

# Methodology Appendix

This publication aggregates several datasets on state legislatures and state legislator demographics to provide the most comprehensive view of state legislatures across the country based on available data. The primary sources of data reported in this publication are from:

- [National Conference of State Legislatures \(NCSL\)](#) - institutional information, legislators by race and ethnicity, legislators by generation, legislators by educational attainment
- [Center for American Women and Politics \(CAWP\)](#) - women legislators, women in legislative leadership, women legislators by race and ethnicity
- [Victory Institute](#) - LGBTQ+ legislators
- [New American Leaders](#) - New American (first- and second-generation immigrant) legislators

In addition to legislator data, this publication relies on population datasets to illustrate how the demographics of state legislatures compare to the overall population. In all instances, except for educational attainment, population data is for each state's adult population age 18 or older as a rough comparison to each state's population that is generally eligible to serve as a state legislator, though [some states have age limits as high as 30 for the upper chamber](#). Population data for educational attainment is based on the population age 25 years and over, which is the most comparable age group reported by the Census.

## Terminology

In general, the data reported in this publication reflects the same terminology adopted by the source datasets to describe demographic groups, which may be inconsistent between legislator and population datasets. This publication discusses the data using racial and ethnic terms that may be inconsistent with the terms used within each dataset. We note some considerations for the following terms:

- Asian and Pacific Islander (API). Whereas the Census Bureau and other data sources generally include Native Hawaiians in this racial category, Native Hawaiians are grouped with Native Americans/Alaska Natives by the Center for American Women and Politics. Additionally, we acknowledge that this grouping is an imperfect one that flattens the vast diversity and distinct experiences within and between Asians and Pacific Islanders.
- Indigenous. We adopt this term to refer to groups that are generally referred to as Alaska Native, American Indian, or Native American in data sources.
- Latinx. We adopt this gender-neutral term to refer to groups that are generally

referred to as Hispanic or Latino/a in data sources, though the two terms are not synonymous. Additionally, we acknowledge the many complexities and limitations of this term, including its failure to reflect different racial identities among Hispanic or Latinx people.

- Multiracial. We adopt this term to refer to groups that are generally referred to as multiracial, “two or more races,” or “other” in data sources.

## Data Limitations

It is important to note the limitations of this data so as to not overstate the accuracy of the representation ratios reported in this publication. Datasets on legislator demographics are limited and noncomprehensive, since many demographics are self-reported by legislators themselves. As a result, some of the datasets utilized in this publication are incomplete and reported in different years, while some population datasets may not be perfectly suited for each representation ratio or each state’s circumstances. The representation ratios reported in this publication represent our best estimate – based on available data – of how state legislatures do (or don’t) reflect their states.

There are limitations to each of these datasets and to their comparison to available population data. The NCSL data are reported as *rounded percentages*; as a result, any figure in this publication reporting the number of legislators within a particular demographic group is an *estimate* calculated by multiplying the reported percentage and the number of legislators in each state. This may result in the total number of legislators across a single demographic group exceeding the number of legislators in a given state. In particular, a significant share of legislators did not report their generation and educational attainment; readers should be aware of these deficiencies in interpreting the data presented in this publication.

Additionally, the NCSL dataset includes some incomplete information for race and ethnicity, generation, and educational attainment. In particular, a significant share of legislators did not report their age and educational attainment. Although age information was not available for 48.3% of legislators and educational information was not available for 29.8% of legislators, there are significant patterns of disparity based on the available data. For example, even with missing data, the number of legislators reporting having a graduate or professional degree are still overrepresented in every state legislature by anywhere between 200% to 600%.

The CAWP data on women legislators by race and ethnicity includes women who self-identify as more than one race and are included in each category. As a result, adding totals from each racial/ethnic group results in a double count of some officeholders.

# Data Sources and Calculation Methods

The following is a full list of sources for the data reported in this publication, along with notes on any calculations made by the authors of this report.

## Population

U.S. Census Bureau. “Table 2. Resident Population for the 50 States, the District of Columbia, and Puerto Rico: 2020 Census.” <https://www2.census.gov/programs-surveys/decennial/2020/data/apportionment/apportionment-2020-table02.pdf>.

## Upper and Lower Chamber Districts and Number of Legislators

National Conference of State Legislatures. “Number of Legislators and Length of Terms in Years.” April 19, 2021. <https://www.ncsl.org/research/about-state-legislatures/number-of-legislators-and-length-of-terms.aspx>.

## Constituents per District

Calculated by dividing each state’s [apportionment population](#) by the number of upper and lower chamber districts. This number may not reflect the actual number of constituents within each legislative district but reflects an estimate of how many constituents each legislator represents on average.

## Full or Part Time and Legislature Type

As categorized by the National Conference of State Legislatures:

- Full-time legislatures generally require 80% or more of a full-time job, are well-paid, and have large staff sizes. Full-time *lite* legislatures spend slightly less time in session, have smaller districts, lower pay, and fewer staff than full-time legislatures.
- Part-time legislatures, also known as traditional or citizen legislatures, spend the equivalent of half of a full-time job doing legislative work, receive low pay that requires other sources of income, and have small staff. Part-time *lite* legislatures are slightly less traditional than part-time legislatures.
- Hybrid legislatures are somewhere between a full- and part-time legislature, requiring more than two-thirds of a full-time job, being paid more than a part-time legislature but still requiring another source of income, and having intermediate-sized staff.

National Conference of State Legislatures. “Full- and Part-Time Legislatures.” July 28, 2021. <https://www.ncsl.org/research/about-state-legislatures/full-and-part-time-legislatures.aspx>.

## Session Length Limits

National Conference of State Legislatures. “Legislative Session Length.” July 1, 2021.

<https://www.ncsl.org/research/about-state-legislatures/legislative-session-length.aspx>.

## Term Limits

National Conference of State Legislatures. “The Term-Limited States.” November 12, 2020. <https://www.ncsl.org/research/about-state-legislatures/chart-of-term-limits-states.aspx>.

## Legislator Salary

Legislator compensation is the annual compensation as provided by NCSL. Some states calculate compensation on a nonannual basis; for these states, compensation is calculated based on [NCSL’s 2021 Session Calendar](#). We calculate the number of days, weeks, or months based on the dates provided for convening and adjourning, less planned recess days as noted in the calendar. The estimated annual salary for these states may not account for holidays or other days when the legislature is not in session that may not be counted toward a legislator’s actual compensation.

- Kansas – \$88.86 per session day. 98 net work days, less 14 days recess = 84 days.
- Kentucky – \$188.22 per calendar day. 84 calendar days.
- Montana – \$100.48 per legislative day. 84 net work days.
- Nevada – \$164.69 per calendar day for up to 60 days (senators not up for re-election receive a slightly lower rate of \$159.89, but we use the higher rate). 60 calendar days.
- North Dakota – \$526 per month (increasing to \$537 effective July 1, 2022). Four months. We use the compensation rate that was in effect in 2021 for consistency in comparison with other states.
- Utah – \$285 per legislative day. 34 net work days.
- Vermont – \$742.92 per week during session. 19 weeks.
- Wyoming – \$150 per calendar day. 85 calendar days.

Additionally, Maine provides a salary of \$15,417 per year in the first regular session and \$10,923 in the second regular session; for the purposes of comparison, we adopt the higher of the two. Similarly, Virginia provides a salary of \$18,000 for senators and \$17,640 for delegates; for the purposes of comparison, we adopt the higher of the two.

Particularly in states where legislators are compensated by the day, week, or month, the estimated annual compensation may not reflect actual compensation because legislators in some states may receive additional compensation for interim days not otherwise calculated within this report.

National Conference of State Legislatures. “2021 Legislator Compensation.” September 21, 2021. <https://www.ncsl.org/research/about-state-legislatures/2021-legislator-compensation.aspx>.

## State Median Household Income (current dollars)

U.S. Census Bureau. *Current Population Survey*. “Table H-8. Median Household Income by State.” <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-income-households.html>.

## Legislator Salary to Median Household Income Ratio

Calculated by dividing legislator salary by the state median household income. This ratio is an estimate of how close legislator compensation is to a living wage in each state; a ratio of 1.0 means that legislators are paid the same as the state median household income; a ratio of less than 1.0 means that legislators are paid less than the state median household income.

## Mileage

National Conference of State Legislatures. “2021 Legislator Compensation.” September 21, 2021. <https://www.ncsl.org/research/about-state-legislatures/2021-legislator-compensation.aspx>.

## Per Diem

In some states, legislators receive a per diem based on the distance of their residence from the state capitol. In these instances, the values shown reflect the per diem rate for legislators who do not live in or near the capitol to reflect geographic accessibility.

National Conference of State Legislatures. “2021 Legislator Compensation.” September 21, 2021. <https://www.ncsl.org/research/about-state-legislatures/2021-legislator-compensation.aspx>.

## Permanent and Session Staff

The most recent and comprehensive dataset on legislative staffing levels is reported by the National Conference of State Legislatures based on a staff census conducted in 2015; as such, the figures in this report may be outdated. The NCSL staff census does not include temporary contractual employees, interns, and pages.

National Conference of State Legislatures. “Size of State Legislative Staff.” May 18, 2021. <https://www.ncsl.org/research/about-state-legislatures/staff-change-chart-1979-1988-1996-2003-2009.aspx>.

## Permanent and Session Staff per Legislator

Calculated by dividing permanent and session staff by the total number of legislators. The NCSL staff census does not distinguish between centralized staff, committee staff, partisan staff, or personal staff; as a result, the values shown reflect an *average* – not the actual – number of staff whom legislators have access to.

## Introduced and Enacted Bills

FiscalNote. “The Most Effective States: Which States Passed the Most Legislation in 2021?” September 23, 2021. <https://fiscalnote.com/whitepapers/2021-most-effective-states>.

## Introduced and Enacted Bills per Legislator and Staff

Calculated by dividing the number of introduced and enacted bills by the number of legislators and number of staff.

## Legislators by Race and Ethnicity

Estimates of the number of legislators identifying as American Indian/Native American, Asian/Pacific Islander, Black, Hispanic/Latino, multiracial/other, or white are based on *rounded percentages* as reported by the National Conference of State Legislatures from 2020. As a result, the total number of legislators reported within each category may not add up to 100%. Additionally, race and ethnicity data are incomplete for some states, and at least 10% of legislators reported “no data” in the following states: Mississippi (14%), Nebraska (22%), New Hampshire (25%), Utah (16%), Washington (16%), and West Virginia (22%).

National Conference of State Legislatures. “State Legislator Demographics.” December 1, 2020. <https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx>.

## Adult Population by Race and Ethnicity

The Census treats Hispanic origin separate from race; adult population data for racial groups are based on estimates for non-Hispanic groups reporting one racial category alone (American Indian/Alaska Native, Asian/Pacific Islander, Black, two or more races, and white).

To align with the NCSL dataset on legislator race and ethnicity, Census data on the adult population of Asians and Native Hawaiians or Pacific Islanders were combined in each state.

U.S. Census Bureau. *State Population by Characteristics: 2010-2020*. “Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: April 1, 2010 to July 1, 2019; April 1, 2020; and July 1, 2020 (SC-EST2020-ALLDATA6).” <https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html>.

## Race and Ethnicity Representation Ratio

The representation ratio for American Indian/Native American, Asian/Pacific Islander, Black, Hispanic/Latino, multiracial/other, and white legislators was calculated by dividing the percentage of each racial/ethnic group in each state legislature by their share of the state’s adult population

## Women Legislators

Center for American Women and Politics, Eagleton Institute of Politics, Rutgers University-New Brunswick. “Women in State Legislatures 2022.”

<https://cawp.rutgers.edu/facts/levels-office/state-legislature/women-state-legislatures-2022>.

*Accessed February 18, 2022.*

## Women in Legislative Leadership

Center for American Women and Politics, Eagleton Institute of Politics, Rutgers University-New Brunswick. “Women in State Legislative Leadership 2022.”

<https://cawp.rutgers.edu/facts/levels-office/state-legislature/women-state-legislative-leadership-2022>.

*Accessed February 18, 2022.*

## Adult Population by Sex

U.S. Census Bureau, American Community Survey. “2020 American Community Survey 5-Year Estimates.” <https://data.census.gov/cedsci/table?q=DP05#>.

## Representation Ratio for Women and Women in Leadership

Calculated by dividing the percentage of women in legislatures and women in legislative leadership by their share of the adult population in each state

## Legislators by Gender and Race and Ethnicity

Data on women legislators by race and ethnicity is [reported by the Center for American Women and Politics](#) and includes women who self-identify as more than one race and are included in each category. As a result, adding totals from each racial/ethnic group results in a double count of some officeholders.

Center for American Women and Politics, Eagleton Institute of Politics, Rutgers University-New Brunswick. “Women Elected Officials by Position.” [https://cawpdata.rutgers.edu/women-elected-officials/position?current=1&yearend\\_filter=All&level%5B%5D=State+Legislative&items\\_per\\_page=150](https://cawpdata.rutgers.edu/women-elected-officials/position?current=1&yearend_filter=All&level%5B%5D=State+Legislative&items_per_page=150).

*Accessed February 18, 2022.*

## Adult Population by Sex and Race and Ethnicity

The Census treats Hispanic origin separate from race; adult population data for racial groups are based on estimates for non-Hispanic groups reporting one racial category alone (American Indian/Alaska Native, Asian/Pacific Islander, Black, two or more races, and white).

The adult population data reported in this publication combines Census data on the adult population of Asians with Native Hawaiians or Pacific Islanders, though the CAWP dataset combines Asian Americans and Pacific Islanders. Adult population is additionally reported by the Census for American Indians or Alaska Natives, while the CAWP dataset combines Native Americans, Alaska Natives, and Native

Hawaiians.

U.S. Census Bureau. State Population by Characteristics: 2010-2020. “Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: April 1, 2010 to July 1, 2019; April 1, 2020; and July 1, 2020 (SC-EST2020-ALLDATA6).” <https://www.census.gov/programs-surveys/pepest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html>.

## Gender and Race and Ethnicity Representation Ratio

For this analysis, we combined Asian and Native Hawaiian or Pacific Islander population data to calculate the representation ratio for Asian American/Pacific Islander women and used American Indian or Alaska Native population data to calculate the representation ratio for Native American/Alaska Native/Native Hawaiian women. As a result, the representation ratios for these two groups are imperfect estimates due to the overlap in racial groups.

State-level population data is not available for Middle Eastern/North African women; as a result, no representation ratio is available for this group.

The representation ratio for Asian American/Pacific Islander, Black, Latina, Native American/American Indian/Native Hawaiian, and white women was calculated by dividing the percentage of each racial/ethnic group in each state legislature by their share of the state’s adult population

## LGBTQ-Identifying Legislators

State legislators self-identifying as asexual, bisexual, gay, lesbian, pansexual, queer, same-gender loving, transgender women, or transgender men as reported by the Victory Institute.

Victory Institute. “Out for America.” <https://outforamerica.org/?office-level=State%20Legislature>.

Accessed June 26, 2022.

## LGBT Adult Population

Estimate of the share of the total adult population identifying as lesbian, gay, bisexual, or transgender based on an analysis of the Gallup Daily Tracking survey conducted from 2015-2017 conducted by the Williams Institute.

University of California at Los Angeles School of Law, Williams Institute. “LGBT Demographic Data Interactive.” <https://williamsinstitute.law.ucla.edu/visualization/lgbt-stats/?topic=LGBT&compare=percentage#comparison>.

## LGBTQ Representation Ratio

Calculated by dividing the percentage of LGBTQ-identifying legislators by the estimated share of LGBT people in the state’s adult population



Percent of state legislators self-identifying as asexual, bisexual, gay, lesbian, pansexual, queer, same-gender loving, transgender women, or transgender men divided by percent of the total adult population identifying as LGBTQ. A ratio of 1.0 means that the LGBTQ representation in a legislature is exactly equal to their representation in the state's population.

## **New American Legislators**

Number of state legislators identifying as first- or second-generation immigrants as reported by New American Leaders.

New American Leaders. "State of Representation 2020: New Americans in State Legislatures." <https://newamericanleaders.org/wp-content/uploads/2017/05/State-of-Representation-2020-New-American-Leaders.pdf>.

## **Naturalized Citizen Voting Age Population**

Percentage of naturalized citizens in the citizen voting age population in each state as estimated by New American Leaders. This estimate only includes first-generation immigrants and likely underestimates the share of New Americans since it excludes second-generation immigrants.

New American Leaders. "State of Representation 2020: New Americans in State Legislatures." <https://newamericanleaders.org/wp-content/uploads/2017/05/State-of-Representation-2020-New-American-Leaders.pdf>.

## **New American Representation Ratio**

Calculated by dividing the percentage of New American legislators in each state by the share of naturalized citizens in each state's voting age population

## **Legislators by Generation**

Percentage of state legislators in Generation Z (1998-present), Millennials (1981-1997), Generation X (1965-1980), Baby Boomers (1946-1964), Silent Generation (1929-1945), and Greatest Generation (before 1928). Estimates of the number of legislators in each generation are based on *rounded percentages* as reported by the National Conference of State Legislatures from 2020. As a result, the total number of legislators reported within each category may not add up to 100%. Additionally, generation data are incomplete for a significant share of legislators in most states (ranging from 7% in Texas and 82% in Utah).

National Conference of State Legislatures. "State Legislator Demographics." December 1, 2020. <https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx>.

## **Population by Generation**

U.S. Census Bureau. State Population by Characteristics: 2010-2020. "Annual Estimates of the Civilian Population by Single Year of Age and Sex for the United

States and States: April 1, 2010 to July 1, 2020 (SC-EST2020-AGESEX-CIV).” <https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html>.

## Generation Representation Ratio

Calculated by dividing the percentage of each generation in each state legislature by their share of the state’s adult population

## Educational Attainment of Legislators

Percentage of state legislators who have attained less than a bachelor’s degree, a bachelor’s degree, or a graduate or professional degree as reported by the National Conference of State Legislatures from 2020. The original NCSL dataset distinguishes between legislators with an advanced degree, a master’s degree, a law degree, and a Ph.D.; for the purposes of this analysis, these four categories are combined into a single category of graduate or professional degree. Estimates of the number of legislators in each generation are based on *rounded percentages* as reported by the National Conference of State Legislatures from 2020. As a result, the total number of legislators reported within each category may not add up to 100%. Educational attainment data are incomplete for a significant share of legislators in most states (ranging from 0% in Idaho to 59% in New Hampshire).

National Conference of State Legislatures. “State Legislator Demographics.” Last modified December 1, 2020. <https://www.ncsl.org/research/about-state-legislatures/state-legislator-demographics.aspx>.

## Population Educational Attainment

Educational attainment of the population age 25 years and older. The educational attainment categories reported by the Census for individuals with less than 9th grade; 9th to 12th grade, no diploma; high school graduate (includes equivalency); some college, no degree; and associate’s degree were combined into a single category representing the share of the population with less than a bachelor’s degree to compare with the NCSL dataset.

U.S. Census Bureau, American Community Survey. 2020 American Community Survey 5-Year Estimates, Table S1501. <https://data.census.gov/cedsci/table?q=S1501&tid=ACSST5Y2020.S1501>.