

No. 23-2969

IN THE
United States Court Of Appeals
FOR THE NINTH CIRCUIT

NetChoice, LLC,

Plaintiff-Appellee,

v.

Rob Bonta,

Defendant-Appellant.

On appeal from the United States District Court
Northern District of California
22-cv-8861
Honorable Beth Labson Freeman

**BRIEF OF AMICI CURIAE THE AMERICAN FEDERATION OF
TEACHERS AND THE CALIFORNIA FEDERATION OF
TEACHERS IN SUPPORT OF DEFENDANT-APPELLANT AND
REVERSAL**

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INTEREST OF AMICI CURIAE

This brief is submitted on behalf of Amici American Federation of Teachers (“AFT”) and California Federation of Teachers (“CFT”).

The American Federation of Teachers, an affiliate of the AFL-CIO, was founded in 1916 and today represents 1.72 million members in more than 3,000 local affiliates nationwide. AFT members include educators and educational assistants, higher education faculty and administrative staff, nurses and health care workers, and public employees. AFT’s K-12 members are committed to providing their students the highest quality public education consistent with the standards set by the local, state, and federal government.

The CFT is a union of educators and classified professionals affiliated with the AFT. Through its local unions, the CFT represents more than 120,000 educational employees working at every level of public and private education from Head Start to the University of California. In all segments of education, the CFT is committed to promoting high-quality education and to securing the conditions necessary to provide the best services to California’s students.

Amici AFT and CFT are on the front lines of the mental health crisis affecting students nationwide, which has been deeply exacerbated by the pervasive presence of data-driven advertising to children and the use of psychologically manipulative design features intended to prolong time spent engaging with online services, to which children and teens are particularly vulnerable.

All parties have consented to the filing of this brief. No party's counsel authored this brief in whole or in part, and no party's counsel contributed money intended to fund preparing or submitting the brief. The Tech Justice Law Project contributed money intended to fund preparing or submitting the brief.

INTRODUCTION

The purpose of the California Age-Appropriate Design Code Act (“the Act”) is to protect children by requiring businesses that develop and provide online services, products, or features that children are likely to access—some of whom are among the largest and most profitable companies in the world—to consider the best interests of children and to prioritize the privacy, safety, and well-being of children over profits.

The district court, in granting Plaintiff-Appellee NetChoice’s motion to preliminarily enjoin the Act in its entirety, reasoned, in part, that the Act was not likely to materially advance the government’s interest in protecting children online.¹ However, the body of evidence linking harms to youth mental health to design features of online services has grown significantly in recent years, with some of the most compelling evidence coming from online businesses themselves. As a result of whistleblowers stepping forward and federal and state investigations, internal documents from some of the largest providers of online services to children have become public, revealing that these companies have not

¹ Order Granting Motion for Preliminary Injunction at 21, 22, 27, 30, 33, *NetChoice, LLC v. Rob Bonta*, No. 22-cv-08861-BLF (N.D. Cal. Sept. 18, 2023), ECF No. 74.

only intentionally exploited the insecurities and personal information of children and adolescents, but that they have also internally researched and documented the extent of the harm caused by their own designs.

In California and nationwide, students are experiencing an unprecedented decline in their mental health and wellbeing. Well before the COVID-19 pandemic, indicators of poor mental health among children and adolescents nationwide were on the rise: declining happiness, life satisfaction, and flourishing, and sharply increasing anxiety, loneliness, depressive symptoms, suicidal ideation, hospitalizations for self-harm and suicide attempts, and completed suicides. The crisis for youth mental health plays out every day in our nation's schools, where AFT and CFT members witness the effects daily.

The Act expands the protections provided by existing legislation and addresses the gaps, offering much-needed guardrails and protections for the generations growing up without the opportunity to experience a childhood and adolescence that is not in some way mediated by the Internet. The AFT and the CFT submit this brief to call the Court's attention to the nature of NetChoice members' surveillance advertising activities, the design features these businesses use to keep users

(including kids) engaged with their online services, and the impact this conduct has had on students and schools.

ARGUMENT

I. The Collection and Sale of Children’s Personal Data Is Fundamentally Economic Activity

With the growth of the internet economy, a new form of digital advertising developed: targeted or “surveillance” advertising. Surveillance advertising relies upon constant surveillance of our online behavior and the collection and sale of personal data. In contrast to “contextual advertising”—where ads are placed based on content, such as ads for bikes alongside an article about cycling—surveillance advertising involves ads placed based on data on the individual viewing the ad, including the individual’s location, networks, searches, purchases, and habits. For children and adolescents, the delivery of personalized, data-driven marketing has come at a serious cost to mental health and wellbeing. Targeted advertising can be used to exploit young people’s vulnerabilities (e.g., their dissatisfaction with their bodies). It also incentivizes platforms to collect excessive data and maximize the amount of time young users spend on their platforms, to the detriment of their sleep, study time, classroom learning, and participation in

extracurricular activities. The Act recognizes the risks of targeted advertising to children and requires businesses covered by the Act to address, as part of their Data Protection Impact Assessments (“DPIA”), “[w]hether targeted advertising systems used by the online product, service, or feature could harm children.” Cal. Civ. Code § 1798.99.31(a)(1)(B)(vi).

The collection and trade in personal data for purposes of surveillance advertising is fundamentally economic activity. For Google, Meta, TikTok, and Snap Inc., some of NetChoice’s largest members,² surveillance advertising comprises nearly the entirety of their revenue streams. For example, Meta earned over 98% of its total revenue in

² While investigations into these companies in particular have produced documents demonstrating the need for the Act, Amici recognize that the Act applies broadly to businesses with an annual gross revenue of over \$25 million or businesses whose economic activity centers on the trade of personal data (specifically, businesses that buy, sell, or share the personal information of 100,000 consumers or more annually or that derive 50% or more of their annual revenues from selling or sharing consumers’ personal information), and which also provide an online service, product, or feature likely to be accessed by children. Cal. Civ. Code § 1798.140(d); § 1798.99.30(a) (incorporating 1798.140(d) into the Act); § 1798.99.31(a), (b).

2019—nearly \$70 billion—from advertising,³ while for Snap Inc., advertising has accounted for 99% its revenue each year since 2018.⁴ For these companies, the unfettered ability to collect and sell users’ personal information is critical to their bottom lines. As Snap Inc. explained in its SEC filings, “We rely heavily on our ability to collect and disclose data, and metrics to our advertisers so we can attract new advertisers and retain existing advertisers. Any restriction or inability, whether by law, regulation, policy, or other reason, to collect and disclose data and metrics which our advertisers find useful would impede our ability to attract and retain advertisers.”⁵ A law or regulation restricting this ability to collect and sell the data and metrics of its patrons is a restriction on economic activity, which rarely warrants heightened scrutiny. *See* Brief of Appellant at 21-24, *NetChoice LLC v. Rob Bonta*, No. 23-2969 (9th Cir. Dec. 13, 2023); *Sorrell v. IMS Health Inc.*, 564 U.S. 552, 567 (2011) (“[T]he

³ Rishi Iyengar, *Here’s how big Facebook’s ad business really is*, CNN (July 1, 2020), <https://www.cnn.com/2020/06/30/tech/facebook-ad-business-boycott>.

⁴ Snap Inc., Annual Report (Form 10-K) at 15 (Dec. 31, 2022), <https://d18rn0p25nwr6d.cloudfront.net/CIK-0001564408/c22ae9bd-7418-456e-82d4-48129de1df54.pdf>.

⁵ *Id.*

First Amendment does not prevent restrictions directed at commerce or conduct from imposing incidental burdens on speech.”).

Surveillance advertising is inherently more manipulative than contextual advertising, and as the surveillance advertising industry continues to expand, government oversight is increasingly necessary, especially for the protection of children and teens, who are less likely than adults to be able to critically assess marketing messages that exacerbate insecurities.⁶ One tech company estimated that by the time a child is thirteen years old, over 72 million pieces of personal data will have been captured about them.⁷ This astonishing figure—72 million pieces of data on a 13-year-old child—becomes plausible with a closer look at the fine print of online businesses’ privacy policies. For example, Google’s current privacy policy⁸ states that Google tracks the following:

⁶ Matthew A. Lapierre, et al., *The Effect of Advertising on Children and Adolescents*. Am. Acad. Pediatrics (Nov. 2017), 140 (Supp._2): S152–S156. 10.1542/peds.2016-1758V.

⁷ Press Release, SuperAwesome, *SuperAwesome launches Kid-Safe Filter to prevent online ads from stealing children’s personal data* (Dec. 6, 2018), <https://www.superawesome.com/superawesome-launches-kid-safe-filter-to-prevent-online-ads-from-stealing-childrens-personal-data/>.

⁸ *Information Google collects: Google Privacy Policy*, Google, <https://policies.google.com/privacy?hl=en#infocollect> (last visited Dec. 7, 2023).

- Terms users search for
- Videos watched
- Views and interactions with content and ads
- Voice and audio information
- Purchase activity
- People with whom users communicate or share content
- Activity on third-party sites and apps that use Google’s services
- Chrome browsing history synced with a user’s Google Account
- GPS and other sensor data from users’ devices
- IP addresses
- Location-related activity on Google services, such as users’ searches and places users label like “Home” or “Work”
- Information about things near users’ devices, such as Wi-Fi access points, cell towers, and Bluetooth-enabled devices
- Information about the apps, browsers, and devices users use to access Google services . . . includ[ing] unique identifiers, browser type and settings, device type and settings, operating system, mobile network information including carrier name and phone number, and application version number

This policy encompasses not only use of Google’s search engine but also use of YouTube, which is owned by Google. One recent report estimates that more than 95% of children ages 13 to 17 have used YouTube.⁹

Similarly, Meta’s Privacy Policy¹⁰—which applies to the Instagram and Facebook platforms—states that Meta collects personal data including but not limited to the following:

⁹ Emily A. Vogels *et al.*, *Teens, Social Media and Technology 2022*, Pew Rsch. Ctr. (Aug. 10, 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

¹⁰ *Privacy Policy*, Meta (June 15, 2023), <https://mbasic.facebook.com/privacy/policy/printable/#annotation-1>.

- “Content you create, like posts, comments or audio”
- “Content you provide through our camera feature or your camera roll settings, or through our voice-enabled features”
- “[I]nformation you’ve shared with us through device settings, like GPS location, camera access, photos and related metadata”
- “Messages you send and receive, including their content”
- “Metadata about content and messages”
- “Types of content, including ads, you view or interact with, and how you interact with it”
- “The time, frequency and duration of your activities on our Products”
- “[Y]our contacts’ information, such as their name and email address or phone number, if you choose to upload or import it from a device, like by syncing an address book”
- information about “[w]hat you’re doing on your device, like whether our app is in the foreground or if your mouse is moving”
- “device signals from different operating systems[,]” including “things like nearby Bluetooth or Wi-Fi connections”
- “Information about the network you connect your device to and your connection, including your IP address”
- including the “name of your mobile operator or internet service provider (ISP)[,] . . . Language[,] . . . , Time zone[,] . . . , Mobile phone number[,] . . . , Connection and download speed”
- “Information about other devices that are nearby or on your network”
- “Wi-Fi hotspots you connect to using our Products”; and
- information from third parties, including, “[m]arketing and advertising vendors and data providers, who have the rights to provide us with your information”

Meta presents the reasons for this extensive data harvesting as benign and even positive for its users—“to provide a personalized experience to you” and to “[m]ake suggestions for you (such as people you may know, groups or events that you may be interested in or topics that

you may want to follow)[.]”¹¹ But this “personalized experience” is simply targeted advertising. The size of the surveillance advertising industry—and the amount of data being collected—has grown so large that there are now thousands of companies in the United States that exist on this trade alone, “data brokers” that buy, aggregate, and sell billions of pieces of personal data about individuals, including children.¹²

Moreover, the fact that children’s data is caught in this net is not inadvertent or accidental. With respect to Meta, for example, an internal communication from 2017 listed one of Meta’s “Longer-term Focus Areas” as “get teens to share their location with us so we can leverage that data for awesome product experiences and also analytics around high schools.”¹³ Leaked documents showed that Facebook also boasted to advertisers that it could identify when teenagers feel “insecure,” “worthless,” and “need a confidence boost.”¹⁴ The company can monitor

¹¹ *Id.*

¹² *See Data Brokers, Elec. Priv. Info. Ctr.*, <https://epic.org/issues/consumer-privacy/data-brokers/>, (last visited Dec. 18, 2023).

¹³ Complaint and Jury Demand (“Mass. AG Compl.”) _____, *Commw. Mass. v. Meta Platforms, Inc.*, No. 2384cv02397-BLS1 (Mass. Super. Ct. Nov. 6, 2023), ECF No. 1.

¹⁴ Sam Levin, *Facebook told advertisers it can identify teens feeling ‘insecure’ and ‘worthless,’* The Guardian (May 1, 2017),

posts and photos in real time to determine when young people feel “stressed,” “defeated,” “overwhelmed,” “anxious,” “nervous,” “stupid,” “silly,” “useless,” and a “failure”—in other words, when they are prime targets for advertisements that would capitalize on their vulnerabilities.¹⁵

The district court concluded that “the CAADCA’s age estimation provision appears not only unlikely to materially alleviate the harm of insufficient data and privacy protections for children, but actually likely to exacerbate the problem by inducing covered businesses to require consumers, including children, to divulge additional personal information.”¹⁶ But with the amount of data already being captured, online businesses like Meta can tell not only when a user is a teenager, but also when that teenager is feeling insecure or defeated. Despite possessing more than enough information for age estimation—and estimating a user’s age for purposes of targeted advertising—some

<https://www.theguardian.com/technology/2017/may/01/facebook-advertising-data-insecure-teens>.

¹⁵ *Id.*

¹⁶ Order Granting Motion for Preliminary Injunction at 22, *NetChoice, LLC v. Rob Bonta*, No. 22-cv-08861-BLF (N.D. Cal Sept. 18, 2023), ECF No. 74.

businesses choose not to use this information to increase young users' safety or privacy protections. In one instance, an undercover reporter receiving training to be a moderator at Facebook in 2018 was told, with respect to users flagged as potentially underage, "We just like pretend that we are blind and that we don't know what underage looks like."¹⁷

Although Meta announced in July 2021 that it had "heard from youth advocates" regarding concerns about targeted advertising to youth and that it would taking "a more precautionary approach in how advertisers can reach young people," an investigation by the nonprofit organization Fairplay found that Meta continued collecting data from teens for advertising.¹⁸ The difference in the "precautionary approach" is that, rather than advertisers, a highly trained AI "Delivery System" determines the delivery of target ads to teens.¹⁹ But this development may only intensify the level of personalized targeting. As Meta describes

¹⁷ Duncan McCann, *I-Spy: The Billion Dollar Business of Surveillance Advertising to Kids*, New Econ. Found. 28, https://neweconomics.org/uploads/files/i-Spy_NEF.pdf (last visited Dec. 18, 2023).

¹⁸ Elena Yi-Ching Ho & Rys Farthing, *How Facebook still targets surveillance ads to teens*, Exec. Summary (Nov. 2021), <https://aboutblaw.com/0t6>.

¹⁹ *Id.*

it, “the delivery system uses machine learning to improve each ad’s performance....Each time an ad is shown, the delivery system’s predictions of relevance become more accurate. As a result, the more an ad is shown, the better the delivery system becomes.”²⁰

As long as surveillance advertising is permitted, the financial incentives are just too great for many online businesses to stop collecting and utilizing children’s data for profit. By requiring businesses covered by the Act to address the potential harm of targeted advertising systems to children as part of the DPIA, the Act changes the incentives for these businesses. As this Court has recognized, “a law regulating conduct that merely alters incentives rather than restricts the ingredients necessary for speech does not regulate conduct that is ‘inherently expressive[.]’” *Interpipe Contr., Inc. v. Becerra*, 898 F.3d 879, 896 (9th Cir. 2018). The Act permissibly restricts economic activity and imposes guardrails that are necessary to protect children who are less likely than adults to be able to protect their own privacy online.

²⁰ *About Ad Delivery*, Meta, <https://www.facebook.com/business/help/1000688343301256?id=561906377587030> (last visited Dec. 18, 2023).

II. Many Businesses Utilize Design Features and Children’s Personal Data to Increase Time Spent Online

The surveillance advertising business model, in addition to incentivizing companies to collect excessive amounts of personal data, rewards design features that extend the time users spend on online. The longer users stay online, scrolling or watching videos—or the more frequently users log back on—the more valuable they are to advertisers and, thus, the more online business stand to gain. Snap Inc., as an example, acknowledged in its SEC filings that its revenue could be harmed by, among other things, “a decrease in the amount of time spent on Snapchat, a decrease in the amount of content that our users share, or decreases in usage of our Camera, Visual Messaging, Map, Stories, and Spotlight platforms[.]”²¹ In keeping with these incentives, many businesses whose revenue is based on surveillance advertising have designed online platforms with features to maximize the time users spend on the platform, referred to as “user engagement” or “retention.” Such features have proven to be alarmingly effective and habit-forming

²¹ See Snap Inc. 10-K, *supra* note 4 at 16.

for children and teenagers, with consequences for their mental health, sleep, relationships, and academic performance, among other things.

The design features commonly used to increase time spent are automatic functions or driven by machine-learning, including push notifications, never-ending feeds of content “recommended” by algorithms, intermittent variable rewards such as “likes,” or displaying metrics related to activity on the platform. *See Twitter, Inc. v. Taamneh*, 598 U.S. 471, 499 (2023) (describing Google, Twitter, and Facebook’s algorithms as “infrastructure” and stating that “[o]nce the platform and sorting-tool algorithms were up and running, defendants at most allegedly stood back and watched”). Although the algorithms may be designed to produce recommendations that keep users “engaged,” the machine-generated feeds do not represent expressive content or endorsement of any particular message by the businesses. As with targeted advertising, the algorithm-generated content is based on personal data about the individual user. In other words, personal data harvested from kids’ use of online platforms is not only used for ad delivery, but also to keep kids online longer, making the ad space itself more valuable to advertisers.

TikTok, for example, offers users a “For You” feed that presents users “with a stream of videos curated to your interests” and “is one of the defining features of the TikTok platform.”²² The For You feed relies on personal data collection to determine what content is most likely to capture a user’s attention. As TikTok describes it, its algorithms populate each user’s For You feed by “ranking videos based on a combination of factors” that include, among others, any interests expressed when a user registers a new account, videos a user likes, accounts they follow, hashtags, captions, sounds in a video they watch, certain device settings, such as their language preferences and where they are located, and finally, the likelihood of the user’s interest.²³ An internal document titled “TikTok Algo 101” explained that “in the pursuit of the company’s ‘ultimate goal’ of adding daily active users, it has chosen to optimize for two closely related metrics in the stream of videos it serves: ‘retention’—

²² *How TikTok recommends videos #ForYou*, TikTok Inc. (June 18, 2020), <https://newsroom.tiktok.com/en-us/how-tiktok-recommends-videos-for-you>.

²³ *Investigation: How TikTok’s Algorithm Figures Out Your Deepest Desires*, Wall St. J. (July 21, 2021), <https://www.wsj.com/video/series/inside-tiktoks-highly-secretive-algorithm/investigation-how-tiktok-algorithm-figures-out-your-deepest-desires/6C0C2040-FF25-4827-8528-2BD6612E3796>.

that is, whether a user comes back—and ‘time spent.’”²⁴ As one Meta employee put it, “No one wakes up thinking they want to maximize the number of times they open Instagram that day. But that’s exactly what our product teams are trying to do.”²⁵ The Act protects children and teens from online businesses supplying their personal data to algorithms designed to maximize “time spent” where the business knows or has reason to know that this practice “is materially detrimental to the physical health, mental health, or well-being of a child.” Cal. Civ. Code § 1798.99.31(b)(1).

Investigations into the practices of Meta and other surveillance advertising industry leaders have demonstrated a pattern of prioritizing profits over the safety and well-being of children. As another example, Meta knows a major problem with social media platforms is the propensity for them to cause “social comparison,” which “previous internal and external research” has “linked to multiple negative well-

²⁴ Ben Smith, *How TikTok Reads Your Mind*, N.Y. Times (Dec. 5, 2021), <https://www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html>.

²⁵ Plaintiffs’ Amended Master Complaint (Personal Injury) at 93, ¶ 302, *In re Soc. Media Adolescent Addiction/Personal Inj. Prods. Liab. Litig.*, MDL No. 22-md-03047-YGR (N.D. Cal Apr. 14, 2023), ECF No. 234-1.

being outcomes (e.g., increased loneliness, worse body image, negative mood of affect)[.]”²⁶ To address this problem, Meta experimented with hiding Like counts.²⁷ The result was a success: Meta found that hiding Like counts resulted in “less social comparison” and that “negative social comparison decrease[d] more over time” for participants in the experiment.”²⁸ But, after assessing the impact of the experiment on user engagement and revenue—including an estimated 1% negative effect on Meta’s advertising revenue—Meta’s leadership decided not to implement this change as a default on the platform.²⁹

Other documents have shown Meta’s detailed knowledge of serious and widespread harms to the pre-teen and teenage users of its platforms. From 2019 to 2021, a team of Meta employees, with expertise in psychology as well as quantitative and qualitative analysis, completed a “teen mental health deep dive” which included focus groups, online surveys, and pairing survey responses with Meta’s data about the time

²⁶ Complaint for Injunctive and Other Relief at 43, ¶ 232, *State of Arizona et al. v. Meta Platforms, Inc. et al.*, No. 4:23-cv-05448-YGR, (N.D. Cal. Nov. 11, 2023), ECF No. 73-2.

²⁷ *Id.* at 43-44, ¶¶ 240-251.

²⁸ *Id.* at 43, ¶ 246.

²⁹ *Id.* at 44, ¶ 250.

each respondent spent on Instagram and the type of posts viewed.³⁰ The findings of this “deep dive” included the following:³¹

- 41% of teen users of Instagram in the U.S. and U.K. who reported feeling “unattractive” said the feeling began while using the product
- 32% of teenage girls said that when they felt bad about their bodies, Instagram made them feel worse
- “We [Instagram] make body image issues worse for 1 in 3 teen girls”
- “Frequent social comparison is a key driver of subjective well-being and teens say [Instagram] makes this problem worse”
- One in five teens said that Instagram made them feel worse about themselves or their mental health
- Two thirds of teen girls on Instagram experienced negative social comparison
- 17% of teen girl Instagram users said the product made “[e]ating [i]ssues” worse
- About a quarter of teens who reported feeling “[n]ot good enough” said the feeling started on Instagram;
- Many teens said that Instagram undermined their confidence in the strength of their friendships;
- “Teens blame Instagram for increases in the rates of anxiety and depression among teens” in recent years—a response that was “unprompted and consistent across all groups
- 13.5% of teen girls on Instagram said the product made thoughts of “suicide and self-injury” worse

Snapchat has also conducted internal research on the impact of its design features on children and teens. Snapchat’s design utilizes a

³⁰ Plaintiffs’ Amended Master Complaint (Personal Injury) at 94, ¶ 307, *In re Soc. Media Adolescent Addiction/Personal Inj. Prods. Liab. Litig.*, MDL No. 22-md-03047-YGR (N.D. Cal Apr. 14, 2023), ECF No. 234-1.

³¹ *Id.* at 95-96, ¶ 308.

variety of social metrics—such as Snapscores, Snap Streaks, and Snap Awards—that reward users when they engage with Snapchat and punish them when they fail to engage with Snapchat. Internal research by Snap Inc. has found these psychological manipulation techniques are highly effective at instilling anxiety about not using Snapchat frequently enough—and competitor research has confirmed these features are addictive.³² Children and teens are particularly susceptible to these techniques.

As these examples illustrate, many online businesses have already been internally assessing the impact of features of their services on children. The Act requires businesses to make this sort of assessment available to the Attorney General as part of the Data Protection Impact Assessments outlined in Cal. Civ. Code § 1798.99.31(a)(1)-(4).

When users manage to disengage from online platforms, push notifications are designed to bring them back. For young people today, these notifications can be relentless. A study by Common Sense Media

³² Plaintiffs' Amended Master Complaint (Personal Injury) at 153-154, ¶ 468, *In re Soc. Media Adolescent Addiction/Personal Inj. Prods. Liab. Litig.*, MDL No. 22-md-03047-YGR (N.D. Cal Apr. 14, 2023), ECF No. 234-1.

and the C.S. Mott Children’s Hospital found that young users “received a median of 237 notifications” in a “typical day,” and that “[n]otification frequency varied widely, with maximums of over 4,500 delivered and over 1,200 seen.”³³ Nearly a quarter of those notifications “arrived during school hours[.]”³⁴ Meta, for example, views notifications as part of its strategy for pursuing “Teen Growth,” noting that the ability to “leverage[] teens’ higher tolerance for notifications to rush retention and engagement,”³⁵ despite also acknowledging that “smartphone notifications caused inattention and hyperactivity among teens, and they reduced productivity and well-being.”³⁶

These combination of these design features and “recommended” content feeds driven by the user’s personal data have proven highly effective in achieving the “retention,” especially for teenagers. According to a 2023 report by Common Sense Media, 45% of teen girls who use

³³ Jenny S. Radesky *et al.*, *Constant Companion: A Week in the Life of a Young Person’s Smartphone Use* at 6, Common Sense Media (2023), https://www.commonsensemedia.org/sites/default/files/research/report/2023-cs-smartphone-research-report_final-for-web.pdf.

³⁴ *Id.*

³⁵ Complaint for Injunctive and Other Relief at 52, ¶ 304, *State of Arizona et al. v. Meta Platforms, Inc. et al.*, No. 4:23-cv-05448-YGR, (N.D. Cal Nov. 11, 2023), ECF 73-2.

³⁶ *Id.* at 52, ¶ 306.

TikTok say they feel addicted to it or use it more than intended at least weekly.³⁷ Similarly, 37% of teen girls said they felt addicted to Snapchat, 34% said they felt addicted to YouTube, and 33% said they felt addicted to Instagram.³⁸ A 2022 report by the Pew Research Center found that, of teens who use at least one social media product “almost constantly,” 71% say quitting would be hard, and nearly one third say quitting would be “very hard.”³⁹ Other studies have documented that children are losing approximately one night’s worth of sleep every week, staying up to use social media or even waking themselves up in the middle of the night to check notifications, driven by fear of missing out.⁴⁰

The Act provides needed protections for an unregulated industry that is causing serious harm. As a recent whistleblower put it, “One, Meta knows the harm that kids experience on their platform. And executives

³⁷ Jacqueline Nesi *et al.*, *Teens and Mental Health: How Girls Really Feel about Social Media* at 6, Common Sense Media (2023), https://www.commonsensemedia.org/sites/default/files/research/report/how-girls-really-feel-about-social-media-researchreport_web_final_2.pdf.

³⁸ *Id.*

³⁹ See Vogels, *supra* note 9.

⁴⁰ Beatrice Nolan, *Kids are waking up in the night to check their notifications and are losing about 1 night’s worth of sleep a week, study suggests*, Bus. Insider (Sept. 19, 2022), <https://www.businessinsider.com/social-media-costing-children-one-night-sleep-study-2022-9>.

know that their measures fail to address it. Two, there are actionable steps that Meta could take to address the problem. And three, they are deciding time and time again to not tackle these issues.”⁴¹

III. Students Nationwide Are Experiencing a Mental Health Crisis

This compulsive overuse of online platforms and pervasive presence of surveillance advertising to children have resulted in substantial harm to children and adolescents nationwide. In 2023, the U.S. Surgeon General issued an advisory calling attention to the “growing concerns about the effects of social media on youth mental health.”⁴² This advisory followed an advisory in 2021 warning that youth are experiencing mental health struggles at crisis levels,⁴³ as well as a declaration in 2021 of a

⁴¹ *Former Meta Executive Testifies on Social Media and Youth Mental Health*, at 27:30-27:59, C-SPAN (Nov. 7, 2023), <https://www.c-span.org/video/?531650-1/meta-executive-testifies-social-media-youth-mental-health>; *Protecting Kids Online: Testimony from a Facebook Whistleblower Hearing before Subcomm. On Consumer Protection, Product Safety, and Data Security* (Oct. 5, 2021), <https://www.commerce.senate.gov/2021/10/protecting%20kids%20online:%20testimony%20from%20a%20facebook%20whistleblower>.

⁴² *Social Media and Youth Mental Health: The U.S. Surgeon General’s Advisory* at 3, U.S. Dep’t Health & Hum. Servs. <https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf>.

⁴³ *Protecting Youth Mental Health: The U.S. Surgeon General’s Advisory*, U.S. Dep’t Health & Hum. Servs. (Dec. 7, 2021), <https://www.hhs.gov/>

national emergency in child and adolescent mental health by the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the Children's Hospital Association in October 2021.⁴⁴

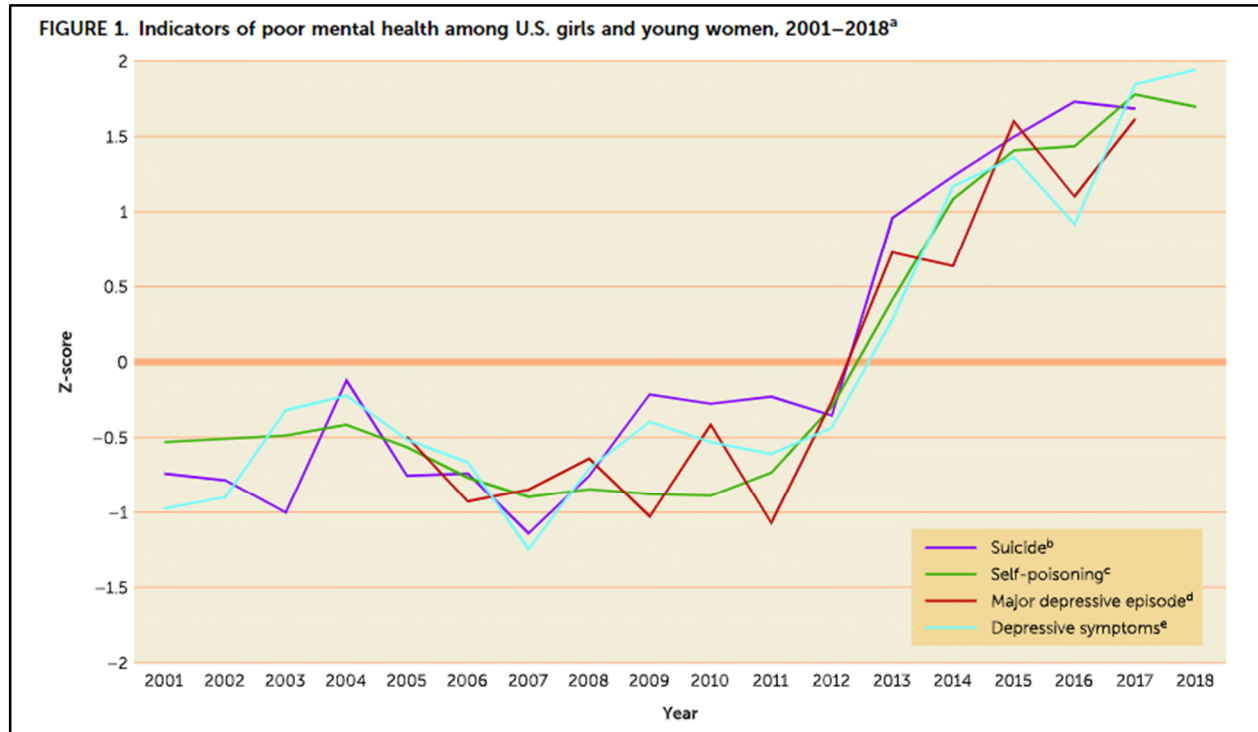
The deterioration in youth mental health began long before the COVID-19 pandemic. Beginning in the early 2010s, indicators of poor mental health among adolescents, including rates of anxiety, major depressive episodes, hospital admissions for self-harm, and suicide attempts, increased significantly, especially for adolescent girls.⁴⁵ As shown in the graph below, rates of suicide, self-poisoning, major depressive episodes, and depressive symptoms among girls and young

sites/default/files/surgeon-general-youth-mental-health-advisory.pdf [https://perma.cc/SQZ7-NDFR].

⁴⁴ *AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health*, Am. Acad. Of Pediatrics, <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health/> (last updated Oct. 19, 2021).

⁴⁵ Jean M. Twenge, *Increases in Depression, Self-Harm, and Suicide Among U.S. Adolescents After 2012 and Links to Technology Use: Possible Mechanisms*, *Psychiatric Rsch. & Clinical Prac.*, 2:1, 19–25 (2020). <https://doi.org/10.1176/appi.prcp.20190015>.

women have deviated considerably from the mean since approximately 2012.⁴⁶



AFT and CFT members have been on the front lines of this crisis. Schools are one of the main providers of mental health services for school-aged children. Indeed, over 3.7 million children ages 12–17 received mental health services through an education setting in 2019, more than any other non-specialty mental health service setting.⁴⁷ AFT and CFT members have witnessed firsthand the effects of an unregulated online

⁴⁶ *Id.*

⁴⁷ National Survey on Drug Use and Health, SAMHSA (2019 & 1st & 4th Qs. 2020), <https://www.samhsa.gov/data/report/2020-nsduh-detailed-tables> [<https://perma.cc/NA32-JYQX>].

environment on the health and wellbeing of students, and the corresponding disruption to students' learning and school operations, in California and nationwide.

In July 2023, the AFT and its partners released a report titled “Likes vs. Learning: The Real Cost of Social Media for Schools,” detailing how school districts across the country are experiencing significant burdens as they respond to online businesses’ predatory and prevalent influence in the classroom.⁴⁸ School districts have mustered significant resources to mitigate in-classroom disruptions and grapple with an increase in depression and suicidal ideation among students, dangerous and disruptive behavior, and bullying and harassment by and directed at students, as well as the popularity of dangerous viral challenges that originate from social media. Notably, the increased attention to tackling tech companies’ omnipresent role in children’s lives has pulled resources away from the core mission of education. One AFT member, a school social worker in New York, offered a description of the effects of

⁴⁸ *Likes vs. Learning: The Real Cost of Social Media for Schools* (July 2023), available at https://www.aft.org/sites/default/files/media/documents/2023/LikesVSLearning_Report.pdf.

widespread social media use that was reiterated by educators around the country:

Mental health staff in our district building have seen an increase in the number of students experiencing anxiety, depression and self-harm ideation. Often, when we talk with these students about their situation, they report the root cause for their struggles as being related to social media. ... When students are experiencing the negative social and emotional stressors of social media, we often see issues with attendance and behavior, dropping grades, and poor social interactions with teachers and peers. All of these things can have a direct impact on academic success.⁴⁹

As students experience an unprecedented decline in their mental health and wellbeing, the community of people who work to ensure students have a safe and supported environment in school—educators, paraprofessionals, mental health counselors and school health professionals, among others—are overwhelmed by the disruption that is playing out daily in our educational settings. Even if schools implement a policy that requires students to put devices away or physically out of reach during class time, the addictive nature of social media platforms continues to disrupt learning. Students struggle with being separated from the platforms and experience anxiety over missing even a single

⁴⁹ *Id.*

notification, and this anxiety interferes with students' ability to focus and learn.

Increases in students' anxiety, depression, suicidal ideation, and other mental health crises affect not only the students suffering from these challenges but also their fellow students, their families, and the educators who support them. School districts have had to divert human and financial resources to address social media-related student behavior or mental health issues, taking away resources from other important school district operations, including teaching. Schools have had to recruit and hire additional mental health professionals, provide additional training to teachers and paraprofessionals to better support students' mental health, and develop new mental health resources. All this effort to address the impact of social media on youth is diverting time and resources from instructional activities at a time when schools are desperately trying to help students recover from the impact of the COVID-19 pandemic.⁵⁰

In the context of this nationwide crisis, California's Age-Appropriate Design Code is a necessary step to require online businesses

⁵⁰ *Id.*

offer online services in ways that are safer for children, and its provisions will directly advance the government's interest in children's online safety.

CONCLUSION

From the perspective of AFT and CFT, whose members witness students struggling every day with the consequences of an unregulated surveillance advertising industry, the protections provided by the Act are urgently needed. The Act reflects a bipartisan determination that, as a society, we do not need to sit back passively as digital media disrupts the learning and damages the mental wellbeing of this generation of children and the generations to follow. The Act permissibly regulates economic activity in ways that will materially alleviate the harms at issue. The AFT and the CFT strongly urge this Court to reverse the decision below.

RESPECTFULLY SUBMITTED this 20th day of December, 2023.

By: s/ Alison S. Gaffney

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FOR THE NINTH CIRCUIT**

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