



BAYESIAN INFERENCE AND THE BLUE WAVE

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1. BAYESIAN INFERENCE

The Prediction Process

Bayesian Inference Includes Three Components

Prior

Democratic vote share
in the 2014 or 2016
Senate elections

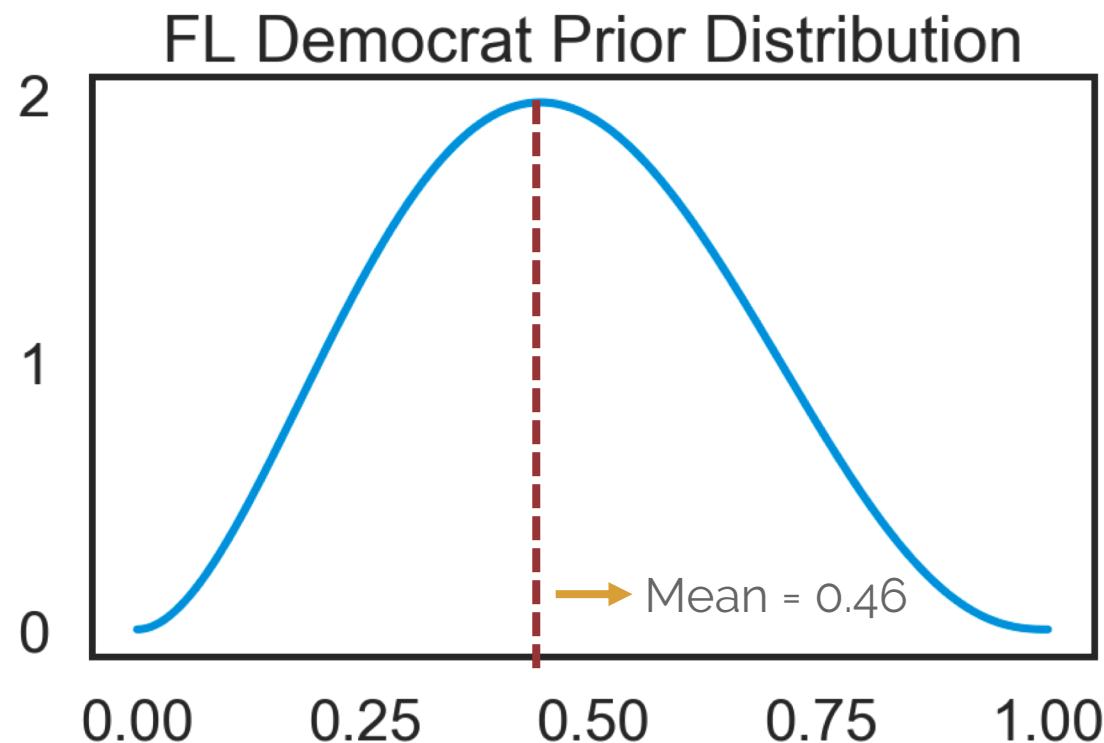
Likelihood

Polling data on the
current Senate
candidates from
FiveThirtyEight

Posterior

Distribution of all
possible vote shares
2018 Democratic
Senate candidates will
receive in the midterm,
given prior beliefs

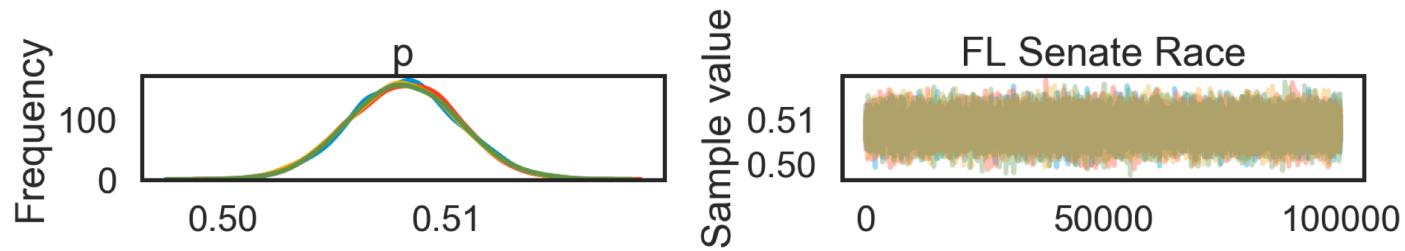
Prior Distribution



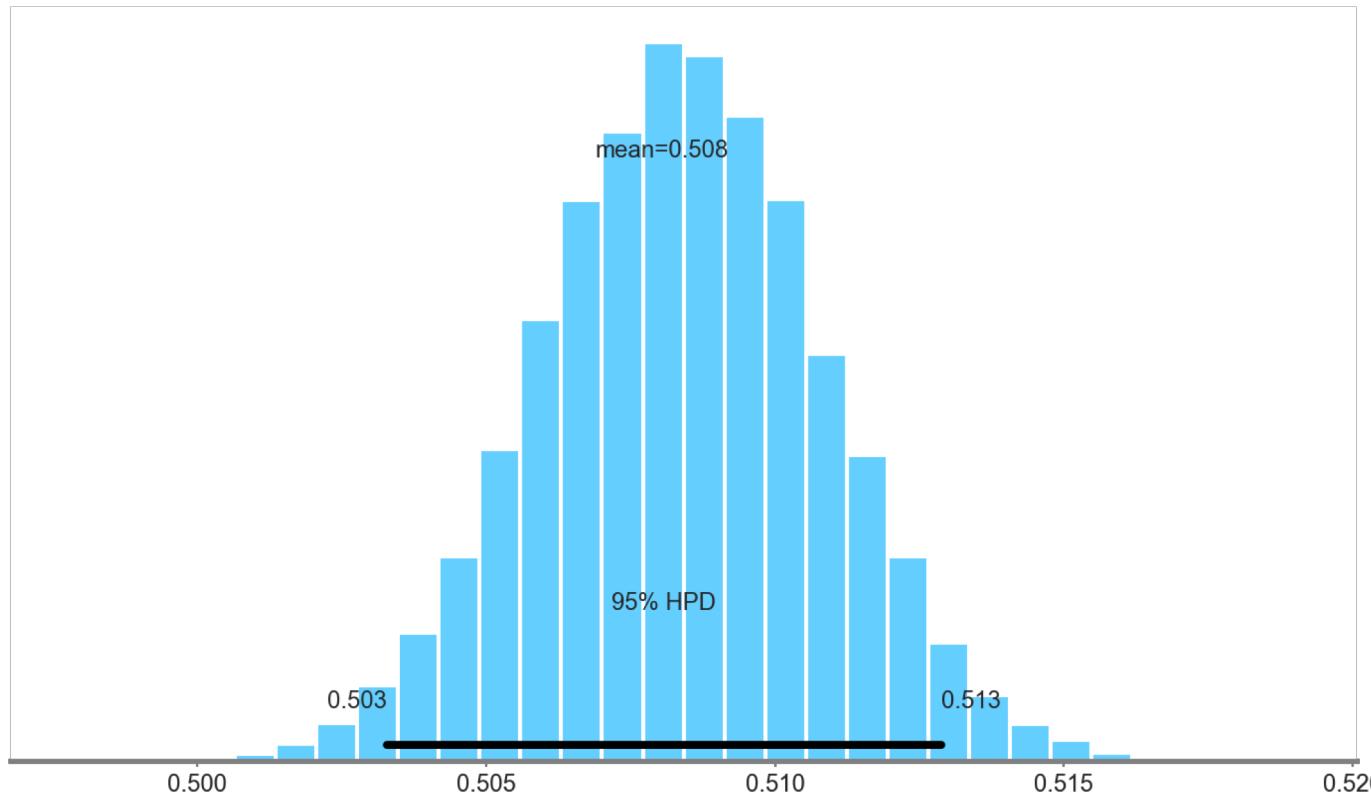
Likelihood

DATES	POLLSTER	SAMPLE	WEIGHT			NELSON / SCOTT MARGIN	ADJUSTMENTS			
				LIKELY VOTER	TIME-LINE		HOUSE EFFECTS	ADJUSTED MARGIN		
OCT 15-16	St. Pete Polls	1,974 LV	1.54	47%	49%	R+1.4	—	<0.1 ►	◀ 1.0	R+0.4
OCT 1-5	Florida Southern College	476 LV	0.59	44%	46%	R+1.5	—	◀ 0.1	◀ 1.3	R+0.1
SEP 19- OCT 2	Kaiser Family Foundation	522 RV	0.45	48%	45%	D+3.0	0.2 ►	◀ 0.1	0.6 ►	D+2.3
SEP 29-30	St. Pete Polls	2,313 LV	0.46	47%	47%	D+0.7	—	◀ 0.2	◀ 1.0	D+1.8
SEP 28-30	Public Policy Polling D	779 V	0.46	48%	44%	D+4.0	0.1 ►	◀ 0.2	2.2 ►	D+1.9
SEP 17-30	Strategic Research Associates	800 LV	0.55	45%	44%	D+1.0	—	◀ 0.1	◀ 2.6	D+3.7
SEP 24-27	Mason-Dixon Polling & Research, Inc.	815 LV	0.73	47%	46%	D+1.0	—	◀ 0.1	0.4 ►	D+0.8
SEP 22-24	Quinnipiac University	888 LV	0.65	53%	46%	D+7.0	—	◀ 0.1	1.0 ►	D+6.1
SEP 19-24	Cherry Communications R	622 LV	0.32	48%	46%	D+2.0	—	◀ 0.1	◀ 3.3	D+5.3
SEP 16-20	Marist College	600 LV	0.47	48%	45%	D+3.0	—	◀ <0.1	1.4 ►	D+1.6
								Weighted average	D+1.4	

Posterior Distribution



FL Democrat Posterior Distribution



2.

THREE KEY RACES

The Most Uncertain 2018 Senate Races

Missouri

Claire McCaskill vs. Josh Hawley

- ▷ McCaskill is a vulnerable incumbent with only 37% approval
- ▷ But, the state's GOP has been rocked by scandal which may help McCaskill
- ▷ Hawley is ahead in the polls, but only by 0.5 points

I predict McCaskill will **LOSE** by a hair with 49.5% of the votes

Nevada

Jacky Rosen vs. Dean Heller

- ▷ Heller is the incumbent with a mere 37% approval rating
- ▷ He is the only Senate Republican up for reelection in a state that Hillary Clinton won
- ▷ Yet, latest polls has him in the lead

I predict Rosen will **WIN** with 51% of the votes

Florida

Bill Nelson vs. Rick Scott

- ▶ Scott is a tremendously popular governor*
- ▶ He has outspent Nelson by a 4-to-1 margin
- ▶ Yet, the two are polling at a dead-even tie

I predict Nelson will **WIN** with 51% of the votes

*Despite the attack ads he put out on a constituent who yelled at him in a Starbucks

3. RESULTS

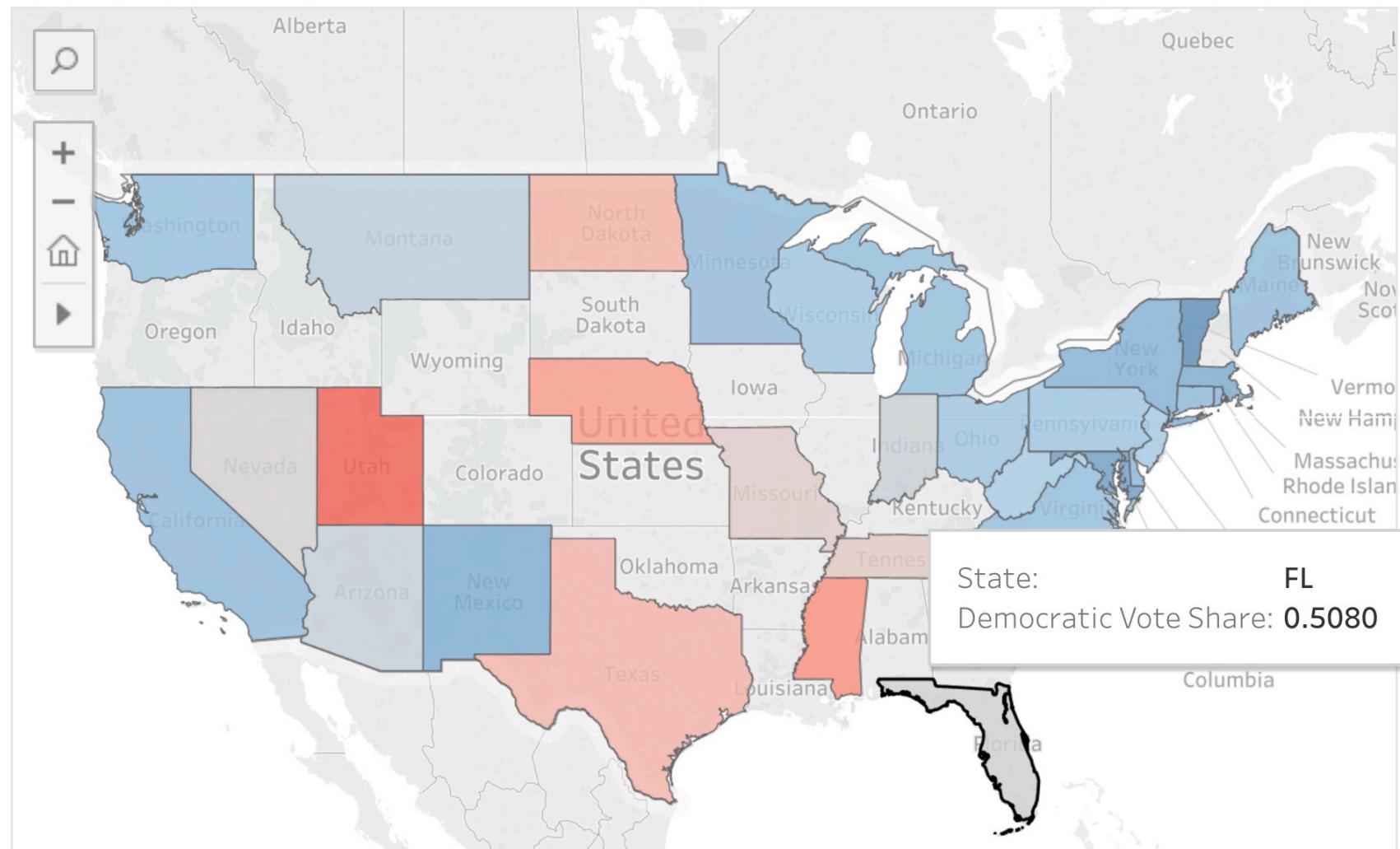
Will there be a blue wave in the Senate?

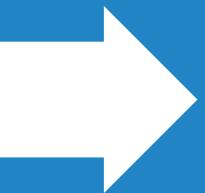
Democratic Vote Share

0.000

1.000

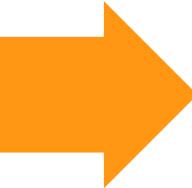
2018 Senate Elections





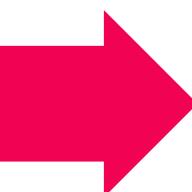
26 Open Seats*

forecasted to be blue



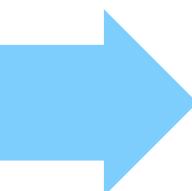
26

seats likely to be taken by Democrats



49

total seats in the Senate to be held by Democrats



49%

Democratic minority in the Senate



A Senate Blue Wave is Unlikely

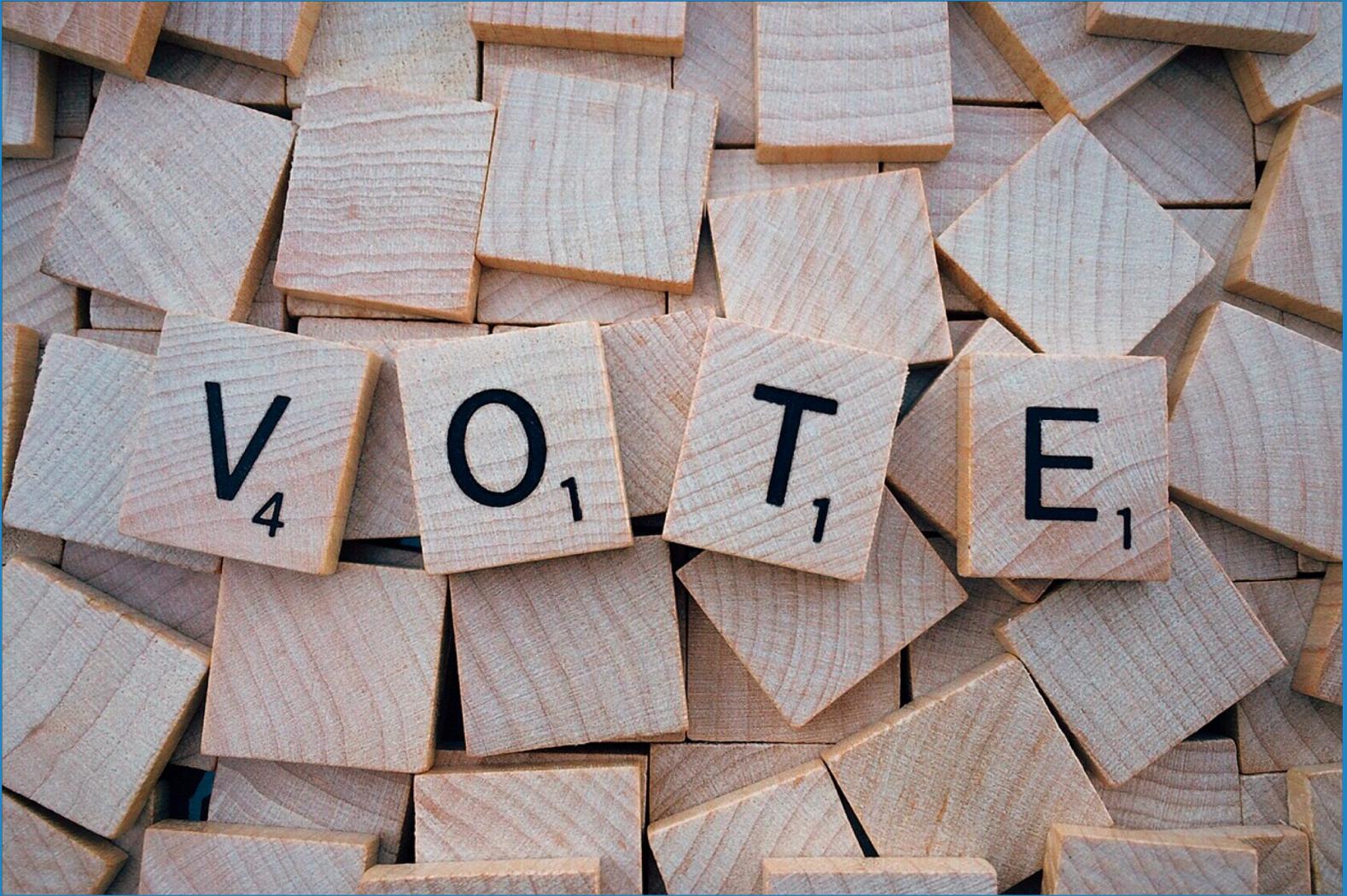
However, forecasts from FiveThirtyEight indicate a Blue Wave in the House of Representatives is probable.

4. NEXT STEPS

NEXT STEPS

- ▷ Forecast House of Representatives races
- ▷ Forecast Governor races
- ▷ Calculate probabilities of each race





No matter your political leanings, it is imperative that you exercise your right as a citizen and let your voice be heard.

Thanks!

Any questions?

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