

Economic and Fiscal Impacts of AB 566: Global Opt-Out for Internet Users

This Brief discusses the economic and fiscal impacts of AB 566 (as amended June 2, 2025), a measure that would require internet browsers to include a global opt-out preference signal allowing consumers to request that their personal information not be sold or shared by any business reached through the browser. Our analysis focuses solely on the impact of a browser setting. If the scope of the opt-out mechanism is broadened, the negative financial, employment, and consumer impacts would increase.

Key Findings

If a significant number of users were to select the global opt-out option provided by AB 566, advertisers would no longer be able to effectively tailor ads to specific groups of people based on their interests, behaviors, demographics or online activities. As a result, AB 566 threatens the very foundation on which the current digital economy is based. The measure is predicated on the false premise that internet users opting out of all data sharing can expect to have continued access to the same range of ad-supported websites, publishers, and streaming services as exist today. If a significant percent of users choose the global opt-out option before fully understanding the consequences of this action, the result will be a diminished online experience for all users, with fewer ad-supported websites, less content, less diversity, and fewer perspectives.

The loss of targeted advertising would have serious impacts on California's economy, potentially resulting in ongoing reductions of more than 73,000 jobs, \$6.4 billion in labor income, \$550 million in state taxes and \$270 million in local taxes. Severe impacts would be felt by:

- Small businesses with limited advertising budgets, which are highly reliant on personalized ads to efficiently reach the right audience to expand their sales.
- Charities and non-profit organizations, who use targeted advertising and commercially available data and ad tech as a cost-effective way of reaching potential donors and supporters. We estimate that 501(c)(3) tax exempt organizations account for approximately 10 percent of the spending on targeted advertising in the state, or several billions of dollars in spending per year.

• Online publishers, who would find it much more difficult to monetize content through targeted ads. This will have major implications for the news industry, as targeted advertising is an important component of their revenue streams.

These major impacts reflect the following factors:

- The digital economy is a major engine of economic growth both nationally and in California, accounting for \$850 billion in sales in the state.
- Digital advertising plays a central role in the support, development and expansion of the internet, accounting for three-quarters of all advertising in the U.S. Digital ad revenue totaled \$301 billion in the U.S., and \$48 billion in California during 2024 (about 16 percent of digital ad revenue in the U.S.)
- Targeted advertising, which involves tailoring ads to specific groups of people based on their interests, behaviors, demographics or online activities, accounts for nearly 90 percent of total digital ads in the U.S.
- The popularity of targeted advertising arises from its demonstrated effectiveness in matching sellers to potential buyers, as evidenced by various metrics such as high click-through rates, conversion rates and Return on Ad Spend (ROAS).

Background – California's Digital Economy

Over the past three decades, the internet has become a major engine of global economic growth. According to a report released by the Interactive Advertising Bureau (IAB) in April 2025, the digital economy accounted for \$3.9 trillion in U.S. revenues in 2024.¹ Using data from the 2022 County Business Patterns and Economic Census, we estimate that California accounts for roughly 19 percent of the U.S. digital economy, or about \$856 billion. (See Figure 1.)

Figure 1 Estimated Size of Digital Economy: U.S. and California (\$ Millions)

Category	U.S. Revenues*	California Revenues**	
Infrastructure	\$606,404	\$201,932	
Support Services	\$510,065	\$79,372	
Consumer Services	\$1,809,577	\$257,187	
Integrated Companies	\$952,241	\$317,096	
Total	\$3,878,287	\$855,587	

¹ "Measuring the Digital Economy: Advertising, Content, Commerce, and Innovation." IAB, April 30, 2025. https://www.iab.com/insights/deighton-study-2025/.

*Source: IAB, Measuring the Digital Economy: Advertising, Content, Commerce, and Innovation, April 2025 ** Source: Apportioned based on data from U.S. Census Bureau and County Business Patterns.

The Key Role of Digital Advertising

Advertising has played a significant role in the development and expansion of the digital economy since its early days. Overall, three-quarters of all advertising in the United States, or \$301 billion, was transmitted via the Internet in 2024.² The comparable figure for California is \$48 billion. Thousands of businesses and independent contractors are involved in the development and placement of digital ads, including publishers, advertising agencies and networks, technology firms, measurement firms, web programmers, designers, writers, and digital creators.

The Importance of Targeted Ads

Targeted advertising involves tailoring ads to specific groups of people based on their interests, behaviors, demographics or online activity. Instead of showing the same message to everyone, targeted ads aim to reach the right audience with relevant content, making the ads more likely to lead to sales.³ Recent estimates find that up to 90 percent of digital ads involve some form of personalization or targeting.⁴

Targeted ads play a crucial role for small- and medium-sized businesses. According to the Census Bureau, 87 percent of California businesses are small- or medium-sized (having from 0 to 499 employees).⁵ These businesses employ 47 percent of all California workers, and account for about 37 percent of California's total economic output.

Small- and medium-sized businesses are heavily reliant on targeted advertising. A 2024 study by Advertiser Perceptions found that between 75 percent and 98 percent of small- and medium-sized businesses (depending on the region) rely on targeted advertising to grow or expand their customer base.⁶ While large businesses can afford to access large markets through the broadcasting of un-targeted advertisements, such options do not exist for small- and medium-sized businesses due to their more limited advertising budgets. A Connected Commerce Council report notes that "digital ads help level the playing field and empower small business advertisers to compete with the biggest brands with billion-dollar

² Source: "Digital Makes Up Over Three-Quarters of Total Ad Spend in the U.S." Emarketer, August 27, 2024. <u>www.emarketer.com</u>

³ "Targeted Advertising Statistics by Revenue and Facts (2025)." Sci-Tech Today. <u>https://www.sci-tech-today.com/stats/targeted-advertising-statistics-updated/</u>

⁴ See "40+ Targeted Advertising Statistics: Data-Driven Marketing Insights [2025]." Cropink. <u>https://cropink.com/</u> targeted-advertising-statistics

⁵ U.S. Census Bureau. 2022 SUSB Annual Data Tables by Establishment Industry. <u>https://www.census.gov/data/tables/</u>2022/econ/susb/2022-susb-annual.html

⁶ "Digital Advertising: Balancing Regulation and Growth Opportunities for American Businesses." Advertiser Perceptions. June 2024. <u>https://www.advertiserperceptions.com/wp-content/uploads/2024/06/Digital-Advertising-Balancing-Regulation-and-Growth-Opportunities-for-American-Businesses June-2024-Final.p</u>

marketing budgets by providing affordable, highly effective ways to reach target audiences, drive sales, and instantly understand the ROI (return on investment) with free high-quality analytics."⁷

Targeted ads are also important to non-profits and online publishers. Charities use targeted advertising as a cost-effective way of reaching potential donors and supporters. We estimate that 501(c)(3) tax exempt organizations account for approximately 10 percent of spending on targeted advertising in the state, which translates into several billion dollars of ads per year. Online publishers include news organizations that rely on targeted advertising for revenue to support quality journalism.

Why Targeted Ads Are So Popular

Targeted ads are widely used because they are extremely effective. For example:

- A 2013 study by Farahat and Bailey found that targeted ads resulted in click-through rates that were nearly nine times that of the same ads shown to a non-targeted group.⁸
- A 2021 study by the McKinsey Company found that "companies that excel at personalization generate 40 percent more revenue from those activities than average players." They also found that across US industries, shifting to top-quartile performance in personalization would generate over \$1 trillion in value, and that companies that are leaders in personalization achieve above-average outcomes by "tailoring offerings and outreach to the right individual at the right moment with the right experiences."⁹
- In 2019, a randomized controlled experiment that involved disabling cookies on a small fraction of randomly selected publishers found that, for the top 500 global publishers, average ad revenue in the group for which cookies were disabled decreased by 52 percent as compared to the control group¹⁰. Cookies are generally the vehicles that provide websites, advertisers and search engines with user specific, personalized information. Thus, this experiment supports the conclusion that a

⁷ "Digital Advertising: Balancing Regulation and Growth Opportunities for American Businesses." Connected Commerce Council. <u>https://connectedcouncil.org/wp-content/uploads/2023/03/Maximum-Impact-How-Digital-Ads-Level-the-Playing-Field-for-U.S.-Small-Businesses-2023.pdf</u>

⁸ "How Effective is Targeted Advertising." Ayman Farahat and Michael Bailey. International World Wide Web Conference Committee. April 16–20, 2012, Lyon, France.

⁹ "The Value of Getting Personalization Right - or Wrong - is Multiplying." McKinsey and Co. November 2021. <u>https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/the-value-of-getting-personalization-right-or-wrong-is-multiplying</u>

¹⁰ "Effect of Disabling Third-Party Cookies on Publisher Revenue." Deepak Ravichandran, Principal Engineer, Google Display Ads Nitish Korula, Senior Staff Research Scientist, Google Ad Manager. August 2019. <u>https://services.google.com/</u>fh/files/misc/disabling_third-party_cookies_publisher_revenue.pdf

substantial reduction in the availability of such information would lead to a large and broad-based reduction in revenue to all players in the digital economy.

Return on Ad Spend. A key benchmark used in the advertising industry is the Return on Ad Spend (ROAS) which is normally expressed as sales revenues per each dollar spent on advertising. While ROAS can vary a great deal depending on the type of product, audience behavior, and market competition, industry reports suggest ROAS for targeted ads range from 2 to 9 times higher than their non-targeted counterparts, depending on the platform and the markets.¹¹ The result is more ad revenues for publishers, more revenue for companies in the digital-ad industry, and more sales for advertisers, who will benefit from more click-throughs from potential customers and, ultimately, more sales.

Key Provisions of AB 566

Existing Privacy Laws

The California Consumer Privacy Act (CCPA, AB 375, 2018) and the California Privacy Rights Act (CPRA, Proposition 24, 2020) together establish numerous online privacy rights and safeguards for California consumers. Currently, businesses covered by CCPA and CPRA are required to include on their websites an "opt-out" option, which if toggled, ensures that consumer information will not be shared with third parties. Under this system, consumers make the opt-out decision on a case-by-case basis. They can, for example, allow data sharing in cases of familiar and trusted businesses but disallow the option for unfamiliar businesses where the trust factor is not as high.

New Requirement Added by AB 566

The bill requires that internet browsers offer their users an easily accessible setting that enables the consumer to send a global opt-out preference signal (OOPS).^{12,13} This means that when using a browser to access any website, consumers would be given the option to prohibit the sale of their data for *all* websites they visit in the future using that browser.

Thus, under current law users can make informed data-sharing decisions on a case-by-case basis, at the individual website level. However, the proposed change would offer a global opt-out option up front, without providing context on what such an option would mean for the individual (i.e., missing out on personalized ads from future businesses visited using

¹¹ See "What is a Good Return on AD Spend?" AI Marketing Engineers. <u>https://aimarketingengineers.com/</u> what is a good return on ad spend/

^{#:~:}text=Answer%3A%20A%20%22good%22%20ROAS,5%20for%20every%20dollar%20invested

¹² California Legislative Information System. AB 566, Amended June 2, 2025. https://leginfo.legislature.ca.gov/faces/ billTextClient.xhtml?bill_id=202520260AB566

¹³ The bill does not specify exactly how the OOPS would work, but the author explains that it would make it, "easier for consumers to state their privacy preferences from the start by requiring web browsers to allow a user to exercise their opt-out rights at all businesses with which they interact." See Assembly Committee on Appropriations analysis of AB 566 – As Amended April 8, 2025.

that browser), or the overall digital economy (i.e., fewer ad-supported websites, less quality journalism and less internet content). This lack of context would likely result in users making less informed and more impulsive choices regarding their personal data-sharing. Such decisions would be difficult to reverse in the future, given the logistical challenges of reversing a global opt-out signal to hundreds of thousands of businesses. The cumulative impact of this option would likely become quite significant over time. The result would be a potentially large reduction in information needed for businesses and advertisers to efficiently target their advertisements.

The National Advertiser Institute, which generally supports consumer opt-out mechanisms, has found that "AB 566 as currently drafted...does not do enough to ensure that the OOPS it would require browsers and (browser engines) to implement will represent authentic consumer choices to opt-out. On the contrary, default opt-out settings would alter a user's expected internet experience and require potentially confusing measures to turn such a setting off."¹⁴ It is likely, therefore, that once selected, the OOPS required by AB 566 would be permanent for the user who selects it.

Economic and Fiscal Impacts of AB 566

AB 566 will have major impacts on the digital advertising industry in California and, by extension, the state's overall economy. The magnitude of these impacts will depend significantly on the percentage of users selecting the global opt-out rate. Our review of various surveys and studies suggest that a significant share of consumers – perhaps 25 percent or more – may choose to place global limits on data sharing, especially if not presented with a clear understanding of the tradeoffs involved. For purposes of our estimates below, we assume a 25 percent opt-out rate.¹⁵

Impacts of Opt-Outs on the Economy and Government Revenues

A 25 percent opt-out rate would have a substantial impact on the ability of advertisers to reach customers with personalized, targeted ads. The result will be a reduction in both the volume and effectiveness of advertising in California.

¹⁴ "NAI Comments on CA Bill AB 566 – Opt-out preference signal requirements." <u>March 26, 2025. https://thenai.org/nai-comments-on-ca-bill-ab-566-opt-out-preference-signal-requirements</u>

¹⁵ For example, a 2023 survey by Deloitte found that 58 percent of respondents had concerns about how companies are sharing their online information. ("Data Privacy and Security Worries are On the Rise, While Trust is Down." Deloitte, September 2023. <u>https://www2.deloitte.com/us/en/insights/industry/telecommunications/connectivity-mobile-trends-survey/2023/data-privacy-and-security.html</u>,). A 2016 study by Adlucent found that 71 percent of respondents preferred ads tailored to their interests and shopping habits but only 44 percent of respondents were willing to give up information including name, address or email address in order to get more personalized advertising. ("Study: 71% of Consumers Prefer Personalized Ads." May 2016. <u>https://www.marketingdive.com/news/study-71-of-consumers-prefer-personalized-ads/418831/</u>.) Statista reports that as of 2023, 25 percent of users globally had disabled third-party cookies on their browser in response to privacy and data-sharing concerns. ("Steps Taken by Global Internet Users to Protect Their Personal Information Online as of January 2023." Statista. <u>https://www.statista.com/statistics/617422/online-privacy-measures-worldwide/</u>]

Decline in volume of advertising. The magnitude of advertising spending reductions would depend significantly on the ability of advertisers to find cost-effective alternatives to the targeted ads. Large advertisers, with national brands and large budgets, may be able to afford to blanket a wide range of potential customers by delivering ads that are not targeted through national broadcasting networks and major publishers. However, small- and medium-sized firms will not have that luxury. Most small firms have limited advertising budgets, and their success hinges on being able to target the exact customers who are most likely to be interested in their products. The loss in ability to find these customers would lead to a significant decline in advertising spending and revenues to these small- and medium-sized firms. Based on specific assumptions about reallocations of ad spending by small and larger firms, we estimate that a 25 percent opt-out would result in a \$3.6 billion reduction in advertising spending in California (see Figure 2).

A \$3.6 billion reduction in advertising spending would reverberate through the digital ad industry and California's broader economy, resulting in layoffs among ad agencies, technology companies, and other businesses involved in the creation and placement of ads. A reduction in ad spending will also have a substantial impact on the small technical service providers that support advertisers and publishers. Using the IMPLAN input-output model of the California economy,¹⁶ we estimate that the direct and indirect impacts of a \$3.6 billion drop in ad spending would be a loss of 24,200 jobs, \$2.2 billion in labor income, \$200 million in state revenues and \$100 million in local tax revenues per year in California.

Figure 2 Potential Ongoing California Losses From a 25 Percent Global Opt-Out Rate (\$ Millions)

Impact	Revenue Effect	Economic and Fiscal Impacts (Direct and Multiplier)			
		Jobs	Labor Income	State Taxes/Fees	Local Taxes/Fees
Advertising Volume	-\$3,600	-24,200	-\$2,200	-\$200	-\$100
Sales/Charitable Contributions Tied to Advertising	-\$7,200	-48,800	-\$4,200	-\$350	-\$170
Digital Economy (Each 1%)	-\$8,500	-63,000	-\$6,000	-\$500	-\$240

Decline in sales and charitable contributions tied to advertising. Sales and charitable contributions in California would decline due to both the drop in targeted advertising and, in the case where advertisers switch to un-targeted ads, a decline in the ROAS. This combination would reduce annual spending and charitable contributions by \$7.2 billion

¹⁶ IMPLAN is an input-output modeling system that enables users to calculate the direct, indirect, and induced effects of output and/or spending in one industry on other industries located within a geographical region (national, state, county, metropolitan statistical area, or zip code). IMPLAN is widely used by academic institutions, federal, state, and local government agencies, and private companies for economic impact analyses. The model is based on benchmark U.S. input-output accounts produced by the U.S. Bureau of Economic Analysis (BEA).

annually.¹⁷ Of this total, we estimate that about \$6.5 billion would be in sales of products and services by for-profit companies and about \$700 million would be in reductions to charitable giving to California non-profits registered as 501(c)(3)s.¹⁸

Again, using the IMPLAN input-output model of the California economy, we estimate that the total impact a \$7.2 billion reduction in sales and charitable giving tied to advertising would be a 48,800 decline in jobs, \$4.2 billion decline in labor income, \$350 million decline in state tax revenues, and a \$170 million reduction in local revenues.

Broader impact on the digital economy. A key characteristic of the digital economy is its interdependence. Many components of the digital economy are funded directly or indirectly by advertisements and are therefore potentially at risk of diminishment from AB 566. The breadth and variety of ad-supported websites catering to niche and specialty audiences will be reduced because publishers will not be able to support themselves. The breadth of products and services offered by small- and medium-sized business advertisers will similarly be reduced. While it is not possible to precisely quantify these effects, even a minor reduction in California's digital economy would have a sizable impact on state employment, income, and tax revenues. As indicated in Figure 2, each 1-percent reduction in the size of California's digital economy would translate into job losses of 63,000, income losses of \$6 billion, state tax losses of \$500 million and local revenue losses of \$240 million.

Conclusion

AB 566 comes with a major tradeoff. While it would provide consumers with an easy way to opt-out of sharing of their personal data, it would do so by undermining the very foundation on which the internet currently operates. The bill's author contends that consumers today do not fully understand how often their browsing and related data is shared among businesses. However, the bill does not solve this problem by, for example, requiring consumer testing before regulations are imposed to ensure that the proposed opt out mechanism will be understood. Instead, the bill could exacerbate the stated concern by providing consumers a new way to transform common data flows in ways they may not fully understand.

This would likely lead to numerous unintended consequences. At the individual level, these include fewer relevant ads, more generic ads for products that the user has no interest in,

¹⁷ For purposes of this estimate we assume (1) ROAS of 4:1 for targeted spending and 2:1 for non-targeted spending; and (2) three-quarters of sales generated by advertising is related to reallocation of spending among competitors and onequarter is related to market expansion. (The drop in product and service sales tied to targeted advertising would be related only to the one-quarter of sales related to market expansion.)

¹⁸ Our estimate that 501(c)(3)s account for about 10% of total ad spending is based on (1) a ProPublica estimate that 177,984 501(c)(3)s were operating in California in 2023, (<u>https://projects.propublica.org/nonprofits/states/CA</u>) and a an estimate from a 2024 nonprofit advertising benchmark study by Whole Whale that average digital advertising budget per non-profit was slightly over \$29,000 per year. (<u>https://www.wholewhale.com/tips/2024-nonprofit-advertising-benchmark-study/#:~:text=Higher%20Revenue%20Nonprofits.14%25</u>). We also assumed that targeted ads accounted for 90% of total digital ads purchased by non-profits. 177,984 X \$29,000 X .9 = \$4.6 billion, or slightly over 10% of our \$43.2 billion estimate for targeted ads in California.

and additional expenses for apps and streaming subscriptions. At the economy-wide level, the elimination of targeted ads implies less effective advertising, fewer product choices, fewer sales and charitable contributions, fewer jobs, less small business growth, and reduced state and local tax revenues in California. Ultimately the elimination of targeted ads would result in a diminishment in the online experience, with fewer local ad-supported websites, less content, less diversity and fewer perspectives.