

Exploring the Enhanced Veteran Employment Outcomes Data Tool

Experimental Census Bureau statistics on employment and earnings for veterans in the decade after leaving service.

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Any opinions and conclusions expressed herein are those of the author and do not represent the views of the U.S. Census Bureau. All tables and figures use data that is publicly available (VEO Disclosure Review Board Release Numbers CBDRB-FY20-088 and CBDRB-FY25-0058).

This work was done under DMS project P-7501553.

Veteran Employment Outcomes (VEO)

Background and goals of project

What is VEO:

- VEO began as a collaboration between the Census Bureau and the Army Office of Economic and Manpower Analysis (OEMA) to create statistics on labor market outcomes for veterans of the U.S. Army.
- VEO augments traditional survey-based sources of information on veterans to provide additional information about veterans' employment and earnings after discharge.
- The Census Bureau collaborated with staff from the Department of Defense (DoD) to form an expanded partnership that incorporates data from other branches of military service: VEO v2.
- The [VEO Explorer](https://lehd.ces.census.gov/applications/veo/) tool provides public access to the VEO data tabulations in graphical format at <https://lehd.ces.census.gov/applications/veo/>.

Veteran Employment Outcomes (VEO)

Background and goals of project

Anticipated use cases for VEO:

- *Military*: Talent retention and recruitment.
- *Servicemembers and veterans*: Post-military career planning.
- *Policymakers/DoD Transition Assistance Program*: Help design targeted interventions for veterans transitioning into the civilian labor market.

Veteran Employment Outcomes (VEO)

Additional Background

- VEO matches administrative earnings records from the Census Bureau's LEHD program to DoD data on 2.8 million enlisted veterans who discharged from service between 2002 and 2021.
 - LEHD records cover over 96% of private and public sector wage and salary jobs; excludes self-employment earnings.
- Data are longitudinal, such that the employment and earnings outcomes are both immediate (1 year after exiting service) and longitudinal (5 and 10 years after).
- State-of-the-art differential privacy techniques maintain individual veterans' privacy in accordance with the Census Bureau's legal obligations.

Veteran Employment Outcomes (VEO)

Additional Background

VEO provides statistics on numerous veteran characteristics, including several that are not observed in traditional survey-based datasets (e.g., CPS/ACS):

- Military occupation (2-digit level (9 occupations) and 3-digit level (56 occupations))
- Civilian industry of employment
- State of employment
- Veterans' characteristics (sex, race, rank, years of military service, etc.)
- Discharge cohort
- Branch (new in VEO v2): Air Force, Army, Coast Guard, Marine Corps, Navy

Veteran Employment Outcomes (VEO)

Live demonstration with specific use case examples

Three use cases:

- *Military*: what do military personnel in specific occupations earn if they leave service for civilian jobs?
- *Servicemember*: what types of civilian jobs would value my military experience if I left service?
- *Policymakers/Transition Assistance*: Which vets struggle to find good jobs initially? Who should be targeted for post-military labor market transition interventions?

Veteran Employment Outcomes (VEO)

Resources

- VEO Explorer: <https://lehd.ces.census.gov/applications/veo/>
- America Counts: Stories Behind the Numbers:
<https://www.census.gov/library/stories/2025/01/veterans-employment-outcomes.html>
- **Feedback:** CES.Local.Employment.Dynamics@census.gov

MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

2 Military Occupations Selected

Select Multiple Characteristics



Service Branch

All Branches



Cohort

All Cohorts

Earnings for Employed Veterans by Military Occupation

Data Type

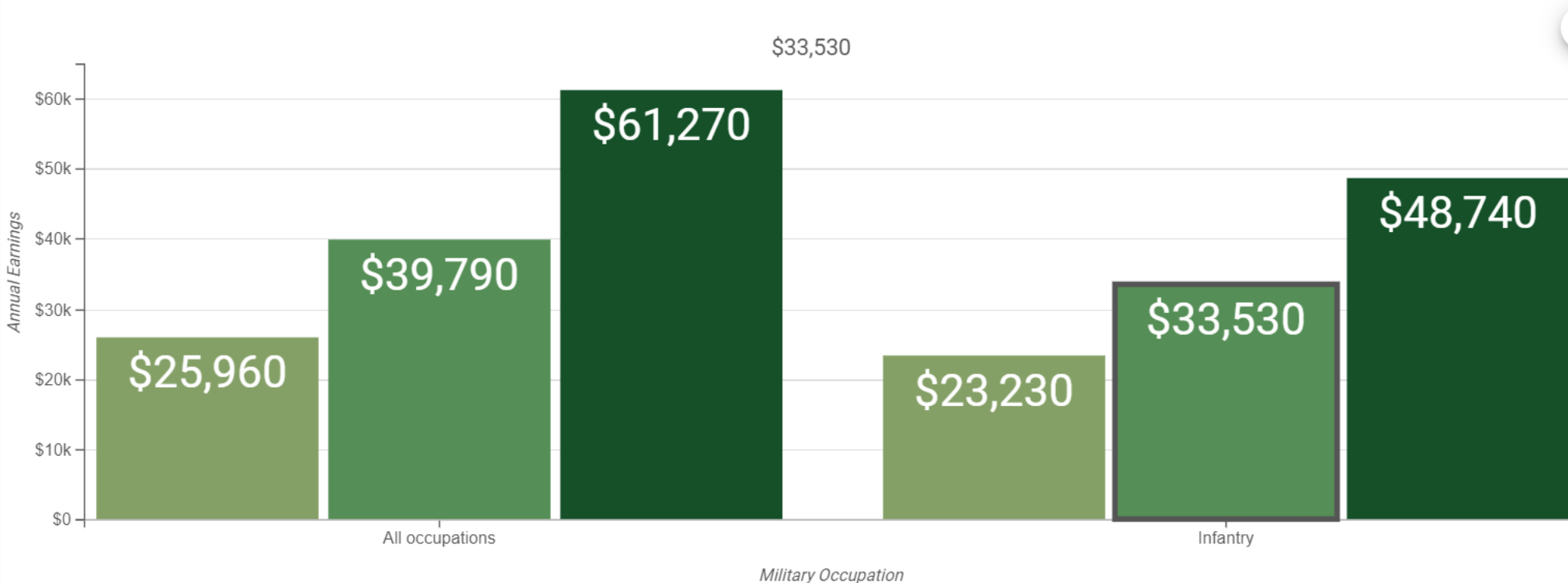
Earnings

Percentiles

25% 50% 75%

Years Post Discharge

1



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

4 Military Occupations Selected



Service Branch

All Branches



Cohort

All Cohorts

SELECT ALL CLEAR



All occupations

All occupations

Infantry

Infantryman (11B), Indirect Fire Infantryman (11C), Infantry Senior Sergeant (11Z), Rifleman (0311), Scout Sniper (0317), Machine Gunner (0331), Mortarman (0341), Antitank Missile Gunn...

Armor and Amphibious

M1 Armor Crewman (19K), Armor Senior Sergeant (19Z), Light Armored Reconnaissance Marine (0313), Light Armored Reconnaissance (LAR) Unit Leader (0363), Light Armored Reconnaissance...

Combat Engineering

Engineer Senior Sergeant (12A), Combat Engineer (12B, 1371), Bridge Crewmember (12C), Combat Engineering Senior Sergeant (12Z), Landing Support Specialist (0481)

Artillery/Gunnery, Rockets, and Missiles

Cannon Crewmember (13B), Field Artillery Senior Sergeant (13Z), Gunner's Mate (GM), Field Artillery Cannoneer (0811), Field Artillery Radar Operator (0842), Field Artillery Fire Control Mar...

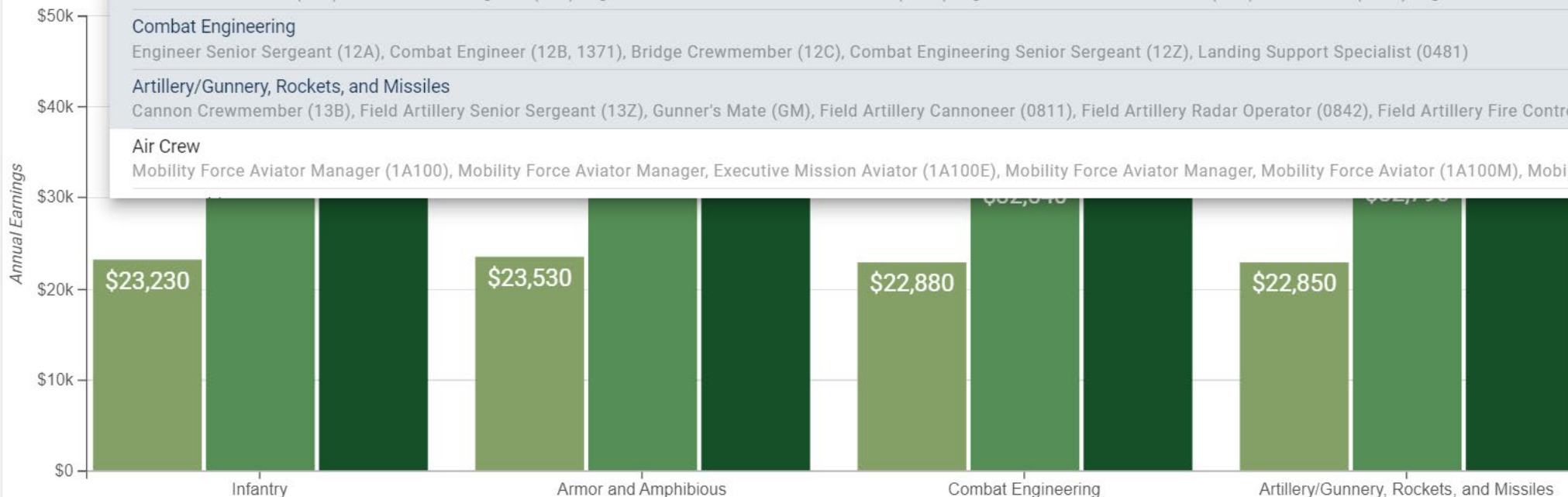
Air Crew

Mobility Force Aviator Manager (1A100), Mobility Force Aviator Manager, Executive Mission Aviator (1A100E), Mobility Force Aviator Manager, Mobility Force Aviator (1A100M), Mobility Fo...

Earnings for

Data Type

Earnings



Military Occupation

MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

10 Military Occupations Selected

Select Multiple Characteristics



Service Branch

All Branches



Cohort

All Cohorts

Earnings for Employed Veterans by Military Occupation

Data Type

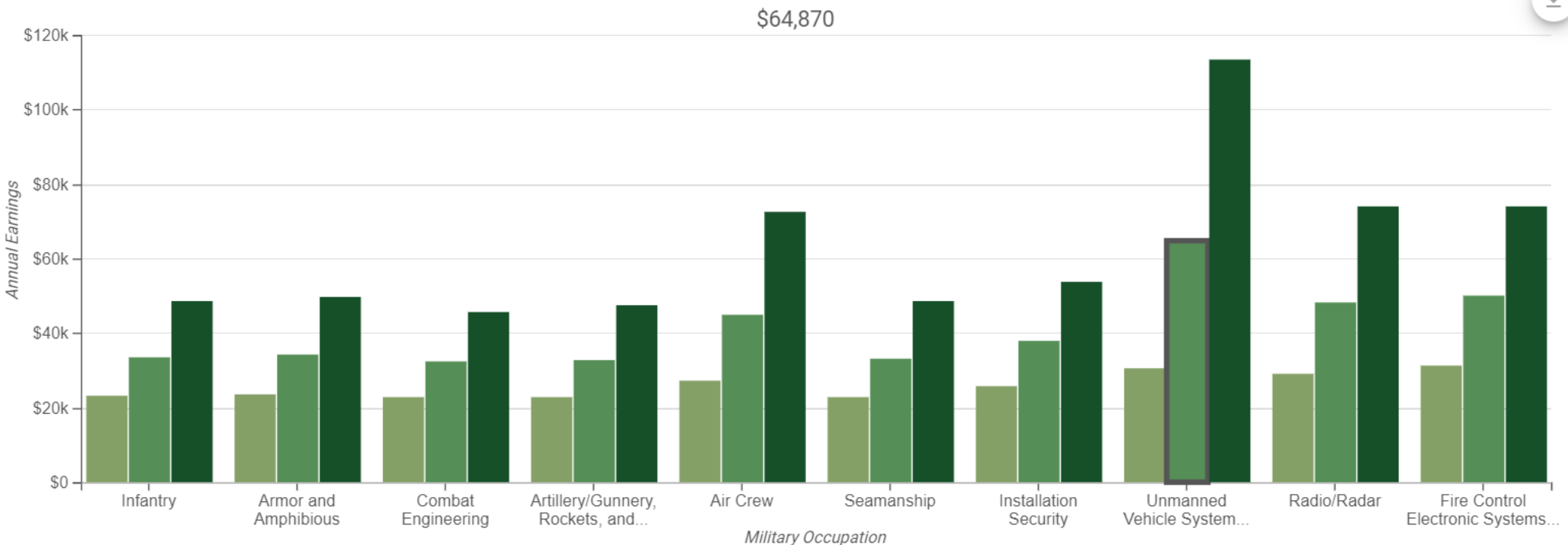
Earnings

Percentiles

25% 50% 75%

Years Post Discharge

1



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

10 Military Occupations Selected

Select Multiple Characteristics



Service Branch

All Branches



Cohort

All Cohorts

Earnings for Employed Veterans by Military Occupation

Date Type

Earnings for Employed Veterans

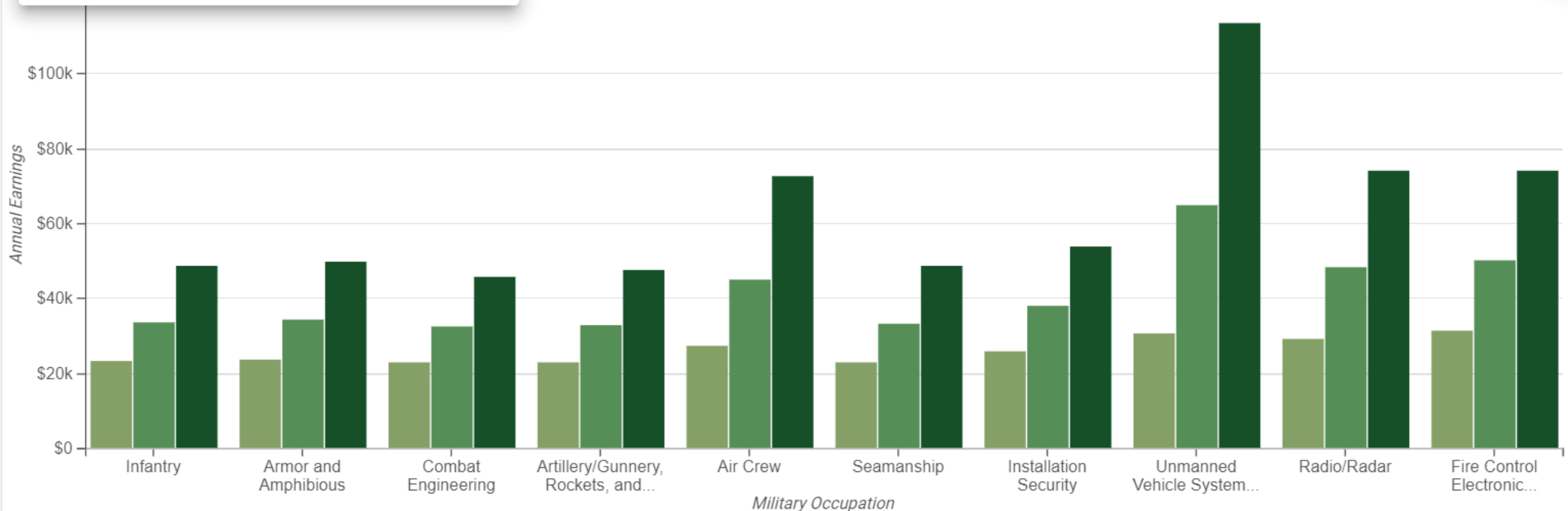
Counts of Veterans

Percentiles

25% 50% 75%

Years Post Discharge

1



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

11 Military Occupations Selected

Select Multiple Characteristics



Service Branch

All Branches



Cohort

All Cohorts

Earnings for Employed Veterans by Military Occupation

Data Type

Earnings

Percentiles

50%

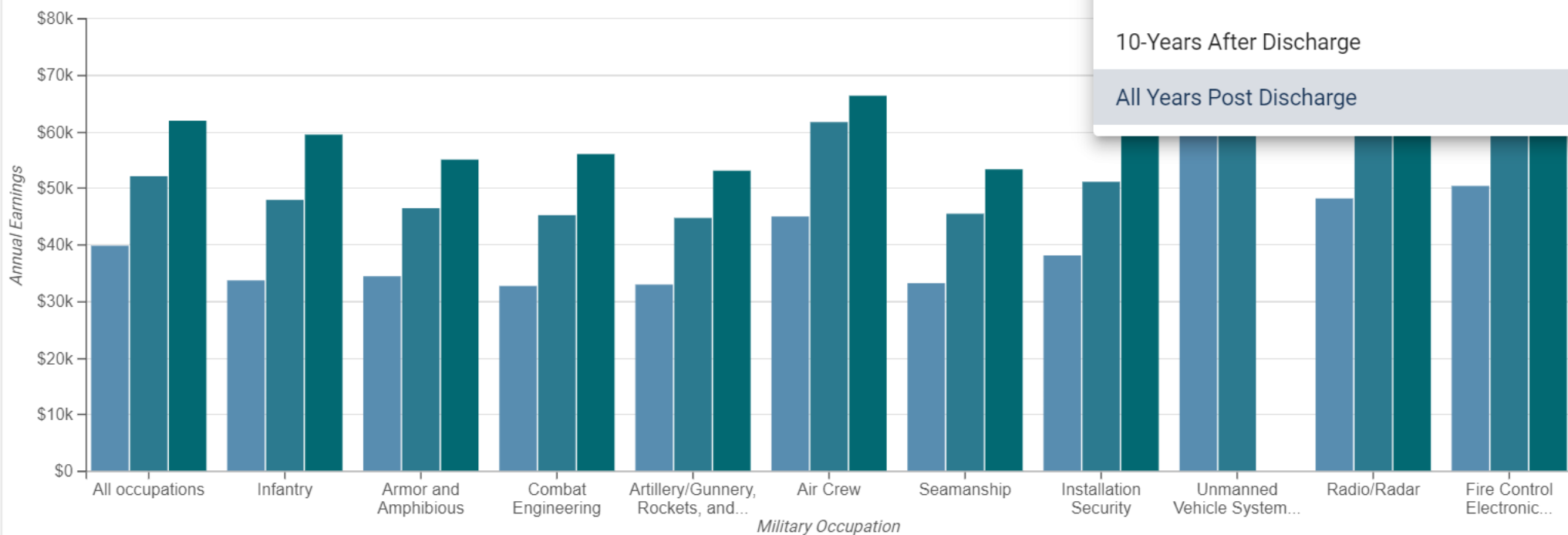
Years Post Discharge

1-Year After Discharge

5-Years After Discharge

10-Years After Discharge

All Years Post Discharge



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

11 Military Occupations Selected

Select Multiple Characteristics



Service Branch

All Branches



Cohort

All Cohorts

Earnings for Employed Veterans by Military Occupation

Data Type

Earnings

Percentiles

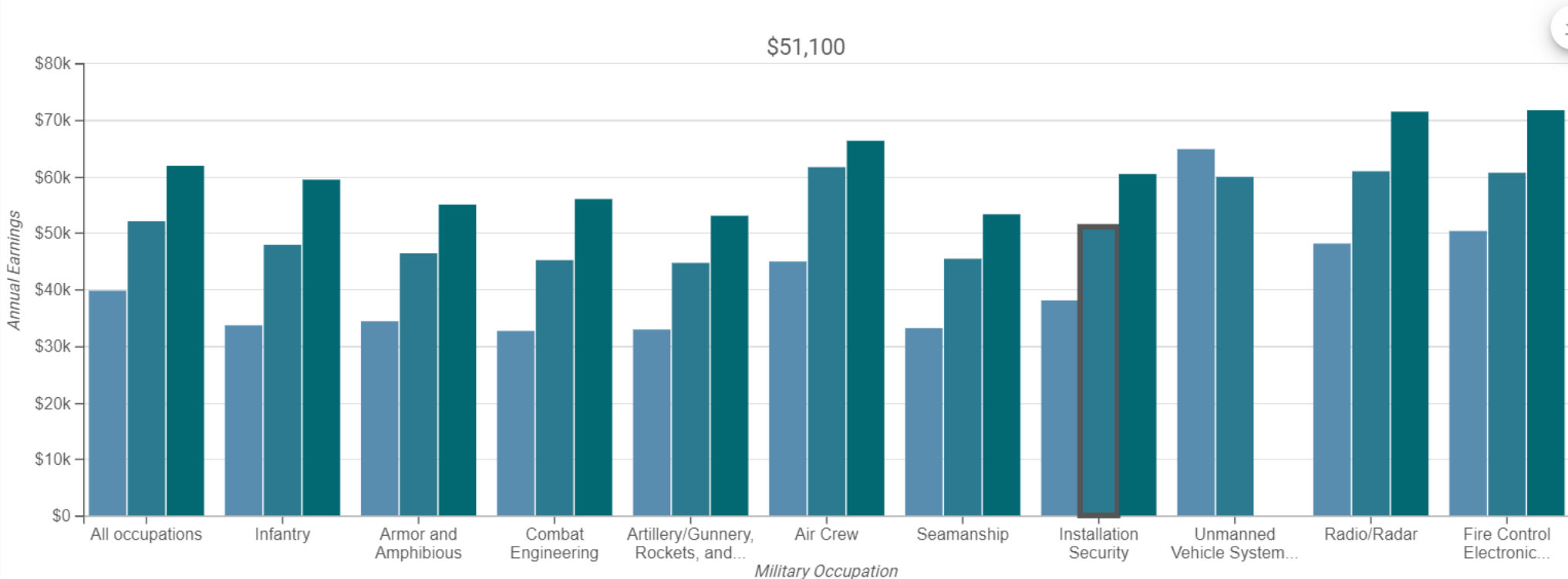
50%

Years Post Discharge

1

5

10



MILITARY SPECIALIZATION ▾

SERVICE CHARACTERISTIC ▾

DEMOGRAPHIC ▾

INDUSTRY ▾

STATE ▾

HELP ?



Military Occupation

10 Military Occupations Selected ▾

Select Multiple Characteristics



Service Branch

Army ▾



Cohort

All Cohorts ▾

Earnings for Employed Veterans by Military Occupation

Data Type

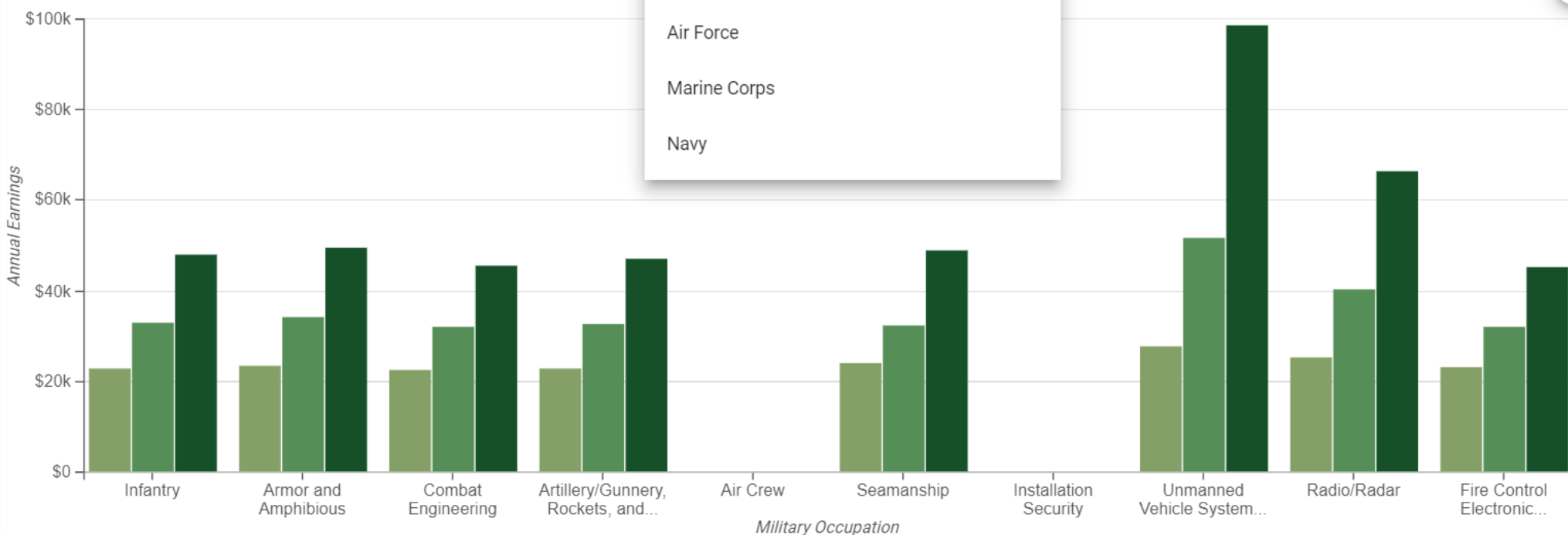
Earnings ▾

Percentile

25% ▾

Years Post Discharge

1 ▾



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

10 Military Occupations Selected

Select Multiple Characteristics



Service Branch

Coast Guard



Cohort

All Cohorts

Earnings for Employed Veterans by Military Occupation

Data Type

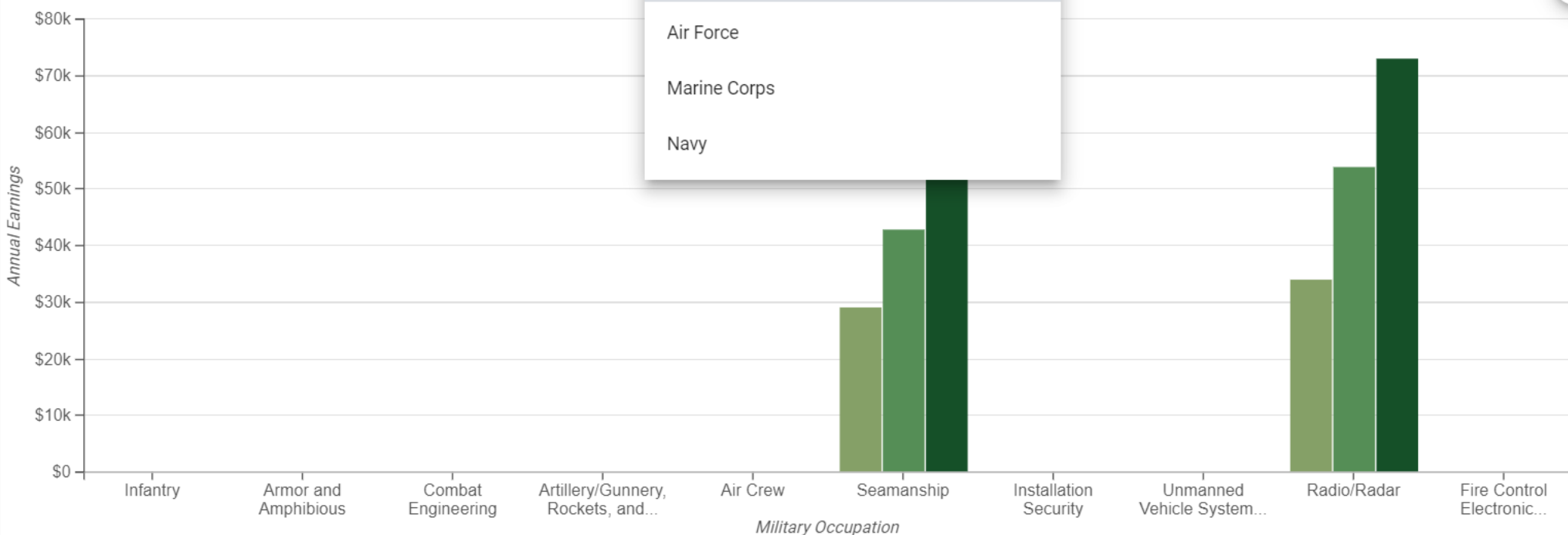
Earnings

Percentile

25%

Years Post Discharge

1



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

10 Military Occupations Selected

Select Multiple Characteristics



Service Branch

Air Force



Cohort

All Cohorts

Earnings for Employed Veterans by Military Occupation

Data Type

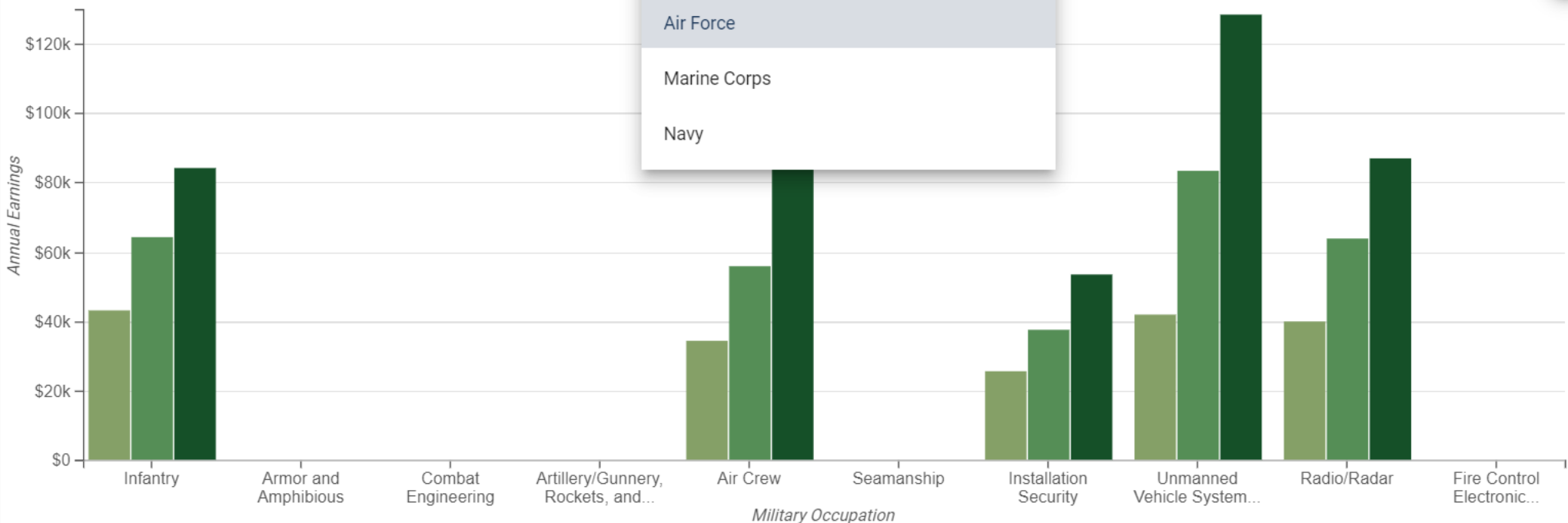
Earnings

Percentile

25%

Years Post Discharge

1



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

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Military Occupation

10 Military Occupations Selected

Select Multiple Characteristics



Service Branch

Marine Corps



Cohort

All Cohorts

Earnings for Employed Veterans by Military Occupation

Data Type

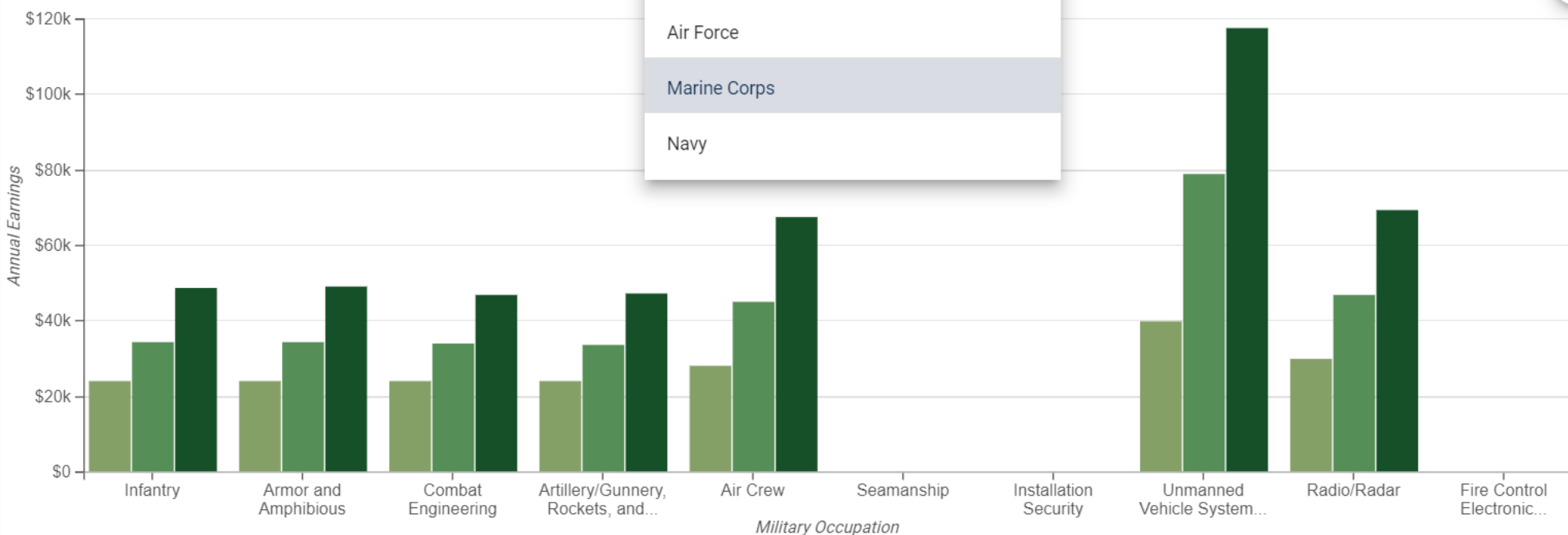
Earnings

Percentile

25%

Years Post Discharge

1



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

10 Military Occupations Selected

Select Multiple Characteristics



Service Branch

Navy



Cohort

All Cohorts

Earnings for Employed Veterans by Military Occupation

Data Type

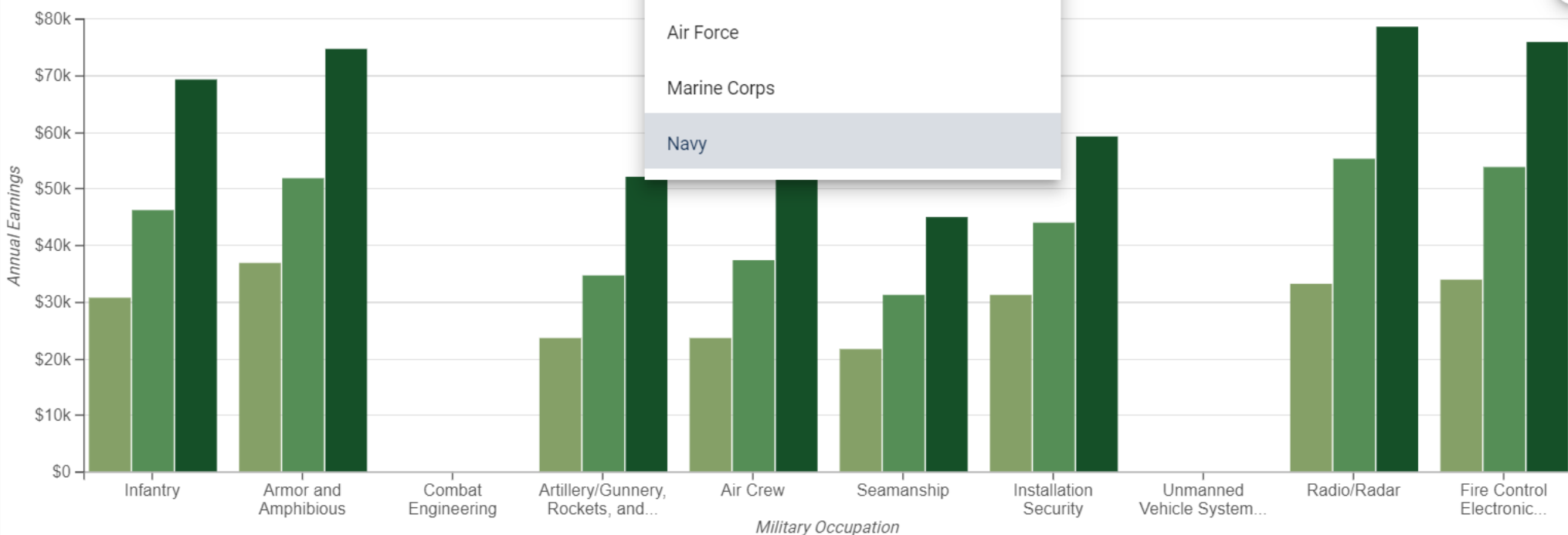
Earnings

Percentile

25%

Years Post Discharge

1



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

Radio/Radar



Service Branch

6 Service Branches Selected



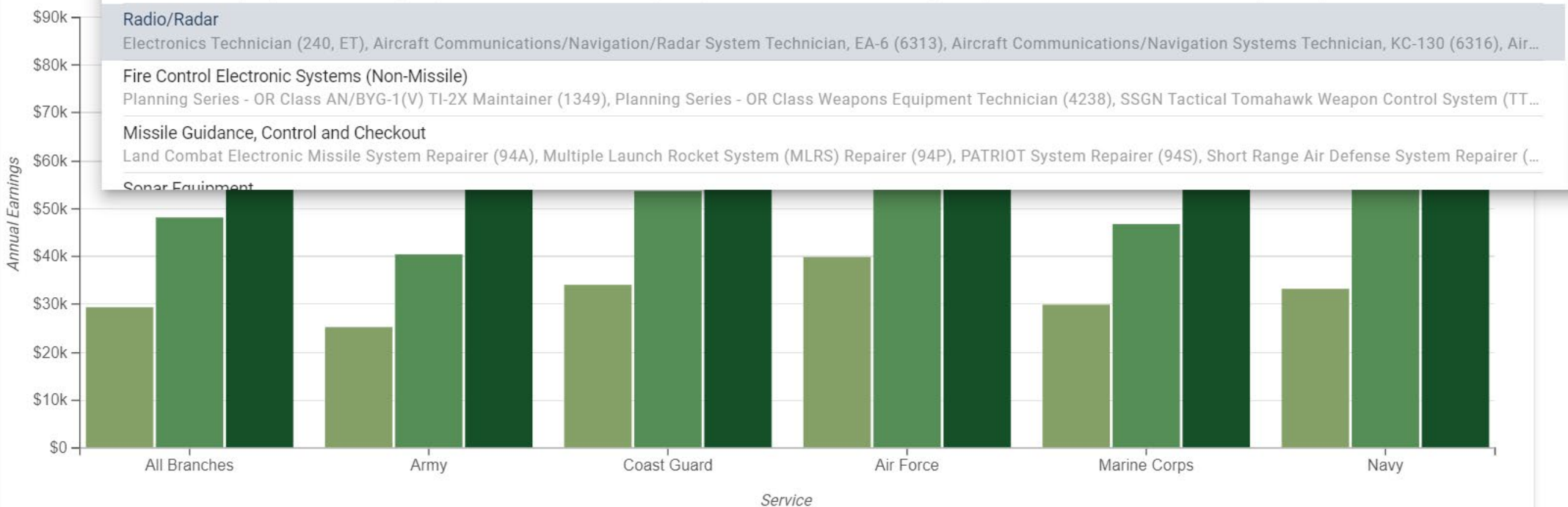
Cohort

All Cohorts

Earnings for

Data Type

Earnings



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Detailed Military Occupation



Military Occupation by Paygrade



Military Occupation by Industry



Military Occupation by State



Service Branch

6 Service Branches Selected

Select Multiple Characteristics



Cohort

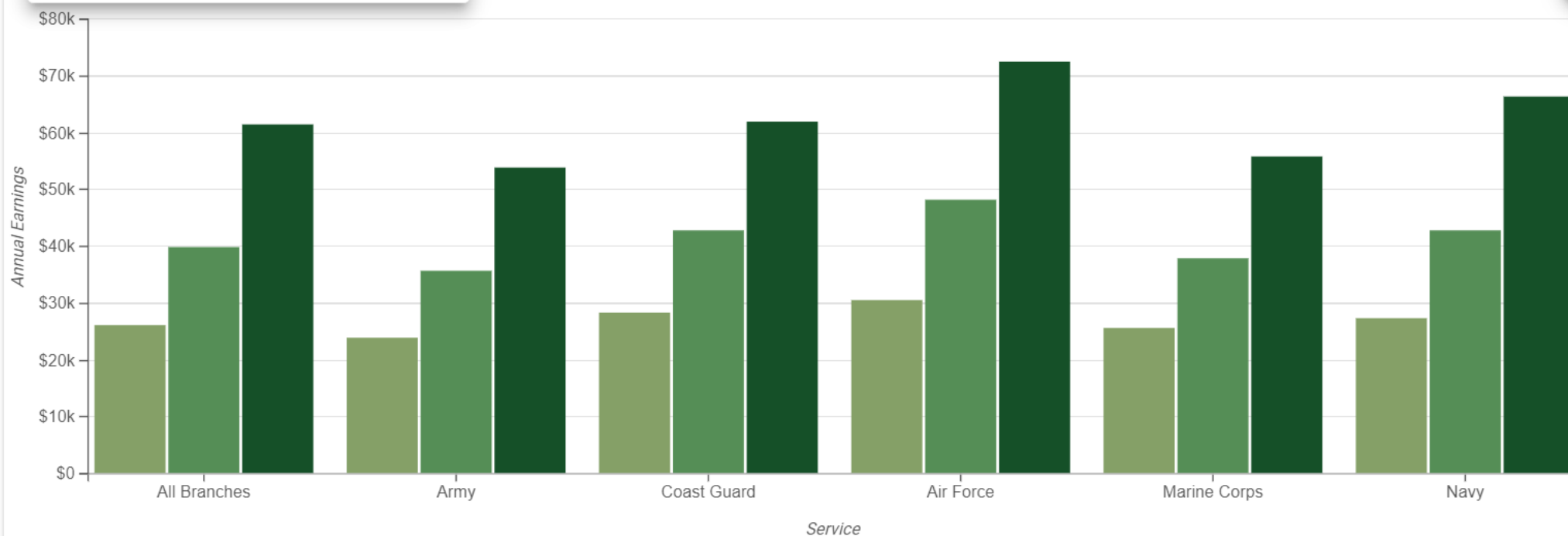
All Cohorts

Percentiles

25% 50% 75%

Years Post Discharge

1



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



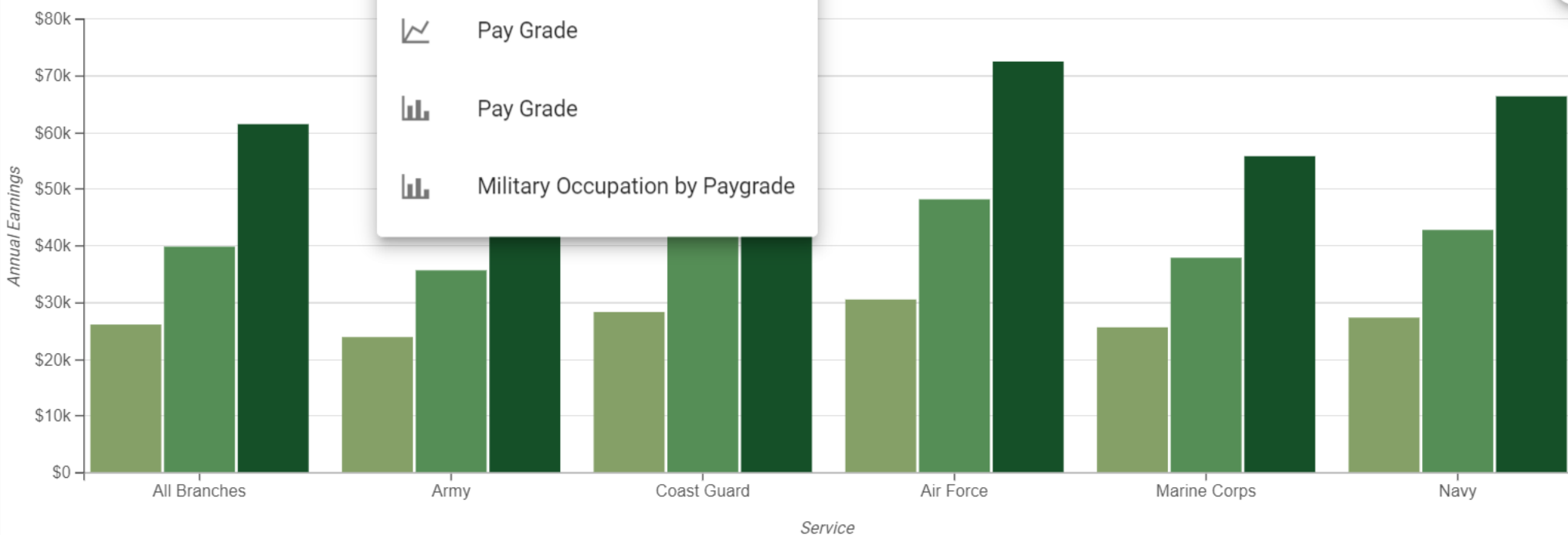
Military Occupation
All occupations



Cohort
All Cohorts

Earnings for Employed Veterans by Service

Data Type
Earnings



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

All occupations



Service Characteristic

All service characteristics



Cohort

All Cohorts

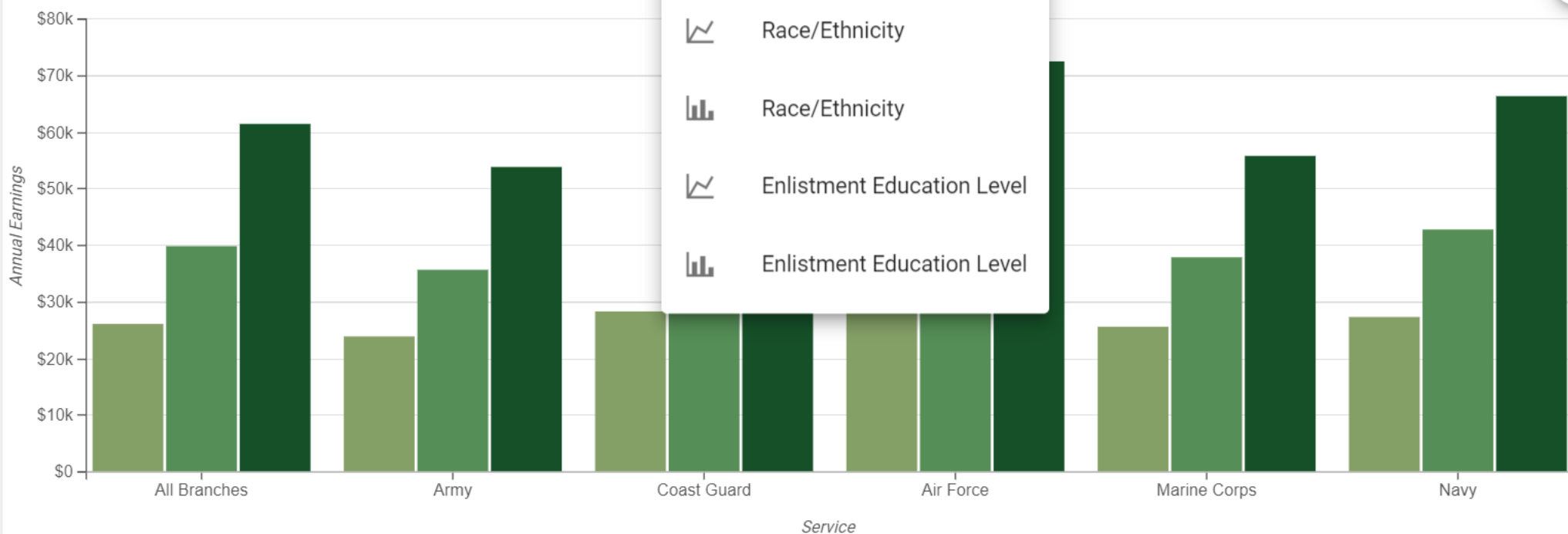
Earnings for Employed Veterans by Service Branch

Data Type

Earnings

Percentiles

25%



Age at Exit Cohort



Age at Exit Cohort



Sex



Sex



Race/Ethnicity



Race/Ethnicity



Enlistment Education Level



Enlistment Education Level



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

All occupations



Service Branch

6 Service Branch

Select Multiple Characters



Industry



Industry



Military Occupation by Industry

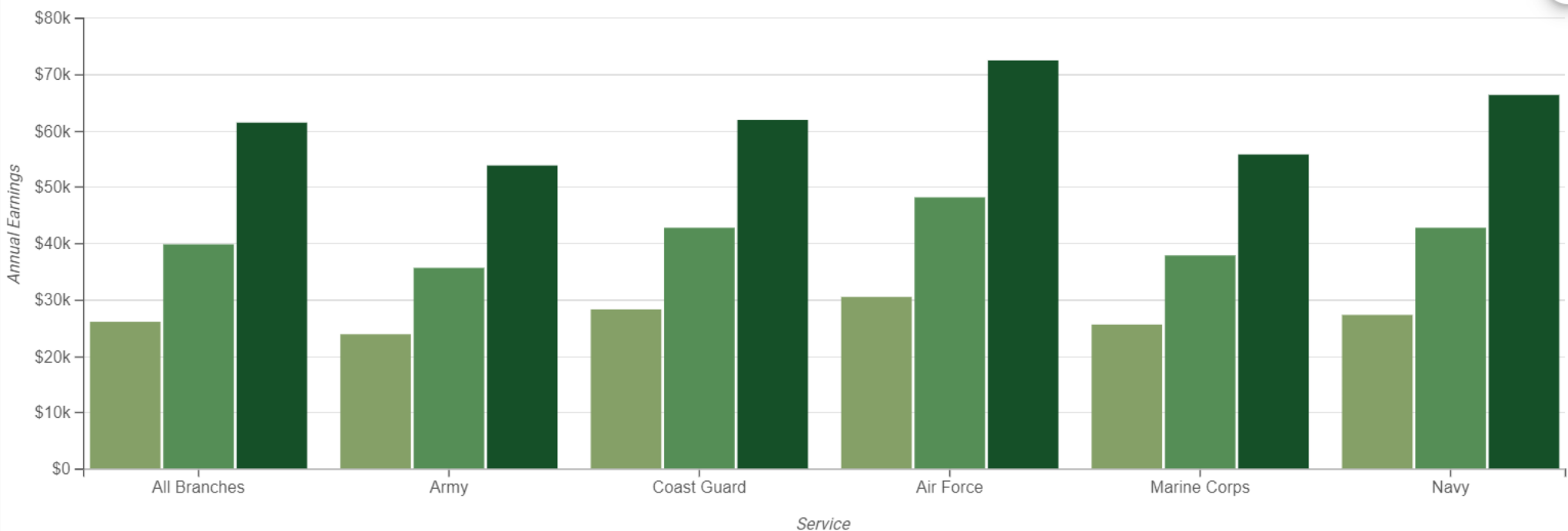
Earnings for Employed Veterans by Service Branch

Data Type

Earnings

Percentiles

25% 50% 75%



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

All occupations



Service Branch

6 Service Branches Selected

Select Multiple Characteristics



State



State



Military Occupation by State

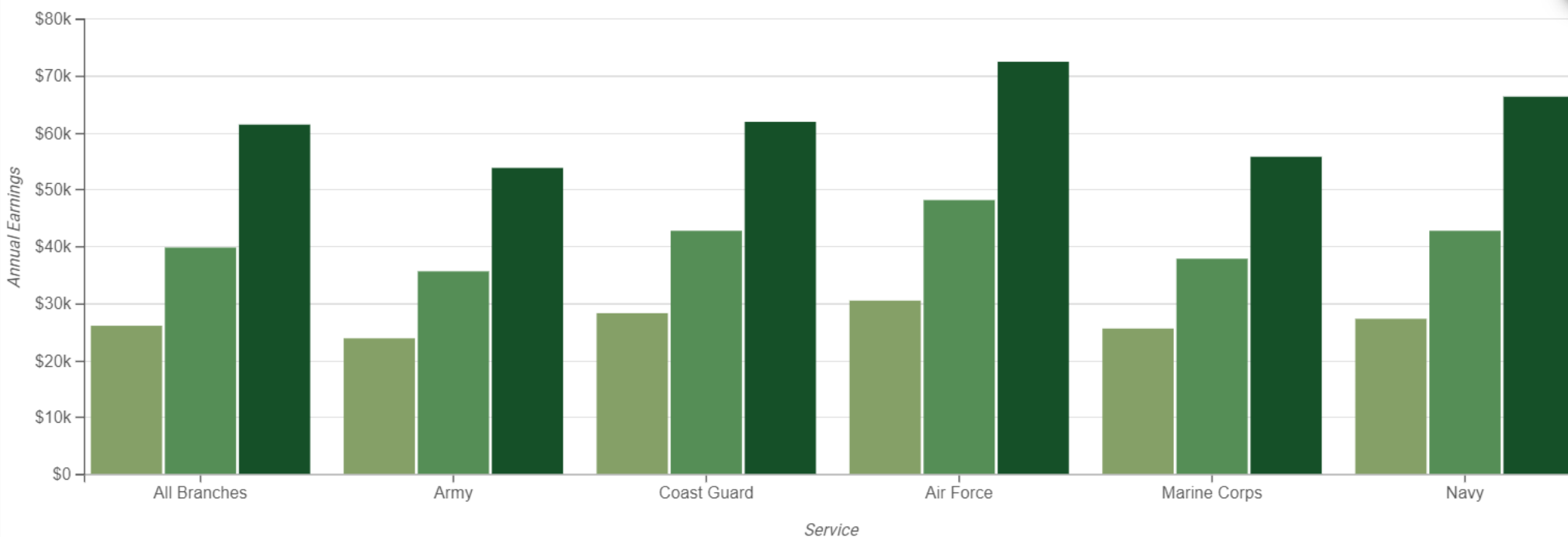
Earnings for Employed Veterans by Service Branch

Data Type

Earnings

Percentiles

25% 50% 75%



MILITARY SPECIALIZATION

SERVICE CHARACTERISTIC

DEMOGRAPHIC

INDUSTRY

STATE

HELP



Military Occupation

All occupations



Service Characteristic

All service characteristics



Cohort

All Cohorts

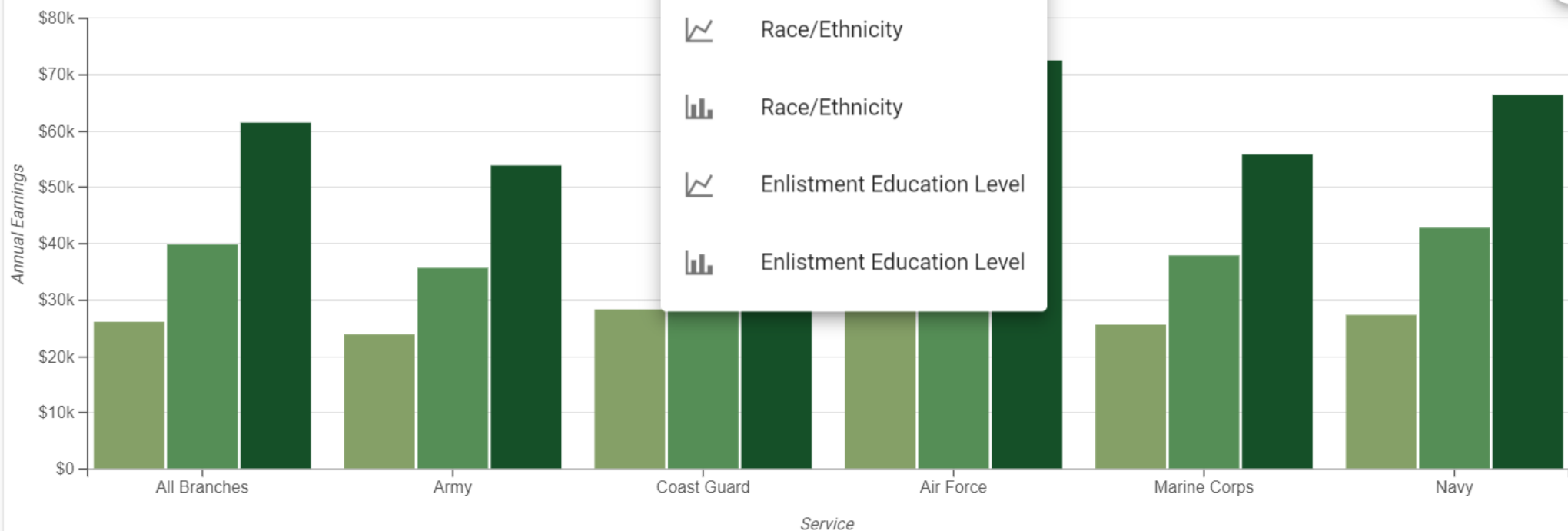
Earnings for Employed Veterans by Service Branch

Data Type

Earnings

Percentiles

25%



Age at Exit Cohort



Age at Exit Cohort



Sex



Sex



Race/Ethnicity



Race/Ethnicity



Enlistment Education Level



Enlistment Education Level





Sex

2 Sexes Selected ▾

Select Multiple Characteristics



Service Branch

All Branches ▾



2002

2004

2006

2008

2010

2012

2014

2016

2018

2020

Exit cohort, two-year range



Earnings for Employed Veterans by Sex

Data Type

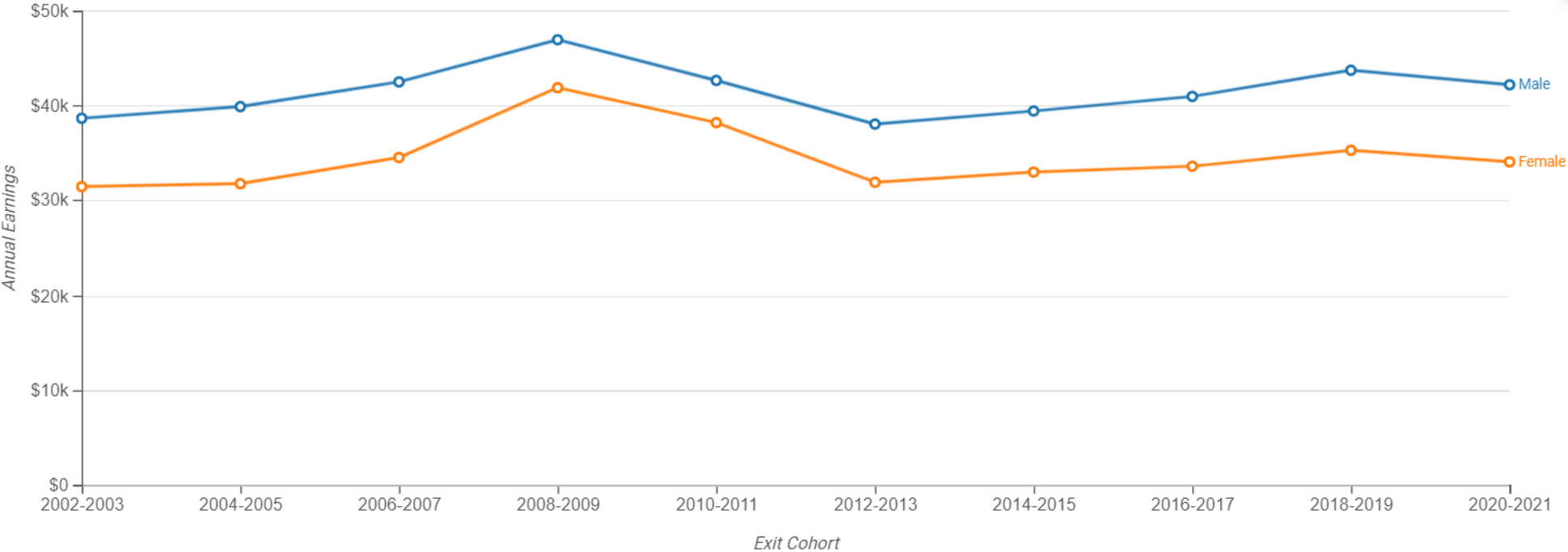
Earnings ▾

Percentiles

50% ▾

Years Post Discharge

1 ▾





Sex

2 Sexes Selected ▾

Select Multiple Characteristics



Service Branch

All Branches ▾



2002

2004

2006

2008

2010

2012

2014

2016

2018

2020

Exit cohort, two-year range

Earnings for Employed Veterans by Sex

Data Type

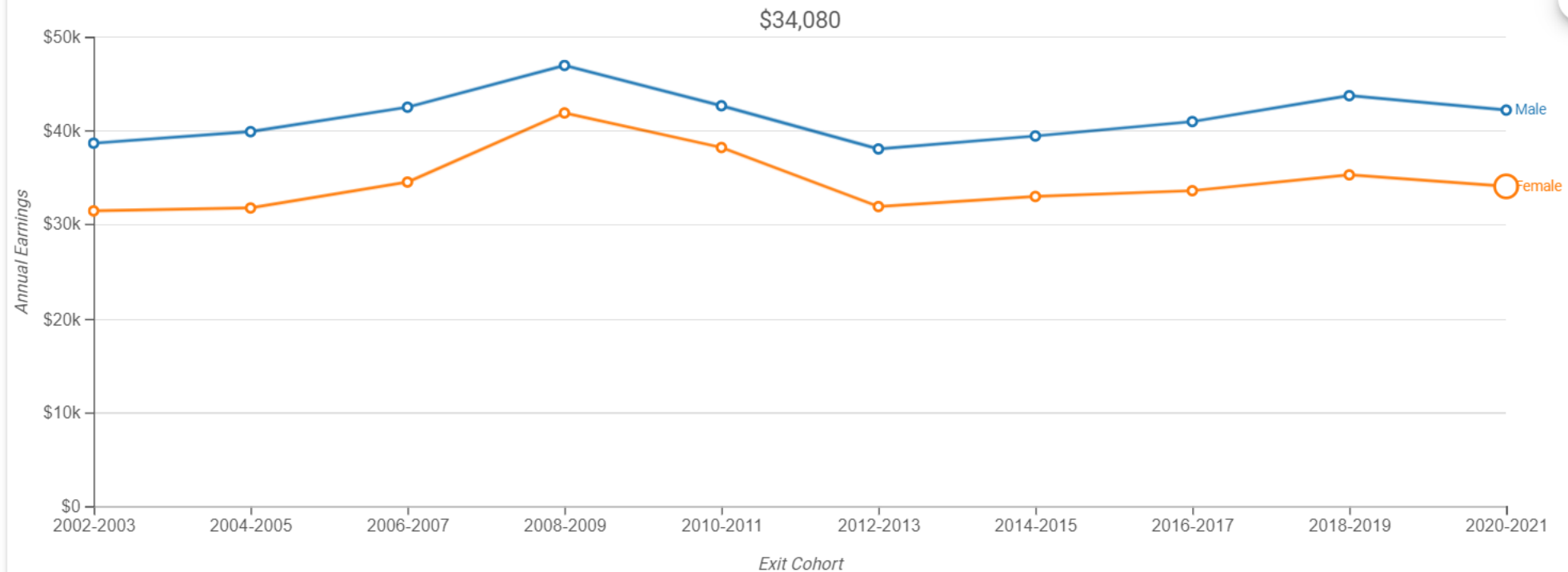
Earnings ▾

Percentiles

50% ▾

Years Post Discharge

1 ▾





Sex

2 Sexes Selected ▾

Select Multiple Characteristics



Service Branch

All Branches ▾



2002

2004

2006

2008

2010

2012

2014

2016

2018

2020

Exit cohort, two-year range

Earnings for Employed Veterans by Sex

Data Type

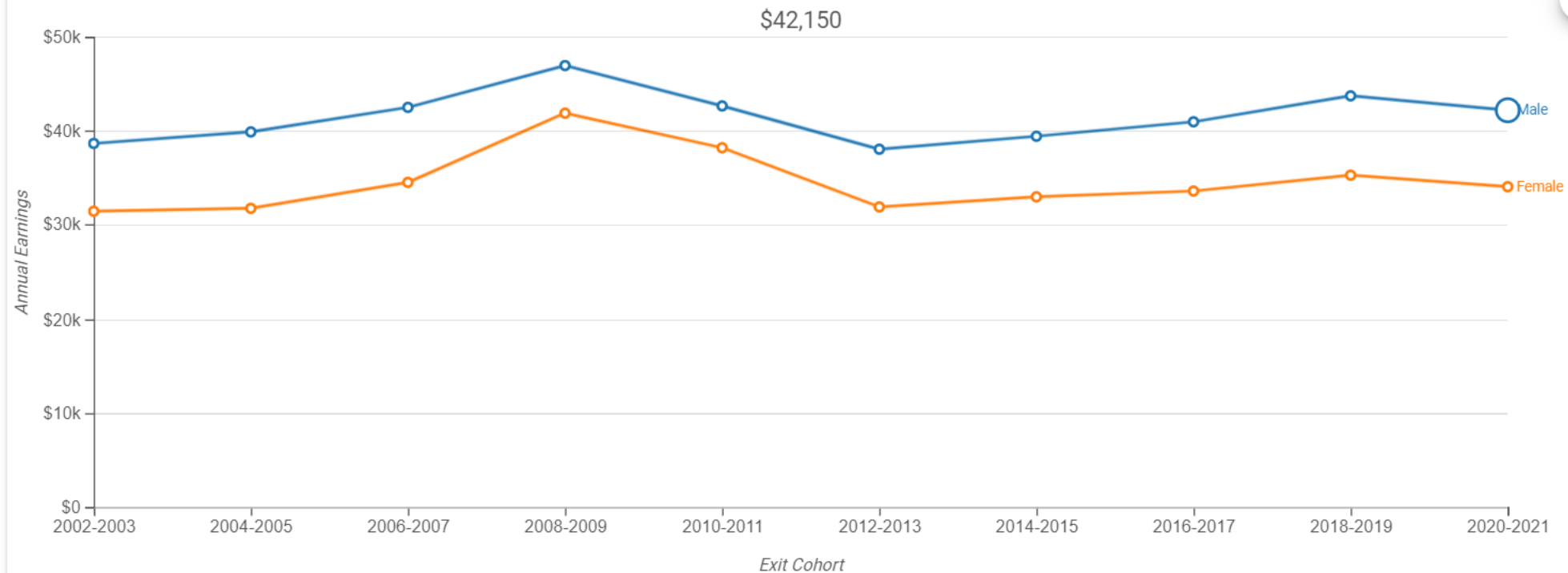
Earnings ▾

Percentiles

50% ▾

Years Post Discharge

1 ▾





Sex
2 Sexes Selected
Select Multiple Characteristics



Service Branch
Army

- ×
- All Branches
 - Army
 - Coast Guard
 - Air Force
 - Marine Corps
 - Navy

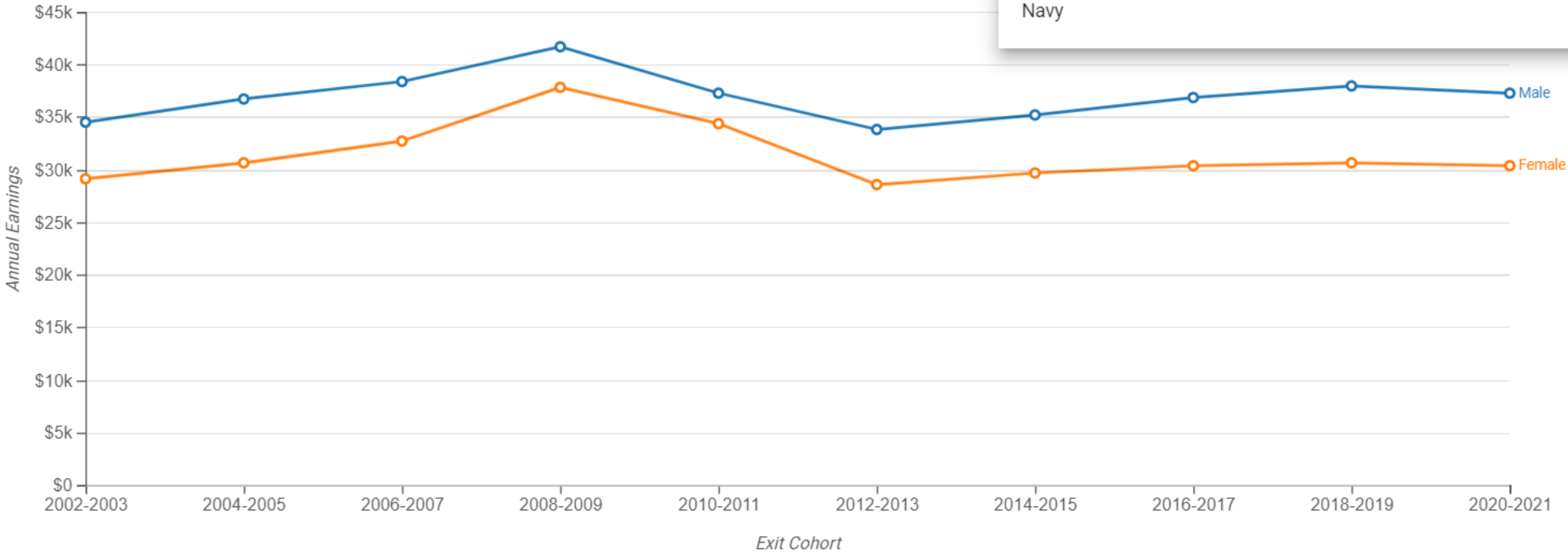


2002 2004 2006 2008 2010 2012
Exit cohort, two-year range

Earnings for Employed Veterans by Sex

Data Type
Earnings

Percentiles
50%





Sex

2 Sexes Selected ▾

Select Multiple Characteristics



Service Branch

Air Force | ▴

×

All Branches

Army

Coast Guard

Air Force

Marine Corps

Navy



2002

2004

2006

2008

2010

2012

Exit cohort, two-year range

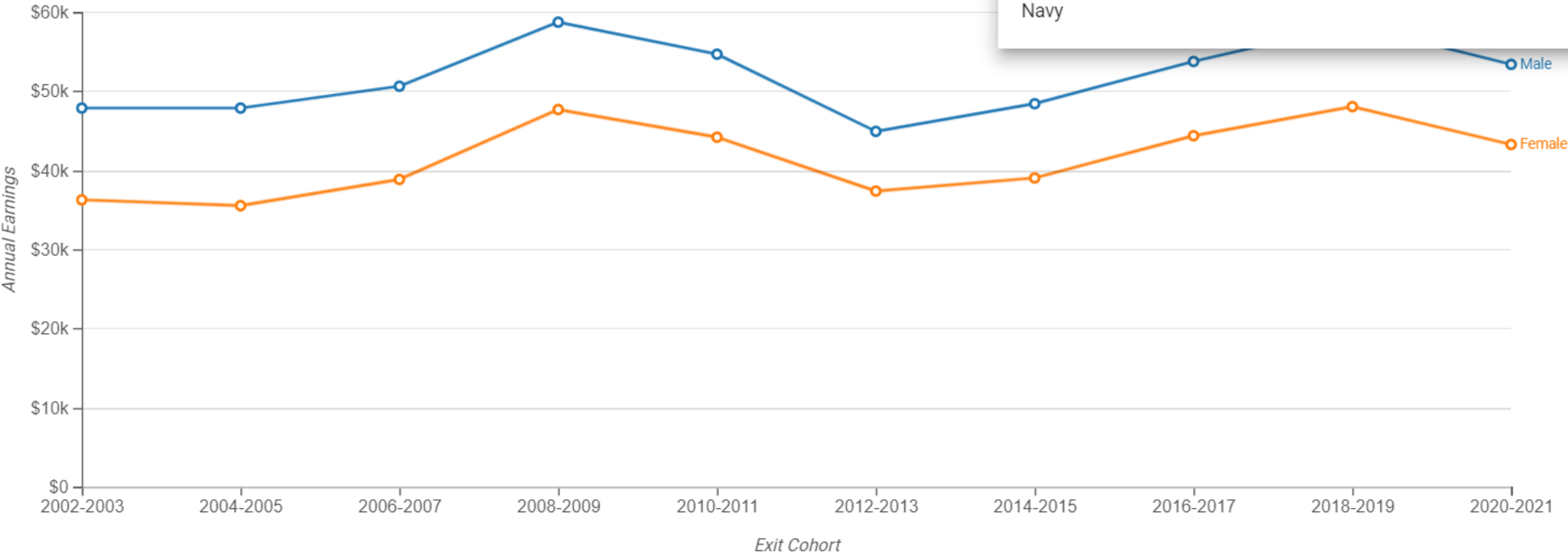
Earnings for Employed Veterans by Sex

Data Type

Earnings ▾

Percentiles

50%





Sex

2 Sexes Selected ▾

Select Multiple Characteristics



2002

2004

2006

2008

2010

2012

2014

2016

2018

2020

Exit cohort, two-year range



Industry



Industry



Military Occupation by Industry

Earnings for Employed Veterans by Sex

Data Type

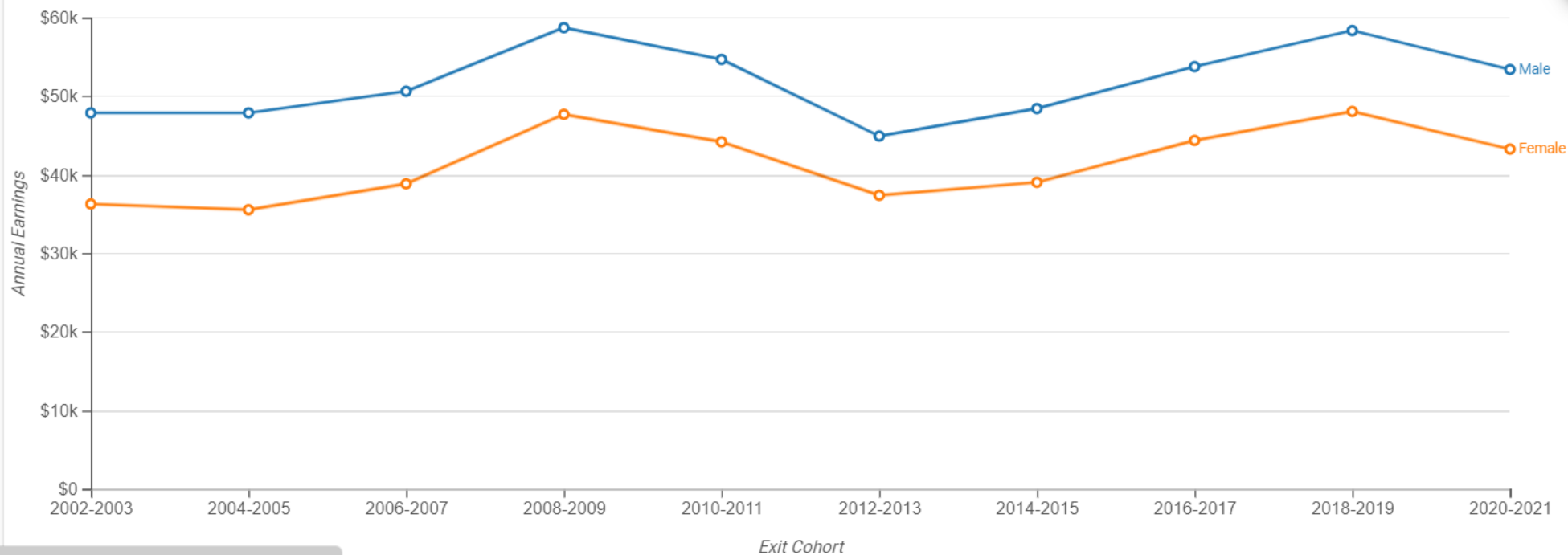
Earnings ▾

Percentiles

50% ▾

Years Post Discharge

1 ▾





Industry

4 Industries Selected ▾

Select Multiple Characteristics



Service Branch

All Branches



Industry



Industry



Military Occupation by Industry

Earnings for Employed Veterans by Industry

Data Type

Earnings ▾

Percentiles



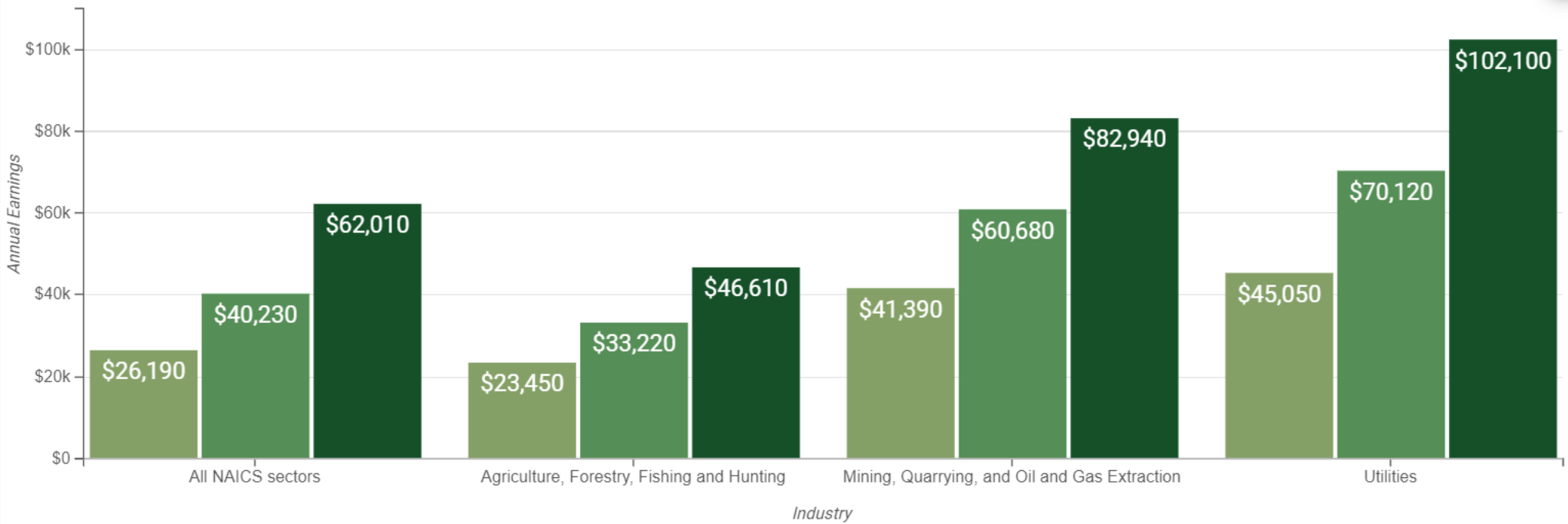
25%



50%



75%





Industry
4 Industries Selected



Service Branch
All Branches



Cohort
All Cohorts

SELECT ALL CLEAR



All NAICS sectors

Agriculture, Forestry, Fishing and Hunting

Mining, Quarrying, and Oil and Gas Extraction

Utilities

Construction

Manufacturing

Wholesale Trade

Earnings for

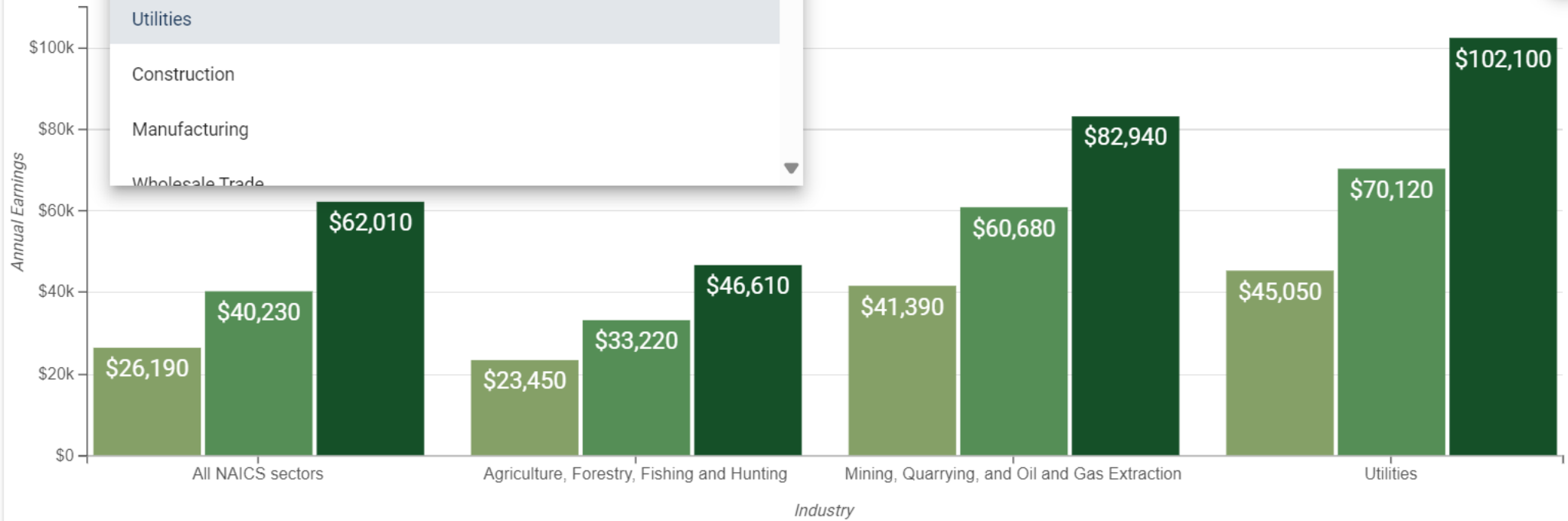
Data Type

Earning

%

Years Post Discharge

1





Industry
22 Industries Selected



Service Branch
All Branches



Cohort
All Cohorts

☒ SELECT ALL

☐ CLEAR



- All NAICS sectors
- Agriculture, Forestry, Fishing and Hunting
- Mining, Quarrying, and Oil and Gas Extraction
- Utilities
- Construction
- Manufacturing
- Wholesale Trade

Earnings for

Data Type

Earning

%

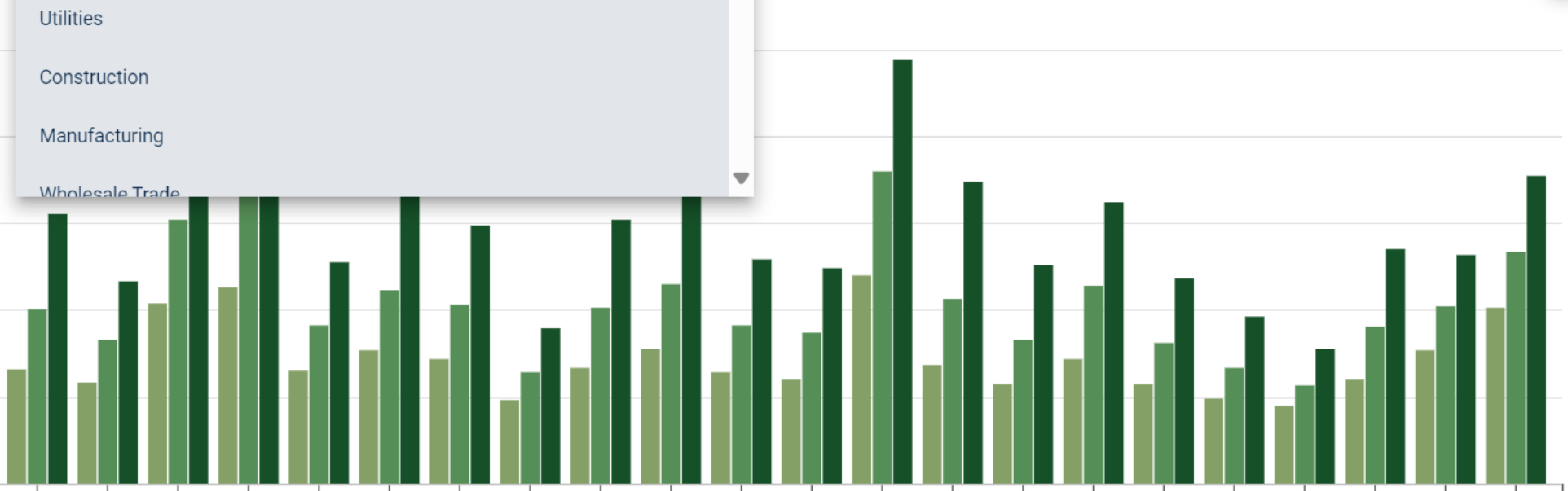
Years Post Discharge

1



Annual Earnings

\$100k
\$80k
\$60k
\$40k
\$20k
\$0



Industry (Click on Bar to Show)



Industry

22 Industries Selected ▾

Select Multiple Characteristics



Service Branch

All Branches ▾



Cohort

All Cohorts ▾

Earnings for Employed Veterans by Industry

Data Type ▾

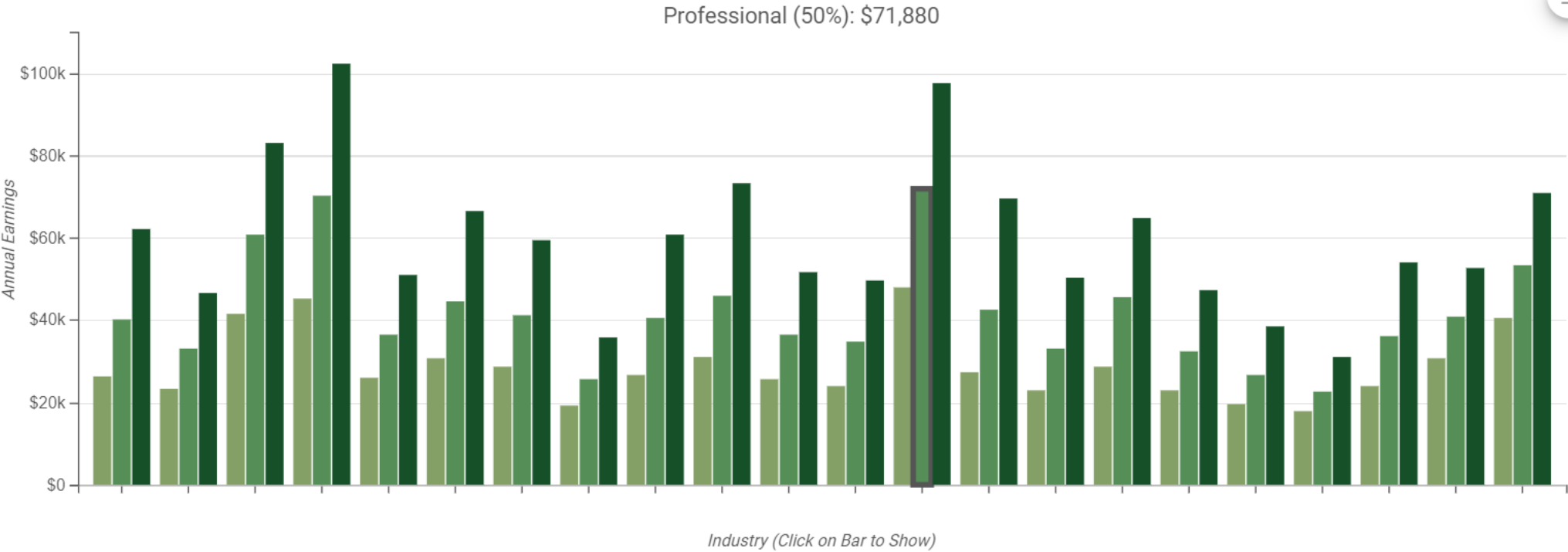
Earnings ▾

Percentiles ▾

25% 50% 75% ▾

Years Post Discharge ▾

1 ▾

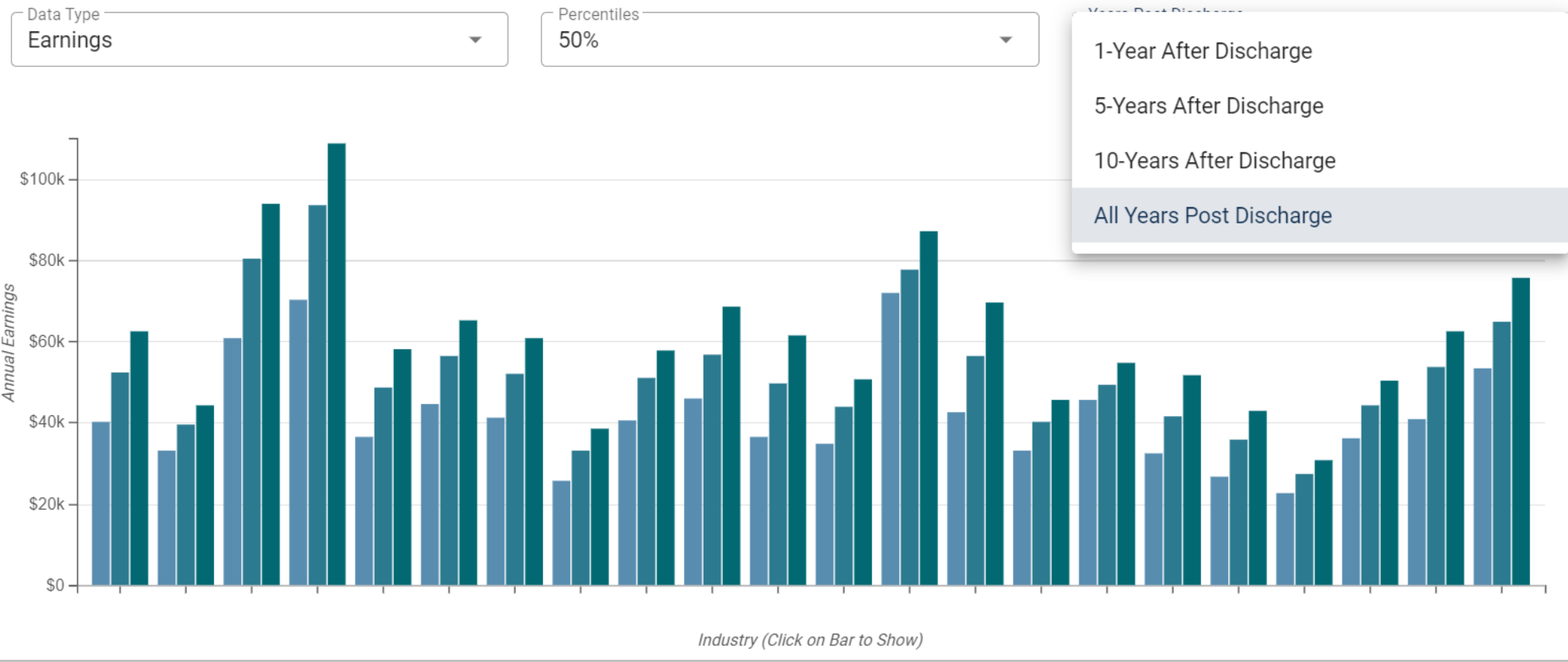


 Industry
22 Industries Selected
Select Multiple Characteristics

 Service Branch
All Branches

 Cohort
All Cohorts

Earnings for Employed Veterans by Industry





Industry

22 Industries Selected ▾

Select Multiple Characteristics



Service Branch

All Branches ▾



Cohort

All Cohorts ▾

Earnings for Employed Veterans by Industry

Data Type

Earnings ▾

Percentiles

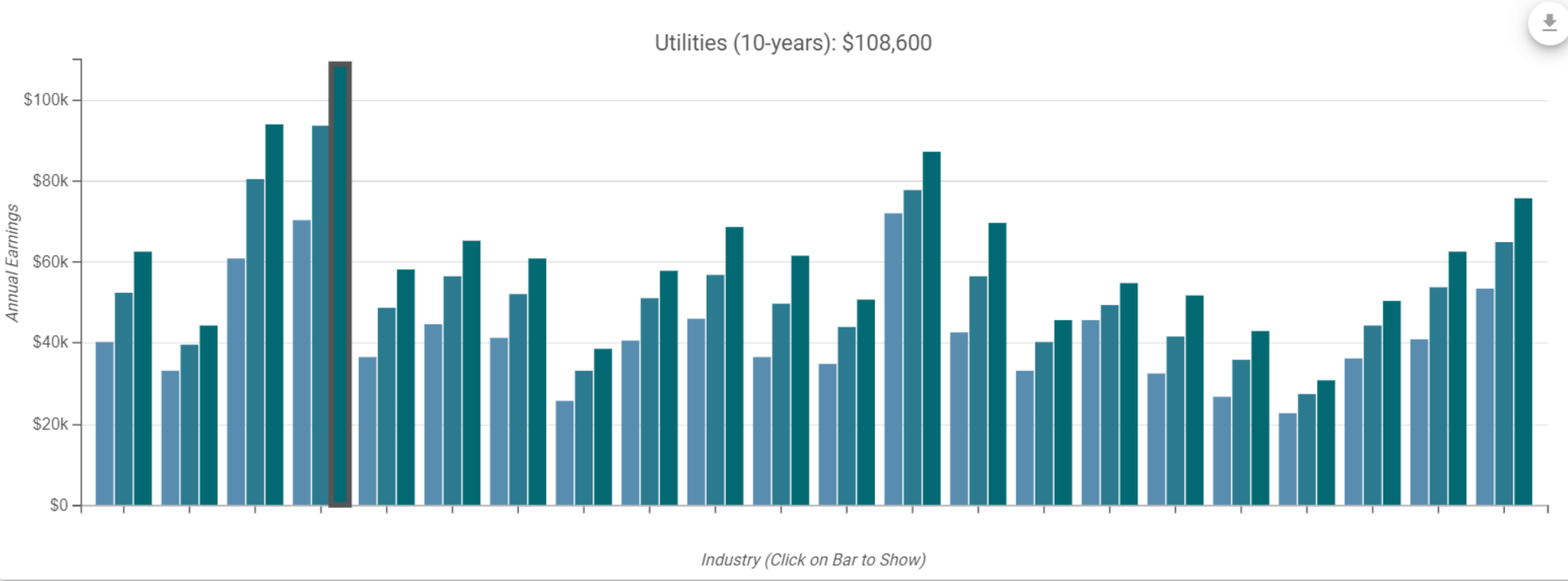
50% ▾

Years Post Discharge

1

5

10

 ▾



Industry
22 Industries Selected
Select Multiple Characteristics



Service Branch
All Branches



Cohort
All Cohorts

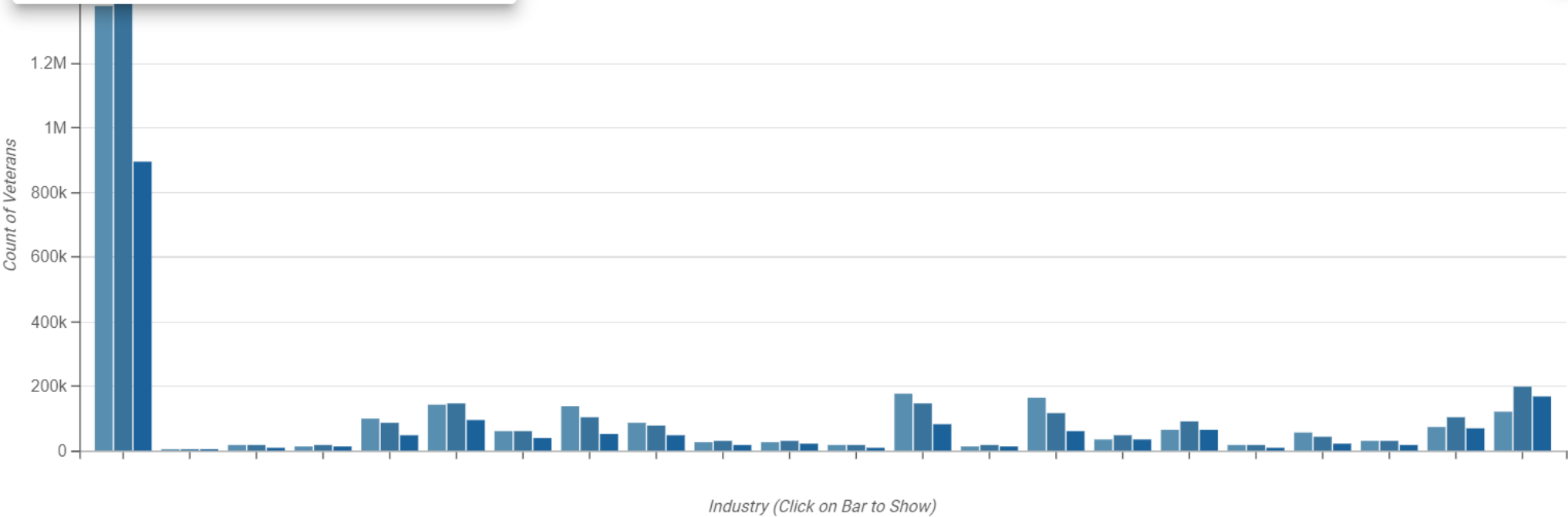
Counts of Veterans by Industry

Earnings for Employed Veterans

Counts of Veterans

Counts of Veterans
Employed

Years Post Discharge
1 5 10





Industry
21 Industries Selected ▾



Service Branch
All Branches ▾



Cohort
All Cohorts ▾

☒ SELECT ALL ☐ CLEAR



All NAICS sectors

Agriculture, Forestry, Fishing and Hunting

Mining, Quarrying, and Oil and Gas Extraction

Utilities

Construction

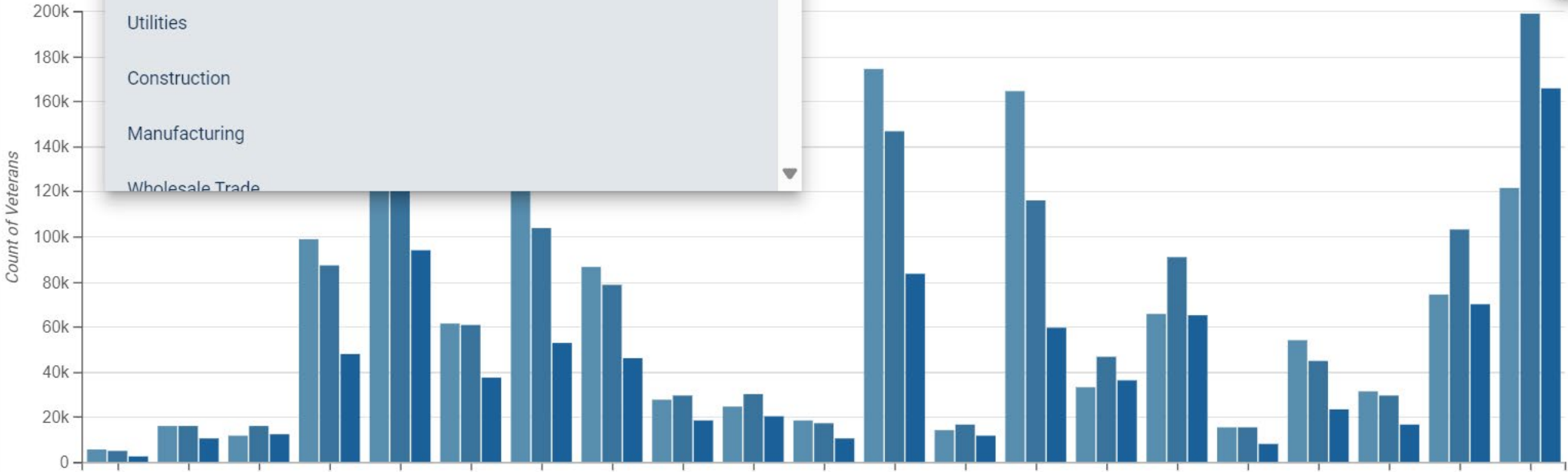
Manufacturing

Wholesale Trade

Counts of Veterans

Data Type
Counts

Years Post Discharge
☒ 1 ☒ 5 ☒ 10



Industry (Click on Bar to Show)



Industry
21 Industries Selected
Select Multiple Characteristics



Service Branch
All Branches



Cohort
All Cohorts

Counts of Veterans by Industry

Data Type
Counts ▾

Counts of Veterans
Employed ▾

Years Post Discharge
1 5 10 ▾

