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Tool

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An Accession Benchmarking Tool for the U.S. Department of the Air Force

For more information on this publication, visit **www.rand.org/t/TLA988-2**.

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About This Tool

The Department of the Air Force (DAF) has prioritized growing and maintaining a diverse workforce across all pay grades. Understanding the population that meets the eligibility requirements to join is crucial to determining the potential demographic makeup of DAF accessions and, ultimately, all DAF personnel. To assist in this endeavor, RAND Corporation researchers developed an application for benchmarking gender and racial and ethnic diversity at the time of accession. The primary objective of this tool is to demonstrate this application.

The application described in this tool was commissioned by DAF-A1 and conducted within the Workforce, Development, and Health Program of RAND Project AIR FORCE as part of a fiscal year 2021 project, titled "Data-Enabled Talent Management Through Targeted Benchmarks, Best Practices, and Partnerships." The project endeavored to (1) provide targeted benchmarks to evaluate the demographic composition of the active duty workforce and (2) to identify practices and opportunities that the DAF can use to support diversity in critical career fields. The project produced four reports to meet these goals:

- RR-A988-1-v2: *Population Benchmarking for the U.S. Department of the Air Force: Impact of Eligibility Requirements and Propensity to Serve on Demographic Representation* (Berglund, Mariano, and Maerzluft, 2023)
- RR-A988-3: *Benchmarking Demographic Diversity in Air Force Functional Areas Against Near-Equivalent Civilians: The Air Force Occupational Diversity Benchmarking Workbooks* (Calkins et al., 2023)
- RR-A988-4: *Talent Management and Diversity, Equity, and Inclusion in Private-Sector Organizations: A Qualitative Review of Promising Practices* (Hill et al., 2023)
- RR-A988-5: *Talent Management and Diversity, Equity, and Inclusion in the Department of the Air Force: Qualitative Review of Programs, Practices, and Partnerships* (Lytell et al., 2023).

RAND Project AIR FORCE

RAND Project AIR FORCE (PAF), a division of the RAND Corporation, is the Department of the Air Force's (DAF's) federally funded research and development center for studies and analyses, supporting both the United States Air Force and the United States Space Force. PAF provides the DAF with independent analyses of policy alternatives affecting the development, employment, combat readiness, and support of current and future air, space, and cyber forces. Research is conducted in four programs: Strategy and Doctrine; Force Modernization and Employment; Resource Management; and Workforce, Development and Health. The research reported here was prepared under contract FA7014-16-D-1000.

Additional information about PAF is available on our website:
www.rand.org/paf/

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Acknowledgments

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Chapter 1. Introduction

The Department of the Air Force (DAF) has placed a strategic focus on improving talent management, which includes efforts to build a diverse, equitable, and inclusive workforce. To support those efforts, in fiscal year (FY) 2021, RAND Project AIR FORCE (PAF) was asked to (1) provide targeted benchmarks and a planning tool that will allow the DAF to evaluate the demographic composition of the active duty workforce overall and functional areas within this workforce, and (2) to identify practices and opportunities that the DAF can use to support diversity in critical career fields. As part of the first objective, we developed a tool for benchmarking gender and racial and ethnic diversity at the time of accession for three active duty accession sources: enlistment, officer commission through the U.S. Air Force Academy (USAFA), and officer commission through the Reserve Officers Training Corps (ROTC) or Officer Training School (OTS).[1] The primary objective of this guide is to demonstrate how to use the tool that we developed.

The DAF sets certain restrictions for eligibility to enlist in the U.S. Air Force or receive a commission to be an officer. When these eligibility criteria are applied to the U.S. population, the resulting eligible population can look different from the composition of the entire U.S. population. Comparing the demographic composition of the eligible population with the composition of service members who accessed into the DAF, a process known as *benchmarking* (Rivera and Rosenbaum, 2020; Schulker, 2010), and gaining an understanding of how these criteria influence the diversity of the eligible population can help the DAF better understand the context of diversity already present within its ranks and help identify barriers to gender and racial and ethnic accessions. In conjunction with eligibility criteria, we can also consider how group-level differences in the intention to serve in the military, which is known as *propensity to serve*, further shape the population from which DAF accessions might draw.

Although benchmarking might be carried out in other contexts, such as within DAF functional areas (Calkins et al., 2023), considering benchmarks at the point of accession is particularly valuable because virtually all DAF active duty personnel access into entry-level positions and are promoted from within the service. The diversity present or absent at the time of accession thus guides the diversity that the DAF might achieve within its active duty force. Prior work has considered benchmarking DAF accessions, including Schulker (2010) and Lim et al. (2014). A companion report to this guide updates these efforts by using FY 2020 accession data and by jointly examining benchmarks for gender and race and ethnicity (Berglund, Mariano, and Maerzluft, 2023). Turning the benchmarking analysis into a computer application gives DAF

[1] In this tool, we use a binary gender construct (female and male) because it aligns with DAF personnel data collection.

decisionmakers both the ability to continue to benchmark future accessions and a planning tool for exploring how alternative scenarios in eligibility, as well as such external factors as differences in the propensity to serve in the military, might influence how well actual accessions reflect diverse benchmarks.

In the following sections, we briefly discuss the eligibility criteria and our approach. In Chapter 2, we introduce the tool, including the measures and methodology used to estimate eligibility and propensity, describe the user interface, and demonstrate how it can be used to generate different results. We complement our description with a summary of the key elements of the tool, including customization of input values for planning purposes. In Chapter 3, we conclude with notes on the applicability and use of the tool. In the appendix, we describe all the data sources in further detail and explain how a user with a local version of the tool can update the data. The update step is vital to the continued use of the tool as the population continues to shift and change.

Eligibility

Although there are many factors that go into whether a person can join the Air Force, we limit our analysis to factors that are well measured in the entire U.S. population. The criteria examined in this tool can be broadly categorized into three groups: physical capability, background, and academic skill. Within the physical capability category, we have measures of age, body mass index (BMI), height, and various health conditions. The background category includes measures of the number of dependents a person has (including their marital status), whether that person has ever been convicted of a felony, and whether they have a history of drug or alcohol abuse. The academic skill category covers educational attainment and how well the person performed on the Armed Forces Qualification Test (AFQT). These criteria can also vary based on entrance point into the Air Force, (e.g., enlistment, attendance at USAFA, participation in ROTC or OTS). Table 1.1 shows the list of criteria by entrance point into the Air Force. These requirements are described in Air Force Manual (AFMAN) 36-2032 (2019) and AFMAN 36-2905 (2020) and outlined in fuller detail in Berglund, Mariano, and Maerzluft (2023).[2]

[2] AFMAN 36-2032, issued in 2019, and AFMAN 36-2905, issued in 2020, apply to both the U.S. Air Force and the U.S. Space Force. Therefore, the accession requirements we discuss for both enlisted and officers in this tool are departmentwide. As noted in AFMAN 36-2905, it is possible that separate Space Force policy guidance could emerge.

Table 1.1. Eligibility Criteria, by Accession Source

Criteria	Enlisted	USAFA	ROTC/OTS
Age	17 to 40 years	17 to 23 years	18 to 34 years
Minimum education level	High school senior	General Educational Development Test (GED)	Bachelor's degree
Dependents	Single with no children or married with no more than two children	No children	
BMI	15 to 25	15 to 25	15 to 25
Height	58 inches to 80 inches	58 inches to 80 inches	58 inches to 80 inches
Medical conditions	None	None	
AFQT	65 with no degree or 50 with a GED or 36 with a high school diploma	80 with a GED	
Felony	No felony conviction	No felony conviction	No felony conviction
Drug or alcohol abuse	No history of abuse	No history of abuse	No history of abuse
U.S. citizen			Yes

NOTE: Applicants must be younger than age 40 on their date of enlistment. Blanks in the table indicate that the requirement is not present for that accession source.

Approach

In an ideal world, to study how the eligibility criteria would alter the demographics of the population, we would survey a representative sample of the overall population and ask how they scored on every measure of interest. We could then apply each criterion in turn until we arrived at a final estimate of the eligible population. Although such a survey is feasible, it would only give a single snapshot of the population and could quickly become outdated. Fielding a survey annually would be quite an undertaking and could be a challenge for such measures as the AFQT, which requires a substantial amount of time to complete. Fortunately, the eligibility criteria are measured in multiple publicly available datasets, generated from recurring surveys, that provide samples of the U.S. population and report values on these criteria. We utilize these data, apply the criteria to the samples, and generate an estimate of the final eligible population. Similarly, we use publicly available data from a recurring survey to inform our estimates of the propensity to serve.

Chapter 2. Project Air Force Benchmarking Tool

The PAF Benchmarking Tool gives the user the ability to adjust the requirements that an individual must meet to join the Air Force. The tool shows how these requirements can change the demographics of the eligible population compared with the overall U.S. population, specifically on measures of diversity. For each of the three accession sources—enlistment, commission through USAFA, and commission through ROTC or OTS—the tool will output comparisons of an accession cohort to three benchmarks: the full age-eligible U.S. population, the eligible population, and the eligible population who also indicate a propensity to serve (referred to as *eligible and propensed*). Benchmarks are produced jointly across gender and five racial and ethnic categories: Non-Hispanic Asian, Non-Hispanic Black, Hispanic, Non-Hispanic White, and Other Non-Hispanic. The category "Other Non-Hispanic" aggregates those people who do not fall in the first four groupings. Thus, benchmarks for the distribution of accessions are produced within the tool for ten distinct gender and racial and ethnic groupings. Hispanics are always grouped in the "Hispanic" category regardless of their racial identity. Pacific Islanders are grouped in the "Asian" category, and those with two or more races and who are not Hispanic are grouped in the "Other Non-Hispanic" category. For efficiency, when referring to these groups, we drop "Non-Hispanic" and simply refer to them as Asian, Black, White, and Other.

Measures

The measures that are used to estimate the population that meets the eligibility requirements can be found in four public-use survey-generated data sources: the American Community Survey (ACS), the National Health Interview Survey (NHIS), the National Survey on Drug Use and Health (NSDUH), and the National Longitudinal Surveys of Youth (NLSY). In addition, the Monitoring the Future survey (MTF) informs the measure of propensity to serve. Some measures appear in multiple surveys while others appear in just one. For measures that appear in multiple surveys, we consider the information from those surveys as much as possible, but, for the purposes of reporting a final estimate, we use only the primary source of the measure. The measures and their associated data sources are described in Table 2.1. If multiple surveys cover a measure, the first source listed is the primary source. The ACS serves as the primary source whenever a data element is present, because it is the largest and most comprehensive of the surveys that we used.

Table 2.1. Measures That Inform Eligibility and Propensity

Measure	Sources	Description
Demographics		
Race/Ethnicity	All sources	Asian, Non-Hispanic; Black, Non-Hispanic; Hispanic; Other, Non-Hispanic; White, Non-Hispanic
Gender	All sources	Female, Male
Physical capabilities		
Age	ACS, NHIS, NSDUH, MTF	Age at enlistment or commission
BMI	NHIS, NSDUH	Body mass index
Height	NHIS, NSDUH	Height (inches)
Has asthma	NHIS	Requires waiver because of asthma
Has diabetes	NHIS	Requires waiver because of diabetes
Has heart condition	NHIS	Requires waiver because of heart condition
Has any limitations	NHIS	Has other health-related limitations requiring a waiver
Needs special equipment	NHIS	Needs waiver to use special health-related equipment
Has vision problems	NHIS	Requires waiver because of vision problems
Has vision-related functional limitations	NHIS	Requires a waiver for vision-related functional limitations
Personal background		
U.S. citizen	ACS, NLSY	Is a U.S. citizen
Marital status	ACS, NLSY, NSDUH	Single, married with spouse present, married with spouse absent, divorced, or separated
Number of children	ACS, NLSY, NSDUH	Number of children living in a person's household
Has felony	NLSY	Requires a waiver for a felony conviction
Has history of drug or alcohol abuse	NSDUH	Requires a waiver because of a history of drug or alcohol abuse
Academic achievement		
Educational attainment	ACS, NHIS, NSDUH, NLSY	Highest degree earned
AFQT score	NLSY	AFQT percentile score
Propensity	MTF	Propensity for joining the military

Methodology

We follow the benchmarking method of Schulker (2010) in preparing the eligible and eligible and propensed benchmarks. A full description of the method used in this tool, as applied to benchmarking DAF accessions, including the process, assumptions, and limitations, can be found in the companion report to this tool that documents benchmarking results for FY 2020

accessions (Berglund, Mariano, and Maerzluft, 2023). We provide a brief overview of the approach executed by the tool; please refer to Appendix A of Berglund, Mariano, and Maerzluft (2023) for additional detail.

Because there is no single dataset that measures every factor related to eligibility, we must use the multiple datasets described above to estimate the effects of each criterion on eligibility within the U.S. population. The method is the same for each accession source, aside from the differences in eligibility criteria, as outlined in Table 1.1. We begin with an estimate of the size of the full U.S. population within each gender and racial and ethnic group, as provided by the ACS. We then estimate the proportion of people that meet each eligibility standard within each gender and racial and ethnic group, reducing the remaining population estimate by multiplying by the proportion of the population that meets that standard. Once all eligibility requirements have been applied, the remaining population size is an estimate of the eligible population for each gender and racial and ethnic group. We then divide the eligible population size for each group by the total eligible population across all groups (and multiply by 100) to calculate the estimated percentage of the eligible population that belongs to each of the gender and racial and ethnic groups. These percentages are the benchmarks for the eligible population and can be compared with the percentages of actual accessions in each group.

Aside from the eligible benchmark, the tool produces two other benchmarks. The procedure to generate the eligible and propensed benchmark is identical to the procedure to estimate the eligible benchmark, with the exception that propensity to serve is treated as an additional eligibility requirement. A simple benchmark consisting of the U.S. population of eligible age is also produced by the tool. This benchmark is calculated using the same process but considers age as the only eligibility standard.

For measures that appear in multiple datasets, we use the primary data source to apply the standard in creating the benchmark; however, we still apply those measures to their secondary data sources for the purpose of getting more-accurate results for any standard applied later in the algorithm. For example, while the ACS is our primary data source for age, the NHIS also contains age information. Thus, when calculating the proportion of people who meet the BMI standards using the NHIS data, we do so only for people who also meet the age requirements.

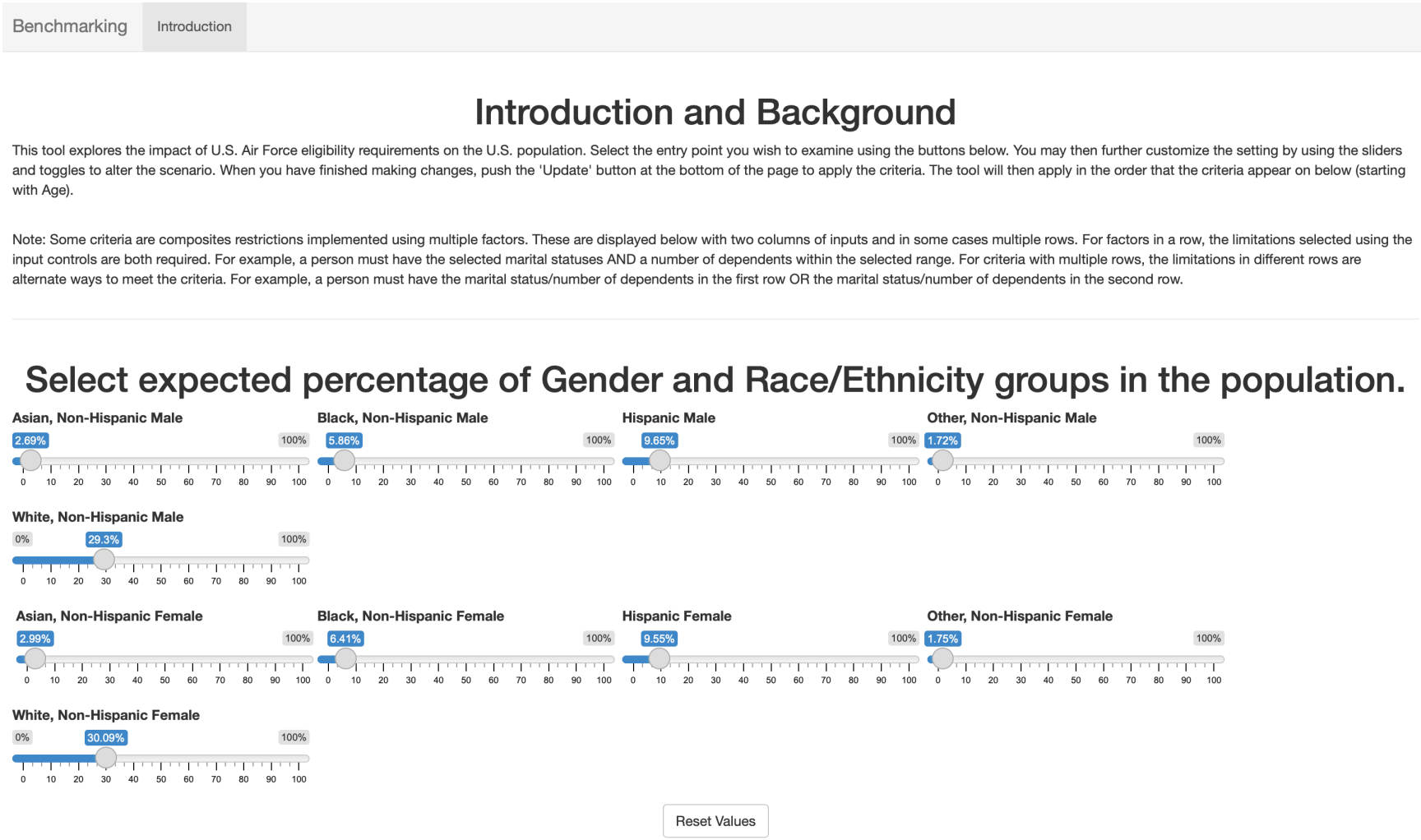
The order in which we apply the eligibility requirements should not matter for the process of arriving at a final eligible population. However, by examining the distribution of the remaining eligible population in each gender and racial and ethnic group after each individual standard is applied, we can investigate how strongly each standard reduces eligibility within each group and relative to the other gender and racial and ethnic groups. Because the standards are applied sequentially and are conditional on all previously applied standards, changing the order of application could provide additional insight on the extent to which a standard is a barrier to accession for any one group. As described below, the tool provides additional outputs that allow for such a sequential examination of the impact of each eligibility requirement.

Tool Interface and Example

As DAF recruiting priorities change, decision planners might need to adjust the eligibility criteria. This tool allows decision planners to test different adjustments to the eligibility criteria and gain initial feedback on what changes might be reasonable. The tool provides a simple interface while maintaining the ability to customize output to reflect different scenarios.

When the user first opens the tool, they will be brought to an introduction and input page. The "Introduction and Background" section, as shown in Figure 2.1, gives a brief overview of the tool. Just below this section on the page is a set of sliders that asks the user to select the expected percentage of Gender and Race/Ethnicity groups in the population. These values default to the current population percentages in the ACS. If the user's current benchmarking task is to show a comparison with those who are eligible or eligible and propensed in the current population, the default should be used. However, these inputs are designed for forecasting and to allow the user to fine-tune the proportions of the gender and race and ethnicity groups in the starting population of the data should the user wish to study a different population than the current U.S. population (for example, using predictions of future values of the demographic subgroups). When altered, the selected values that are set with the sliders are used to adjust the weights of individuals within the different surveys to match their relative proportions from the sliders. Finally, we note that if the user sets values that do not sum to 100, the tool will adjust those values to do so. This automatic adjustment will lead to reported population estimates that are not equal to the values selected with the sliders. The user can reset the sliders to their historical values by using the reset button just below the sliders.

Figure 2.1. Tool Introduction



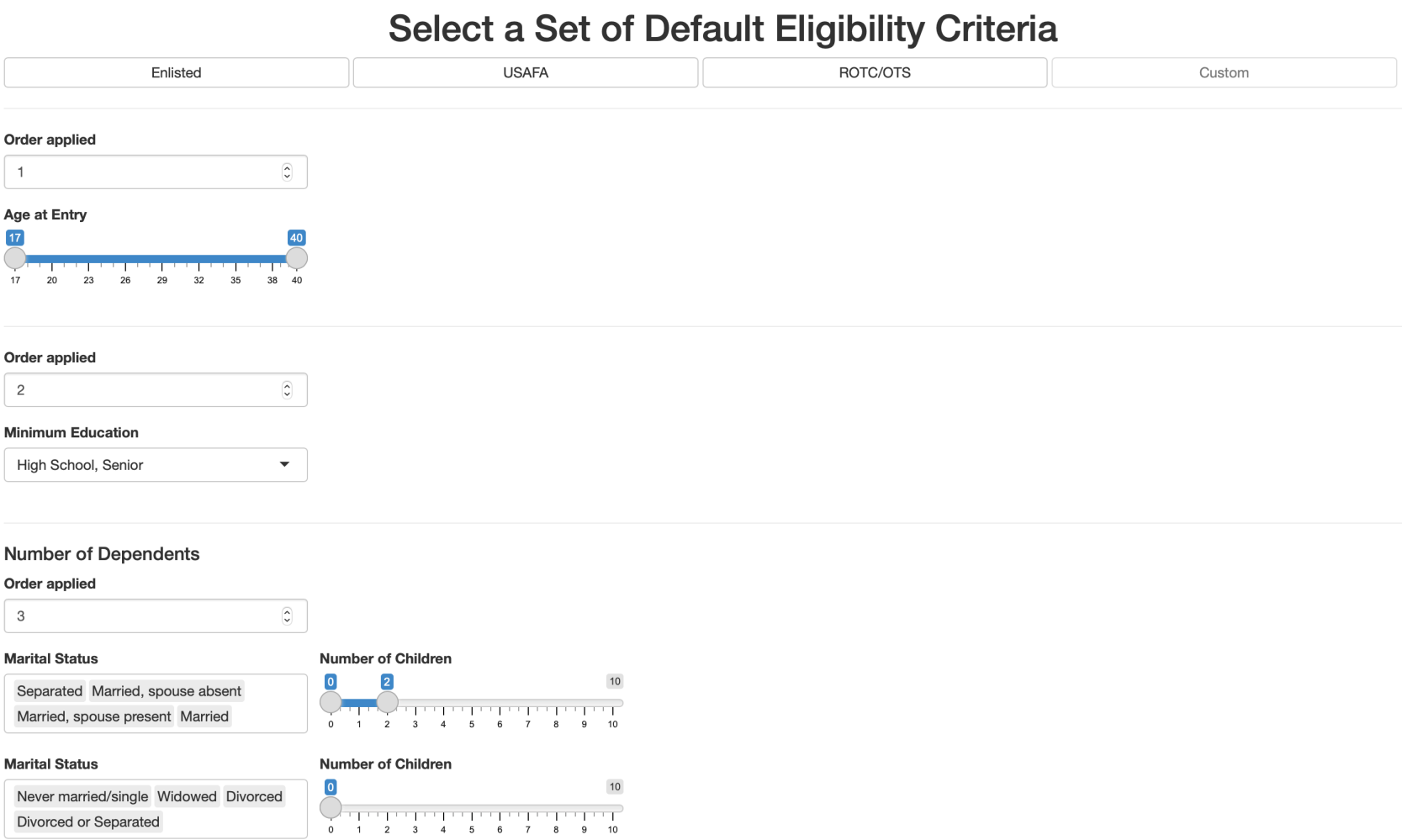
Below the percentage sliders in the Introduction and Background section, the user can find the section of the tool that is used to set the eligibility criteria. As seen in Figure 2.2, the user is given three default option sets to choose from: Enlisted, USAFA, and ROTC/OTS.[3] These options correspond to the three main entrance points into the Air Force. Each option results in a slightly different set of criteria (see Table 1.1 for expected criteria). Selecting one of these entrance point buttons will also change the accessions data the tool will use as a reference point in the other tool tabs. Figures 2.2 and 2.3 show what these criteria look like for the enlisted population of the tool. Each eligibility input defaults to the eligibility criteria as of FY 2021.

For each criterion, the user will be given at least two options. The first is a numeric input box labeled "Order applied." When the tool estimates the criteria effects, it will do so following the order selected in these boxes. As noted in the "Methodology" section, changing the order of applying requirements should not change the eligibility benchmark produced, but doing so can provide additional insight into the impact of each requirement as a potential barrier to eligibility. If the user wishes to change the default order provided, they must select a unique number for each criterion. Additionally, the age criterion must always be the first criterion applied.

After the "Order applied" box, the number of inputs and the input type will vary based on the eligibility criteria. Some might be simple sliders or drop-down menus while others might be multipart inputs. The number of dependents criteria is one example of a multipart input. In the "Number of Dependents" section of the tool, the user can select two different combinations of marital status and number of children. Options that appear in the same row should be thought of as *joint* conditions, which means that the range of the number of children applies to the marital statuses selected in that row. Options that appear in separate rows are *alternative* conditions, which means that people who meet the conditions in either row are considered eligible.

[3] The grayed-out "Custom" button is for demonstration only. Future iterations of the tool might allow for an expanded capability to define a unique set of eligibility criteria.

Figure 2.2. Tool Eligibility Criteria

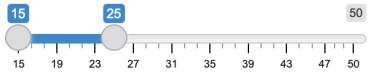


Body Size

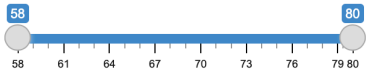
Order applied

4

BMI



Height (inches)



Allow Medical Waivers

Order applied

5

Has Asthma?

- Yes
- No

Has Diabetes?

- Yes
- No

Has Heart Condition?

- Yes
- No

Has any Limitations?

- Yes
- No

Needs Special Equipment?

- Yes
- No

Has Vision Problems?

- Yes
- No

Has Vision Related Functional Limitations?

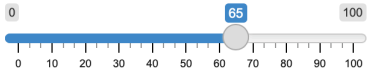
- Yes
- No

Aptitude

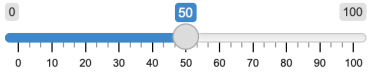
Order applied

6

Minimum AFQT



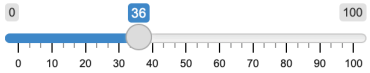
Minimum AFQT



Minimum Education

GED

Minimum AFQT



Minimum Education

High School Diploma

Order applied

7

Allow Felony Waiver

- ○ Yes
- ◉ No

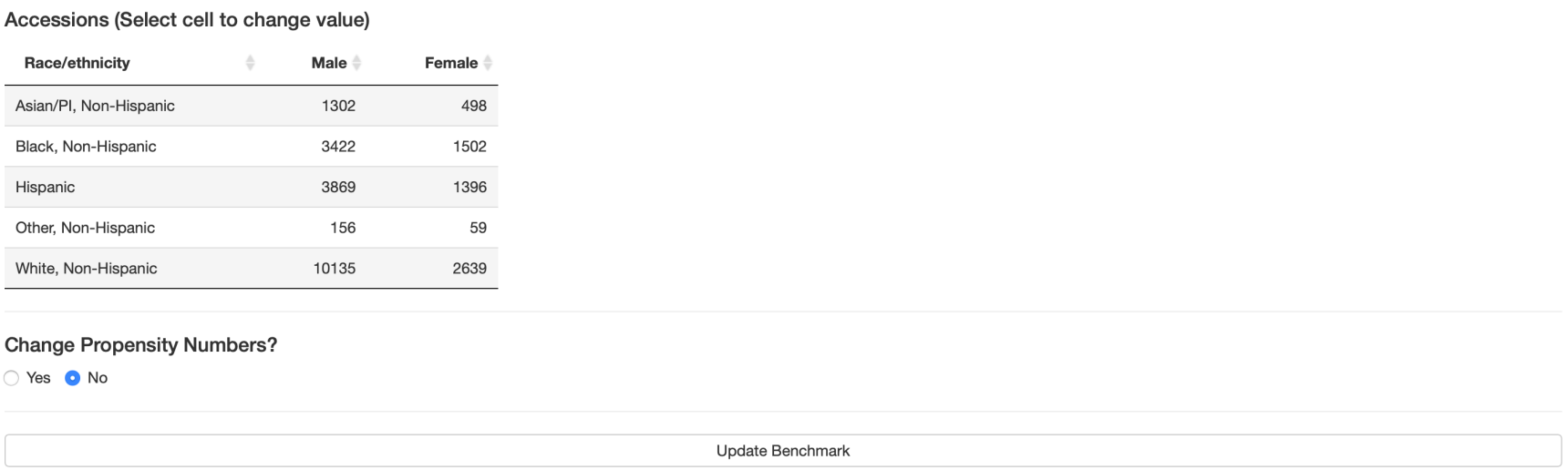
Order applied

8

Allow Drug Abuse Waiver

- ○ Yes
- ◉ No

Figure 2.3. Accession and Propensity Customization



Accessions (Select cell to change value)

Race/ethnicity	Male	Female
Asian/PI, Non-Hispanic	1302	498
Black, Non-Hispanic	3422	1502
Hispanic	3869	1396
Other, Non-Hispanic	156	59
White, Non-Hispanic	10135	2639

Change Propensity Numbers?

Yes No

Update Benchmark

The user is also given the opportunity to adjust the number of accessions for each gender or race and ethnicity subgroup within the tool, as shown in Figure 2.3. These values default to the total accessions in each group for the most current year for which accession data have been loaded into the tool (see the appendix for information about updating the accession data). The option to adjust these values allows the use of the tool for planning and forecasting. In addition to estimating the number of eligible persons, the tool also estimates the number of people who are eligible and have a propensity for joining the military. The propensity values default to the estimates provided by data from the MTF. The user is also given the option to set their own values instead of using the MTF estimates, such as entering alternate propensity estimates from the Joint Advertising, Market Research & Studies Youth Poll (undated), which is conducted by the Office of People Analytics within the U.S. Department of Defense, or providing their own estimates for forecasting and planning. The accession values should be entered as total persons, and the propensity values should be reported as percentage points that must add up to 100 percent.

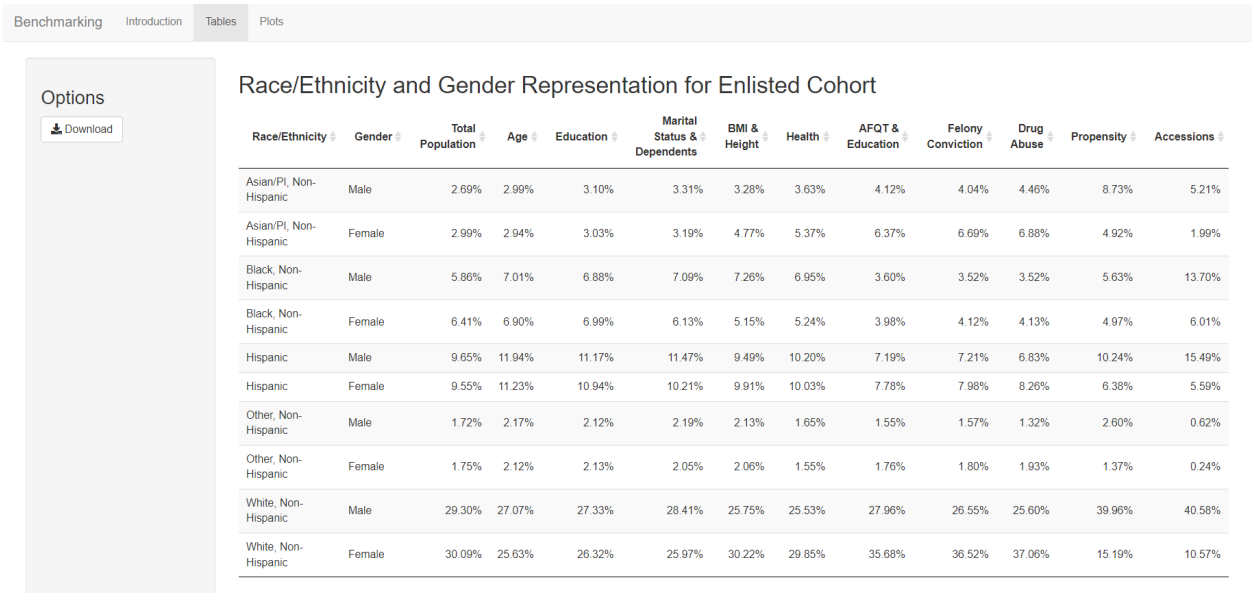
After selecting the desired values, the user can push the "Update Benchmark" button at the bottom of the screen to estimate the eligibility populations. As the tool runs the estimates, a progress bar will appear in the lower right corner of the screen. Once the first run is complete, the user can scroll to the top of the screen to see that two new tabs, which are described in the following two sections, are now available to select at the top of the screen next to the "Introduction" tab. Note that if the user intends to use all the default values (i.e., all the current eligibility criteria, current accession totals, and MTF-based propensity values), they can proceed directly to the "Update Benchmark" button after choosing the accession source (Enlisted, USAFA, or ROTC/OTS) at the top of the page.

Tabular Output

Once the benchmark estimates are run, the first new tab available at the top of the screen is called "Tables." This tab displays the results of the benchmarking tool in tabular form. There are two versions of the results within the tab. The first table, shown in Figure 2.4, provides the marginal demographic proportions after each criterion has been applied. This example shows what the results look like when the enlisted population defaults are selected. The column labeled "Total Population" reflects the demographics of the entire U.S. population as estimated using the ACS data. In other words, it shows the percentage of the full U.S. population that falls into each of the ten gender and racial and ethnic groupings displayed. The next column, titled "Age," gives the estimated demographics of people who are within the eligible age range (as selected in the introduction tab). The "Education" column shows the percentage of individuals that fall within each group who are of eligible age and meet the education requirement. The pattern continues up to and including the column titled "Propensity." The "Propensity" column is the estimated eligible and propensed benchmark; it displays the estimated percentage of people within each of the gender and racial and ethnic groups in the population who both meet eligibility requirements

and have a propensity to serve. The column to the immediate left of the "Propensity" column (shown in the example in Figure 2.4 as "Drug Abuse") is the estimated eligibility benchmark; it displays the percentage of people in the population who meet all the applied eligibility requirements, of which the moral character requirement, characterized by an absence of drug abuse, was the final criterion applied in this example. Although, as noted previously, the order of the application of the eligibility criteria can be changed, the column to the immediate left of the "Propensity" column will always hold the eligibility benchmark. The final column displays the demographic proportions of the accession group of interest, which is estimated from real data (unless those data are overwritten in the "Introduction" tab).

Figure 2.4. Tool Table Results



Race/Ethnicity	Gender	Total Population	Age	Education	Marital Status & Dependents	BMI & Height	Health	AFQT & Education	Felony Conviction	Drug Abuse	Propensity	Accessions
Asian/PI, Non-Hispanic	Male	2.69%	2.99%	3.10%	3.31%	3.28%	3.63%	4.12%	4.04%	4.46%	8.73%	5.21%
Asian/PI, Non-Hispanic	Female	2.99%	2.94%	3.03%	3.19%	4.77%	5.37%	6.37%	6.69%	6.88%	4.92%	1.99%
Black, Non-Hispanic	Male	5.86%	7.01%	6.88%	7.09%	7.26%	6.95%	3.60%	3.52%	3.52%	5.63%	13.70%
Black, Non-Hispanic	Female	6.41%	6.90%	6.99%	6.13%	5.15%	5.24%	3.98%	4.12%	4.13%	4.97%	6.01%
Hispanic	Male	9.65%	11.94%	11.17%	11.47%	9.49%	10.20%	7.19%	7.21%	6.83%	10.24%	15.49%
Hispanic	Female	9.55%	11.23%	10.94%	10.21%	9.91%	10.03%	7.78%	7.98%	8.26%	6.38%	5.59%
Other, Non-Hispanic	Male	1.72%	2.17%	2.12%	2.19%	2.13%	1.65%	1.55%	1.57%	1.32%	2.60%	0.62%
Other, Non-Hispanic	Female	1.75%	2.12%	2.13%	2.05%	2.06%	1.55%	1.76%	1.80%	1.93%	1.37%	0.24%
White, Non-Hispanic	Male	29.30%	27.07%	27.33%	28.41%	25.75%	25.53%	27.96%	26.55%	25.60%	39.96%	40.58%
White, Non-Hispanic	Female	30.09%	25.63%	26.32%	25.97%	30.22%	29.85%	35.68%	36.52%	37.06%	15.19%	10.57%

Below the first table, the tool reports a second table that estimates the total number of persons in the United States to which the proportions in the first table correspond. The bottom table contains counts instead of percentages but is otherwise identical to the top table in both layout and interpretation of the individual columns. To the left of these tables, the user will find buttons to download these tables as CSV files.

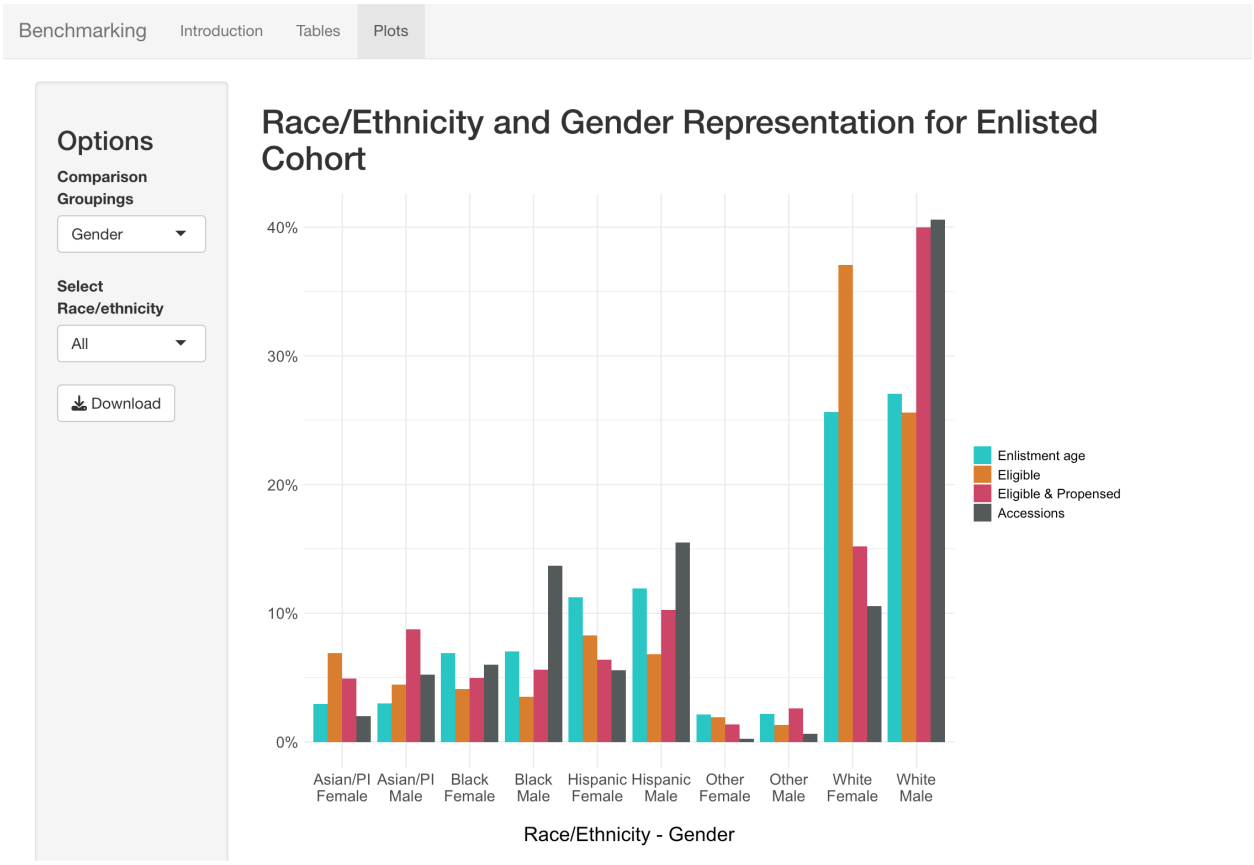
Graphical Output

The second tab that appears at the top of the screen after the completion of the benchmarking estimation is called "Plots." In the "Plots" tab, the user will find three useful visual representations of the data shown in the "Tables" tab. The first plot shows the demographic distributions at different points in the estimation process, displayed in Figure 2.5 for enlisted accessions. There are four bars presented for each of the ten racial/ethnic and gender groups. Moving left to right, the first bar for each group represents the percentage of the population of

eligible enlistment age that falls in that group. These percentages are the same as the percentages displayed in the "Age" column in Figure 2.4 and comprise the benchmark of individuals in the full U.S. population that are of enlistment age. The second bar shows the percentage of the population meeting all the eligibility criteria that fall into each group. These percentages make up the eligible benchmark, and they match the percentages displayed in the "Drug Abuse" column in Figure 2.4, because that was the final criterion applied in this example. The third bar shows the distribution that is both eligible and has a propensity to join the military across the ten groups. This distribution is the eligible and propensed benchmark and matches the values in the "Propensity" column in Figure 2.4. The last and final bar shows the distribution of the accessions group selected. Thus, the benchmarking activity compares the final column, the actual distributions of accessions, with the three other columns, as is most appropriate for the exercise the user is conducting.

To the left of the plot, as shown in Figure 2.5, the user will find drop-down options and a "Download" button. The "Download" button saves the plot as an image to the user's computer. The drop-down options allow the user to examine the data for specific comparison groups. For example, if the user changes the "Race/Ethnicity" drop-down to "Hispanic" instead of "All," the plot will change to show the proportions of males and females in each of the four benchmark categories who are also Hispanic. The user can do the same thing within each of the gender groups by changing the comparison group to "Race/ethnicity" and then selecting the gender group of interest in the second drop-down menu.

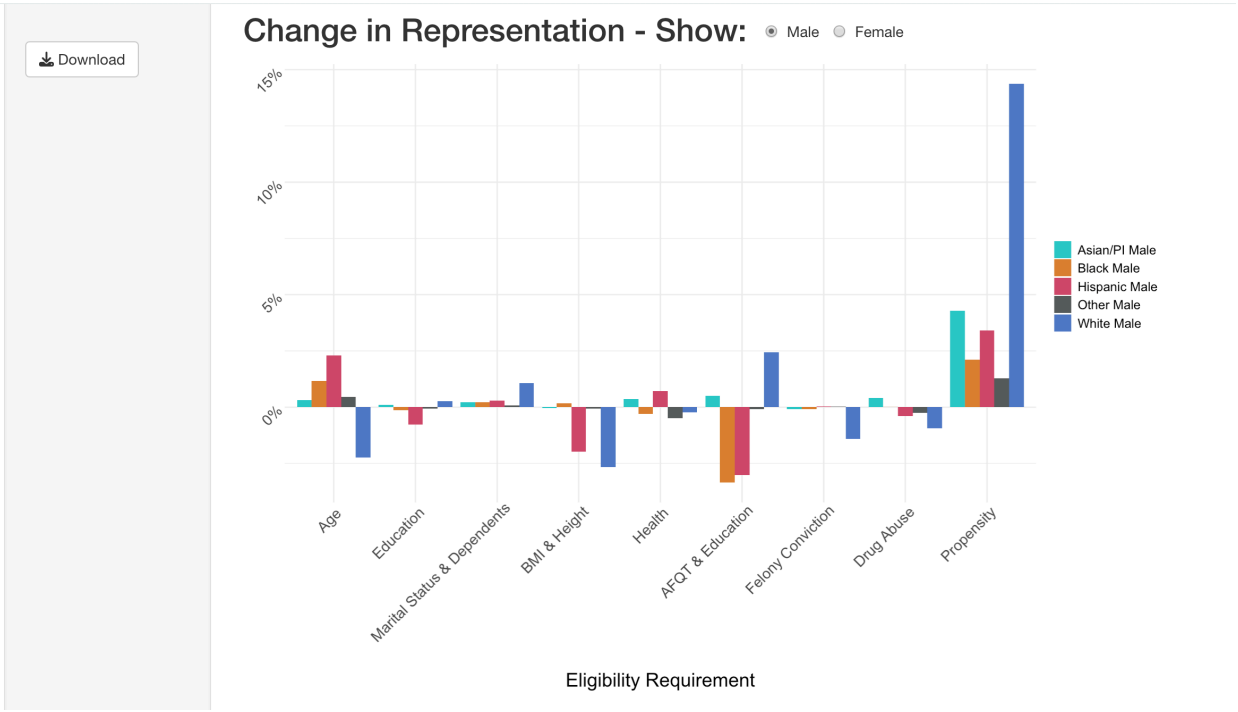
Figure 2.5. Plot Results Example: Enlisted Benchmarks



The second plot produced by the tool shows how a gender and racial and ethnic group's share of the eligible population changes as each successive eligibility criterion is applied. Figure 2.6 displays an example of this plot for the enlistment case for males. Because these graphs would become very dense with all ten groups in one plot, they are divided into male and female plots, which can be selected using the radio buttons at the top of the page. The plots display a percentage-point change in that group's share of the population as each eligibility criterion at the bottom of the graph is applied. Consider, for example, the darker blue bar above "Age" at the left of Figure 2.6. This bar, for White males, extends downward by about 2.25 percentage points, indicating that when the age criteria is applied to the full population, the White male share of people of eligible age is about 2.25 percentage points lower than the White male share of the full population. This percentage-point change corresponds to the change in values in the White male row of Figure 2.4 in the "Total Population" and "Age" columns. From Figure 2.4, the White male share of the total population is 29.30 percent, and the White male share of the age-eligible population once the age restriction is applied is 27.07 percent. The difference between these two values is shown by the dark blue bar for "Age" in Figure 2.6, and from the table, we see that the exact drop is 2.23 percent ($27.07 - 29.30 = -2.23$). As a second example, the Hispanic male share of the eligible population decreases by about 2 percentage points when the body

composition requirements were applied (as shown by the pink bar in the “BMI & Height” set of bars), after first applying the age, education, and marital status and dependents criteria. This decrease maps to the difference between the values in the Hispanic male row of Figure 2.4 in the "BMI & Height" and "Marital Status & Dependents" columns (9.49 − 11.47 = −1.98). It is important to note that this graph shows the change in percentage points between each application of eligibility criteria and those previously applied, and, as discussed previously, the user can change the order in which the eligibility criteria are applied prior to calculating the benchmarks.

Figure 2.6. Plot Results Example: Relative Change in Representation, by Enlisted Eligibility Requirement



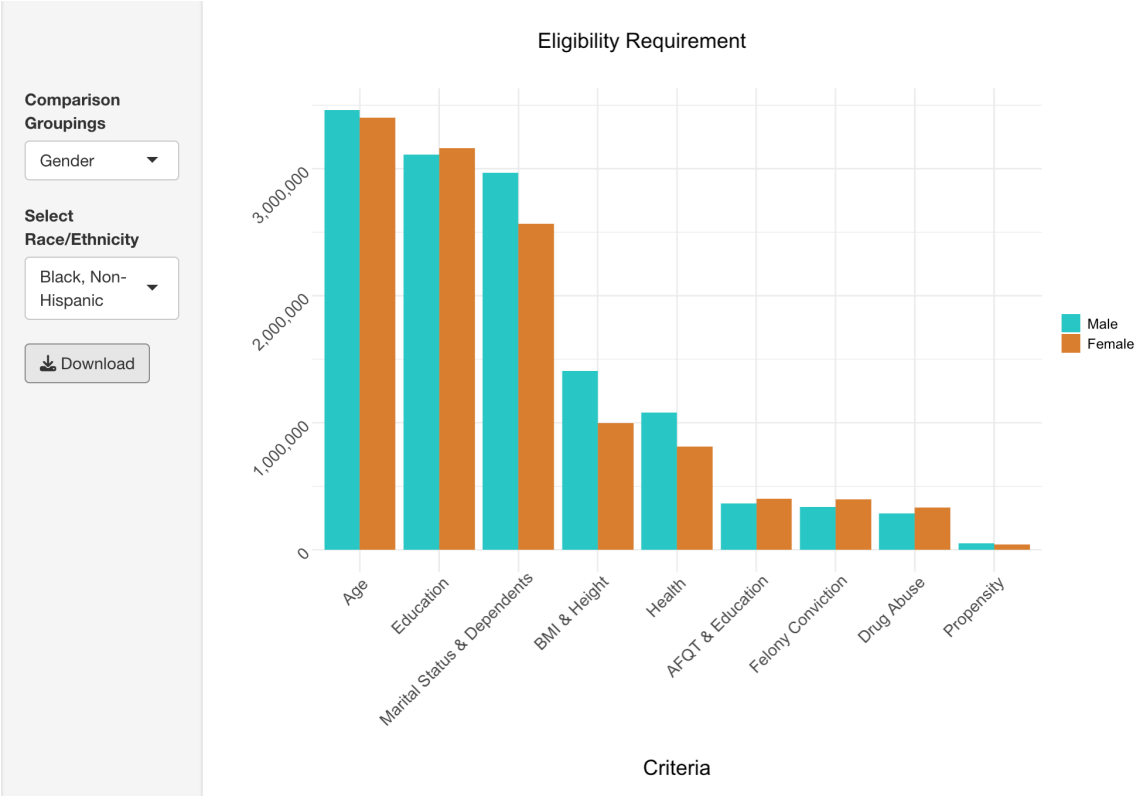
The final plot in the tool displays how the estimates of eligible population size are reduced as each eligibility criterion is applied. Captured in Figure 2.7, this plot shows how many people in the U.S. population meet all the criteria (in this example, for enlisted eligibility of all males and all females), as each eligibility criterion is applied. Two drop-down boxes to the left of the plot allow the user to indicate which gender and racial and ethnic groupings are displayed. The values displayed in this plot match the corresponding values in the second output table that captures the remaining eligible population after each eligibility requirement is applied. For example, when the age criterion is applied to the U.S. population, just under 3.5 million Black males and 3.5 million Black females remain in the eligible population. When the education criterion is applied to the age-eligible population, the number of eligible Black males and the number of Black females both drop to just over 3 million. We also note that, although there are slightly more eligible

Black males than eligible Black females when the age requirement is applied, slightly more Black females than Black males remain eligible when the education requirement is applied.

We recommend that the second and third plots be used together to better understand potential barriers to accession for all gender and racial and ethnic groups. For example, Figure 2.7 shows that the requirements for BMI and height and the requirements for AFQT and education both create an important reduction in the number of Black males in the eligible population. However, Figure 2.6 also shows that the impact of the BMI and height requirements on Black males is very similar to what is typical for all other groups (the orange bar is nearly zero), while the AFQT and education requirements have a larger negative impact on Black males than the typical effect on all other groups (the orange bar indicates that the Black male share reduces by more than 3 percentage points when this criterion is applied).

The plots displayed in Figures 2.6 and 2.7 might help the user understand how an individual eligibility criterion can affect the overall benchmark for a given group; however, when examining a criterion, the user must view the displayed information in the context of the sequence in which it was applied. For example, in Figure 2.7, felony conviction appears to barely affect the number of people eligible after age, education, marital status and dependents, BMI and height, health, and AFQT criteria have all been applied. However, had felony conviction been applied earlier in the order, immediately after the age criterion had been applied, the impact on the reduction of the number of eligible people would have been much higher. The reason for the difference in impact is that important correlations exist among several of the criteria, such as level of education and felony convictions. The flexibility of the tool in enabling the user to set the order in which the criteria are applied can be used to gain further insight into how each criterion affects the benchmarks relative to the other criteria. Examining a criterion under various orderings allows the user to gain a fuller understanding of the importance and impact of that criterion, particularly as alternate eligibility policy options are considered. Although any ordering of the application of the eligibility criteria will lead to the same benchmarking results, the user should be cautious that any one individual ordering could give a false impression of the impact of an individual eligibility criterion.

Figure 2.7. Plot Results Example: Remaining Enlisted Eligible Population as Each Eligibility Requirement Is Applied



Chapter 3. Conclusion

The accession benchmarking tool enables DAF personnel to conduct ongoing monitoring of the demographic distribution of accessions through three different entry points: enlistment, officer commissions through USAFA, and officer commissions via ROTC or OTS. The tool enables comparison with three benchmarks for each accession source: the full U.S. population of eligible age, the population meeting eligibility requirements, and the population both meeting eligibility requirements and likely to serve in the military. Because the data utilized by the tool can be updated (as described in the appendix), the tool can be used for monitoring of future accessions.

Beyond monitoring accessions relative to benchmarks, the tool enables planning and forecasting by the user through a simple interface that allows the user to estimate the shift in eligibility among the gender and race and ethnicity demographic groups through a set of customizable features. To accommodate shifts in the racial and ethnic distribution of the U.S. population, the tool includes the capability to reweight the population to alternate starting demographic distributions. Three other customization options allow the user to test hypothetical scenarios. Each of the individual eligibility requirements can be toggled on or off, and those featuring continuous values, such as AFQT minimum scores, can be altered to different thresholds. These options allow users to explore how altering these conditions affects the benchmarks. The accession totals can also be changed from the observed values, allowing the user to explore how shifting accession demographics might affect the distribution of accessions across gender and race and ethnicity compared with the benchmarks. Finally, the values for propensity to serve can be altered from their primary source, the MTF survey, which allows the user to either use an alternate data source for propensity, such as the Joint Advertising, Market Research & Studies Youth Poll, or explore scenarios in which the propensity within the eligible population changes.

Beyond simply examining the benchmarks, the tool provides the user with two additional output plots to further explore the impact of the eligibility criteria on any individual gender and racial and ethnic group. One of these plots allows the user to visualize how each successive eligibility requirement reduces the size of the eligible population within a specific group when it is applied. The other plot characterizes how each successive eligibility criterion affects an individual gender and racial and ethnic group's share of the eligible population relative to all the other groups. Combined, these diagnostics allow the user to better understand how each eligibility requirement affects the eligible population both within and across groups, which can provide important context as the user explores how the eligibility criteria might create barriers to accession. The user is also provided with all the information, in tabular form, that is needed to generate the plots provided in the tool. This output enables the user to create their own

specialized summaries and graphics that support their needs. These tables and plots can be downloaded using the buttons located next to the outputs within the tool.

This guide focuses on the functionality of the tool. For additional guidance on the interpretation of the results from the tool, the reader should consult the companion report by Berglund, Mariano, and Maerzluft (2023) that explores the results of benchmarks generated from this tool for FY 2020 accessions.

Appendix. Data Sources

Which the exception of the accession totals, data for the PAF Benchmarking Tool come from publicly available sources. The tool was built for default benchmarking of the FY 2020 accession cohort. The versions of each publicly available dataset used for FY 2020 comparisons are described and discussed in Berglund, Mariano, and Maerzluft (2023), a comprehensive examination of benchmarks for the FY2020 cohort. Designed as a tool for examining and forecasting future benchmarks, each dataset used by the tool can be updated to different versions. In the following sections, we describe where the user can acquire the data that are necessary to update the tool.

American Community Survey Data

The ACS is a product of the U.S. Census Bureau. Although these data can be obtained from the Bureau's website directly, it is easier to obtain the data from IPUMS USA. IPUMS has a website that provides an easy-to-use interface for downloading certain public-use datasets, including the ACS. To get the data used by the tool from IPUMS, the user can navigate to the IPUMS data selection page (https://usa.ipums.org/usa-action/variables/group) (IPUMS, undated-b) and add the variables listed in Table A.1 to their cart. The user can add variables by navigating to the section listed in the "Variable Section" column of Table A.1 and clicking on the plus sign next to the variable. The variables "year" and "perwt" should be included by default. Then, by clicking on "Select Sample," the user can select the sample they wish to include; the user can use the default or select specific years and even include territories, such as Puerto Rico, which is a separate sample from the ACS file and must be selected separately. Once the variables and sample are selected, the user can click "Submit" to be taken to a page with their data requests (past and present) listed in a table. The user data request will be in process, and an email will be sent when the download is available. While the data extract is processing, the user must download the Data Documentation Initiative (DDI) style file by clicking on the DDI link under the "Codebook" column and then right-click and save in their web browser. A *DDI file* is a type of codebook in a specific format following the rules prescribed by the DDI (DDI, undated). The DDI file should be saved in the XML text file format (the extension for this format is .xml). Once the data extract is ready, the user must download the DAT file. The data will need to be cleaned using the "clean_acs" function provided within the benchmarking tool and stored properly in the data folder. The data can be cleaned in R by passing the path to where the DDI file is located on the user's computer to the "xml_filepath" option of "clean_acs" and the path to the data file to the "dat_file path" option. If both files are stored in the same folder, only the xml_filepath needs to be specified. The results of this function call should then be saved and

written to the data folder of the tool directory. The user will then need to update the global.R script to load in these data instead of the old data to the acs_dta object toward the top of global.R.

Table A.1. American Community Survey Variables

Variable	Variable Section and Subsection
year	Household: Technical
perwt	Person: Technical
sex	Person: Demographic
age	Person: Demographic
marst	Person: Demographic
educ	Person: Education
nchild	Person: Family Interrelationship
race	Person: Race, Ethnicity, and Nativity
hispan	Person: Race, Ethnicity, and Nativity
citizen	Person: Race, Ethnicity, and Nativity

National Health Interview Survey Data

Just like the ACS, the National Health Interview Survey (NHIS) data can be found at IPUMS USA. The user can navigate to the IPUMS NHIS data selector (https://nhis.ipums.org/nhis-action/variables/group) (IPUMS, undated-a) and add the variables found in Table A.2 to the cart by navigating to the variable section and clicking on the plus sign next to the variable. The variables "year" and "perweight" should be included by default. To add a sample, the user can use the default or select the desired year(s). Once the variables and sample are selected, the user must click "Submit" to be taken to a page with the data requests (past and present) listed in a table. The data request will be in process, and an email will be sent when the user can download the data. While the data extract is processing, the user can download the DDI file by clicking on the DDI link under the "Codebook" column and then right-click and save the file in their web browser. The DDI file should be saved in the XML text file format (the extension for this format is .xml). Once the data extract is ready, the user must download the DAT file. The data will need to be cleaned using the clean_nhis function provided with the tool and stored properly in the data folder.

Table A.2. National Health Interview Survey Data

Variable	Variable Section and Subsections
year	Household: Technical
perweight	Person: Technical
sex	Person: Demographic: Core Demographic
age	Person: Demographic: Core Demographic
racenew	Person: Demographic: Ethnicity/Nativity
hispyn	Person: Demographic: Ethnicity/Nativity
bmicalc	Person: General Health: General Health
height	Person: General Health: General Health
educ	Person: Socio-Economic Status: Education
asthmaev	Person: Conditions: Condition
asthmastil	Person: Conditions: Condition
diabeticev	Person: Conditions: Condition
heartconev	Person: Conditions: Condition
visionprob	Person: Conditions: Condition
lany	Person: Limitation: Limitation
equipment	Person: Limitation: Limitation
flvision	Person: Limitation: Functional Limitation Causes

National Longitudinal Survey of Youth 1997 Data

The National Longitudinal Survey of Youth 1997 (NLSY97) was a survey conducted among a cohort of youth from 1997 to 2017. It is available via its own website. To access the data used for the tool, go to the NLSY website (https://www.nlsinfo.org/investigator/pages/search) (U.S. Bureau of Labor Statistics, undated) and select the study "NLSY97 (National Longitudinal Survey of Youth 1997)" followed by the sub-study "NLSY97 1997–2017." The user might need to create a free account to access these data. Use the "Variable Search" tab and "Browse Index with Search" subtab to search by "Question Name (enter search term)" using the "Variable Section" column in Table A.3 as a guide for what to search. The user must be sure to set the results filter to "All Variables" because some variables are not considered primary variables. Certain variables are captured in multiple years; those variables have years listed at the end of

the variable name. Although this list mostly contains the years 1997, 2003, 2005, and 2017, note that for a few variables, the years are slightly different. This difference is because of data not being available in those years (see "cv_citizen_current" as an example). Also, the search mechanism defaults to searching for values that start with the user's search term (i.e., the search mechanism will be set to find that term only at the beginning of a value and will not find it contained within values); for some variables, the user might need to add a second search term by clicking the "Add" button to the right of the text box. Those variables are indicated in the "Variable Section" column in Table A.3 with cells that have "(add . . .)" after the first search term. The user might need to change the parameters in the new search input line to "contains." Once all variables have been selected, the user can navigate to the "Save/Download" tab and the "Basic Download" subtab, give the sample a name, and click "Download." Doing so will take the user to the "Manage Downloads" subtab as the sample is prepared. Once the sample is ready, the user should click the download button in the right-hand column of the available downloads table. A function called clean_nlsy is provided within the tool repository. However, unlike the ACS and NHIS functions, the user needs to pass the path to the NLSY data download to the filepath option. The user will need to update the global.R script just as they do for the ACS or NHIS datasets.

Table A.3. National Longitudinal Survey of Youth 1997 Data

Variable	Variable Section
pubid_1997	Included in default sample variables
keysex_1997	key!
keybdate_m_1997	Included in default sample variables
keybdate_y_1997	Included in default sample variables
keyage_1997	key!
keyethnicity_1997	key!
keyrace_ethnicity_1997	key!
keyrace_1997	key!
cv_sample_type_1997	cv_sample_type
sampling_weight_cc_2003	sampling_weight_cc
sampling_weight_cc_2005	sampling_weight_cc
sampling_weight_cc_2017	sampling_weight_cc
cv_marstat_collapsed_2003	cv_marstat_collapsed
cv_marstat_collapsed_2005	cv_marstat_collapsed

Variable	Variable Section
cv_marstat_collapsed_2017	cv_marstat_collapsed
cv_bio_child_hh_2003	cv_bio_child_hh
cv_bio_child_hh_2005	cv_bio_child_hh
cv_bio_child_hh_2017	cv_bio_child_hh
cv_bio_child_hh_u18_2017	cv_bio_child_hh
cv_census_region_2003	cv_census_region
cv_census_region_2005	cv_census_region
cv_census_region_2017	cv_census_region
cv_citizen_current_2003	cv_citizen_current
cv_citizen_current_2006	cv_citizen_current
cv_citizen_current_2015	cv_citizen_current
cv_highest_degree_0304_2003	cv_highest_degree
cv_highest_degree_0506_2005	cv_highest_degree
cv_highest_degree_ever_edt_2017	cv_highest_degree
trans_sat_verbal_hstr	trans_sat
trans_sat_math_hstr	trans_sat
trans_act_comp_hstr	trans_act_comp
asvab_math_verbal_score_pct_1999	asvab_math_verbal_score_pct
cvc_sat_math_score_2007_xrnd	cvc_sat
cvc_sat_math_rnd_2007_xrnd	cvc_sat
cvc_sat_verbal_score_2007_xrnd	cvc_sat
cvc_sat_verbal_rnd_2007_xrnd	cvc_sat
cvc_act_score_2007_xrnd	cvc_act_score
ysaq_443c4_2003	ysaq (add contains: 443c4)
ysaq_443c42_2003	ysaq (add contains: 443c4)
ysaq_443c43_2003	ysaq (add contains: 443c4)
ysaq_443c44_2003	ysaq (add contains: 443c4)
ysaq_443c45_2003	ysaq (add contains: 443c4)
ysaq_443c47_2003	ysaq (add contains: 443c4)

Variable	Variable Section
ysaq_443c48_2003	ysaq (add contains: 443c4)
ysaq_443c410_2003	ysaq (add contains: 443c4)
ysaq_443c4_000001_2005	ysaq (add contains: 443c4)
ysaq_443c4_000002_2005	ysaq (add contains: 443c4)
ysaq_443c4_000003_2005	ysaq (add contains: 443c4)
ysaq_443c4_000004_2005	ysaq (add contains: 443c4)
ysaq_443c4_000005_2005	ysaq (add contains: 443c4)
ysaq_443c4_000007_2005	ysaq (add contains: 443c4)
ysaq_443c4_000008_2005	ysaq (add contains: 443c4)
ysaq_443c4_000010_2005	ysaq (add contains: 443c4)
ysaqf_443c4_000001_2017	ysaq (add contains: 443c4)
ysaqf_443c4_000002_2017	ysaq (add contains: 443c4)
ysaqf_443c4_000003_2017	ysaq (add contains: 443c4)
ysaqf_443c4_000004_2017	ysaq (add contains: 443c4)
ysaqf_443c4_000005_2017	ysaq (add contains: 443c4)
ysaqf_443c4_000007_2017	ysaq (add contains: 443c4)
ysaqf_443c4_000008_2017	ysaq (add contains: 443c4)
ysaqf_443c4_000009_2017	ysaq (add contains: 443c4)
ysaqf_443c4_000010_2017	ysaq (add contains: 443c4)
ysaqf_443c4_000012_2017	ysaq (add contains: 443c4)
ysaq_469a01_2003	ysaq (add contains: 469a.01)
ysaq_469a01_000001_2005	ysaq (add contains: 469a.01)
ysaqf_469a01_000001_2017	ysaq (add contains: 469a.01)
ysaq_469a02_2003	ysaq (add contains: 469a.02)
ysaq_469a02_000001_2005	ysaq (add contains: 469a.02)
ysaqf_469a02_000001_2017	ysaq (add contains: 469a.02)
ysaq_469a03_2003	ysaq (add contains: 469a.03)
ysaq_469a03_000001_2005	ysaq (add contains: 469a.03)
ysaqf_469a03_000001_2017	ysaq (add contains: 469a.03)

Variable	Variable Section
ysaq_469a04_2003	ysaq (add contains: 469a.04)
ysaq_469a04_000001_2005	ysaq (add contains: 469a.04)
ysaqf_469a04_000001_2017	ysaq (add contains: 469a.04)
ysaq_469a201_2003	ysaq (add contains: 469a2)
ysaq_469a202_2003	ysaq (add contains: 469a2)
ysaq_469a203_2003	ysaq (add contains: 469a2)
ysaq_469a204_2003	ysaq (add contains: 469a2)
ysaq_469a301_2003	ysaq (add contains: 469a3)
ysaq_469a302_2003	ysaq (add contains: 469a3)
ysaq_469a303_2003	ysaq (add contains: 469a3)
ysaq_469a304_2003	ysaq (add contains: 469a3)
ysaq_469a401_2003	ysaq (add contains: 469a4)
ysaq_469a402_2003	ysaq (add contains: 469a4)
ysaq_469a403_2003	ysaq (add contains: 469a4)
ysaq_469a404_2003	ysaq (add contains: 469a4)
ysaq_469a501_2003	ysaq (add contains: 469a5)
ysaq_469a502_2003	ysaq (add contains: 469a5)
ysaq_469a503_2003	ysaq (add contains: 469a5)
ysaq_469a504_2003	ysaq (add contains: 469a5)
ysaq_469a701_2003	ysaq (add contains: 469a7)
ysaq_469a702_2003	ysaq (add contains: 469a7)
ysaq_469a703_2003	ysaq (add contains: 469a7)
ysaq_469a704_2003	ysaq (add contains: 469a7)
ysaq_469a801_2003	ysaq (add contains: 469a8)
ysaq_469a802_2003	ysaq (add contains: 469a8)
ysaq_469a803_2003	ysaq (add contains: 469a8)
ysaq_469a804_2003	ysaq (add contains: 469a8)
ysaq_469a1001_2003	ysaq (add contains: 469a10)
ysaq_469a1002_2003	ysaq (add contains: 469a10)

Variable	Variable Section
ysaq_469a1003_2003	ysaq (add contains: 469a10)
ysaq_469a1004_2003	ysaq (add contains: 469a10)
ysaqf_470_01_2017	ysaq (add contains: f-470)
ysaqf_470_03_2017	ysaq (add contains: f-470)
ysaqf_470_02_2017	ysaq (add contains: f-470)
ysaqf_470_04_2017	ysaq (add contains: f-470)

National Survey on Drug Use and Health Data

The National Survey on Drug Use and Health (NSDUH) is a product of the Substance Abuse and Mental Health Services Administration and the U.S. Department of Health and Human Services. To get the data used by the tool, the user can navigate to data archive homepage (https://www.datafiles.samhsa.gov) (Substance Abuse and Mental Health Services Administration, undated), select "Data Sources," and click "Population Data (NSDUH)" in the drop-down menu to be taken to a page on which the desired year can be selected. If the user wishes to use multiple years, they will need to repeat the process for each desired year of data. On the right side of the page will be a section titled "Dataset Downloads"; the user can click the "Delimited" link to begin downloading the data. The entire dataset can be downloaded and used for the tool. A function called clean_nsduh can be called from the tools R directory to prepare the data for the tool. This function is similar to clean_nlsy, and the procedure for updating the tool is identical to the previously discussed datasets.

Monitoring the Future Data

Monitoring the Future (MTF) is a survey used to estimate the propensity measures found in the benchmarking tool. The user can download the data from the National Addiction & HIV Data Archive Program homepage (https://www.icpsr.umich.edu/web/pages/NAHDAP/index.html) by selecting the "Find Data" drop-down menu at the top of the page and the "Series" option in the drop-down list, then take the following steps:

- Under the search results, click "Monitoring the Future (MTF) Public-Use Cross-Sectional Datasets."
- Scroll down the list of studies to the desired year for the option "Monitoring the Future: A Continuing Study of American Youth (12th-Grade Survey), YEAR." Click on the study.
- Select the "Download" drop-down and the "Delimited" option in the drop-down list.

The user might need to create a free Inter-university Consortium for Political and Social Research account. The user can clean this data using the clean_mtf function found in the tool

directory. This function has the same input as clean_nlsy. Follow the same procedure as the other datasets to update the tool with the new data.

There are other sources of propensity estimates beyond MTF. Should the user wish to use these sources, they can estimate the propensity of each gender and racial and ethnic subgroup and manually input them into the tool using the input option on the "Introduction" tab of the tool. The numbers must be input as percentage values between 0 and 100, and all the values in the table must sum to 100.

Accession Data

The last data source is for the accession data. We used PAF data stored internally at RAND to estimate the appropriate values for each Air Force entry point. Like the propensity values, the accession values can be input into the tool manually using the proper input table found in the "Introduction" tab of the tool. These numbers should be input as raw counts of accessions for each gender and racial and ethnic demographic group. However, the user can also add the data into the tool by updating the path to the accession dataset in global.R. In global.R, the user must search for acc_dta_filepath and change the string assigned to that object to be the correct path to the new data source. For this to work, the new data must be in the correct format. These data should be individual-level data (one row per person). The variables included should be gender, which specifies recruits as either male or female; age, which specifies a recruit's age at enlistment; race_ethnicity, which specifies whether someone was HISPANIC, WHITE (NON-HISP), BLACK (NON-HISP), ASIAN/PAC ISLE (NON-HISP), or Other; and, finally, what source the commission was from via a variable called commission_source_short, which should be ENLISTED, USAFA, or ROTC/OTS.

Abbreviations

ACS	American Community Survey
AFMAN	Air Force Manual
AFQT	Armed Forces Qualification Test
BMI	body mass index
DAF	Department of the Air Force
DDI	Data Documentation Initiative
FY	fiscal year
GED	General Educational Development Test
MTF	Monitoring the Future
NHIS	National Health Interview Survey
NLSY	National Longitudinal Survey of Youth
NLSY97	National Longitudinal Survey of Youth 1997
NSDUH	National Survey on Drug Use and Health
OTS	Officer Training School
ROTC	Reserve Officers Training Corps
USAFA	U.S. Air Force Academy

References

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PROJECT AIR FORCE

The Department of the Air Force (DAF) has placed a strategic focus on improving talent management, which includes efforts to build a diverse, equitable, and inclusive workforce. RAND researchers developed a benchmarking tool to assist the DAF in these efforts. This guide provides instructions for use of that tool for benchmarking diversity at the time of accession for three active duty accession sources: enlistment, commission through the U.S. Air Force Academy, and commission through the Reserve Officers Training Corps or Officer Training School. The tool gives decisionmakers the ability to continue to benchmark accessions and explore hypothetical eligibility scenarios.

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