Soda tax debates:

A case study of Berkeley vs. Big Soda's social media campaign

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Clancey Bateman, MS, MPH, a consultant for John Snow Inc., served as a volunteer for the Berkeley vs. Big Soda campaign, which included managing and posting social media content. She also facilitated access to the campaign's social media data.

Lori Dorfman, DrPH, director of BMSG, participated in the "Soda Series" mentioned in this case study. The Soda Series was a line-up of six local community events about the harmful impact of sugary drinks.

Soda tax debates: A case study of Berkeley vs. Big Soda's social media campaign

Social media is changing how communities and groups communicate and rally to build capacity in election campaigns.[1-4] Social platforms like Facebook and Twitter can support citizens' civic action and have the potential to drive news and political agendas.[3, 5] In 2014, voters in Berkeley, California, were asked to decide whether to place an excise tax on sugary drinks sold within city borders. Berkeley vs. Big Soda, the city's pro-tax campaign, turned to social media to communicate with residents and other audiences. The city made history in November 2014 when it passed the nation's first tax on sugary drinks, despite the beverage industry spending more than $2.4 million on an anti-tax campaign.[6] Advocates and stakeholders in other communities can use this case study to strategize about using social media in their campaigns to pass sugary drink taxes, fight chronic diseases and protect public health.

What we did

To better understand the pro-tax campaign's social media efforts, we conducted a content analysis of Berkeley vs. Big Soda's Twitter[7] and Facebook[8] posts and examined their social media analytics. Our analysis includes pre- and post-election posts from February 2014, when the campaign launched its social media strategy, through June 2015.

We obtained Twitter data from Twitter and Twitonomy and Facebook data from the campaign's Facebook account. Our unit of analysis for Tweets and Facebook data was the post, including the text and, for Facebook posts, associated images. When the campaign posted a photo album, we coded only the first three images. We assessed native analytics from Twitter, Facebook and Twitonomy (Twitter only). We catalogued the gender, location and age (Facebook only) of channel audiences, impressions, and engagement (including likes, comments and shares for Facebook, and retweets, likes* and replies for Twitter).

* Formerly called "favorites"

For posts that @BerkvsBigSoda retweeted, we analyzed the content of the tweet, but data on engagement were not available, so we excluded these posts from our analyses of engagement. Although the campaign also used an Instagram account, we did not include it in our analysis because there were a small number of posts.

To determine how the posts were framed, we first read a small number of Tweets and Facebook posts and, informed by our previous research on sugar-sweetened beverage framing in the news,[9] developed a preliminary coding instrument. Before coding the full sample, we used an iterative process[10] and statistical test (Krippendorf's alpha,[11] $\alpha \geq .8$ for all measures) to ensure that coders' agreement was not occurring by chance. See Appendix 1 for a summary of the arguments contained in the posts and Appendix 2 for a glossary of social media and analytics terms.

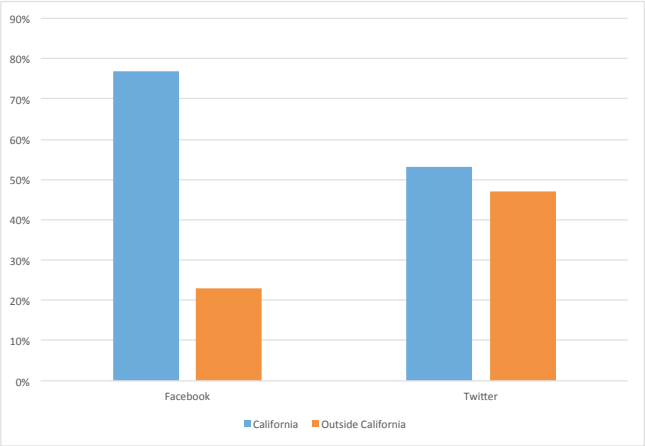
What we found

We found 1,731 tweets and 250 Facebook posts from February 2014 through June 2015. We excluded 13 posts because they were not about sugary drinks, such as when the campaign promoted unrelated issues or posted links with no descriptions. Most of Berkeley vs. Big Soda's relevant posts occurred before the November 2014 election month (77% of Twitter posts; 87% of Facebook posts), with a large fraction during the two months leading up to the vote (42% of Twitter posts; 49% of Facebook posts).

Who was following the campaign on social media?

As of September 2015, the campaign had 594 followers on Twitter, and its Facebook page had 729 "likes" (followers). Across both channels, the majority of followers were women (59% and 69%, respectively) between the ages of 35 and 44 (25% of Facebook followers), and were located in California (see Figure 1 for geographic breakdown). According to Facebook data, while roughly half of followers (49%) were located in Berkeley, 28% were located in other California cities, many of them in the Bay Area (primarily San Francisco and Oakland). Over half of Twitter followers were located

Figure 1: Location of Facebook and Twitter followers

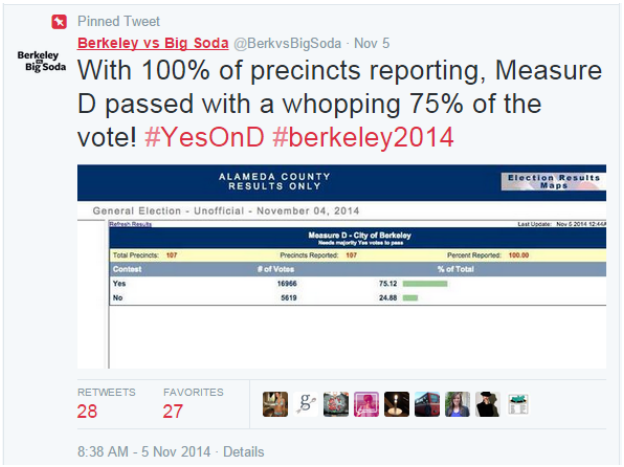


in California (53%); however, more specific location data were not available for Twitter (see Appendix 3, Table 2). Interestingly, 17% of Twitter followers were located outside of the U.S. Among Twitter followers, 80% were identified by Twitter as having an interest in "politics and current events" and 77% in "business and news" (similar data were not available for Facebook followers).

Engagement and impressions

Between February 2014 and June 2015, the Berkeley vs. Big Soda campaign published 1,731 tweets and 250 Facebook posts. On Twitter, there were approximately 3.5 tweets per day, including both original posts and retweets of others' messages (39% of posts). Tweets received an average of five engagements per post (engagement includes retweets, favorites and replies) resulting in a 9% average engagement rate. Each tweet was retweeted an average of 1.67 times.

Figure 2: Twitter post with high engagement



While there were fewer posts on Facebook overall, these posts produced more impressions (the number of times a post was delivered to users' news feeds or search results) and engagements per post compared to tweets. The average number of impressions for Facebook posts was 959, compared to 266 average impressions per tweet (see Appendix 3, Tables 3 and 4).

Engagement and impressions peaked in October and November

For Facebook posts, the average impressions per post spiked in October and November (1,511 and 2,377 impressions per post, respectively) and decreased thereafter. While lower, average impressions per tweet remained consistent over time. However, the total impressions over time were comparable across Twitter and Facebook, peaking in October with about 90,000 total impressions on each of the platforms in that month.

The most retweeted and most liked message pertained to the final election results. This tweet garnered a total of 10,825 impressions and 158 engagements (see Figure 2). On Facebook, a similar celebratory post reached 5,998 people and had 592 engagements (total number of likes, comments and shares on the original and shared posts).

The post with the most lifetime impressions (27,972) was a Facebook message (posted Oct. 22, 2014) sharing a video[12] developed by Robert Reich in support of the campaign: “In an entertaining new video, Robert Reich breaks down the facts on Berkeley's Measure D, Big Soda's tactics and outrageous spending, and tells the story of his encounter with a No on D pollster. http://ow.ly/DbDvH Vote #YesOnD!” (See Figure 3).

Figure 3: Screenshot of Robert Reich’s video: “Like Coke or Pepsi? Wait Until You Hear What They Are Doing.”

What were campaign posts about?

Berkeley vs. Big Soda used social media to frame the debate and announce events

While arguments in favor of the tax were present in more than a third of posts (see Table 1), we found Berkeley vs. Big Soda also used the medium to tell the public about events, recruit volunteers for canvassing, encourage voters to head to the polls (often referred to as “Get Out The Vote”), discuss other sugary drink policies, and celebrate the election win.

Table 1: Topics of Berkeley vs. Big Soda posts on social media (February 2014-June 2015)

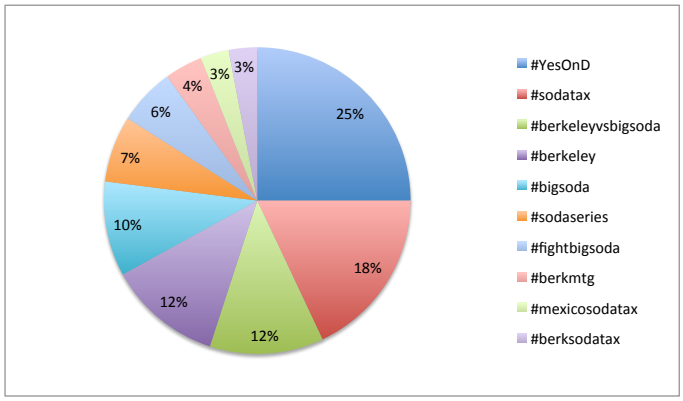
	Twitter posts		Facebook posts	
	Percent	Number	Percent	Number
Arguments in favor of SSB tax	36	614	43	107
Tagging other users ("@")	23	404	N/A	N/A
Events	20	353	37	92
Other SSB policy	6	100	2	6
Celebratory	4	65	0	1
"Get out the vote"	3	59	6	15

Note: These are non-exclusive categories

In more than three quarters of posts, the campaign engaged in the common Twitter practice of using the "@" symbol to mention other users and converse with them. While traditional media typically rely on one-way message delivery from the sender to the recipient, Twitter allows users to have conversations.[13] Interactions included retweeting others' messages (39% of campaign tweets), as well as replying to tweets (14% of tweets) and mentioning ("@") others. The campaign interacted with health advocacy organizations, including the Center for Science in the Public Interest, Soda Free Summer, Kick the Can (a project of the California Center for Public Health Advocacy), Berkeley Media Studies Group, and the Latino Coalition for a Healthy California. Berkeley vs. Big Soda also engaged with individuals such as Anna Lappé (Small Planet Institute/Food Mythbusters) and Jeff Ritterman, a former Richmond, California, city councilmember who fought for a soda tax there in 2012. It also engaged with local news outlets such as Berkeleyside and Beyond Chron.

The campaign used hashtags — categories denoted by the "#" symbol — in 34% of tweets and 37% Facebook posts to connect their posts to broader conversations with other users. The most popular hashtags were #YesOnD (used after July 1, 2014, referring to the official ballot measure D), #sodatax, #berkeleyvsbigsoda and #berkeley (see Figure 4).

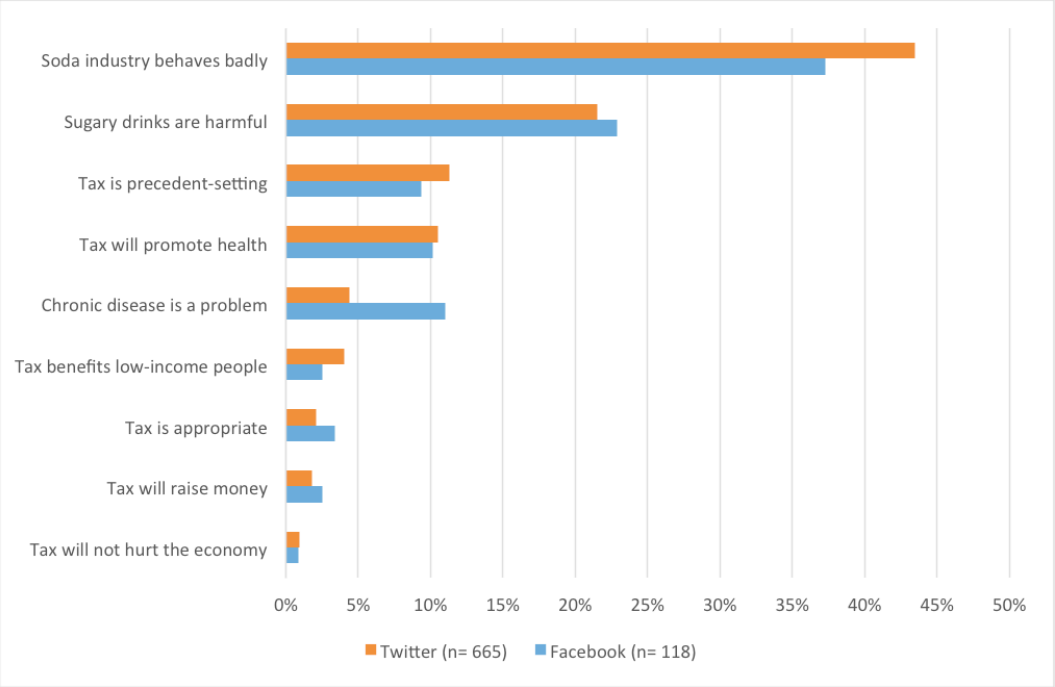
Figure 4: Top hashtags used by @BerkvsBigSoda



Celebratory comments did not comprise a large proportion of posts on Twitter and Facebook; however, they reached the greatest number of people per post. Celebratory tweets issued after the victory had quadruple the impressions and close to six times the engagement compared to non-celebratory posts, with an average of 27 engagements per celebratory tweet. The increase in engagement suggests social media users were interested in interacting with posts praising the passage of the tax proposal, such as when the pro-tax campaign wrote on Election Day, "With 100% of precincts reporting, Measure D passed with a whopping 75% of the vote! #YesOnD #berkeley2014."

What arguments did Berkeley vs. Big Soda use?

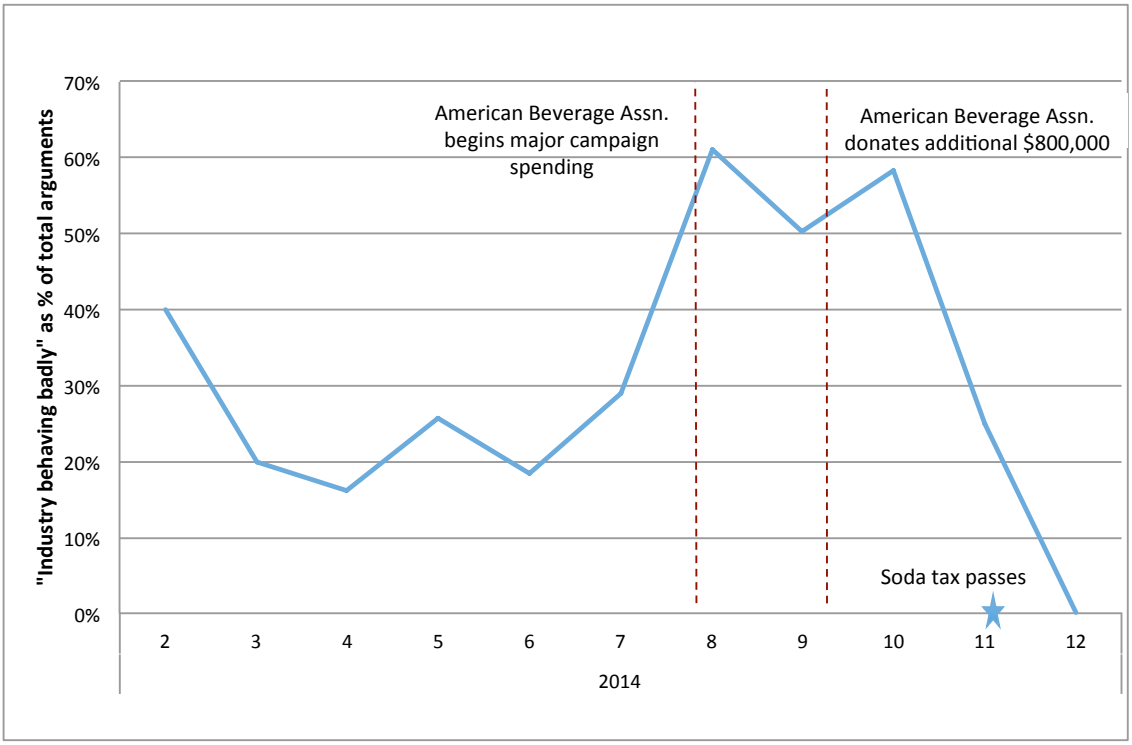
Figure 5: Arguments Berkeley vs. Big Soda used on social media (February 2014-June 2015)



Berkeley vs. Big Soda focused heavily on how the industry behaved badly in the campaign, and that appealed to audiences on both channels.

The most common theme in Berkeley vs. Big Soda's social media posts was how the sugar-sweetened beverage industry was behaving badly (accounting for 42% of Twitter arguments and 37% of Facebook arguments). Berkeley vs. Big Soda illuminated the bad behavior of both the soda industry's marketing tactics, and, to a greater extent, how the industry was acting inappropriately in the election. The "industry behaving badly" argument on Twitter increased in August 2014, as the pro-tax campaign began reporting the amount of funding the American Beverage Association was pouring into fighting the tax (see Figure 6). The American Beverage Association made its first donation ($300,000) to No Berkeley Beverage Tax campaign on August 1, after which "industry behaving badly" started taking off on social media. The Association donated an additional $800,000 on September 16, 2014, and by the end of September the No campaign had spent $1.67 million (spending $2.4 overall on the election in Berkeley).[14] In a typical post on Facebook, Berkeley vs. Big Soda wrote, "BREAKING: Big Soda has now funneled $1.4M into defeating Measure D in Berkeley — that's $20 per voter, more money than has ever been spent in a Berkeley election."

Figure 6: "Industry behaving badly" arguments on Twitter (February to December 2014)



The Big Soda's bad behavior argument resonated well with online audiences. For example, Facebook users were almost twice as likely to comment on a post (average of seven comments per post) and more than twice as likely to share a post with their friends (average of eight shares per post) when the pro-tax campaign used that argument compared to others. On Twitter, relative impressions more than doubled when the campaign discussed Big Soda's inappropriate actions.

Arguments about the harmful health impact of sugary drinks resulted in a large number of retweets.

The second most common argument that the pro-campaign used to promote the tax emphasized the health harms that sugary drinks pose. For example, one tweet stated, "#BigSoda wants you to believe 'a calorie is a calorie' but it's fiction — calories from sugar cause diabetes. #SodaSeries." In another tweet, Berkeley vs. Big Soda used Halloween as a seasonal news hook to highlight this risk: "Teen boys eat the sugar equivalent of 18 fun-sized candies EVERYDAY — not just on #Halloween." These discussions did not result in high engagement on Facebook, but Twitter audiences responded well: They were twice as likely to retweet this argument compared to others, averaging six retweets per post.

The campaign focused on how Berkeley's policy would pave the way for other places to do the same.

The campaign quoted supporters speaking about Berkeley as paving the way for soda taxes ("We have already inspired people around the country — if our tiny city of 100k can take on the industry, so can other cities! @annalappe") and used the argument to solicit additional support: "Help Berkeley make history today by voting #YesOnD! Together, we can beat Big Soda. https://t.co/STMMWGmx47."

Discussions about how the sugary drink tax was precedent-setting and a good first step in a larger movement toward soda taxation became the leading theme in November after the tax passed, accounting for half of arguments used in that month on Twitter and on Facebook. In a Facebook post, Berkeley vs. Big Soda linked to a Huffington Post article and wrote, "Berkeley is a trendsetter for the soda tax movement," noting how the city is inspiring advocates across the nation to build momentum.

Each post with the "Tax is precedent-setting" argument resulted in more engagement with more than three times as many comments, likes and shares on Facebook compared to other arguments (the sum of comments, likes and shares averaged 68 per post). On Twitter, users were excited to like posts with this theme, with nearly a twofold increase in likes relative to other arguments.

Posts about the burden of chronic disease that didn't mention soda received limited user engagement on both platforms.

Arguments about the extent and impact of chronic disease appeared in 11% of Facebook posts and 5% of tweets discussing the rates of disease and preventable death, the impact on children, and associated medical costs. Users were less likely to interact with posts containing this framing: We found 66% less engagement on Twitter and 82% less engagement on Facebook in comparison to other arguments.

Within the chronic disease argument, statements regarding the economic cost of disease (e.g. "Managing The Cost Of Diabetes is why #Berkeley needs to vote #YesOnD) fared better in terms of engagement than posts that relayed only the extent and impact of chronic diseases in terms of health (e.g. "Report finds high obesity rates in Alameda County including #Berkeley").

We also searched Berkeley vs. Big Soda's social media posts for explicit mentions of diabetes, obesity, heart disease and oral health. The campaign rarely mentioned specific diseases, with diabetes being the most cited, at a minimal 5% of tweets and 4% of Facebook posts.

What type of images did the campaign use on Facebook?

We found that 23% of Berkeley vs. Big Soda's Facebook posts included an image. More than half of the pictures depicted children or teens (Figure 7), such as when the campaign posted an image a week before the election to remind residents to vote (Figure 8). We also found many images depicting people of color (45% of images). The pro-tax campaign occasionally used images of soda and sugar to illustrate health harms.

Images posted were mostly from campaign events (Figure 9), such as City Council meetings and canvassing, but also included those submitted by Berkeley residents, e.g. photos of "Yes On D"-themed Halloween decorations (Figure 10). While the average number of clicks was 19% lower for Facebook posts with an image (likely due to the fact that the user can see an image without having to click on it), the sum of comments, likes and shares per post did not differ between those with images and those without.

Figures 7-8: Examples of images of children posted by Berkeley vs. Big Soda

Figures 9-10: Examples of images posted by Berkeley vs. Big Soda, portraying community activism.

Conclusions

Social media offers opportunities to connect with communities and frame policy debates. The pro-tax campaign in Berkeley used social media to share key arguments, build upon offline grassroots advocacy, and communicate with audiences both within and outside of the city. Facebook and Twitter also offered the opportunity to measure which messages garnered the most engagement with followers (and potential voters). Our research found that its most successful social media messages emphasized the "bad behavior" of the soda industry, capitalized on interactions with high-profile organizations or well-known individuals, and tied the Berkeley sugary drink tax to part of a larger nationwide movement.

Posts that highlighted the burden of chronic disease did not fare as well on social media, perhaps because this was considered "old news." However, posts that specifically linked harmful health impacts to soda garnered more engagement.

Based on our findings, we offer the following suggestions for sugary drink tax advocates looking to use social media to support their campaigns:

Tailor social media to specific audiences

In determining what to post through which medium, advocates should pay careful attention to the demographic makeup of their audiences by using social media analytics. The Berkeley vs. Big Soda campaign found differences in audience specifically in terms of location: Facebook followers tended to be local, with almost half from Berkeley and nearly three-quarters from California. The campaign's Twitter audience tended to be more geographically diverse, although more than half of followers were located in California. Understanding the audience composition can help in tailoring messages by, for example, sharing canvassing events and photos with a local audience while sharing policy news with a national audience.

Connect online and offline advocacy efforts

The Berkeley vs. Big Soda campaign used social media to make arguments in support of the tax, but also to complement its offline efforts to connect with volunteers and community members. The campaign used social media — particularly Facebook, with its more local audience — to promote events such as the Soda Series (a line-up of six local community events about the harmful impact of sugary drinks), recruit volunteers for canvassing, and drive Berkeley residents to the polls.

Adapt social media strategy based on the local context

Social media posts highlighting the bad behavior of the soda industry, particularly its aggressive and expensive anti-tax campaign at the local level, generated a high level of engagement among audiences. Although the campaign originally conceived this as a central argument (evident in the campaign's name), its increase in usage throughout the course of the campaign was a reaction to events happening in the Berkeley community — i.e. the beverage industry spending $2.4 million on its local opposition campaign — and how local voters reacted. Berkeley vs. Big Soda capitalized on these events and adapted its social media strategy accordingly. To take best advantage of social media, advocates should ensure social media messages are responsive to the local context (e.g. shifts in campaign engagement, levels of community support, and opposition campaign arguments) and adapt their social media strategy as needed.

When discussing health impacts, make the connection to soda explicit

Messages framed around the burden of chronic disease did not resonate with the campaign's social media audience. While these arguments are likely necessary to make the public health case for implementing a soda tax, these posts did not garner high engagement among social media users unless they were explicitly connected with soda. It is possible that audiences are already familiar with or knowledgeable about chronic disease risk; therefore, they may be less likely to engage with these posts. In contrast, posts specifically linking sugary drinks to harmful health impacts ("soda harmful" argument) had higher overall engagement than those focusing on chronic disease more generally. Advocates should check analytics as they try messages to see which ones garner the most engagement and adjust as they go.

Interact with health advocates, organizations and news outlets to spread the message

A key part of Berkeley vs. Big Soda's social media efforts entailed interacting with other health advocates and organizations, particularly on Twitter. This was done by retweeting, replying to and mentioning other users. High levels of interaction allowed Berkeley's advocates to play an active role in a larger, national conversation around sugary drinks, in tandem with local grassroots efforts. Concurrently, the campaign's messages were retweeted by organizations with larger groups of followers, amplifying Berkeley's messages. Advocates can use social media to build new and strengthen existing

relationships with like-minded organizations, while also leveraging the broad reach of such organizations.

The campaign also interacted regularly with local news outlets with significant social media reach, such as Berkeleyside, and individual journalists, like Dana Woldow at Beyond Chron (a San Francisco online news outlet). Berkeleyside often retweeted campaign news, such as when Measure D was placed on the ballot in July and when it shared details about Big Soda's local spending. As a result, the campaign was able to communicate with a wide audience in the Bay Area, likely reaching local voters who did not directly engage with the campaign's social media efforts. Advocates should consider how social media can affect the larger public dialogue, and, more specifically, how online interactions with local news outlets or journalists can amplify key campaign messages.

Amplify the power of influential voices

The campaign capitalized on local experts to raise awareness about the tax. These individuals came to the campaign's events and were advocates on the ground; Berkeley vs. Big Soda amplified this support online through social media. The pro-tax campaign's post with the most lifetime impressions was a video created by prominent political economist, former Labor Secretary, and current UC Berkeley professor and Berkeley resident Robert Reich in support of the campaign. In addition, Anna Lappé (of Small Planet Institute/Food Mythbusters, also a Berkeley resident) was a powerful advocate for the tax by appearing in a campaign video, hosting a Soda Series event, and promoting campaign messages through her own social media channels. Endorsement by local, influential spokespeople can raise awareness about the issue, spark new interest, and give a campaign a sense of legitimacy both locally and nationally.

Continue the conversation around sugary drinks, even after the tax passes

Messages that framed Berkeley's soda tax as a "good first step" in addressing chronic disease and obesity were well received and garnered high engagement rates on both Twitter and Facebook. Continuing the dialogue and speaking to how the tax helps set a precedent for other municipalities proved important for audiences.

Since the campaign ended in November 2014, both Berkeley vs. Big Soda accounts have remained active and engaged in the ongoing conversations around soda taxes and, more generally, around beverage industry tactics to mislead consumers. Additionally, the campaign has used these channels to inform the public of progress and outcomes related to the implementation of Berkeley's soda tax, including how tax revenue will be allocated within the city.

Advocates should consider sustaining social media momentum after campaigns end to remain engaged with local and non-local followers, who likely share a long-term interest in the issues at hand.

As policy interest in soda taxes increases, advocates should consider the use and potential impact of social media. Using Facebook and Twitter as advocacy tools can help shape soda tax debates and be part of a successfully strategy to help pass sugary drink taxes to improve health outcomes across the nation.

Appendix 1: Arguments in Berkeley vs. Big Soda social media posts

Argument	Description	Example
Soda industry behaving badly *42% of the campaign's posts on Twitter* *37% of the campaign's posts on Facebook*	Industry is behaving badly in its marketing and spending inordinate amounts of money to protect corporate interests.	"Berkeleyside reports that Big Soda has spent even more than we thought trying to defeat #YesOnD in Berkeley — $1.675 million, or $21.43 per voter. It's totally outrageous and shows how scared they are that Measure D will pass in Berkeley."
Sugary drinks are harmful *22% on Twitter* *22% on Facebook*	Sugary drinks uniquely contribute to harming the public's health.	"There's no debate; there's a clear link between soda and health. Vote #YesOnD"
Tax is precedent-setting *12% on Twitter* *9% on Facebook*	The tax will encourage other communities to do the same thing.	"Berkeley #sodatax is 'inspiring advocates across the country; building the national momentum.'"
Tax will promote health *11% on Twitter* *10% on Facebook*	The tax will improve health by reducing consumption of harmful products and increasing funding for prevention.	"Let's make #Berkeley the first to reduce diabetes with a #sodatax."
Chronic disease is a problem *5% on Twitter* *12% on Facebook*	Chronic disease like obesity and diabetes are pressing health problems that warrant action.	"Nearly 1 in 3 hospitalizations in CA are due to #diabetes. As diabetes rates increase, so do our healthcare costs."
Tax benefits low-income people *4% on Twitter* *3% on Facebook*	The tax will have the greatest positive effect on low-income and communities of color	"Preventable deaths from diabetes are an 'outlandish inequity.' — read more in Dr. Vicki Alexander's op-ed on #YesOnD"
Tax is appropriate *2% on Twitter* *3% on Facebook*	The tax is a reasonable government policy and does not impede choice.	"We need policy solutions to protect our children"
Tax will raise money for health programs *2% on Twitter* *3% on Facebook*	Revenue generated from the tax will fund health programs.	"#SodaTax revenue is used for health! How Berkeley's $ is funding ed programs: http://ow.ly/QqQRY #phealth #foodenviros"
Tax will not hurt the economy *1% on Twitter* *1% on Facebook*	The tax will not reduce jobs or harm the economy.	"RT @KQED: Study: No Job Loss from Soda Tax #CAReport"

Appendix 2: Glossary of social media terms

@: A symbol used on Twitter to connect with other users and engage with them.

Analytics: The process of collecting data about social media activity and engagement in order to gain strategic insight.

Engagement: Total number of interactions users have with a post. On Twitter, this takes the form of clicks on links in Tweets, retweets, replies, etc. On Facebook, this includes comments, likes, shares and clicks.

Engagement rate: Percentage of individuals who saw a post and interacted with it (e.g. clicks, retweets or comments).

Follower: A user becomes a follower by clicking "like" on an individual or organization's Facebook page.

Followers: Includes all users who follow an individual or organization on Twitter and receive Tweets on their timeline.

Hashtag: A word or phrase preceded by the "#" symbol. Hashtags are used to group messages on specific topics so that users can click on them to see other posts containing the same topic.

Impressions: Number of times a post is delivered to users' timelines or news feeds or search results.

Lifetime engaged users: Number of unique users who clicked anywhere in a post.

Lifetime post total impressions: Number of impressions a post receives since it was initially posted.

Like: Users "like" a Tweet or Facebook post to indicate that they support or agree with it. (Formerly known as "favorites" on Twitter.)

Reply: A response to another Twitter user that includes the username of the account you're replying to preceded by the "@" symbol.

Retweet: The act of reposting a tweet so that it appears in the user's followers' home streams.

Share: Users click the share button on Facebook to broadcast a post to their friends.

Timeline: On Twitter, a stream of posts from accounts a user has chosen to follow. On Facebook, the timeline displays a user's posts, their friends' posts, and posts that they have been tagged in.

Tweet: A Twitter post of up to 140 characters that is displayed in Twitter timelines. A Tweet may also contain links, photos and videos.

Twitonomy: An online application that allows users to track Twitter analytics.

Appendix 3: Berkeley vs. Big Soda social media analytics, February 2014-June 2015

Table 1: Demographics of Facebook followers*

	Percentage of Facebook Followers (n=729)
Gender**	
Female	69%
Male	28%
Age	
18-24	11%
25-34	22%
35-44	25%
45-54	23%
55-64	9%
65+	8%
Location (Top 5)	
Berkeley, CA	49% (355)
Oakland, CA	9% (68)
San Francisco, CA	7% (50)
Los Angeles, CA	2% (12)
Madison, WI	2% (12)
Other locations	32% (497)
Locations (Berkeley vs. other CA)	
Berkeley, CA	48.7% (355)
Other CA cities	28.1% (205)
Outside CA	23.2% (169)

*Source: Facebook Analytics

**3% of followers did not specify gender

Table 2: Demographics of Twitter followers*

	Percentage of Twitter Followers (n=594)
Gender	
Female	59%
Male	41%
Location (top 5 by region)	
California	53%
New York	7%
England	3%
Washington, DC	2%
Texas	2%

*Source: Twitter Analytics

Table 3: Twitter engagement*

Total Tweets	1,731
Total tweets retweeted	461 (27%)
Total tweets liked	400 (23%)
Averages per post**	
Impressions	266
Engagements	5
Engagement rate	9%
Retweets	2
Replies	0.2
Favorites	0.7

*Source: Twitonomy

**Note: This only reflects original tweets (n=1042), not retweets

Table 4: Facebook engagement*

Total Posts	250	
	Averages per post	Post with highest engagement
Lifetime post total impressions	959	27,972
Total engagement (any clicks)	54	1,241
Lifetime engaged users	41	949
Comments	5	70
Likes	21	407
Shares	5	67
Stories created**	22	519

*Source: Facebook Analytics

**Stories created = sum of comments, likes and shares

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