

Did Solo do worse in more conservative media markets? Probably not.

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In the *Washington Post*, I [argued](#) that the online political backlash against *Star Wars* is real (not bots), is a modest percentage of SW Twitter, and targets female/POC actors and fans disproportionately. It is an open question how deep this backlash is, particularly off-line.

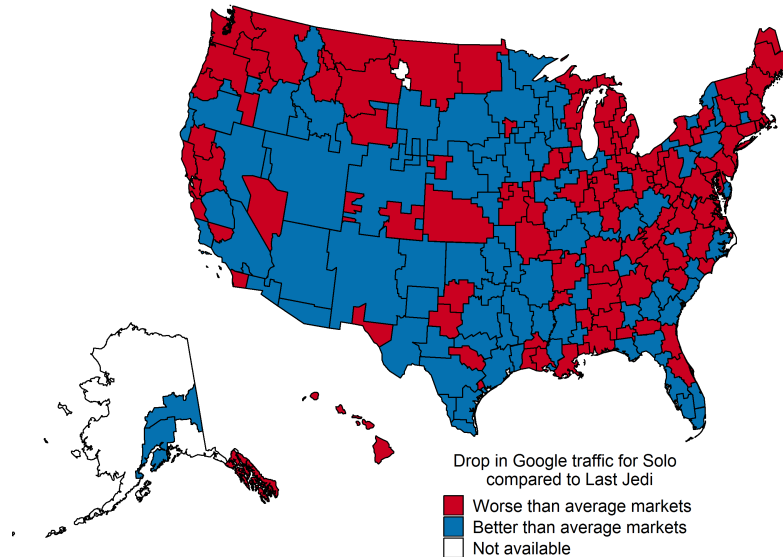
When I was writing the piece, I looked at Google search data to see whether political backlash explained why *Solo: A Star Wars Story* underperformed in May 2018.

Solo got a lot less attention on Google than *The Last Jedi* (TLJ). But the drop in enthusiasm was not any bigger in more conservative media markets. From Lucasfilm's point-of-view, it is not great news that audiences of all political compositions were less interested in *Solo* than past SW films. But as observers, we already know the film did not make as much money as their other releases. A conservative political backlash is probably not the reason.

Data on interest in Solo

The data in the map in Figure 1 is from [Google Trends](#). I measured the volume of Google searches for *Solo* on its opening weekend relative to the volume of Google searches for TLJ when it opened. For example, in the Cheyenne/Scottsbluff media

Figure 1: Solo opening weekend Google traffic compared to opening weekend traffic for TLJ by US media markets



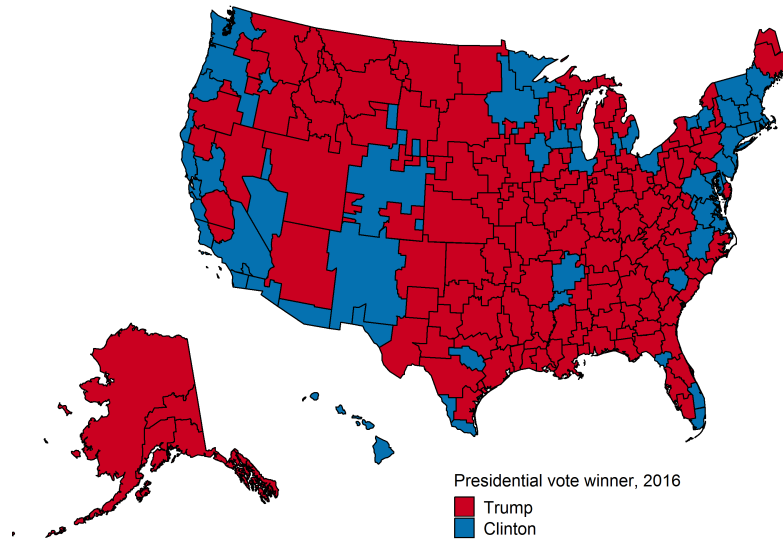
market, opening weekend Google traffic for *Solo* was 20% of opening weekend traffic for TLJ.

On average, Solo Google traffic was a little more than 2% of TLJ Google traffic. In red areas on the map (above left), the Solo-relative-to-TLJ comparison was even worse for Solo than the average media market. In blue areas it was better. (There were no media markets where Solo had more Google traffic than TLJ).

I measured interest in Solo relative to TLJ for two reasons. First, Google Trends only gives free data in the format of one-thing-relative-to-another. Second, the relative measure adjusts for about how well a SW movie should do in each media market given how past movies have fared. For example, the Salt Lake City (SLC) media market has a lot of Google searches for everything related to SW. Also, it is very conservative. But even if Solo did well in SLC, it might have underperformed in what should have been one of its strongest markets.

Google traffic is not the ideal way to measure movie performance. It would be better to have ticket sales by region. It would be even better to have consumer level data. That will eventually be available and can be used to ask if more conservative people were less likely to go see *Solo* than past SW movies.

Figure 2: Presidential election results in US media markets, 2016



Data on politics

The map in Figure 2 indicates which presidential candidate won each media market in 2016, with President D. Trump in red and H.R. Clinton in blue.

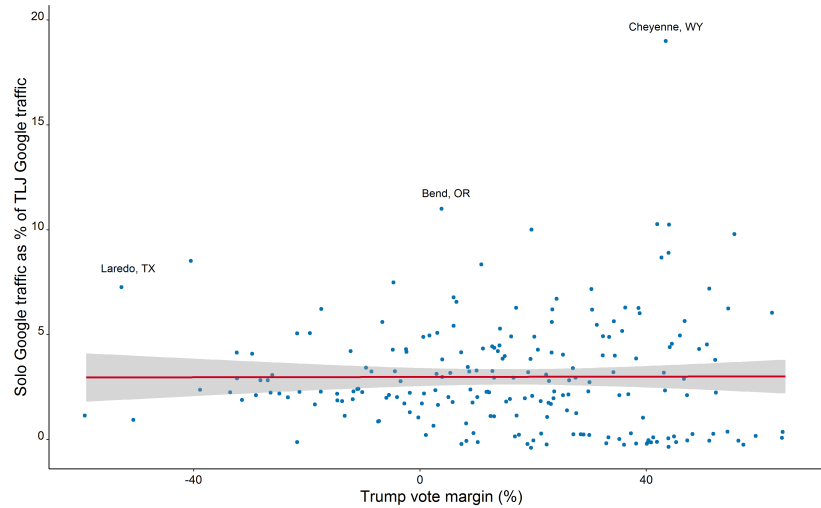
The map of areas that were bad for Solo (left) does not look very similar to the map of media markets that were good for Trump (right).

Media market political leanings versus interest in Solo

Another way to look at the same information is a graph. Figure 3 is a scatterplot of Google traffic (Solo-vs-TLJ) in each media market compared to President Trump's vote margin in each market. A positive margin is a market Trump won and a negative margin means Clinton won. There is a line drawn through the dots, which is the line that comes closest to fitting these points.¹ The flat line and the formless cloud of dots suggest that there is no correlation between areas where Trump did better and areas Solo underperformed.

¹I.e.: this is the line of best fit from an ordinary least squares regression. $\hat{\alpha} = 2.9$ ($t = 13$), $\hat{\beta} = 0.000039$ ($t = 0.052$).

Figure 3: Solo opening weekend Google traffic compared to political lean of US media markets



Additional sources

US media markets: <https://www.nielsen.com/intl-campaigns/us/dma-maps.html>

Map of media markets: <https://github.com/simzou/nielsen-dma/>.

Election results: <https://www.cnn.com/election/2016/results>

Election results for Alaska: <https://rrhelections.com/index.php/2018/02/02/alaska-results-by-county-equivalent-1960-2016/>