

CASE NO. 25-1456

IN THE UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

NETCHOICE,	)
	)
Plaintiff-Appellee,	)
	)
v.	)
	)
PHILIP J. WEISER, in his	)
official capacity as Attorney	)
General of the State of Colorado,	)
	)
Defendant-Appellant.	)

On Appeal from the United States District Court, District of Colorado
The Honorable William J. Martinez, Senior District Judge
District Court Case No. 25-cv-02538-WJM-KAS

**BRIEF OF COMMON SENSE MEDIA AND HEALTHIER
COLORADO AS *AMICI CURIAE* IN SUPPORT OF
DEFENDANT-APPELLANT AND REVERSAL**

Respectfully submitted,

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CORPORATE DISCLOSURE STATEMENT

Common Sense Media and Healthier Colorado are each nonprofit organizations that have no parent corporations and in which no person or entity owns stock.

STATEMENT OF CONSENT TO FILE

All parties to this appeal consented to the filing of this brief.

INTERESTS OF *AMICI CURIAE*

Common Sense Media (“Common Sense”) is a nonpartisan, nonprofit organization dedicated to improving the lives of kids and families by providing the trustworthy information, education, and independent voice they need to thrive.¹ Common Sense has been studying children and teens’ relationships with social media and technology, and the impacts of such relationships, for over a decade. For example, Common Sense has detailed how social media can amplify the pressure and stress teens feel along a variety of metrics (e.g. achievement, appearance, friendship) and how children and teens struggle to set healthy boundaries with technology (including missing sleep).² Additionally, as part of its efforts to understand effective ways to protect youth online, Common Sense has studied both the negative and positive effects of social media use. Common Sense has published several reports regarding the impact of screen time, phone use, and social media on young people.³ For almost three years, Common Sense has assessed the risks that young people face from the use of Artificial Intelligence (AI) chatbot companions,

¹ In accordance with Fed. R. App. P. 29, the undersigned certifies that (1) this brief was not authored by any party or by counsel for any party, in whole or in part; (2) no party or counsel for any party contributed money to preparing or submitting this brief; and (3) no person other than amicus curiae contributed money to the preparation or submission of this brief.

² See Our Research Program, Common Sense Media, <https://www.commonsensemedia.org/research>, (last updated Mar. 24, 2025).

³ *Id.*

analyzing the psychological and physical risks they pose to kids and teens, and supporting legislation to put guardrails in place to protect kids and teens as AI evolves.⁴

Common Sense has advocated for policy solutions at the state and federal level that would help enable a digital world where all kids can thrive. Common Sense supported Colorado House Bill 24-1136 (“the Act”), as well as social media warning label laws in California (AB-56) and New York (S.4505 and A.5346). Drawing on former U.S. Surgeon General Vivek Murthy’s⁵ 2024 call for social media warning labels, as well as Common Sense Media’s years of research into technology’s effects on children and its experience developing legislative proposals to protect youth online, Common Sense believes that targeted social media warning labels can help children thrive in an increasingly digital world.⁶ Further, Common Sense believes that the potential harms to minors from social media use are severe

⁴ Celinda Lake et al., *Generation AI: What Kids and Families Think About AI* (Common Sense Media 2026), <https://www.commonsensemedia.org/research/a-new-look-at-families-attitudes-on-ai>.

⁵ Vivek Murthy joined the Common Sense Media Board of Directors in 2025. Common Sense Media, *Common Sense Media Adds Public Health Expertise to Board of Directors with Addition of Former Surgeon General Dr. Vivek Murthy* (Oct. 1, 2025), <https://www.commonsensemedia.org/press-releases/common-sense-media-adds-public-health-expertise-to-board-of-directors-with-addition-of-former-surgeon>.

⁶ Vivek H. Murthy, *Surgeon General: Why I’m Calling for a Warning Label on Social Media Platforms*, N.Y. Times (June 17, 2024), <https://www.nytimes.com/2024/06/17/opinion/social-media-health-warning.html>.

and immediate and that efforts focused on product features, and not on access to content and services, offer protective approaches against these harms consistent with the First Amendment. Ultimately, Common Sense’s interest is ensuring that this Court’s judgment regarding the Act, and specifically the social media harms, is based on a thorough understanding of the body of evidence of these real and immediate harms.

Healthier Colorado is a nonprofit organization dedicated to advocating on behalf of everyday Coloradans to change laws and systems so that everyone has a fair chance to live a healthy life. Healthier Colorado works to improve the physical, mental, and social health of Coloradans through nonpartisan research, policy development, and state legislative advocacy. Within mental health, the impacts of technology on the mental health and well-being of kids and teens in Colorado has emerged as a primary focus area for Healthier Colorado.

In 2024, Healthier Colorado spearheaded the policy development and passage of the Act, working alongside a coalition of youth advocates, experts in the nexus of youth well-being and technology, mental health providers, and public health professionals.

Healthier Colorado believes the Act represents a common-sense approach that empowers youth and their families to make informed decisions about social media use without imposing any restrictions on what content they consume. Similar

to the warnings we already place on many other consumer products, the Act helps individuals make informed choices by providing them with evidence-based information about the impacts of prolonged social media use on their mental and physical health.

SUMMARY OF ARGUMENT

The district court’s constitutional analysis rests on a critical factual error: it substantially understated the severity, scale, and immediacy of harms that social media platforms pose to minors.

That error distorted the court’s First Amendment analysis in two ways. First, it led the court to discount Colorado’s compelling interest in protecting youth from well-documented harms associated with prolonged and late-night social media use. Second, it led the court to mischaracterize the Act as compelling platforms to opine on contested issues, rather than requiring the disclosure of factual, evidence-based information about product use and its effects.

The scientific and empirical record—drawing from public health research, internal social media company documents, and Common Sense Media’s own studies—demonstrates that these harms are neither speculative nor abstract. They are widespread, measurable, and escalating.

Because the district court’s analysis rests on an incomplete understanding of the harms of social media use, its First Amendment conclusions should be reversed.

ARGUMENT

I. The District Court Erred in Understating the Severity and Immediacy of Harms to Minors.

The district court’s analysis fails at the threshold because it treats the harms associated with youth social media use as diffuse, speculative, or insufficiently immediate. The evidence of these harms from researchers, parents and caregivers, children and teens, therapists, experts, and the companies themselves demonstrates the opposite. The evidence demonstrates that social media platforms are designed to be addictive and can lead to negative mental health outcomes like depression, anxiety, low self-worth, and even suicide.

According to the U.S. Surgeon General’s report, *Social Media and Youth Mental Health: The U.S. Surgeon General’s Advisory*, up to 95% of adolescents ages 13-17 report using social media, with more than a third saying they use social media “almost constantly.”⁷ Social media companies increasingly rely on “engagement-ranked” (“addictive”) feeds—feeds that use an algorithm to predict and maximize user engagement—to get kids and teens to view and engage with platforms for longer periods of time to make larger profits. Before these addictive feeds became the dominant mode of social media consumption for teens, their experiences online were more centered on maintaining friendships and engaging with shared culture and

⁷ U.S. Surgeon Gen., *Social Media and Youth Mental Health: The U.S. Surgeon General’s Advisory* (2024).

information.⁸ Since the widespread adoption of addictive feeds, social media has been found to have had an increasingly negative effect on children and teens, contributing to significantly higher rates of youth depression, anxiety, suicidal ideation, and self-harm.⁹

Research has shown that kids and teens are struggling to set their own boundaries around technologies that use a combination of designs to capture their attention, keep them on the platform, and prevent disengagement.¹⁰ In one Common Sense Media study, teen participants reported they checked their phone on an average of over 100 times per day, with some users reporting checking their phones hundreds of times a day, and scrolling through TikTok and Instagram for hours at a time.¹¹ Further, the research found that children and teens are bombarded with an average of 237 notifications per day, with the majority of them being from social

⁸ Monica Anderson & Jingjing Jiang, *Teens' Social Media Habits and Experiences* (Nov. 28, 2018), <https://www.pewresearch.org/internet/2018/11/28/teens-social-media-habits-and-experiences>.

⁹ Tariq Masri-zada et al., *The Impact of Social Media & Technology on Child and Adolescent Mental Health*, 9 J. Psychiatry & Psychiatric Disorders, no. 2, 2025, at 111-30, <https://pmc.ncbi.nlm.nih.gov/articles/PMC12165459>.

¹⁰ Yixin Chen et al., *The Engagement-Prolonging Designs Teens Encounter on Very Large Online Platforms*, 2026 Proceedings of 2026 CHI Conference on Human Factors in Computing Systems (Apr. 13, 2026), <https://doi.org/10.1145/3772318.3790393>.

¹¹ Jenny S. Radesky et al., *Constant Companion: A Week in the Life of a Young Person's Smartphone Use* (Common Sense Media 2023), https://www.commonsensemedia.org/sites/default/files/research/report/2023-cs-smartphone-research-report_final-for-web.pdf.

media apps.¹² These are notifications that disrupt sleep, school, work, and face-to-face relationships. This level of exposure is associated with a range of harms, including sleep disruption, particularly from late-night use, anxiety and depression, compulsive or addictive patterns of engagement, exposure to bullying, self-harm content, and sexual exploitation, negative body image, and social comparison effects. The American College of Pediatricians warns that “media use and screen time are associated with increased risks for children and adolescents, such as attention deficits, increased aggression, low self-esteem, and depression.”¹³ The American Psychological Association (“APA”) has also highlighted the correlation between frequent social media use and poor mental health among adolescents.¹⁴ Common Sense Media’s own research confirms these impacts, in a 2024 report, wherein 43% of teens ages 14-17 reported that social media takes time away from meaningful activities, and 34% reported negative effects on sleep.¹⁵

¹² *Id.*

¹³ American College of Pediatricians, *Media Use and Screen Time – Its Impact on Children, Adolescents, and Families* (May 2020), <https://acpeds.org/position-statements/media-use-and-screen-time-its-impact-on-children-adolescents-and-families>.

¹⁴ Kirsten Weir, *Social Media Brings Benefits and Risks to Teens. Psychology Can Help Identify a Path Forward*, 54 *Monitor on Psych.*, no. 6, at 46 (Sept. 1, 2023), <https://www.apa.org/monitor/2023/09/protecting-teens-on-social-media>.

¹⁵ Mary Madden et al., *A Double-Edged Sword: How Diverse Communities of Young People Think About the Multifaceted Relationship Between Social Media and Mental Health* (Common Sense Media & Hopelab 2024), https://www.commonsensemedia.org/sites/default/files/research/report/2024-double-edged-sword-hopelab-report_final-release-for-web-v2.pdf.

More severe harms, such as suicidal ideation, are not uncommon among frequent users of social media.¹⁶ Two surveys examining a nationally representative cohort of U.S. adolescents in grades 8-12 found “a clear pattern linking screen activities with higher levels of depressive symptoms/suicide-related outcomes and nonscreen activities with lower levels.”¹⁷ According to this research, suicide-related outcomes were elevated after only two (2) hours or more of electronic device use.¹⁸

Another study of teens and social media use found that the use of social media has led more than one-quarter of teens to believe others’ lives are better than their own, contributing to diminished self-worth, loneliness, and social exclusion.¹⁹ These concerns are echoed by industry insiders. Arturo Béjar, a former senior employee at Instagram, has publicly warned that platform design changes have transformed social media “from a product you used to a product that uses you,” highlighting the

¹⁶ Jean M. Twenge & W. Keith Campbell, *Media Use Is Linked to Lower Psychological Well-Being: Evidence from Three Datasets*, 90 Psych. Q. 311 (Mar. 11, 2019), <https://pubmed.ncbi.nlm.nih.gov/30859387>.

¹⁷ Jean M. Twenge et al., *Increases in Depressive Symptoms, Suicide-Related Outcomes, and Suicide Rates Among U.S. Adolescents After 2010 and Links to Increased New Media Screen Time*, 6 Clinical Psychol. Sci. 3, 9 (2018) <https://doi.org/10.1177/2167702617723376>; see also Jane Harness et al., *Youth Insight About Social Media Effects on Well/Ill-Being and Self-Modulating Efforts*, 71 J. Adolescent Health, 324-33 (Sept. 1, 2022), <https://pubmed.ncbi.nlm.nih.gov/35691849>; Amy Orben et al., *Windows of Developmental Sensitivity to Social Media*, 13 Nature Commc’ns 1649 (2022), <https://www.nature.com/articles/s41467-022-29296-3>.

¹⁸ *Id.*

¹⁹ *Id.*

degree to which engagement-driven systems may operate to the detriment of young users' well-being.²⁰ Taken together, this evidence demonstrates that the harms associated with youth social media use are not abstract or speculative, but instead reflect a pervasive and escalating public health concern.

II. The Body of Evidence Demonstrates that Platform Design Features Drive Engagement in Ways that Contribute to Youth Harm.

The Act's disclosure requirements are grounded in a substantial and growing body of evidence demonstrating that social media platforms are deliberately designed to maximize user engagement through features that can contribute to harmful patterns of use among minors. This evidence, which is drawn from youth self-reports, expert testimony, academic research, and internal industry documents, confirms that the risks associated with these platforms are a function of deliberate product design. Requiring platforms to disclose the effects of these design features does not compel ideological speech; it mandates the communication of factual information about how their products are designed to operate and affect young users.

A. Evidence from Youth, Families, and Experts Confirms the Role of Platform Design in Driving Harmful Use Patterns.

Youth engagement with these platforms is both widespread and intensive. In addition to the report from the U.S. Surgeon General, Common Sense Media's

²⁰ Zoe Klienman, 'A Game-Changing Moment for Social Media' - *What Next for Big Tech After Landmark Addiction Verdict?*, BBC News (Mar. 26, 2026), <https://www.bbc.com/news/articles/c87wd0d84jqo>.

research similarly finds that teens spend an average of approximately 4.5 hours per day on their phones, with a substantial subset reporting five to eight hours of daily screen time.²¹ In a 2025 Pew Research Center survey of U.S. teens ages 13-17, 76% of those surveyed reported using YouTube daily, including 43% who used it several times per day, and 17% who reported using it “almost constantly.” The same survey found that 61% of teens used TikTok daily, including 34% who used it several times a day, and 21% reporting near-constant use. Finally, 61% also reported daily Instagram use, including 31% who accessed the platform several times a day, and 12% who used it almost constantly.²² Once engaged, many teens report difficulty disengaging. Nearly three-quarters of the surveyed teenagers reported believing that technology companies intentionally design their products to keep users engaged for longer periods of time.²³ Even younger users—such as children ages 11-12—who may spend less time online independently, are nonetheless exposed to the same design-driven risks, including compulsive use patterns.²⁴

²¹ Radesky et al., *Constant Companion*, *supra* note 11.

²² Monica Anderson Faverio & Olivia Sidoti, *Teens, Social Media and AI Chatbots 2025*, Pew Research Center (Dec. 9, 2025), <https://www.pewresearch.org/internet/2025/12/09/teens-social-media-and-ai-chatbots-2025>.

²³ Vicky Rideout & Michael B. Robb, *Social Media, Social Life: Teens Reveal Their Experiences* (Common Sense Media 2018), <https://www.commonsensemedia.org/sites/default/files/research/report/2018-social-media-social-life-executive-summary-web.pdf>.

²⁴ *Id.*

Qualitative research further illustrates how specific design features contribute to these outcomes. In studies of adolescent girls, Common Sense Media found that, although many users recognize benefits such as connection and self-expression, a significant proportion report difficulty controlling their use.²⁵ Participants consistently identified features such as algorithmic recommendations, infinite scrolling, autoplay, and constant notifications as making platforms difficult to stop using.²⁶ These same users reported a range of associated harms, including exposure to harmful content, social comparison, bullying, unwanted contact, and sleep disruption.²⁷

These experiences are not incidental. Social media platforms are engineered to maximize engagement through the continuous collection and analysis of user data. Platforms deploy sophisticated algorithms to curate personalized content streams, while incorporating design features—such as autoplay, infinite scroll, and repeated notifications—that reduce friction and prolong use. As identified in the U.S. Surgeon General’s advisory, “Social media platforms are often designed to maximize user engagement, which has the potential to encourage excessive use and behavioral

²⁵ Jacqueline Nesi, Supreet Mann & Michael B. Robb, *Teens and Mental Health: How Girls Really Feel About Social Media* (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.

²⁶ *Id.*

²⁷ *Id.*

dysregulation. Push notifications, autoplay, infinite scroll, quantifying and displaying popularity (i.e., ‘likes’), and algorithms that leverage user data to serve content recommendations are some examples of these features that maximize engagement.”²⁸ These features function together to sustain attention, encourage repeated checking, and reinforce habitual engagement. Indeed, Common Sense Media research shows that popular social media apps, like TikTok, provide low-friction access to infinite, personalized content, which short-circuits kids’ and teens’ attention and drives compulsive engagement.²⁹ Research has found that nighttime social media use can negatively impact sleep and be particularly harmful to children’s health.³⁰ In one report, one-third of teens indicated they wake up and check their phones for something other than time at least once per night.³¹ Another report found that some teens actually set alarms in the middle of the night to remind

²⁸ U.S. Surgeon Gen., *Social Media and Youth Mental Health: The U.S. Surgeon General’s Advisory* (2023), <https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf>.

²⁹ Jenny S. Radesky et al., *Constant Companion*, *supra* note 11.

³⁰ Maida Lynn Chen, *How Screen Time is Affecting Teens’ Sleep and Mental Health*, World Economic Forum (Sept. 7, 2023), <https://www.weforum.org/stories/2023/09/screen-time-affecting-sleep-mental-health>.

³¹ Michael B. Robb, *Screens and Sleep: The New Normal: Parents, Teens, Screens, and Sleep in the United States*, at 7 (2019), <https://www.commonsensemedia.org/sites/default/files/research/report/2019-new-normal-parents-teens-screens-and-sleep-united-states-report.pdf>.

them to check their notifications or complete game tasks that are only available for a limited time.³²

Importantly, these behaviors are the result of design choices closely tied to platforms' advertising-driven business models, which reward increased time spent and user engagement.³³ The resulting incentives encourage the development and deployment of features that maximize attention, even when such features may contribute to harmful patterns of use among minors. Taken together, this evidence demonstrates that the harms at issue are not simply a byproduct of user choice or content exposure, but are closely linked to identifiable and intentional design features. Requiring platforms to disclose the effects of these features therefore compels only the communication of factual information about how their products operate and affect minors—facts of which the companies are well aware, as discussed in Section C *infra*—and not the expression of contested or ideological views.

³² Emily Weinstein & Carrie James, *Behind Their Screens: What Teens Are Facing (And Adults Are Missing)* 38 (2022).

³³ See Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* 8-12 (2019) (describing data-driven engagement optimization); see also Lake et al., *Generation AI*, *supra* note 4.

B. There is Substantial Evidence from Researchers that These Harms are Especially Acute for Minors Because Adolescents are More Vulnerable to Persuasive Design, Social Pressure, and Reward Loops.

Youth brains are still developing, and that development makes them uniquely vulnerable to social media harms such as reward loops, persuasive design, and social pressure, all of which can make it especially difficult for minors to disconnect. The U.S. Surgeon General’s 2023 advisory noted that “frequent social media use may be associated with distinct changes in the developing brain in the amygdala (important for emotional learning and behavior) and the prefrontal cortex (important for impulse control, emotional regulation, and moderating social behavior), and could increase sensitivity to social rewards and punishments.”³⁴

Minors’ executive functioning skills, which are critical to directing attention and resisting impulsive behavior, are still developing throughout childhood and adolescence.³⁵ The brain structures of young people are very different from those of adults, which causes young people to respond to stimuli differently from adults.³⁶

³⁴ U.S. Surgeon Gen., *Social Media and Youth Mental Health 2023*, *supra* note 28, at 5 (citing M.T. Maza et al., *Association of Habitual Checking Behaviors on Social Media with Longitudinal Functional Brain Development*, 177 JAMA Pediatrics 160 (2023)).

³⁵ Heather J. Ferguson et al., *The Developmental Trajectories of Executive Function from Adolescence to Old Age*, 11 Sci. Reps. 1382 (2021), <https://www.nature.com/articles/s41598-020-80866-1.pdf>.

³⁶ See Brief for Common Sense Media and Frances Haugen as Amici Curiae Supporting Petitioners at 6–9, *Gonzales v. Google*, 598 U.S. 617 (2022) (No. 21-

The limbic system and the prefrontal cortex of our brains grow synchronously, but at different speeds.³⁷ The limbic system is associated with survival and contains the part of our brains that controls certain emotional responses such as our “fight or flight” response.³⁸ Meanwhile, the prefrontal cortex is associated with higher-level functions such as planning, problem solving, reasoning, and impulse control, and will not mature until closer to adulthood.³⁹ Before the prefrontal cortex is fully matured and able to counterbalance the limbic system, children and teens are less equipped than adults to make rational decisions, consider long term consequences, and control impulses.⁴⁰ Their critical thinking skills are still developing, making them more vulnerable and largely defenseless against the built-in design features of social media. Young children do not have developed impulse control, and they do not understand the consequences of what they are doing and sharing online. Teenagers demonstrate heightened reward-seeking behavior due to increased brain

1333) (discussing the structural disparities between the adult and adolescent brain and how they lead adults and adolescents to respond to stimuli differently).

³⁷ B.J. Casey et al., *The Adolescent Brain*, 28 *Developmental Rev.* 62, 63 (2008).

³⁸ See Velayudhan Rajmohan & Eladath Mohandas, *The Limbic System*, 49 *Indian J. Psychiatry* 132-39 (2007) (providing an overview of the components and functions of the limbic system).

³⁹ Edward E. Smith & John Jonides, *Storage and Executive Processes in the Frontal Lobes*, 283 *Science* 1657, 1659-60 (1999).

⁴⁰ See Angela Griffin, *Adolescent Neurological Development and Implications for Health and Well-Being*, 5 *Healthcare* 62, 63 (2017) (describing how the prefrontal cortex is late-evolving and enables individuals to learn how to manage long term planning, monitor what is going on, and adjusting smoothly to surroundings while keeping emotions and behaviors context-appropriate).

activity related to dopamine.⁴¹ This contributes to teens’ tendency to seek out reward stimuli,⁴² such as those offered by social media.

Young people are also very sensitive to social pressure. Social acceptance activates the reward center in adolescent brains, rendering youth especially susceptible to the social manipulation and peer pressure applied by design features intended to maximize user engagement.⁴³ When platforms publicly surface follower counts, peer reactions, and “likes,” they are not just sharing information: they are triggering neurological responses in young people who are not yet developmentally equipped to moderate them. Adolescents are more sensitive to social feedback than adults, and their moods are more strongly affected by variations in “likes.”⁴⁴ Companies know this. For example, internal Meta studies showed that hiding “likes” helped make teen users feel less social comparison —and yet because Meta was

⁴¹ Eveline A. Crone, *Executive Functions in Adolescence: Inferences from Brain and Behavior*, 12 *Developmental Sci.* 825, 829 (2009); Adriana Galvan, *Adolescent Development of the Reward System*, 4 *Frontiers Hum. Neuroscience* 1, 1 (2010).

⁴² Ashley C. Parr et al., *Dopamine-Related Striatal Neurophysiology is Associated with Specialization of Frontostriatal Reward Circuitry Through Adolescence*, 201 *Progress in Neurobiology* 1, 1 (2021); Dustin Albert & Laurence Steinberg, *Judgment & Decision Making in Adolescence*, 21 *J. Res. on Adolescence* 211, 217-19 (2011).

⁴³ Zara Abrams, *Why Young Brains Are Especially Vulnerable to Social Media*, *American Psychological Association* (Feb. 3, 2022), <https://www.apa.org/news/apa/2022/social-media-children-teens>.

⁴⁴ Ana da Silva Pinho et al, *Youths’ Sensitivity to Social Media Feedback: A Computational Account*, 10 *Sci. Advances*, no. 43 (Oct. 23, 2024) <https://www.science.org/doi/epdf/10.1126/sciadv.adp8775>.

worried this would limit users' time spent on the platform, it chose to offer that option only as an opt-in, not as the default, knowing that fewer people would choose it (i.e., 72% of users would voluntarily opt-in to a protective setting, vs. 35% who would otherwise leave the protective setting in place if it were the default).⁴⁵ Social media's business models depend on engagement and time spent on the platform, and young people's developing brains and sensitivity to social pressure make them among the most valuable and most exploitable users on these platforms.

While young people in general are more susceptible to social media's risks and harms than adults, vulnerable populations among teens are even more susceptible. Young people suffering from depressive symptoms attempt to curate their feed at a higher rate. Ninety percent (90%) of young people with moderate to severe depressive symptoms have tried to see less of what they do not like on social media, versus 67% of those with no symptoms.⁴⁶ Eighty-one percent (81%) of youth with moderate to severe depressive symptoms have taken actions to try to curate their social media feed, compared to 55% of those with no symptoms.⁴⁷ A longitudinal cohort study of adolescents aged 12–15 further found that those who spend more than three hours per day on social media face a heightened risk of

⁴⁵ Complaint and Jury Demand at 54-56, *Commonwealth of Massachusetts v. Meta Platforms, Inc. and Instagram, LLC*, No. 2384CV02397-BLS1 (Mass. Super. Ct. Nov. 6, 2023).

⁴⁶ Madden et al., *A Double-Edged Sword*, *supra* note 15.

⁴⁷ *Id.*

depression and anxiety.⁴⁸ These patterns are not coincidental; they reflect the predictable consequences of sustained exposure to platform environments designed to maximize engagement. The harms are reinforced by behavioral feedback loops that exacerbate vulnerability. When young people feel sad or isolated, they often turn to social media for distraction or connection; however, increased use can intensify those same negative feelings.

C. Internal Industry Evidence Confirms Companies' Awareness of Design-Related Risks.

Testimony from company whistleblowers, along with internal documents disclosed through whistleblower reports and litigation—including thousands of screenshots of internal communications and presentations—further corroborates the link between platform design choices and harms to young users. Frances Haugen, a former Meta employee, described how the company, then referred to as Facebook, documented the cycle of harms to young girls and increased use in its own internal research on Instagram: “And what’s super tragic is Facebook's own research says, as these young women begin to consume this -- this eating disorder content, they get

⁴⁸ See Kira E. Riehm et al., *Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth*, 76 JAMA Psychiatry 1266 (Sept. 11, 2019), <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2749480>.

more and more depressed. And it actually makes them use the app more. And so, they end up in this feedback cycle where they hate their bodies more and more.”⁴⁹

There are thousands of internal documents that have been disclosed in ongoing litigation against Meta, Google, Snap, and TikTok that reveal internal company knowledge of the harms being caused to children and teens. One of the most succinct acknowledgments of the problem is from a chat between two researchers at Meta:

“IG [Instagram] is a drug,”... “LOL, I mean, all social media. We're basically pushers,” ... “Seriously it is! We are causing reward deficit disorder because people are binging on IG so much they can't feel reward anymore, like their reward tolerance is so high.”⁵⁰

In other documentation a senior data scientist at Meta wrote:

It seems clear from what's presented here that some of our users are addicted to our products. And I worry that driving sessions incentivizes us to make our product more addictive, without providing much more value. How to keep someone returning over and over to the same behavior each day? Intermittent rewards are most effective (think slot machines) reinforcing behaviors that become especially hard to extinguish—even when they provide little reward, or cease providing reward at all.⁵¹

⁴⁹ Scott Pelley, *Whistleblower: Facebook Is Misleading the Public on Progress Against Hate Speech, Violence, Misinformation*, CBS News (Oct. 4, 2021), <https://www.cbsnews.com/news/facebook-whistleblower-frances-haugen-misinformation-public-60-minutes-2021-10-03>.

⁵⁰ See Plaintiff's Corrected Omnibus Opposition to Defendant's Motions for Summary Judgment at 5673, *In re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation*, MDL Case No. 4:22-md-03047-YGR (PHK) (N.D. Cal. Nov. 21, 2025), Dkt. No. 2480.

⁵¹ *Id.*

Internal documents show that Meta pursued engagement even when it knew its design choices connected minors with adult groomers. These documents revealed that Instagram’s “Accounts You May Follow” feature recommended nearly two million minors to accounts associated with adult groomers within a three-month period, with a substantial percentage of those recommendations resulting in follow requests.⁵² Additional evidence suggests that employees raised concerns about such risks internally, but that platform leadership declined to implement stronger safeguards, maintaining permissive enforcement policies even in cases involving serious misconduct.⁵³ These disclosures underscore that the risks associated with platform design are not hypothetical; they are known within the industry and, in some instances, have been consciously tolerated in pursuit of engagement metrics.

There is even evidence that design features that are still being offered by some of these companies have been found to be harming young users. According to investigations into Instagram conducted by attorneys general in several states, Meta has known for years that cosmetic “filters” and “effects,” which are common features of Instagram and its visual camera, harm young users.⁵⁴ One of these common filters stimulates the effects of facial enhancements such as cosmetic

⁵² See Plaintiff’s Complaint for Abatement and Civil Penalties and Demand for Jury Trial, *New Mexico v. Meta Platforms, Inc. et al.*, Case No. D-101-CV-2023-02838 (N.M. Dist. Dec. 5, 2023) (alleging recommendation of minors to adult accounts).

⁵³ *Id.*

⁵⁴ Complaint and Jury Demand at 57, *supra* note 45.

surgery, Botox, and other skin enhancements.⁵⁵ After consulting with independent researchers around the world who agreed that these filters could have severe mental health impacts, high-ranking employees at Meta had advocated for banning these filters.⁵⁶ However, Meta CEO Mark Zuckerberg personally chose to veto a policy that would have banned these filters on Meta’s platforms, stating that there is a “clear demand” for the filters and that he had seen “no data” suggesting they were harmful.⁵⁷

This type of evidence from inside social media companies is not unique to Meta. The recently unsealed documents in the Judicial Council Coordination Proceeding (JCCP) and Multi-District Litigation (MDL) against Meta, TikTok, Snap, and YouTube provide an unprecedented look at some of the largest social media platforms. For example, between 2018 and 2024, TikTok received countless reports from users and parents describing TikTok as “addictive,” “like crystal meth,” and “ruining” children’s attention and sleep.⁵⁸ Snap CEO Evan Spiegel internally referred to his company’s Streaks as “toxic behavior” that Snap shouldn’t reinforce. Yet, in 2023, Snap launched a paid feature to “restore” lost Streaks for a fee,

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ Plaintiff’s Corrected Omnibus Opposition to Defendant’s Motions for Summary Judgment at 87, *supra* note 50.

monetizing the very anxiety they created.⁵⁹ YouTube research had shown that teens were more susceptible to online harms because “changes in brain development predisposes young teens to act more impulsively, show a greater tendency towards risk taking, and lead to an increased interest in riskier content.”⁶⁰

These disclosures build on years of whistleblower evidence that first exposed the gap between these companies’ public assurances and internal reality. This paints a deeply troubling picture where platforms knowingly prioritized profits over child safety by utilizing these addictive design features to increase engagement - and profit. These companies were not only aware of the harms, they documented them and engineered addictive systems, all while misleading parents, lawmakers and the public at large.

Taken together, this evidence demonstrates that the harms addressed by the Act arise not from abstract concerns about speech, but from identifiable and measurable product features. By requiring platforms to disclose factual information about how these features operate and affect young users, Colorado has adopted a narrowly focused, evidence-based approach that is fully consistent with the First Amendment.

⁵⁹ Defendant’s Notice of Lesser-Redacted Filing Regarding General Causation Sargon Motions, at 253, *In re: Social Media Cases*, JCCP No. 5255, Case No. 22STCV21355 (Cal. Super. Nov. 14, 2025).

⁶⁰ *Id.* at 173.

CONCLUSION

The district court's finding rests on a fundamental factual mistake: It significantly understated the severity, scale, and immediacy of the harms that social media platforms pose to minors. That error skewed its First Amendment analysis in two critical respects. It led the court to undervalue the State's compelling interest in protecting youth from well-documented harms associated with prolonged and late-night social media use, and to mischaracterize the Act as compelled opinion rather than a requirement to disclose factual, evidence-based information about product use and its effects.

The scientific and empirical evidence confirms that these harms are not speculative or abstract. They are widespread, measurable, well-documented, and increasing. Because the district court's analysis rests on an incomplete and inaccurate understanding of these realities, its First Amendment conclusions cannot stand and should be reversed.

Dated: May 18, 2026

Respectfully submitted,

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I certify that on May 18, 2026, I caused the foregoing to be filed with the Clerk of the Court for the United States Court of Appeals for the Tenth Circuit by using the appellate CM/ECF system. All participants in the case are registered CM/ECF users and will be served by the appellate CM/ECF system.

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