

# Voter Analytics



IRIS Fall Meeting  
Toronto  
September 22, 2017

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# Market Environment

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- ▶ Traditional “research” is merging with “analytics”
- ▶ Companies are releasing market research RFPs that ask directly for analytics and modeling
- ▶ Analytics firms are offering survey research services
- ▶ Firms that used to be complementary are now competitors
- ▶ MRA merged with CASRO to become the Insights Association, representing the “market research and analytics industry”

# Analytics at EMC

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- ▶ Focused on voter analysis, targeting individual voters
- ▶ First electoral model built and delivered to a campaign in 2013
- ▶ Grew in 2016, responding to demand and competition
- ▶ Two primary product areas
  - Modeling and Scoring
    - Data mining
    - Event modeling
    - Survey-assisted modeling
  - Data visualization
    - Mapping
    - Dynamic reporting/web applications
- ▶ Additional products in development and looking for opportunities to introduce to corporate clients

# Voter Analytics

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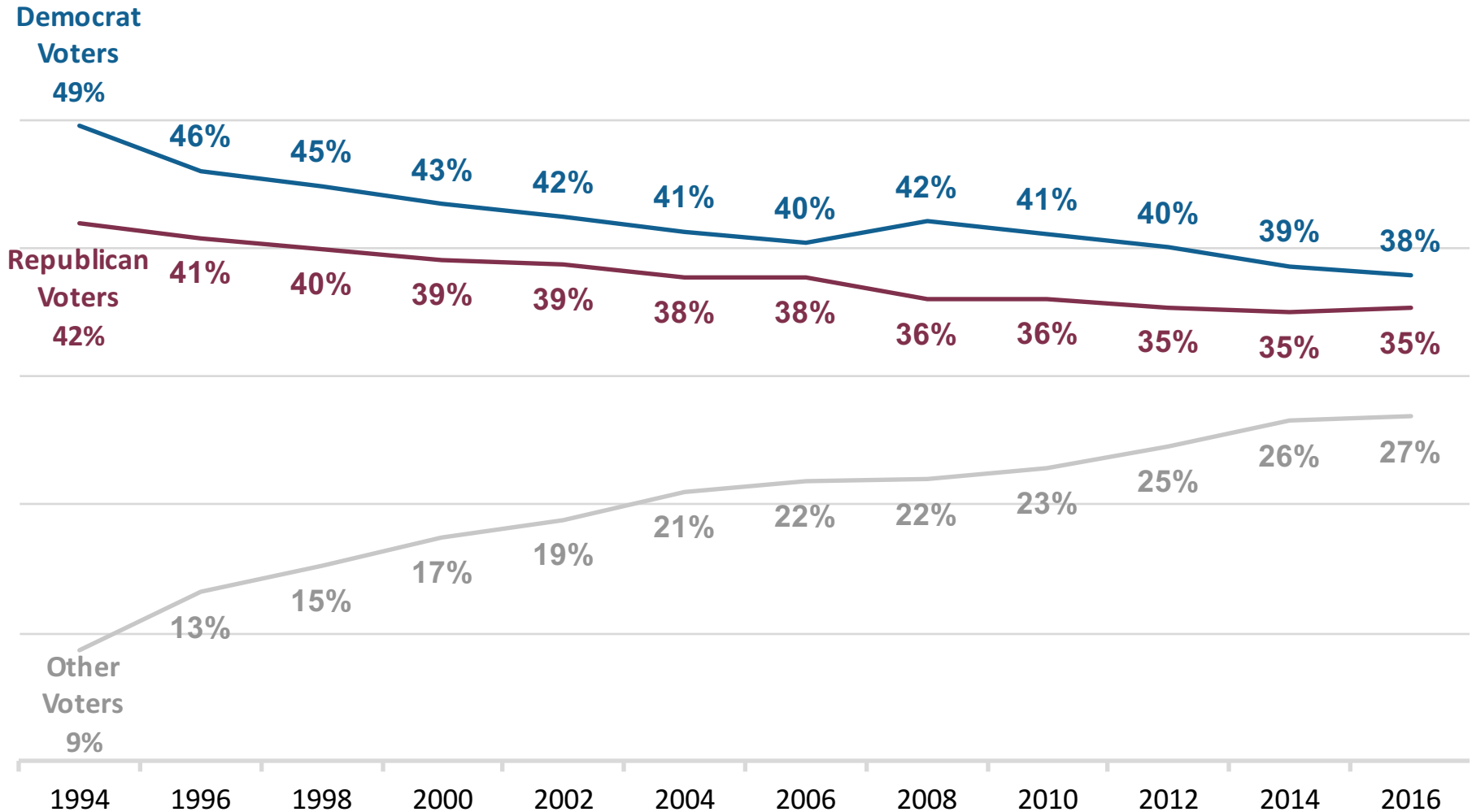
- ▶ Data preparation
  - Requires the entire database of voters for an electoral jurisdiction
  - Must be “enhanced” with detailed demographic and socioeconomic information
  - Additional consumer information, behaviors and attitudinal models are also desired
- ▶ Creating predictive scores
  - Build an individual level model with machine-learning algorithms
  - Predict a future event, i.e., turnout
  - Incorporate survey data to project survey responses to the entire database of voters
- ▶ Develop segmentations with data mining and clustering techniques using the same data
- ▶ Primary deliverables are scores and classifications uploaded to a voter database and consultation on use



# Florida Case Study

# Florida Historical Voter Registration by Party

*The number of Other party registrants has risen considerably in the last decade.*







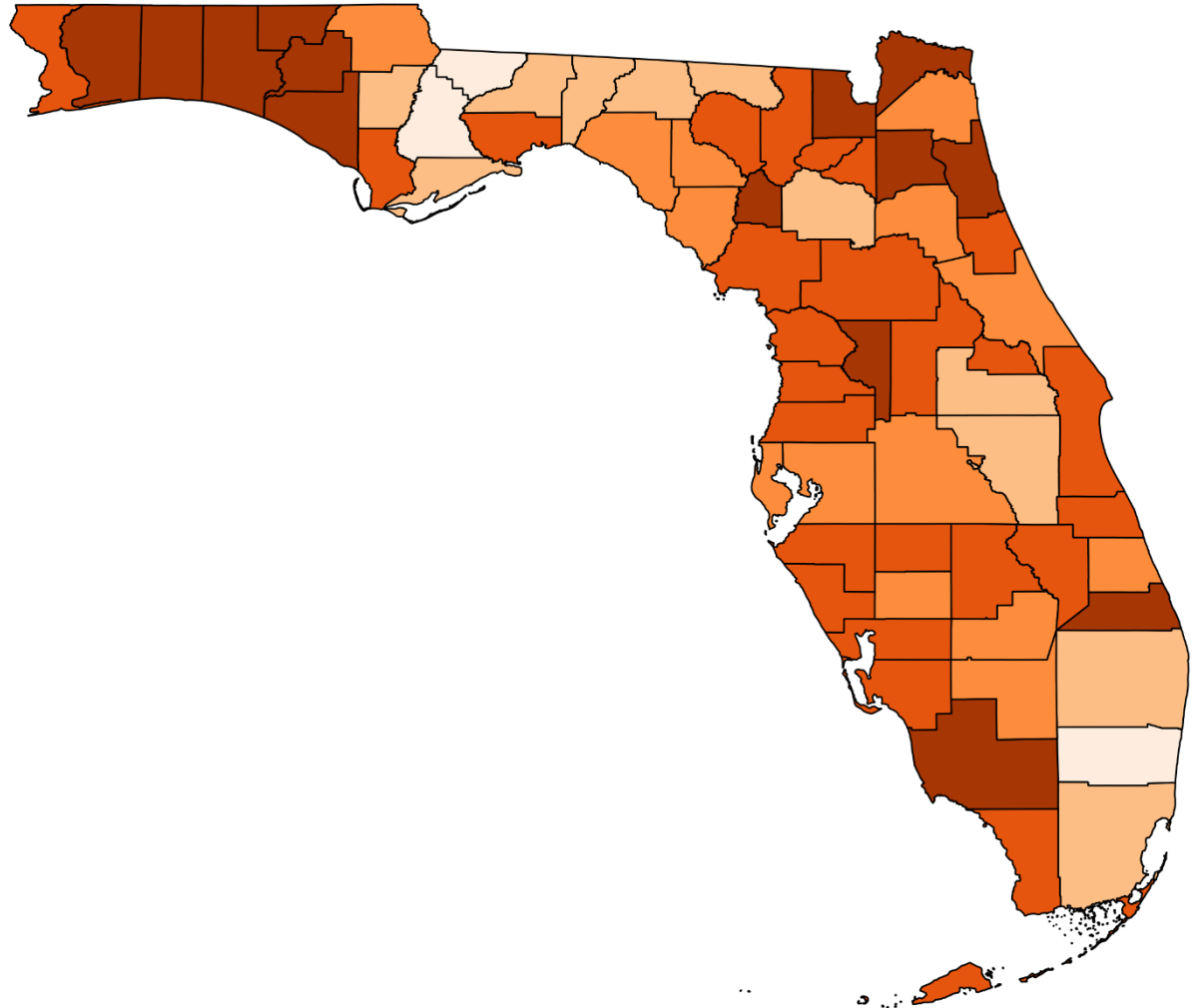
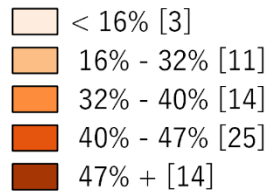
# Republican Voters by County

*Republican voters are concentrated in counties throughout, but especially in the western Panhandle region.*

## Registered Republican voters:

4,265,763 (36.1%)

## Share in County



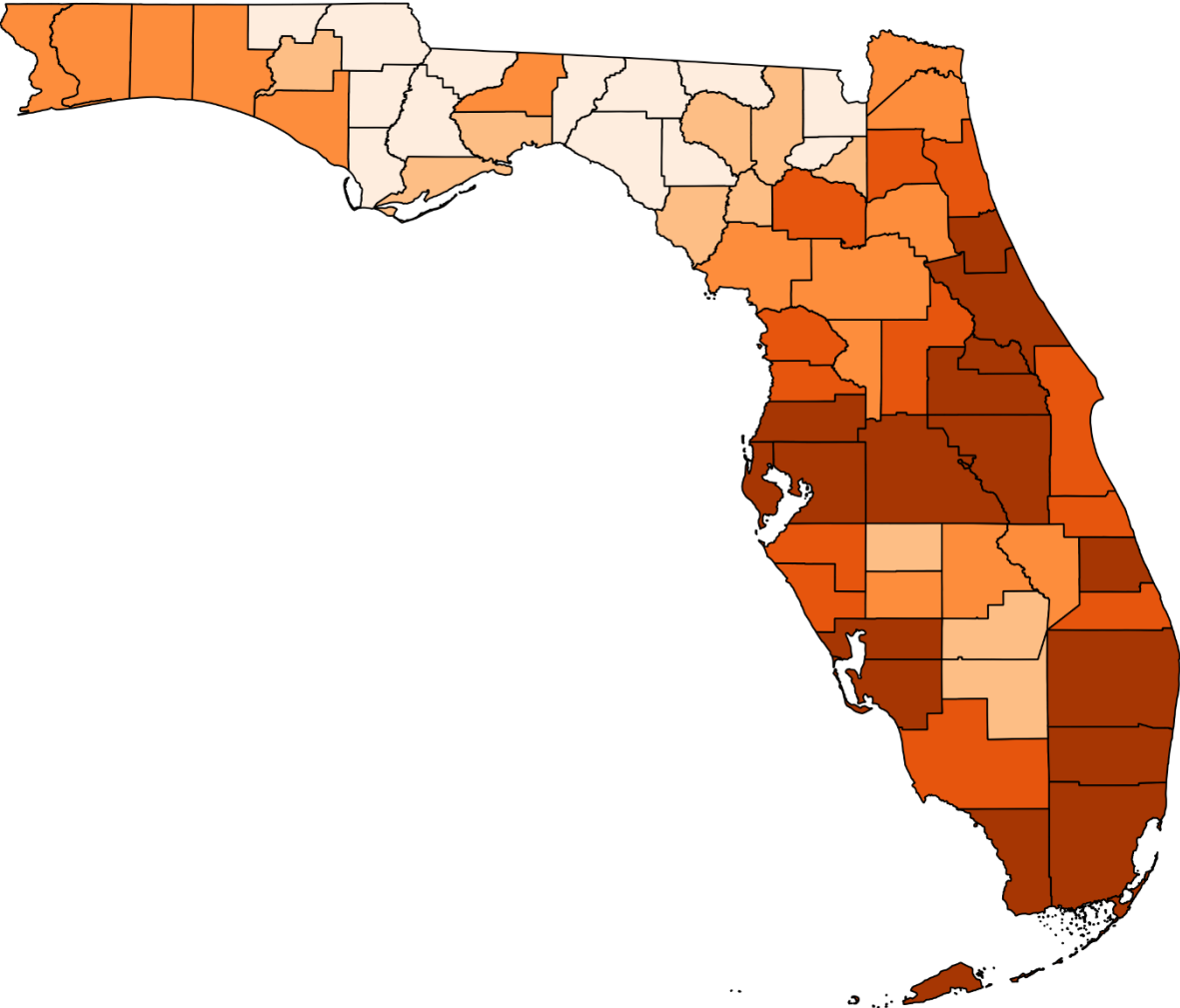
# Other Party/Non-Affiliated Voters by County

*Independent and non-affiliated voters are found throughout the Southern Coastal and Central regions of the state.*

**Registered Other Party/  
Non-Affiliated voters:**  
3,188,757 (27.0%)

**Share in County**

- 7% - 12% [13]
- 12% - 18% [11]
- 18% - 23% [15]
- 23% - 27% [12]
- 27% - 33% [16]



# Registered Democrat – Republican Voters Differential

*Democrats are most concentrated in the population centers across the state, while Republicans are found most densely in the rural counties of the state.*

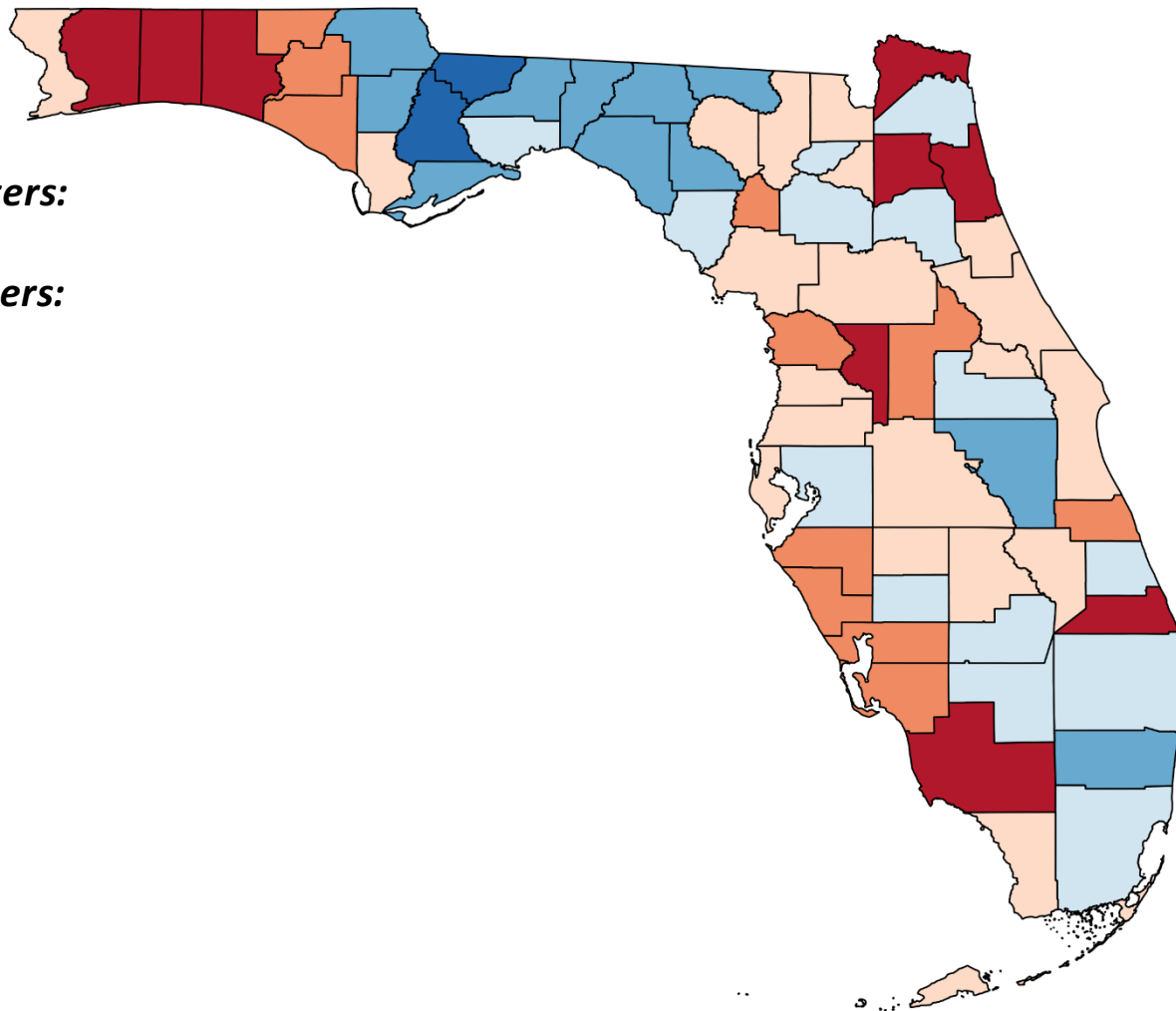
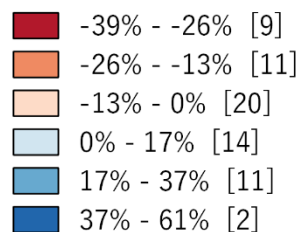
**Registered Democratic voters:**

4,366,424 (36.9%)

**Registered Republican voters:**

4,265,763 (36.1%)

## Differential



# Florida Senate Historical Party Performance

*Statewide performance of candidates vary greatly over time.*

**Republican Candidate**

71%

63%

51%

49%

60%

55%

52%

38%

46%

48%

38%

49%

42%

44%

**Democratic Candidate**

30%

31%

20%

**Other Candidate**

0%

3%

2%

2%

3%

4%

1994  
General

1998  
General

2000  
General

2004  
General

2006  
General

2010  
General

2012  
General

2016  
General

**66%**  
turnout

**49%**  
turnout

**70%**  
turnout

**74%**  
turnout

**47%**  
turnout

**49%**  
turnout

**72%**  
turnout

**75%**  
turnout

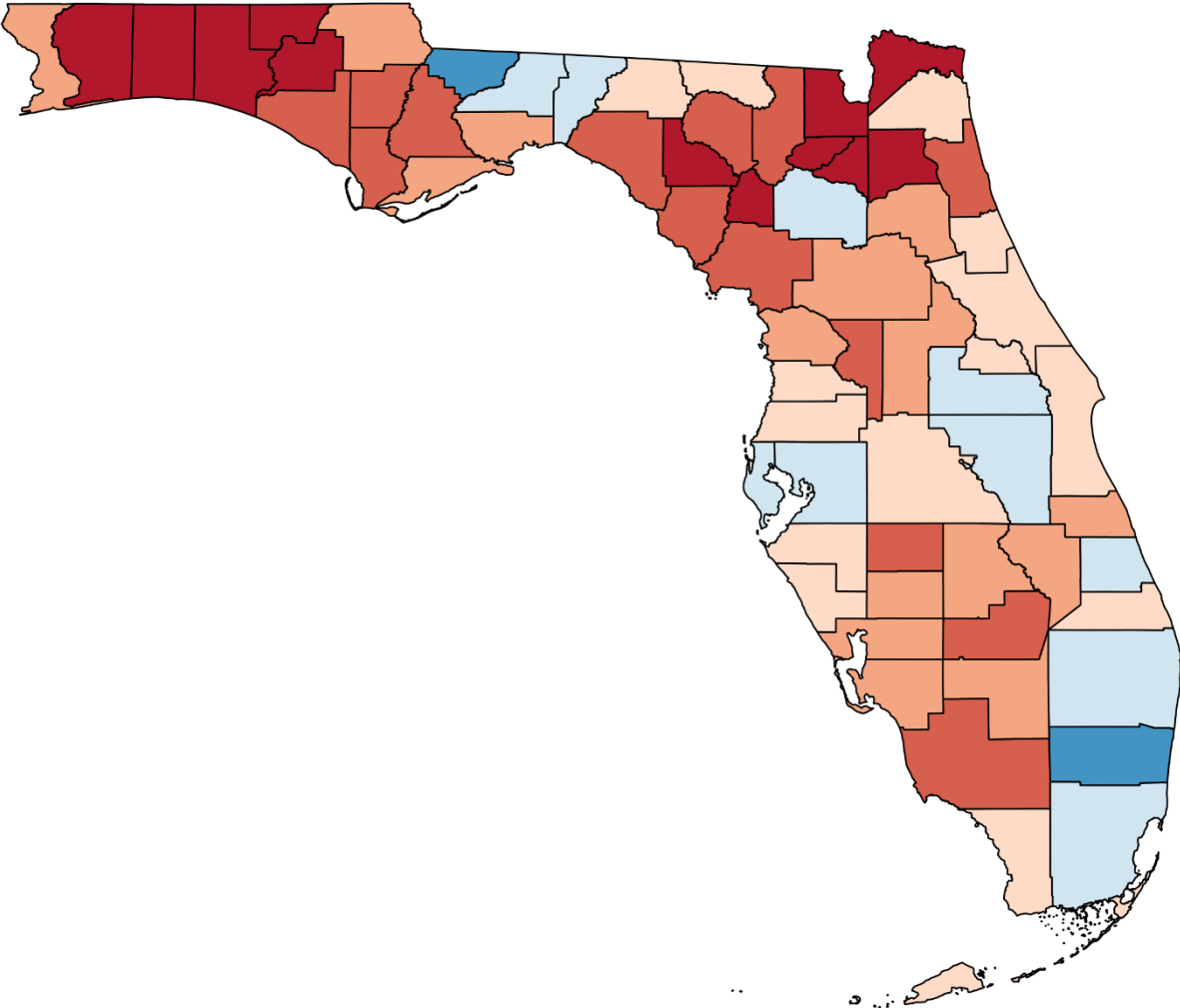
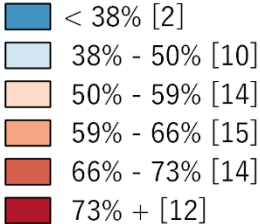


# 2016 Rubio Senate Vote

*Murphy only outperformed Rubio in the major urban centers of the state, while Rubio took rural and suburban counties.*

**Murphy: 4,122,088 (44.3%)**  
**Rubio: 4,835,191 (52.0%)**

## November 2016

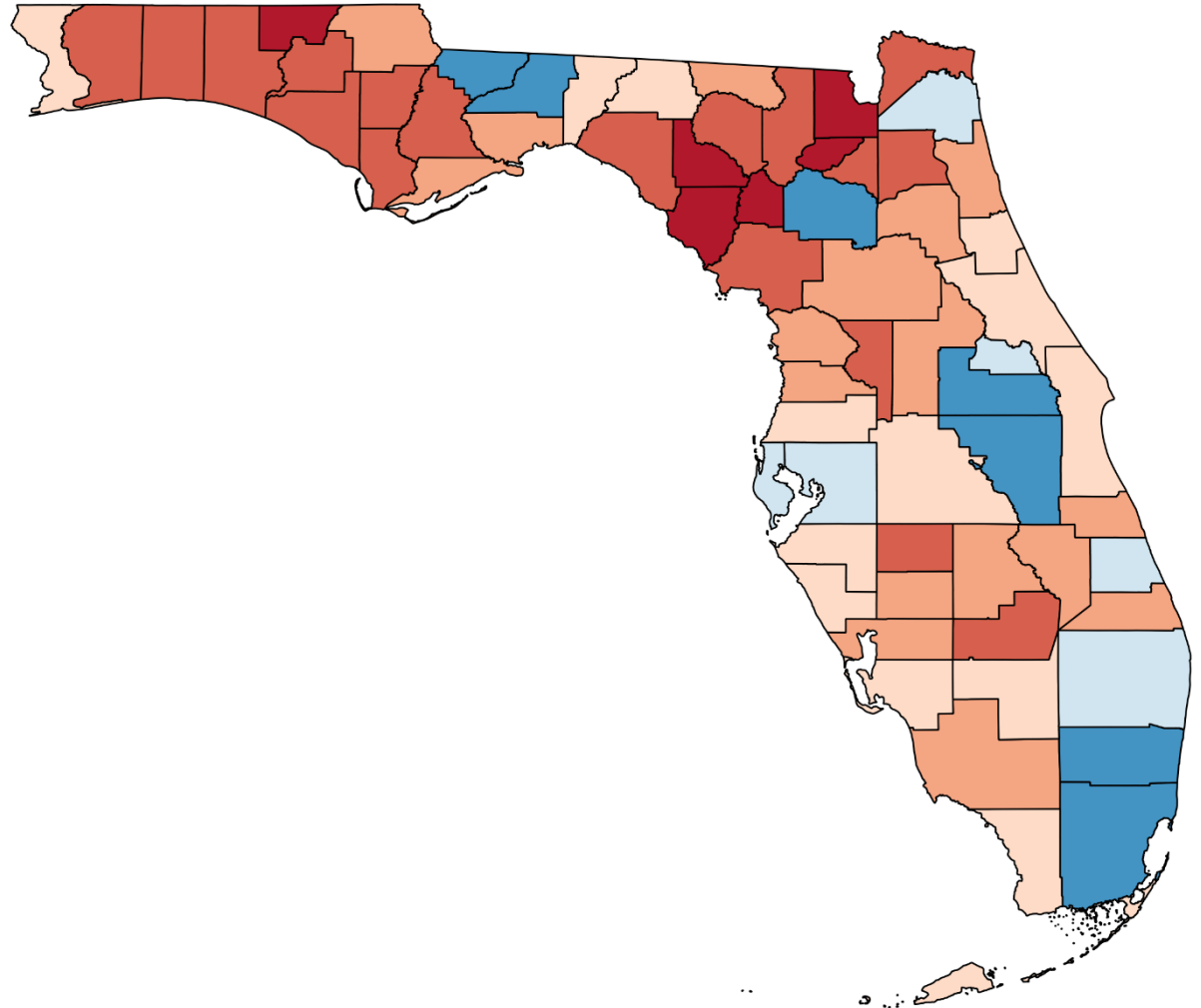
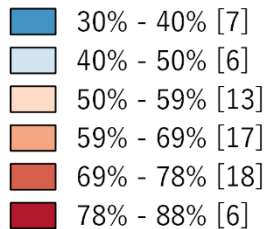


# 2016 Trump Presidential Vote

*Clinton performed better against Trump than 2016's Democratic candidate for Senate, Murphy, with high proportions of the vote in urban counties and a better performance in suburban counties.*

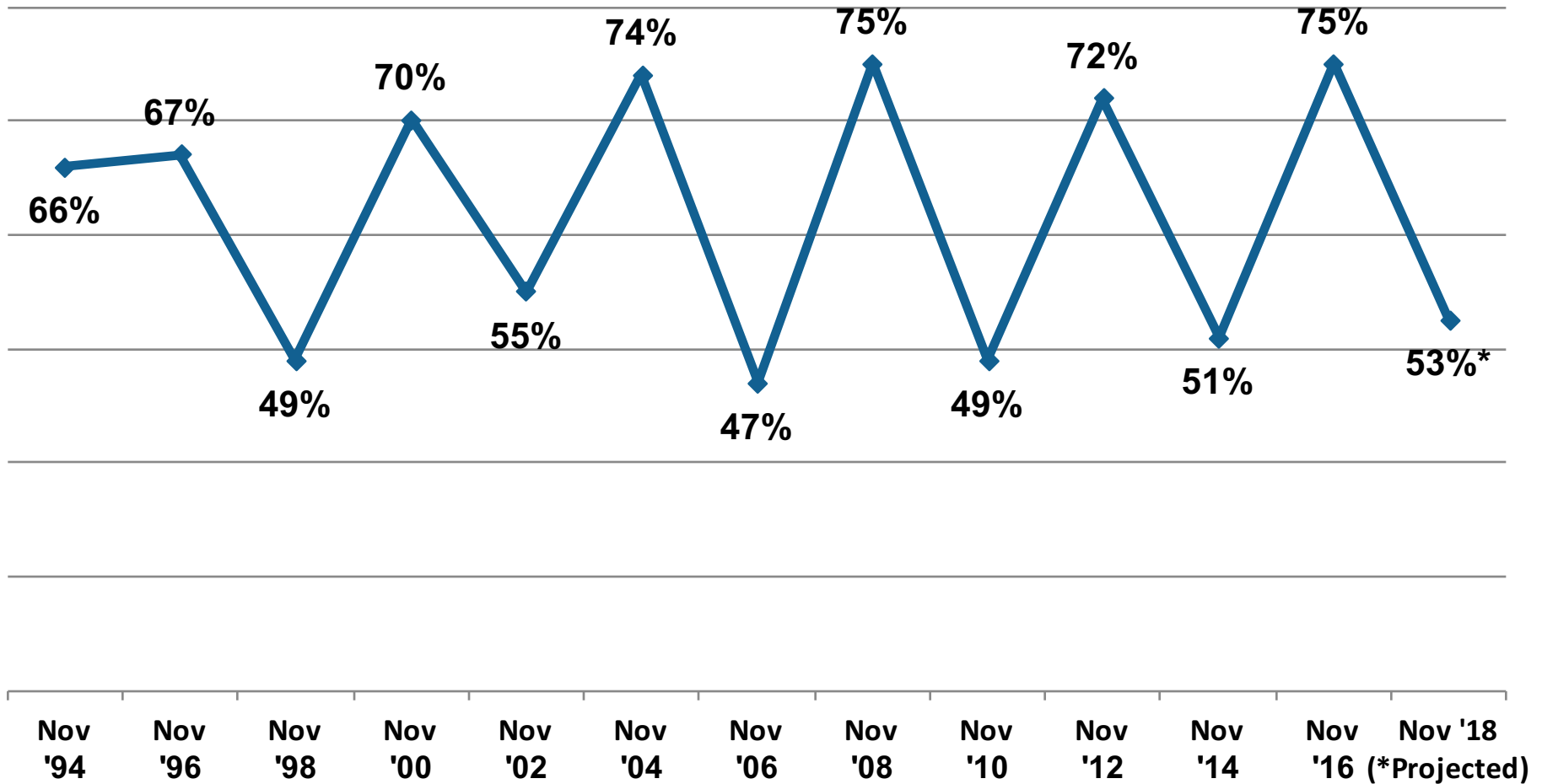
**Clinton: 4,504,975 (47.8%)**  
**Trump: 4,617,886 (49.0%)**

## November 2016



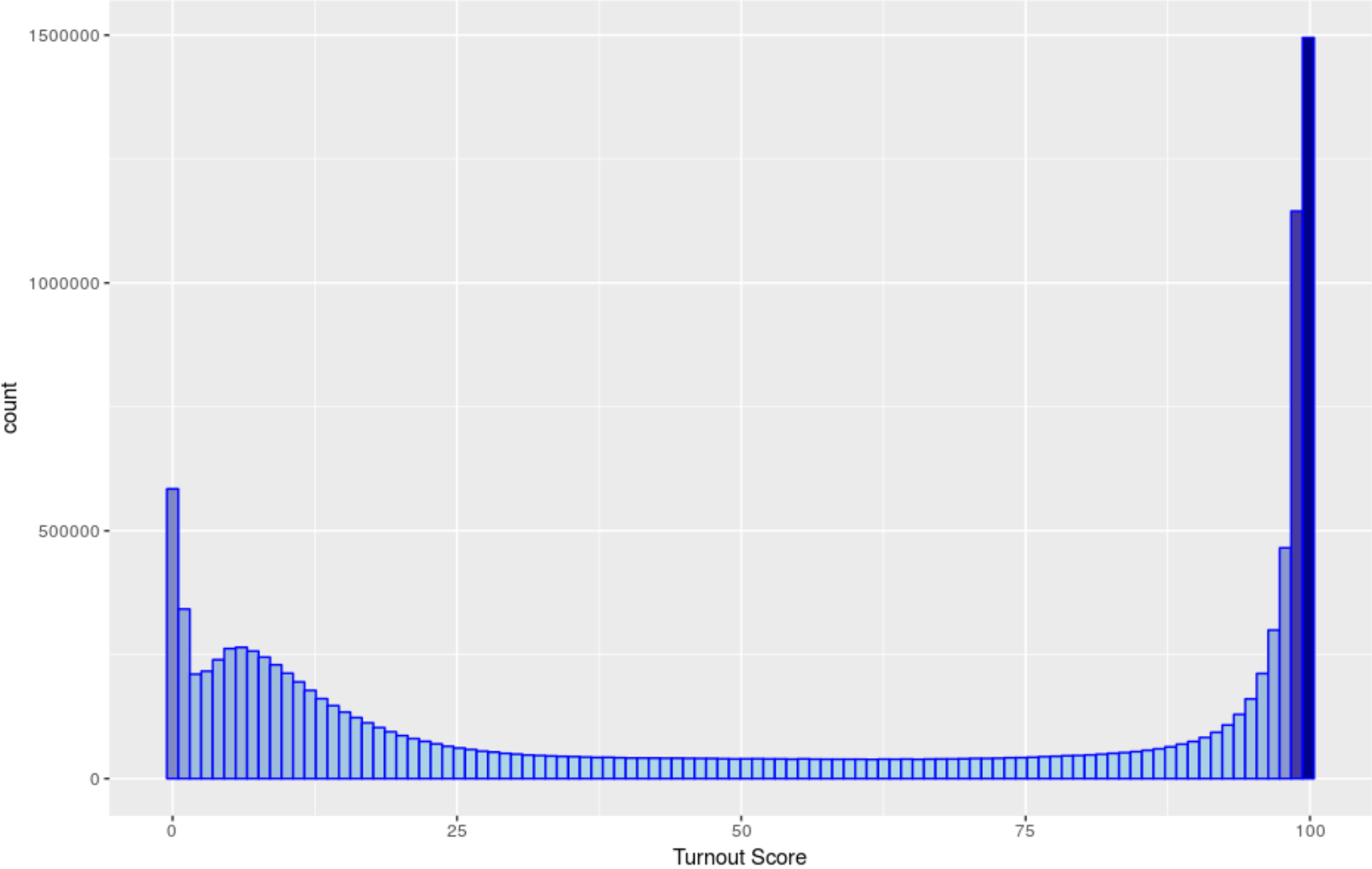
# Florida Turnout Over Time

*Projected turnout for 2018 is slightly higher than 2014 turnout.*



# Florida Likely 2018 General Election Turnout

*The turnout model projects that 53% of all Florida voters will vote in the 2018 general. This histogram shows the number of registered Florida voters with each score, from 0 to 100.*





# 2016 Voter Turnout

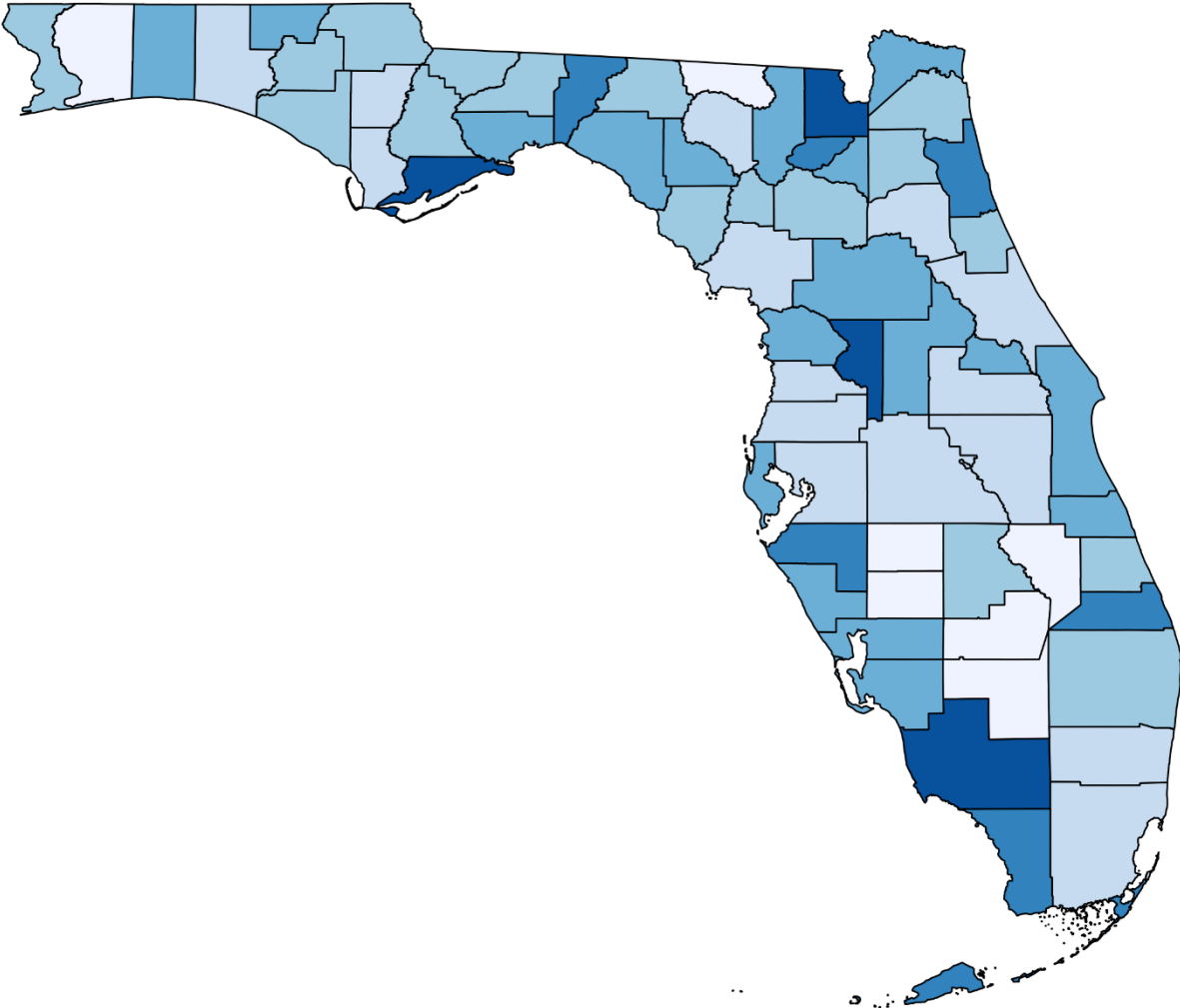
*The share of voters turning out was highest in Collier, Baker and Franklin counties.*

**2016 Voter turnout:**  
9,580,489 voters

### November 2016

- < 69% [7]
- 69% - 73% [15]
- 73% - 75% [17]
- 75% - 78% [18]
- 78% - 82% [6]
- 82% + [4]

*Number of Voters [Number of Counties]*

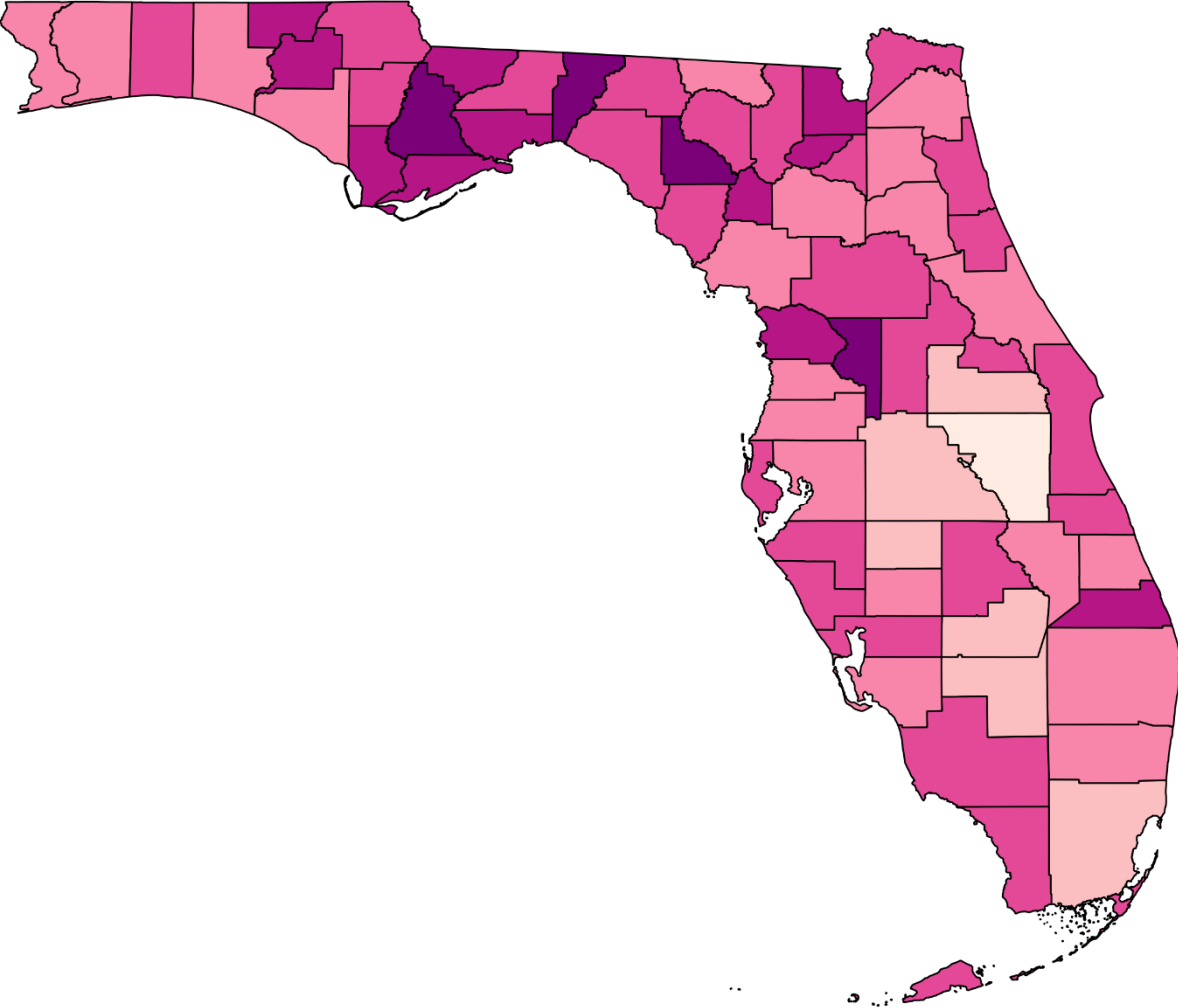
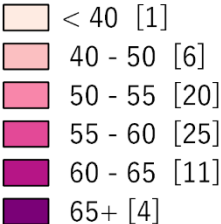


# 2018 General Election Turnout Score by County

*Sumter, Liberty, and Jefferson counties have the highest turnout scores for 2018.*

**All registered voters:**  
11,820,944

**Projected Nov 2018**



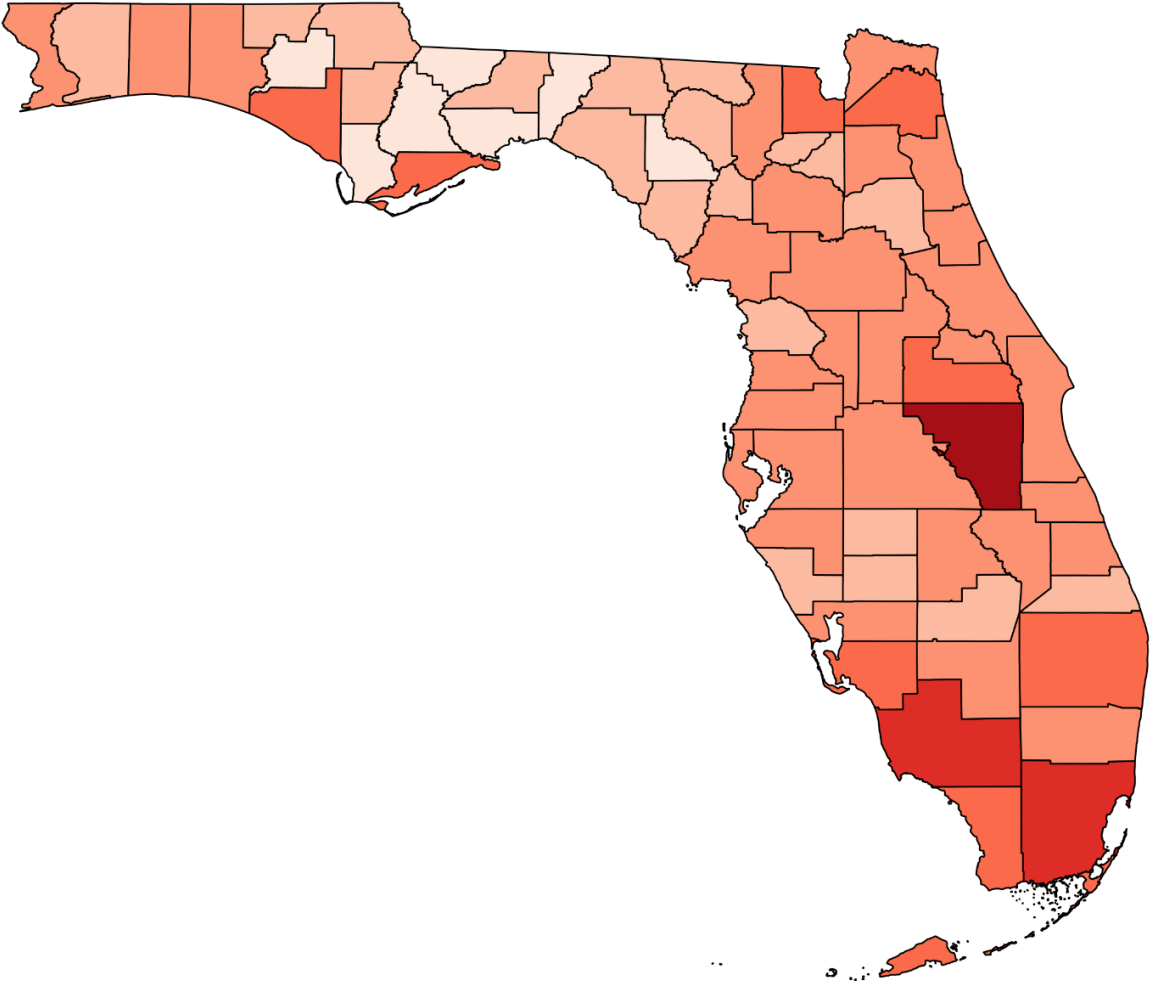
# 2018 Turnout Score – 2016 Turnout Differential by County

*Osceola County has the greatest negative turnout differential, while projected 2018 turnout in the Tallahassee area is closest to that recorded in 2016.*

**All registered voters:**  
11,820,944

**Differential**

- < -31% [1]
- 31% - -26% [2]
- 26% - -22% [8]
- 22% - -18% [29]
- 18% - -13% [20]
- 13% + [7]



# Profiling Voters

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- ▶ All registered voters in the state were segmented with a clustering algorithm to identify natural groupings in the data.
- ▶ Eight groups were discovered using the following attitudinal information:
  - Political ideology
  - Religious preference
  - Campaign finance attitudes
  - Climate change attitudes
  - College affordability attitudes
  - Government surveillance and privacy attitudes
  - Gun control attitudes
  - Minimum wage attitudes
  - Paid leave attitudes
  - Path to citizenship for immigrants attitudes
  - Women's right to choose attitudes
  - Progressive taxation attitudes

# Voter Profile Grid

The following table illustrates how each segment compares along three significant dimensions.

	Turnout	Party Loyalty	Agreement with Progressive Issues
Establishment Liberals	High	High	High
Liberal Catholics	Low	Medium	High
Working-Class Progressives	Medium	High	High
Great Society Retirees	High	Low	Medium
Unaligned Independents	Medium	Low	Medium
Temperate Conservatives	Medium	Medium	Medium
Conservative Catholics	Medium	Medium	Low
Conservative Stalwarts	High	High	Low

**Color Scale**

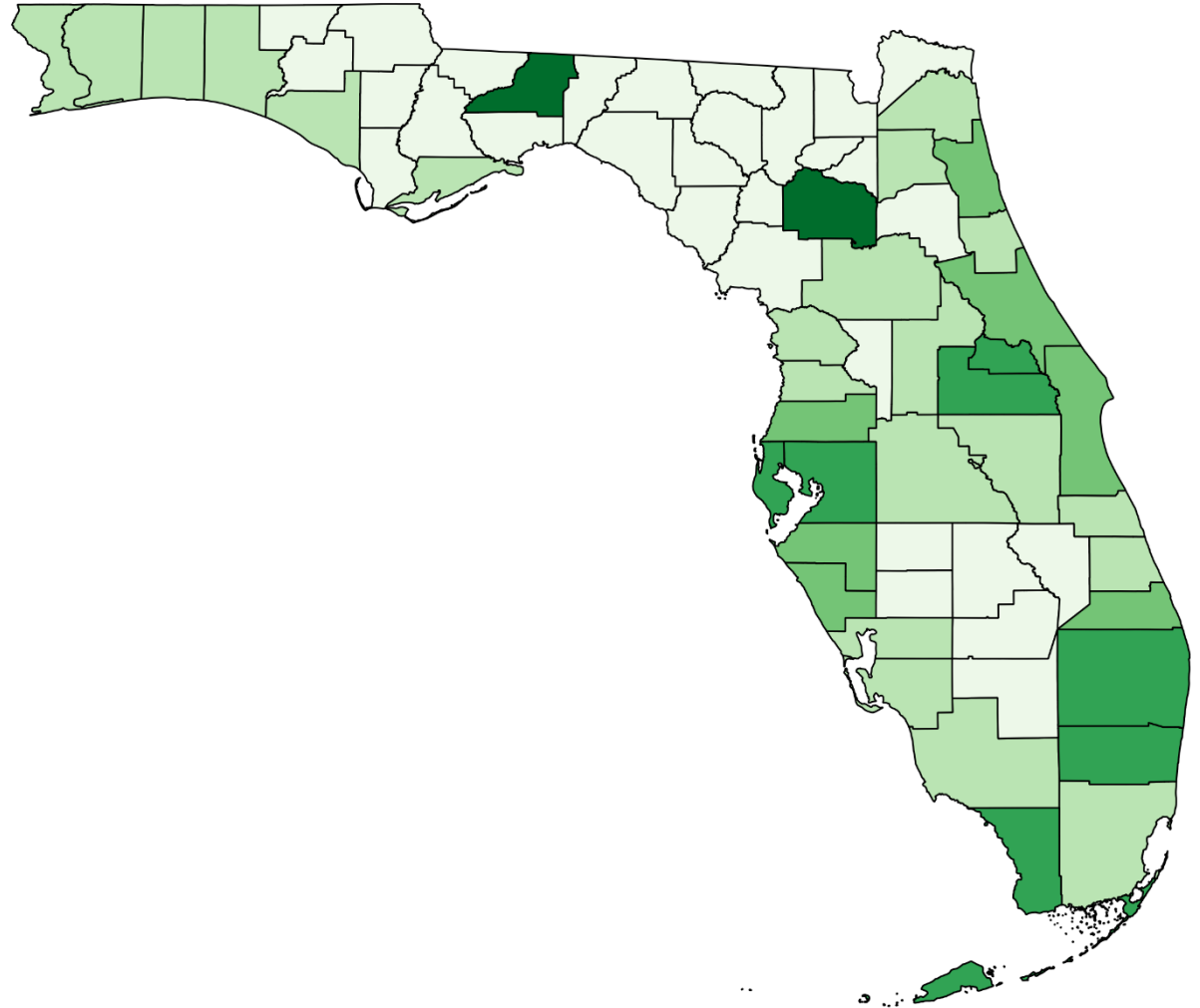
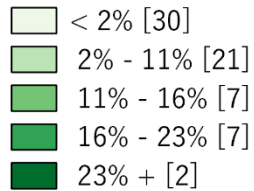
- High
- Medium
- Low

# Establishment Liberals by County

*Establishment Liberals are mostly concentrated in the Tallahassee and Gainesville areas.*

**Registered Establishment  
Liberal voters:**  
1,600,567 (13.5%)

## Share in County



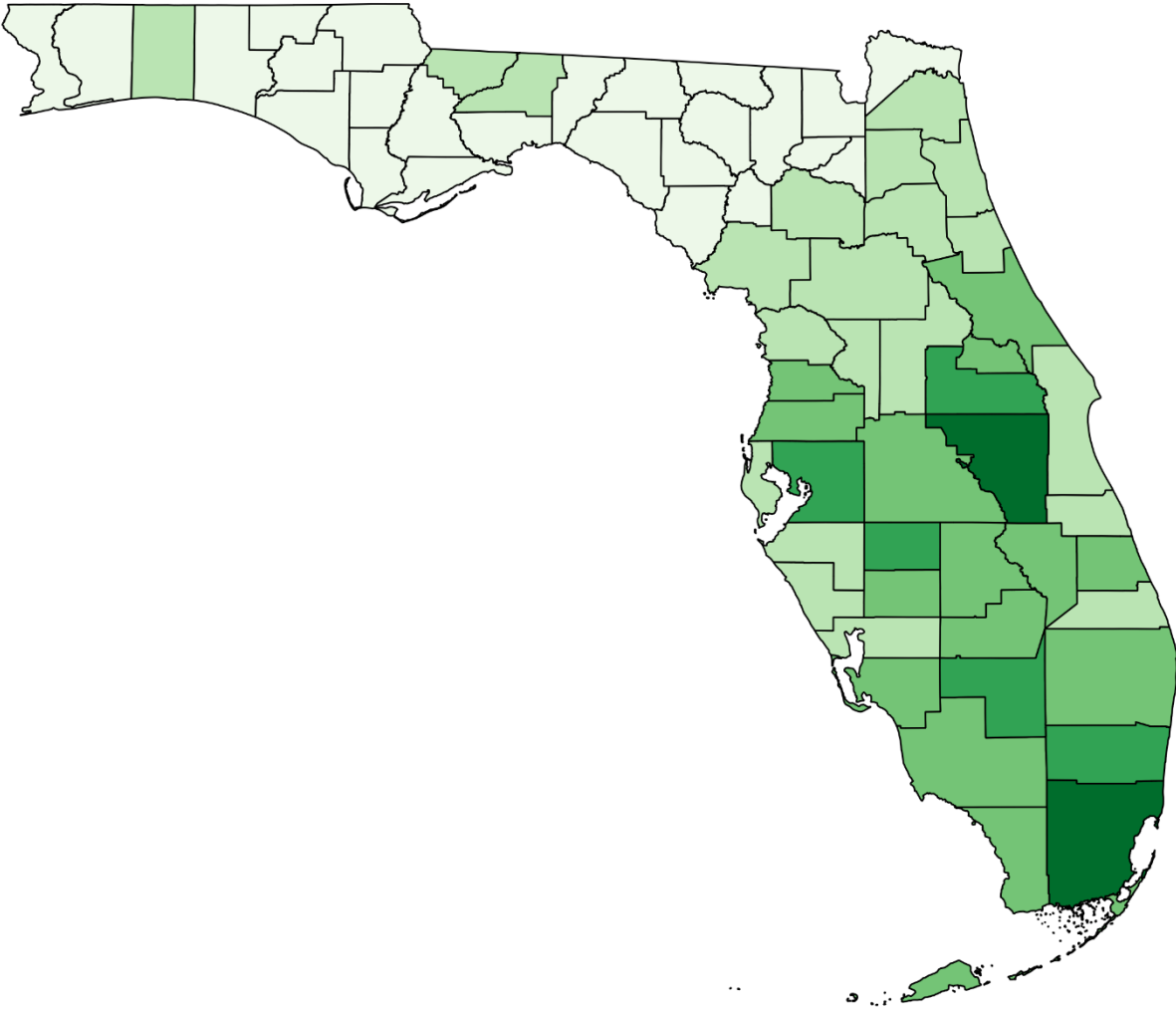
# Liberal Catholics by County

*Liberal Catholics are mostly concentrated in the Miami-Dade area.*

**Registered Liberal Catholic voters:**  
**1,356,280 (11.5%)**

### Share in County

- < 2% [25]
- 2% - 6% [21]
- 6% - 11% [14]
- 11% - 19% [5]
- 19% + [2]



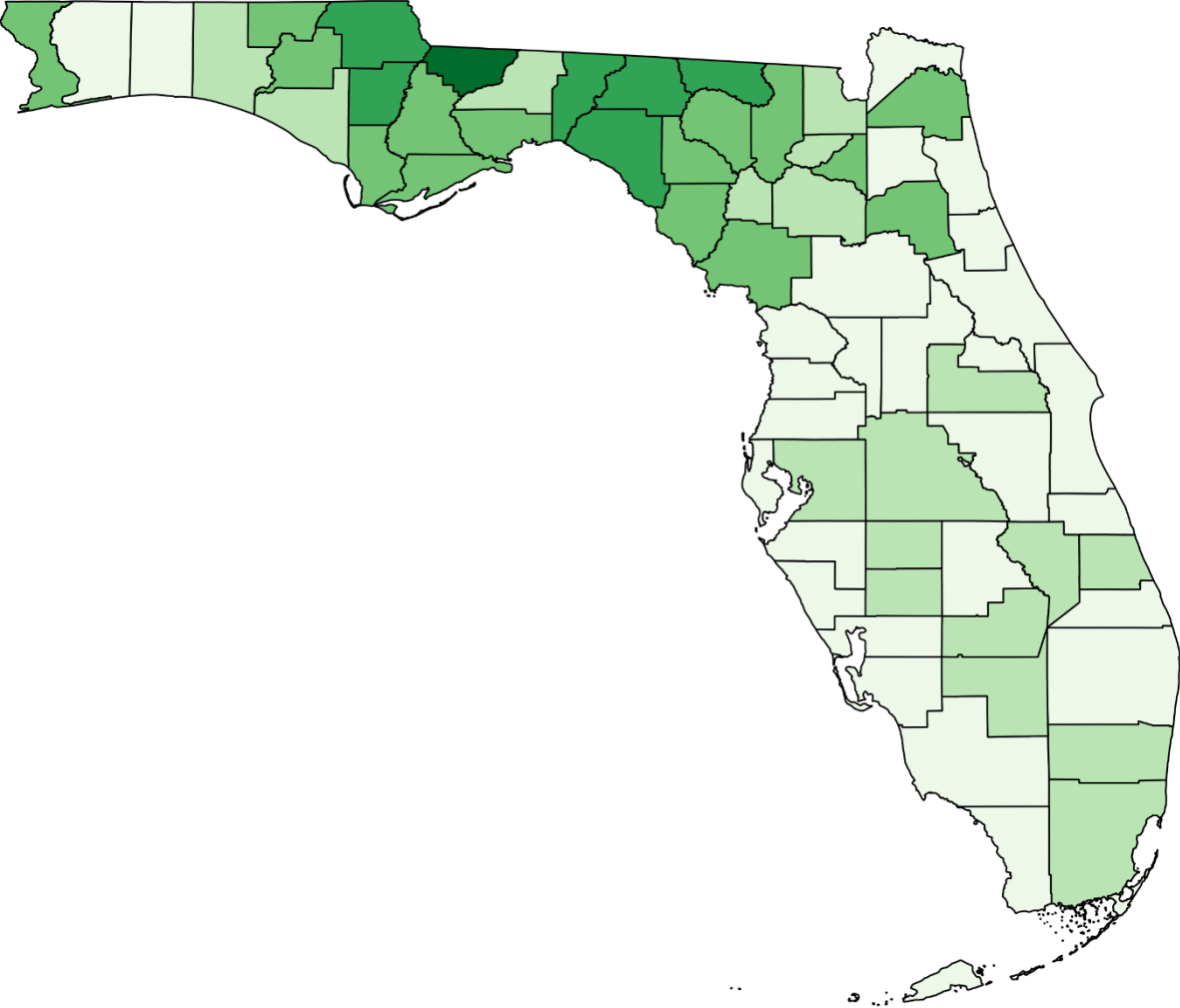
# Working-Class Progressives by County

*Working-Class Progressives are mostly found in the counties surrounding the Tallahassee area.*

**Registered Working-Class  
Progressive voters:  
1,392,877 (11.8%)**

### Share in County

- < 11% [27]
- 11% - 22% [18]
- 22% - 35% [15]
- 35% - 53% [6]
- 53% + [1]





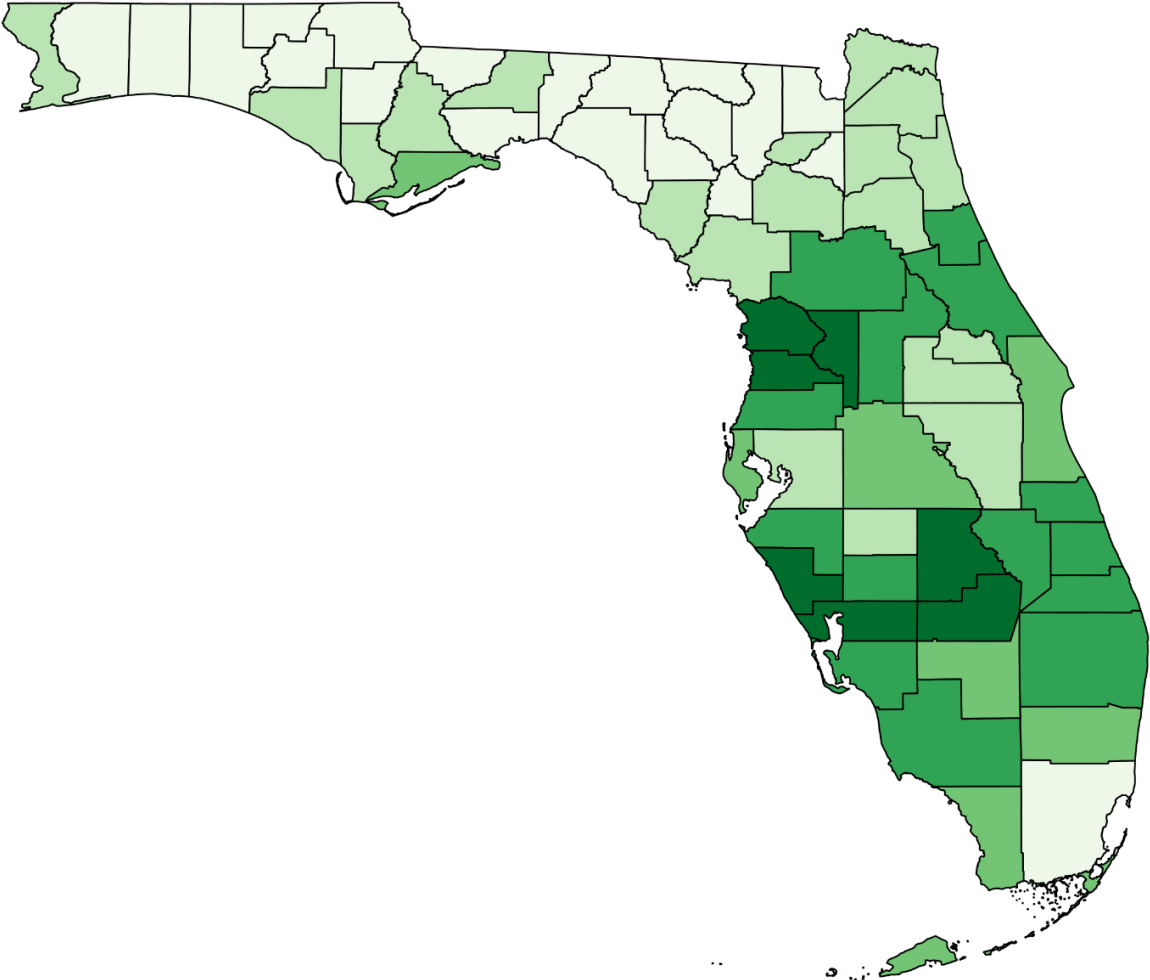
# Great Society Retirees by County

*Great Society Retirees are concentrated in two sets of counties: Citrus, Hernando, and Sumter; and Sarasota, Charlotte, Glades and Highlands counties.*

**Registered Great Society  
Retiree voters:  
1,027,708 (8.7%)**

**Share in County**

- < 3% [20]
- 3% - 5% [19]
- 5% - 10% [7]
- 10% - 15% [14]
- 15% + [7]



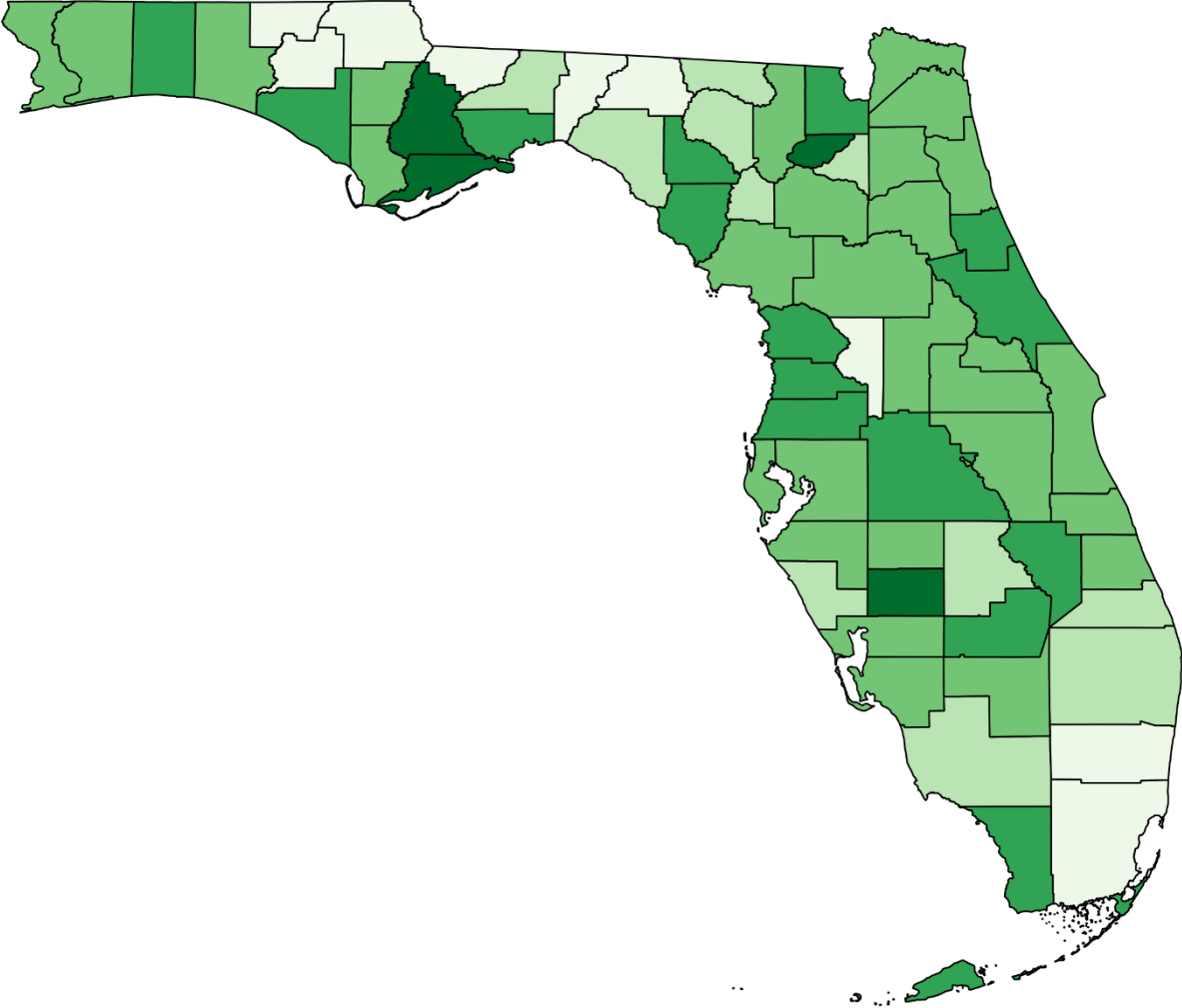
# Unaligned Independents by County

*Unaligned Independents are concentrated in Franklin and Liberty counties.*

**Registered Unaligned Independent voters:  
2,342,966 (19.8%)**

### Share in County

- < 16% [9]
- 16% - 20% [11]
- 20% - 23% [28]
- 23% - 29% [15]
- 29% + [4]

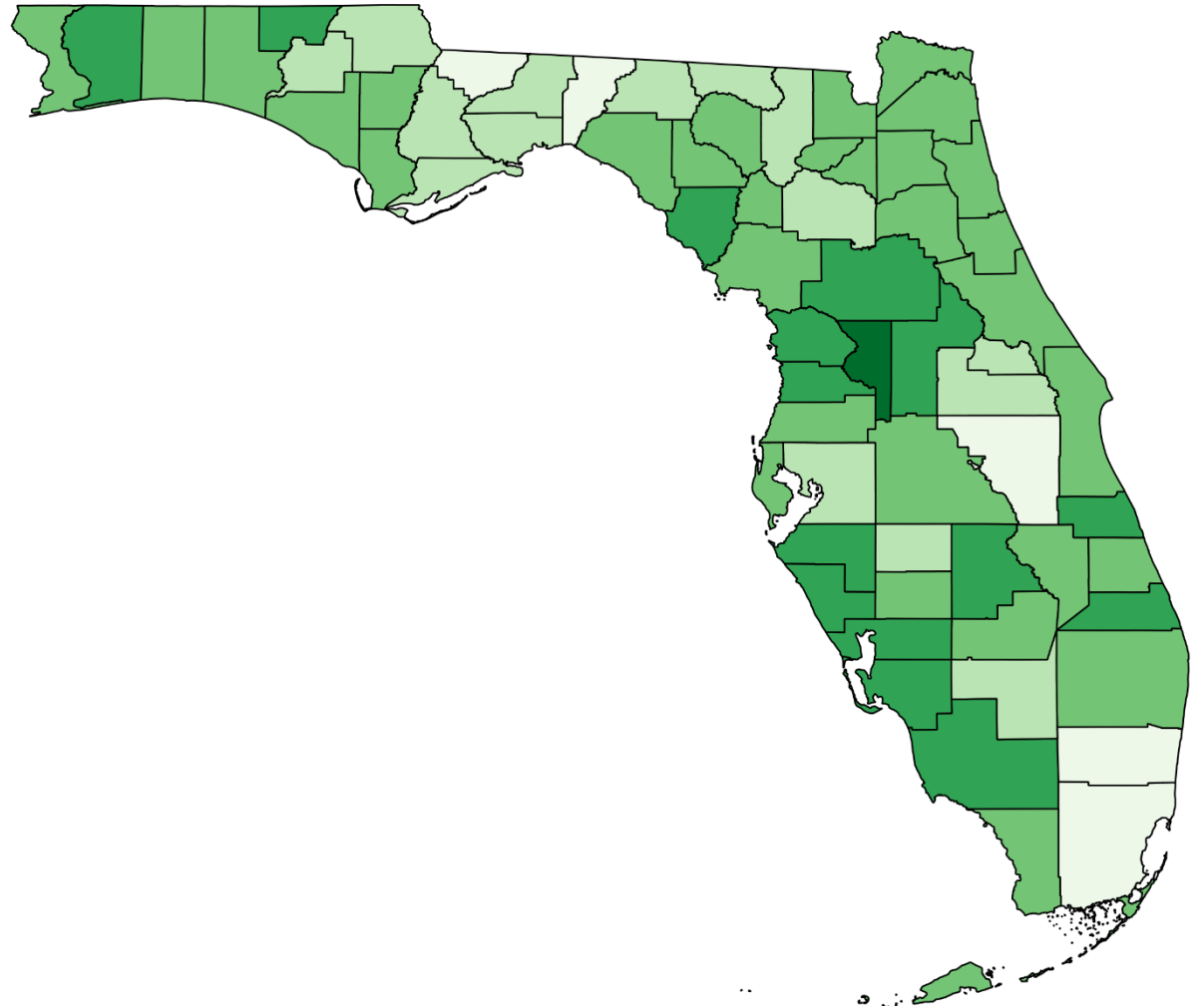
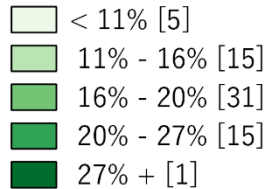


# Temperate Conservatives by County

*Temperate Conservatives are concentrated most highly in Sumter County.*

**Registered Temperate  
Conservative voters:  
1,865,190 (15.8%)**

## Share in County



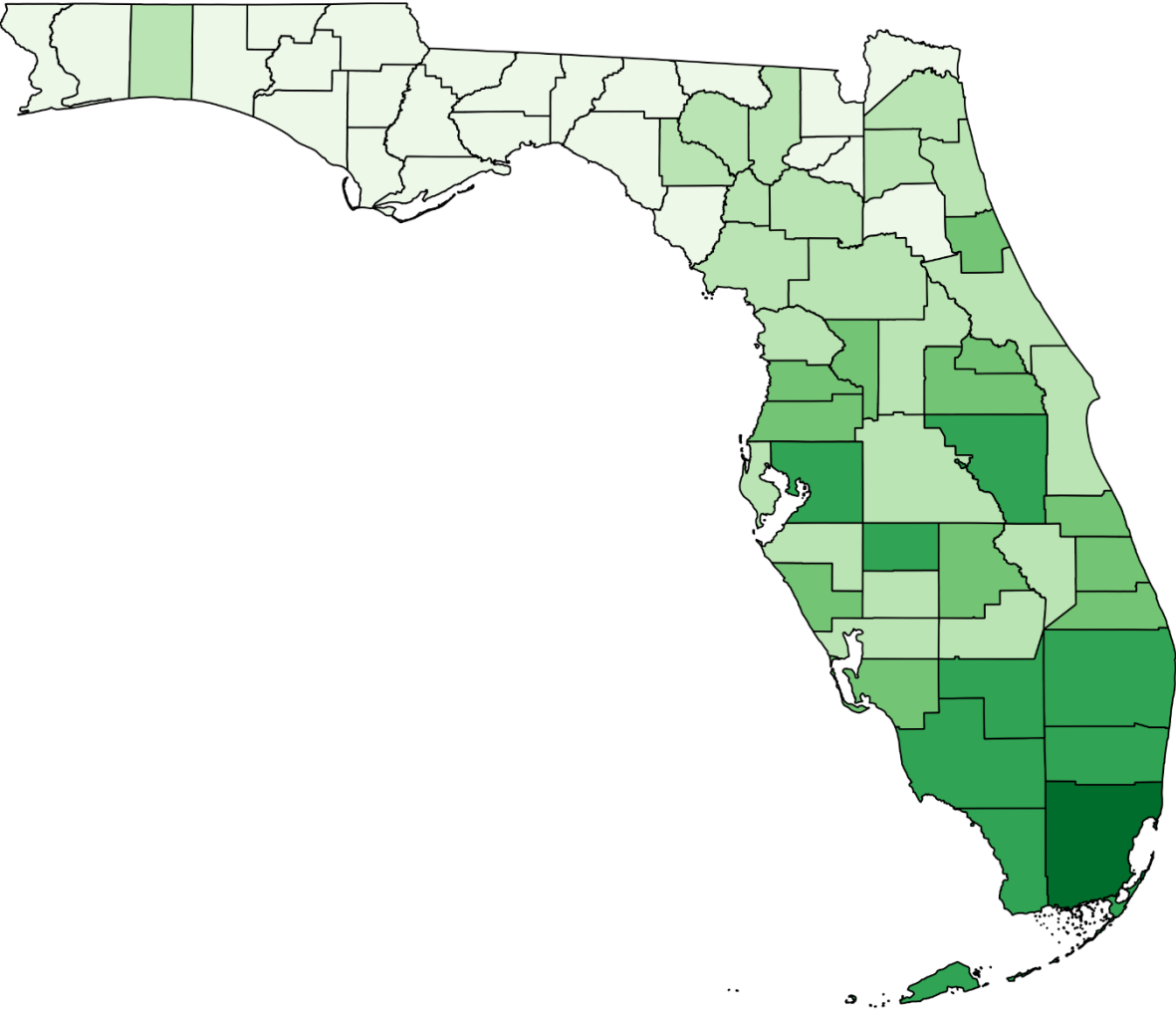
# Conservative Catholics by County

*Miami-Dade County contains the highest concentration of Conservative Catholic voters.*

**Registered Conservative Catholic voters:**  
626,432 (5.3%)

### Share in County

- < 1% [24]
- 1% - 2% [22]
- 2% - 4% [12]
- 4% - 8% [8]
- 8% + [1]



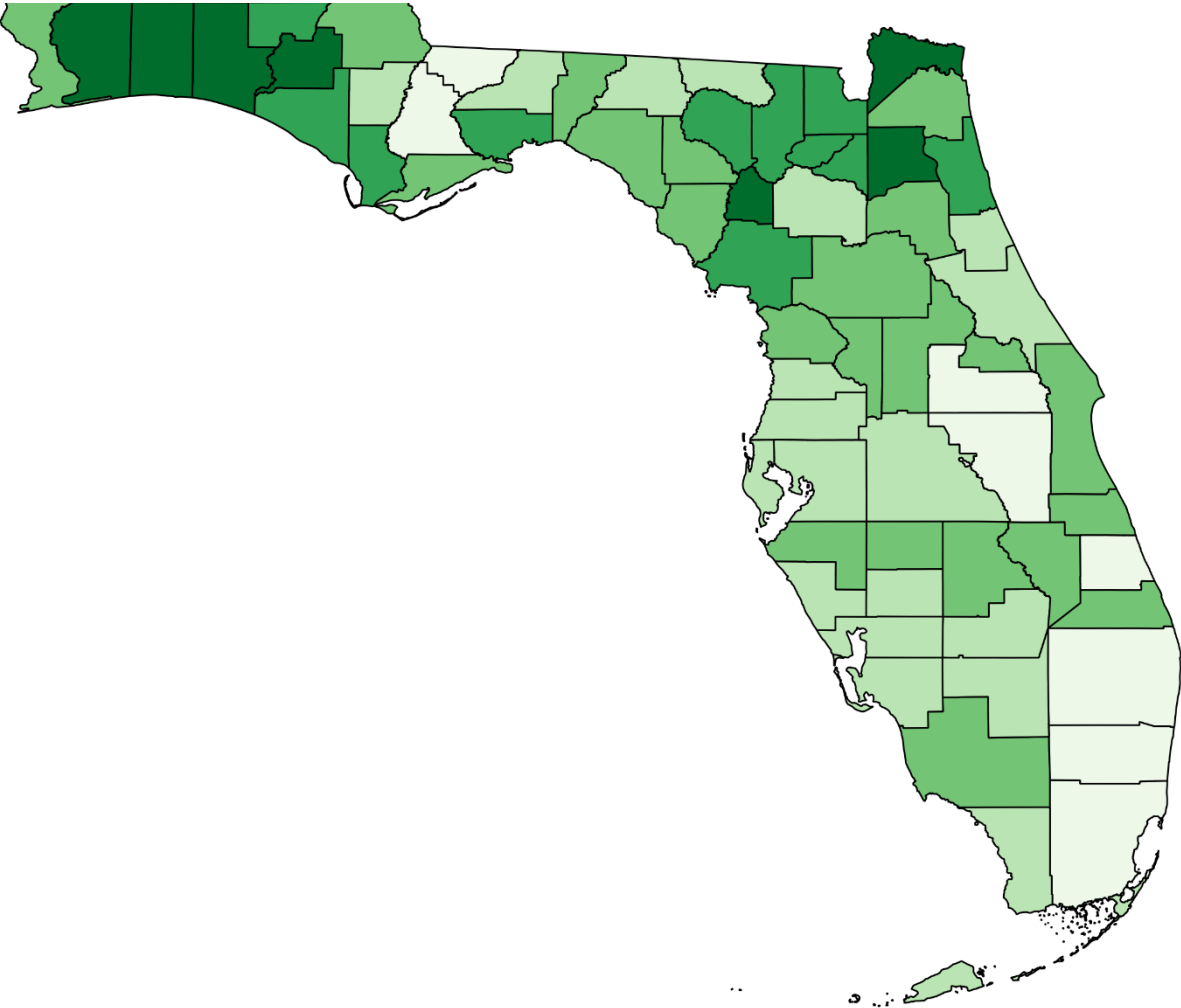
# Conservative Stalwarts by County

*The Panhandle region contains the highest concentration of Conservative Stalwart voters in the state.*

**Registered Conservative  
Stalwart voters:  
1,608,924 (13.6%)**

### Share in County

- < 10% [8]
- 10% - 18% [19]
- 18% - 25% [22]
- 25% - 34% [11]
- 34% + [7]



# Discussion

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- ▶ The role of the research industry in analytics
  - Advice, interpretation and consulting
  - Development of custom tools and mass market products

