

A Geek's Guide to Election Night 2016
by Sam Wang, Princeton University
Princeton Election Consortium
<http://election.princeton.edu>

This document presents

- a) Key races to watch;
- b) Ways to detect hidden biases in polls;
- d) The most important Senate races; and
- e) A list of poll closing times.

General Overview

270 EV are required to win. Races are defined as "safe" if they have poll margins $\geq 5\%$. The safe states are

Clinton (227 EV): CA CO CT DC DE HI IL MA MD ME (except Maine Congressional District 2) MN NJ NY OR RI VA VT WA WI.

Trump (164 EV): AK AL AR ID IN KS KY LA MO MS MT ND NE OK SC SD TN TX UT WV WY.

This leaves twelve contests with intermediate polling margins. Toss-ups are in **bold** (2% margin or smaller).

<u>State (electoral votes)</u>	<u>Poll margin</u>
New Mexico (5 EV)	Clinton +4%
Nevada (6 EV)	Clinton +3%
Michigan (16 EV)	Clinton +2.5%
Pennsylvania (20 EV)	Clinton +2.5%
Florida (29 EV)	Clinton +1.5%
Maine CD2 (1 EV)	Clinton +1%
North Carolina (15 EV)	Clinton +1%
New Hampshire (4 EV)	Clinton +1%
Ohio (18 EV)	Trump +1%
Iowa (6 EV)	Trump +2%
Georgia (16 EV)	Trump +3.5%
Arizona (11 EV)	Trump +4%

Tests to estimate the amount by which polls may be inaccurate are on pp. 3-4.

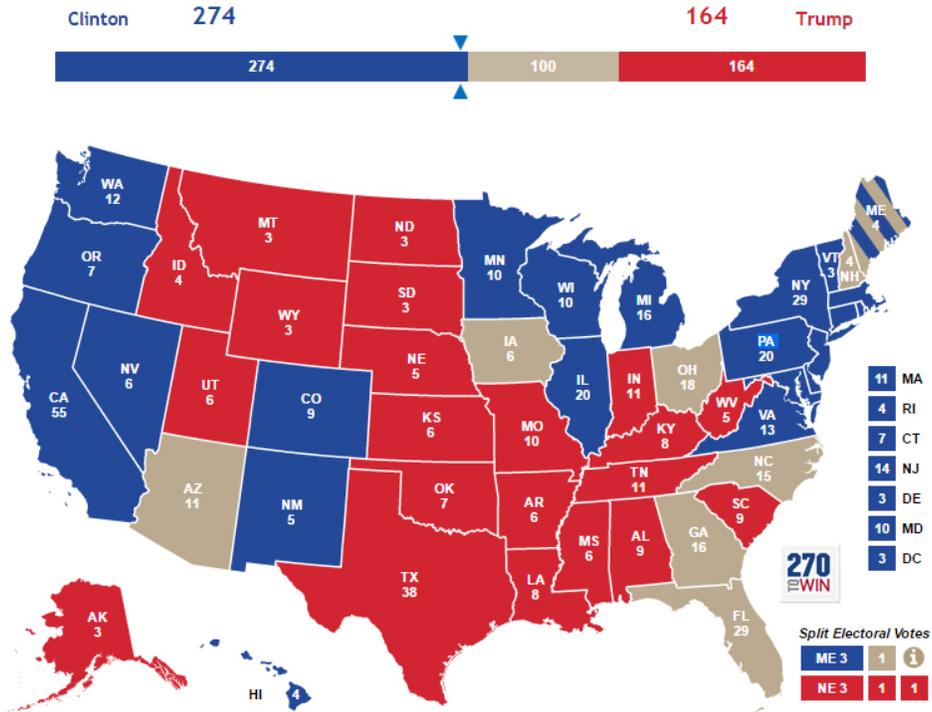
Rank Order of States, from Clinton to Trump

Even if there is polling bias, the rank order of Clinton-Trump margins should correlate well with this sequence.

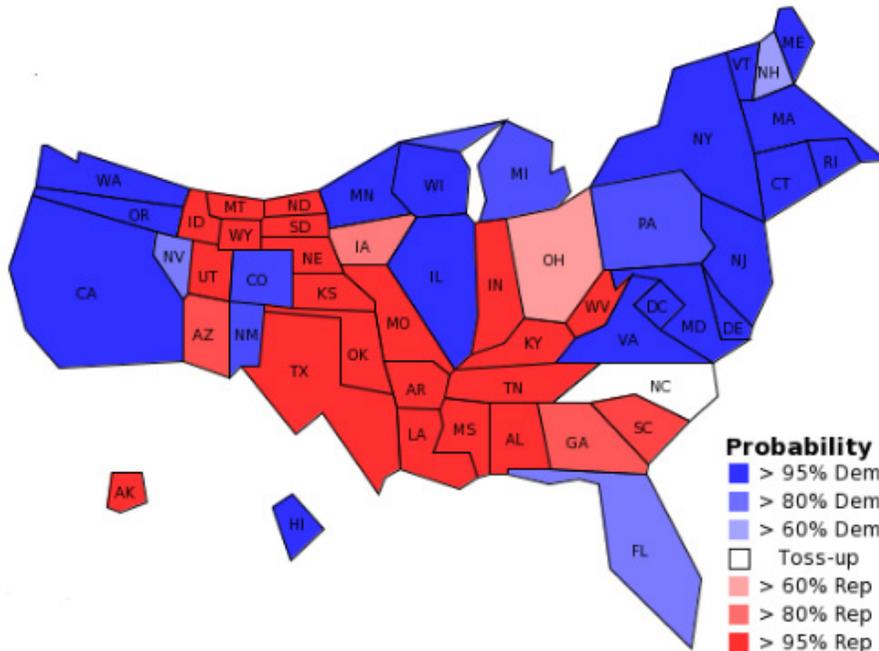
Clinton <<< DC / HI / VT / RI / MA / MD / CA / NY / DE / WA / IL / ME-1 / NJ / OR / CT / ME / MN / VA / WI / CO / NM / NV / MI / PA <<<from here to the left, 270 for Clinton / FL / ME-2 / NC / NH / OH / IA / GA / AZ / NE-2 / SC / MO / TX / UT / AR / AK / IN / MS / MT / TN / LA / KS / NE-1 / SD / ND / NE / AL / KY / WV / ID / OK / WY / NE-3>>> Trump

State-by-state predictions from polling data

Safe states only (margins $\geq 5\%$):



With leaners included: Clinton 308 EV, Trump 215 EV. Tossup: North Carolina (15 EV).



How To Know When The Fat Lady Sings

Surprising results in certain Eastern states would suggest that results differ from pre-election polls. Possible causes include biases such as unexpected turnout effects, unrepresentative models by pollsters, or missing Trump or Clinton voters coming out of the woodwork.

Early warnings for a larger-than-expected Clinton win: *North Carolina* (closing time 7:30 pm, polling median at Clinton +1%) and New Hampshire (closing time 7:30-8:30pm, Clinton +1%). New Hampshire is a homogeneous and quickly-reporting state. Clinton wins in these two states would indicate that she is at or above her pre-election polling performance. If Clinton loses these states, tonight may be a nail-biter.

Trump has a reasonable path to win if he takes three of the following four states: Florida, North Carolina, Pennsylvania, and Michigan.

Slow counting: Virginia is slow-counting in a way that makes Republican candidates appear stronger than their eventual finish. Ignore early counts.

Inaccurate polling: Nevada's pre-election polls often understate Democratic support. If there is a gap there, it does not foretell a gap elsewhere in the nation.

Bug-eating watch: if Clinton wins Texas or Trump gets above 240 EV, one bug each.

The Senate

RCP map:

http://www.realclearpolitics.com/epolls/2016/senate/2016_elections_senate_map.html

The close races are in ***Pennsylvania, Nevada, Wisconsin, Indiana, New Hampshire, North Carolina, and Missouri***. Not counting these, Democrats/Independents are likely to control 46 seats. If they win all seven, they will control 53 seats.

The likely final range of outcomes is **49-51 seats for both Democrats/Independents and for Republicans**. This is a gain of 5-7 seats for Democrats.

Other key Senate races:

Democrats lead in Illinois (Duckworth over Kirk) and Colorado (Bennet over Glenn).

Republicans lead in Florida (Rubio over Murphy) and Arizona (McCain over Kirkpatrick).

The House. Democrats should gain 5-15 House seats but not take control. A popular-vote win of at least 6% would be needed for Democrats to be competitive for change of control, because of population clustering and gerrymandering. Pre-election polls were between Democrats +1% and Democrats +4%.

<http://cookpolitical.com/house/charts/race-ratings>

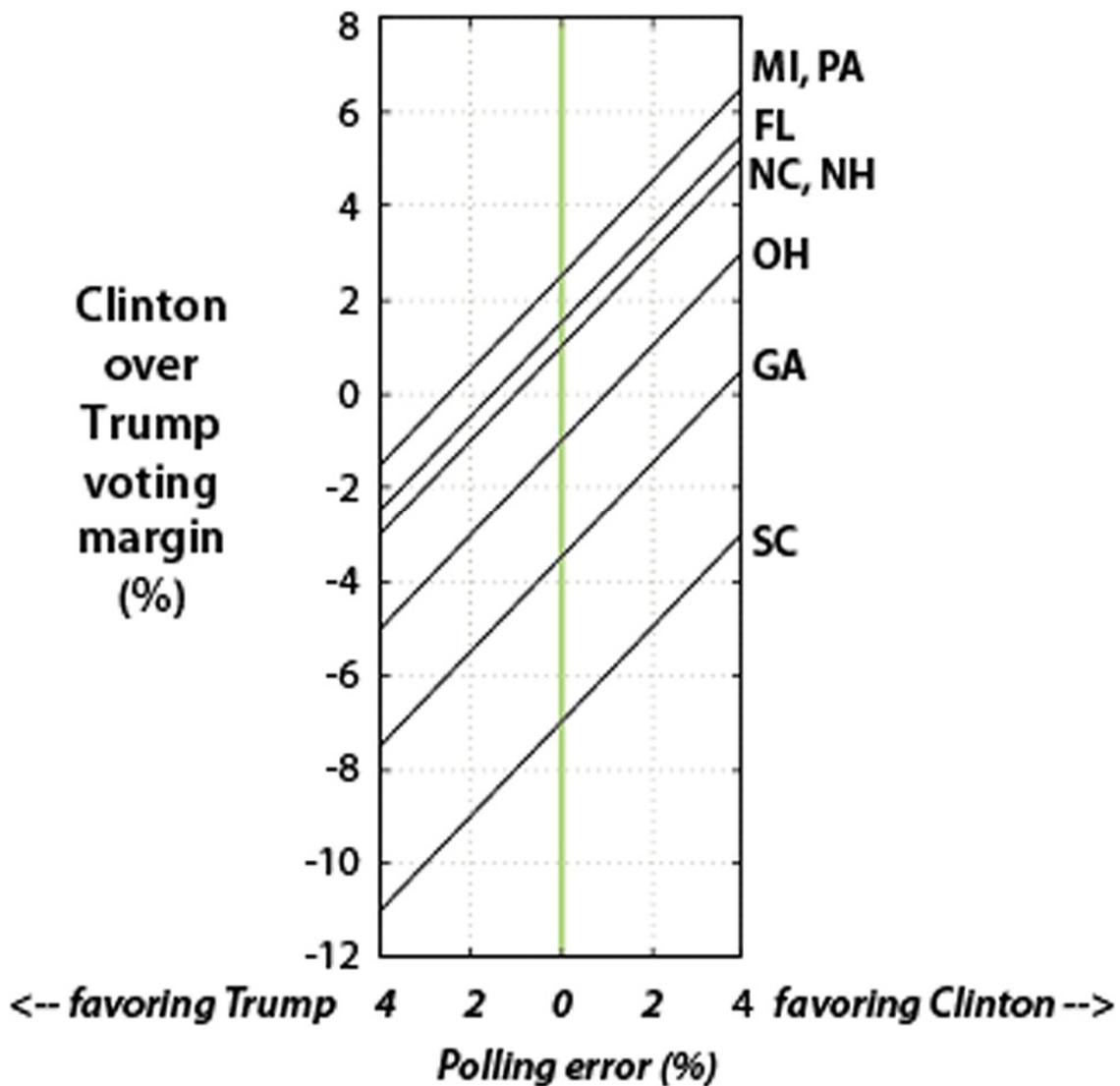
Presidential Results Tracker

Feed your inner geek! Use the chart below to plot the Clinton-Trump margin as results come in. By the end of the evening, this graph may provide some indication of whether actual results were in line with pre-election polls.

When a margin becomes available, plot it on the diagonal line with the state name labeled.

If polls are accurate, the points will fall both left and right of the horizontal black axis. If points fall predominantly left or right, this indicates a systematic difference between polls and voting.

POLLING ERROR CALCULATOR

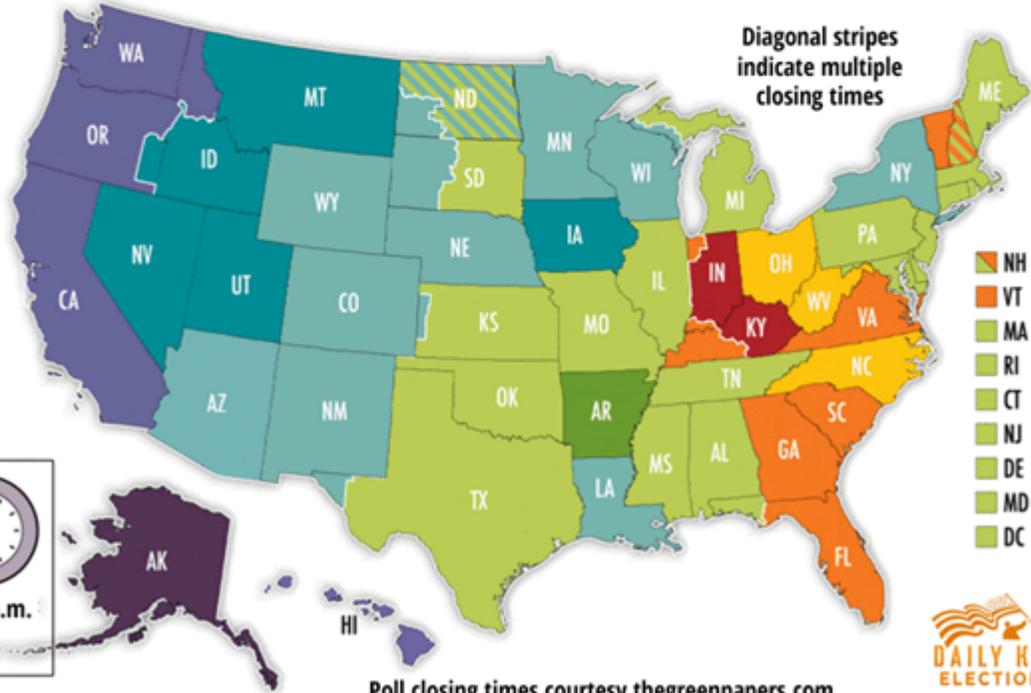
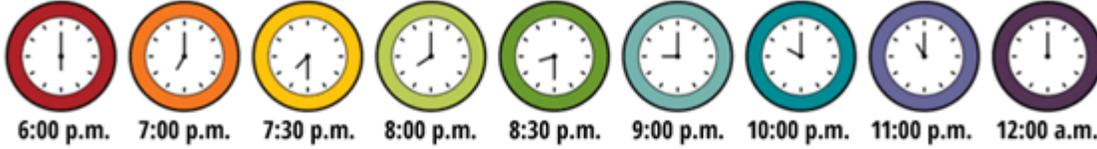


Poll closing times

POLL CLOSING TIMES NOVEMBER 8, 2016

ELECTIONS.DAILYKOS.COM

ALL TIMES EASTERN



Poll closing times courtesy thegreenpapers.com

