left side compares aggregated employee counts by sex for various dimensions. The user can use the "Compare" selection to break out the data by Industry, Job Category, or Race/Ethnicity. The total employee count for each segment is displayed to the right of each bar. The user can change the order of the bars using the "Rank by" selection. The default order is the total employee count, but users can also order the bars by the difference in employee count by sex (more women or more men).

The chart on the right side displays aggregated employee counts by sex across the 12 salary bands. The salary bands can be compressed into High, Medium, and Low by hovering over the left column of the chart and clicking the "-" symbol that appears. By default, the chart displays the pay band distribution at the national level. Any of the labels on the left bar chart/graph can be selected to apply as a filter to the salary band chart on the right side.

Figure E below shows an example of this tab:

**Figure E.**   Screen Layout for the Industry Comparison Tab

5) Pay Band Distribution

This tab compares the pay band distribution between men and women. The tab contains a set of filters that include:

a) Year
b) Race/Ethnicity
c) Job Category
d) NAICS (2-digit)
e) NAICS (3-digit)

The chart compares male (blue diamonds) and female (orange circles) representation within different salary bands. By default, it shows the Employee Count for each group. A user can also select Cumulative Employee Total (a running sum of Employee Count, beginning at the highest salary band and ending at the lowest) or Cumulative Percentage of Employee Total (a running sum of Employee Count divided by the total Employee Count, beginning at the highest salary band and ending at the lowest), which updates the horizontal axis accordingly. The median salary band for both genders is highlighted and labeled for easy comparison.

Figure F below shows an example of this tab:

Figure F. Screen Layout for the Pay Band Distribution Tab
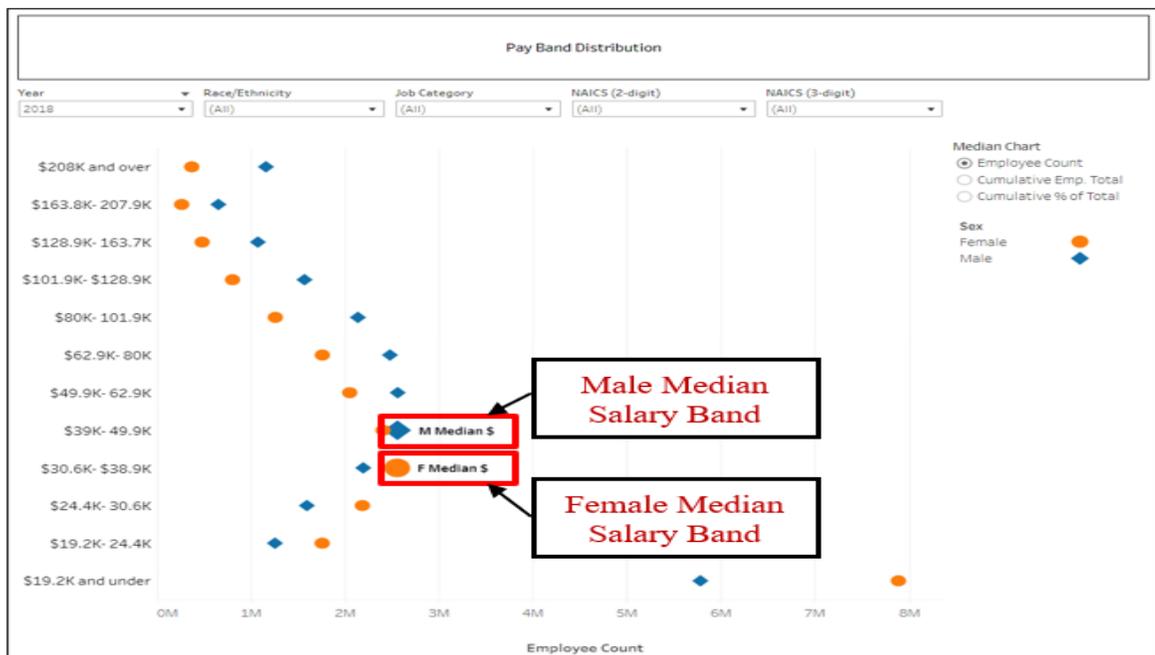
Filters

The following filters are available:

1. Year
2. Sex
3. Race/Ethnicity
4. Job Category
5. Geography
6. Industry

A brief description of each filter is provided below:

1. **Year**: The default value is the most recent year in the database.

   Available selection options are:

   - 2017
   - 2018

2. **Sex**: Default: (All)

   Available selection options are:

   - Female
   - Male
   - (All)

3. **Race/Ethnicity**: Default: (All)

   Available selection options are:

   - American Indian or Alaska Native
   - Asian
   - Black or African American
   - Hispanic
   - Native Hawaiian or Other Pacific Islander
   - Two or more Races
   - White
   - (All)

4. **Job Category**: Default: (All)

    Available selection options are:

    - Craft Workers

    - Executive/Senior Level Officials and Managers

    - First/Mid-Level Officials and Managers

    - Laborers and Helpers

    - Administrative Support Workers

    - Operatives

    - Professionals

    - Sales Workers

    - Service Workers

    - Technicians

    - (All)

5. **Geography**: Default: (All)

    Available selection options are:

    - State

    - CBSA (Maps and Comparison Tool only)

    - (All)

6. **Industry**: Default: (All)

    Available selection options are:

    - 11 Agriculture, Forestry, Fishing and Hunting

    - 21 Mining, Quarrying, and Oil and Gas Extraction

    - 22 Utilities

    - 23 Construction

    - 31-33 Manufacturing

    - 42 Wholesale Trade

    - 44-45 Retail Trade

    - 48-49 Warehousing

    - 51 Information

    - 52 Finance and Insurance

    - 53 Real Estate and Rental and Leasing

    - 54 Professional, Scientific, and Technical Services

- 55 Management of Companies and Enterprises

- 56 Administrative & Support and Waste Management & Remediation Services

- 61 Educational Services

- 62 Health Care and Social Assistance

- 71 Arts, Entertainment, and Recreation

- 72 Accommodation and Food Services

- 81 Other Services (except Public Administration)

- (All)

7. NAICS Code (3-digit): Default: (All)

   20 two-digit NAICS Sector codes are expanded to three-digit Subsector codes. When a user selects a specific code in the NAICS-2 dropdown, the system will show only the relevant codes in the NAICS-3 dropdown.

Data Download Options

Data and objects can be downloaded in several ways.

The download options icon (shown below) is available along the bottom right corner of the screen. A keyboard user can use the Tab key to go to the Tableau logo on the bottom left corner of the screen, and then use the Right Arrow key to reach this download button.

When the download icon is clicked or selected by a keyboard, the following options are presented to the user:
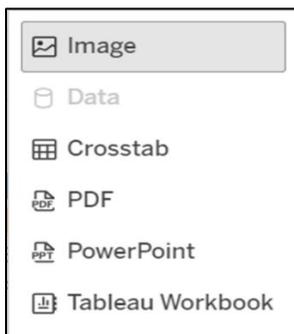
Accessibility

To enable independent use of the application, EEOC Explore supports screen readers for blind and visually impaired users. A free version of the NVDA screen reader software can be downloaded from the following site: https://www.nvaccess.org/download/
For additional information on the NVDA software and system requirements, please visit:
https://www.nvaccess.org/about-nvda/
NVDA quick reference command keys information is available at:
https://www.nvaccess.org/files/nvdaTracAttachments/455/keycommands%20with%20laptop%20keyboard%20layout.html

A keyboard can be used for navigating through objects on the user interface as well.

Comments and Feedback

EEOC Explore has been developed as a prototype to modernize the data dissemination process. This application is expected to be upgraded in the future to meet user needs. Please feel free to send your comments to: OEDA@EEOC.GOV.