

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 into a table as part of a private relational database accessible only to me. This table consists of a row for every voter that had is 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 both "active" and "inactive" voters and ignored "removed" or "denied" voters. This was accomplished by selecting only the rows with column "status_cd" equal to "A" or "I"

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

party_cd

DEM DEMOCRATIC
LIB LIBERTARIAN
REP REPUBLICAN
UNA UNAFFILIATED

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. This is summarized below:

The number of rows we have dropped is 2,963

The number of rows remaining in the database is 6,759,456

The percentage of rows that we have dropped is: 0.044%

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 us understand impact of this decision, below is a table describing the original breakdown of race for each of the three ethnic codes.

ethnic_code	HL	NL	UN
race			
Asian	0.4%	1.0%	2.1%
Black	3.2%	21.2%	28.4%
Multiple Race	6.4%	0.4%	1.1%
Native American	0.4%	0.9%	0.6%
Other Race	44.6%	1.5%	1.3%
Undesignated Race	19.0%	0.3%	13.6%
White	25.9%	74.8%	53.0%

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

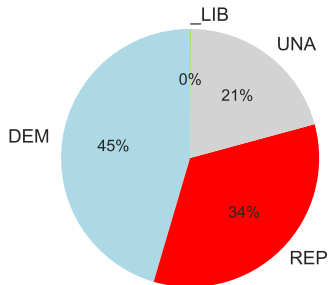
The data seem to suggest that everything else being equal, younger voters today are less likely to affiliate with a political party than older voters today, and party affiliation tendency increases with age. This does not imply that today's younger voters will be more likely to affiliate as they get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

The data also seem to suggest that both women and men are more likely to be registered as democratic than republican, with the women leaning more democratic than men. Women are also slightly more likely to affiliate with a political party than men.

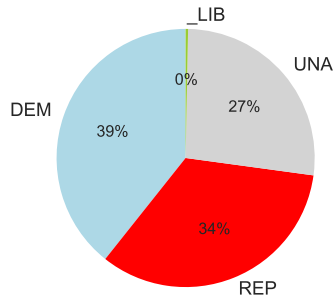
The most striking inference on party affiliation is by race. Black registered voters are more likely to affiliate with the democratic party than the republican party by a factor of more than 20 to 1. A little less than one sixth of Black registered voters are unaffiliated while approximately one third of white registered voters are unaffiliated. White voters that are affiliated choose the republican party over the democratic party by approximately 3 to 2. The details follow.

Party Registration by Age Group

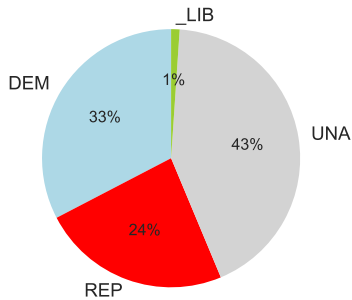
Ages 66 and over



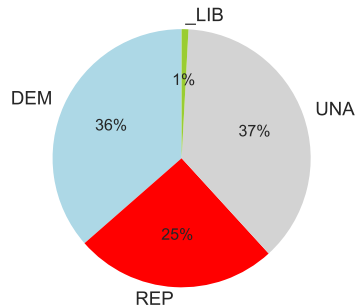
Ages 41-65



Ages 18-25

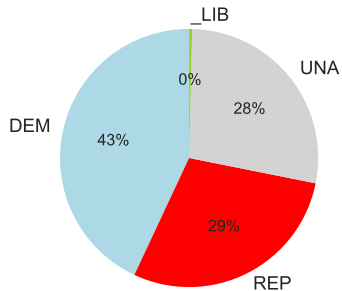


Ages 26-40

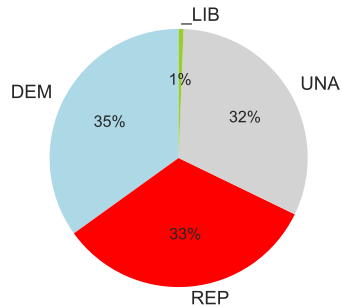


Party Registration by Gender

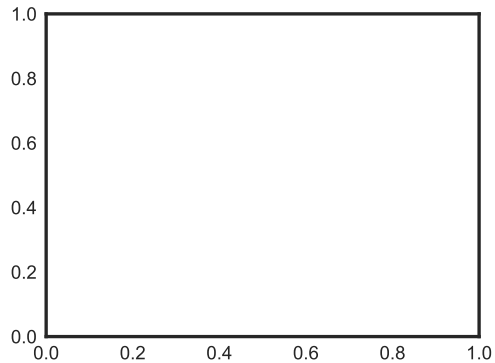
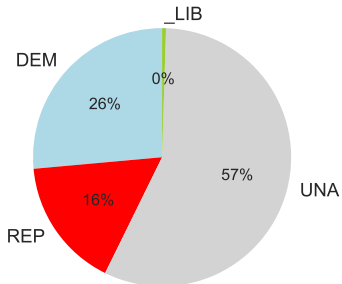
Gender Female



Gender Male

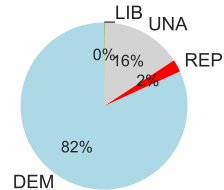
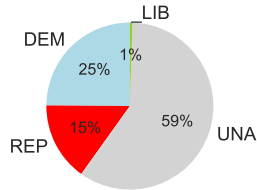
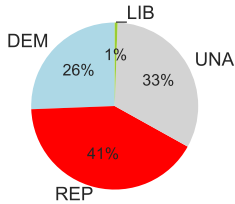


Gender Unspecified Gender

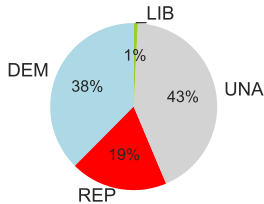


Party Registration by Race/Ethnicity

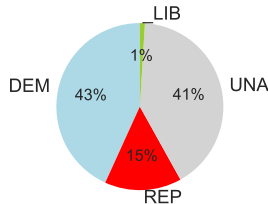
Race/Ethnicity White Race/Ethnicity Undesignated Race Race/Ethnicity Black



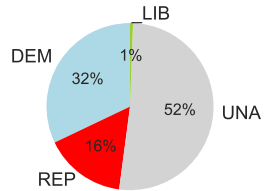
Race/Ethnicity Other Race



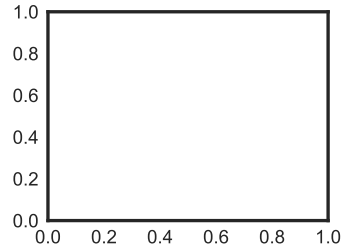
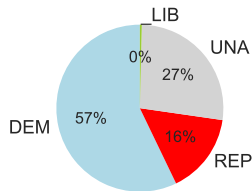
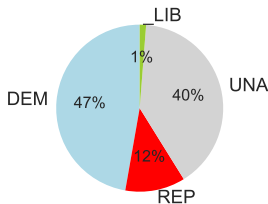
Race/Ethnicity Hispanic



Race/Ethnicity Asian



Race/Ethnicity Multiple Races Race/Ethnicity Native American



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.

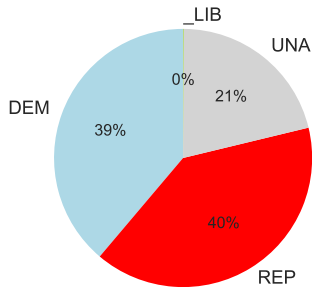
One thing that stands out is that white males ages 18-25 that choose to affiliate with a party choose the republican over the democratic party by approximately 3 to 1. This contrasts with only a 2 to 1 ratio for white females in the same age group.

The dearth of black voters choosing to affiliate with the republican party spans all age groups and genders.

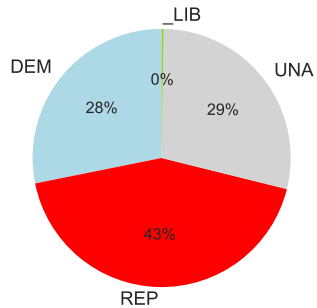
Female Hispanic voters that choose to affiliate with a political party tend to choose the democratic party by approximately 3 to 1, while male Hispanic voters choose the democratic party by approximately 2 to 1. For Hispanic voters of both genders, the percentage of voters affiliating with the republican party diminishes as voters get younger. The details follow:

White Females by Age Group

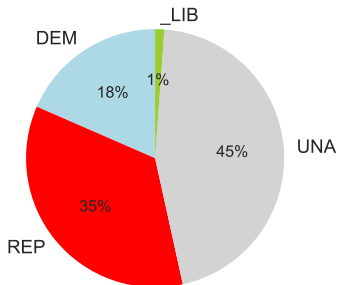
White Females Ages 66 and over



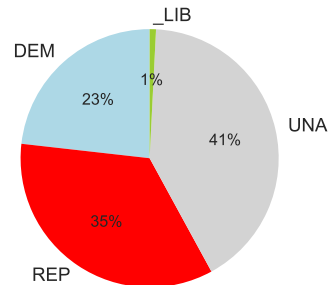
White Females Ages 41-65



White Females Ages 18-25

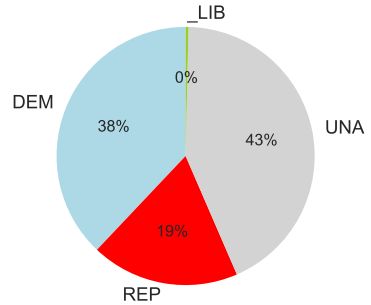
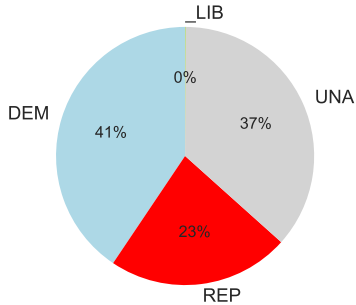


White Females Ages 26-40

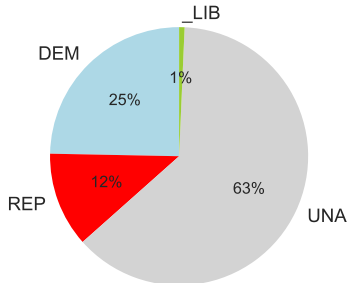


Undesignated Race Females by Age Group

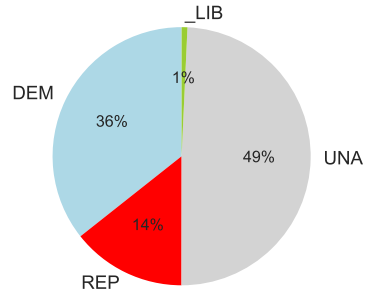
Undesignated Race Females Ages 66 and over



Undesignated Race Females Ages 18-25

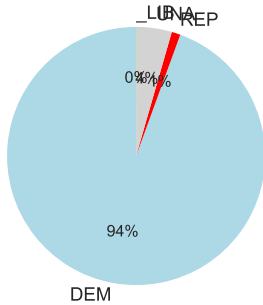


Undesignated Race Females Ages 26-40

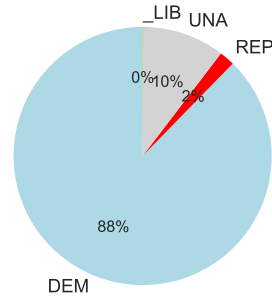


Black Females by Age Group

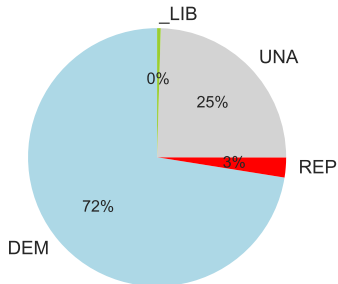
Black Females Ages 66 and over



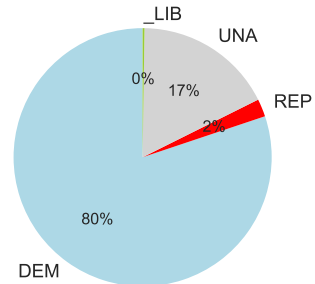
Black Females Ages 41-65



Black Females Ages 18-25

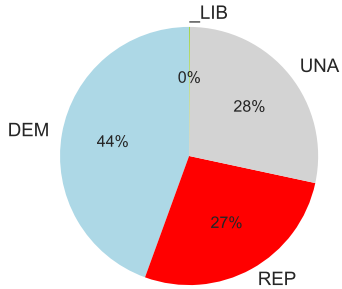


Black Females Ages 26-40

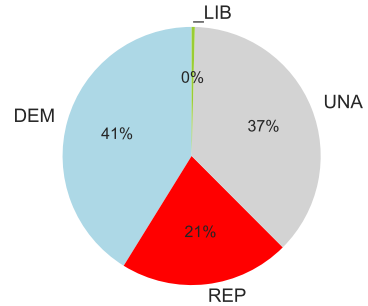


Other Race Females by Age Group

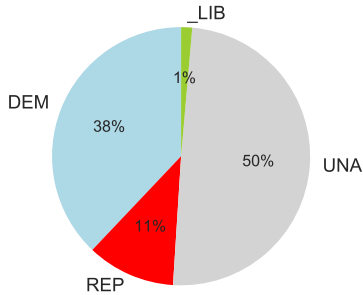
Other Race Females Ages 66 and over



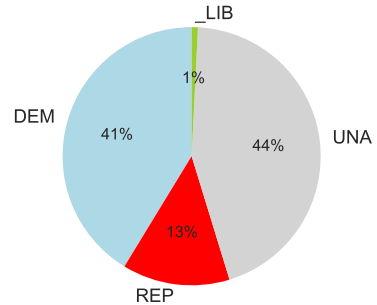
Other Race Females Ages 41-65



Other Race Females Ages 18-25

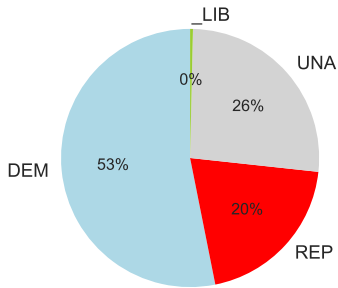


Other Race Females Ages 26-40

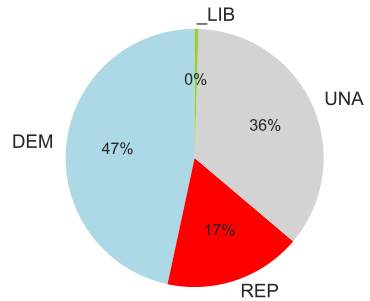


Hispanic Females by Age Group

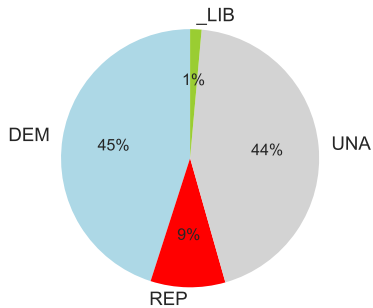
Hispanic Females Ages 66 and over



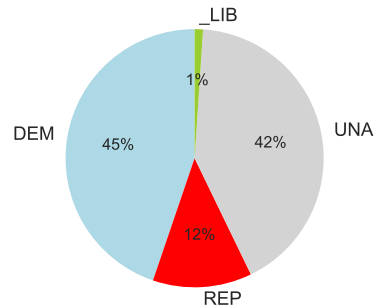
Hispanic Females Ages 41-65



Hispanic Females Ages 18-25

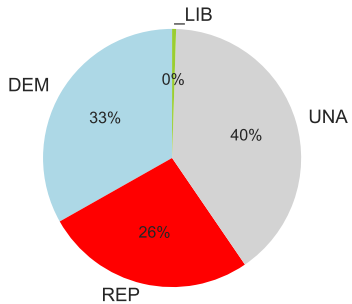


Hispanic Females Ages 26-40

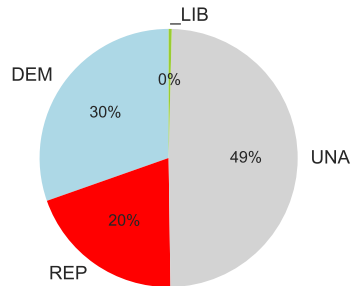


Asian Females by Age Group

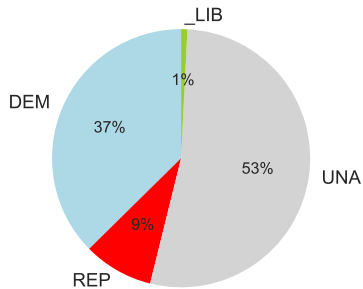
Asian Females Ages 66 and over



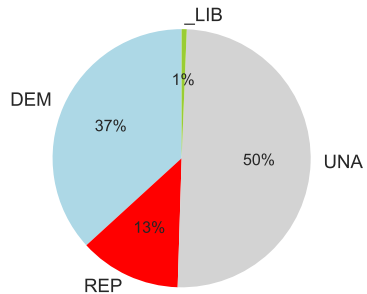
Asian Females Ages 41-65



Asian Females Ages 18-25

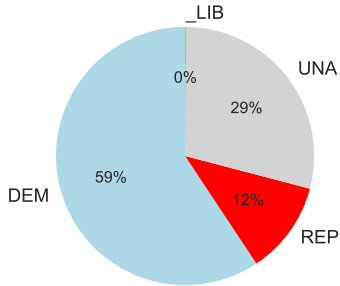


Asian Females Ages 26-40

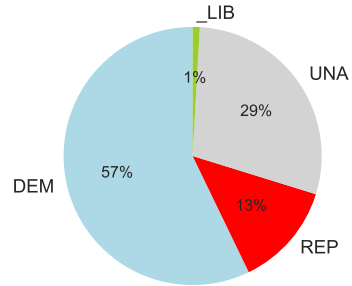


Multiple Race Females by Age Group

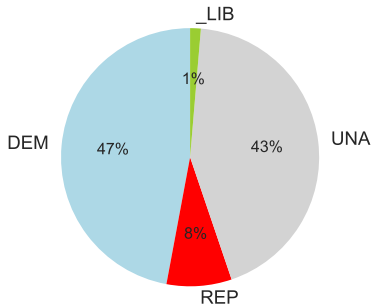
Multiple Race Females Ages 66 and over



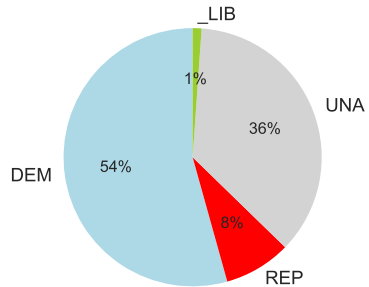
Multiple Race Females Ages 41-65



Multiple Race Females Ages 18-25

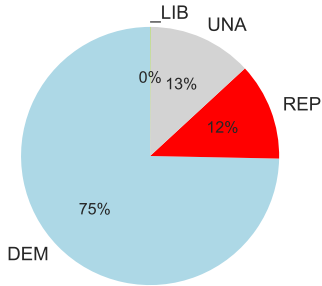


Multiple Race Females Ages 26-40

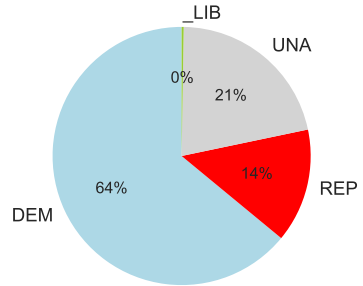


Native American Females by Age Group

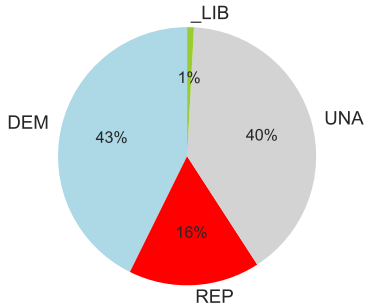
Native American Females Ages 66 and over



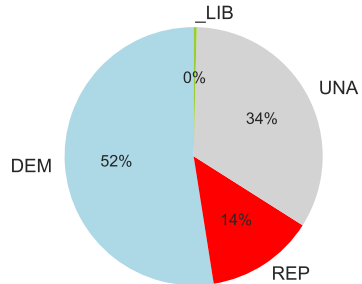
Native American Females Ages 41-65



Native American Females Ages 18-25

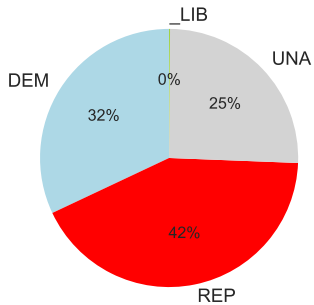


Native American Females Ages 26-40

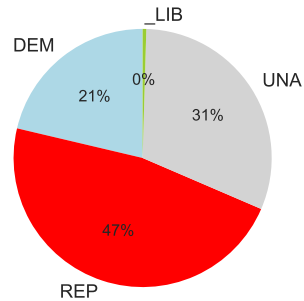


White Males by Age Group

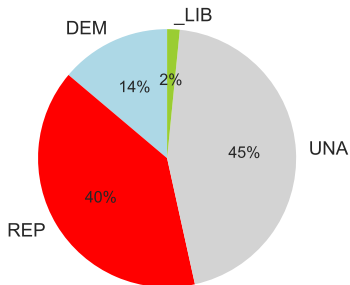
White Males Ages 66 and over



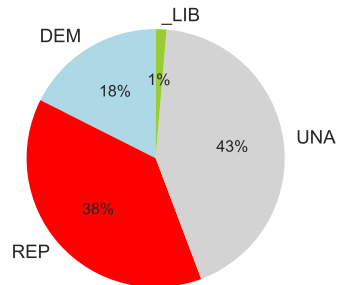
White Males Ages 41-65



White Males Ages 18-25

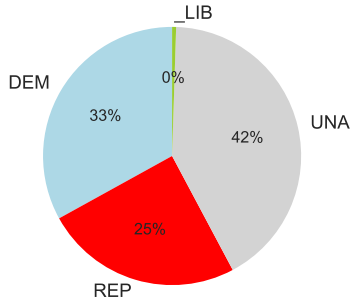


White Males Ages 26-40

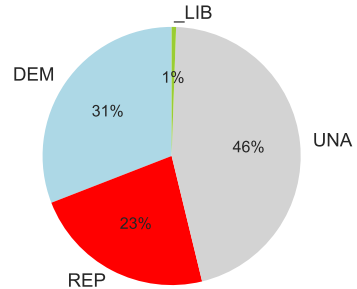


Undesignated Race Males by Age Group

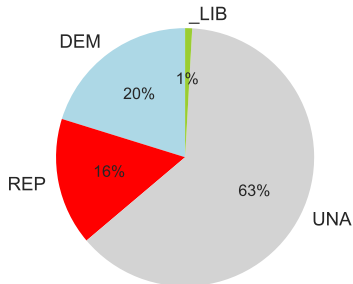
Undesignated Race Males Ages 66 and over



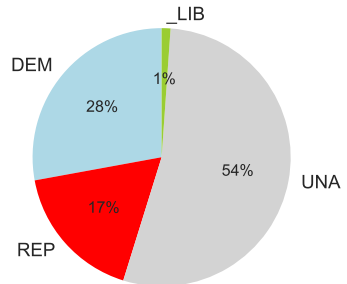
Undesignated Race Males Ages 41-65



Undesignated Race Males Ages 18-25

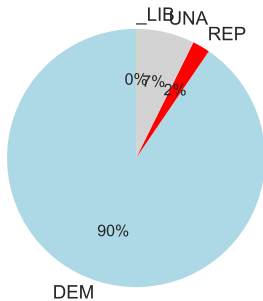


Undesignated Race Males Ages 26-40

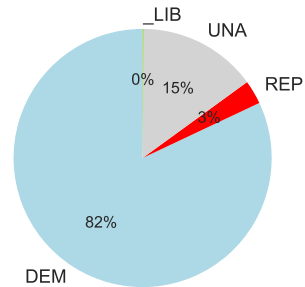


Black Males by Age Group

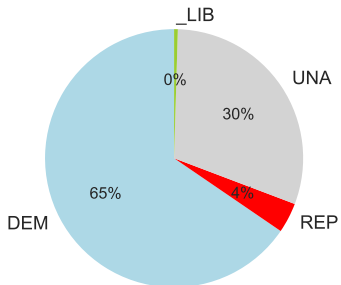
Black Males Ages 66 and over



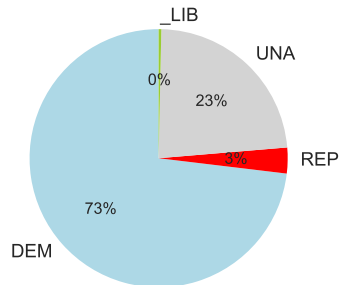
Black Males Ages 41-65



Black Males Ages 18-25

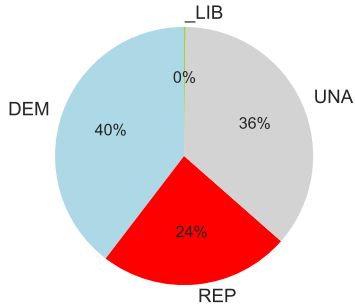


Black Males Ages 26-40

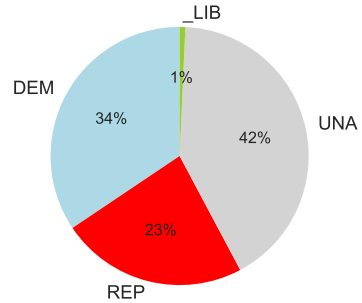


Other Race Males by Age Group

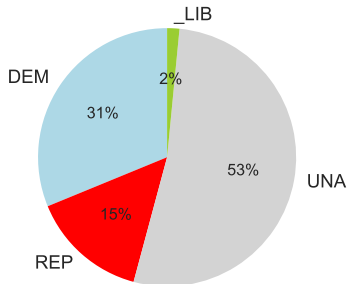
Other Race Males Ages 66 and over



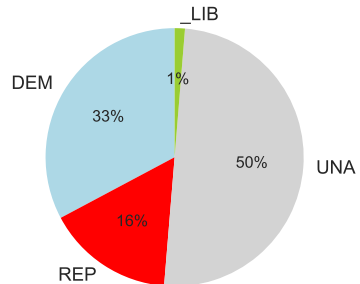
Other Race Males Ages 41-65



Other Race Males Ages 18-25

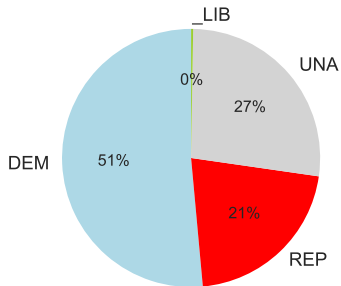


Other Race Males Ages 26-40

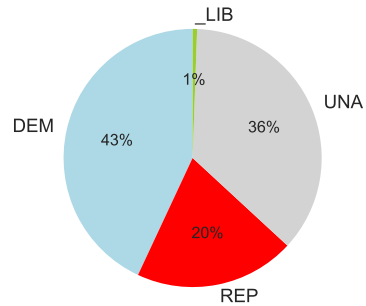


Hispanic Males by Age Group

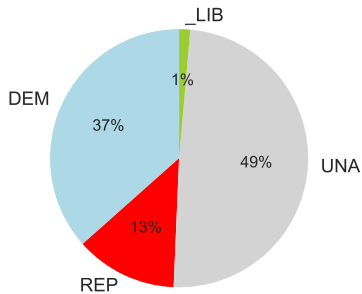
Hispanic Males Ages 66 and over



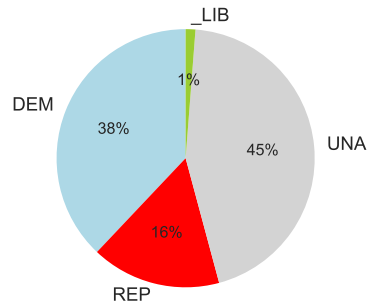
Hispanic Males Ages 41-65



Hispanic Males Ages 18-25

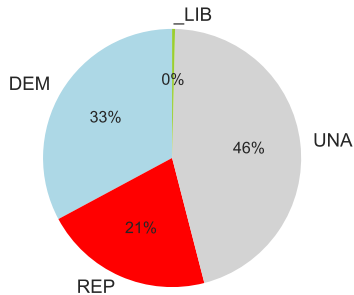


Hispanic Males Ages 26-40

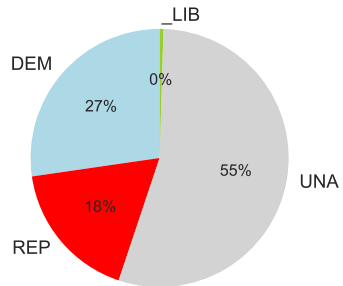


Asian Males by Age Group

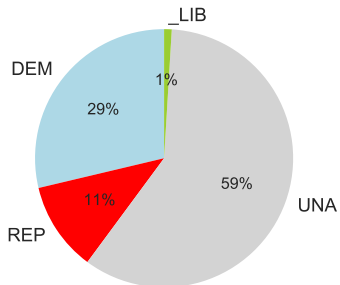
Asian Males Ages 66 and over



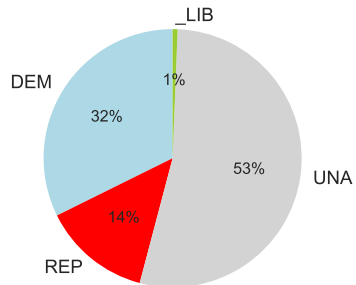
Asian Males Ages 41-65



Asian Males Ages 18-25

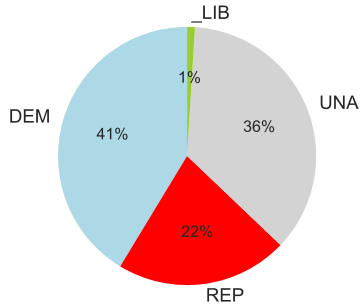


Asian Males Ages 26-40

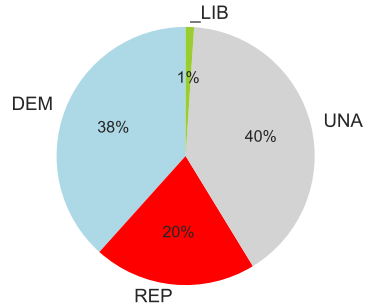


Multiple Race Males by Age Group

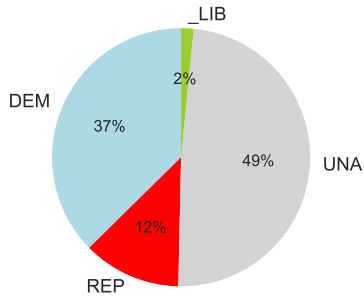
Multiple Race Males Ages 66 and over



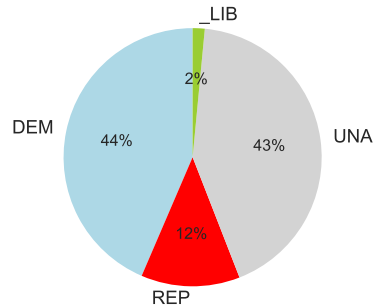
Multiple Race Males Ages 41-65



Multiple Race Males Ages 18-25

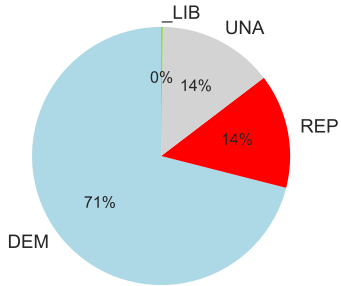


Multiple Race Males Ages 26-40

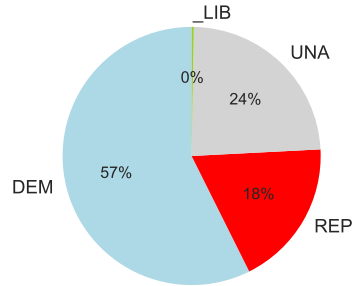


Native American Males by Age Group

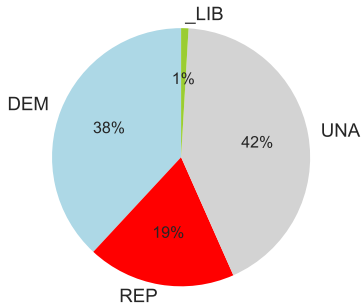
Native American Males Ages 66 and over



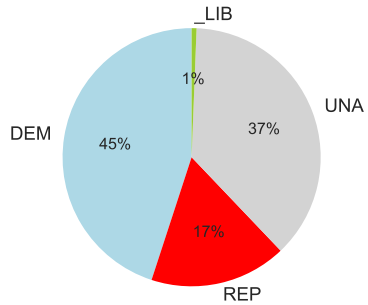
Native American Males Ages 41-65



Native American Males Ages 18-25

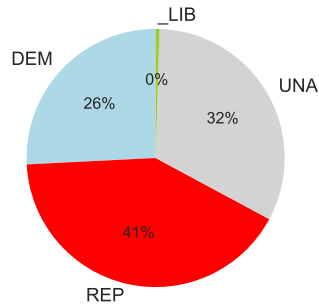
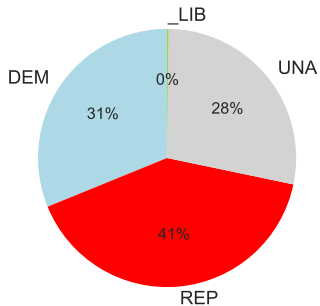


Native American Males Ages 26-40

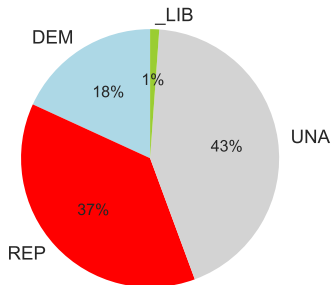


White Unspecified Genders by Age Group

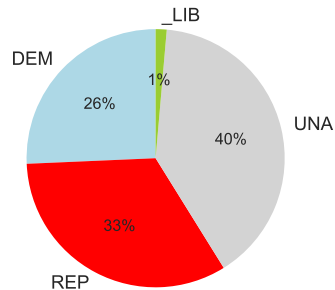
White Unspecified Genders Ages 66 and over White Unspecified Genders Ages 41-65



White Unspecified Genders Ages 18-25

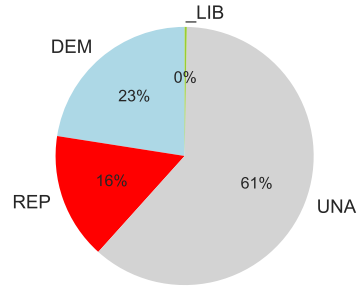
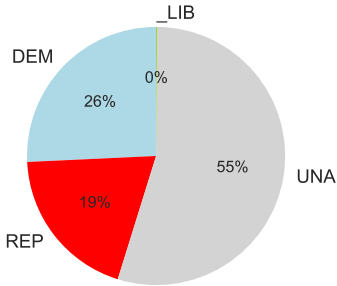


White Unspecified Genders Ages 26-40

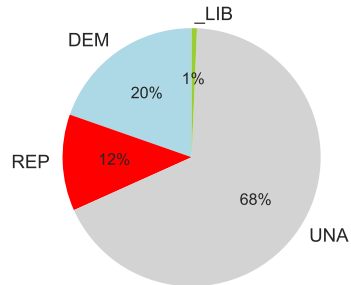
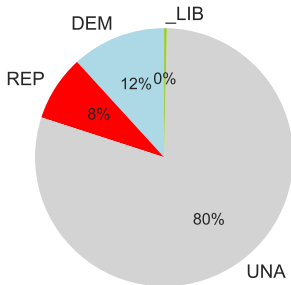


Undesignated Race Unspecified Genders by Age Group

Undesignated Race Unspecified Genders Ages 18-25 Undesignated Race Unspecified Genders Ages 41-65

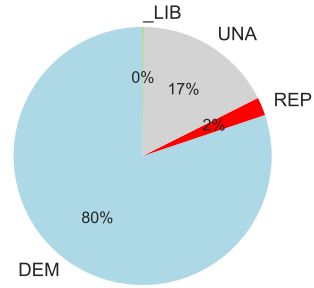
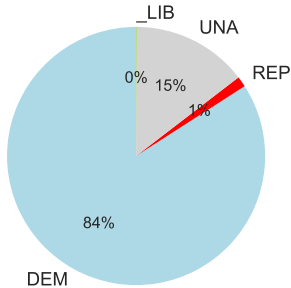


Undesignated Race Unspecified Genders Ages 18-25 Undesignated Race Unspecified Genders Ages 26-40

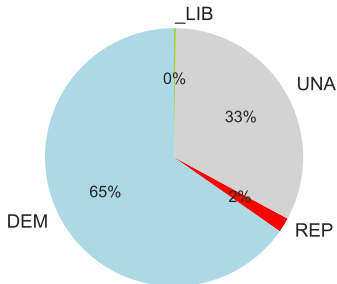


Black Unspecified Genders by Age Group

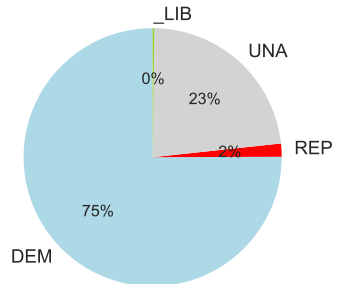
Black Unspecified Genders Ages 66 and over Black Unspecified Genders Ages 41-65



Black Unspecified Genders Ages 18-25

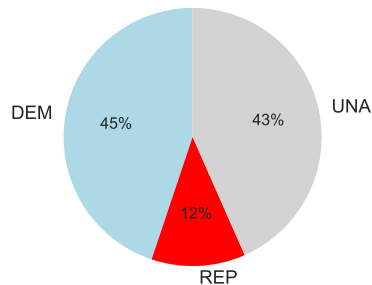
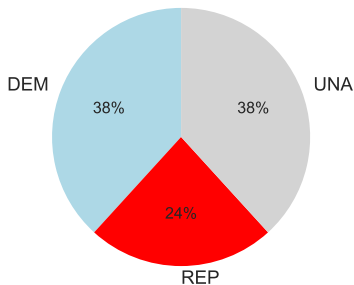


Black Unspecified Genders Ages 26-40

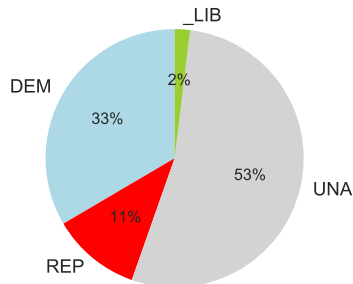
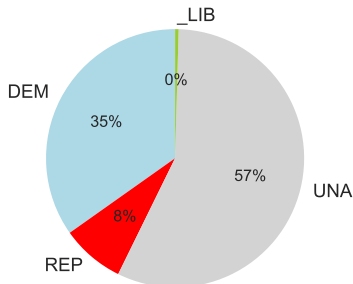


Other Race Unspecified Genders by Age Group

Other Race Unspecified Genders Ages 66 and Over

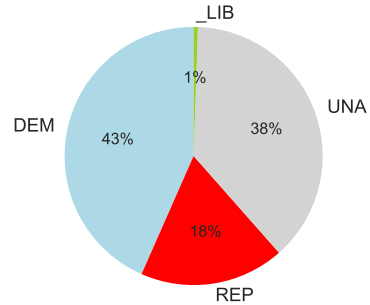
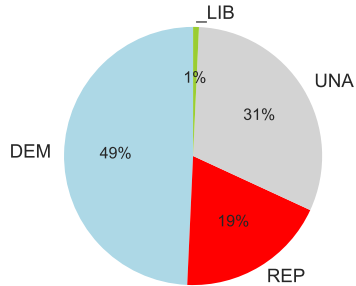


Other Race Unspecified Genders Ages 18-25

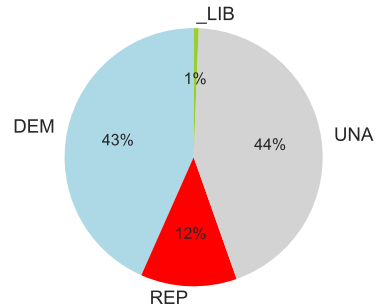
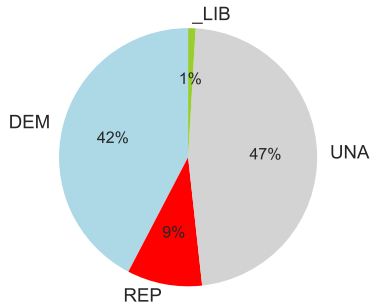


Hispanic Unspecified Genders by Age Group

Hispanic Unspecified Genders Ages 66 and over

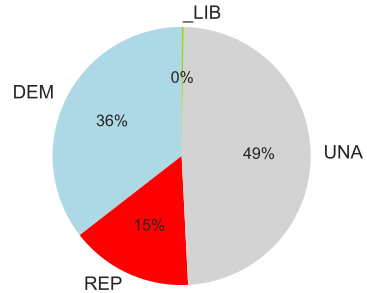
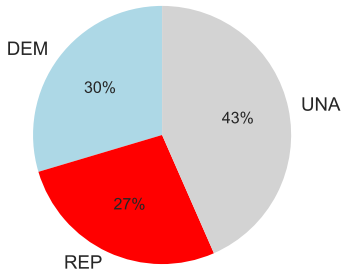


Hispanic Unspecified Genders Ages 18-25

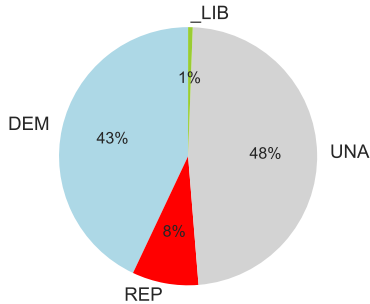


Asian Unspecified Genders by Age Group

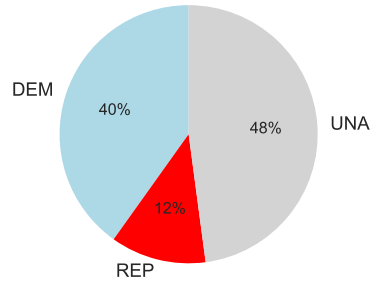
Asian Unspecified Genders Ages 66 and over Asian Unspecified Genders Ages 41-65



Asian Unspecified Genders Ages 18-25

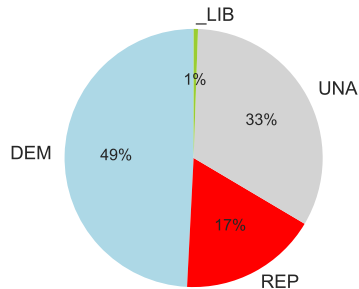
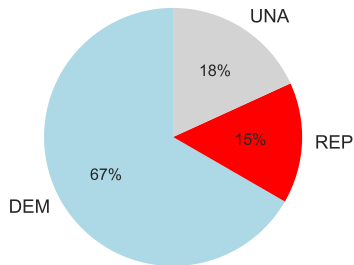


Asian Unspecified Genders Ages 26-40

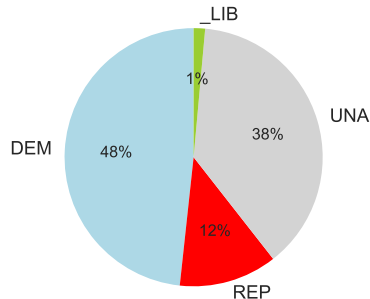
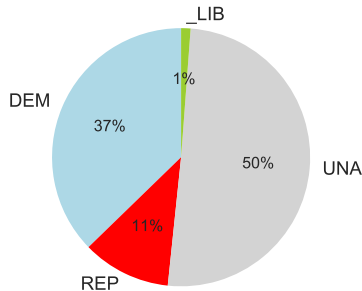


Multiple Race Unspecified Genders by Age Group

Multiple Race Unspecified Genders Ages 66 and older

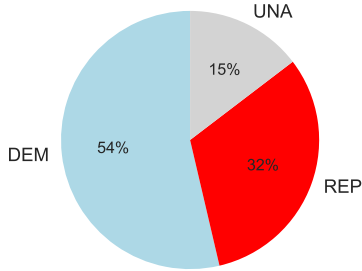


Multiple Race Unspecified Genders Ages 18-25

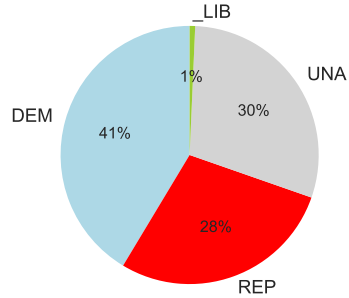


Native American Unspecified Genders by Age Group

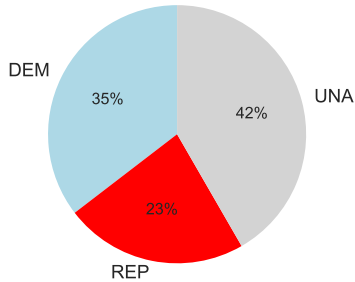
Native American Unspecified Genders Ages 66 and over



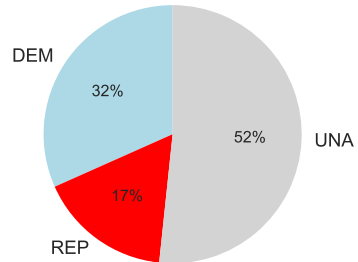
Native American Unspecified Genders Ages 41-65



Native American Unspecified Genders Ages 18-25



Native American Unspecified Genders Ages 26-40



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.

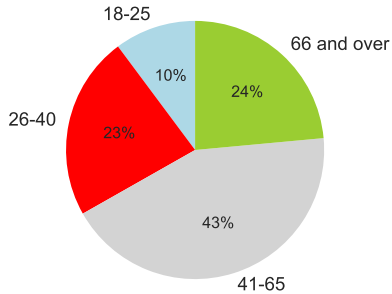
For Race/Ethnicity, what stands out is the extremely low percentage of the republican party consists of non-white voters. Over 93% of registered republicans are white. Since the pie charts in this section are hard to read, below is a table that summarizes party breakdown by race/ethnicity:

party_cd	DEM	REP	UNA	_LIB
race_ethnicity				
Asian	1.0%	0.6%	2.0%	1.4%
Black	46.2%	1.8%	11.4%	8.6%
Hispanic	2.8%	1.2%	3.4%	4.9%
Multiple Race	0.6%	0.2%	0.7%	1.3%
Native American	1.2%	0.4%	0.7%	0.6%
Other Race	1.3%	0.9%	2.0%	2.3%
Undesignated Race	1.8%	1.4%	5.6%	3.0%
White	45.1%	93.5%	74.2%	78.0%

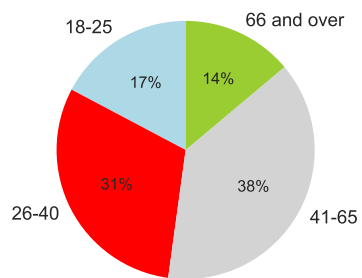
The gender split in the republican party is almost even with women holding a slight edge. The democratic party is almost 60% female. Males dominate the libertarian while there is a slight female edge for unaffiliated voters. The details follow:

Age Distribution for each Party

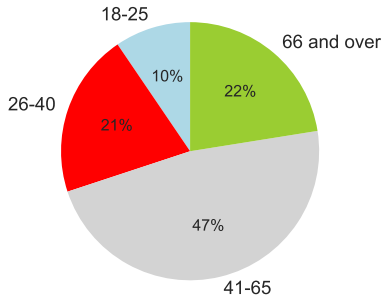
Party: DEM



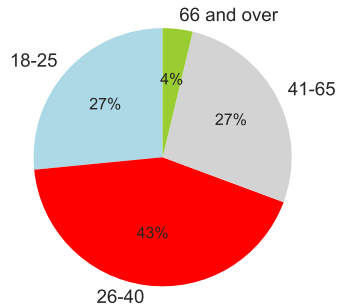
Party: UNA



Party: REP

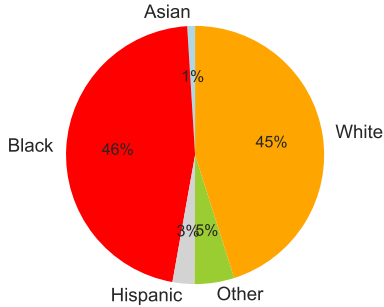


Party: _LIB

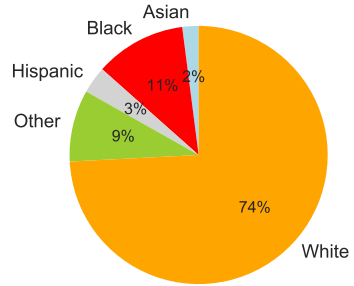


Race/Ethnicity Distribution for each Party

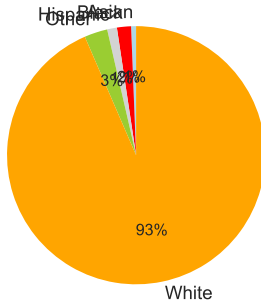
Party: DEM



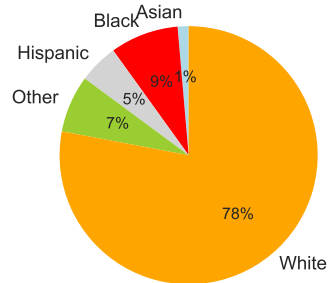
Party: UNA



Party: REP

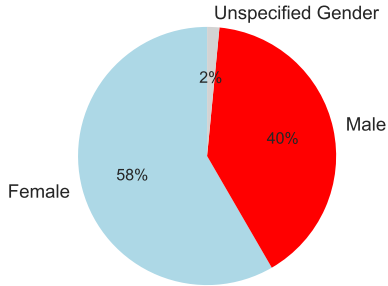


Party: _LIB

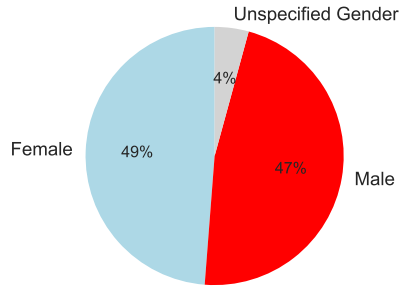


Gender Distribution for each Party

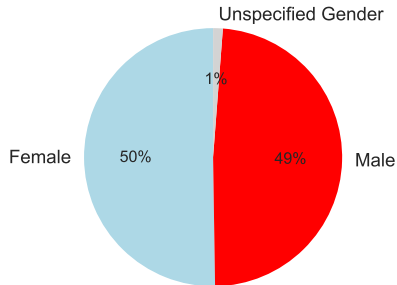
Party: DEM



Party: UNA



Party: REP



Party: _LIB

