



<https://www.nytimes.com/interactive/2024/11/06/us/politics/presidential-election-2024-red-shift.html>

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0. The graphic depicts the shift in party lean between the 2020 and 2024 presidential general election for each county. Lean is denoted by a red rightward or a blue leftward arrow where the length of the arrow depicts the vote increase (as a percentage) towards the Republican or Democratic party, respectively. The arrows are predominantly red rightward arrows.

This particular graphic appears in the article 'Election Results Show a Red Shift Across the U.S. in 2024', the first of a sequence of graphics showing trends in presidential election voting results. The article also includes similar figures depicting the lean-change between the 2012-2016 and 2016-2020 data as well a table summarizing the nationwide shift by county-wide demographics (e.g. Over 90% white, suburban, urban, over 50% college-educated, etc).

1. The election data used by the New York Times are sourced from the Associated Press, as stated at the bottom of the article. The AP makes these data available through a paid license which I don't intend to pay for. However, the Harvard Dataverse (<https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/VOQCHQ>)

provides free access to tabulated election data from 2000-2024, and the county level results from this source would be sufficient to recreate all the figures in this article.

2.

	year	state	state_po	county_name	county_fips	office	candidate	party	candidatevotes	totalvotes	version	mode
0	2000	ALABAMA	AL	AUTAUGA	1001.0	US PRESIDENT	AL GORE	DEMOCRAT	4942	17208	20250821	TOTAL
1	2000	ALABAMA	AL	AUTAUGA	1001.0	US PRESIDENT	GEORGE W. BUSH	REPUBLICAN	11993	17208	20250821	TOTAL
2	2000	ALABAMA	AL	AUTAUGA	1001.0	US PRESIDENT	OTHER	OTHER	113	17208	20250821	TOTAL
3	2000	ALABAMA	AL	AUTAUGA	1001.0	US PRESIDENT	RALPH NADER	GREEN	160	17208	20250821	TOTAL
4	2000	ALABAMA	AL	BALDWIN	1003.0	US PRESIDENT	AL GORE	DEMOCRAT	13997	56480	20250821	TOTAL

The data provide the election year, state/county information (state, state\_po, county\_name, and county\_fips), candidate and party information (office, candidate, party), and votes for each candidate. There are 94409 rows of data.

3. The analysis would use just Republican Votes and Democrat Votes. A new total would be calculated by summing the two, ignoring third-party or write-in votes.
4. From the dataset above, the raw vote data is first converted to percentages by county and year. I believe third-party votes are not considered, and lean is calculated as  $(R-D)/(R+D)$ . The margin-shift is then calculated as the difference in lean between consecutive elections.
5. No model has been applied to these data.
6. The 'article' doesn't provide much editorial beyond the title, just eight sentences summarizing the data as matter of fact without interpretation. The article starts with this statement:

More than 89 percent of counties in the United States shifted in favor of former President Donald J. Trump in the 2024 presidential election...

I interpret the title and the use of 'in favor of former President Donald J Trump' as suggesting that the election results indicate an ideological change, that there is a red shift among voters. Considering the source is the NYT, a balanced if not slightly left-leaning publication, this feels as if the data are presented to disturb the audience, a call to action against a worrisome trend.

7. I don't entirely believe the red shift as presented. Election data presented on maps are flawed by the land-don't-vote fallacy, conflating area with population. There is no standard for the population of a county; the same percentage-wise change in a small county requires a fraction of the votes as would the same change in a more densely populated county.

Also, the 2024 election was bizarre in several ways and the red shift may not indicate a widespread ideological change. Numerous factors may have contributed to the electoral shift without suggesting a favor towards Trump:

- Many Democrats (and certainly Republicans) were unenthusiastic for Biden as a candidate
- The Democratic party substituted its candidate late in the election cycle, Kamala Harris replacing Joe Biden.
- Kamala Harris is a biracial woman, and implicit biases (if not overtly racist/sexist beliefs) may have swayed voters against voting Democrat.
- There was an assassination attempt against Donald Trump during his campaign.
- There were significant efforts to either limit voting or disqualify cast ballots in historically Democrat-leaning counties.

While these factors may have tilted the votes in Trump's favor, they may be more representative of apathy on the left or disdain on the right. It would be informative to compare final ballots with polling data taken before/after some of the momentous events during the campaigns to better understand how some of the above factors may have swayed voters. Based just on these data, I am not convinced that the American populace is shifting rightward in their beliefs. It may be, but these data don't convince me.

8. The amount of red or blue 'ink' should be proportional to the number of votes, but differences in the size of counties make this an unfair comparison; Adams County (~60,000 votes) and Philadelphia County (~700,000 votes) are each represented by a single arrow. I assume either the AP or the NYT aggregated the data to get county-level results, since initial counts are tallied at the precinct-level.

It would be interesting to see votes aggregated at the level of congressional districts, more similarly populated districts. That said, congressional districts are in many cases gerrymandered to game congressional representation, and this would also have an effect on the political leaning.