

Executive Summary

North Carolina maintains detailed data on voter registration by county and makes this data available to the public. This data includes personal data for each registered voter (e.g. age, race, ethnicity, gender) as well as political data (e.g. congressional district, party registration, precinct).

This report, created by the Reese News Lab Local Elections Data project, will examine the relationship between registered voters' age, race, ethnicity, and gender with the political party that they have chosen to affiliate with (or whether they are unaffiliated with any political party). The first section analyzes which party voters affiliate with given their unique demographics. The second section analyzes the demographics of the affiliates of each political party.

Data and Assumptions

The complete statewide voter registration data has been loaded county by county into a table as part of a private relational database accessible only to UNC employees and independent contractors working on the Reese News Lab Local Elections Data project. This table consists of a row for every voter that had recently registered to vote in North Carolina. The table contains 71 columns each representing either personal or political information for each voter.

For our analysis, we selected only "active" voters and ignored inactive, removed or denied voters. This was accomplished by selecting only the rows with column "status_cd" equal to "A"

We then extracted five columns from the database table with the following definitions:

race_code:

B	BLACK or AFRICAN AMERICAN
I	AMERICAN INDIAN or ALASKA NATIVE
O	OTHER
W	WHITE
U	UNDESIGNATED
A	ASIAN
M	TWO or MORE RACES

ethnic_code:

HL	HISPANIC/LATINO
NL	NOT LATINO
UN	ETHNICITY NOT DECLARED

gender_code

M	MALE
F	FEMALE
U	UNSPECIFIED

birth_age

Current age in years calculated by North Carolina based upon birth date

Note: The assumption of accurate age calculation needs to be verified. If this cannot be verified, approximate age in years can be calculated using the column birth_year

party_cd

DEM DEMOCRATIC

LIB LIBERTARIAN

REP REPUBLICAN

UNA UNAFFILIATED

Note: After exploring a subset of the data, these were the only parties found in the database table. These could be updated based upon full data exploration

Data Cleaning

Since we can't infer the values of missing data in any columns, we start by dropping any rows where data is missing in any of the five columns listed above. At this time, no rows have been dropped.

Note: This can be updated with percent rows dropped if this changes

After exploring the data, the only item that appeared to have been miscoded is for unaffiliated voters in party_cd. Various codes such as "UN" and "u" were found. We set up a rule that such that if this column contained either an upper or lowercase "U" we substituted "UNA".

Note: We can always add additional correction rules if these become necessary after further data exploration.

All columns were checked for invalid data values and none were found at this time. If we do find invalid values, we will attempt to create a rule that fixes these values if the true values can be inferred (similar to party_cd above). If values can't be inferred, we will drop the rows.

Data Adjustment

To enable analysis, we created a new column to reflect age groupings. We used the same age groupings used by Democracy North Carolina: 18-25; 26-40; 41-65; 66 and older.

In most published political demographic analyses in North Carolina, a single race attribute is used that defines Hispanic as a "race". Although this is not technically correct, it does enable a more understandable visualization of data. We agree that visualizing data for all combinations of race and ethnicity would not be very meaningful. Therefore we created a new column that combined race and ethnicity into a single value by adding "Hispanic" to the list of races. We set up a rule that such that if ethnic_code was "HL" then change race to "Hispanic". Otherwise, we left race as it was. Although not a perfect solution, we felt this was the most appropriate decision.

To help mitigate the analytical impact of this decision, below is a table describing the original breakdown of race for each of the three ethnic_codes.

	<u>HL</u>	<u>NL</u>	<u>UN</u>
Asian	0.2%	0.4%	1.0%
Black	2.2%	15.5%	23.5%
Multiple Race	6.1%	0.2%	0.7%
Native American	0.6%	0.2%	0.4%
Other Race	39.8%	0.6%	0.6%
Undesignated Race	26.4%	0.1%	18.8%
White	24.7%	83.0%	55.0%

Analysis

Part A: Percentage registered in each party by demographic group

Summary Demographics

What follows are three pages each describing the percentage of voters registered in each political party: one for age group, one for gender, and one for race/ethnicity. Each page has a pie chart for each possible value of each of these attributes showing party affiliation

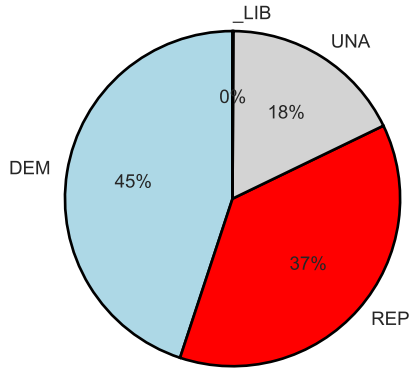
The data seem to suggest that everything else being equal, younger voters today are less likely to affiliate with a political party than older voters today, and party affiliation tendency increases with age. This does not imply that today's younger voters will be more likely to affiliate as they get older; it is only a snapshot of today's voter.

The data also seem to suggest that everything else being equal, women are slightly more likely to be registered as democratic than republican, and men are more likely to be registered as republican than democratic. The tendency to affiliate with a political party does not appear to differ by gender.

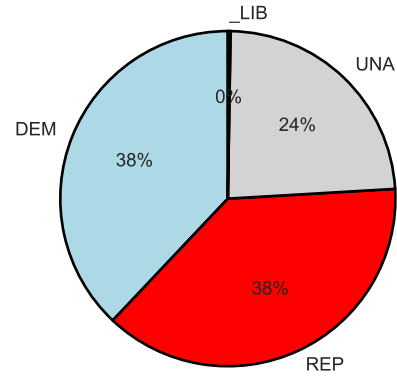
The most striking inference on party affiliation is by race. Black registered voters are more likely to affiliate with the democratic party than the republican party by more than a factor of 10 to 1. A small minority of Black registered voters are unaffiliated. Approximately a quarter of white registered voters are unaffiliated. White voters that are affiliated choose the republican party over the democratic party by almost 2 to 1. The details follow.

Party Registration by Age Group

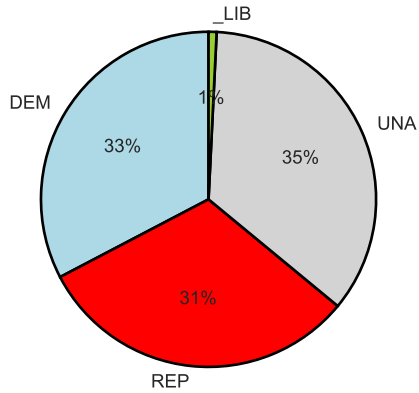
Ages 66 and over



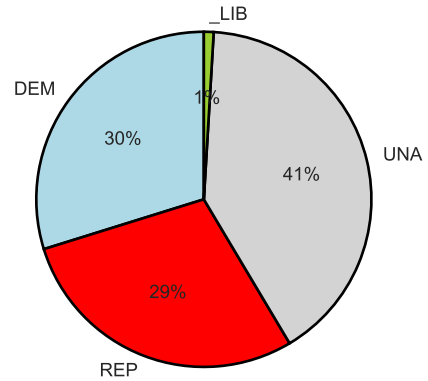
Ages 41-65



Ages 26-40

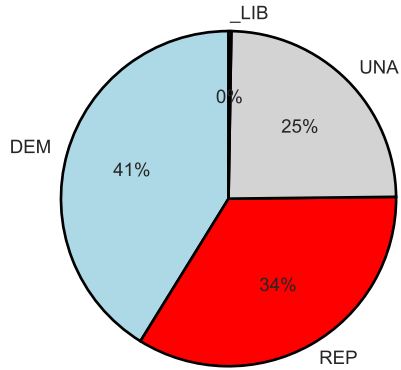


Ages 18-25

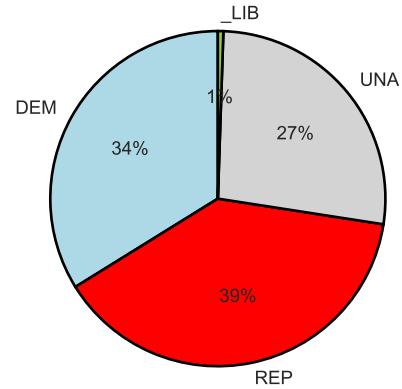


Party Registration by Gender

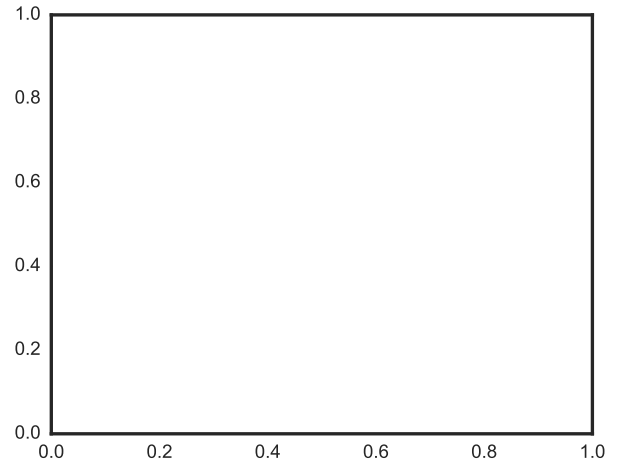
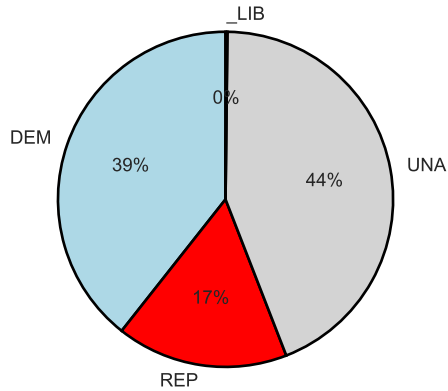
Gender Female



Gender Male

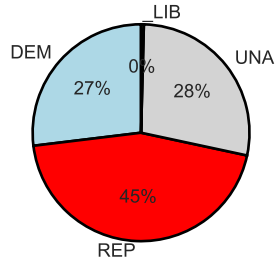


Gender Unspecified Gender

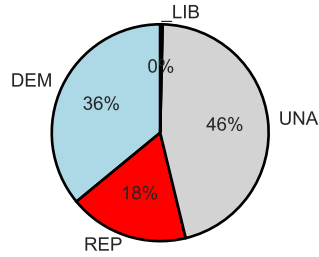


Party Registration by Race/Ethnicity

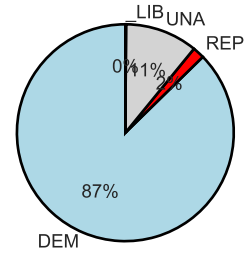
Race/Ethnicity White



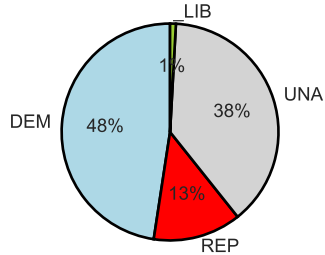
Race/Ethnicity Undesignated Race



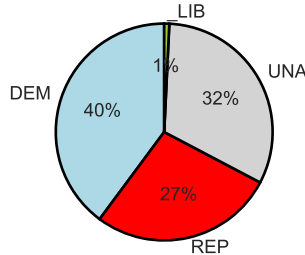
Race/Ethnicity Black



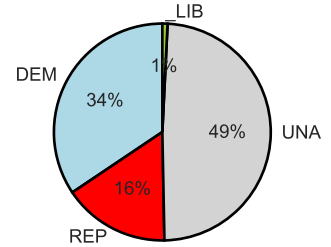
Race/Ethnicity Hispanic



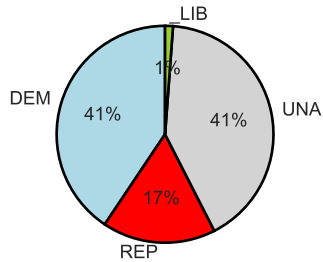
Race/Ethnicity Native American



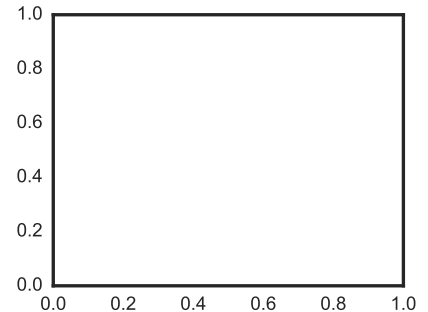
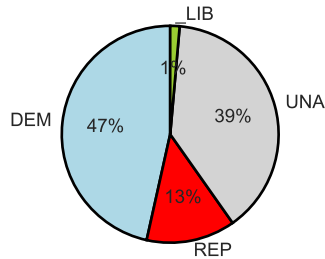
Race/Ethnicity Asian



Race/Ethnicity Other Race



Race/Ethnicity Multiple Race



Detailed Demographics

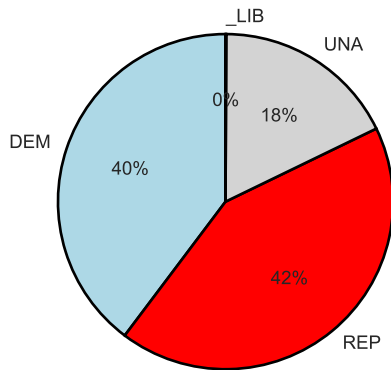
What follows are 24 pages each describing the percentage of voters registered in each political party for every possible combination of age group, gender, and race/ethnicity. Each page represents a unique combination of gender and race/ethnicity, and there are four pie charts on each page representing each of the four age groups.

One thing that stands out is that white males ages 18-40 that choose to affiliate with a party choose the republican over the democratic party by approximately 3 to 1. This contrasts with only a 2 to 1 ratio for white females in the same age group.

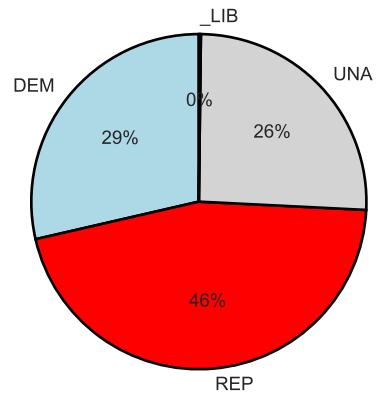
The dearth of black voters choosing to affiliate with the republican party spans all age groups and genders. Approximately half of registered Hispanic voters choose to affiliate with the democratic party, with women showing a slightly stronger democratic tendency than men. Older registered Hispanic voters are much more likely to affiliate with the republican party than younger registered Hispanic voters. The details follow:

White Females by Age Group

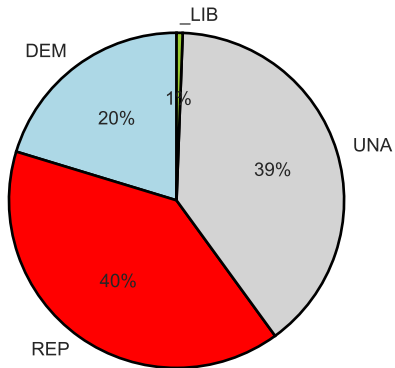
White Females Ages 66 and over



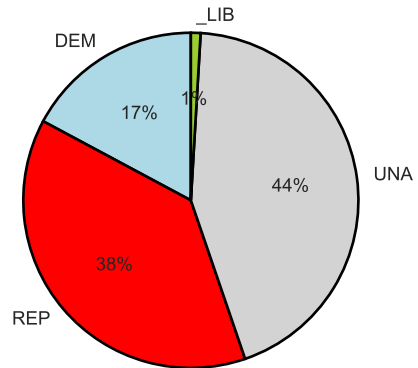
White Females Ages 41-65



White Females Ages 26-40

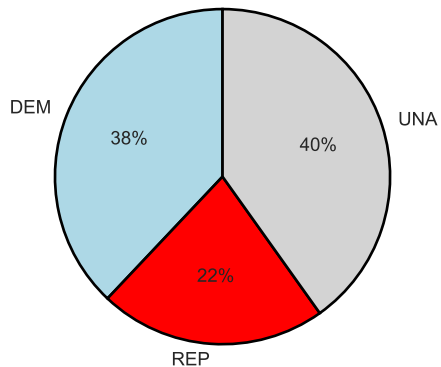


White Females Ages 18-25

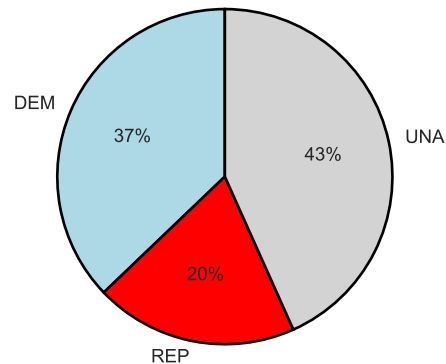


Undesignated Race Females by Age Group

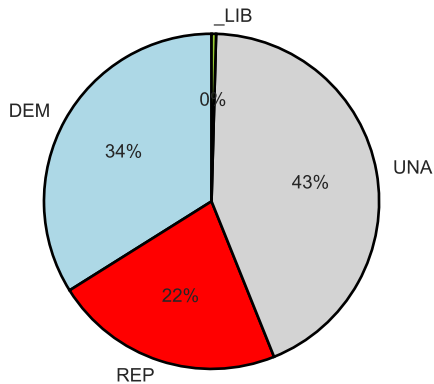
Undesignated Race Females Ages 66 and over



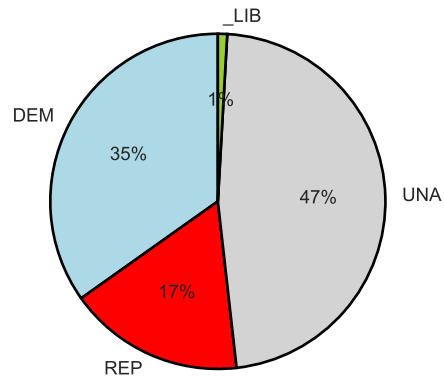
Undesignated Race Females Ages 41-65



Undesignated Race Females Ages 26-40

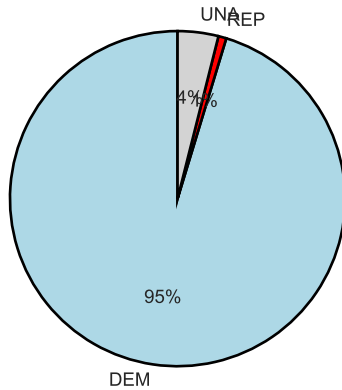


Undesignated Race Females Ages 18-25

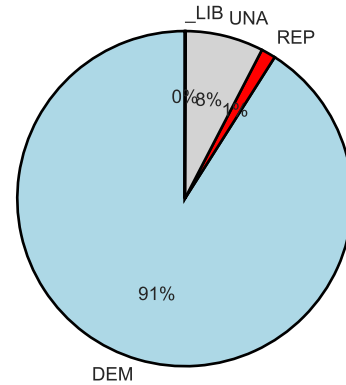


Black Females by Age Group

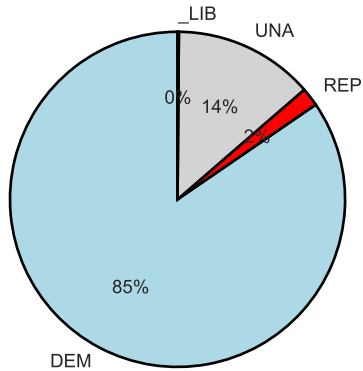
Black Females Ages 66 and over



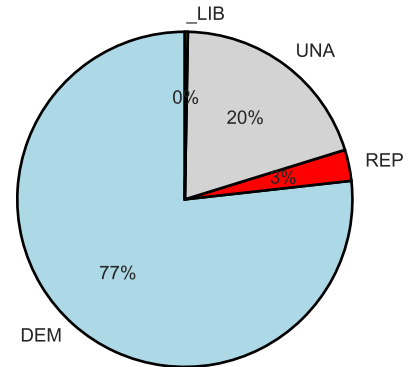
Black Females Ages 41-65



Black Females Ages 26-40

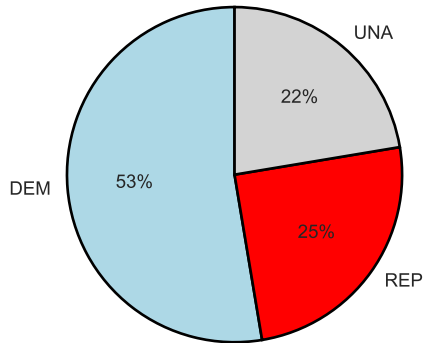


Black Females Ages 18-25

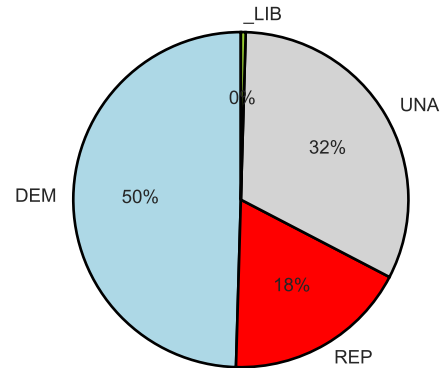


Hispanic Females by Age Group

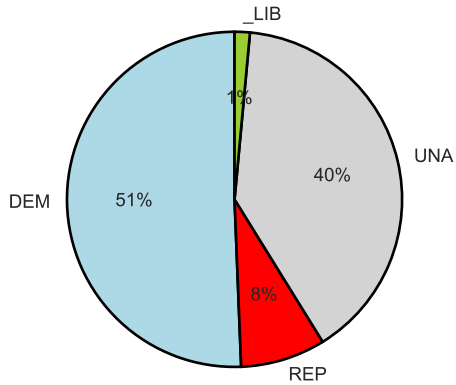
Hispanic Females Ages 66 and over



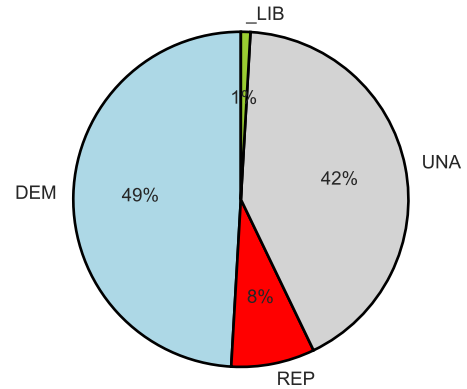
Hispanic Females Ages 41-65



Hispanic Females Ages 26-40

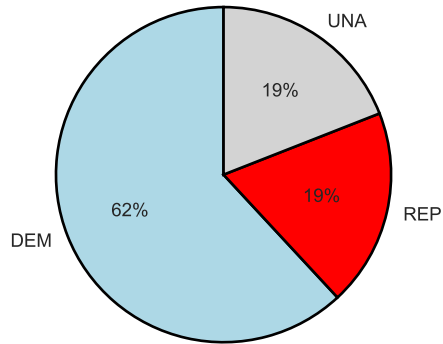


Hispanic Females Ages 18-25

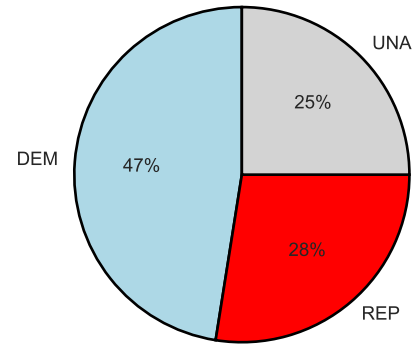


Native American Females by Age Group

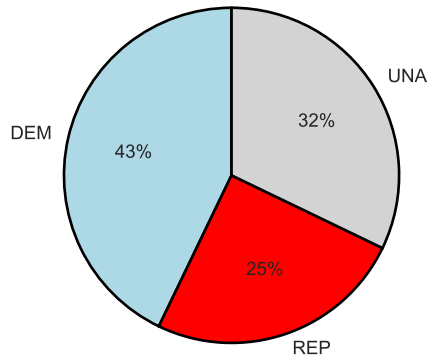
Native American Females Ages 66 and over



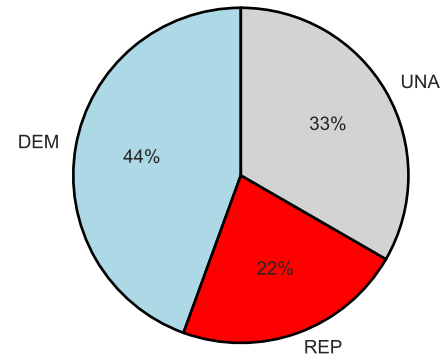
Native American Females Ages 41-65



Native American Females Ages 26-40

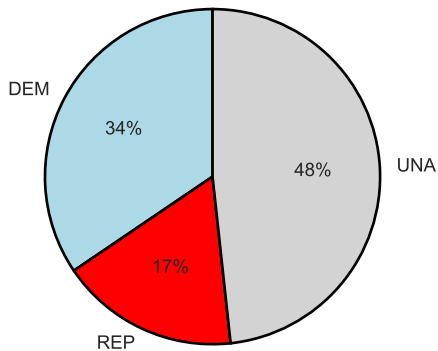


Native American Females Ages 18-25

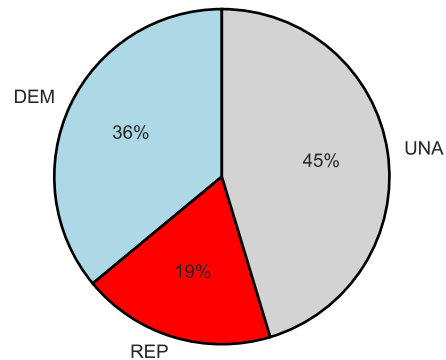


Asian Females by Age Group

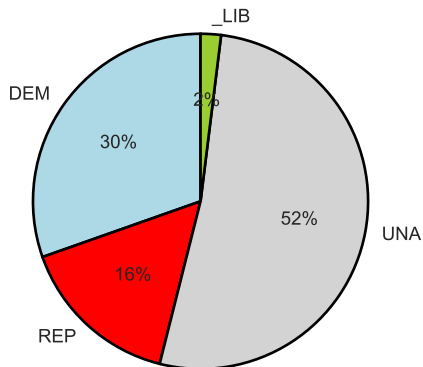
Asian Females Ages 66 and over



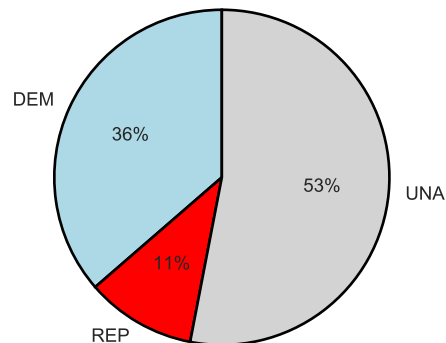
Asian Females Ages 41-65



Asian Females Ages 26-40

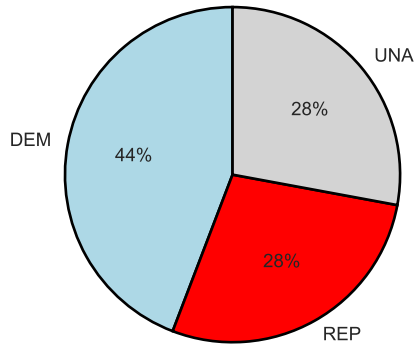


Asian Females Ages 18-25

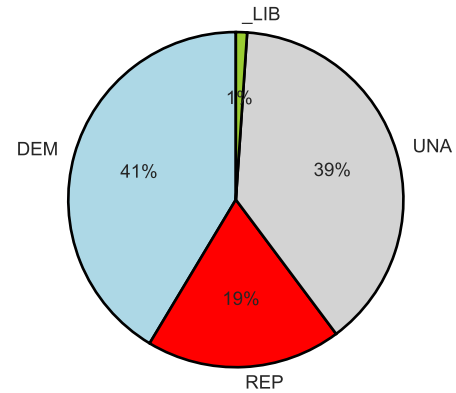


Other Race Females by Age Group

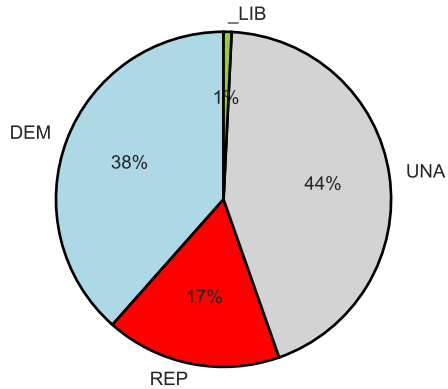
Other Race Females Ages 66 and over



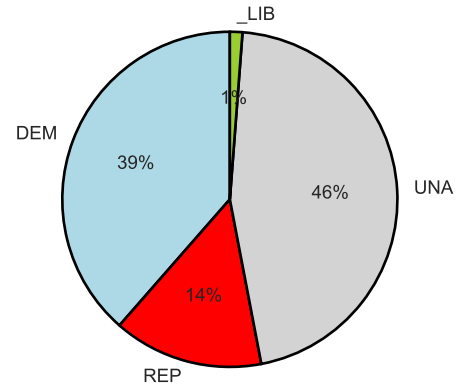
Other Race Females Ages 41-65



Other Race Females Ages 26-40

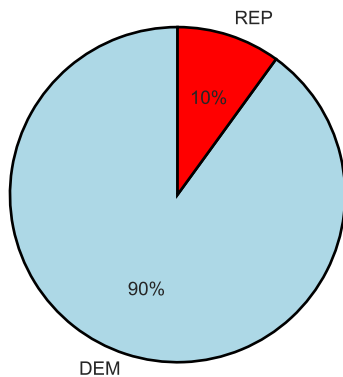


Other Race Females Ages 18-25

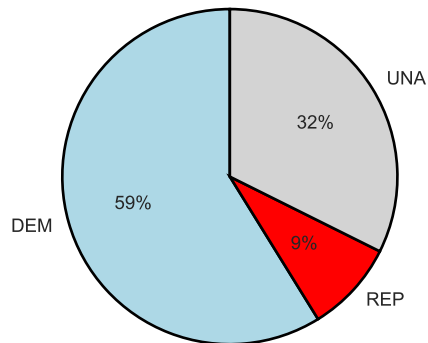


Multiple Race Females by Age Group

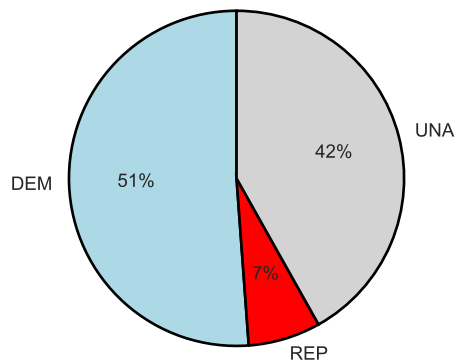
Multiple Race Females Ages 66 and over



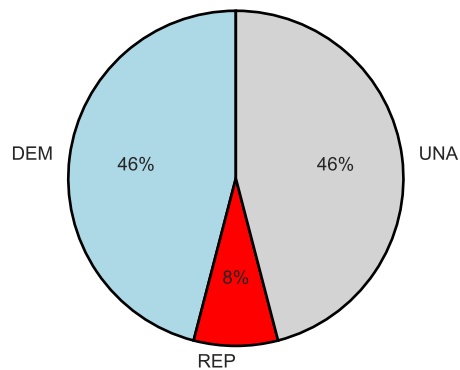
Multiple Race Females Ages 41-65



Multiple Race Females Ages 26-40

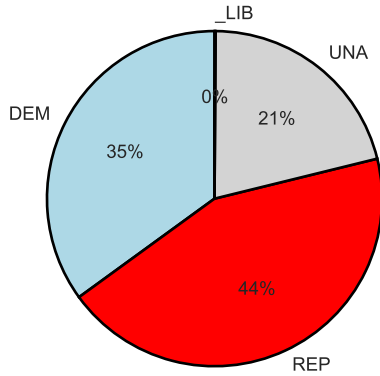


Multiple Race Females Ages 18-25

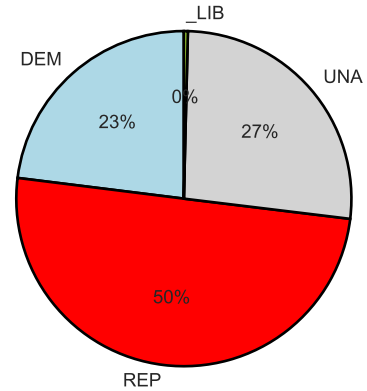


White Males by Age Group

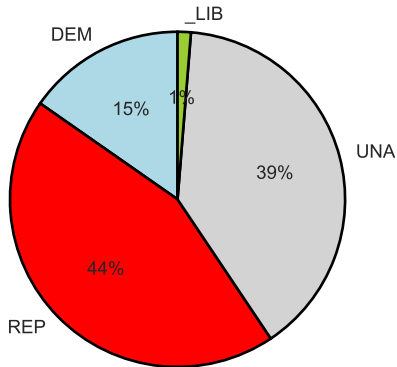
White Males Ages 66 and over



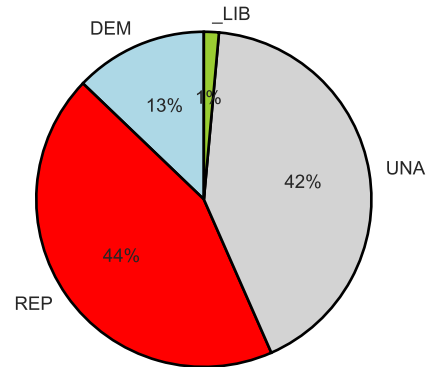
White Males Ages 41-65



White Males Ages 26-40

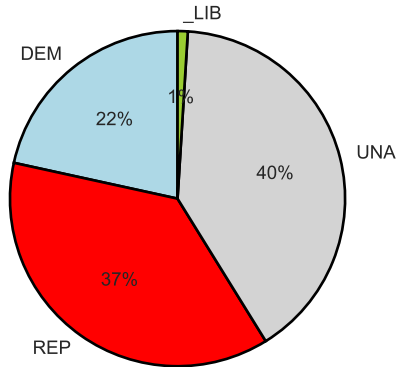


White Males Ages 18-25

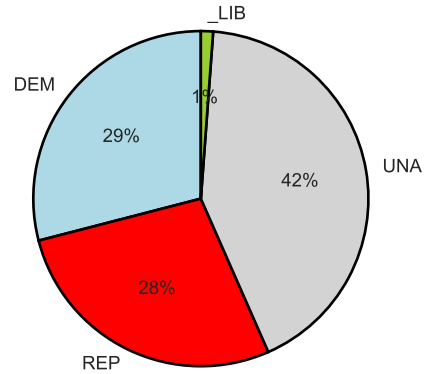


Undesignated Race Males by Age Group

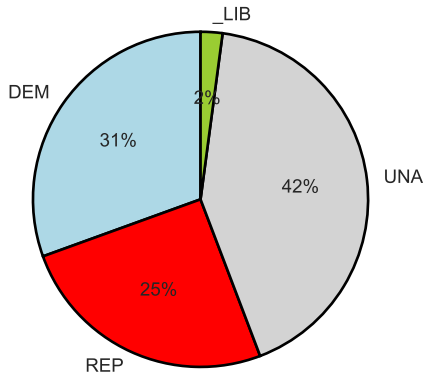
Undesignated Race Males Ages 66 and over



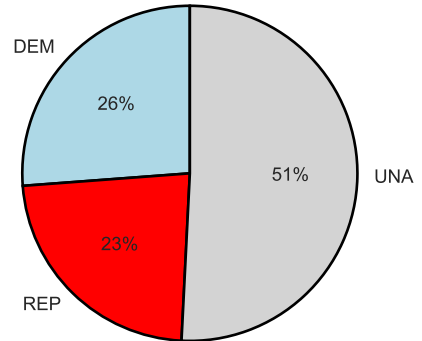
Undesignated Race Males Ages 41-65



Undesignated Race Males Ages 26-40

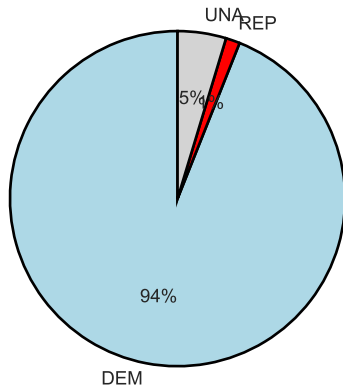


Undesignated Race Males Ages 18-25

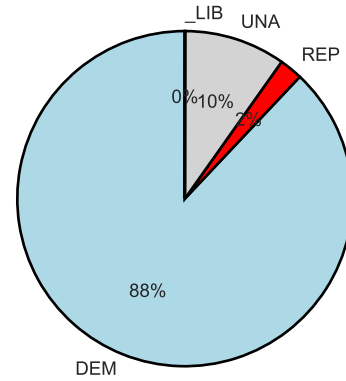


Black Males by Age Group

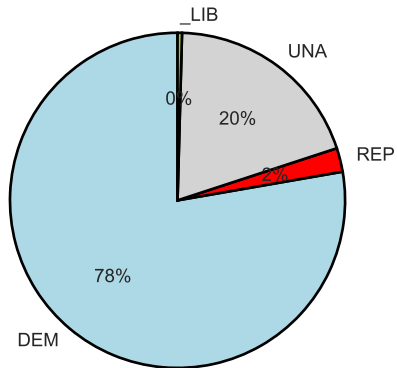
Black Males Ages 66 and over



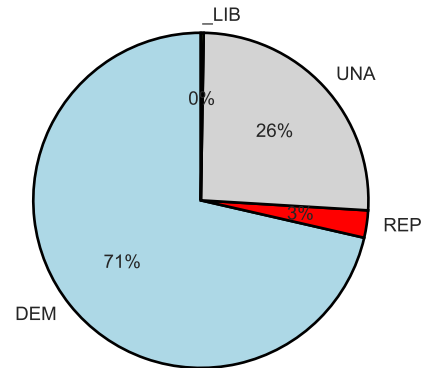
Black Males Ages 41-65



Black Males Ages 26-40

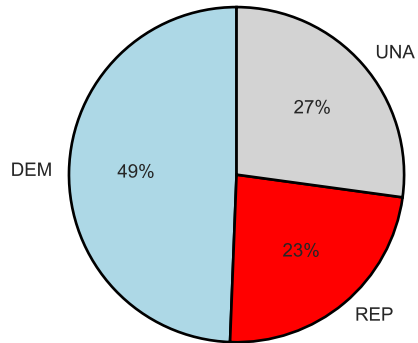


Black Males Ages 18-25

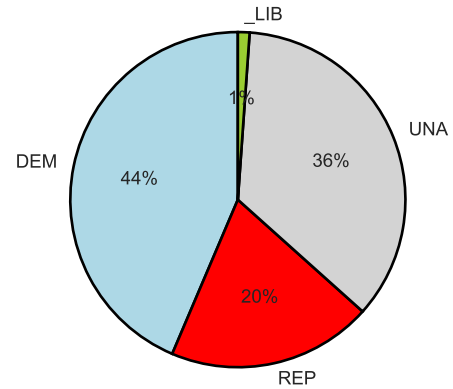


Hispanic Males by Age Group

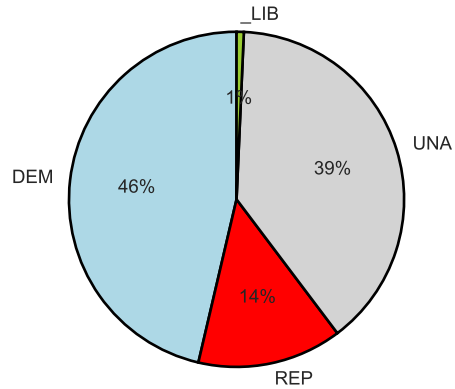
Hispanic Males Ages 66 and over



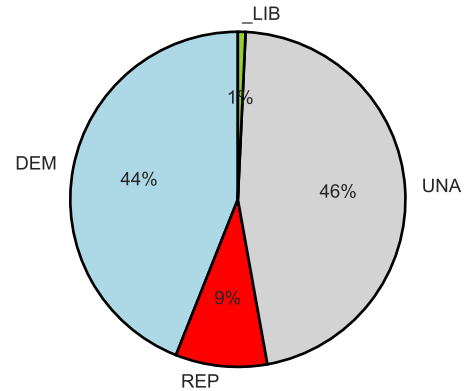
Hispanic Males Ages 41-65



Hispanic Males Ages 26-40

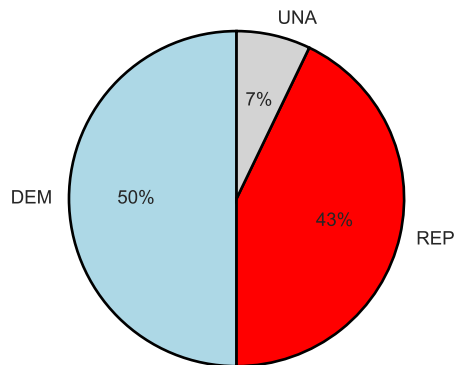


Hispanic Males Ages 18-25

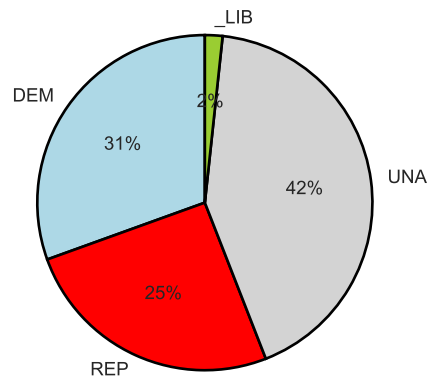


Native American Males by Age Group

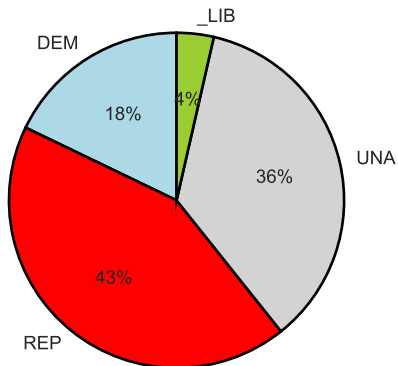
Native American Males Ages 66 and over



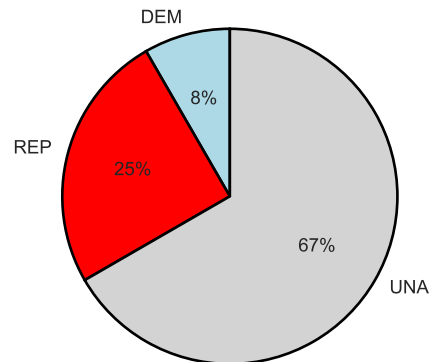
Native American Males Ages 41-65



Native American Males Ages 26-40

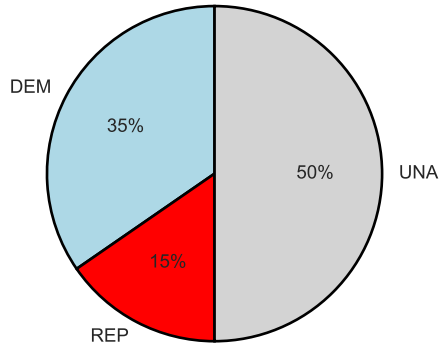


Native American Males Ages 18-25

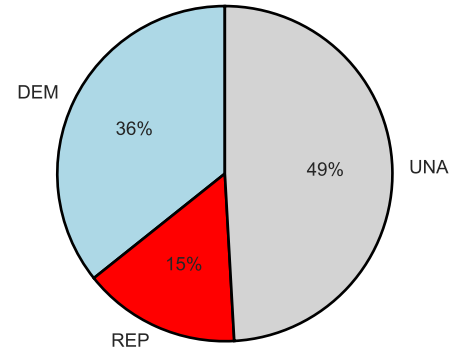


Asian Males by Age Group

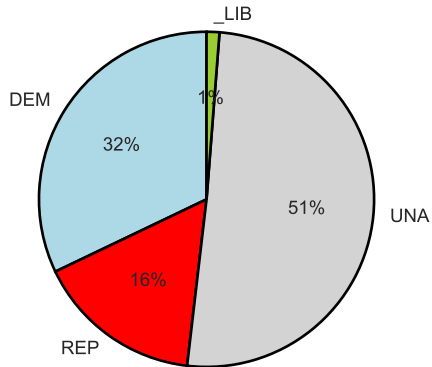
Asian Males Ages 66 and over



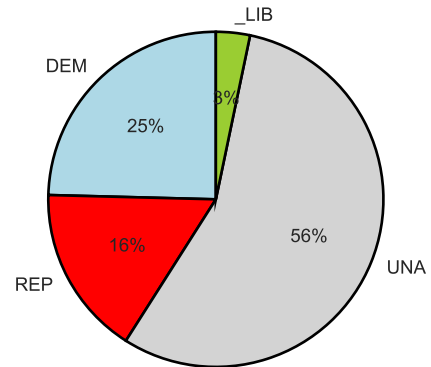
Asian Males Ages 41-65



Asian Males Ages 26-40

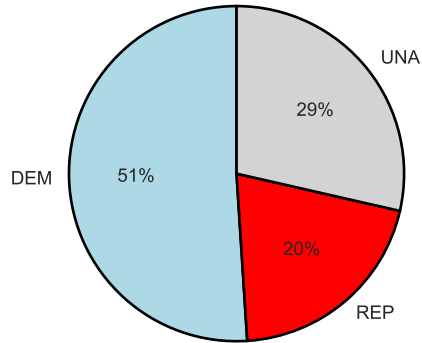


Asian Males Ages 18-25

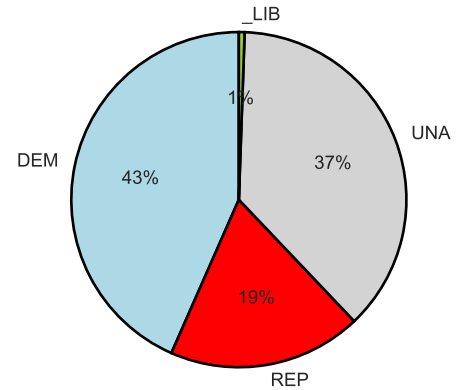


Other Race Males by Age Group

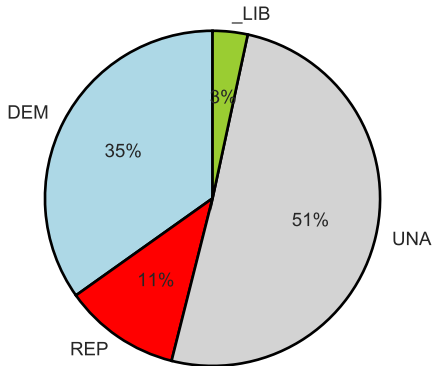
Other Race Males Ages 66 and over



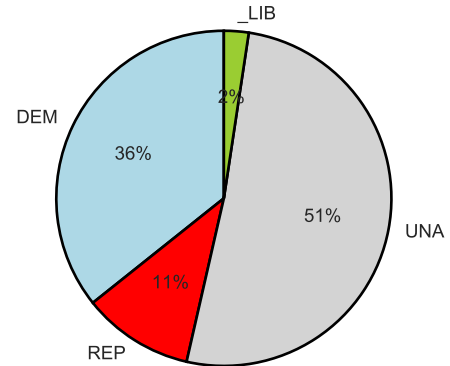
Other Race Males Ages 41-65



Other Race Males Ages 26-40

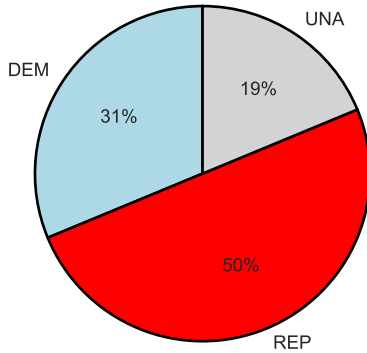


Other Race Males Ages 18-25

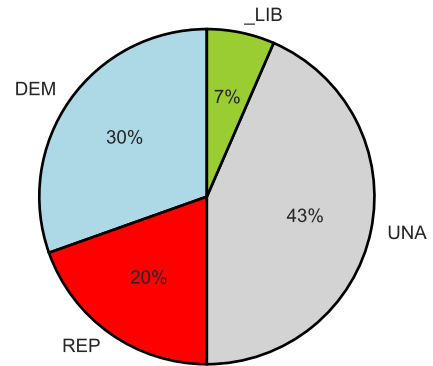


Multiple Race Males by Age Group

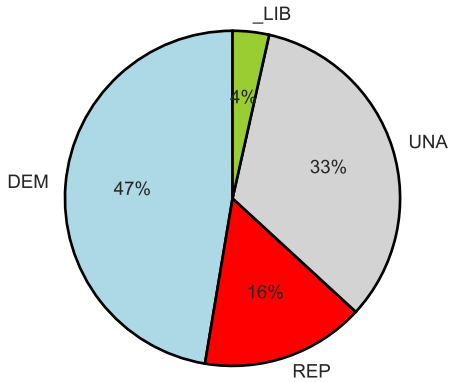
Multiple Race Males Ages 66 and over



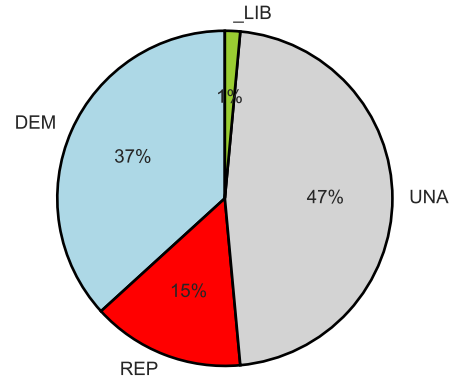
Multiple Race Males Ages 41-65



Multiple Race Males Ages 26-40

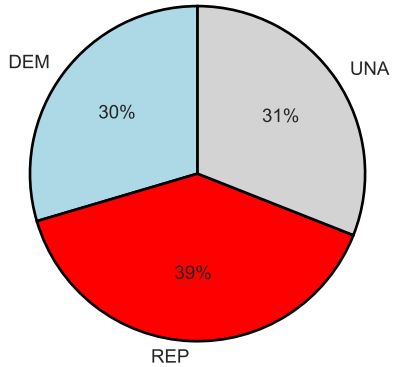


Multiple Race Males Ages 18-25

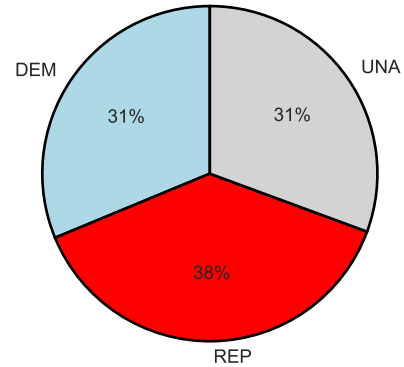


White Unspecified Genders by Age Group

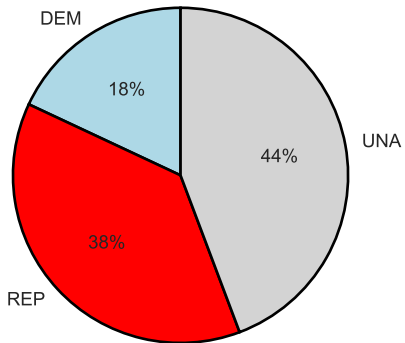
White Unspecified Genders Ages 66 and over



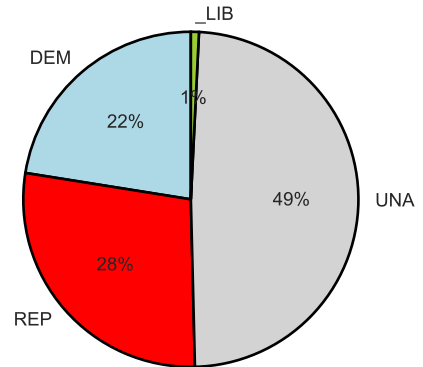
White Unspecified Genders Ages 41-65



White Unspecified Genders Ages 26-40

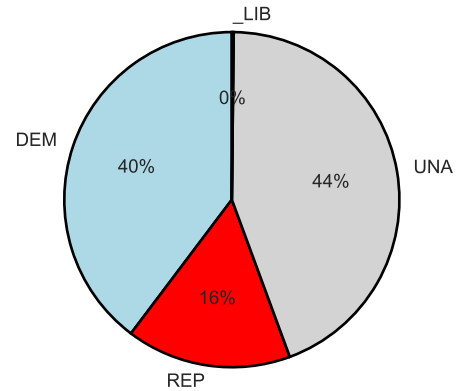
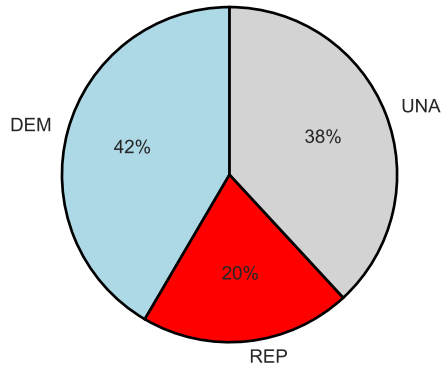


White Unspecified Genders Ages 18-25

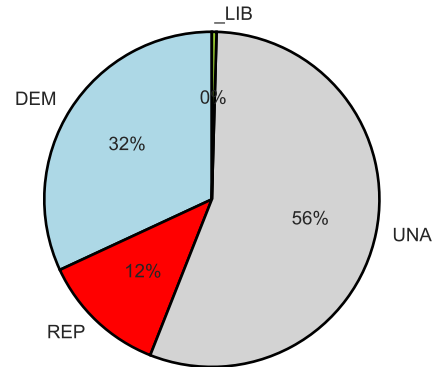
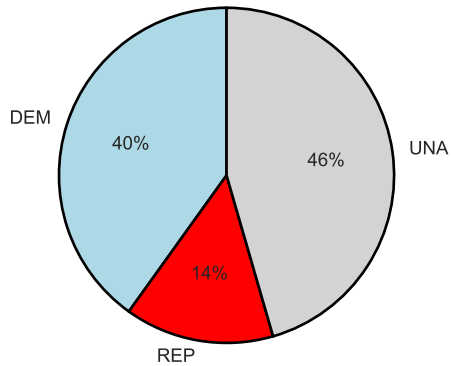


Undesignated Race Unspecified Genders by Age Group

Undesignated Race Unspecified Genders Ages 66 and over

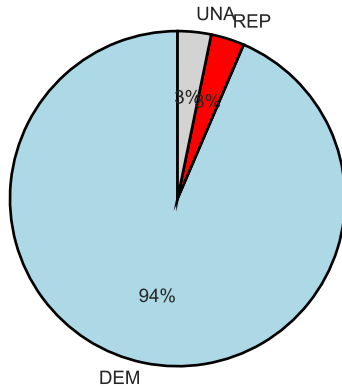


Undesignated Race Unspecified Genders Ages 26-40

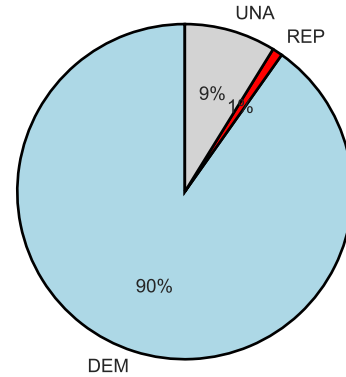


Black Unspecified Genders by Age Group

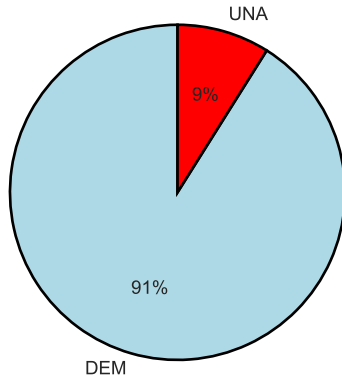
Black Unspecified Genders Ages 66 and over



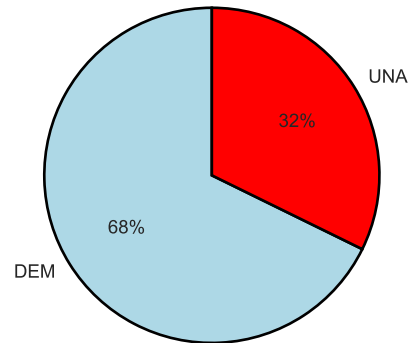
Black Unspecified Genders Ages 41-65



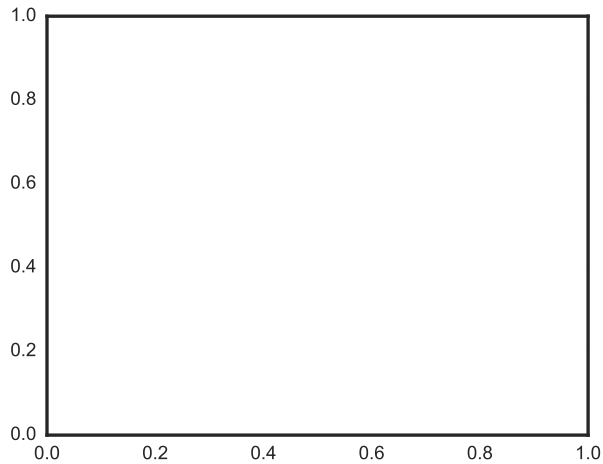
Black Unspecified Genders Ages 26-40



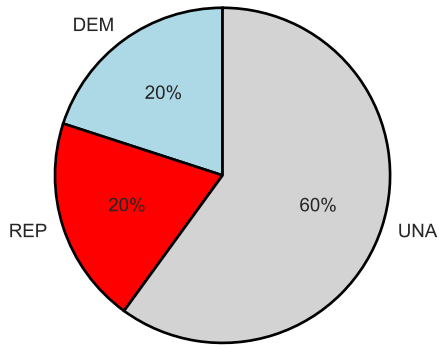
Black Unspecified Genders Ages 18-25



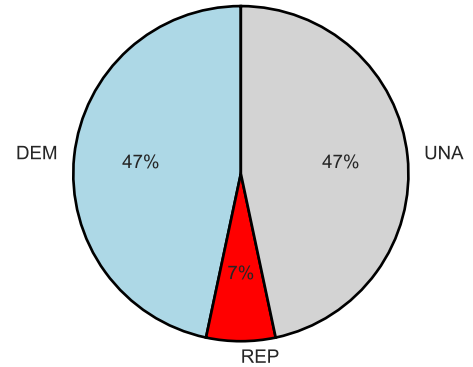
Hispanic Unspecified Genders by Age Group



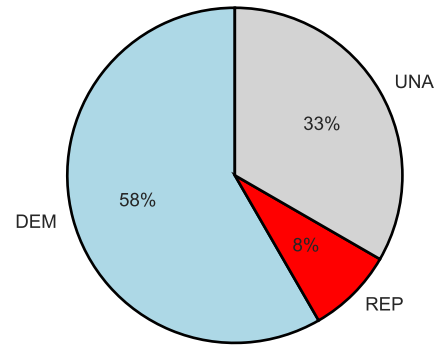
Hispanic Unspecified Genders Ages 26-40



Hispanic Unspecified Genders Ages 41-65

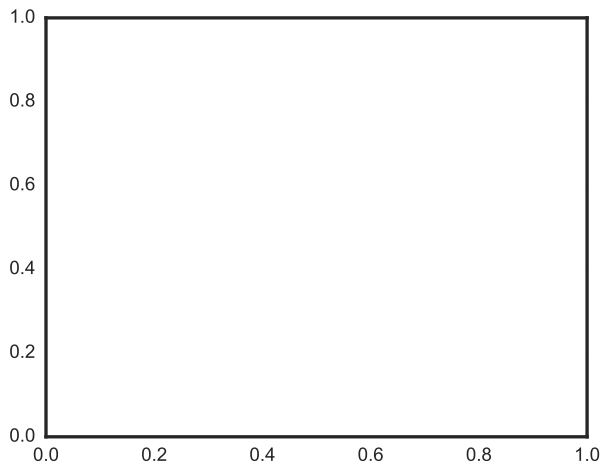
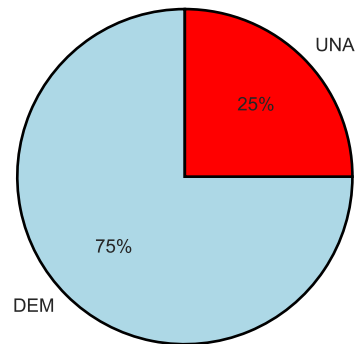
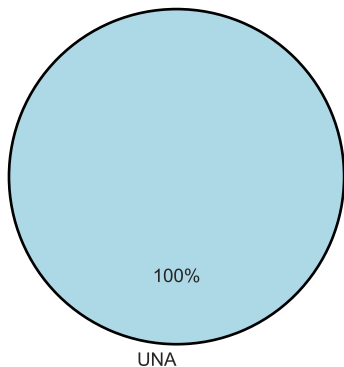


Hispanic Unspecified Genders Ages 18-25

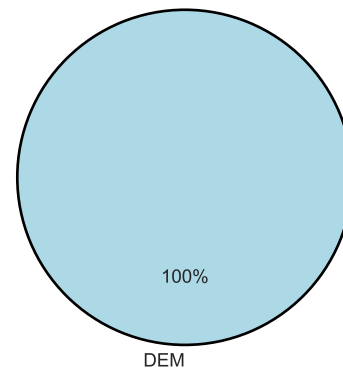


Native American Unspecified Genders by Age Group

Native American Unspecified Genders Ages 66 and over Native American Unspecified Genders Ages 41-65

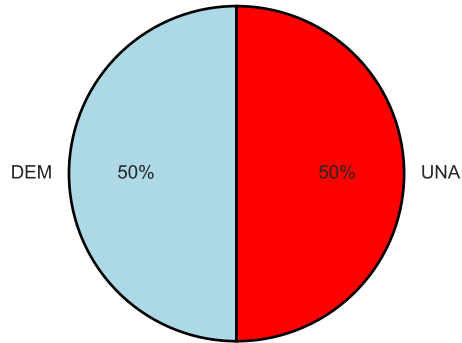


Native American Unspecified Genders Ages 18-25

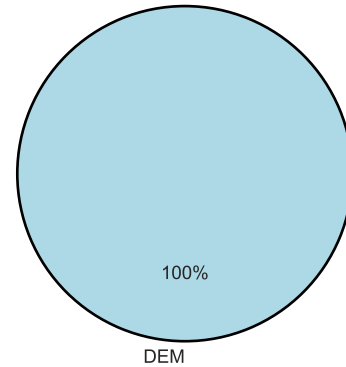


Asian Unspecified Genders by Age Group

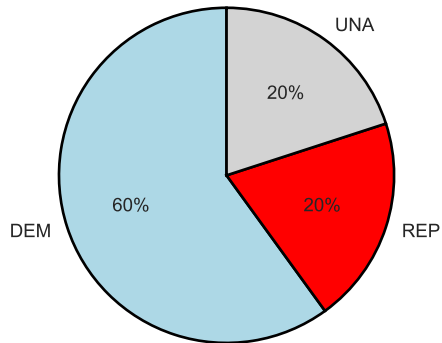
Asian Unspecified Genders Ages 66 and over



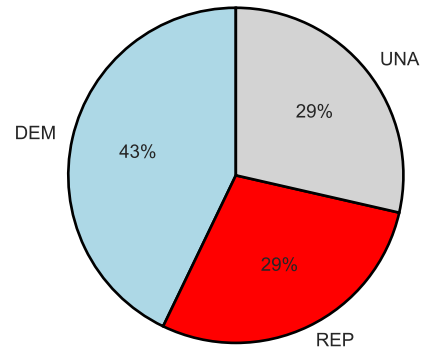
Asian Unspecified Genders Ages 41-65



Asian Unspecified Genders Ages 26-40

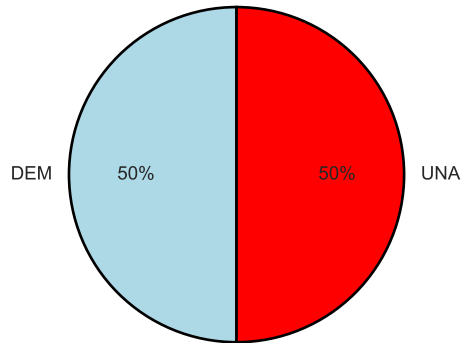


Asian Unspecified Genders Ages 18-25

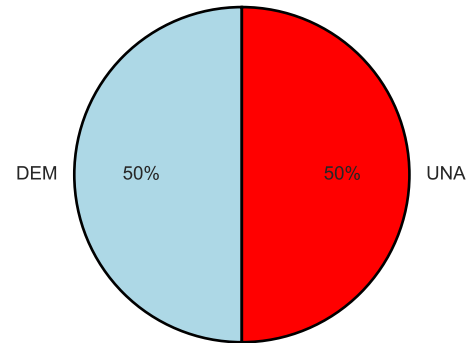


Other Race Unspecified Genders by Age Group

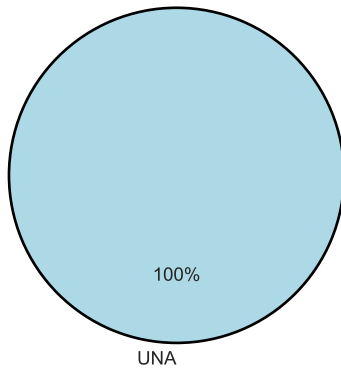
Other Race Unspecified Genders Ages 66 and over



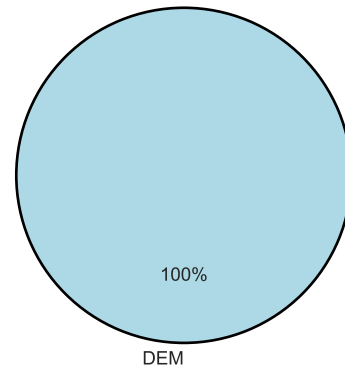
Other Race Unspecified Genders Ages 41-65



Other Race Unspecified Genders Ages 26-40

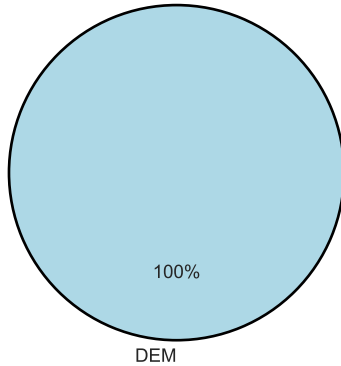


Other Race Unspecified Genders Ages 18-25

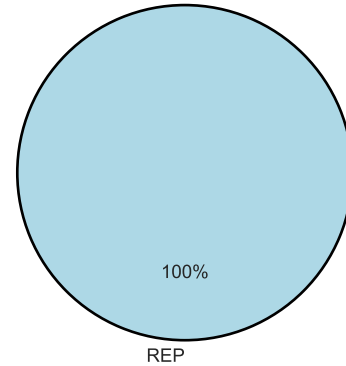


Multiple Race Unspecified Genders by Age Group

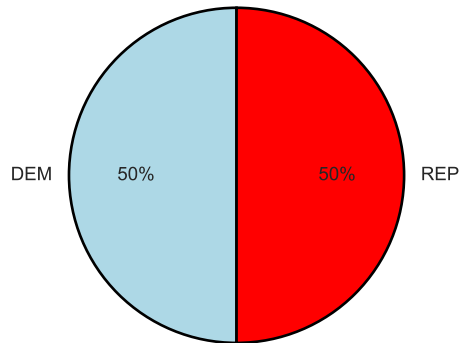
Multiple Race Unspecified Genders Ages 66 and over



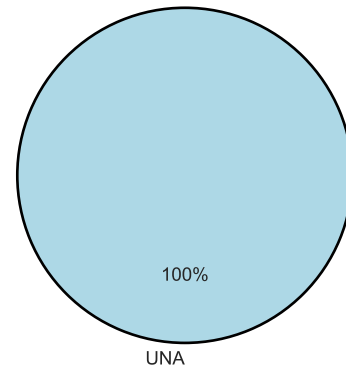
Multiple Race Unspecified Genders Ages 41-65



Multiple Race Unspecified Genders Ages 26-40



Multiple Race Unspecified Genders Ages 18-25



Part B: Percentage of each demographic group by registered party

Summary Demographics

What follows are three pages each describing the percentage of voters registered in each political party by demographic group one for age group, one for gender, and one for race/ethnicity. Each page has a pie chart for each political party showing the demographic breakdown.

The age distributions for both the democratic and republican parties are remarkably similar, with the smallest group being 18-25 year olds and the largest group being 41-65 year olds. This is very different from the libertarian party, which is dominated by voters 18-40.

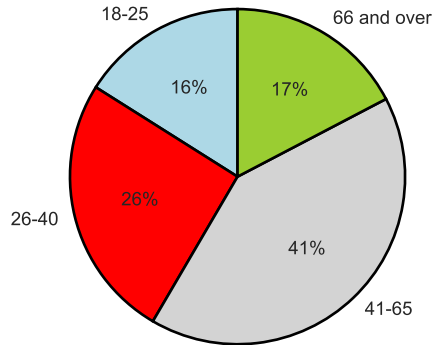
For Race/Ethnicity, what stands out is the extremely low percentage of the republican party consists of non-white voters. Fully 96% of registered republicans are white. Since the pie charts in this section are hard to read, below is a table that summarizes party breakdown by race/ethnicity:

	DEM	REP	UNA	LIB
Asian	0.4%	0.2%	0.9%	1.0%
Black	38.3%	0.8%	6.9%	4.6%
Hispanic	2.5%	0.7%	3.0%	4.6%
Multiple Race	0.4%	0.1%	0.5%	1.1%
Native American	0.2%	0.1%	0.2%	0.4%
Other Race	0.7%	0.3%	1.0%	1.9%
Undesignated Race	3.3%	1.7%	6.1%	3.3%
White	54.2%	95.9%	81.5%	83.1%

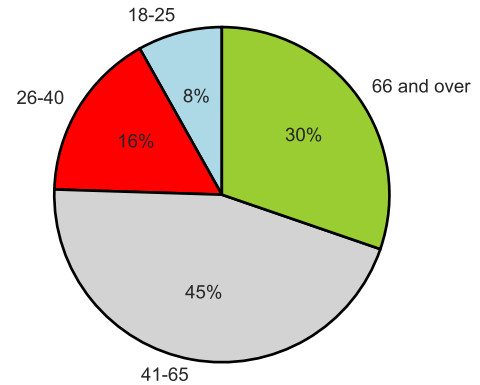
The gender split in the republican party is almost even with women holding a slight edge. The democratic party is almost 60% female. Males dominate the libertarian while there is a slight female edge for unaffiliated voters. The details follow:

Age Distribution for each Party

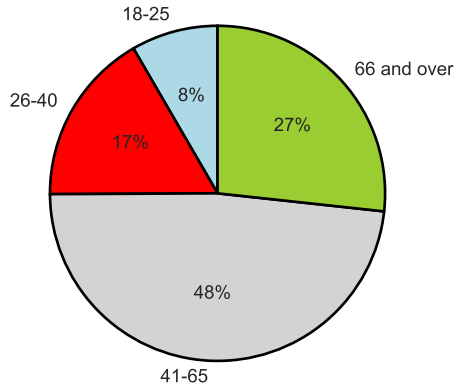
Party: UNA



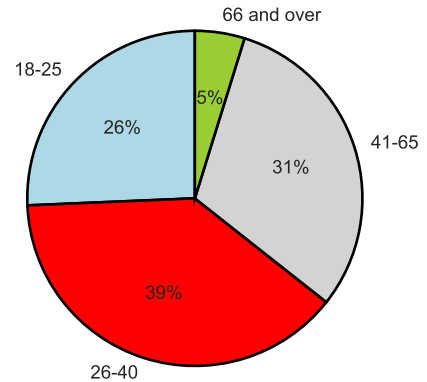
Party: DEM



Party: REP

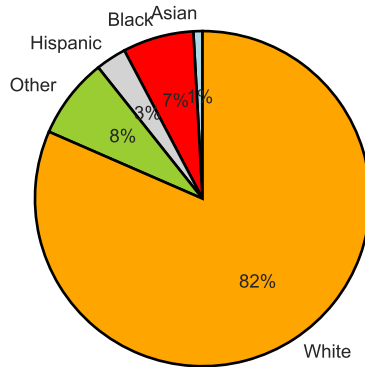


Party: _LIB

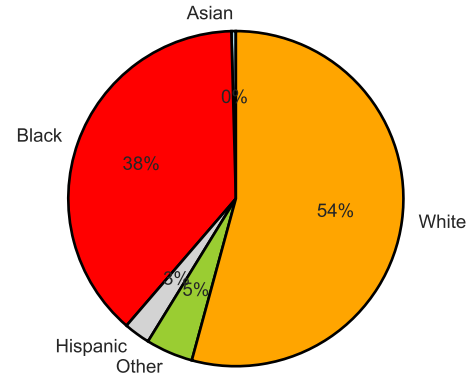


Race/Ethnicity Distribution for each Party

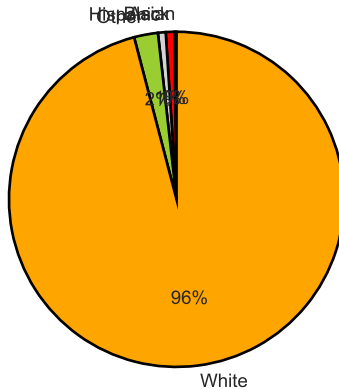
Party: UNA



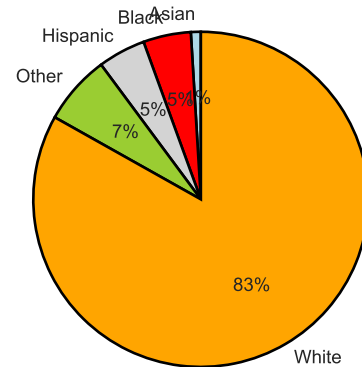
Party: DEM



Party: REP

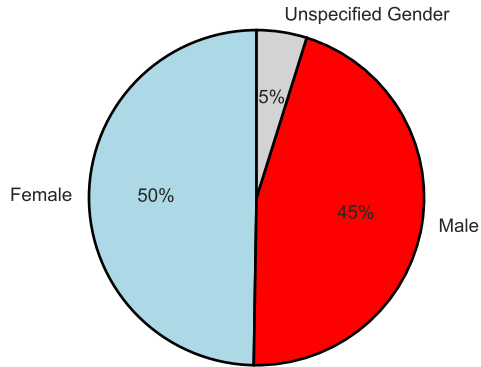


Party: _LIB

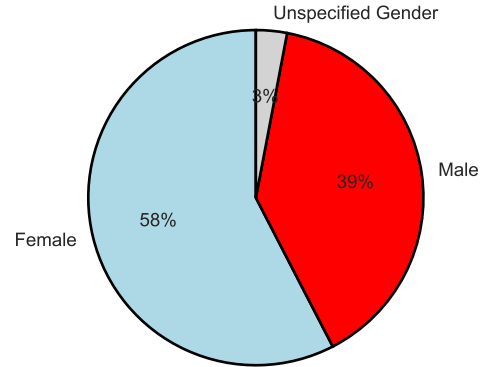


Gender Distribution for each Party

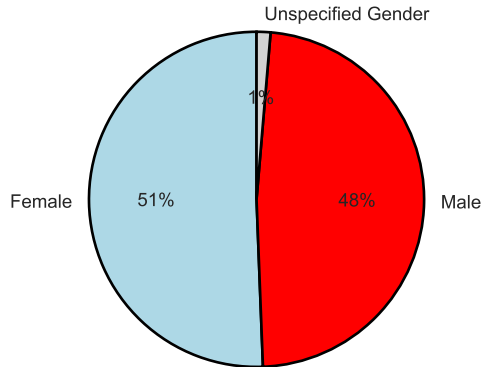
Party: UNA



Party: DEM



Party: REP



Party: _LIB

