

Every State Is Weird



A Selection of Election Edge-Cases

Hello, my name is Jacob Harris. And I've survived the 2012 Election



Originally, I was going to do this talk by hitting every state and telling you something weird about their elections.

But I'm not a cattle auctioneer, and that approach was boring and also, stupid. I'm going to focus on fewer states instead



I know that's not exactly what you voted for, but this is America.

Sometimes, the people you vote for will do something completely different than you expected. So, I'm just continuing in this glorious tradition of democracy, with all its complexities and confusions.

So, let me talk about a few of the weird things we saw in 2012


```
class StateRace < ActiveRecord::Base
  has_many :state_results
```

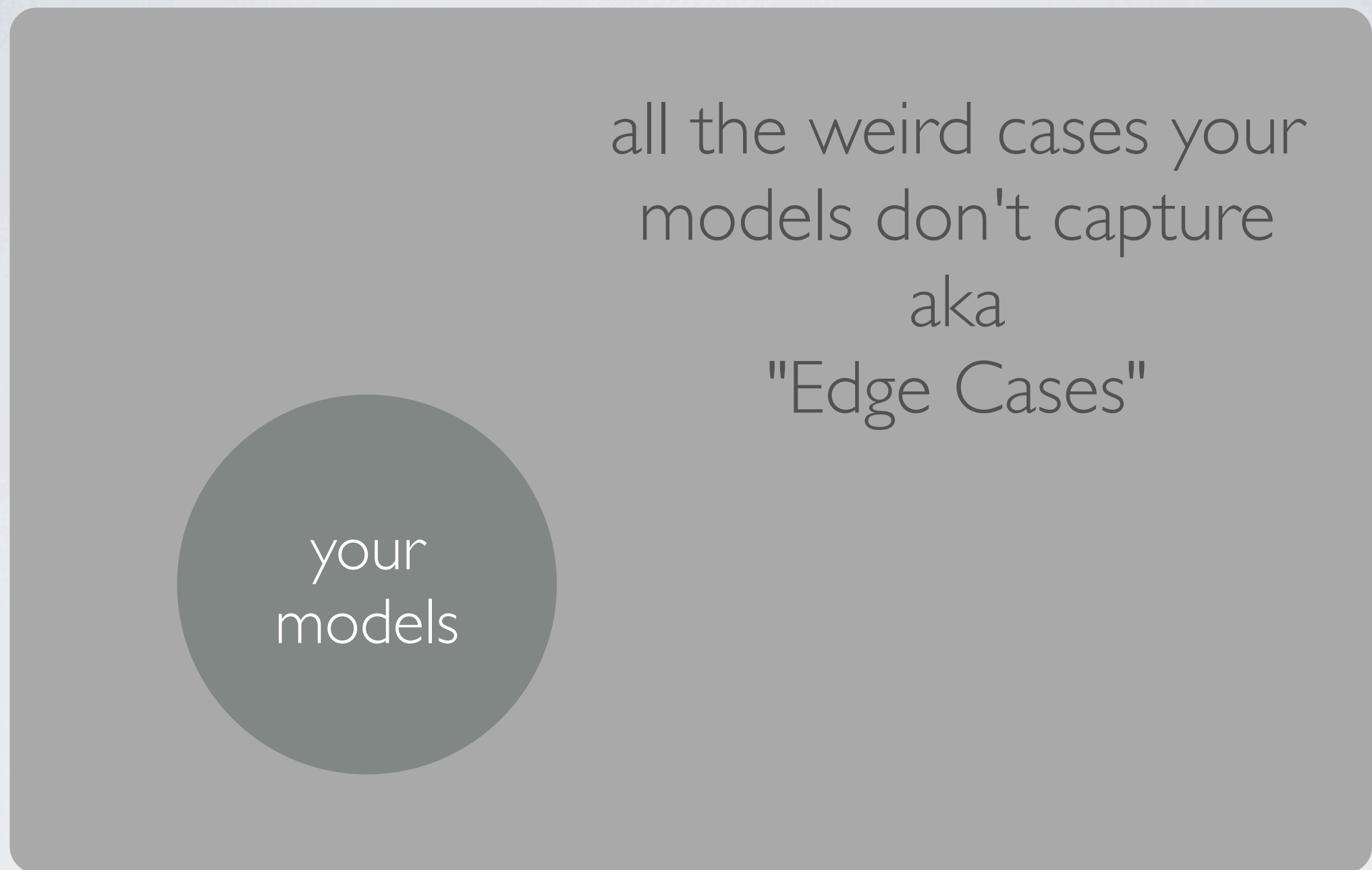
```
class StateResult < ActiveRecord::Base
  belongs_to :state_race
  belongs_to :candidate
```

```
class Candidate < ActiveRecord::Base
  has_many :state_results
  has_many :county_results
  has_many :state_delegate_counts
  has_one :national_delegate_count
```

We think of elections as complex

They're actually pretty easy to model in a database. Most of get our results from the AP. They define three tables to represent election. At the Times, we separate state-level from county-level results, but that doesn't add too much complexity.

The problem though is not putting stuff in the model. It's making sense of cases where reality is a little different from the model.



The problem with elections is all the extra stuff that happens outside of what your models capture.

These edge cases often mean you have to write special code just for them. And you have to test for them, even if the likelihood is low.

I HATE CAUCUSES

Let's start with caucuses

IOWA


- Caucus State!
- Nonbound Delegates



It all starts with Iowa.

I've never participated in a caucus. I'm sure they're lovely events that embody the spirit of democracy.

But in terms of data, they're a hot mess. This is true whatever the party.



**"Oh — I haven't.
God, I added them
up. I added them
up a couple of
times. Oh man."**

BREAKING NEWS

ROMNEY WINS IOWA BY 8 VOTE

Closest Iowa caucus vote in history

ROMNEY

✓ 30,015

25%

PAUL

Because stuff like this happens. You have data, but it might be wrong, and the person who added it up went to bed because it's not like the whole nation is watching or anything.









MINNESOTA

- Another nonbinding caucus
- Jan 3: Santorum wins Iowa
- Feb. 7: Santorum wins Minnesota











One other thing I also dislike about early caucuses is that the delegates are unbound. So, things like this happen. Santorum wins Iowa! Santorum wins Minnesota! He's picking up delegates!

Iowa

CANDIDATE		VOTES	PERCENT		DELEGATES*
	 Rick Santorum	29,839	24.6%	<div></div>	—
	 Mitt Romney	29,805	24.5	<div></div>	5
	 Ron Paul	26,036	21.4	<div></div>	22
	 Newt Gingrich	16,163	13.3	<div></div>	—

Minnesota

CANDIDATE		VOTES	PERCENT		DELEGATES*
	 Rick Santorum	21,932	44.9%	<div></div>	3
	 Ron Paul	13,228	27.1	<div></div>	30
	 Mitt Romney	8,222	16.9	<div></div>	3
	 Newt Gingrich	5,272	10.8	<div></div>	—

But later that summer, wat?

Where'd his delegates go?

Delegates aren't like points. They don't accrue neatly.

But we all show graphs that make them seem that way. So, it's really confusing when those projections collapse because states hold their party conventions and actually assign their delegates.

MAINE

- Because of snow, only 84% of the caucuses happened. Canceled counties weren't told they wouldn't be counted. Feelings were hurt.
- Also, they reported results as a single dump of statewide totals at 7:30 on a Saturday.



Sometimes, the data you want from a caucus, you're not going to get. For instance, Maine decided to only release a statewide count. Which meant we had to add some special logic to our election results map at the last minute.

WYOMING

- Another caucus!
- On caucus night, eleven counties pair off and select a single delegate for the both of them (Laramie gets one)
- Big Horn / Sheridan: I vote
- Carbon / Sweet Water: I



Even stranger things can happen. I'm still angry at Wyoming

PRIMARY PROBLEMS

I pick on caucuses, but Primaries have their quirks too


NEW ENGLAND

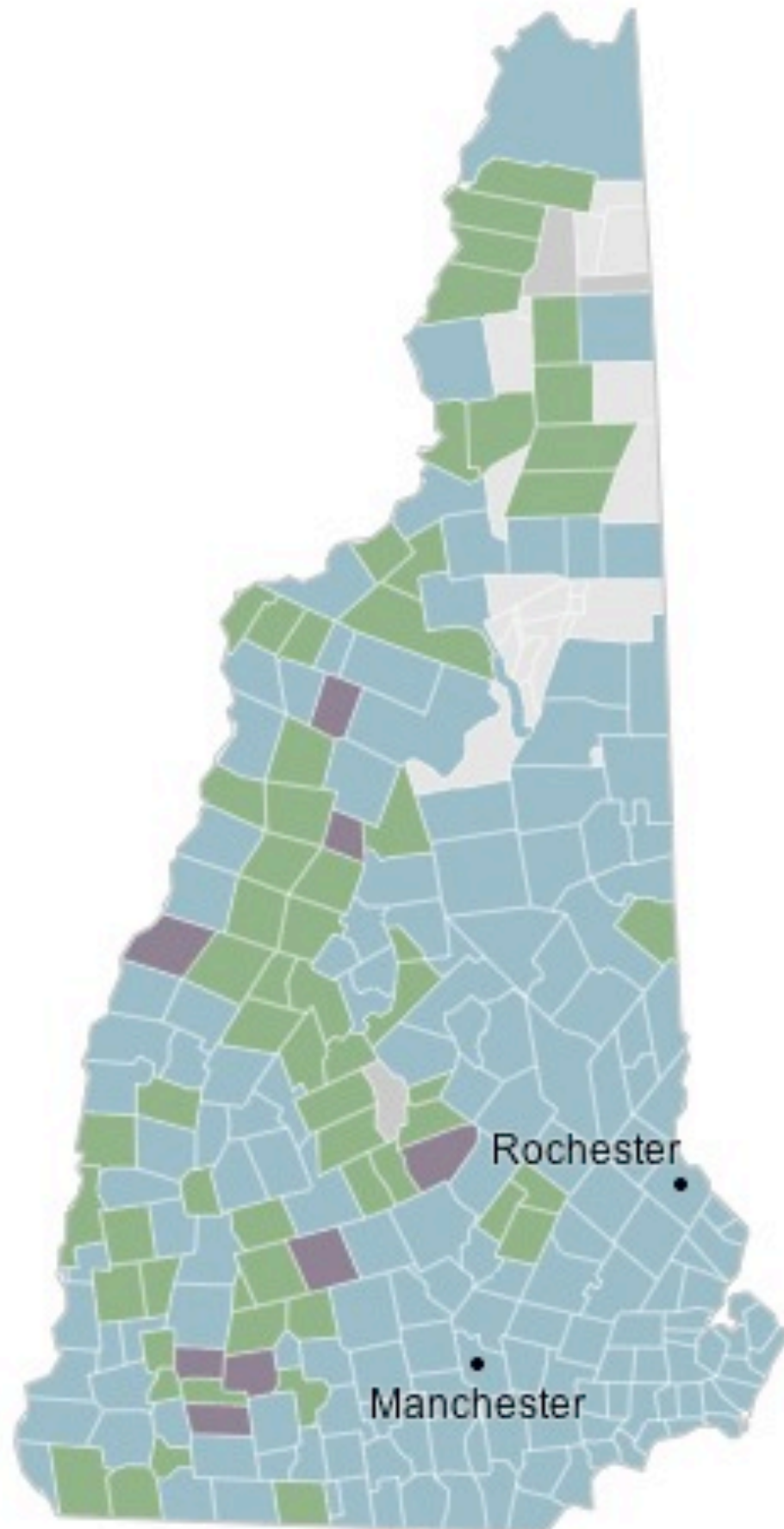
- They have old-fashioned names for milkshakes and soda!
- They also only report results at the town level. Up to you to aggregate into counties.



For starters, the New England states. They report results only at the town level, which is interesting but also sometimes annoying.

 County Leaders

 Size of Lead



SHOW RESULTS BY

Towns

Counties

FILTER BY

PERCENT REPORTING

0-49%

50-89%

90-99%

100%

WINNER IN 2008

McCain

Romney

DEMOGRAPHICS

>90% White

>10% Nonwhite

MEDIAN INCOME

\$0-50,000

\$50,000-60,000

\$60,000 or more

OTHER

>25% College Degree

Urban Areas

Rural Areas

 Tie or other

 No data

But I also kinda wish that the rest of America followed their lead, because it's cool to be able to go down to that level of detail.

1
Independent

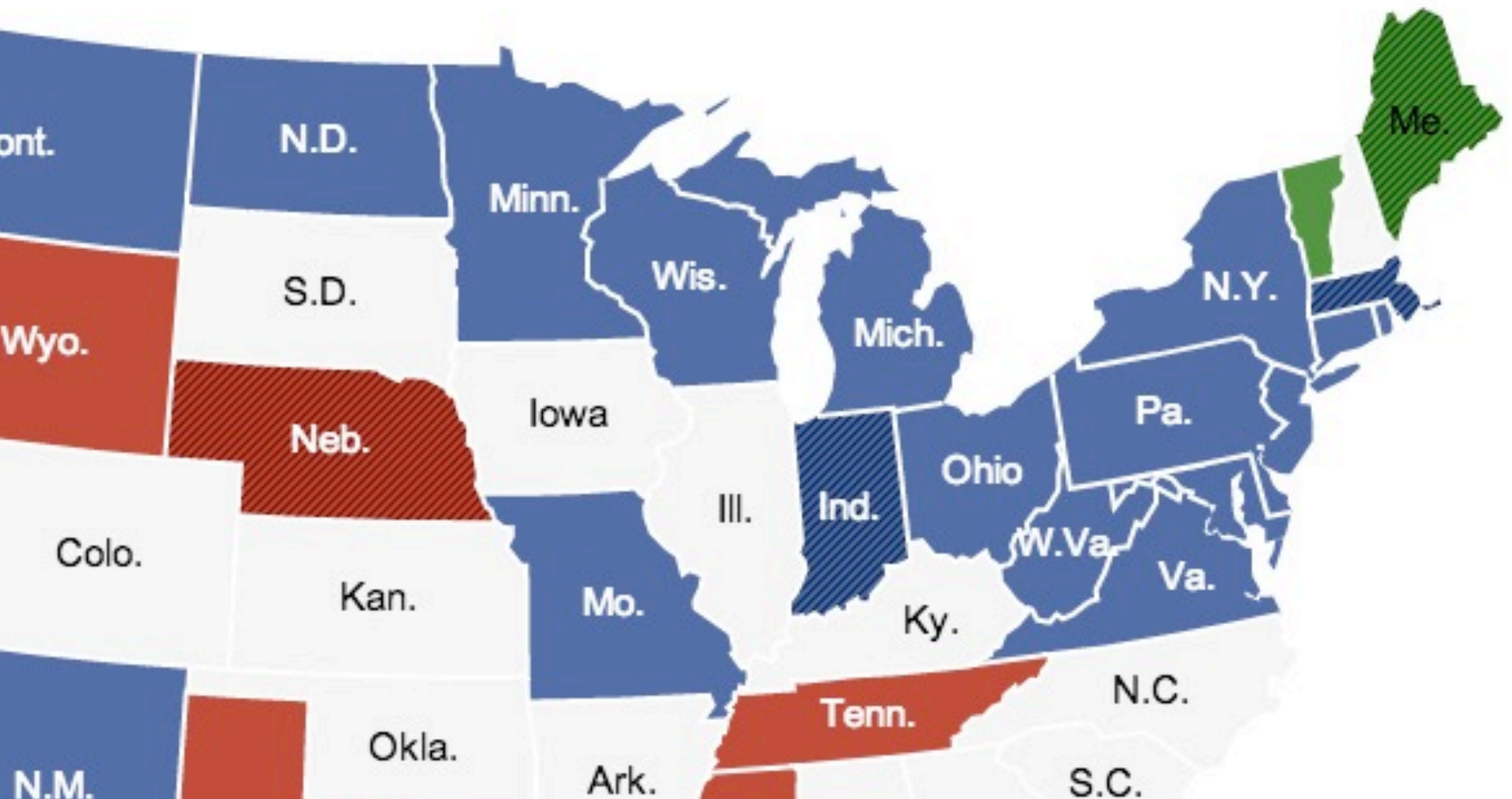
0
undecided

Republicans **45**

50 53 Dems. before election































-2 seats

Need +4 seats for control



New England also has a fair number of independents. Who may or may not caucus with another party. So, you get cases like this where 2 independents won, but you need to count 1 of them as a democrat in your control of congress. More special code

ARIZONA

CANDIDATE			VOTES	PERCENT		DELEGATES
		Mitt Romney	216,805	47.3%	<div><div></div></div>	29
		Rick Santorum	122,088	26.6	<div><div></div></div>	—
		Newt Gingrich	74,110	16.2	<div><div></div></div>	—
		Ron Paul	38,753	8.4	<div><div></div></div>	—
		Rick Perry	1,871	0.4	<div><div></div></div>	—
		Sarah Gonzales	1,460	0.3	<div><div></div></div>	—
		Buddy Roemer	657	0.1	<div><div></div></div>	—
		Paul Sims	489	0.1	<div><div></div></div>	—
		Cesar Cisneros	398	0.1	<div><div></div></div>	—
		Mark Callahan	326	0.1	<div><div></div></div>	—
		Al Perry	288	0.1	<div><div></div></div>	—
		Donald Benjamin	207	0.0	<div><div></div></div>	—
		Michael Levinson	202	0.0	<div><div></div></div>	—
		Kip Dean	189	0.0	<div><div></div></div>	—
		Ronald Zack	142	0.0	<div><div></div></div>	—



Another fun thing about early primaries are all the fringe candidates you get to see. Here are some of the candidates in Arizona. New Hampshire had even more.

FRINGE CANDIDATES

- Election model doesn't distinguish between "main" and fringe candidates.
- Necessary to add extra rules for sorting, filtering for the main guys.
- Some states also allow Write-ins or "None of the Above" for races.



There is nothing in a general election model that distinguishes between major candidates like Romney or Paul and my favorite here, Vermin Supreme.

So we have to write more special logic to put the major guys first when everybody has 0 votes and other such details.

Sometimes, there are also special candidates that represent things like total write-ins or such.

VIRGINIA

- Candidates must submit 10,000 valid signatures to appear on primary ballot (400 min. from each C.D.)
- Rule was more strictly enforced in 2012
- Only Romney and Paul qualified to be on ballot



You also can't assume that all of the main candidates will be in every primary. This year, only 2 of the 10 original Republican contenders appeared on the Virginia ballot

MISSOURI

- State Legislature decides to try an Early Primary
- RNC says they will take half their delegates away
- Too late to reschedule under state law, adds caucus
- \$7 million for a meaningless primary



Before 2012, I never thought a primary would be meaningless though. But that's what happened thanks to some deft legislative work by Missouri

NORTH CAROLINA

- A constitutional amendment to ban same-sex marriage in North Carolina was scheduled for the primary date rather than the general election.
- Resolutions and general elections don't just happen on election day.



During the primary season, North Carolina held a major ballot initiative. California had a few too. One common mistake is to assume that anything "general" will only be on the general election ballot in November.

CALIFORNIA

- Switched to Open Primaries
- Annoying if you have a page design that places Dem. primaries on the left, Rep. primaries on the right.
- Also, jokes about Yolo County never grow old



California also switched to Open Primaries this year, which required some different designs from our usual presentation of congressional primaries.

OHIO

- Primary voters elect a delegate from their Congressional District
- There is also an at-large delegate.
- As AP reports, this means there are 17 presidential primaries (16 CD + 1)



Ohio has its own quirk where people elect two delegates. The AP counts them as 17 races.

NYT_RACE MAPPING

State	Office	Type	Seat Name
OH	P	R	Delegate-at-Large
OH	P	R	Congressional District 1
OH	P	R	Congressional District 2
OH	P	R	Congressional District 3
OH	P	R	Congressional District 4
OH	P	R	Congressional District 5
OH	P	R	Congressional District 6
OH	P	R	Congressional District 7
OH	P	R	Congressional District 8
OH	P	R	Congressional District 9
OH	P	R	Congressional District 10
OH	P	R	Congressional District 11
OH	P	R	Congressional District 12
OH	P	R	Congressional District 13
OH	P	R	Congressional District 14
OH	P	R	Congressional District 15
OH	P	R	Congressional District 16

← oh_president_2012_primary_rep

We already have a layer mapping NYT names to AP races, but I still thought I was loading the data wrong when I saw 17 races.

GENERAL ELECTION GRIPEs

On to November!

NEW HAMPSHIRE

- State Law allows a town to close and report early if 100% of people have voted.
- Dixville Notch gets all 10 of its residents to report results at 12:01 am on Election Day.
- "I just loaded zeroes. Why are they votes in the data? WHYYYYYYYYY!!!!? "



I really hate Dixville Notch.

ALASKA

- Protip: store poll closings as a datetime not just a time. Polls close at 12:00am ET
- Also, they have nothing below state-wide results.



One mistake we've made a few times: thinking we could just store poll closings as times, since they're all on the same day. Bad idea if you're on the East Coast.

I'm not even talking about the caucuses in Guam

NEBRASKA

- Seriously? You and Maine have to do this whole split electoral vote thing just to make my modeling/testing more complicated?
- Several website EV counts were off by one in 2008 when Nebraska split



I'm not going to talk about all the annoyances from states that split their electoral votes

FLORIDA

- Early and absentee voting makes for fun panic attacks:
- Miami / Dade County
500,000 votes
0% reporting



Early voting is also confusing. They usually get reported first, even before any precincts come in.

GEORGIA

- Every office from the US House or below automatically goes to a runoff if no candidate has a majority.
- Not sure if this has happened, but we had to test for it.



Finally, there are runoffs. Georgia, for instance has them.

LOUISIANA

- Actually holds its congressional primaries on election day in November
- Open primaries
- Runoff in **December** if winner without majority.



Louisiana is even weirder. This year, one race with two Republicans went to runoff. We couldn't mark the race as won, but it would definitely be Republican in the control of congress. So we had to add more special code.



I don't really have a good conclusion here, so yeah! DEMOCRACY!

Thank you.