AGE OF INDIVIDUALS WHO IDENTIFY AS TRANSGENDER IN THE UNITED STATES

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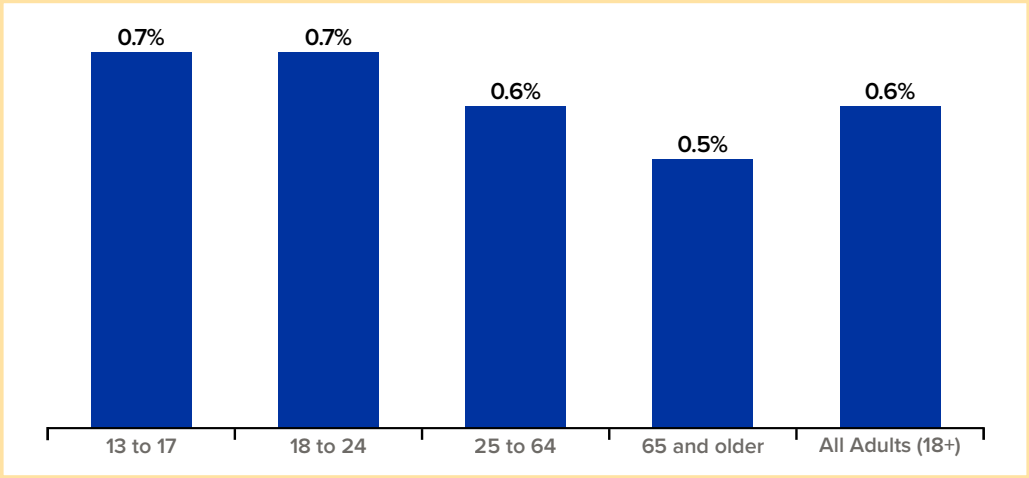
INTRODUCTION AND SUMMARY

Few data sources exist that can be used to describe the demographic characteristics of transgender people in the United States. Most U.S. demographic data come from national, population-based surveys, like the Decennial Census and the American Community Survey. National surveys, such as these, have rarely included questions to identify transgender respondents, leaving large gaps in our knowledge about the size and demographic composition of the transgender population. Yet, an increasing number of states and localities do collect data about transgender people. In this report, we utilize data from state-level, population-based surveys to estimate the proportion of the population that identifies as transgender by age group, starting at age 13. We provide a new estimate of the percentage of youth (13 to 17) that identifies as transgender (Figure 1). We also provide a new estimate of the overall age distribution of the transgender population, ages 13 and above. This report is part of a series of Williams Institute reports in which we provide estimates about the size and demographic characteristics of those who identify as transgender in the United States.[1]

Figure 1. Percentage of Individuals Who Identify as Trangender by Age



Some state-level surveys have provided researchers with data to compare the demographic characteristics of the transgender population to the non-transgender population. Studies based on state-level surveys of adults have differed somewhat in their findings in regard to the relationship between age and transgender identification. In a 2012 Massachusetts probability sample study researchers found that, overall, adults who identify as transgender were somewhat younger than non-transgender individuals.[2] A more recent study utilizing data from 19 states found no significant difference in age between transgender and non-transgender adults.[3]

Currently, the best available data about transgender people come from surveys of adults. Less is known about the proportion of youth that identify as transgender in the United States. Studies based on probability and non-probability survey samples at the local, state, and national levels have produced a range of findings in regard to the proportion of youth that identify as transgender. Wilson and colleagues found that among existing studies that measured transgender identity among youth, using local probability surveys or national convenience samples, the percentage of youth that identified as transgender ranged from 1.3% to 3.2%.[4]

In this report, we utilize data from the CDC's Behavioral Risk Factor Surveillance System (BRFSS), a national, state-administered survey, on which 19 states included a transgender identity question in 2014. An additional eight states collected data on transgender identity in 2015. In prior reports in this series, we estimated the size and the racial and ethnic composition of the adult population that identifies as transgender.[5] In this report, we estimate that, in addition to 0.6% of U.S. adults (1.4 million), 0.7% of youth ages 13 to 17, about 150,000 youth, would identify as transgender. In addition, we find that, overall, the estimated population of individuals over the age of 13 years who identify as transgender appears similar to the general U.S. population in regard to its age distribution. A detailed description of the methodology for this report is included in the Appendix.

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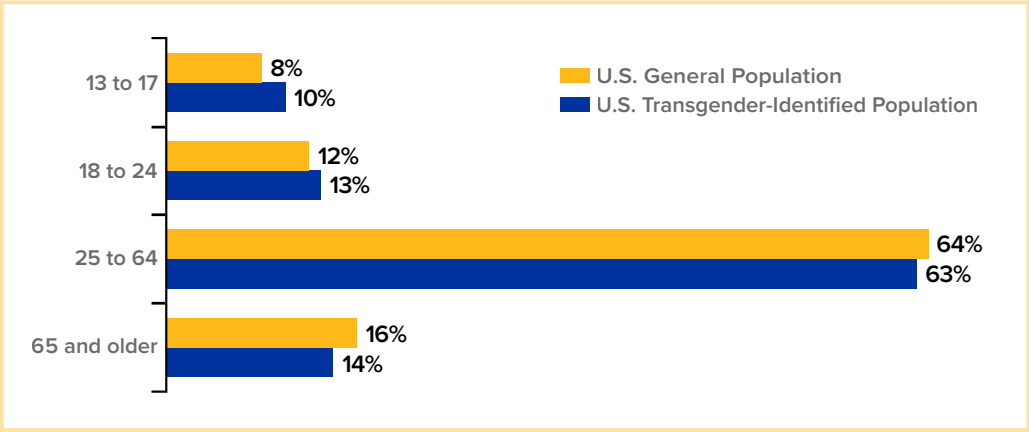
In this report, we consider the age composition of individuals who identify as transgender in two ways: the age distribution of those who identify as transgender and the percentage out of each age group that identifies as transgender. In Table 1, the estimated age distribution of those who identify as transgender, ages 13 and older, in the United States is provided alongside the age distribution of the general population. In keeping with prior studies, we find that the population of individuals who identify as transgender appears similar to the U.S. general population in regard to age. For instance, of those ages 13 and older, an estimated 10% of the transgender-identified population is 13 to 17 years of age, whereas 8% of the U.S. general population is 13 to 17 years of age.

Figure 2. Estimated Age Distribution for the Transgender-Identified Population and the General Population in the United States[6]



Based on our prior study, an estimated 0.7% of adults between the ages of 18 and 24 identify as transgender, whereas 0.6% of adults age 25 to 64 and 0.5% of adults age 65 or older identify as transgender.[7] In this study, we add a new estimate for the number and percentage of transgender youth, ages 13 to 17, that would identify as transgender. We estimate that 0.7% of youth ages 13 to 17, about 150,000 youth, would identify as transgender, in addition to 0.6% (or about 1.4 million) adults.[8] The 95% credible intervals around these national and state estimates are presented in Table A1 of the Appendix. For youth ages 13 to 17 that identify as transgender, the 95% credible interval ranges from 0.54% as the lower bound to 1.00% as the upper bound for the percentage of youth that identify as transgender.

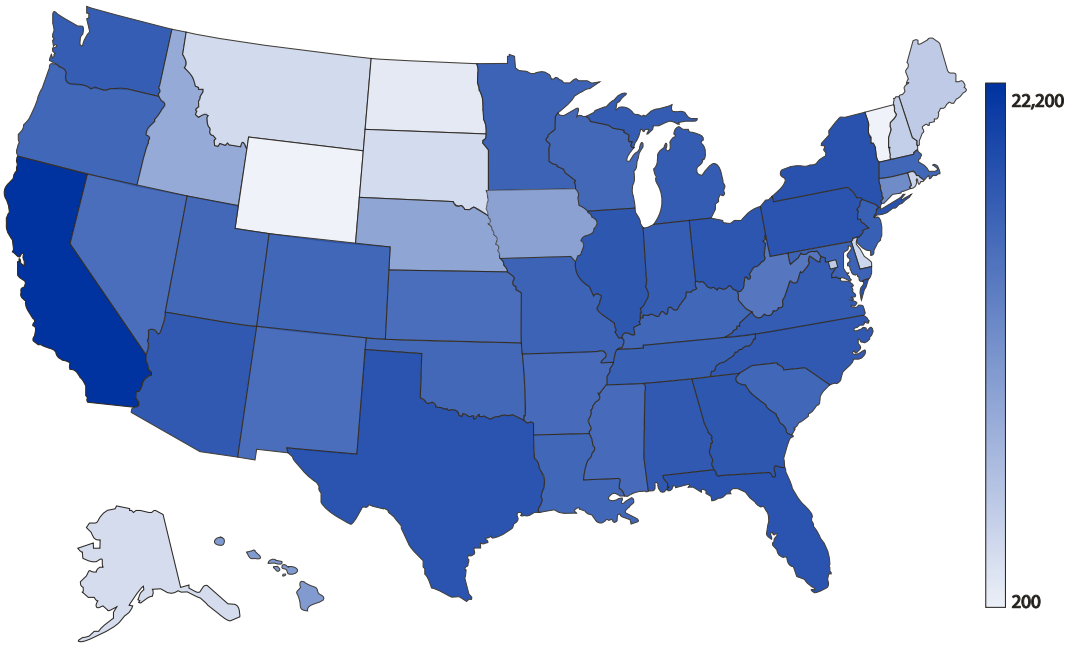
Table 1. Estimated Number and Percentage of Individuals who Identify as Transgender by Age

State	Age									
	13 to 17		18 to 24		25 to 64		65 and older		All Adults (ages 18+)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States	149,750	0.73%	205,850	0.66%	967,100	0.58%	217,050	0.50%	1,397,150	0.58%
Alabama	2,500	0.77%	3,250	0.67%	15,450	0.61%	3,700	0.53%	22,500	0.61%
Alaska	350	0.70%	500	0.60%	1,950	0.48%	250	0.42%	2,700	0.49%
Arizona	3,650	0.81%	4,700	0.72%	20,800	0.63%	4,850	0.50%	30,550	0.62%
Arkansas	1,450	0.75%	1,850	0.65%	9,150	0.61%	2,300	0.52%	13,400	0.60%
California	22,200	0.85%	33,450	0.84%	154,750	0.77%	29,050	0.63%	218,400	0.76%
Colorado	1,800	0.54%	3,200	0.63%	14,900	0.53%	2,750	0.45%	20,850	0.53%
Connecticut	950	0.39%	1,750	0.52%	8,450	0.44%	2,100	0.40%	12,400	0.44%
Delaware	400	0.74%	700	0.73%	3,050	0.64%	800	0.55%	4,550	0.64%
District of Columbia	300	1.12%	2,600	3.14%	9,900	2.66%	1,950	2.72%	14,550	2.77%
Florida	9,050	0.78%	13,450	0.75%	66,750	0.67%	19,350	0.55%	100,300	0.66%
Georgia	4,950	0.71%	8,700	0.86%	39,500	0.75%	7,450	0.66%	55,650	0.75%
Hawaii	850	1.01%	1,200	0.89%	5,700	0.77%	1,550	0.72%	8,450	0.78%
Idaho	700	0.61%	750	0.47%	3,250	0.41%	750	0.35%	4,750	0.41%
Illinois	5,700	0.65%	7,150	0.57%	34,500	0.50%	7,750	0.46%	49,750	0.51%
Indiana	3,350	0.74%	4,100	0.62%	18,950	0.56%	4,450	0.50%	27,600	0.56%
Iowa	800	0.39%	1,100	0.35%	4,900	0.31%	1,350	0.29%	7,400	0.31%
Kansas	1,300	0.66%	1,500	0.49%	6,300	0.43%	1,500	0.38%	9,300	0.43%
Kentucky	1,850	0.65%	2,400	0.57%	12,200	0.52%	3,000	0.49%	17,700	0.53%
Louisiana	2,350	0.76%	3,150	0.66%	14,550	0.60%	3,100	0.52%	20,900	0.60%
Maine	450	0.55%	650	0.56%	3,650	0.50%	1,050	0.45%	5,350	0.50%
Maryland	2,300	0.60%	3,200	0.57%	15,650	0.49%	3,300	0.43%	22,300	0.49%
Massachusetts	2,150	0.52%	4,550	0.66%	20,150	0.56%	5,050	0.53%	29,900	0.57%
Michigan	3,950	0.59%	4,800	0.48%	22,400	0.43%	5,600	0.39%	32,900	0.43%
Minnesota	3,000	0.85%	3,450	0.69%	16,750	0.58%	3,950	0.54%	24,250	0.59%
Mississippi	1,600	0.77%	2,100	0.66%	9,400	0.62%	2,150	0.53%	13,650	0.61%
Missouri	2,500	0.63%	3,600	0.60%	17,000	0.54%	4,400	0.50%	25,050	0.54%
Montana	300	0.49%	400	0.40%	1,800	0.34%	450	0.30%	2,700	0.34%
Nebraska	750	0.62%	800	0.44%	3,650	0.39%	900	0.35%	5,400	0.39%
Nevada	1,300	0.74%	1,750	0.70%	9,100	0.61%	1,750	0.49%	12,700	0.61%
New Hampshire	450	0.55%	650	0.50%	3,100	0.43%	750	0.39%	4,500	0.43%
New Jersey	3,850	0.65%	3,950	0.51%	21,050	0.44%	5,050	0.41%	30,100	0.44%
New Mexico	1,200	0.88%	1,800	0.85%	8,000	0.75%	1,850	0.62%	11,750	0.75%
New York	9,750	0.79%	11,150	0.56%	54,150	0.51%	12,850	0.47%	78,600	0.51%
North Carolina	4,650	0.74%	6,600	0.68%	31,050	0.60%	7,150	0.53%	44,750	0.60%
North Dakota	200	0.53%	300	0.34%	1,050	0.30%	300	0.29%	1,650	0.30%

State	Age									
	13 to 17		18 to 24		25 to 64		65 and older		All Adults (ages 18+)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Ohio	5,900	0.76%	5,550	0.50%	27,150	0.45%	7,000	0.41%	39,950	0.45%
Oklahoma	2,100	0.83%	2,800	0.72%	12,600	0.64%	2,900	0.55%	18,350	0.64%
Oregon	1,700	0.70%	2,800	0.76%	13,700	0.65%	3,150	0.55%	19,750	0.65%
Pennsylvania	5,250	0.65%	6,100	0.48%	29,250	0.44%	8,250	0.40%	43,800	0.44%
Rhode Island	400	0.62%	650	0.56%	2,800	0.51%	750	0.46%	4,250	0.51%
South Carolina	2,150	0.73%	3,150	0.64%	14,250	0.58%	3,450	0.50%	21,000	0.58%
South Dakota	300	0.57%	350	0.39%	1,400	0.34%	350	0.30%	2,150	0.34%
Tennessee	3,150	0.74%	4,250	0.68%	21,550	0.63%	5,150	0.56%	31,200	0.63%
Texas	13,800	0.73%	19,600	0.73%	88,950	0.66%	15,700	0.55%	125,350	0.66%
Utah	1,400	0.61%	1,350	0.42%	4,950	0.36%	800	0.30%	7,200	0.36%
Vermont	250	0.71%	450	0.67%	2,000	0.59%	550	0.53%	3,000	0.59%
Virginia	4,150	0.80%	5,150	0.62%	24,000	0.54%	5,200	0.49%	34,500	0.55%
Washington	3,100	0.70%	4,850	0.73%	23,150	0.62%	4,700	0.52%	32,850	0.62%
West Virginia	1,150	1.04%	750	0.44%	4,150	0.42%	1,200	0.38%	6,100	0.42%
Wisconsin	1,850	0.50%	2,700	0.49%	13,150	0.43%	3,250	0.39%	19,150	0.43%
Wyoming	200	0.50%	200	0.37%	1,000	0.32%	200	0.29%	1,400	0.32%

The following figure provides a visual representation of the number of youth, ages 13 to 17, that would identify as transgender in each state. Mirroring the relative population size of U.S. states, the largest populations of transgender youth are found in California, Texas, New York, and Florida. The smallest populations of trans youth are found in North Dakota, Vermont, and Wyoming.

Figure 3. Estimated Number of Youth (13 to 17) That Would Identify as Transgender in the United States



DISCUSSION

In this report, we utilized data from adults ages 18 and older in the BRFSS to estimate the proportion of youth who would identify as transgender on an anonymous survey within all 50 states, and the District of Columbia. The estimation procedure assumes an equal probability for individuals to identify as transgender within each age group included in the model. Therefore, the 13 to 17 year old age group is assumed to have the same proportion of those who would identify as transgender across the individual ages in that group. Prior research suggests that transgender youth begin to "feel different" in regard to their gender and understand themselves to be transgender at young ages, such as at four years old.[9] Calculations by the authors using existing datasets that identify transgender youth under 18 suggest that the highest proportions of youth who identify as transgender occur around ages 15 to 17.[10] Therefore, our model may underestimate the proportion of 15 to 17 yrs olds who would identify as transgender and overestimate the proportion of those who are 13 and 14 who would identify as transgender. Current available data sources do not allow us to take this non-linear relationship into account in our model. We present in this report the best available estimates of youth who would identify as transgender in the United States at this time. As new data collection efforts emerge at the state and national levels, estimates can continue to be refined to improve our understanding of the size and characteristics of the transgender population across all ages.

APPENDIX: METHODOLOGY AND CREDIBLE INTERVALS OF POPULATION ESTIMATES

The Behavioral Risk Factor Surveillance System (BRFSS) collects state-specific data on demographic characteristics and health-related factors across the 50 states, the District of Columbia, and the territories of the United States. The survey is designed to be representative within each state. The survey is conducted by an interviewer via landline and cellular telephone. The national response rate for the 2014 BRFSS was 48.7% for landline telephones and 40.5% for cellular telephones, and the national response rate for the 2015 BRFSS was 48.2% for landline telephones and 47.2% for cellular telephones (American Association of Public Opinion Research, Response Rate calculation 4).

The BRFSS contains optional module questionnaires in addition to its standard questionnaire for each state.[11] The 2014 BRFSS had 19 optional modules that states were able to opt-into, and the 2015 BRFSS had 24 optional modules that states were able to opt-into. One of the modules contained the following question:

> *Do you consider yourself to be transgender?*
>
> YES
>
> NO
>
> *[If Yes] Do you consider yourself to be male-to-female, female-to-male, or gender non-conforming?*

If the interviewer is asked for a definition of transgender, they respond:

> *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 would be transgender. Some transgender people change their physical appearance so that it matches their internal gender identity. Some transgender people take hormones and some have surgery. A transgender person may be of any sexual orientation – straight, gay, lesbian, or bisexual.*

Since this question is included in an optional module, some states asked this question while others did not. The states that did ask this question in 2014 include: Delaware, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Minnesota, Montana, Nevada, New York, Ohio, Pennsylvania, Vermont, Virginia, Wisconsin, and Wyoming. In total, 0.52% of 2014 BRFSS respondents in these states identified as transgender, and 151,456 respondents answered this question. The states that asked this question in 2015 include: Colorado, Connecticut, Delaware, Georgia, Hawaii, Idaho, Illinois, Indiana, Kansas, Massachusetts, Maryland, Minnesota, Missouri, Nevada, New York, Ohio, Pennsylvania, Texas, Virginia, Wisconsin, and West Virginia. In total, 0.58% of 2015 BRFSS respondents in these states identified as transgender, and 160,638 respondents answered this question.

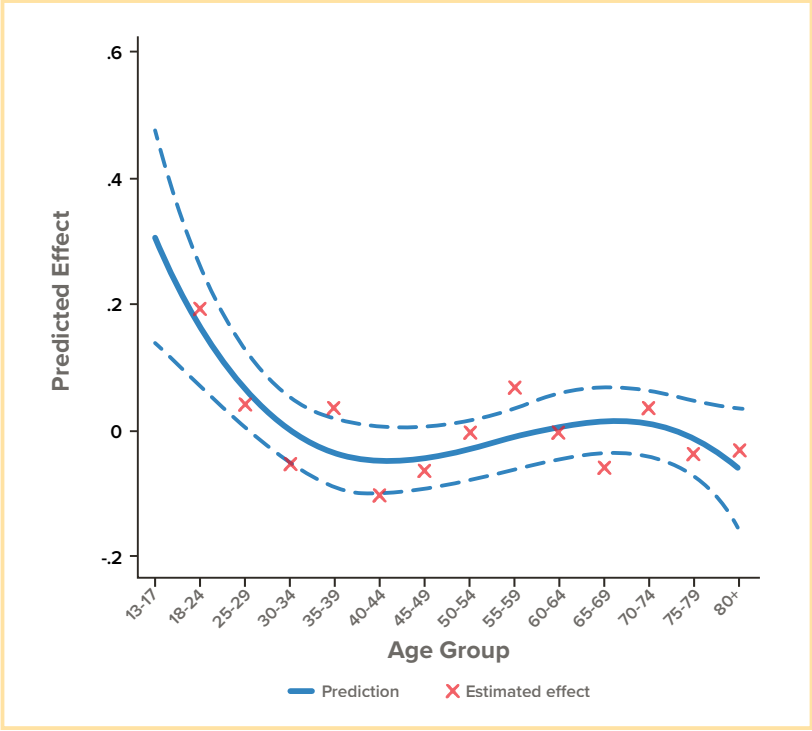
To estimate the population by state and age groups, we relied on multilevel regression and post-stratification.[12] The method fits a multilevel logistic regression to the data to predict the likelihood that an individual identifies as transgender on demographic attributes about the respondents (e.g., race and ethnicity; age cohorts; and educational attainment). State and regional characteristics were accounted for and state-level characteristics were included to add information about how states differ from one another (e.g., racial composition, median income, percentage of households that are of same-sex couples, and the percentage of the population that identifies as Evangelical). This method has been applied to measure statewide political attitudes[13] and to measure Jewish Populations.[14] Further, the estimation strategy has undergone rigorous evaluation by other scholars, and these evaluations often show that the method produces reliable and valid estimates.[15] While the estimation approach is not without its criticisms,[16] the method remains the best available approach to perform this estimation procedure.

The estimates of transgender identification for those 18 years or older come from a previous report on the population identifying as transgender, based solely on the 2014 BRFSS.[17] The present report extends the application of the estimation technique to estimate the size and percentage of 13-17 year olds who identify as transgender. First, we include both the 2014 and 2015 BRFSS in a pooled analysis. We incorporate all of the respondents, even though respondents in only 27 states received the gender identity question. By doing so, we impute the states that did not ask the gender identity question by modeling the probability that a respondent identifies as transgender. The hierarchical model still incorporates the statewide covariates to increase precision in the estimation.[18] The 13-17 year old model was estimated using a maximum likelihood model with Laplace-approximation. A posterior draw 5,000 simulations from the fitted model is used to calculate confidence intervals.

Second, 13-17 year olds are not measured directly in the BRFSS, as it is a survey for those aged 18 years or more. We relied on the data patterns in age to extrapolate an estimate for those who are 13-17 years old. We did this by fitting the multilevel model as previously described and extracting the age random effects. This comprises 13 estimated effects for each age grouping (e.g., 18-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80 and over). These age random effects were subsequently analyzed with the use of a polynomial regression to best model the pattern of these effects (see Figure A.1). The third order regression was used to predict what the estimated effect would be had we had 13-17 year olds. This in turn, reflects our best estimate, based on these data, on the patterns of younger age cohorts in identifying as transgender. This approach allows the relationship between age and the probability of identifying as transgender to be non-linear, which is consistent with previous findings. This assumes that the patterns of identifying among adults, especially among 18-24 year olds can be used to infer patterns among 13-17 year olds. This may also be an underestimate if younger cohorts identify as transgender at a sharply higher rate than 18-24 year olds. We subsequently used the estimate and standard error of the fitted effect for 13-17 year olds as a part of the model prediction.

Third, we post-stratified the model results to official population cross-tabulations from the ACS 3-year estimates (2011-2013). This way the model predictions for age, race and ethnicity, and statewide context are generalized to official counts of the number of individuals matching each demographic type.

Figure A.1. Age Random Effects Fitted to a Polynomial Regression Used to Extrapolate to the 13-17 Year Old Age Effect



In the table below, 95% credible intervals are provided for the population estimates by age. A credible interval is a Bayesian equivalent of a confidence interval. A 95% credible interval represents the upper and lower bounds where there is 0.95 probability an estimate falls between them. For 13-17 year olds, the maximum likelihood approximation of a credible interval is used from 5,000 simulations.

Table A1. Estimated Number and Percentage That Identify as Transgender by Age and State of Residence, 95% Credible Intervals

State	Age									
	13-17		18-24		25-64		65+		All Adults (18+)	
	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent
United States	[112,032, 209,008]	[0.54%, 1.00%]	[121,074, 354,454]	[0.39%, 1.13%]	[569,753, 1,649,712]	[0.34%, 1.00%]	[132,175, 360,271]	[0.31%, 0.84%]	[854,066, 2,293,511]	[0.36%, 0.95%]
Alabama	[1,401, 4,413]	[0.43%, 1.37%]	[1,624, 7,089]	[0.33%, 1.46%]	[7,630, 32,564]	[0.30%, 1.29%]	[1,868, 7,887]	[0.27%, 1.13%]	[11,487, 46,858]	[0.31%, 1.27%]
Alaska	[232, 541]	[0.46%, 1.07%]	[282, 806]	[0.35%, 0.99%]	[1,132, 3,210]	[0.28%, 0.81%]	[157, 434]	[0.25%, 0.69%]	[1,634, 4,323]	[0.3%, 0.8%]
Arizona	[2,451, 5,473]	[0.55%, 1.22%]	[2,562, 8,556]	[0.39%, 1.31%]	[11,120, 37,886]	[0.34%, 1.14%]	[2,708, 8,560]	[0.28%, 0.88%]	[17,137, 53,889]	[0.35%, 1.09%]
Arkansas	[866, 2,504]	[0.44%, 1.27%]	[966, 3,550]	[0.34%, 1.23%]	[4,614, 17,456]	[0.31%, 1.16%]	[1,185, 4,384]	[0.27%, 0.99%]	[6,898, 25,072]	[0.31%, 1.12%]
California	[15,459, 31,867]	[0.59%, 1.21%]	[18,464, 60,029]	[0.46%, 1.50%]	[83,407, 274,478]	[0.41%, 1.36%]	[15,871, 51,075]	[0.35%, 1.11%]	[120,074, 378,513]	[0.42%, 1.31%]
Colorado	[1,184, 2,821]	[0.35%, 0.84%]	[1,796, 5,616]	[0.35%, 1.10%]	[8,404, 25,994]	[0.30%, 0.92%]	[1,595, 4,612]	[0.26%, 0.76%]	[12,094, 35,295]	[0.31%, 0.89%]
Connecticut	[604, 1,457]	[0.25%, 0.61%]	[1,024, 2,942]	[0.30%, 0.86%]	[4,988, 14,281]	[0.26%, 0.74%]	[1,253, 3,458]	[0.24%, 0.65%]	[7,454, 19,824]	[0.27%, 0.71%]
Delaware	[256, 689]	[0.45%, 1.22%]	[451, 974]	[0.49%, 1.05%]	[2,061, 4,417]	[0.43%, 0.92%]	[541, 1,074]	[0.38%, 0.76%]	[3,195, 6,176]	[0.45%, 0.87%]
District of Columbia	[80, 1,027]	[0.31%, 3.96%]	[470, 11,880]	[0.57%, 14.48%]	[1,786, 47,078]	[0.48%, 12.65%]	[361, 9,351]	[0.51%, 13.10%]	[2,608, 66,391]	[0.5%, 12.63%]
Florida	[6,429, 12,862]	[0.55%, 1.11%]	[7,554, 23,144]	[0.42%, 1.29%]	[37,404, 114,026]	[0.37%, 1.14%]	[11,453, 32,341]	[0.33%, 0.92%]	[58,364, 163,960]	[0.38%, 1.07%]
Georgia	[3,199, 7,541]	[0.46%, 1.09%]	[4,847, 16,177]	[0.48%, 1.59%]	[21,496, 71,304]	[0.41%, 1.35%]	[4,147, 13,309]	[0.37%, 1.17%]	[31,243, 97,981]	[0.42%, 1.32%]
Hawaii	[426, 1,693]	[0.51%, 2.01%]	[845, 1,662]	[0.62%, 1.23%]	[4,005, 7,975]	[0.54%, 1.08%]	[1,088, 2,098]	[0.51%, 0.99%]	[6,310, 11,215]	[0.58%, 1.03%]
Idaho	[387, 1,346]	[0.33%, 1.15%]	[500, 1,087]	[0.32%, 0.69%]	[2,224, 4,882]	[0.28%, 0.61%]	[525, 1,068]	[0.25%, 0.50%]	[3,403, 6,800]	[0.29%, 0.58%]
Illinois	[3,646, 9,031]	[0.41%, 1.03%]	[4,255, 11,778]	[0.34%, 0.94%]	[20,559, 55,749]	[0.30%, 0.81%]	[4,668, 12,533]	[0.28%, 0.74%]	[30,519, 77,228]	[0.31%, 0.79%]

State	Age									
	13-17		18-24		25-64		65+		All Adults (18+)	
	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent
Indiana	[2,114, 5,262]	[0.47%, 1.17%]	[3,045, 5,579]	[0.46%, 0.84%]	[14,012, 25,792]	[0.41%, 0.76%]	[3,457, 5,802]	[0.39%, 0.65%]	[21,867, 35,060]	[0.44%, 0.71%]
Iowa	[418, 1,477]	[0.21%, 0.74%]	[656, 1,617]	[0.21%, 0.52%]	[2,963, 7,376]	[0.19%, 0.47%]	[841, 1,939]	[0.18%, 0.41%]	[4,558, 10,398]	[0.19%, 0.44%]
Kansas	[790, 2,110]	[0.40%, 1.08%]	[1,065, 1,978]	[0.36%, 0.66%]	[4,565, 8,465]	[0.31%, 0.58%]	[1,130, 1,919]	[0.29%, 0.49%]	[7,183, 11,706]	[0.33%, 0.54%]
Kentucky	[953, 3,583]	[0.33%, 1.26%]	[1,665, 3,374]	[0.39%, 0.80%]	[8,649, 16,904]	[0.37%, 0.73%]	[2,190, 3,949]	[0.36%, 0.64%]	[13,092, 23,060]	[0.39%, 0.69%]
Louisiana	[1,367, 4,104]	[0.45%, 1.34%]	[2,204, 4,371]	[0.46%, 0.92%]	[10,310, 20,236]	[0.43%, 0.84%]	[2,260, 4,181]	[0.38%, 0.71%]	[15,582, 27,230]	[0.45%, 0.78%]
Maine	[269, 736]	[0.33%, 0.91%]	[378, 1,146]	[0.32%, 0.98%]	[2,120, 6,268]	[0.29%, 0.87%]	[607, 1,739]	[0.27%, 0.77%]	[3,202, 8,895]	[0.3%, 0.84%]
Maryland	[1,311, 4,127]	[0.34%, 1.08%]	[2,303, 4,398]	[0.41%, 0.78%]	[11,347, 21,316]	[0.35%, 0.66%]	[2,461, 4,307]	[0.32%, 0.57%]	[17,177, 28,088]	[0.38%, 0.62%]
Massachusetts	[1,223, 3,927]	[0.29%, 0.93%]	[2,568, 7,807]	[0.37%, 1.13%]	[11,326, 34,087]	[0.31%, 0.95%]	[2,832, 8,391]	[0.30%, 0.88%]	[17,251, 49,307]	[0.33%, 0.94%]
Michigan	[2,608, 6,040]	[0.39%, 0.89%]	[2,655, 7,870]	[0.27%, 0.79%]	[12,593, 37,168]	[0.24%, 0.72%]	[3,240, 8,999]	[0.23%, 0.63%]	[19,132, 52,059]	[0.25%, 0.68%]
Minnesota	[1,696, 5,386]	[0.48%, 1.52%]	[2,541, 4,552]	[0.51%, 0.91%]	[12,539, 22,498]	[0.44%, 0.78%]	[3,043, 5,080]	[0.42%, 0.70%]	[19,368, 30,211]	[0.47%, 0.74%]
Mississippi	[901, 2,873]	[0.43%, 1.37%]	[1,009, 4,310]	[0.32%, 1.37%]	[4,490, 19,158]	[0.29%, 1.26%]	[1,036, 4,327]	[0.26%, 1.08%]	[6,731, 27,122]	[0.3%, 1.21%]
Missouri	[1,285, 4,988]	[0.32%, 1.26%]	[1,876, 6,423]	[0.32%, 1.08%]	[8,975, 30,421]	[0.29%, 0.97%]	[2,324, 7,535]	[0.26%, 0.85%]	[13,512, 43,611]	[0.29%, 0.94%]
Montana	[170, 578]	[0.27%, 0.91%]	[266, 572]	[0.27%, 0.58%]	[1,222, 2,592]	[0.23%, 0.49%]	[323, 650]	[0.21%, 0.41%]	[1,880, 3,669]	[0.24%, 0.47%]
Nebraska	[522, 1,134]	[0.42%, 0.91%]	[473, 1,264]	[0.25%, 0.68%]	[2,143, 5,820]	[0.23%, 0.61%]	[551, 1,389]	[0.21%, 0.54%]	[3,247, 8,207]	[0.23%, 0.59%]
Nevada	[738, 2,374]	[0.41%, 1.33%]	[1,135, 2,646]	[0.45%, 1.04%]	[5,889, 13,545]	[0.40%, 0.92%]	[1,150, 2,547]	[0.32%, 0.71%]	[8,570, 18,018]	[0.41%, 0.86%]
New Hampshire	[293, 758]	[0.34%, 0.88%]	[356, 1,067]	[0.28%, 0.85%]	[1,798, 5,237]	[0.25%, 0.72%]	[450, 1,244]	[0.23%, 0.64%]	[2,693, 7,362]	[0.26%, 0.7%]
New Jersey	[2,696, 5,550]	[0.45%, 0.93%]	[2,265, 6,732]	[0.29%, 0.86%]	[12,204, 36,508]	[0.25%, 0.76%]	[3,013, 8,517]	[0.24%, 0.68%]	[17,981, 49,987]	[0.26%, 0.73%]
New Mexico	[861, 1,746]	[0.62%, 1.25%]	[988, 3,255]	[0.46%, 1.53%]	[4,389, 14,044]	[0.41%, 1.32%]	[1,011, 3,160]	[0.34%, 1.07%]	[6,613, 19,959]	[0.42%, 1.27%]
New York	[5,688, 16,963]	[0.46%, 1.37%]	[7,732, 15,788]	[0.39%, 0.79%]	[37,363, 76,111]	[0.35%, 0.72%]	[9,137, 17,614]	[0.33%, 0.64%]	[57,043, 103,813]	[0.37%, 0.68%]
North Carolina	[3,148, 6,958]	[0.50%, 1.10%]	[3,765, 11,609]	[0.39%, 1.19%]	[17,757, 54,557]	[0.34%, 1.06%]	[4,194, 12,219]	[0.31%, 0.91%]	[26,299, 76,786]	[0.35%, 1.03%]

State	Age									
	13-17		18-24		25-64		65+		All Adults (18+)	
	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent	[LB, UB] Number	[LB, UB] Percent
North Dakota	[133, 367]	[0.32%, 0.89%]	[170, 531]	[0.19%, 0.59%]	[593, 1,834]	[0.17%, 0.51%]	[170, 498]	[0.17%, 0.50%]	[961, 2,785]	[0.18%, 0.51%]
Ohio	[3,387, 10,463]	[0.44%, 1.35%]	[4,001, 7,561]	[0.36%, 0.68%]	[19,701, 36,836]	[0.32%, 0.61%]	[5,251, 9,125]	[0.31%, 0.54%]	[30,705, 50,183]	[0.35%, 0.56%]
Oklahoma	[1,194, 3,680]	[0.47%, 1.46%]	[1,351, 6,063]	[0.35%, 1.56%]	[6,026, 26,649]	[0.31%, 1.36%]	[1,438, 6,011]	[0.27%, 1.13%]	[9,049, 37,798]	[0.31%, 1.31%]
Oregon	[1,090, 2,620]	[0.45%, 1.08%]	[1,512, 5,190]	[0.41%, 1.42%]	[7,380, 25,644]	[0.35%, 1.22%]	[1,714, 5,934]	[0.30%, 1.02%]	[10,774, 36,440]	[0.35%, 1.2%]
Pennsylvania	[3,024, 9,148]	[0.37%, 1.13%]	[4,284, 8,404]	[0.34%, 0.67%]	[21,090, 40,686]	[0.31%, 0.60%]	[6,172, 10,959]	[0.30%, 0.54%]	[33,506, 56,799]	[0.33%, 0.57%]
Rhode Island	[276, 599]	[0.43%, 0.93%]	[389, 1,143]	[0.32%, 0.95%]	[1,608, 4,817]	[0.29%, 0.87%]	[424, 1,219]	[0.27%, 0.77%]	[2,493, 6,979]	[0.3%, 0.84%]
South Carolina	[1,397, 3,389]	[0.47%, 1.14%]	[1,784, 5,944]	[0.36%, 1.21%]	[7,977, 26,549]	[0.32%, 1.08%]	[1,963, 6,533]	[0.28%, 0.94%]	[12,139, 38,343]	[0.33%, 1.05%]
South Dakota	[189, 483]	[0.35%, 0.90%]	[188, 577]	[0.22%, 0.69%]	[827, 2,452]	[0.20%, 0.58%]	[217, 631]	[0.18%, 0.52%]	[1,279, 3,592]	[0.2%, 0.57%]
Tennessee	[1,833, 5,323]	[0.43%, 1.26%]	[2,220, 8,664]	[0.36%, 1.39%]	[11,036, 42,384]	[0.32%, 1.24%]	[2,740, 9,962]	[0.30%, 1.09%]	[16,601, 60,319]	[0.33%, 1.22%]
Texas	[8,178, 23,706]	[0.43%, 1.26%]	[10,763, 33,983]	[0.40%, 1.27%]	[49,965, 156,972]	[0.37%, 1.16%]	[8,906, 27,059]	[0.31%, 0.95%]	[71,791, 212,200]	[0.38%, 1.11%]
Utah	[706, 2,858]	[0.31%, 1.25%]	[617, 3,133]	[0.19%, 0.96%]	[2,244, 11,329]	[0.16%, 0.83%]	[385, 1,804]	[0.14%, 0.67%]	[3,338, 16,157]	[0.17%, 0.82%]
Vermont	[139, 565]	[0.36%, 1.46%]	[299, 629]	[0.46%, 0.96%]	[1,364, 2,844]	[0.40%, 0.84%]	[372, 745]	[0.38%, 0.75%]	[2,126, 4,034]	[0.42%, 0.8%]
Virginia	[2,427, 7,173]	[0.47%, 1.39%]	[3,798, 6,980]	[0.46%, 0.85%]	[17,590, 33,074]	[0.40%, 0.75%]	[3,987, 7,026]	[0.38%, 0.66%]	[2,6945, 44,697]	[0.43%, 0.71%]
Washington	[2,154, 4,588]	[0.48%, 1.03%]	[2,662, 8,550]	[0.40%, 1.29%]	[12,748, 41,018]	[0.34%, 1.10%]	[2,655, 8,291]	[0.29%, 0.91%]	[18,574, 57,196]	[0.35%, 1.08%]
West Virginia	[647, 2,140]	[0.57%, 1.90%]	[427, 1,325]	[0.25%, 0.76%]	[2,347, 7,299]	[0.24%, 0.74%]	[687, 2,040]	[0.22%, 0.66%]	[3,518, 10,477]	[0.24%, 0.71%]
Wisconsin	[1,037, 3,312]	[0.28%, 0.88%]	[1,883, 3,799]	[0.34%, 0.69%]	[9,141, 18,414]	[0.30%, 0.61%]	[2,287, 4,434]	[0.28%, 0.54%]	[13,920, 25,364]	[0.32%, 0.58%]
Wyoming	[99, 363]	[0.26%, 0.95%]	[135, 328]	[0.23%, 0.57%]	[634, 1,509]	[0.21%, 0.49%]	[141, 308]	[0.19%, 0.41%]	[945, 2,073]	[0.22%, 0.47%]

*Note: LB=95% Lower bound; UB=95% Upper bound

ENDNOTES

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[5] See note #1.

[6] The general population figures were derived from the U.S. Census Bureau's American Community Survey, 2011-2013 3-year PUMS.

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[8] See note #7.

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[10] Calculations by the authors using the following -available datasets: California Healthy Kids Survey, Los Angeles Foster Youth Survey, 2006 Boston Youth Survey, and Our Health Matters: Boston LGBT Youth of Color Community Survey.

[11] For more detailed information on gender identity data collection in the BRFSS, see Baker, K.E. & Hughes, M. (2016). *Sexual Orientation and Gender Identity Data Collection in the Behavioral Risk Factor Surveillance System.* Washington, DC: The Center for American Progress, available at https://cdn.americanprogress.org/wp-content/uploads/2016/03/29090401/BRFSSdatacollect-brief-03.31.16.pdf.

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[17] See note #7.

[18] See Flores, A.R. (2016). *Estimating the adult population that identifies as transgender in the BRFSS.* Los Angeles, CA: The Williams Institute, UCLA.

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