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BLUEPRINTS FOR SOUND PUBLIC POLICY

## DEPARTMENT OF DEFENSE ISSUES FIRST-EVER OFFICIAL COUNT OF ACTIVE DUTY TRANSGENDER SERVICE MEMBERS

~14,700 TRANSGENDER TROOPS SERVE CURRENTLY  
(8,980 ACTIVE DUTY & 5,727 SELECTED RESERVE)

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### Executive Summary

- Based on new Pentagon data collected for the first time in history, we estimate that the number of currently serving transgender troops is 14,707, of whom 8,980 are in the Active Component, and 5,727 are in the Selected Reserve.
- The estimate of 8,980 active duty troops is an official Defense Department estimate, while we derived the estimate of 5,727 troops in the Selected Reserve on the basis of our own calculations.
- Public policy discourse typically draws on round numbers, and military leaders, politicians, journalists and advocates should cite 14,700 as the number of transgender troops in the Active Component and Selected Reserve.
- Scholars have calculated seven different estimates in recent years, all derived from acceptable and widely used demographic techniques.
- However, the fact that the Defense Department itself derived the new count of active duty transgender service members from an internal survey lends a high degree of confidence to the new estimate of 14,700.
- The Defense Department's estimate of 8,980 active duty transgender troops includes 1,850 transgender men (who joined the military as women) and 7,129 transgender women (who joined the military as men).<sup>1</sup>
- Our estimate of 5,727 transgender troops in the Selected Reserve includes 1,420 transgender men (who joined the military as women) and 4,307 transgender women (who joined the military as men).
- Transgender troops make up 0.7% (seven-tenths of one percent) of the military (Active Component and Selected Reserve).
- The gender breakdown of transgender troops is 22% transgender men (who joined the military as women) and 78% transgender women (who joined the military as men).

## **Introduction**

In recent years, the national debate about transgender military service has included competing claims about the number of currently serving transgender personnel. Based on new Pentagon data collected for the first time in history, we estimate that the number of currently serving transgender troops is 14,707, of whom 8,980 are in the Active Component, and 5,727 are in the Selected Reserve. The estimate of 8,980 active duty troops is an official Defense Department estimate, while we derived the estimate of 5,727 troops in the Selected Reserve on the basis of our own calculations.

The national policy conversation about military service by transgender personnel has included frequent references to the number of currently serving troops, and scholars have calculated seven different estimates in recent years. Although prior estimates of the number of transgender service members were derived from acceptable and widely used demographic techniques, the fact that the Defense Department itself derived the new count of active duty transgender service members from an internal survey lends a high degree of confidence to the new estimate.

Despite our estimate that 14,707 transgender service members serve currently, public policy discourse typically draws on numbers that have been rounded. Hence, our recommendation is that military leaders, politicians, journalists and advocates should cite 14,700 as the number of currently serving transgender troops.

## **Literature review**

In 2014, Drs. Gary Gates and Jody Herman estimated that there were 15,500 transgender service members in the military, including 7,300 transgender women (who joined the military as men but who identify as women) and 1,500 transgender men (who joined the military as women but who identify as men) in the Active Component, and 5,300 transgender women and 1,400 transgender men in the Guard and Reserve.<sup>2</sup> Their estimate of 15,500 has been widely cited in the national policy conversation.

The Gates/Herman estimate depended on the assumption that the ratio of veterans to currently serving troops among transgender adults was the same as the ratio among all adults. The number of veterans and of currently serving troops were, of course, widely available, and Gates and Herman estimated the number of transgender veterans by multiplying the number of civilian transgender adults (700,000) by the percent of transgender survey respondents who indicated that they were veterans (approximately 21%). Using the ratio of veterans to active duty and reserve members among all adults, applied to the number of transgender veterans, Gates and Herman could then solve for the number of active duty and reserve transgender service members.

Gates and Herman derived their estimate at a time when the total size of the military was 2,581,000, and they included troops who were not eligible for healthcare in their analysis. In a 2015 article in the *New England Journal of Medicine*, Aaron Belkin restricted his estimate to service members who were eligible for health benefits (members of the

Active and Selected Reserve Components, in other words), and also took into account the subsequent downsizing of the armed forces to reach an overall force of 2,136,779. Using the Gates/Herman estimate as a baseline, he calculated that there were 12,800 currently serving transgender troops in the military in 2015.<sup>3</sup>

Finally, in 2016, the RAND Corporation offered five estimates of the number of currently serving transgender troops, ranging from a lower bound estimate of 2,150 (1,320 Active and 830 Selected Reserve) to a higher bound estimate of 10,790 (6,630 Active and 4,160 Selected Reserve). To derive its lower bound estimate, RAND multiplied 0.1%—the percent of civilian transgender adults in California—times the size of the military. And to derive its higher bound estimate, RAND multiplied 0.5%—the percent of civilian transgender adults in Massachusetts—times the size of the military. RAND’s middle bound estimates were derived by integrating the general population estimates from California (0.1%) and Massachusetts (0.5%) in a population-weighted combination, and by making adjustments on the basis of the military’s gender distribution.<sup>4</sup>

### **First-ever Defense Department estimate: 8,980 active duty transgender troops**

While all seven estimates of the number of transgender service members were derived from acceptable methodologies, RAND correctly observed their limitations: “To date, there have been no systematic studies of the number of transgender individuals...in the U.S. military. Current studies rely on clinical samples of health care service utilizers, nonrepresentative samples assembled in ways that are difficult to replicate, and self-reported survey data from a number of states.” As a result, RAND concluded, “Our subsequent estimates must be qualified, therefore, as somewhat speculative...”<sup>5</sup>

Given the difficulty of estimating the number of transgender troops, we were pleased to learn that the Defense Department included, for the first time, a question about gender identity on its 2016 Workplace and Gender Relations Survey of Active Duty Members (2016 WGRA). The Defense Department relied on surveys completed by 126,234 active duty personnel, but results were weighted “so findings can be generalized to the full population of active duty members.”<sup>6</sup> At the time, the military’s Active Component population was 1,277,989.<sup>7</sup>

To estimate the prevalence of transgender troops in the Active Component, the 2016 WGRA included the following question about gender identity: “Some people describe themselves as transgender when they experience a different gender identity from their sex at birth. For example, a person born into a male body, but who feels female or lives as a woman. Do you consider yourself to be transgender?” The response options were: 1) Yes, transgender, male to female; 2) Yes, transgender, female to male; 3) Yes, transgender, gender non-conforming; 4) No; 5) Unsure; 6) Prefer not to answer.<sup>8</sup>

On the basis of 126,234 active duty respondents to that question, the Defense Department estimated that the Active Component includes 8,980 transgender service members, or seven-tenths of one percent of all active duty service troops, including 1,850 transgender men (who joined the military as women) and 7,129 transgender women (who joined the

military as men).<sup>9</sup> This finding is quite close to the 2014 Gates/Herman estimate of 8,800 active duty transgender troops, Belkin's 2015 estimate of 7,800 active duty transgender troops, and RAND's 2016 higher bound estimate of 6,630 active duty transgender troops.<sup>10</sup> This consistency of findings across studies using widely divergent methodologies, as well as the fact that the new estimate of active duty troops is based on an official Defense Department survey, lend confidence to the finding.

### **New estimate: 5,727 transgender members of the Selected Reserve**

Although the Defense Department's 2016 WGRA was only administered to members of the Active Component, survey results can be extrapolated to estimate the number of transgender members of the Selected Reserve. The Defense Department reported that the size of the Active Component was 1,277,989, including 203,200 women (15.9%) and 1,074,789 men (84.1%).<sup>11</sup> As explained above, the Defense Department estimated that the Active Component includes 1,850 women who are transgender (serving as women but who identify as men, i.e. transgender men) and 7,129 men who are transgender (serving as men but who identify as women, i.e. transgender women). The percent of active duty members who are transgender men is thus  $1,850 / 203,300 = .0091$  (.91%) and the percent of active duty members who are transgender women is  $7,129 / 1,074,789 = .0066$  (.66%).

The Defense Department has reported separately that there are 808,703 members of the Selected Reserve, of whom 80.7% (652,623) are men and 19.3% (156,080) are women.<sup>12</sup> Assuming that the distribution of transgender men and women is roughly equivalent in the Active and Selected Reserve Components, it is possible to derive an estimate of the number of transgender troops in the Selected Reserve as follows. The number of transgender women is  $.0066 \times 652,623 = 4,307$  and the number of transgender men is  $.0091 \times 156,080 = 1,420$ . The total number of transgender members of the Selected Reserve is  $4,307 + 1,420 = 5,727$ . And, the total number of transgender troops is  $8,980$  (active) +  $5,727$  (reserve) =  $14,707$ .

### **Limitations and additional research**

At least three sources of uncertainty should be acknowledged. First, it is possible that some transgender service members declined to answer the transgender question on the 2016 WGRA affirmatively. Even though confidentiality was assured, survey data were collected starting just a few weeks after the lifting of the transgender ban, which had subjected any transgender service member who revealed his or her gender identity to automatic discharge. Transgender troops may not have acknowledged their gender identity to colleagues or commanders when the survey was administered, and they may have been reluctant to disclose personal information. The Defense Department should continue to include questions about gender identity in future surveys to determine if prevalence rates change over time.

Second, this analysis assumes that the prevalence of transgender active duty and reserve members is equivalent, and also that the distribution of transgender men and transgender

women is the same in the Active and Reserve Components. If these assumptions are incorrect, then the estimated number of transgender members of the Selected Reserve may not be accurate. The Defense Department could enhance the quality of the estimate by surveying members of the Selected Reserve about their gender identity.

Finally, the Defense Department's data analysts scientifically weighted the results of the 2016 WGRA so that findings could be generalized to the entire Active Component. Given the near impossibility of using truly randomized selection processes to construct samples (pools of respondents), scholars who administer surveys typically rely on weighting to ensure that the characteristics of their samples match key characteristics of underlying populations. That said, weighting is not a perfect science.

Despite these qualifications, the limitations identified in this policy memo are no more serious than limitations associated with other surveys, both military and civilian, whose findings are widely accepted and reported.

## **Conclusion**

Given that transgender troops were forced to serve in silence until the lifting of the transgender ban in 2016, their prevalence has been, until recently, impossible to assess directly. While prior estimates were derived from acceptable methodologies, the fact that the Defense Department itself derived the new count of active duty transgender troops from an internal survey should lend a high degree of confidence to the new estimate. Military leaders, politicians, journalists and advocates should now cite 14,700 as the number of currently serving transgender personnel.

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<sup>1</sup> We suspect that the Defense Department's numbers do not add up (1,850 + 7,129 = 8,979) due to rounding.

<sup>2</sup> Gary J. Gates and Jody L. Herman, *Transgender Military Service in the United States* (Los Angeles: Williams Institute), 2014.

<sup>3</sup> Aaron Belkin, *Caring for Our Troops – The Negligible Cost of Transition-Related Health Care*, *New England Journal of Medicine*, vol. 373, no. 12, 2015.

<sup>4</sup> *Assessing the Implications of Allowing Transgender Personnel to Serve Openly* (Santa Monica: RAND Corporation), 2016, 14-17.

<sup>5</sup> *Assessing the Implications*, 11.

<sup>6</sup> DoD reported that "this item has a low-rate of item missing. That is, of the web-respondents who likely saw the item; only 0.5% chose not to answer the item." 2016 Workplace and Gender Relations Survey, 2.

<sup>7</sup> 2016 Workplace and Gender Relations Survey of Active Duty Members: Transgender Service Members, Office of People Analytics, Department of Defense, 2017, 2-3.

<sup>8</sup> 2016 Workplace and Gender Relations Survey, 1.

<sup>9</sup> As noted above, we suspect that the Defense Department's numbers do not add up due to rounding.

<sup>10</sup> Belkin did not break his estimate down into Active and Selected Reserve Components. Given that the Active Component was approximately 61% of the total force at the time of his analysis, however, his estimate of 12,800 can easily be broken down into Active and Selected Reserve estimates.

<sup>11</sup> 2016 Demographics: Profile of the Military Community, Office of the Deputy Assistant Secretary of Defense for Military Community and Family Policy, Department of Defense, 18.

<sup>12</sup> 2016 Demographics, 66; Department of Defense Selected Reserves by Rank/Grade, November 30, 2017, available at [https://www.dmdc.osd.mil/appj/dwp/rest/download?fileName=DRS\\_42486\\_SelRes\\_201711.pdf&groupName=resRankGrade](https://www.dmdc.osd.mil/appj/dwp/rest/download?fileName=DRS_42486_SelRes_201711.pdf&groupName=resRankGrade).



## 2016 Workplace and Gender Relations Survey of Active Duty Members Transgender Service Members

### Study Background Information

The Health and Resilience Research Division (H&R), within the Office of People Analytics (OPA),<sup>1</sup> has been conducting the congressionally-mandated gender relations surveys of active duty members since 1988 as part of a quadrennial cycle of human relations surveys outlined in Title 10 U. S. Code Section 481. Past surveys of this population were conducted by OPA in 1988, 1995, 2002, 2006, 2010, and 2012. At the request of Congress, the RAND Corporation conducted the *2014 RAND Military Workplace Study (2014 RMWS)* of military members (both the active duty and Reserve components) to provide an independent assessment of unwanted gender-related behaviors in the military force. The measures for sexual assault and Military Equal Opportunity (MEO) violations developed by RAND for use in the *2014 RMWS* will be used in Workplace and Gender Relations (WGR) surveys hereafter. The *2016 Workplace and Gender Relations Survey of Active Duty Members (2016 WGRA)* is a key source of information for evaluating sexual assault and sexual harassment programs to provide reporting options and survivor care procedures and for assessing the gender relations environment across the Services. In addition, this survey is used to scientifically measure and assess other gender-related issues of interest to the Department.

### Analysis of Transgender Active Duty Service Members

The *2016 WGRA* included an item asking whether members identified as transgender. The question was stated as follows with the noted response options. For this analysis, all categories with a "yes" response are included together as one overall "Yes, transgender" response.

Q212. Some people describe themselves as transgender when they experience a different gender identity from their sex at birth. For example, a person born into a male body, but who feels female or lives as a woman. Do you consider yourself to be transgender? *Mark one.*

- 1) Yes, transgender, male to female
- 2) Yes, transgender, female to male
- 3) Yes, transgender, gender non-conforming
- 4) No
- 5) Unsure
- 6) Prefer not to answer

As shown in Table 1, 1% of all DoD active duty members (including DoD women and DoD men)<sup>2</sup> indicated they identified as transgender. The vast majority of DoD members (93%; 95% of women and 93% of

<sup>1</sup> Prior to 2016, the Defense Research Surveys, and Statistics Center resided within the Defense Manpower Data Center (DMDC). In 2016, DHRA reorganized and moved RSSC under the newly established Office of People Analytics (OPA).

<sup>2</sup> Gender was determined by self-report data from the respondent on the survey. If they did not indicate their gender on the survey, their gender from their administrative records was used. Therefore, the gender could be their birth gender or the gender they identified with at the time of the survey administration.

men) indicated they are not transgender. Only 1% of DoD members (1% of women and men) were unsure, and 4% (3% of women and 5% of men) preferred not to answer. It should be noted that the “prefer not to answer” response option is typically not included in gender identity measures.<sup>3</sup> Overall, this item has a low-rate of item missing. That is, of the web-respondents who likely saw the item; only 0.5% chose not to answer the item.

**Table 1.**

***Self-Reported Identification as Transgender for DoD Active Duty Members (Q212)***

	Total DoD	DoD Women	DoD Men
Yes, transgender	1%	1%	1%
No	93%	95%	93%
Unsure	1%	1%	1%
Prefer not to answer	4%	3%	5%

Note. Percent of all active duty members. Margins of error do not exceed  $\pm 1\%$ .

As shown in Table 2, based on the 126,234 DoD active duty eligible web survey<sup>4</sup> respondents (excluding Coast Guard members), weighted up to an estimated eligible population of 1,277,989, a constructed 95 percent confidence interval ranges from 8,227 to 9,732 DoD active duty members, with an estimate of 8,980 who consider themselves to be transgender. For DoD women, based on a constructed 95 percent confidence interval ranging from 1,591 to 2,109, an estimated 1,850 DoD women considered themselves to be transgender. For DoD men, based on a constructed 95 percent confidence interval ranging from 6,329 to 7,930, an estimated 7,129 DoD men considered themselves to be transgender.

**Table 2.**

***Self-Reported Identification as Transgender Population Estimates for DoD Active Duty Members (Q212)***

	Total DoD	DoD Women	DoD Men
Population Estimate	8,980	1,850	7,129
Confidence Interval Range	8,227–9,732	1,591–2,109	6,329–7,930

<sup>3</sup> In September of 2016, the Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys released a comprehensive review of current measures of sexual orientation and gender identity in federal surveys (available: [https://s3.amazonaws.com/sitesusa/wp-content/uploads/sites/242/2014/04/WorkingGroupPaper1\\_CurrentMeasures\\_08-16.pdf](https://s3.amazonaws.com/sitesusa/wp-content/uploads/sites/242/2014/04/WorkingGroupPaper1_CurrentMeasures_08-16.pdf)), examining 12 surveys/studies that assessed sexual orientation and 6 that assessed gender identity. The response options on the WGRA gender identity measure are largely consistent with those included on other surveys. However, unlike other surveys, the WGRA measure provided a “prefer not to answer” option. Most gender identity measures include a response for “something else,” “other,” or “don’t know,” but do not provide a “prefer not to answer” option. The reason for including this response option on the WGRA was to provide a response option for those who did not wish to answer the question. However, it’s possible, if this response option were not available, those who selected it would have skipped the question. If this were the case, those individuals would not be included in analyses and the proportions selecting other response options (i.e., transgender, not transgender, unsure) would thus be slightly higher.

<sup>4</sup> Items addressing transgender identity were only included only on the web version of the 2016 WGRA. Out of the 132,429 DoD active duty members who completed the survey, 126,234 completed via the web and 6,195 completed the paper option.

Note. Population estimates based on a constructed 95% confidence interval.

## Survey Methodology

Data for the 2016 WGRA were collected between July 22 and October 17, 2016 using the web with a paper survey option. The survey procedures were reviewed by a DoD Human Subjects Protection Officer as part of the DoD survey approval and licensing process. Additionally, OPA received a Certificate of Confidentiality from the Health Resources and Services Administration (HRSA) at the Department of Health and Human Services to ensure the respondent data are protected.<sup>5</sup>

The target population for the 2016 WGRA consisted of active duty members from the Army, Navy, Marine Corps, Air Force, and Coast Guard who were below flag rank and had been on active duty for approximately five months.<sup>6</sup> Of note, while Coast Guard members were included in the sample and design of the 2016 WGRA, data reviewed in this white paper is of DoD members only and does not include Coast Guard.

Single-stage, nonproportional stratified random sampling procedures were used in the 2016 WGRA for the DoD Services and Coast Guard. A census of the Coast Guard was taken for this survey as they have a small population. OPA sampled a total of 735,329 active duty Service members (696,329 DoD members and 39,000 Coast Guard members). Surveys were completed by 151,010 active duty members (132,429 DoD members and 18,581 Coast Guard members). The overall weighted response rate for the 2016 WGRA (including DoD and Coast Guard) was 24%, which is typical for large DoD-wide surveys.

OPA scientifically weights the survey data so findings can be generalized to the full population of active duty members. Within this process, statistical adjustments are made so that the sample more accurately reflects the characteristics of the population from which it was drawn. This ensures that the oversampling within any one subgroup does not result in overrepresentation in the total force estimates, and also properly adjusts to account for survey nonresponse. OPA typically weights the data based on an industry standard process that includes 1) assigning a base weight based on a selection probability, 2) adjusting for nonresponse which includes eligibility to the survey and completion of the survey, and 3) adjusting for poststratification to known population totals.

<sup>5</sup> This Certificate of Confidentiality means that OPA cannot be forced to disclose information that may identify study participants in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings.

<sup>6</sup> The sampling frame was developed five months prior to fielding the survey. Therefore, the sampling population including those active duty members with approximately five months of service at the start of survey fielding.