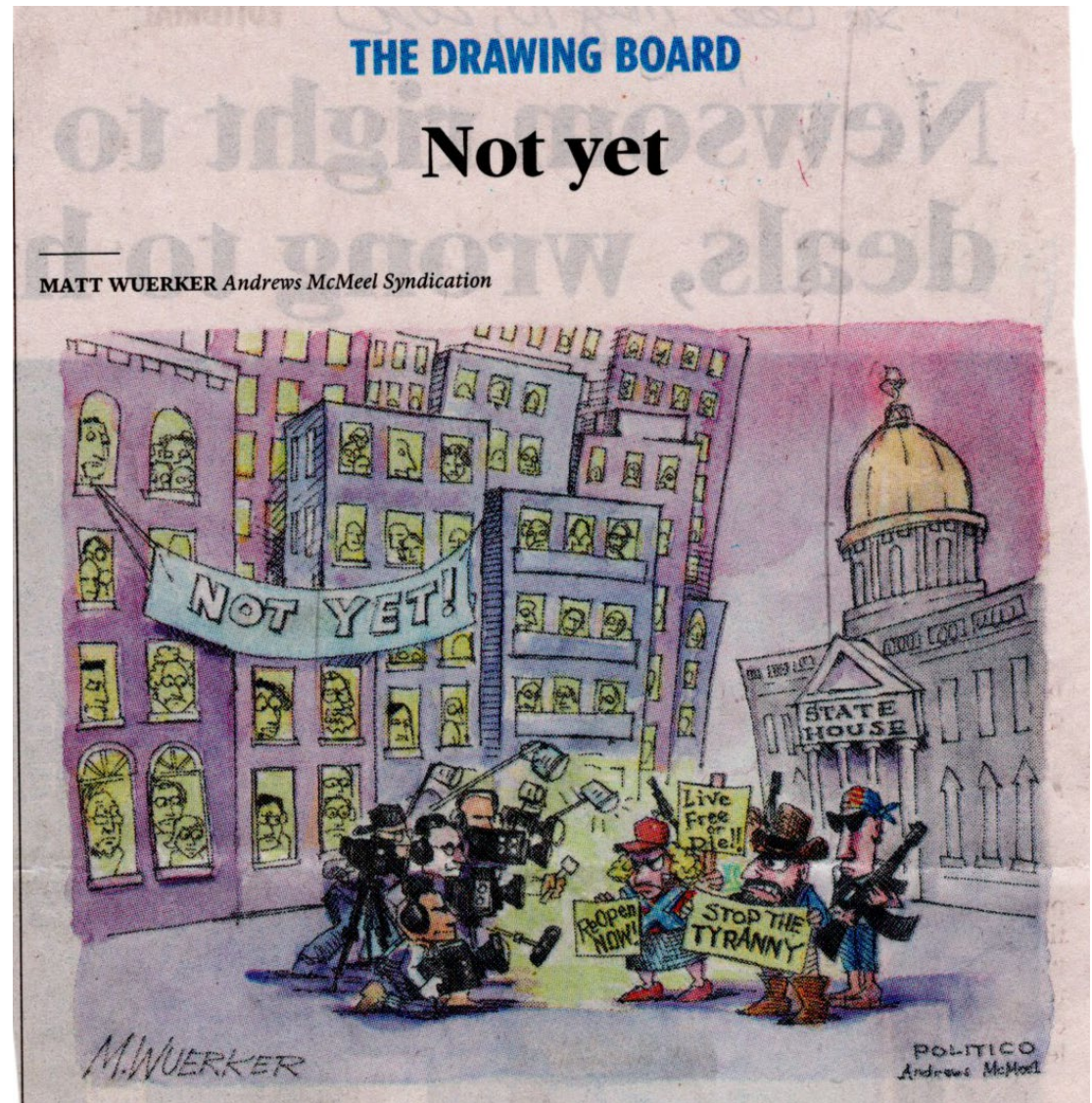




Public Opinion Surveys

What should we know about
surveys?

- How do we know what people think about an issue?
- One method is surveys (polling)



What about surveys?

There are good surveys and there are
bad surveys

Elements of a good survey

1. Is it a good sample?
 1. The usual rule: a good sample is a random sample
2. Is it a good survey?
 1. Are the questions clear?
 2. Do the questions suggest a bias?
 3. Are the questions something that people will answer truthfully?

Samples

- In the best possible situation, we would have an entire population to use.
 - If we want to know what everyone in the US thinks, we would ask everyone.
- But practicality means that we are not always able to examine/test/survey the entire population.
- **A sample is any subset of units collected in some manner from a population.**

Sampling Problems

- Example:
 - Buying a basket of strawberries in a store.
- The top layer is a poor sample.
 - The top strawberries might look nice, but the rest might be rotten
- A poor sample might be
 - Biased or unfair in some way
 - Quite often it is unintentionally biased
- A good sample gives an accurate picture of the population

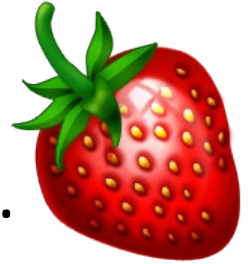
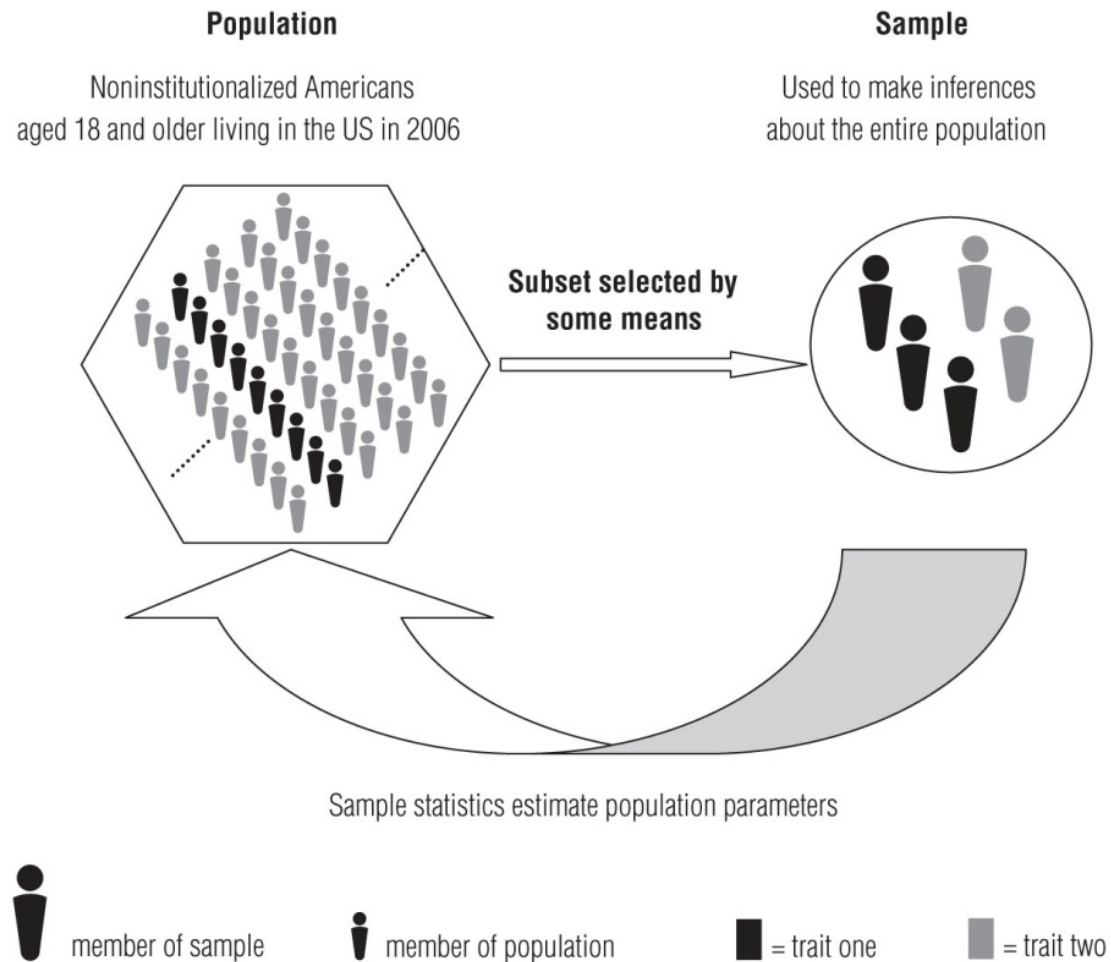


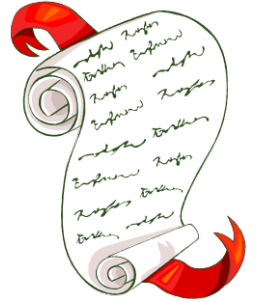
FIGURE 7-1

Population and Sample



Famous Example of a poor sample: *Literary Digest* 1936 presidential poll

- In 1936, the *Literary Digest* predicted that Rep. Alf Landon would defeat FDR in a landslide. Who won?
- Poll conducted as follows:
- 2 out of 10 million people chosen from:
 - telephone directories
 - motor vehicle registration
 - magazine subscribers



The 1948 Poll

- In 1948, the Gallup Poll predicted that NY Governor Thomas Dewey would defeat President Harry Truman. Who won?

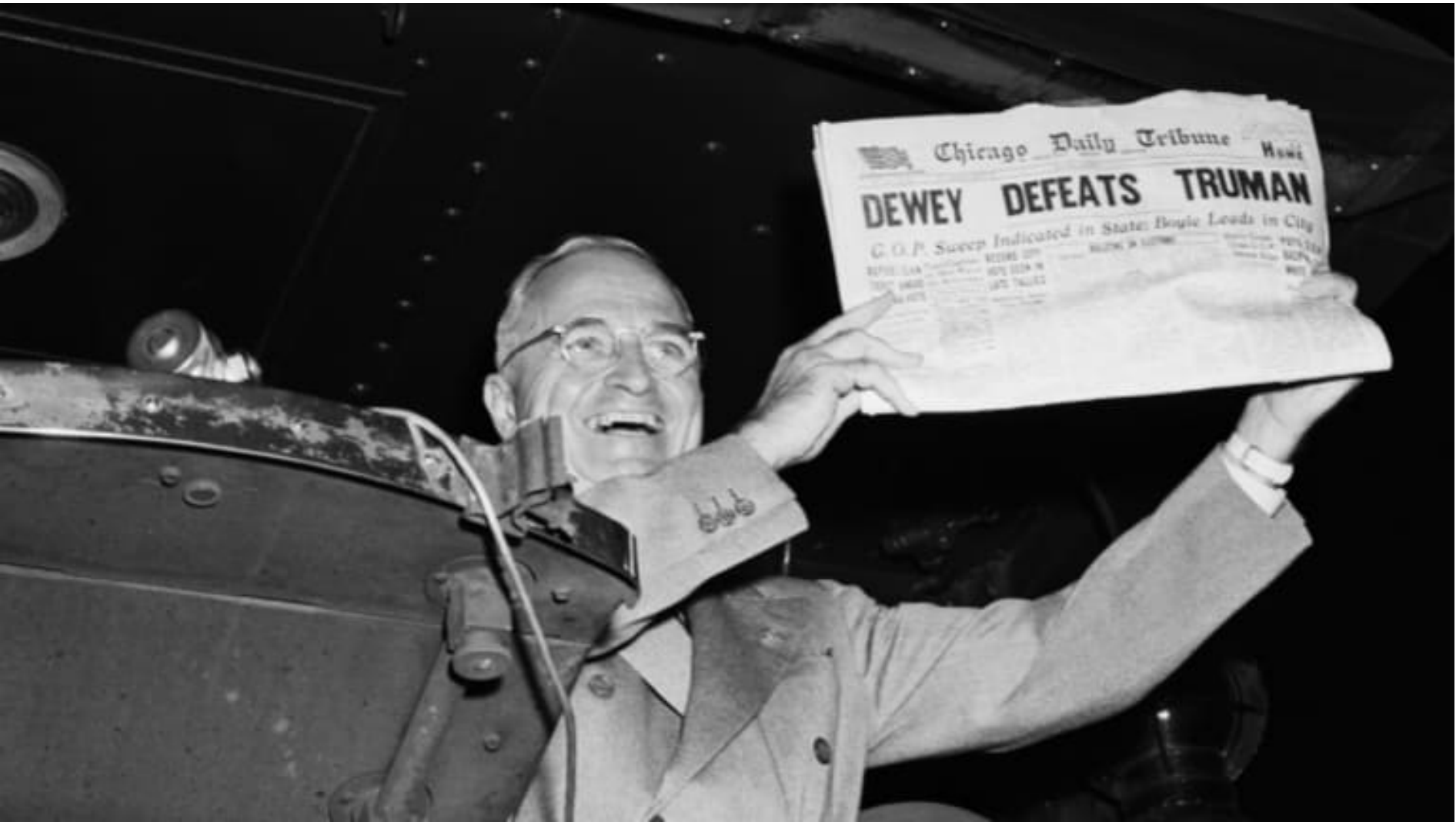
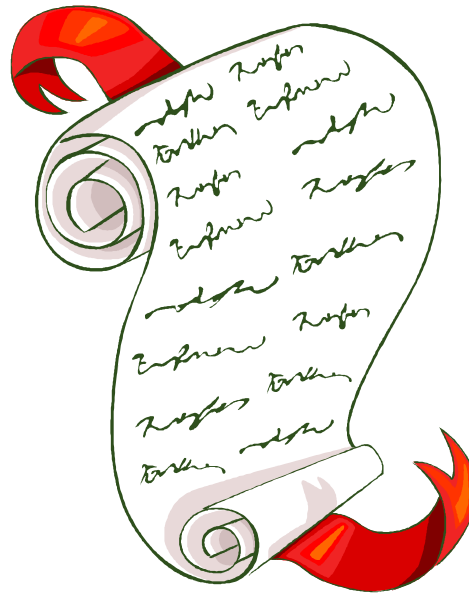


Photo from history.com

The 1948 Poll

- Poll conducted:
 - Quota sampling
- Fact: sample preferred Dewey
- Assumed: majority of all voters preferred Dewey

How can one avoid sample bias?



Random Sample

- Random selection is the best and easiest way to get an unbiased or representative sample.
 - Random sampling: each has equal chance of being included
- Size of sample does not matter as much (most surveys are 1,000-2,000)

Sampling Scenario

- What if you stood in the middle of the Sacramento State campus at noon on a Wednesday (NOT in the middle of a pandemic!) and asked everyone who walked by what they thought about the parking situation on campus.
- Is this a good sample of students at Sacramento State?

- This is NOT a good sample
- Every student does not have an equal chance of being in your sample.
 - For example:
 - It will not include students who go to school on Tuesdays and Thursdays only
 - It will not include students who do not walk through the center of campus
- Maybe you wouldn't need a sample: you could try to ask every student?



Non-Random Samples



Or another way to think about it:

- A random sample is the best method
- A random sample of a bag of M&Ms should include the same colors in the same % as in the bag
- One handful might over- or under-sample a color: this is why surveys report the margin of error
- If you repeat this sampling over time, you will get an accurate %



Margin of Error

- A random sample is an estimate based on statistical probability
- A survey should report the margin of error
- If the margin of error is $\pm 3\%$, then this is example is even: either candidate could win

Candidate	% reporting they will vote for the candidate
Castillo	52
Lopez	48



Other things to watch out for

- Wording of Survey Questions
 - Some wording may bias results
 - Wording or language may be unclear
 - Double-barreled question
 - E.g. “Do you agree with the statement that the situation in Iraq is deteriorating and that the U.S. should increase the number of troops in Iraq?”
 - Ambiguous question
 - E.g. “What is your income?”



Confusing Questions?

- Example: Roper Poll, 1992
- “Does it seem possible or does it seem impossible to you that the Nazi extermination ... never happened?”
 - 22% responded in a way that indicated they thought the Holocaust never occurred

Confusing Questions?

- Example: Roper Poll, 1992
- “Does it seem possible to you that the Nazi extermination of the Jews never happened, or do you feel certain that it happened?”
 - 1% responded in a way that indicated they thought the Holocaust did not occur

Wording of Questions

- Do you think the government should spend (more, less, the same) on welfare?
 - 20% say more

Wording of Questions

- Do you think the government should spend (more, less, the same) on assistance to the poor?
 - 60-65% say more

Wording of Questions

- Do you think the government should spend (more, less, the same) on welfare?
 - 20% say more
- Do you think the government should spend (more, less, the same) on assistance to the poor?
 - 60-65% say more
- These questions are asking the same thing: “welfare” and “public assistance to the poor” are the same thing; “welfare” is a loaded term

Wording of Questions

- Some wording may bias results
 - Leading Questions
 - “Don’t you think that global warming is a serious environmental problem?”

Suggesting Answers

- Are you concerned about crime?
 - Instead of...
 - What issues are you concerned about?
- Question order can affect results
 - Asking a question about crime before asking what one is concerned about

Wording of Questions

Actual example:

Do you believe smut peddlers should be protected by the courts and Congress, so they can openly sell pornographic materials to your children?

Who is going to say “no”?

Wording of Questions

Actual Example:

As you know, residents near Love Canal, in the Niagara Falls, New York area, were reported to have stillbirths, cancer, deformed children, and chromosome damage as a result of dumping hazardous materials.

How serious do you think the dumping of toxic chemicals in the country is today: very serious, only somewhat serious, or hardly serious at all?

Would you be more likely to say it is a very serious issue?

Push Polls

- Push Polls are not “polls”/surveys
- Push Polls are negative advertising

One tactic to avoid question bias

- Use the same question over time to compare responses
- One common question:
 - Do you approve or disapprove of the job _____ is doing as president?

National Tracking Poll

Project: 191058

N Size: 1997 Registered Voters

Margin of Error: $\pm 2\%$

October 25-28, 2019

Topline Report

Question	Response	Frequency	Percentage
P1	<i>Now, generally speaking, would you say that things in the country are going in the right direction, or have they pretty seriously gotten off on the wrong track?</i>		
	Right Direction	785	39%
	Wrong Track	1212	61%
Q172	<i>Do you approve or disapprove of the job Donald Trump is doing as President?</i>		
	Strongly Approve	454	23%
	Somewhat Approve	396	20%
	Somewhat Disapprove	230	12%
	Strongly Disapprove	850	43%
	Don't Know / No Opinion	67	3%
Q172NET	<i>Do you approve or disapprove of the job Donald Trump is doing as President?</i>		
	Total Approve	850	43%
	Total Disapprove	1080	54%
	Don't Know / No Opinion	67	3%
P3	<i>Now, thinking about your vote, what would you say is the top set of issues on your</i>		

POL6_1	<i>Do you think America is ready for... A president who is gay or lesbian</i>		
	Yes, definitely	387	19%
	Yes, probably	414	21%
	No, probably not	417	21%
	No, definitely not	483	24%
	Don't know / No opinion	296	15%
POL6_2	<i>Do you think America is ready for... A female president</i>		
	Yes, definitely	769	39%
	Yes, probably	609	31%
	No, probably not	213	11%
	No, definitely not	186	9%
	Don't know / No opinion	219	11%
POL6_3	<i>Do you think America is ready for... A Hispanic president</i>		
	Yes, definitely	513	26%
	Yes, probably	594	30%
	No, probably not	338	17%
	No, definitely not	232	12%
	Don't know / No opinion	320	16%
POL6_4	<i>Do you think America is ready for... An unmarried president</i>		
	Yes, definitely	623	31%
	Yes, probably	639	32%
	No, probably not	239	12%
	No, definitely not	128	6%
	Don't know / No opinion	367	18%
POL6_5	<i>Do you think America is ready for... An agnostic or nonreligious president</i>		
	Yes, definitely	381	19%
	Yes, probably	386	19%
	No, probably not	437	22%
	No, definitely not	444	22%
	Don't know / No opinion	350	18%
POL6_6	<i>Do you think America is ready for... A president who is vegan</i>		
	Yes, definitely	554	28%
	Yes, probably	523	26%
	No, probably not	181	9%
	No, definitely not	156	8%
	Don't know / No opinion	584	29%

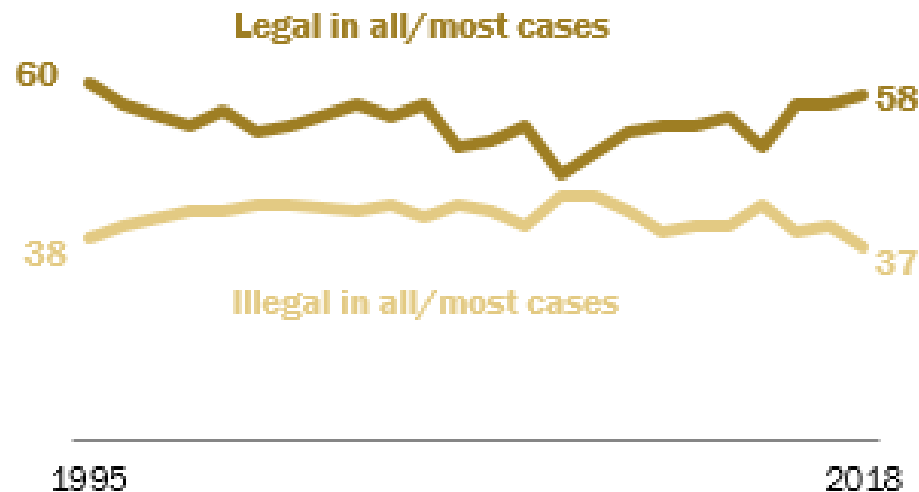
<i>Do you think America is ready for... A president who is gay or lesbian</i>				<i>Do you think you are ready for... A president who is gay or lesbian</i>			
	Yes, definitely	387	19%		Yes, definitely	659	33%
	Yes, probably	414	21%		Yes, probably	348	17%
	No, probably not	417	21%		No, probably not	257	13%
	No, definitely not	483	24%		No, definitely not	476	24%
	Don't know / No opinion	296	15%		Don't know / No opinion	257	13%
<i>Do you think America is ready for... A female president</i>				<i>Do you think you are ready for... A female president</i>			
	Yes, definitely	769	39%		Yes, definitely	969	49%
	Yes, probably	609	31%		Yes, probably	486	24%
	No, probably not	213	11%		No, probably not	165	8%
	No, definitely not	186	9%		No, definitely not	210	11%
	Don't know / No opinion	219	11%		Don't know / No opinion	167	8%
<i>Do you think America is ready for... A Hispanic president</i>				<i>Do you think you are ready for... A Hispanic president</i>			
	Yes, definitely	513	26%		Yes, definitely	794	40%
	Yes, probably	594	30%		Yes, probably	505	25%
	No, probably not	338	17%		No, probably not	204	10%
	No, definitely not	232	12%		No, definitely not	233	12%
	Don't know / No opinion	320	16%		Don't know / No opinion	260	13%



Example

Public views of abortion: 1995-2018

% who say abortion should be ...



Source: Survey of U.S. adults conducted Sept. 18-24, 2018.

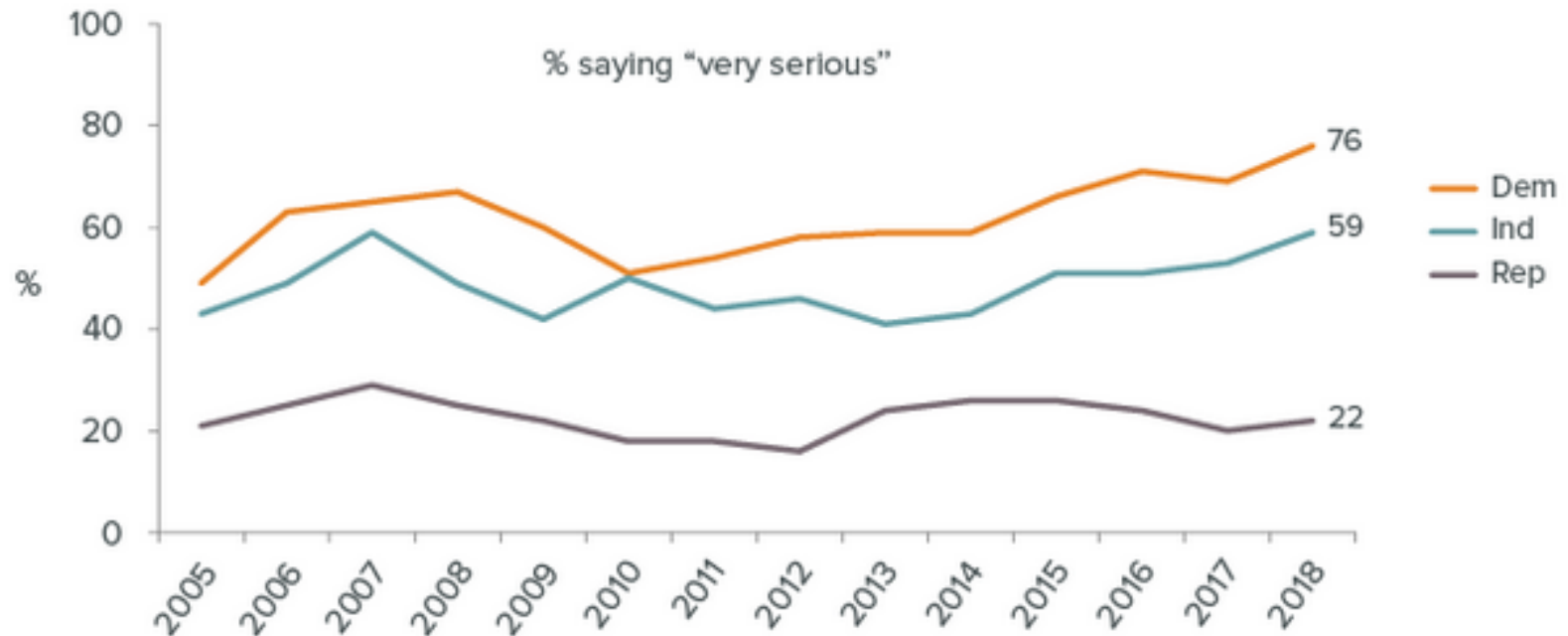
Notes: Data from 1995-2005 from ABC News/Washington Post polls; data for 2006 from AP-Ipsos poll. Trend lines show aggregated data from polls conducted in each year. 2013, 2014, 2015, 2017, 2018 figures are based on one poll.

PEW RESEARCH CENTER

Example from PPIC

(<https://www.ppic.org/publication/californians-views-on-climate-change/>)

How serious is the threat of global warming to California's future?



SOURCE: PPIC Statewide Survey series. The margin of error for all adults in July 2018 is +/-3.4%. The margins of error for subgroups are larger.



Pay attention to:

- Is it a scientific survey?
 - How sample is selected
 - Response rate
- Questions used
- Who does the survey
- Who pays for the survey
- If the survey does not bother to report any of this that is an indicator to distrust it!
- What are the results of other surveys?



One check: compare to other similar surveys. This BBC News story gives the median of the polling results for 2020



<https://www.bbc.com/news/election-us-2020-53657174>

Who's ahead in national polls?



DEMOCRAT
BIDEN
51%

REPUBLICAN
TRUMP
43%



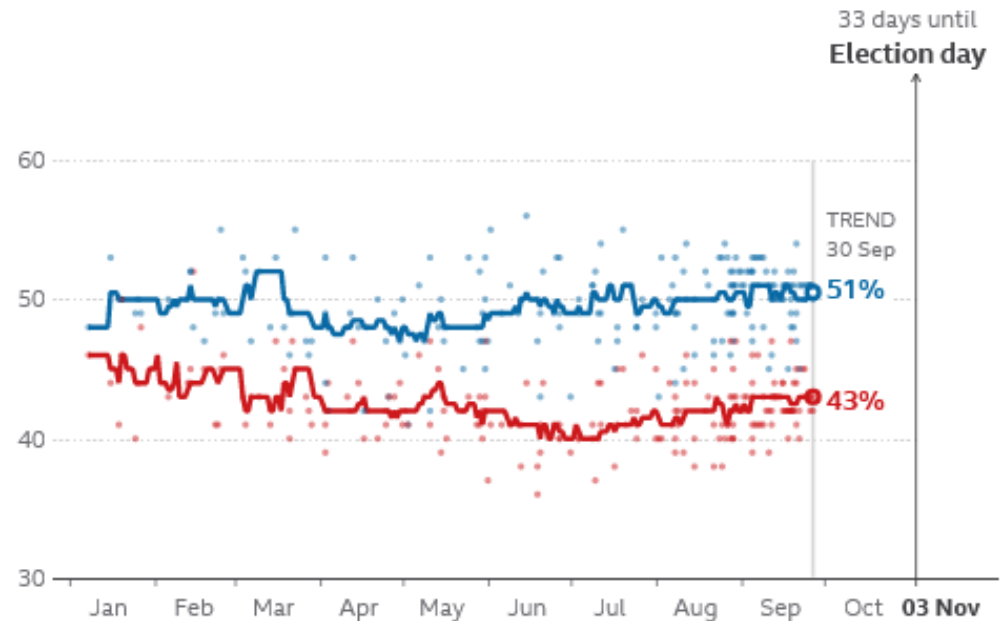
Trend line showing average voting intention based on



individual polls



Show individual polls



The BBC poll of polls looks at the individual national polls from the last 14 days and creates trend lines using the median value, i.e. the value in the middle of the set of numbers.