

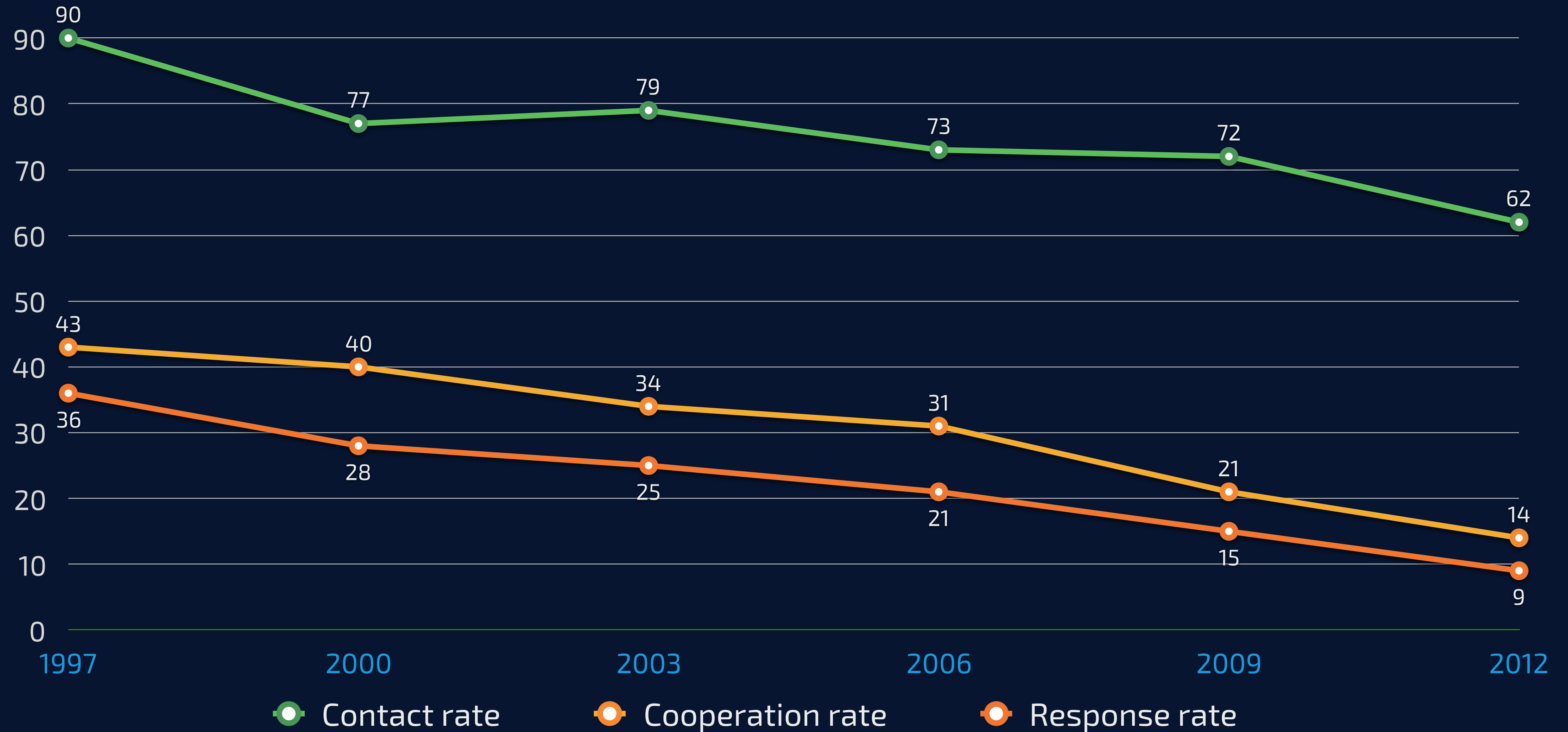
SOCIAL LISTENING, SENTIMENT ANALYSIS, AND NON-TRADITIONAL POLLING

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February 11, 2016
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PHONE RESPONSE RATES, 1997-2012



Data Source: Pew Research Center 2012 Methodology Study

THE GOOD NEWS?



THIS IS A TIME OF INCREDIBLE
INNOVATION IN THE POLLING INDUSTRY



ONLINE POLLING

Reaching hard-to-find audiences. Testing messages in new ways, including video.

SOCIAL LISTENING

Understand how specific audiences are moving in real time, complementing traditional polling.

ANALYTICS & MODELING

Understand your audience at the individual level. Match the right message to the right person.



ONLINE POLLING



ONLINE POLLS HAVE PROVEN MORE ACCURATE IN SOME RECENT ELECTIONS

U.K. ELECTION

U.K. ELECTION | 4:42 PM | MAY 13, 2015

SurveyMonkey Was The Other Winner Of The U.K. Election

By CARL BIALIK



HUFFPOLLSTER: Experimental 2014 Polls Show Promise

12/04/2014 09:23 am ET | Updated Dec 04, 2014



Mark Blumenthal

Mark Blumenthal is the Head of Election Polling at SurveyMonkey.



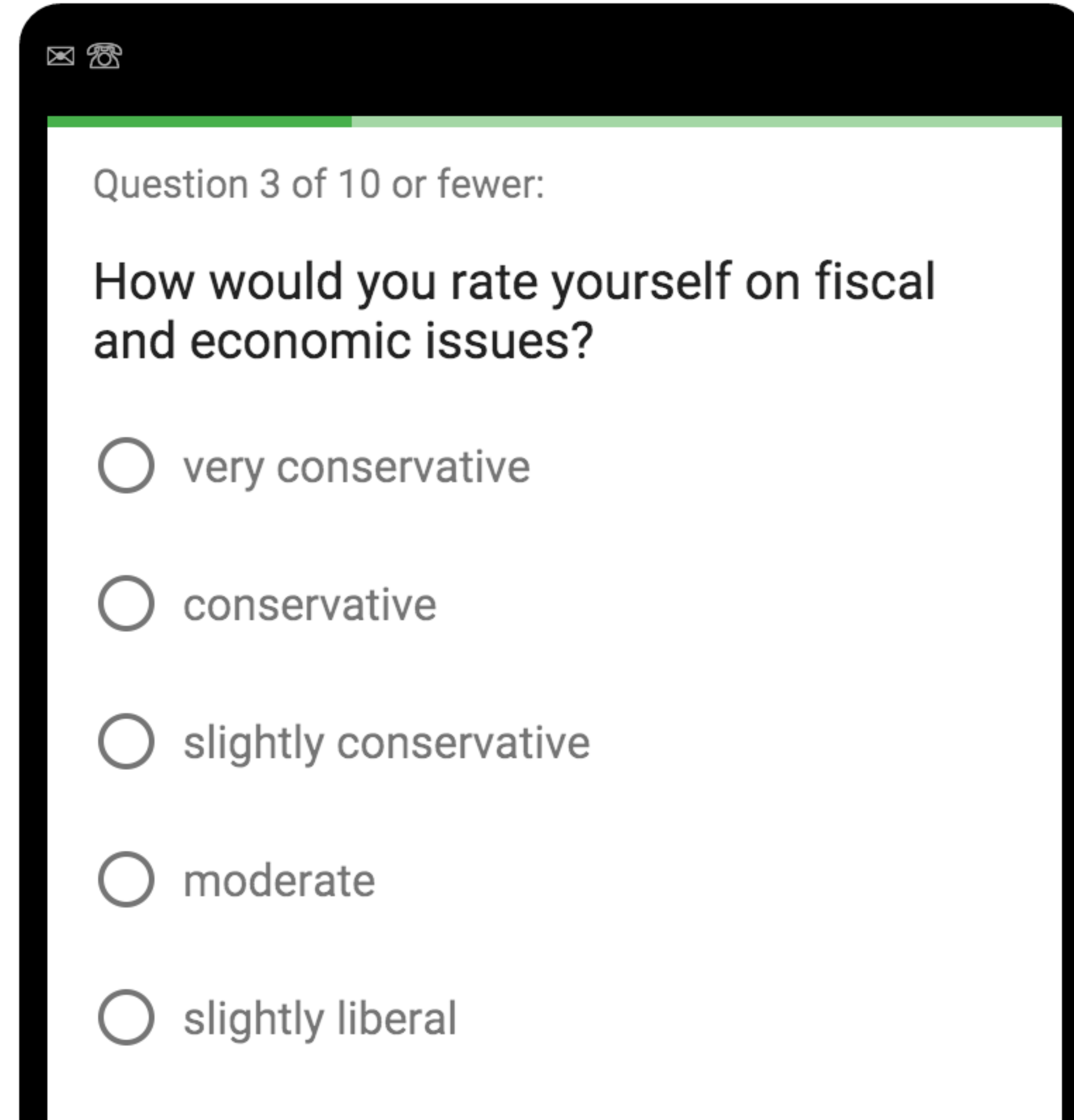
Ariel Edwards-Levy

Reporter, The Huffington Post



ONLINE SURVEYS CAN BE COST-EFFECTIVE... AND FASTER

- There are a growing number of non-probability panels, including YouGov, SSI, and ResearchNow, to choose from
- Google Consumer Surveys and SurveyMonkey intercept users on their platforms and ask them a brief series of questions.
- Downsides: Limited number of questions & inability to link to outside data sources



The screenshot shows a mobile application interface for a survey. At the top, there is a status bar with icons for email and a phone. Below this, a green progress bar indicates the current question. The text reads: "Question 3 of 10 or fewer: How would you rate yourself on fiscal and economic issues?". There are five radio button options listed vertically: "very conservative", "conservative", "slightly conservative", "moderate", and "slightly liberal".

Question 3 of 10 or fewer:

How would you rate yourself on fiscal and economic issues?

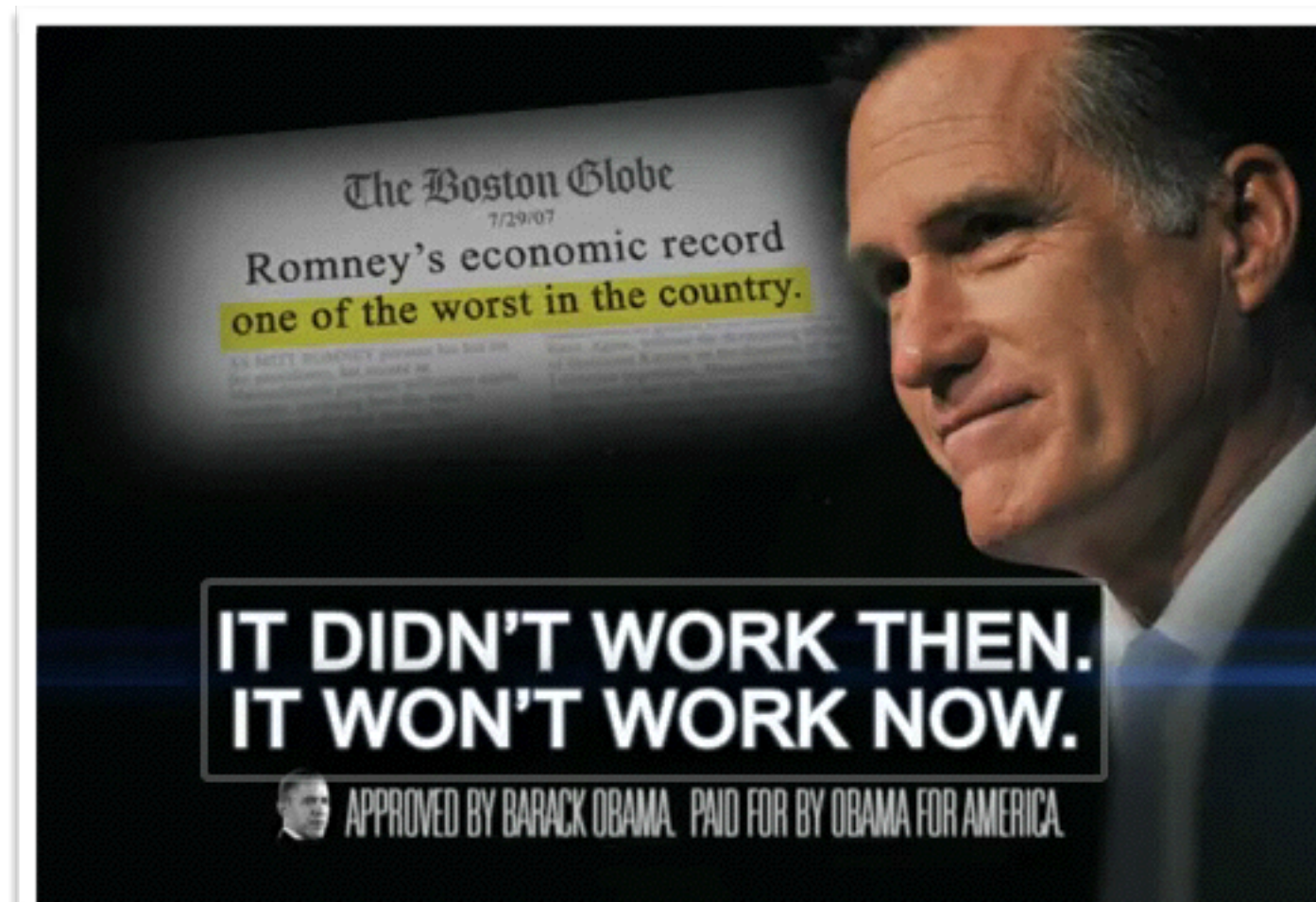
☐ very conservative

☐ conservative

☐ slightly conservative

☐ moderate

☐ slightly liberal



+



=

-2%



+



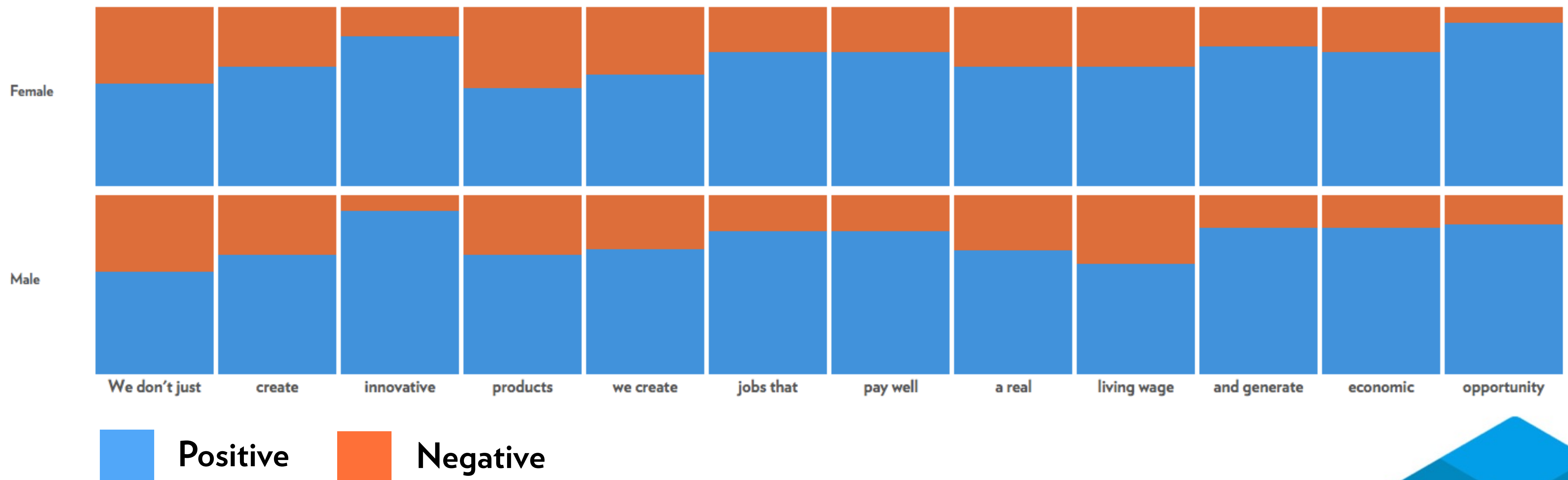
=

+6%



OPTIMIZED MESSAGING: HOW IT WORKS

For any message, respondents are asked to highlight any word or phrase they like, and strike through any word or phrase they don't like. This chart shows you which respondents approved of which part of your message.



HOW SOCIAL LISTENING CAN BUILD ON TOP OF POLLING



FIRST QUESTION: WHAT ARE WE MEASURING?



VOLUME?

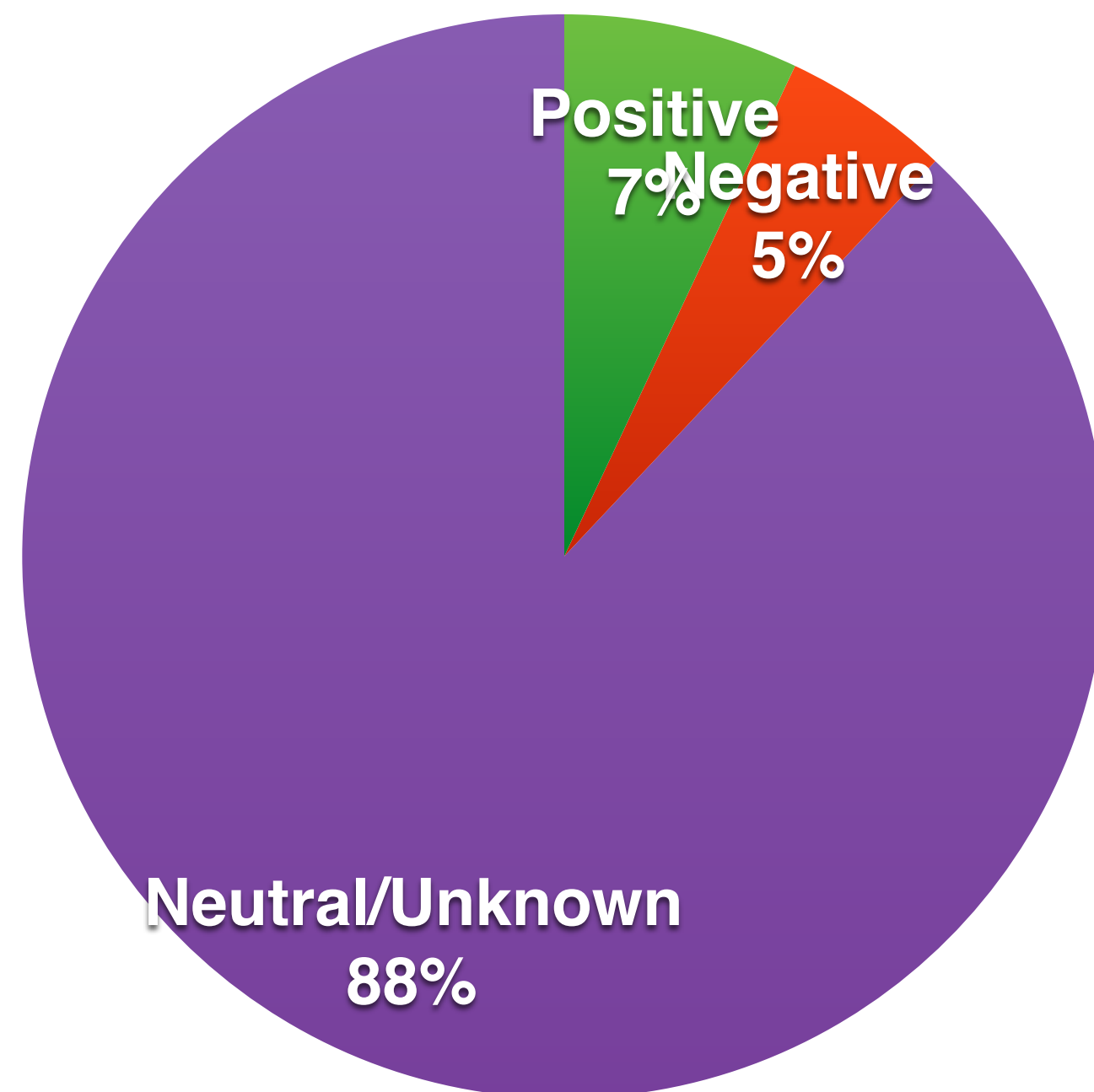
- In 2012, the Obama campaign tracked mentions of President Obama and Mitt Romney, and scored 50,000 accounts by political affiliation.
- What did they find? The majority of mentions came from critics... on both sides. Mention volume wasn't a good indicator of positive activity.
- In our conversation tracking, conservatives on Twitter in 2015 were **twice as likely as liberals to mention Barack Obama**, and liberals were **more than twice as likely to mention the Republican Party**.



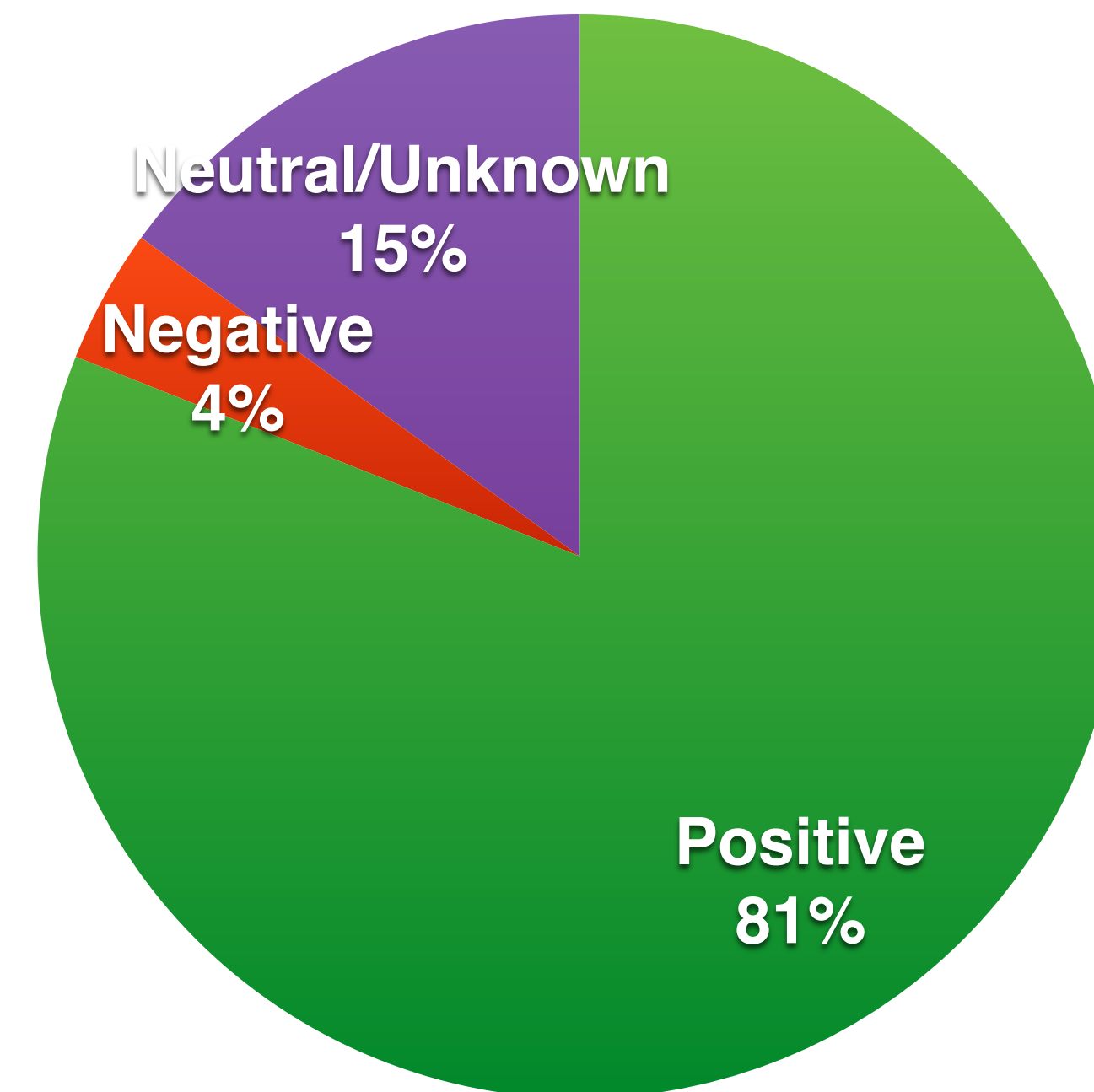
SENTIMENT? HERE'S THE PROBLEM...

After the Supreme Court ruling legalizing gay marriage, we put sentiment analysis to the test, comparing automated sentiment scores on tweets about the ruling generated from a leading social analytics dashboard with our coding of a random sample of the same tweets.

Automated



Manual



PREDICTING OPINION IS MUCH EASIER IF YOU
CAN SEGMENT THE AUDIENCE FIRST...



MEASURING AUDIENCE VS. SENTIMENT

While approaches that rely on sentiment were less accurate, modeling two specific Twitter audiences (supporters and opponents) yielded predictions that were 97% accurate in classifying tweets as either positive or negative (based on the predicted opinion of the author). The models were also accurate in predicting who would actually talk about the issue, with conversation levels more than 20x average.

	Unique State-Matched Accounts	Tweets	Tweets Per Author
Likely Supporter	1,672	149,529	89.43
Likely Opponent	1,988	175,102	88.07
Neutral	2,857	101,990	35.69
Unmatched	195,726	760,628	3.88

CASE STUDY: INTEGRATED POLLING AND SOCIAL DATA ANALYSIS

- For many projects, we will couple an online survey that measures overall attitudes on an issues with an analysis of social data. It is always interesting to see where the two line up, and where they differ.
- In polling on a consumer safety issue*, we found that just **6%** of the surveyed universe had heard a great deal about the issue, and when industry practices were described, respondents had a 2-to-1 positive reaction.
- Yet, the issue had been a subject of a firestorm of online activity, with 240,000 tweets, most of them negative. The client wanted to know whether this was a leading indicator of a future decline in public opinion as awareness grew, and which target audiences might be most affected.



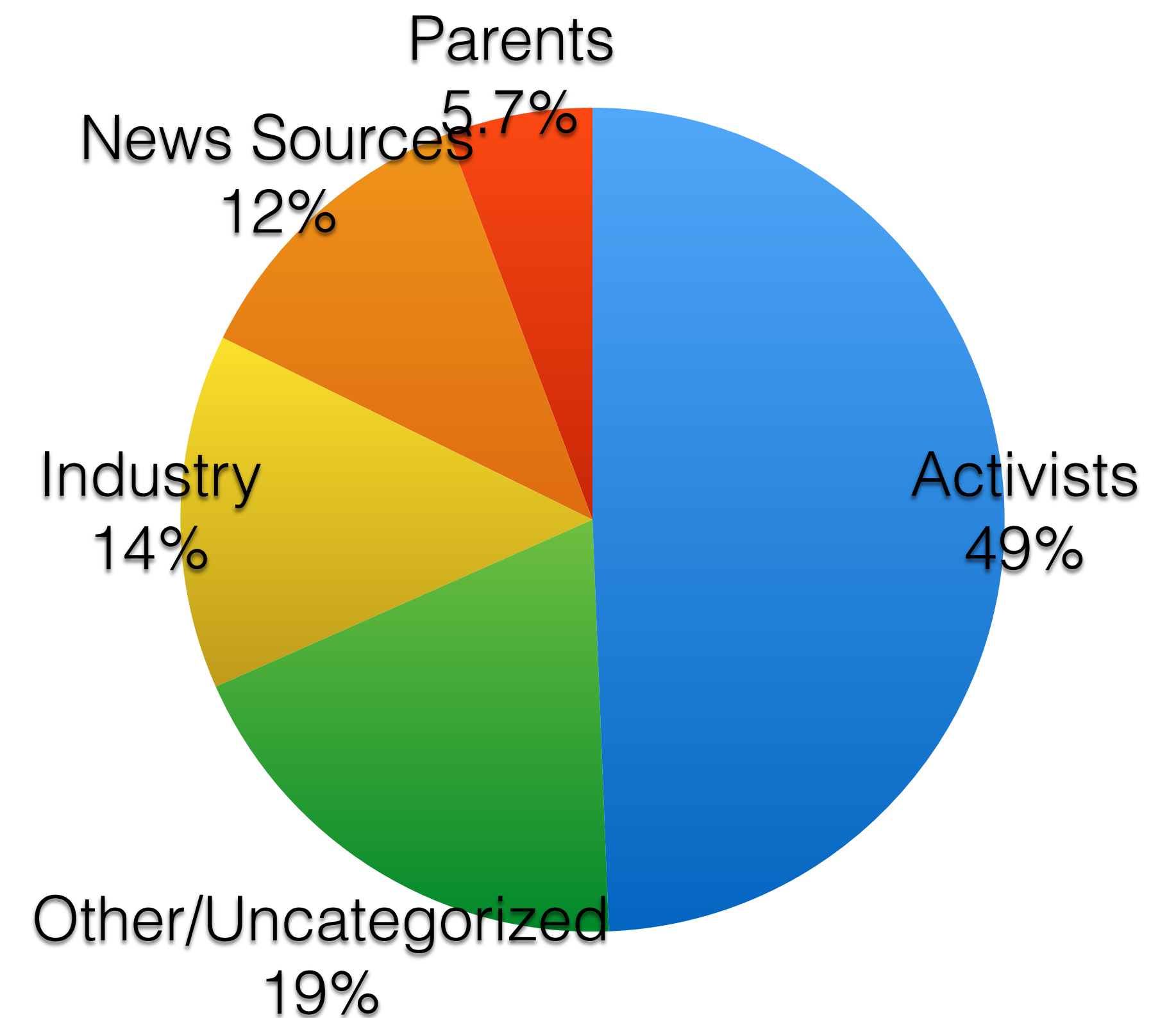
KEY QUESTIONS

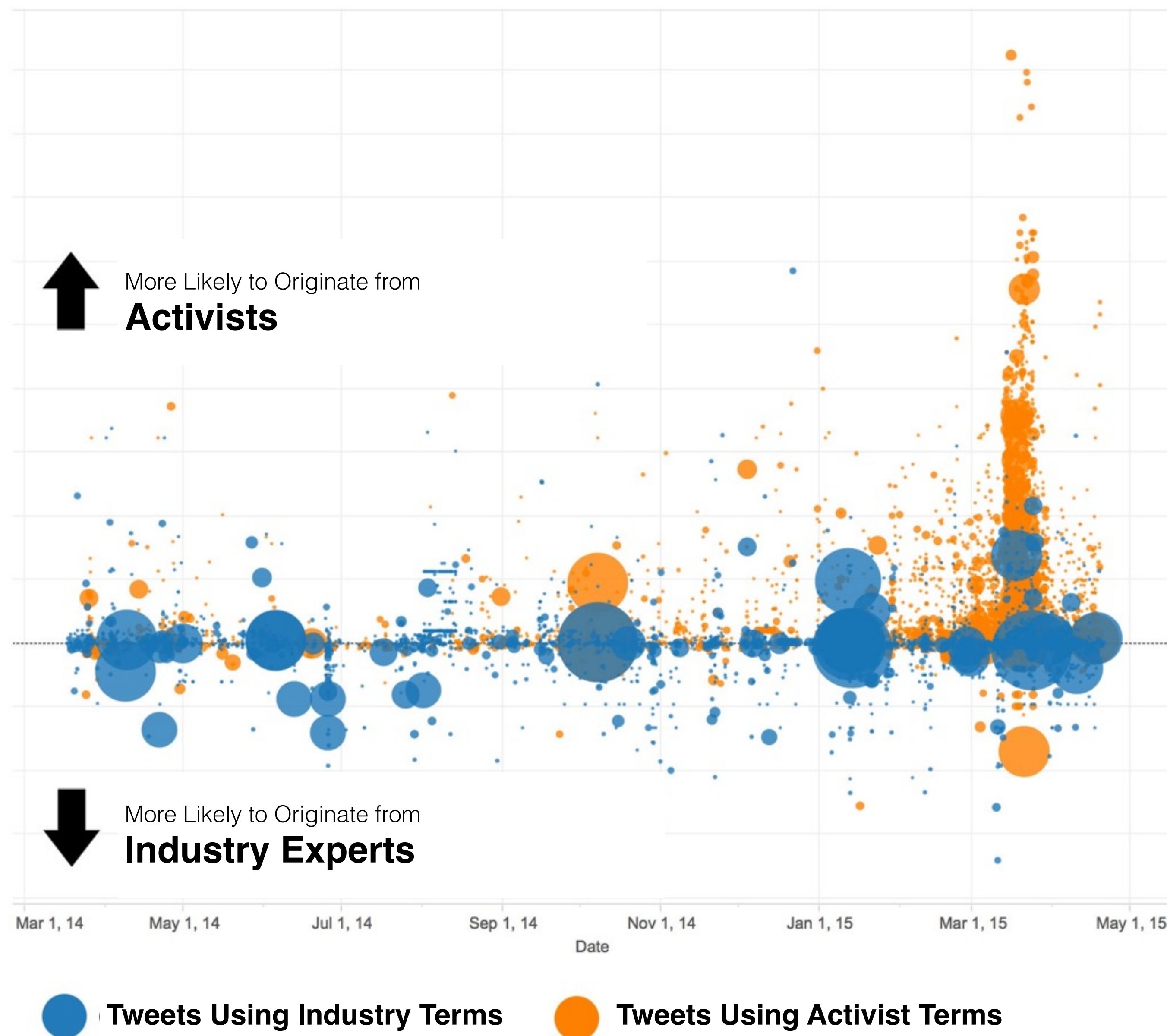
- **What mattered?** Tracking the key events in the debate over safety in the last year and quantifying what was talked about most.
- **Who's engaged?** Understanding the groups most likely to speak out, and what they're most likely to say.
- **Who matters?** Mapping the most influential voices on both sides of the debate.
- **Where is it happening?** Understanding where networks of potential support and opposition are located geographically to anticipate where issues may occur in the future.



WHO WAS TALKING?

We classified Twitter users into seven author categories by analyzing their bios for identifying information. While there was some degree of overlap for most users - we grouped individuals into the single category they appeared to most strongly identify with. Overall, we were able to classify 81% of the unique users within our sample in one of our four categories.





- Data from both network analyses can be combined with conversational data to assess which episodes within the debate spurred each audience to action.
- The bubbles on this chart represent individual tweets, with the larger bubbles indicating tweets with significant reach (typically from mainstream news organizations).
- Each color represents the subject matter of the tweet, while vertical positioning shows which audience engaged more (industry below the line or activists above the line) engaged more. A tweet with many retweets from influential members of one audience will show up high or low on this chart.
- This allows us to visualize the content alongside the likely position on the issue of the people tweeting about it.

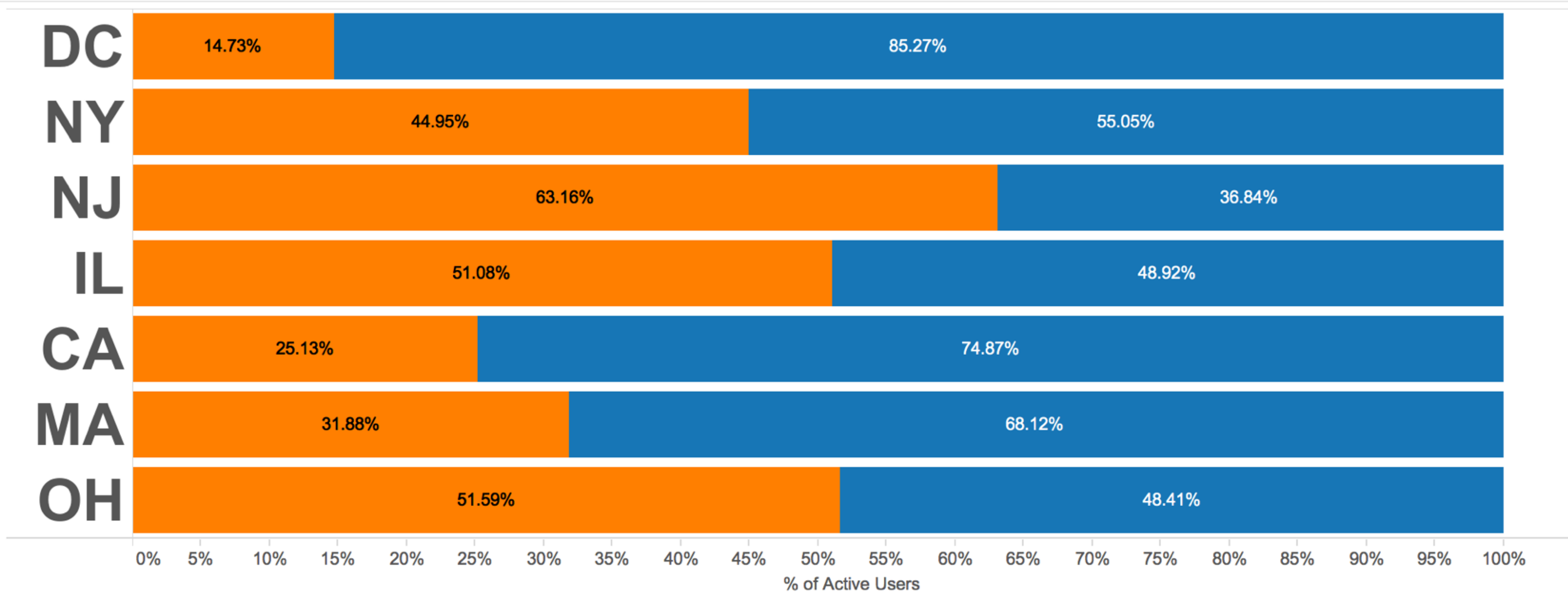


NETWORK ACTIVITY BY STATE

Opposition: DC, CA, MA

Split: NY, IL, OH

Pro: NJ



APPLYING THIS TO ANY ISSUE: OPTIMIZED LISTENING



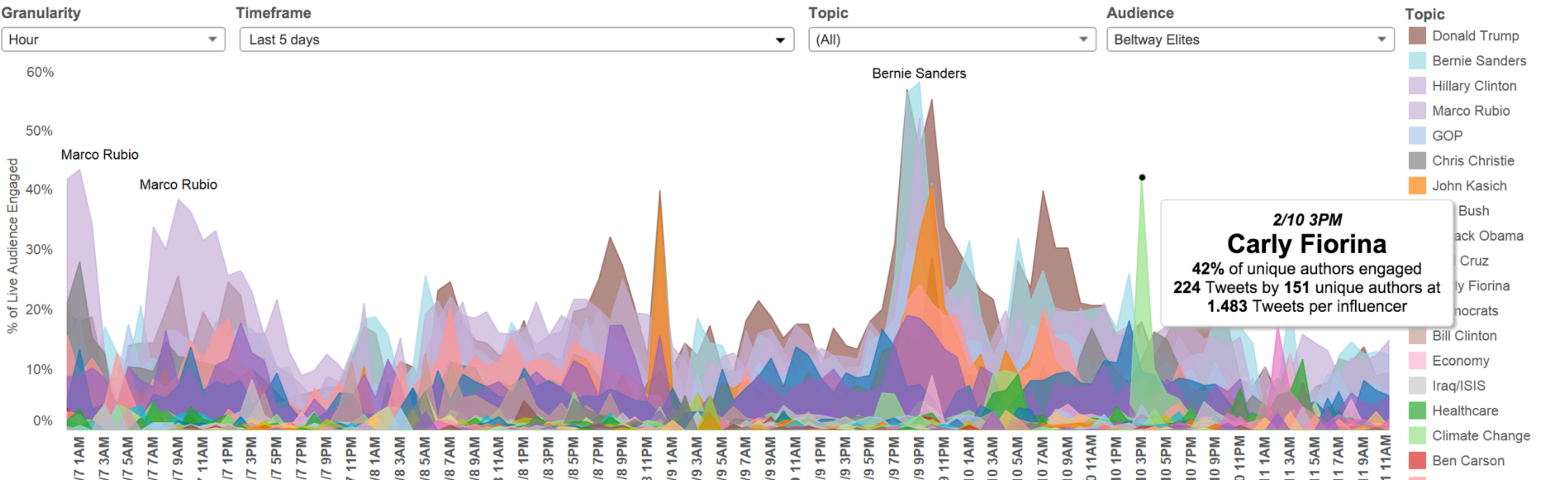
Trendlines

#1 Issue Right Now
Hillary Clinton

% Talking About This
15.0%

% Difference in Last Hour
32.3%

Trending | RT @eorden: Rubio got blueberry pancakes w blueberry syrup. He's trying to eat soft foods, he said, because he cracked a molar on a Twix ba...



RATING AND RANKING CANDIDATES & ISSUES BY AUDIENCE

#1 Ranked Issue

	Everyone	Beltway Elites	Conservative Base	Liberal Base
2/10/20..	Donald Trump	Donald Trump	Donald Trump	Bernie Sanders
2/9/2016	Donald Trump	Donald Trump	Donald Trump	Bernie Sanders
2/8/2016	Donald Trump	Donald Trump	Donald Trump	Bernie Sanders
2/7/2016	Donald Trump	Marco Rubio	Donald Trump	Bernie Sanders
2/6/2016	Donald Trump	Marco Rubio	Donald Trump	Bernie Sanders
2/5/2016	Bernie Sanders	Hillary Clinton	Donald Trump	Bernie Sanders
2/4/2016	Bernie Sanders	Hillary Clinton	Ted Cruz	Bernie Sanders
2/3/2016	Donald Trump	Donald Trump	Donald Trump	Bernie Sanders
2/2/2016	Donald Trump	Donald Trump	Ted Cruz	Bernie Sanders
2/1/2016	Donald Trump	Donald Trump	Donald Trump	Bernie Sanders
1/31/20..	Donald Trump	Donald Trump	Donald Trump	Bernie Sanders
1/30/20..	Donald Trump	Donald Trump	Donald Trump	Bernie Sanders
1/29/20..	Donald Trump	Donald Trump	Donald Trump	Bernie Sanders

CASE STUDY: THE TRADE DEBATE

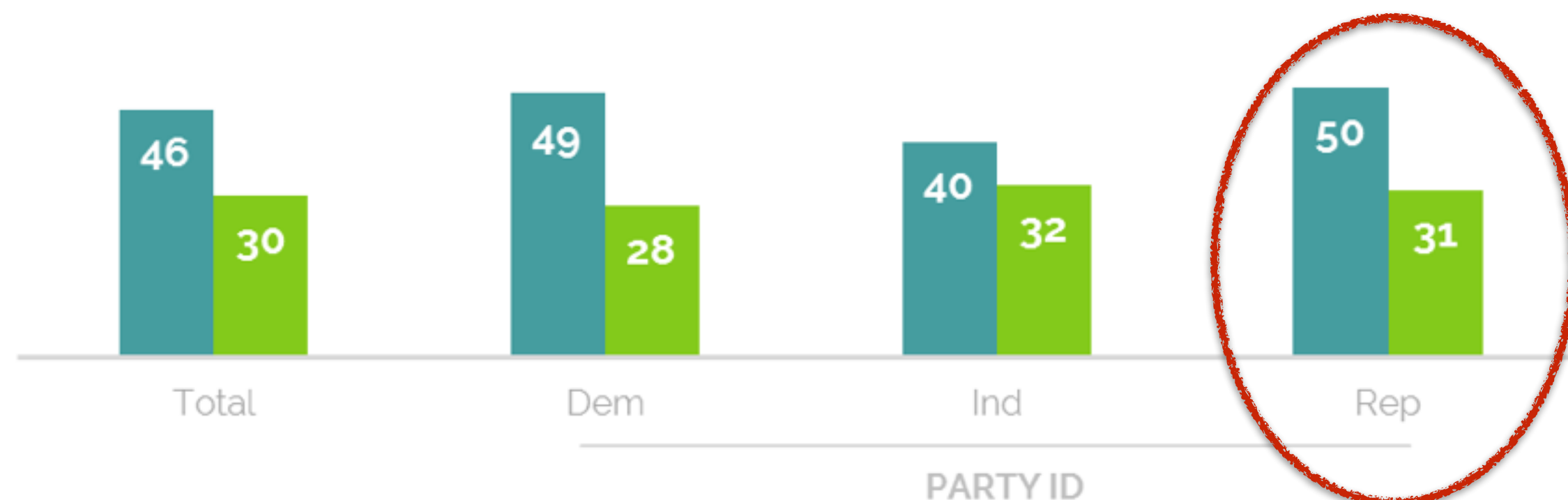
In early May and October 2015, YouGov released two studies measuring public support for free trade and the TPP, and exploring public perceptions of trade deals and their benefits to the U.S. economy. These two polls show a decline in public support for free trade, with the greatest shift amongst Republicans.

May 2015 YouGov Poll on Free Trade

Support for free trade

Overall, do you think that free trade between the United States and other countries has been good or bad for the United States? %

■ Very/somewhat good ■ Very/somewhat bad



YouGov | yougov.com

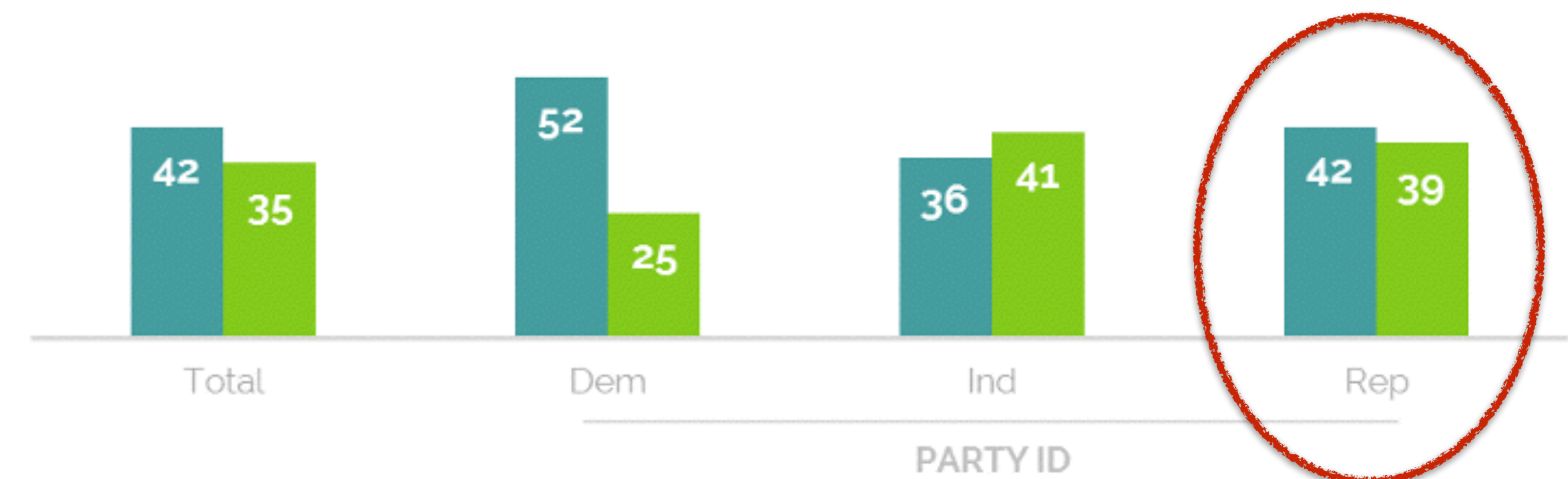
May 10-11, 2015

Oct 2015 YouGov Poll on Free Trade

Support for free trade by party identification

Overall do you think that free trade between the United States and other countries has been good or bad for the United States? (%)

■ Good ■ Bad



YouGov | yougov.com

Oct. 5-7, 2015

Based on the polling results showing increasing support for free trade among Democrats, it would be natural to assume Democratic candidates would also support the issue that has pursued aggressively by the Obama White House.

Yet both Democratic presidential candidates opposed the TPP. While the Republican field was initially supportive, opposition grew and many candidates came out against TPP.

What happened?

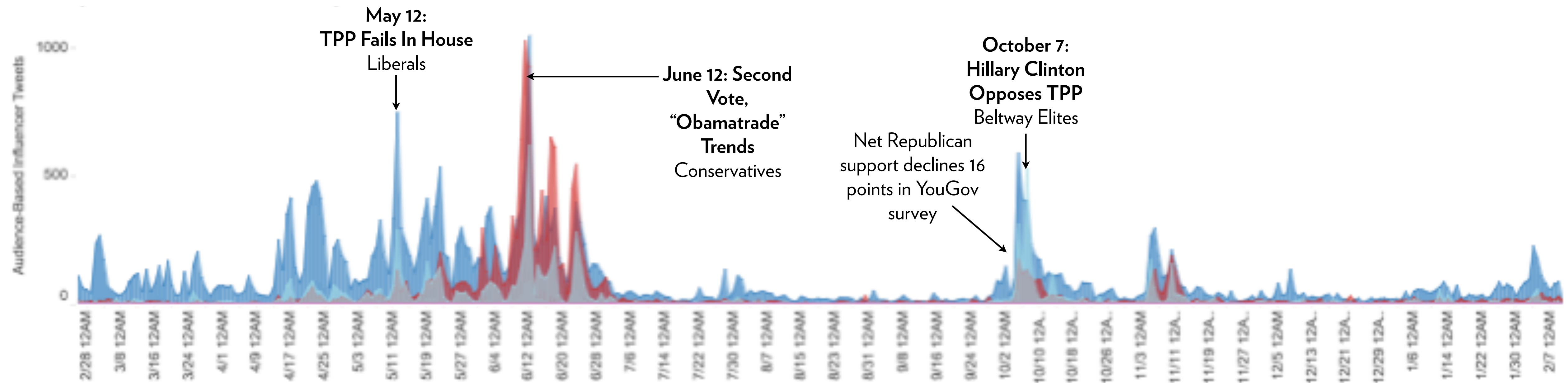


HOW TPA/TPP PLAYED OUT ON TWITTER

From February 1, 2015 through today, Liberals voicing opposition were almost three times as likely to talk about TPP as conservatives, comprising 71.43% of the mention volume between the two audiences. Discussion surrounding international trade, specifically TPP was dominated by Liberals on Twitter up until June 1st, when we suddenly saw TPP become a top issue for Conservatives.

Volume of Twitter Conversation about Trade Over Time By Audience, Feb 1, 2015 - February 9, 2016

Head-to-head comparison of daily mentions over time from each audience



HOW TPA/TPP PLAYED OUT ON TWITTER

Tweets from Influencers

58,374

Unique Influencers

1,617

Tweets Per Influencer

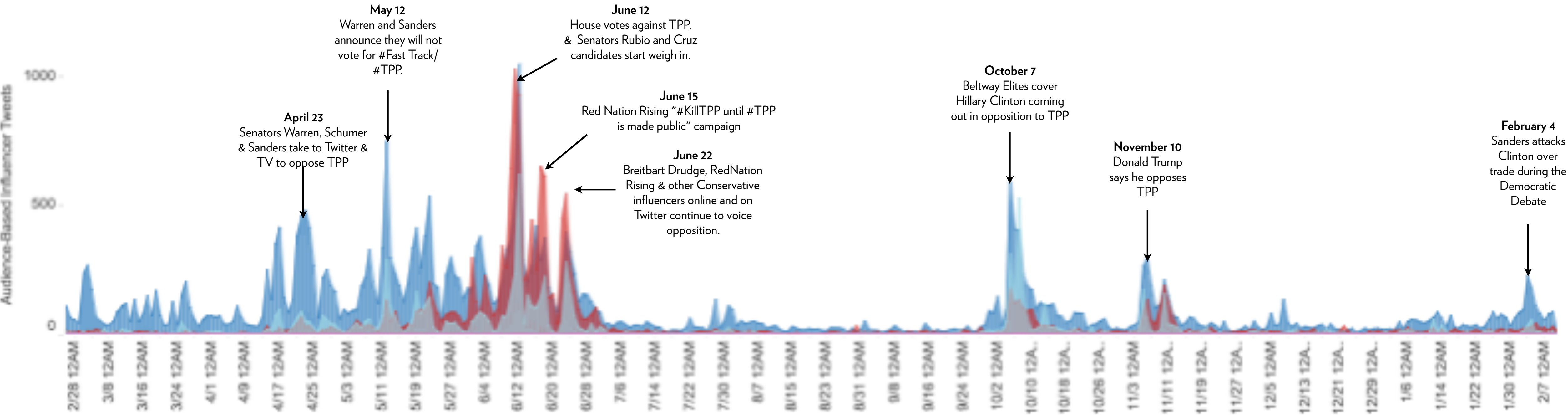
36.1

Change vs. 15-Day Average

19.2%

This matters most to

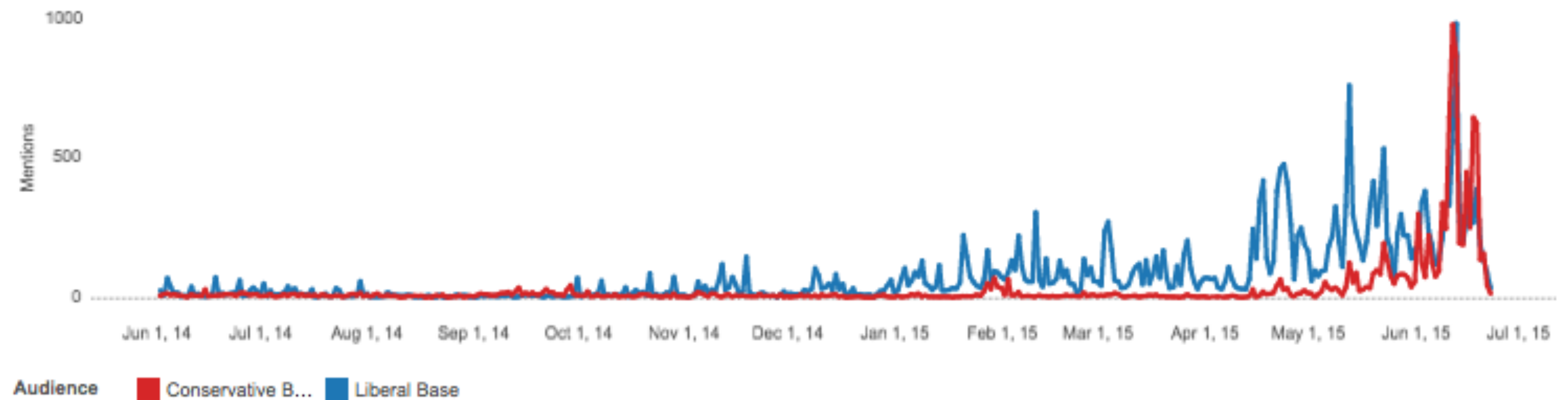
Liberal Base



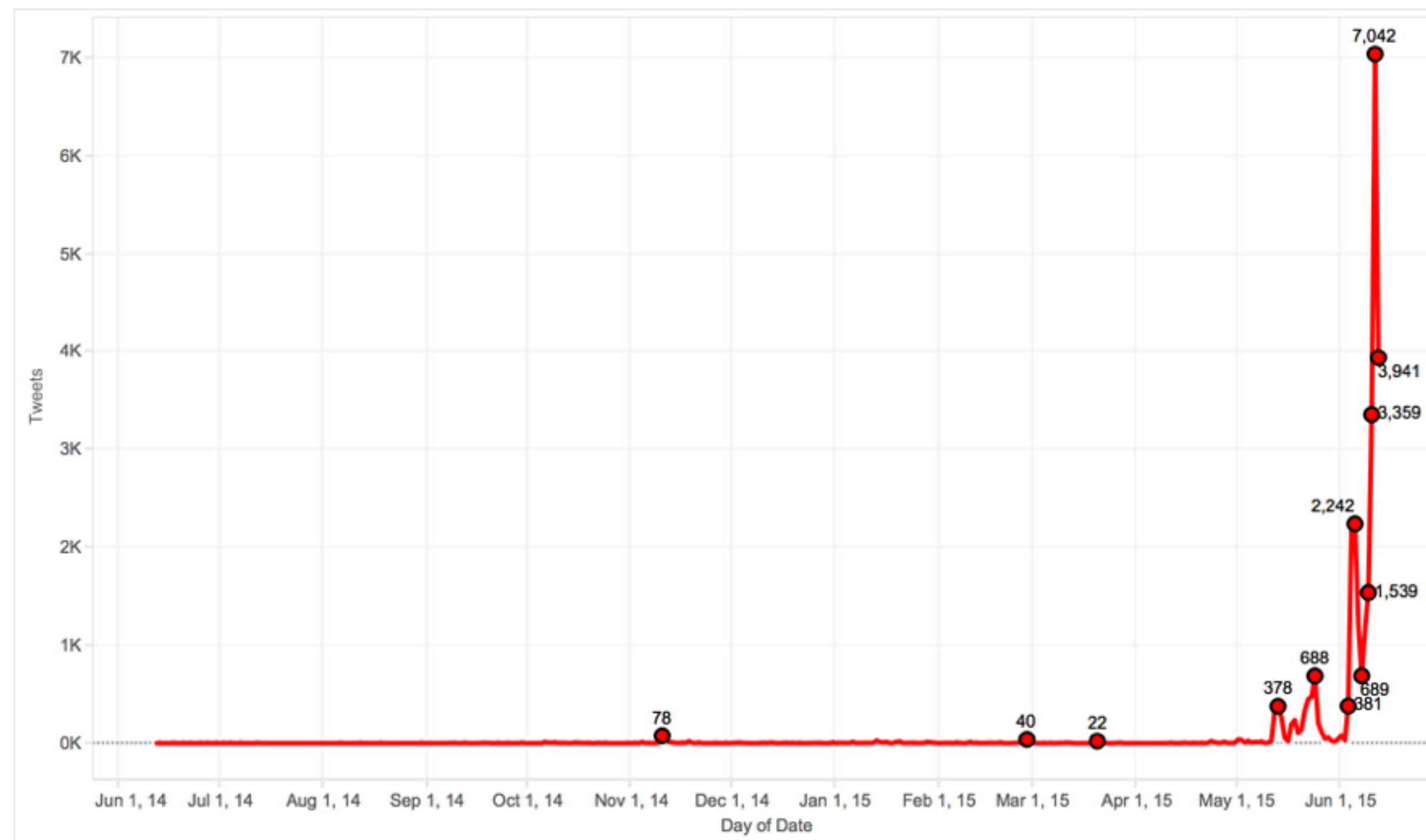
- The rise in Conservative discussion on Twitter surrounding trade exploded on June 4th when there was a 1000% increase in the use of the phrase Obamatrade on Twitter.
- Over the course of June, every time Republican leaders pushed for the passage for TPP, Conservative Twitter activity spiked in opposition.
- In part, Conservative outcry on Twitter was a result of political pundits weighing in and pointing out that TPP would expand President Obama's authority it matters related to immigration. That caused an explosion of pushback with many Conservatives pushing the term "Obamatrade" on Twitter.

Volume of Twitter Conversation about Trade Over Time By Audience, June 2014 - June 2015

Head-to-head comparison of daily mentions over time from each audience



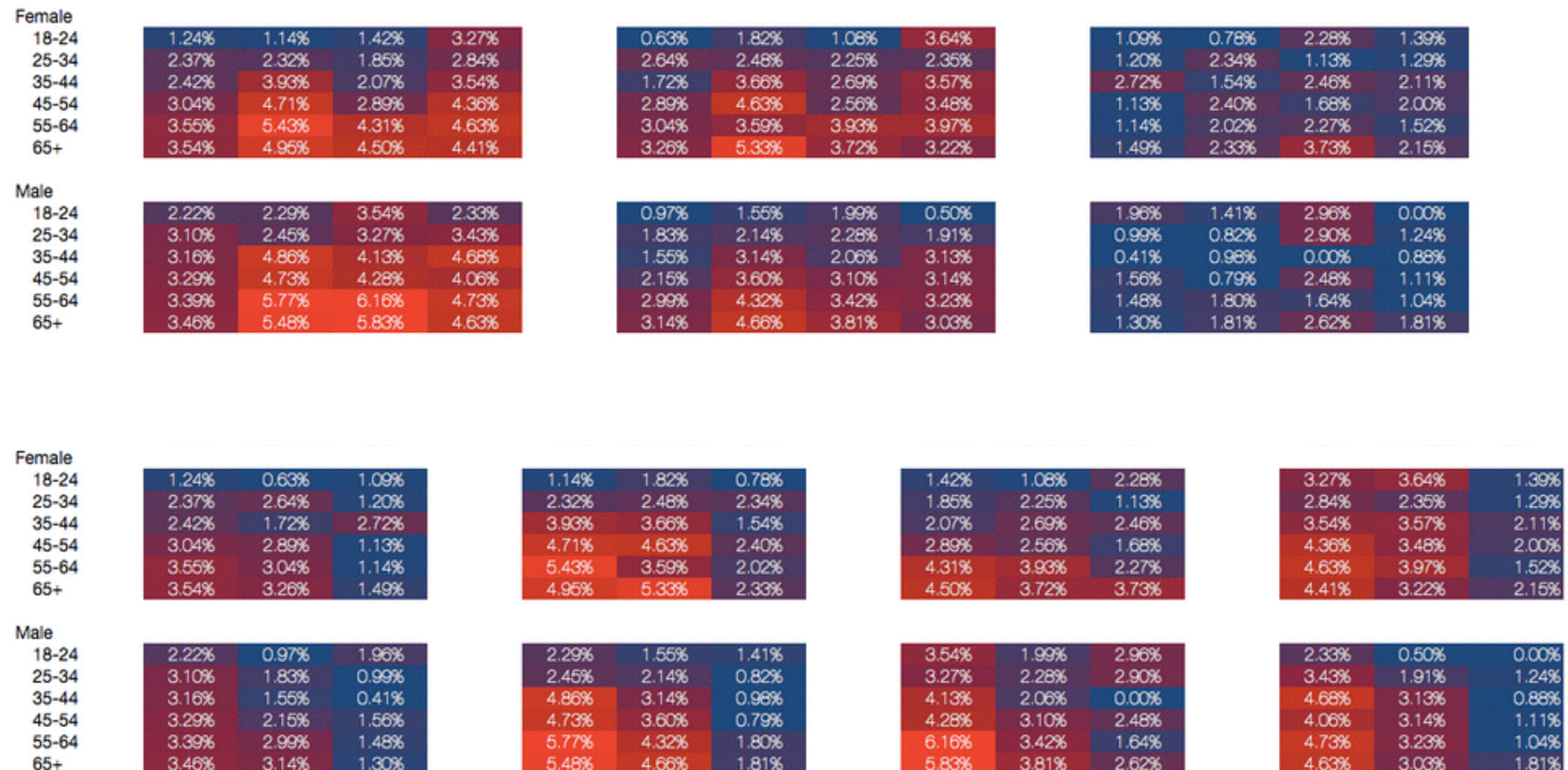
Mentions of "Obamatrade" on Twitter, June 2014 - June 2015



DATA ANALYTICS & FIELD EXPERIMENTS



MESSAGE TESTING ON FACEBOOK



- In this experiment, three different messages were tested to four separate audience segments on Facebook, with results broken out by demographics.
- This allowed us to target the best performing message to each of 48 different attitudinal and demographic audience segments for optimal performance.



Q&A

