STATE OF VERMONT

SUPERIOR COURT
CHITTENDEN UNIT

CIVIL DIVISION
Docket No. 23-CV-04453

STATE OF VERMONT,	)
	)
Plaintiff,	)
	)
v.	)
	)
META PLATFORMS, INC. and	)
INSTAGRAM, LLC.	)
	)
Defendants	)

CONFIDENTIAL

EXHIBIT A TO STATE'S MOTION TO SEAL

STATE OF VERMONT

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	)	
Defendants	)	

COMPLAINT

TABLE OF CONTENTS

COMPLAINT

The Vermont Attorney General brings this suit against Meta Platforms, Inc. and Instagram, LLC ("Defendants") for violations of the Vermont Consumer Protection Act, 9 V.S.A. § 2451 et seq. Defendants have violated the Vermont Consumer Protection Act by engaging in unfair and deceptive acts and practices in commerce, including making materially misleading representations and omissions regarding: the degree to which Defendants' social media platform, Instagram, causes young people to use the platform compulsively and excessively; the risks and harms to young people of compulsive and excessive Instagram use; and the risks and harms to young people of Instagram use otherwise. For these violations, the Attorney General seeks injunctive relief, civil penalties, disgorgement, fees and costs, and other appropriate relief.

I. INTRODUCTION

1. In 1998, state Attorneys General—including the Attorney General of Vermont—sued Philip Morris and R.J. Reynolds and other tobacco manufacturers for addicting consumers to cigarettes, publicly promoting the deceptive narrative that cigarettes were neither addictive nor harmful, and concealing their internal evidence to the contrary.

2. In 2018, state Attorneys General—including the Attorney General of Vermont—sued Purdue Pharma for addicting consumers to opioids, publicly promoting the deceptive narrative that opioids were neither addictive nor harmful, and concealing their internal evidence to the contrary.

3. Today, as part of a coordinated multistate effort, the Attorney General of Vermont sues Meta Platforms Inc. and Instagram LLC for addicting a generation of youth to Instagram, publicly promoting the deceptive narrative that Instagram is neither addictive nor harmful to youth, and concealing their internal evidence to the contrary.

4. Tobacco. Opioids. Social media. The State of Vermont will not tolerate corporations sacrificing the health of Vermont consumers at the altar of profit, particularly where, as here, the corporate conduct in question targets and disproportionately harms **Vermont youth**.

5. On its face, Meta appears to be a social media company. It owns and operates Instagram, Facebook, WhatsApp, and Horizon Worlds. But Meta is an advertising company.[1] And Instagram—the subject of this lawsuit—is a highly sophisticated lure to draw consumers to advertisements.

6. Because Meta generates revenue from Instagram by selling advertising on the platform, Meta is incentivized to maximize the amount of time that Instagram users spend on the platform each day. The more time consumers spend on Instagram, the more advertising Meta can display to them, the more Meta can profit. Additionally, the more time consumers spend on Instagram, the more data Meta can collect about their personality and preferences, the better Meta can

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[1] 98% of Meta's total revenue is advertising revenue. *See Meta Reports Second Quarter 2023 Results* (July 26, 2023), Meta Investor Relations, https://s21.q4cdn.com/399680738/files/doc_financials/2023/q2/Meta-06-30-2023-Exhibit-99-1-FINAL.pdf, at 10.

target ads at them, and the more money Meta can demand from advertisers for its highly targeted advertising capabilities.

7. In Meta's advertising business model, young Instagram users are of paramount significance. This is for several reasons. First, the earlier Meta can draw consumers to Instagram—and away from its social media competitors—the better chance Meta has to retain those consumers' engagement in the long-run. In that regard, young Instagram users are the company's future. They are the eyes that will view ads on Instagram for years to come.

8. Second, young users are Instagram's brand ambassadors to America's households, schools, and communities. They bring their family members, classmates, and community peers to the platform, multiplying Meta's ad revenue.

9. Third, Meta's "advertising partners" are interested in targeting ads at young Instagram users. From these sellers' perspectives, young Instagram users are fish in a barrel, abundant in supply on the platform; more likely to be influenced by advertisements; potential lifelong customers of the product or service for sale; trend-setters in society; and, historically, highly targetable via Meta's sophisticated, data-driven, ad-targeting technology. (Of note, in a 2019 survey of 8,000 teens nationally with an average age of 16.3 years, 73% of respondents said that "Instagram was the best way for brands to reach them about new products or promotions."[2]) And Meta

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[2] *Best Ways for a Retailer/Brand to Communicate About New Products/Promotions According to US Teens, Spring 2019 (% of respondents)*, Insider Intelligence (Apr. 8, 2019), https://www.insiderintelligence.com/chart/227856/best-ways-retailerbrand-communicate-about-new-productspromotions-according-us-teens-spring-2019-of-respondents

stands to financially gain from its "advertising partners'" youth-focused business interests.

10. Accordingly, Meta has gone to the extreme to maximize the amount of time that young users spend on Instagram.

11. To wit: Meta has expended substantial resources to study teen's neurological, cognitive, and psychological vulnerabilities; design and develop Instagram features that exploit teen's neurological, cognitive, and psychological vulnerabilities to cause teens to use Instagram compulsively and excessively; and test and refine these features to exact their intended effect.

12. And Instagram has exacted its intended effect. That is, Instagram's features—including Instagram's algorithmic recommendation systems, infinite scroll, autoplay, displays of status metrics (like numbers of "followers," "likes," and "views"), push notifications, ephemeral content, and "Reels," as described further in this Complaint—cause young people to use Instagram compulsively and excessively.

13. In a litany of internal studies, Meta has concluded as much. Indeed, internally, Meta has found in no uncertain terms that "**app addiction is common on [Instagram]**." (Emphasis added). Likewise, in a leaked internal Meta study, Meta found that teens "have an addicts' narrative about their [Instagram] use…. Teens recognize the amount of time they spend [on Instagram] isn't good for them but at the same time **they lack the willpower to control the time spent**

themselves."[3] (Emphasis added).

14.   As the U.S. Surgeon General recently explained, adolescents' attempt to resist social media is an unfair fight: "You have some of the best designers and product developers in the world who have designed these products to make sure people are maximizing the amount of time they spend on these platforms. And if we tell [an adolescent], use the force of your willpower to control how much time you're spending, you're pitting [an adolescent] against the world's greatest product designers."[4]

15.   Meanwhile, Meta celebrates Instagram's meteoric growth, including among young users. In 2022, approximately 62% of U.S. teens age 13-17 used Instagram.[5] In Vermont, teen use of Instagram is widespread. According to Meta:

    a) Between July 2020 and June 2021, upwards of 41,537 Vermont "teens" [6] used Instagram monthly.

    b) During that time period, upwards of 29,484 Vermont "teens" used Instagram daily.

    c) As of 2022, Instagram had fully or nearly fully saturated the

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[3] *Teen Mental Health Deep Dive*, The Wall Street Journal (Sep. 29, 2021), https://s.wsj.net/public/resources/documents/teen-mental-health-deep-dive.pdf.
[4] Allison Gordon & Pamela Brown, *Surgeon General says 13 is 'too early' to join social media*,
CNN (Jan. 29, 2023), https://www.cnn.com/2023/01/29/health/surgeon-general-social-media/index.html.
[5] Emily A. Vogels et al., *Teens, Social Media and Technology 2022*, Pew Research Center (Aug. 10, 2022), https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/.
[6] Upon information and belief, for the purposes of the statistics referenced in this Paragraph, Instagram defined "teens" as individuals ages 13 to 17.

market for Vermonters under 35 years of age.

    d) At times, more "teens" in Vermont used Instagram, per capita, than teens in any other state.

16. Of critical concern to the State of Vermont: compulsive and excessive use of social media platforms like Instagram cause a wide range of harms to youth, including increased levels of anxiety and depression; reduced and interrupted sleep; increased suicidal thoughts and behaviors; and altered neurological and psychological development, including changes in brain structure similar to changes seen in individuals with addiction to substances or gambling.

17. Further, beyond compulsive use, Instagram routinely exposes young users to harmful content and harmful experiences. For example, Instagram exposes young users to content depicting violence, adult sexual activity, and hate speech, as well as content promoting eating disorders, self-harm, and suicide. Instagram's algorithmic recommendation system pushes some young users into increasingly distressing content—like content promoting extreme weight loss and eating disorders—precisely because, per the recommendation system's objectives, such a push results in the maximization of those young user's "engagement." Additionally, young Instagram users frequently experience negative social comparison, bullying, and unwanted sexual advances.

18. Instagram is disproportionately damaging to teen girls. Namely, it causes them to engage in high rates of negative social comparison, which, in turn, causes or contributes to loneliness, depression, body dissatisfaction, body

dysmorphia, eating disorders, self-harm and suicide. According to a leaked internal Meta study, "[Instagram] make[s] body image issues worse **for one in three teen girls**."[7]

19.   Meta is well aware of Instagram's myriad harms to youth. That is, Meta is well aware that compulsive and excessive Instagram use harms young users' mental health. Internally, Meta's has studied the topic and concluded as much. Likewise, Meta is well aware that Instagram frequently exposes young users to the kinds of harmful content and harmful experiences referenced above. Internally, Meta has studied the topic and concluded as much. And Meta is well aware that Instagram is uniquely damaging to teen girls. Internally, Meta has studied the topic and concluded as much.

20.   That Meta designed and refined—and continues to design and refine—Instagram features with the goal of hooking youth to the platform when Meta has internally found that (a) these features cause compulsive and excessive platform use; (b) compulsive and excessive platform use cause youth mental health harms; and (c) Instagram exposes young users to an array of harmful content and harmful experiences otherwise, is egregious.

21.   Meta's deception compounds the wrong. Meta tells consumers its mission is to "Giv[e] people the power to build community and bring the world closer together," not maximize ad revenue. Meta misleads consumers about the design of

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[7] *Teen Mental Health Deep Dive*, The Wall Street Journal (Sep. 29, 2021), https://s.wsj.net/public/resources/documents/teen-mental-health-deep-dive.pdf.

Instagram, publicly representing that Instagram is not designed to maximize young users' time spent on the platform when it is—and concealing its internal findings that belie these public representations. Meta misleads consumers about the degree to which Instagram causes young users to use the platform compulsively and excessively, publicly representing that the platform does not have this effect when it does—and concealing its internal findings that belie these public representations. Likewise, Meta misleads consumers about the degree to which, beyond causing compulsive and excessive platform use, Instagram exposes young users to harmful content and harmful experiences, saying such exposure is rare when it is frequent— and concealing its internal findings that belie these public representations.

22.   For example: each quarter, Meta publishes a "Community Standards Enforcement Report" that purports to describe for the public the statistical "prevalence" of content on Instagram during the prior quarter that violated Meta's policies prohibiting harmful content. In one CSE Report, Meta claimed that, during the quarter in question, only "between 0.05% to 0.06% of views [on Instagram] were of content that violated [Meta's] standards against bullying & harassment." To a reasonable consumer, this assertion would have created the impression that content reflecting bullying and harassment was extremely rare on Instagram.

23.   In reality, bullying and harassment are rampant on Instagram. However, much of it either does not violate Instagram's policies (which reasonable consumers would have no reason to know) or is not caught by Meta's artificial intelligence systems that troll for "policy violating" content.

24.   The Rosetta Stone for understanding the extent to which bullying and harassment occurs on Instagram is Instagram users themselves. To that end, roughly contemporaneously with the CSE Report period referenced above, Meta conducted a sweeping, sophisticated survey of Instagram users—including young users—to determine the extent to which they encounter various "bad experiences" on Instagram, including being the target of bullying, witnessing bullying, and receiving unwanted sexual advances. Meta designed the survey—including survey sample sizes—to produce survey results that were representative of Instagram users' experiences generally.

25.   According to the results of this internal survey, Instagram users experienced the following events **during just the seven days prior to taking the survey**:

- 28.3% of all users witnessed bullying;

- 27.2% of 13-15 year olds witnessed bullying;

- 29.4% of 16-17 year olds witnessed bullying;

- 8.1% of all users were the target of bullying;

- 10.8% of 13-15 year olds were the target of bullying;

- 9.7% of 16-17 year olds were the target of bullying;

- 11.9% of all users received unwanted sexual advances;

- 13.0% of 13-15 year olds received unwanted sexual advances; and,

- 14.1% of 16-17 year olds received unwanted sexual advances.

26.   Meta is aware that its "prevalence" metrics regarding bullying and harassment—along with other categories of harm—are misleading. Indeed, as

detailed in this Complaint, Meta designed "prevalence" metrics to grossly understate Instagram's true risks and harms to its users, including young users.

27.   Meta has misled and continues to mislead consumers, in these and other respects, in order to assuage prospective and actual young Instagram users—and their parents and guardians—that Instagram is safe when—as Meta has repeatedly internally studied and found—it is not.

28.   If Meta publicly disclosed the known risks and harms of Instagram to youth, many consumers—including young users and their parents and guardians—would likely reject the product. In that event, of course, Meta's revenue would decrease. And this, to Meta, appears an unacceptable risk. In terms of Meta's business activities and public representations relating to Instagram, the status quo remains.

29.   Intervention is required.

30.   Meta's conduct constitutes unfair and deceptive acts and practices under the Vermont Consumer Protection Act. Accordingly, the Vermont Attorney General brings this action seeking to address that conduct and end it.[8]

II.   PARTIES, JURISDICTION, AND VENUE

A.   Plaintiff

31.   The Vermont Attorney General is authorized under the Vermont Consumer Protection Act, 9 V.S.A. § 2458, to sue to enforce the Act's prohibitions on

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[8] This action is timely brought pursuant to the parties' Tolling Agreement signed by Meta's counsel on July 18, 2022, which tolls all claims ripe as of December 20, 2021.

unfair and deceptive acts and practices in commerce.

32.   The Vermont Attorney General also has the right to appear in any civil action in which the State has an interest. 3 V.S.A. § 157. The Attorney General has an interest in ensuring that entities that do business in Vermont do so in a lawful manner.

33.   Pursuant to 9 V.S.A. § 2460, the Vermont Attorney General conducted an investigation prior to filing this complaint, including the issuance of a Civil Investigative Demand and the review of responsive documents and written responses.

B.   **Defendants**

34.   Meta Platforms, Inc., is a Delaware corporation with a principal place of business in Menlo Park, California.[9]

35.   Instagram, LLC, is a Delaware limited liability company with a principal place of business in Menlo Park, California. Instagram LLC is a wholly owned subsidiary of Meta Platforms, Inc.

36.   At all times material to this Complaint, Defendant Meta Platforms, Inc. owned and controlled Instagram LLC.

37.   Defendants acted in concert with one another and as agents and/or principals of one another in relation to all of the conduct alleged in this Complaint.

C.   **Jurisdiction and Venue**

38.   This Court has personal jurisdiction over Defendants because

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[9] Until October 28, 2021, Meta Platforms, Inc. was known as Facebook, Inc.

Defendants entered into contracts with Vermont consumers; obtained personal data from Vermont consumers to enable Defendants to sell businesses advertising targeted to Vermont consumers; in fact sold businesses—including Vermont businesses—advertising targeted to Vermont consumers; offered a social media service to Vermonter consumers; and engaged in unlawful practices in Vermont against Vermont consumers.

39.   Venue in this Court is proper because Defendants do business in Chittenden County. As Vermont's most populous County, Chittenden County is likewise where the largest number of affected consumers reside.

40.   This action is in the public interest.

III.   FACTUAL BACKGROUND

A.   An Overview of Instagram

1.   Instagram is a Popular Social Media Platform

41.   Meta Platforms Inc. ("Meta" or the "Company") owns, operates and controls Instagram LLC ("Instagram"), one of the most widely used social media platforms globally and in Vermont. Previously, Meta was named Facebook, Inc.— the namesake of the Company's first social media platform. Meta—then Facebook, Inc.—acquired Instagram in 2012.

42.   Instagram's mobile application and website provide consumers— including Vermont consumers—the ability to create profiles from which they can post pictures and videos with captions ("posts"); follow other Instagram users' profiles and posts; "like" and "comment" on other Instagram users' posts; re-

distribute (or "Share") content that other Instagram users have posted; and, among other activities, communicate with other Instagram users privately through "Direct Messages."

43. On Instagram, consumers interact with content and other Instagram users on different "surfaces" they can toggle between. For example:

    a) When a consumer opens the Instagram app, the "Feed" surface is displayed to them. The Feed is a scroll of content (pictures or videos with captions) posted by Instagram accounts the consumer "follows." The consumer swipes[10] (or scrolls[11]) up and down to peruse the Feed's content. As referenced above, the consumer can "like," comment on, or "share" any given post.

    b) Above the Feed is banner constituting the "Story" surface. A Story is a temporary Instagram post. It is displayed for a maximum of twenty-four hours, then disappears. If an Instagram user whom the consumer follows posts a new Story, the consumer sees an icon indicating as much in the consumer's Story banner. The consumer can touch[12] (or click[13]) the icon to view the Story, then "x" out of the Story to return to the Feed.

    c) Below the Feed—and always visible within the Instagram

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[10] On a mobile touchscreen device.
[11] On a computer.
[12] On a mobile touchscreen device.
[13] On a computer.

app—is a banner displaying touchable (or clickable) icons to other Instagram surfaces, including the "Explore" surface and "Reels" surface.

d) A consumer's "Explore" surface displays a scrollable collage of content from Instagram accounts the consumer does not follow. A consumer can swipe (or scroll) up and down to peruse the collage, and touch (or click) on any picture or video within the collage to view it fully, then touch (or click) back to the collage to continue viewing more.

e) A consumer's "Reels" surface displays short-form videos that other Instagram users (whether or not the consumer follows them) have created. A consumer swipes up (or clicks) on a video to view the next one.

f) And finally, though not exhaustively, by touching (or clicking) on a paper-airplane icon located above the Story banner, the consumer can access Instagram's Direct Messaging surface, where Instagram users can find and send private messages to each other.

44. No two consumers' experiences on Instagram are the same. Rather, the Instagram consumer experience is defined by the manner in which Meta:

a) Collects vast amounts of data from and regarding each Instagram user; and

b) Based on this data:

    i. Algorithmically curates and personalizes what content to display to each consumer on the consumer's Instagram Feed, Explore, and Reels surfaces; and

    ii. Algorithmically curates and personalizes recommendations to each Instagram user regarding which other Instagram accounts to follow (via Explore, for example).[14]

45.   Pursuant to Instagram's Terms of Use, individuals who self-attest to being over the age of twelve are permitted to use Instagram; individuals who self-attest to being twelve or under are prohibited from doing so. To create an Instagram account, a user is not required to demonstrate or verify any proof of age.

46.   It is estimated that 22 million teens—including approximately 62% of teens age 13-17[15]—log onto Instagram in the U.S. each day.[16]

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[14] Meta algorithmically curates which ads to show Instagram users, as well. As Meta's former Chief Operating Officer Sheryl Sandberg expressed in a 2019 Meta quarterly earnings call, "[a]cross all of our platforms and formats, we're investing in [artificial intelligence] to make ads more relevant and effective. In Q4 [2018], we developed new AI ranking models to help people see ads they're more likely to be interested in." Meta, Fourth Quarter and Full Year 2018 Results Conference Call, (January 30, 2019), https://s21.q4cdn.com/399680738/files/doc_financials/2018/Q4/Q4-2018-earnings-call-transcript.pdf

[15] Emily A. Vogels et al., *Teens, Social Media and Technology 2022*, Pew Research Center (Aug. 10, 2022), https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/.

[16] Many children under the age of 13 use Instagram, as well. In a March 2020 survey of U.S. adults, The Pew Research Center found that 5% of U.S. parents with children age 9-11 reported that at least one of their 9-11 year old children used

2. Instagram Profits by Leveraging User Data to Sell Targeted Advertising

47. Meta does not offer Instagram to consumers for free. It requires each consumer to provide substantial consideration to access the service.

48. Namely, Meta requires that, in order to access Instagram, each consumer must agree:

   a) To provide Meta vast quantities of personal data; and

   b) That Meta may use this personal data to target advertising at the consumer, among other purposes.

49. Meta's revenue depends on this exchange.

50. To explain: In order to fully access Instagram, each consumer must create an Instagram account.

51. As part of the Instagram account-creation process, the consumer must agree to comply with Instagram's Terms of Use ("Instagram's Terms").[17]

52. Instagram's Terms purport to constitute an enforceable legal agreement between the consumer and Meta. They state: "The Instagram Platform is one of the Meta Products[] provided to you by Meta Platforms, Inc. The Instagram Terms therefore constitute an agreement between you and Meta Platforms, Inc."[18]

53. Under Instagram's Terms, consumers "must agree to [Meta's] Privacy

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Instagram. *Children's engagement with digital devices, screen time*, Pew Research Center (July 28, 2020), https://www.pewresearch.org/internet/2020/07/28/childrens-engagement-with-digital-devices-screen-time/.

[17] Instagram Terms of Use, Instagram Help Center, https://help.instagram.com/581066165581870 (last revised July 26, 2022).

[18] *Id.*

Policy to use Instagram."[19]

54.   Pursuant to Meta's Privacy Policy, each consumer—whatever their age, presuming they self-attest to being over 12—must agree that Meta may collect data on:

a) The consumer's "activity [on Instagram] and information [the consumer] provide[s]" Instagram;

b) The consumer's "Friends, followers and other connections";

c) The consumer's "App, browser and device information"; and

d) "Information [about the consumer] from partners, vendors and other third parties."[20]

55.   Specifically, with regard to the consumer's "activity [on Instagram] and information [the consumer] provide[s]" Instagram, the consumer must agree that Meta may collect data on, among other things, content the consumer creates; a consumer's "like" posts and comments; messages the consumer sends and receives, including their content; metadata about content and messages; the types of content—including ads—the consumer views and interacts with, and how the consumer interacts with them; apps and features the consumer uses and what actions the consumer takes within them; purchases or other transactions the consumer makes; and among other data, the time, frequency and duration of the consumer's activities on Meta's products.[21]

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[19] *Id.*
[20] Meta Privacy Policy, Meta Privacy Center (June 15, 2023), https://privacycenter.instagram.com/policy/
[21] *Id.*

56.	With regard to the consumer's "Friends, followers and other connections," the consumer must agree that Meta may collect data about the consumer's friends, followers, groups, and accounts; how the consumer interacts with them across Meta's products; which ones the consumer interacts with the most; and information on the consumer's contacts—including their names, email addresses, and phone numbers—if the consumer imports them from a device, like by syncing an address book.[22]

57.	With regard to the consumer's "App, browser and device information," the consumer must agree that Meta may collect data regarding the device and software the consumer is using, including the type of device, details about its operating system, details about its hardware and software, App and file names and types, and Plugins; what the consumer is doing on their device, like whether Instagram is in the foreground or if the consumer's mouse is moving; identifiers that tell the consumer's device apart from other users; signals from the consumer's device, like GPS, Bluetooth signals, nearby Wi-Fi access points, beacons and cell towers; information the consumer has shared with Meta through device settings, like GPS location, camera access, photos and related metadata; and, among other data, information from "cookies and similar technologies."[23] As Meta explains, "cookies" are "small text files containing a string of characters that can be placed on [the consumer's] computer or mobile device that uniquely identifies [the consumer's]

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[22] *Id.*
[23] *Id.*

browser or device" in order "to track [the consumer's] device's browsing activity on other sites or services other than Instagram."[24]

58.   Finally, with regard to "Information from partners, vendors and other third parties," each consumer must agree that Meta may collect data "from partners, measurement vendors, marketing vendors and other third parties about a variety of [the consumer's] information and activities on and off [Meta's] Products," including the consumer's device information; websites the consumer visits and cookie data; apps the consumer uses; games the consumer plays; purchases and transactions the consumer makes off of Instagram using non-Meta checkout experiences; the consumer's demographics, like their education level; the ads the consumer sees and how the consumer interacts with them; and how the consumer use Meta's partners' products and services, online or in person.[25]

59.   Instagram's Terms then require the consumer to agree that Meta may target ads at the consumer based on the voluminous personal data the consumer has agreed to let Meta collect about them.

60.   Specifically, Instagram's Terms state:

> Instead of paying to use Instagram, by using the Service covered by [Instagram's Terms], [the consumer] acknowledge[s] that [Meta] can show you ads that businesses and organizations pay [Meta] to promote on and off the Meta Company Products. [Meta] use[s] [the consumer's] personal data, such as information about [the consumer's] activity and interests, to show [the consumer]

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[24] Instagram Cookies Policy, Instagram Help Center, https://help.instagram.com/1896641480634370/ (last revised Jan. 4, 2022).
[25] Meta Privacy Policy, *supra* note 20.

ads that are more relevant to [them].[26]

61. Instagram's Terms explain:

> [Meta] allow[s] advertisers to tell us… their business goal
> and the kind of audience they want to see their ads. [Meta]
> then show[s] their ad to people who might be interested.
> [Meta] also provide[s] advertisers with reports about the
> performance of their ads to help them understand how
> people are interacting with their content on and off
> Instagram. For example, [Meta] provide[s] general
> demographic and interest information to advertisers to
> help them better understand their audience.[27]

62. Of note, at least until August 2021, Meta empowered sellers to target

advertisements at individuals under the age of eighteen ("Young People" or "Young

Users") based on a wide range of personal data that Meta had extracted from,

and/or obtained from third-parties regarding, those Young Users, including, but not

limited to, Young Users' personal "interests, behaviors and demographics" and

"[o]ffline activity."[28] After August 2021, Meta permitted sellers to target

advertisements at Young Users based on age, gender and location.[29] As of February

2023, Meta permits sellers to target advertisements at Young Users based on age

and location.[30]

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[26] Instagram Terms of Use, *supra* note 17.
[27] *Id.*
[28] *About Advertising to Teens*, Meta: Business Help Center,
https://www.facebook.com/business/help/229435355723442 (last visited Oct. 16,
2023).
[29] *How does Instagram decide which ads to show young people?*, Instagram Help
Center, https://help.instagram.com/1079023176238541 (last visited October 17,
2023).
[30] *Continuing to Create Age-Appropriate Ad Experiences for Teens*, Meta (Jan. 10,
2023),
https://about.fb.com/news/2023/01/age-appropriate-ads-for-teens/.

63.   In practice, Meta displays targeted advertisements to Instagram users, including Young Users, during each (or nearly each) of their Instagram sessions. And during each such session, Meta displays targeted advertisements to Instagram users, including Young Users, on a constant basis—often several times per minute. Meta displays these targeted advertisements to users across most if not all of Instagram's "surfaces."

64.   In this manner, for Instagram users—including Young Users—viewing advertisements is likewise a defining element of the Instagram experience.

3.   Meta's Business Model Incentivizes the Company to Maximize the Amount of Time Young Users Spend on Instagram

65.   Meta's dependence on advertising revenue incentivizes Meta to maximize the amount of time that consumers spend on Instagram.

66.   The more time consumers spend on Instagram, the more "ad space" Meta has to sell. That is, if the amount of time an Instagram user spends viewing their Instagram "feed" increases from one to five hours per day, Meta can deliver roughly five times the number of advertisements to that user than it could have otherwise. As a result, Meta can sell and profit from five times the advertising opportunities.

67.   Additionally, the more time consumers spend on Instagram, the more data Meta can harvest from consumers to better target ads at them. The more effectively Meta targets ads to consumers, the more Meta can charge sellers for

targeted advertising.[31]

68.   However, in Meta's business model, Young Users are of paramount significance for several reasons:

a) As between social media companies, the battle for industry market share starts with capturing Young Users and retaining their engagement long-term to the detriment of competitors;

b) Young Users drive the spread of Instagram within their households, schools, and communities;

c) Instagram is, in fact, Meta's most popular application among Young People. As referenced above, in 2022, an estimated 62% of U.S. teens (aged 13-17) used Instagram.[32] By contrast, 32% used Facebook.[33] Meta is incentivized to leverage Instagram's relative popularity among teens for business growth;

d) Meta's advertising partners are particularly interested in targeting Young Users because they perceive Young Users as:

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[31] Indeed, according to Meta, the factors that drive the Company's ability to monetize its users' time and data to effectively deliver ads include (1) "user engagement, including time spent on [Meta's] products;" (2) increasing "user access to and engagement with [Meta's] products;" (3) Meta's ability "to maintain or increase the quantity or quality of ads shown to users;" (4) maintaining traffic to monetized features like the Feed and Stories; (5) the "effectiveness of [Meta's] ad targeting;" and (6) the degree to which users engage with Meta's ads. Meta Platforms, Inc., Annual Report (Form 10-K), for the fiscal year ended Dec. 31, 2021, at 14-16 (Feb. 2, 2022). https://www.sec.gov/Archives/edgar/data/1326801/000132680122000018/fb-20211231.htm

[32] Emily A. Vogels et al., *supra* note 5.

[33] *Id.*

(1) more likely to be influenced by advertisements, (2) potential

lifelong customers of the relevant product or service, and (3)

trend-setters in society;

e) Meta's advertising partners are interested in targeting Young

Users *on Instagram*, in particular, because of the platform's

popularity among teens and Meta's historic effectiveness in

targeting ads at Young Instagram Users. Of note, in a 2019

survey of 8,000 teens nationally with an average age of 16.3

years, 73% of respondents said that "Instagram was the best

way for brands to reach them about new products or

promotions"[34]; and

f) Meta stands to profit from its advertising partners' youth-

focused sales interests.

69.   Accordingly, throughout its corporate history, Meta has made it a

business priority—if not the company's top business priority—to increase the

amount of time that Young Users, in particular, spend on Instagram.[35]

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[34] *Best Ways for a Retailer/Brand to Communicate About New Products/Promotions According to US Teens, Spring 2019 (% of respondents)*, Insider Intelligence (Apr. 8, 2019), https://www.insiderintelligence.com/chart/227856/best-ways-retailerbrand-communicate-about-new-productspromotions-according-us-teens-spring-2019-of-respondents
[35] *See Facebook's Effort to Attract Preteens Goes Beyond Instagram Kids, Documents Show*, The Wall Street Journal (Sept. 28, 2021), https://www.wsj.com/articles/facebook-instagram-kids-tweens-attract-11632849667 (regarding Meta's efforts to attract pre-teens to its social media platforms, including Instagram).

70.   For example, according to Meta's internal documents and communications:

   a) As of November 2016, Meta's "overall goal [was] **total teen time spent**…, with some specific efforts (Instagram) taking on tighter focused goals like **U.S. teen total time spent**." (Emphasis added).

   b) Meta's founder and CEO Mark Zuckerberg "decided that the top priority for the company in 2017 [was] **teens**." (Emphasis added).

   c) An internal Meta presentation titled "2017 Teens Strategic Focus" explicitly states and details Meta's "goal" with regard to teens: to "retain MAP [Monthly Active Profiles] and DAP [Daily Active Profiles]," "**grow teen time spent**," and "emphasize 'social entertainment' market opportunities to win back teen interaction." (Emphasis added). The presentation notes: "we should bet big on Instagram Direct + stories to beat Snapchat" with the goal of "**increas[ing] U.S. teen time spent**." (Emphasis added) The presentation exhorts: **"[t]o win social time spent share"—meaning, to "win" the share of total daily time teens spent on all social media applications— "being #1 for each [teen] user is crucial**." (Emphasis added).

d) In January 2020, a Meta employee stated that Meta was "focused on getting a very clear understanding of our current US DAP [Daily Active Profiles] and MAP [Monthly Active Profiles] growth situation, opportunities, and challenges because 1) **US Teens are our #1 cohort for both long-term growth of [Instagram] and [Facebook] incrementality**." (Emphasis added).

e) In August 2021, a Meta employee noted that the fact that 13 and 14-year-olds constituted the "largest component" of decline in engagement was "the most concerning problem from a strategic POV: **they are supposed to be the future of [Instagram]**." (Emphasis added).

f) A Meta product designer summarized the importance of Young Users to Meta in an internal e-mail, saying, "Shared initial findings on long-term retention. Short summary is the 'the [sic] young ones are the best ones.' **You want to bring people to your service young and early**." (Emphasis added).

71.   And as discussed below, Meta has, in fact, captured a disconcertingly colossal degree of time and attention from an entire generation of Young People, including in Vermont.

72.   Ultimately, capitalizing on its ability to leverage Instagram users' personal data for advertising revenue, Meta has become one of the most profitable

companies in the world. In 2022, Meta reported earning $116.6 billion in revenue, including $51.4 billion in revenue from Instagram, with $23.3 billion in net income. 98% of Meta's total revenue, that year, was advertising revenue.

73.   Because of his ownership stake in Meta, Meta's founder and CEO Mark Zuckerberg is one of the wealthiest people in the world. In addition to financial success, Zuckerberg's role as Meta's founder and CEO has made him an influential public figure. In a private email exchange with at least four billionaires (and a Knighted former Member of Britain's Parliament), one of Meta's major investors told Zuckerberg that he believed "Mark Zuckerberg has been cast as *the spokesman* for the Millennial Generation – as the single person who gives voice to the hopes and fears and the unique experience of this generation, at least in the USA." In response, Zuckerberg agreed with that sentiment, stating, "I am the most well-known person of my generation."

4.   Meta Directed its Business Model at Vermont

74.   Instagram is widely used by Young People in Vermont. For that reason, and as described below, Meta has studied the Instagram use of Young People in Vermont; sought to improve Instagram to better capture these particular users' time and attention in order to profit from targeted advertising to them; and, sold and directed targeted ads to them (as with all Vermont Instagram users), including on behalf of Vermont businesses.

75.   In terms of the scope of Young Vermonter's Instagram use, according to Meta's internal data:

a) As referenced above, between July 2020 and June 2021, upwards of 41,537 Vermont "teens"[36] used Instagram monthly.

b) During that time period, upwards of 29,484 Vermont "teens" used Instagram daily.

c) Between October 2022 and April 2023, upwards of 76,285 "young adults"[37] in Vermont used Instagram monthly.

d) And during that time period, upwards of 48,585 "young adults" in Vermont used Instagram daily.

e) As of 2022, by Meta's metrics, Instagram had fully or nearly fully saturated the market for Vermonters under 35 years of age.

76. Indeed, according to Meta, at times, more Young People in Vermont used Instagram, per capita, than Young People in any other state.

77. For that reason, Meta has looked to Vermont as valuable research-grounds for product development, including the development of strategies to increase Young Peoples' engagement on Instagram.

78. For example, in 2017, Meta conducted a national analysis of "teen" Instagram use. As part of this analysis, Meta tracked and assessed—for each state—a wide range of metrics regarding teen Instagram use, including, but not

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[36] Upon information and belief, for the purposes of the statistics referenced in this Paragraph, Instagram defined "teens" as individuals ages 13 to 17.
[37] Upon information and belief, for the purposes of the statistics referenced in this Paragraph, Instagram defined "teens" as individuals ages 18 to 24.

limited to: teen market penetration; the number and percentage of teens that used Instagram daily and the amount of time these "daily active" teens spent on Instagram per day; the number and percentage of teens that used Instagram monthly; the ratio of teen daily active users versus monthly active users; the amount of "feed media" that daily active teens consumed on Instagram per day; the amount of "Stories" that daily active teens consumed on Instagram per day; teen monthly active user "story participation" rates; Instagram market saturation with respect to users under 35; and the estimated years required to saturate the Instagram market for users under 35 years old at Instagram's then-current growth rate.

79. During the course of this analysis, Meta identified that while Instagram's penetration of the Vermont teen market was higher than Instagram's penetration of the teen market in any other state (approximately 80%), the amount of time that Vermont teens spent on Instagram each day was—at that time—lower than in several other states.

80. Looking at these numbers, Meta's research team concluded that, for states like Vermont, Meta "need[s] to build better features/products to make teens more engaged on [Instagram]." In other words: Meta concluded that it needed to refine Instagram such that teens like those in Vermont, specifically, would spend more of their time on Instagram each day.

81. Meta's research team also concluded that because "trends in states may be skewed by certain cities in them," Meta "[n]eed[ed] to dive deeper to look at

trends in key cities," and so would "be looking at the top 10 cities" in just four states, including Vermont.

82. Of note, the Meta data scientist who led this national research project described her job at Instagram as to "[m]anipulate important growth channels to promote Instagram user base growth, especially in key markets like… teens."

83. As of the time of this Complaint's filing, it is unclear whether and to what extent Meta conducted follow up studies on the use of Instagram by Vermont teens in Vermont cities.

84. In any event, given Vermonters' widespread presence on Instagram, Meta has sold advertising on Instagram targeted to Vermonters. That is, Meta has sold advertising to both national businesses and Vermont businesses targeting Vermont markets,[38] including, upon information and belief, Vermont teens.[39]

85. Thus, Meta not only makes Instagram available in Vermont. It also— at a minimum—has historically tracked Instagram's performance in Vermont;

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[38] According to Meta's public advertising library, Meta routinely sells advertisements to businesses targeting Vermont markets, including Vermont-based businesses. For example, in just the last two years, Meta sold advertising on Instagram to HireAbility Vermont (a Vermont-based job placement agency); Langway Chevrolet Volkswagen of Manchester, Vermont (a Vermont car dealership); Vermont Tire & Service (a Vermont tire dealer and mechanic); and LandVest (a real estate agency selling properties in Vermont). *See* Meta Ad Library, https://www.facebook.com/ads/library/?active_status=all&ad_type=political_and_issue_ads&country=US&media_type=all (last visited Oct. 17, 2023).

[39] In just the last two years, Meta sold advertising on Instagram to businesses targeting Vermont teens, including Miss Vermont's Teen (a pageant for Vermont women ages 13 to 28), and North America Beauty Pageants (pageants for women age 12+). *Id.*

studied Vermonter's Instagram use; sought to refine Instagram in order to increase

the engagement of Vermont teens, in particular; and sold advertisements to

Vermont entities seeking to market their businesses in Vermont. Further, Meta has

entered into tens of thousands—if not hundreds of thousands—of contracts with

Vermont consumers—including Young People—wherein those consumers:

> a) Have agreed, per Instagram's Terms, to provide Meta
>
> voluminous amounts of their personal data in exchange for
>
> access to Instagram;
>
> b) Have agreed, per Instagram's Terms, to be subjected to
>
> targeted advertising based on that personal data;
>
> c) Have been subjected by Meta to targeted advertising, including
>
> by Vermont sellers targeting Vermont consumers; and
>
> d) Have thereby enriched Meta.[40]

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[40] Of note, Meta provides other tools to Instagram users—including Vermont Instagram users—through which Meta and these Instagram users generate revenue. For example, Meta's "Creator Monetization Tools" allow users, including Vermont users, to make money off of the Instagram content they create. *See* Aisha Malik, *Meta to roll out new monetization tools on Instagram and Facebook, including a creator marketplace,* TechCrunch+ (June 21, 2022, 10:20 AM), https://techcrunch.com/2022/06/21/meta-new-monetization-tools-on-instagram-facebook-creator-marketplace/. Additionally, Meta provides tools to businesses that advertise on its platforms—including Vermont businesses and/or other business targeting Vermont markets—to enhance these business' advertising efforts. For example, Meta's "Campaign Ideas Generator" provides "campaign ideas, pre-made assets, and resources that are specific to [] small business needs." *Introducing the Campaign Ideas Generator*, Meta, https://www.facebook.com/business/news/create-content-with-facebook-campaign-ideas-generator (last visited October 20, 2023). Finally, the Instagram Shopping surface allows businesses—including Vermont businesses—to advertise and sell goods to Instagram users—including Vermont Instagram users—who, in turn, can purchase those goods directly through the

B. **Meta Designed Instagram to Keep Young Users Spending Unhealthy Amounts of Time on The Platform, with Harmful Effect**

86.   Incentivized to maximize Young Users' time on Instagram, Meta has

invested and continued to invest massive resources into researching Young Peoples'

neurological, cognitive, and psychological vulnerabilities; designing Instagram

features meant to exploit Young Peoples' neurological, cognitive, and psychological

vulnerabilities such that Instagram is maximally difficult—and in some cases

impossible—for Young People to resist; and testing and refining potential and

existing Instagram features to maximize their intended effect, in this regard. As a

result, and as Meta's internal research has concluded, Instagram causes Young

Users to use the platform compulsively and excessively.

87.   As Meta's founding president, Sean Parker, explained in 2018:

> The thought process that went into building these applications, Facebook being the first of them… was all about: 'How do we consume as much of your time and conscious attention as possible?' That means that **we need to… give you a little dopamine hit every once in a while**, because someone liked or commented on a photo or a post or whatever. And that's going to get you to contribute more content and that's going to get you… more likes and comments. It's a social-validation feedback loop… exactly the kind of thing that a hacker like myself would come up with, **because you're exploiting a vulnerability in human psychology**. The inventors, creators—**me, [Meta founder] Mark [Zuckerberg], [Instagram founder] Kevin Systrom on Instagram**, all of these people— **understood this consciously. And we did it anyway**.[41]

Instagram platform. *Instagram Shopping helps you reach new customers*, Meta, https://business.instagram.com/shopping (last visited Oct. 16, 2023).

[41] Alex Hern, *'Never get high on your own supply'- why social media bosses don't use social media*, The Guardian (Jan. 23, 2018, 7:27 AM),

88.   Of profound concern to the State of Vermont, compulsive and excessive

Instagram use causes Young Users serious mental health harms. Meta's internal

research has concluded as much. Further, beyond compulsive use, Instagram

exposes Young Users to an array of harmful content and harmful experiences.

Meta's internal research has concluded the same. Despite Instagram's serious risks

and harms to Young Users, Meta maintains the platform's focus on increasing

Young User engagement in the name of ad revenue, declining even senior leaders'

internal recommendations that Meta invest in making Instagram a safer platform

for Young Users.

1.   Meta Researches Young Peoples' Neurological, Cognitive, and Psychological Vulnerabilities to Inform Product Development

89.   Meta has undertaken substantial efforts to study Young People's

brains and behavior; isolate Young Peoples' neurological, cognitive, and

psychological vulnerabilities; and develop, test and refine a version of Instagram

that exploits these vulnerabilities to cause Young People to use Instagram

compulsively and excessively.

90.   In this way, Meta aims to maximize Young Users time on Instagram

bottom up (i.e., through designing a platform that is likely to cause compulsive and

excessive Instagram use) and top-down (i.e., by testing and refining the platform to

perfect and exact the intended effect).

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https://www.theguardian.com/media/2018/jan/23/never-get-high-on-your-own-
supply-why-social-media-bosses-dont-use-social-media

91.   As an example of Meta's teen research: in 2020,[42] Meta undertook a "Teen Ecosystem Understand" project. This project was led by the business division at Meta responsible for Instagram's "Growth." The purpose of the project was to deepen Meta's understanding of how Meta could refine Instagram to induce compulsive use by Young People in light of Young People's neurological and cognitive vulnerabilities.

92.   A May 2020 internal presentation by the "Teen Ecosystem Understand" project reflects as much.

93.   Titled "Teen Fundamentals," the 97-page internal presentation purports to be a "synthesis of adolescent development concepts, neuroscience as well as **nearly 80 studies of [Meta's] own product research**." (Emphasis added). The presentation's stated goal is to "**look…to biological factors that are relatively consistent across adolescent development and gain valuable unchanging insights to inform product strategy today**." (Emphasis added).

94.   The first section of the internal presentation is titled "Biology." Interspersed with citations to academic research and images of human brains at various stages of development, the section explains that "[u]nlike the body which functions wholly from day one, the brain essential [sic] spot trains certain areas and functions at a partial capacity before it is wholly developed… The teenage brain is

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[42] Meta's intensive research on Young People began at least in the 2010s. For example, according to Meta's internal documents, in the late 2010s, Meta's Consumer Market Research team developed a "*very* deep body of work over the course of years/months" studying "teens." According to Meta, that team facilitated "enormous work and investment" in "teen foundational research."

about 80% mature. The remaining 20% rests in the frontal cortex…. **[T]eens are highly dependent on their temporal lobe where emotions, memory and learning, and the reward system reign supreme**." (Emphasis added).

95.   The discussion continues: "teens' decisions are mainly driven by emotion, the intrigue of novelty and reward… While these all seem positive, **they make teens very vulnerable at the elevated levels they operate on. Especially in the absence of a mature frontal cortex to help impose limits on the indulgence** in these." (Emphases added).

96.   The internal presentation then explores how teens' "novelty seeking" and "reward-seeking" behavior "manifest in [Instagram] product usage," as well as how Meta can better exploit teens' novelty-seeking and reward-seeking natures to increase the amount of time that teens spend on Instagram.

97.   For example, the internal presentation explains that, for teens, novelty-seeking "manifests in three behaviors that especially lend themselves to social media: exploration, discovery and experiences."

98.   The internal presentation then notes where Instagram is succeeding in exploiting teens' "novelty-seeking" biological proclivities. For example, it states: "[Instagram] has a pretty good hold on the serendipitous aspect of discovery through our Explore surface, recommendations and social graph. And **everytime [sic] one of our teen users finds something unexpected their brains deliver them a dopamine hit**." According to the presentation, "**teens are insatiable when it comes to 'feel good' dopamine effects**."

99.   In fact, per the internal presentation, "**teen brains are much more sensitive to dopamine, one of the reasons that drug addiction is higher for adolescents and keeps them scrolling and scrolling**. **And due to the immature brain they have a much harder time stopping even though they want to – our own product foundation research has shown teens are unhappy with the amount of time they spend on our app**." (Emphasis added).

100.   Despite conceding, here, that Instagram traps teens into compulsive and excessive Instagram use, the internal presentation goes on to explore where Instagram could better exploit teens' "novelty-seeking" nature to further increase teen's Instagram usage.

101.   It states that "for a novelty seeking mind – slow or repetitive conduct is a buzzkill. More frequently we are hearing that content has become redundant in Stories and other surfaces – especially in comparison to hyper discovery apps like TikTok and YouTube." The internal presentation then poses the question: "Teen's [sic] insatiable appetite for novelty puts them on a persistent quest to discover new means of stimulation…how can your team give teens somewhere new to go or something new to find from the product you work on?"

102.   As a teaser to action, the internal presentation notes that "the teenage brain happens to be pretty **easy to stimulate**," and that "teens brains' [sic] are **especially 'plastic'** or keen to learn presenting a unique opportunity that coupled with curiosity can **send teens down some interesting rabbit holes**."

103.   The internal presentation then turns to the "reward-seeking" nature of

teen brains, explaining that "a huge driver for teen behavior is the prospect of reward. This is what makes them predisposed to impulse, peer pressure, and potentially harmful risky behavior like drugs, stunts, and pranks…"

104. The internal presentation observes that Instagram is succeeding in exploiting teens' "reward-seeking" nature. It highlights, for example, that "approval and acceptance are huge rewards for teens and interactions are the currency on [Instagram]. [Direct messages], notifications, comments, follows, likes, etc. **encourage teens to continue engaging and keep coming back to the app**."

105. Here, of note, the presenter explicitly calls out Instagram's method of pitting teens against themselves. That is, the presenter acknowledges that the "currency" of Instagram is teens' biological and psychological striving for reward vis-à-vis peer approval, and that Instagram leverages this biological and psychological striving to drive teens' compulsive and excessive Instagram use.

106. Throughout, the internal presentation repeatedly asks how Instagram could be made even more irresistible to teens in order to serve Meta's competitive advantage. For example, it prompts the audience to consider: "How well does [Instagram] cater to [teens' desired] activity? How does it stack up against [its competitors]?"

107. In the end, the internal presentation reiterates "the core things that make teens tick. New things, feeling good and reward. We are not quite checking all of these boxes… some teens are turning to competitors to supplement for those needs." It concludes: "we [would] do well to think hard about how we can make

[Instagram] an app **tailored to the teenage mindset**." (Emphasis added).

108.   This "Teen Fundamentals" presentation was shared with various teams inside Meta. In June 2020, it was shared with Instagram's leadership team, including Head of Instagram Adam Mosseri.

109.   In response to the presentation, Instagram's leadership requested additional research on the role of "reward" in teen Instagram use. This request led to a subsequent report titled "Deeping Rewards to Drive More Meaningful Daily Usage."

110.   As part of this subsequent report, Instagram employees conducted interviews of Instagram users, including teens, and "synthesized this data with academic literature to understand how it applies at a psychological level." That is, Meta systematically sought to maximize leveraging Young Users' biological and psychological vulnerabilities to "promote… [Young Users'] daily usage."

111.   The "Teen Fundamentals" project is just one illustration of Meta's internal efforts to study Young Peoples' neurological and cognitive development, identify vulnerabilities in the same, and focus product development on leveraging those vulnerabilities to make Instagram maximally biologically irresistible to Young People.

2.   Meta Tests and Re-tests Proposed Instagram Features and Modifications on Users to Perfect Instagram's Intended Effect

112.   Once Meta translates its business goals and user research into a proposed Instagram feature or proposed modification to an existing Instagram

feature, Meta then expends substantial resources *testing* the proposed feature or modification on Instagram users—including testing multiple potential versions of a given proposed feature or modification on Instagram users—to obtain a data-driven understanding of the feature or modification's effect on Instagram users' behavior.

113. In evaluating whether to launch certain potential Instagram features or modifications, Meta prioritizes whether the feature or modification, as data-proven through this real-world testing, causes Instagram users increased engagement with the platform.

114. A primary way in which Meta tests the efficacy of a proposed Instagram feature or modification, in this regard, is A/B Testing.

115. In A/B Testing, Meta assigns a group of Instagram users (by the thousands) the ability to see and use a proposed Instagram feature or modification to an existing Instagram feature. Or it assigns different groups of Instagram users the ability to see and use different versions of a proposed feature or modification.

116. Meta then tracks the relative impact of the feature or modification (or versions of the same) on the behavior of the test-group(s) to assess, among other key metrics, whether and to what extent the feature/modification causes the test-group(s)—among other behaviors—increased engagement with, or time spent on, Instagram.

117. Meta might refine and re-test a proposed feature or modification to optimize results in this regard.

118. Meta tests proposed Instagram features and/or modifications on Young

Users to ensure the features and/or modifications accomplish the desired business result.

119.   Ultimately, through this iterative process of research, development, testing, and refining potential Instagram features, Meta possesses and implements the capability to generate Instagram features that cause users—including Young Users—to spend more time on Instagram than they would if Instagram were not systematically working to override their cognitive ability to self-regulate.[43]

3.   Meta Launched and Maintains Instagram Features Designed to Induce Compulsive and Excessive Instagram Use

120.   Indeed, Meta has launched and maintains an array of Instagram features designed to cause Young People to use Instagram compulsively and excessively. These features—described below—include, but are not limited to, algorithmic recommendations systems, infinite scroll, status counts, push notifications, ephemeral content, auto-play, and Reels.

a)   *Algorithmic Recommendation System*

121.   Meta uses a complex algorithmic recommendation system driven by artificial intelligence and machine learning models to transform vast constellations of personal data about each Instagram user into nuanced predictions regarding which Instagram content—and which order of presentation of Instagram content— would cause each such user to spend the most amount of time on Instagram. Instagram then presents—or "recommends"—that content and those accounts to the

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[43] Meta continues to test and refine Instagram features after their launch in order to maximize Instagram users' "engagement" and time spent on the platform.

Instagram user in that particular order.

122.   Meta then measures and analyses the user's reaction to those content and account recommendations (like whether the user views a piece of content, for how long the user "hovers" over the content, whether the user "likes," comments on, or "Shares" the content, etc.) and then incorporates those data points, among others, into future content recommendations to that user. In this manner, Meta constantly measures and refines its understanding of what makes a given user's brain tick, and constantly improves the efficacy of its efforts to capture more and more of that user's time and attention.

123.   Meta's so-called "Algorithmic Recommendation System" drives the delivery of content across Instagram's surfaces, including the primary feed, Explorer, Stories, and Reels.

124.   Of note: Meta's Algorithmic Recommendation System is generally agnostic as to the kind of content that should be displayed to a given user; what gets displayed to a Young User on Instagram is the content most likely to maximize the Young User's time on the platform.

b)   *Infinite Scroll & Autoplay*

125.   Meta also designed Instagram to lure Young Users into indefinite, passive platform use.

126.   For example, Meta designed several of its key surfaces to present as "infinite scrolls." That is, upon opening Instagram, the user is displayed an opening piece of Feed content—a picture or a video selected by Meta's Algorithmic

Recommendation System—and, just below it, the top sliver of the next piece of content—a concurrent teaser of content (i.e., and potential dopamine rewards) to come and trigger for the "fear of missing out."

127. As the Instagram user scrolls down the feed, the first piece of content displayed slides upward and out of view; the next piece of content slides upward into full view; and, just below the newly visible piece of content, the top sliver of the next piece of content reveals itself, pulling the user onward.

128. The user can scroll downward in this manner indefinitely—hence the term "infinite scrolling." There is no end to the content queue.

129. Likewise, when a user opens Instagram's "Explore" surface, they are displayed a collage of pictures interspersed with videos already playing. The bottom of the collage is a row of only partially viewable pictures and videos—again, a teaser of content to come and trigger for the fear of missing out.

130. As the Instagram user scrolls down the "Explore" surface, an endless collage of pictures and videos slides by. If the user pauses scrolling, the collage teases a final row of partially viewable pictures and videos, always pulling the user onward.

131. Instagram's infinite scroll format makes it difficult for Young People to disengage from Instagram. First, with no natural end point to the display of new content, a Young Person must rely on their ability to self-regulate to stop their downward scrolling—a cognitive ability that, as Meta knows, is undeveloped and biologically weak relative to the Young Person's neurological drive to seek novelty

and reward.

132.   For a Young User, as Meta knows, scrolling through algorithmically curated content without end produces similar dopamine rewards as slot machine use. In both cases, the user stays at the machine, hoping each pull (or swipe) will be "the one." Rewards come unpredictably. This "variable reward schedule" makes each pull (or swipe) satisfying; the anticipation of a possible reward is inherently sustaining. When the reward comes, the brain releases dopamine; the promise of passive Instagram use is vindicated; the user pulls (or swipes) again.

133.   As explained by researchers Rasan Burhan and Jalal Moradzadeh, the variable reinforcement schedules baked into social media platforms like Instagram can lead to "addiction with dopamine implicated":

> [T]he user can be kept in a loop. Essentially, that's how the social media apps exploit these innate systems. The way this comes about is through… Variable Reward Schedules. This works by positive stimuli being provided at random internals. By users checking their phones for notifications and updates at periodic intervals for something that could be intrinsically rewarding. Most of the time it's a neutral stimuli, but on occasion there may be a positive stimuli leading to the rewarding dopamine release hence keeping the user in the feedback loop.[44]

134.   Like with "infinite scrolling," Meta also deploys an "autoplay" feature to lure Young People into passive Instagram use. To explain: on Instagram, when a user encounters a video—whether in the primary Feed, Explorer, Reels, or Stories—

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[44] Rasan Burhan and Jalal Moradzadeh, *Neurotransmitter Dopamine (DA) and its Role in the Development of Social Media Addiction*, 11 J. of Neurology & Neurophysiology 507 (2020), available at https://www.iomcworld.org/open-access/neurotransmitter-dopamine-da-and-its-role-in-the-development-of-social-media-addiction.pdf, at pg. 1-2.

the video automatically starts playing without any prompt by the user. This feature captures the Young User's attention before the Young User has the chance to decide to direct their attention elsewhere. Through this feature, Meta seeks to short-circuit the Young User's ability to self-regulate.

135. Meta's internal documents reflect Meta employees' understanding that infinite scroll and autoplay are powerful tools in Meta's efforts to overwhelm teens' ability to self-regulate the amount of time they spend on Instagram. For example, when news broke that a Meta competitor was turning off auto-play for users under 18, Meta's internal research team expressed surprise. One employee observed that "[t]urning off autoplay for teens seems like a huge move! Imagine if we turned off infinite scroll for teens." Another responded "Yeah, I was thinking the same thing. Autoplay is HUGE."

c) Status Counts and Push Notifications

136. Meta also deploys an array of features designed to cause Young Users to continuously return to their Instagram accounts.

137. For example, after an Instagram user posts a piece of content, they can track—on a numerical counter—how many Instagram users have "view[ed]" the post. Similarly, they can track on a numerical counter how many Instagram users have "like[d]" the post.[45] Likewise, after an Instagram user comments on a post,

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[45] Similarly, each Instagram user can track, on a numerical counter, how many "Followers" they have and how many "Followers" other Instagram users have and are thereby incentivized to continuously monitor their "Followers" count to assess their social status, including as compared to peers.

other Instagram users can "like" the comment or "reply" to it. Beneath the comment, a correlating "like" count is displayed.

138. Meta designed these popularity metrics to cause Young Users to constantly check their posts' (and comments') success in obtaining "views" and "likes." In this manner, Meta preyed and preys on Young Users' biological and psychological drive to seek reward vis-à-vis peer approval.

139. When Young Users exit the Instagram platform, Meta sends them rampant "push notifications" that prey on this same drive—and the fear of missing out—to bring them back.

140. A "push notification" is an alert to a Young User that an event has occurred on Instagram of potential relevance to them. Instagram sends Young Users a "push notification" when another user follows them, likes their content, comments on their content, "tags" them, mentions them, sends them a message, or "goes live" (if the Young Person follows the user).

141. Meta inundates Young People with auditory and visual Instagram "push notifications" at all times of day and night—whenever the relevant trigger occurs.

142. According to a January 2023 study of iOS users in the United States, mobile users between 16 and 25 received an average of 109 Instagram notifications per week.[46]

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[46] L. Ceci, *Average weekly notifications received by Gen Z mobile users in the United States from selected social apps as of January 2023*, Statista (Apr. 18, 2023), https://www.statista.com/statistics/1245420/us-notifications-to-social-app-ios-users/

143.   As noted above, several kinds of push notifications prey on Young

Users' biological and psychological drive for peer approval (like those indicating

another user has followed them, liked their content, tagged them, or mentioned

them). And several prey on Young Users' biologically rooted fear of missing out (like

those indicating that someone has sent them a message or "gone live," as discussed

further below).

144.   Echoing Meta's "Teen Fundamentals" research, academics have

observed that these push notifications impact the brain in similar ways as narcotic

stimulants:

> Although not as intense as hit of cocaine, positive social
> stimuli will similarly result in a release of dopamine,
> reinforcing whatever behavior preceded it …Every
> notification, whether it's a text message, a "like" on
> Instagram, or a Facebook notification, has the potential to
> be a positive social stimulus and dopamine influx.[47]

145.   Indeed, Meta has known for years that Young People have a

biologically difficult time resisting notifications. For example:

a) In a November 2019 internal presentation entitled "IG

Notification Systems Roadshow," Meta's employees

acknowledged that some of its users are "overloaded because

they are inherently more susceptible to **notification**

dependency." (Emphasis added).

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[47] Trevor Haynes, *Dopamine, Smartphones & You: A battle for your time*, Science in the News (May 1, 2018), https://sitn.hms.harvard.edu/flash/2018/dopamine-smartphones-battle-time/

b) Similarly, in an internal presentation titled "State of US Teens 2020" authored by the "IG Growth Analytics" team, Meta observed that teens "have longer time spent than adults because they tend to have more sessions per day than adults. This may be because US teens are **more sensitive to notifications and have more notification-driven sessions than adults**." (Emphasis added).

146.   Of course, Meta continues to rampantly issue push notifications to Young Instagram Users precisely *because* it increases Young Users' time on the platform.

d)   *Ephemeral Content*

147.   As mentioned above, and as Meta knows, Young People are developmentally wired to fear missing out on social occurrences among their peers. Meta therefore makes certain Instagram content fleeting in its viewability—or, "ephemeral"—in order to cause Young Users to fear missing out on that content and thus assiduously monitor Instagram and Instagram notifications so as to not miss out on it.

148.   For example, Instagram's "Stories" surface displays posts (pictures or videos with captions) created by an Instagram user the consumer follows. Meta encourages users that Stories should be "fast, memorable and fun." As soon as an Instagram user posts a Story, two things occur. First, Instagram users who follow the Story-creator are notified of the new Story (through an icon that appears in a

bar across the top of their home Feed and/or a push notification). Second, the clock starts ticking on the Story's viewability. By Meta's design, Stories exist for a maximum of twenty-four hours then disappear.[48]

149. Because Stories delete within 24 hours, Young People must constantly monitor their Stories surface—and/or respond to push notifications of new Stories by their peers—to keep up with Stories created by the accounts they follow—i.e., to assuage their fear of missing out.

150. Instagram's "Live" feature has similar effect. Through Instagram "Live," an Instagram user can film and contemporaneously livestream videos to their followers or the public. After a livestream event, the video in question is generally deleted.[49] Instagram users are sent push notifications when another Instagram user they follow goes "live." The notification reads: "[@user] started a live video. Watch it before it ends!"

151. Thus, a Young User's failure to quickly join a livestream as soon as it begins means that the Young Person will miss out on the chance to view the content entirely. Thus, Instagram "live," by design, triggers Young Users' "fear of missing out."

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[48] *See Introducing Instagram Stories,* Instagram (Aug. 02, 2016), https://about.instagram.com/blog/announcements/introducing-instagram-stories; Josh Constine, *Instagram launches "Stories," a Snapchatty feature for imperfect sharing*, TechCrunch+ (Aug. 2, 2016, 10:00 AM), https://techcrunch.com/2016/08/02/instagram-stories/

[49] Live, Instagram Help Center: Instagram Features, https://help.instagram.com/272122157758915/?helpref=hc_fnav (last visited on Oct. 16, 2023).

152. Meta's internal documents reflect Meta's knowledge that Instagram's ephemeral features drive compulsive Instagram use.

153. For example, an October 2019 internal Meta presentation entitled "Teen Mental Health Deep Dive" discussed the findings of a survey by Meta of over 2,500 teenagers who use Instagram on at least a monthly basis.

154. The presentation stated that, according to the survey, "[y]oung people are acutely aware that Instagram can be bad for their mental health, **yet are compelled to spend time on the app for fear of missing out** on cultural and social trends." (Emphasis added).

155. But Meta continues to leverage this fear for profit. Illustrating Meta's mindset, in this regard, in 2021, a Meta user experience researcher observed that direct messages on Instagram "were not urgent (especially compared to other apps like Snapchat)" and "consisted mainly of videos and memes from friends which could be watched at [a user's] leisure." The researcher noted that "we need to develop new products that increase the possibilities for time-sensitive interactions on [Instagram]...."

e) *Reels*

156. Some Instagram features—like Reels—combine elements (and reflect the user-engagement strategies) of multiple of the above-mentioned features to maximally capture Young Users' time and attention.

157. As an internal Meta presentation reflects, Reels is "a TikTok competitor for short and entertaining videos" and one of "three big bets" that

"Instagram focused on…to bring value to teens" in 2020, its launch year. As another Meta employee stated: "obviously teens are key to winniing [sic] in Reels."

158.   Upon opening the Reels surface, a short video begins playing with no prompt by the user. (Here, "autoplay" is deployed.)

159.   The video has been curated for the user (as most likely to engage the user) by Meta's sophisticated Algorithmic Recommendation System.

160.   When the user swipes the video upward and out of sight, the next short video slides upward to center-screen and, like the first video, commences playing automatically. An endless queue of videos awaits. ("Infinite scroll" is deployed.)

161.   If the user does not like a particular video, they swipe it away soon after it begins. Meta's Algorithmic Recommendation System notes as much and course-corrects, constantly building and refining data-driven predictions on what will engage the given user the most and delivering content accordingly.[50]

162.   Reels is performing its intended function. In Meta's Q1 2023 quarterly earnings call, Zuckerberg celebrated that, since Meta launched Reels in August 2020, "time spent" on Instagram has grown more than 24%.[51]

163.   The above-described Instagram features are just a sample of the features Meta has developed and deployed in its efforts to induce Young People to

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[50] Of note, "Reels" displays each video's "like" counts, comments, and number of views within the frame of the video itself to maximize the extent to which the user's eyes are on the video itself—that is, to facilitate endless, passive viewing.
[51] Transcript of Meta's First Quarter 2023 Results Conference Call (Apr. 26, 2023), https://s21.q4cdn.com/399680738/files/doc_financials/2023/q1/META-Q1-2023-Earnings-Call-Transcript.pdf

use Instagram compulsively and excessively.

4. Instagram's Features In Fact Induce Widespread Compulsive and Excessive Use Among Young Users, As Meta's Internal Research Found

164. Internally, Meta has found that its design choices cause Young People to use Instagram at alarming rates; that Young People want to decrease their time on Instagram; but that Instagram's features are overpowering Young Peoples' desire to stop using the application. Meta has found, in other words, that Instagram was and is causing Young Users to use the platform compulsively and excessively. Often but only internally, Meta explicitly refers to this compulsive and excessive use as "addiction."

165. For example, in a February 2019 internal presentation titled "Instagram Teen Well-Being Study: US Topline Findings," Meta found that "**App Addiction is Common on IG [Instagram]**." (Emphasis added).

166. The internal presentation noted that 23% of teenage monthly active users find that they "often" feel like they "waste too much time on" Instagram.

167. In September 2019, Meta commissioned a third-party study on Teen Mental Health. That study's first "Topline Headline" was that "Instagram is an inevitable and unavoidable component of teens lives. **Teens can't switch off from Instagram even if they want to**." (Emphasis added).

168. Another "Topline Headline" was that "Teens talk of Instagram in terms of an **'addicts' narrative' spending too much time indulging in a compulsive behavior that they know is negative but feel powerless to**

resist." (Emphasis added).

169. A later slide observed that "Teens are hooked despite how it makes them feel…**Instagram is addictive, and time-spend on platform is having a negative impact on mental health**." (Emphasis added)

170. The Teen Mental Health report also found that teens "**know they stay up later than they should and miss out on sleep to stay plugged in**" to Instagram. (Emphasis added).

171. Elsewhere, the report noted that "Young people are acutely aware that Instagram is bad for their mental health, yet are **compelled to spend time on the app for fear of missing out….**" (Emphasis added).

172. Relatedly, in an October 2019 internal discussion regarding Meta's internal mental health research, a Meta employee observed that:

> **[T]eens told us that they don't like the amount of time they spend on the app…they often feel 'addicted' and know that what they're seeing is bad for their mental health but feel unable to stop themselves. This makes them not feel like they get a break or can't switch off social media. In the survey, about 30% (and even larger proportions of those who are unsatisfied with their lives) said that the amount of time they spend on social media makes them feel worse.** (Emphasis added)

173. Along the same lines, in March 2020, one Instagram employee asked other employees if there were "any recent studies where we explicitly talk about time spent tools and why teens want them." In response, a colleague confirmed that "[t]he feedback, essentially, is that (1) teens feel **addicted to IG [Instagram]** and feel a pressure to be present, (2) **like addicts, they feel that they are unable to**

stop themselves from being on IG [Instagram], and (3) **the tools we currently have aren't effective** at limiting their time on the ap [sic]." (Emphasis added).

174. Of course, Meta was careful to avoid publicly framing Young Users' addiction to Instagram as "addiction." In this same March 2020 exchange, the two employees discussed a draft public statement regarding "efforts to combat social media addiction."

175. The first asked: "Do we want to call it addiction? Maybe not." The second clarified: "(this is internal only)." The first responded: "Internal only makes it better. I'm just a little cautious about calling it addiction." The second responded: "Totally agree, we would never want to say that!"

176. In September 2020, Meta employees further discussed the manner in which Instagram drives compulsive use. That month, Netflix released "The Social Dilemma," a documentary that accused Meta of addicting Young People to Instagram.

177. Within Meta, this thesis rang true. In one exchange among several Instagram employees, Instagram's Director of Data Science stated "[by the way] there is a new Netflix [documentary] basically saying we're creating a world of addicts…" A second employee responded, mockingly, that the documentary **"makes me feel like tech plays to humans' inability to have self-control lol** [laugh out loud]**."**

178. In response, Instagram's Director of Data Science stated, "Yeh that's

exactly what the [documentary] says. **I think its true tbh** [to be honest]

…**Personally I think it is most worrying for young people**…. I do worry what

it does to young people who are still developing their brains and social skills, as well

as being more susceptible to mean comments or lack of friends/feedback."

179.   A third employee asked if Meta was "creating addicts or facilitating

them…. giving existing addicts a really accessible outlet?" The second employee

responded: "a really accessible outlet **that optimizes for time spent…[and]**

keeps people coming back even when it stops being good for them."

180.   Instagram's Director of Data Science observed, "without the right

stimulus, someone might never become an addict…. It's like, you'll never become a

gambling addict if you don't visit vegas…."

181.   A fourth employee chimed in and said: "**I feel like we should have a**

responsibility to minimize [this] negative externality."

182.   That same day, Instagram's Director of Data Science analyzed the

daily and weekly scope of the teen Instagram use, creating charts titled "Number of

US Humans who spend a lot of time on IG in a day," and "US Humans that spend a

ton of time on IG in a Week."

183.   The former chart reflects that, in the U.S., over 475,000 teens spend 3-

4 hours per day on Instagram; over 235,000 teens spend 4-5 hours per day; and over

300,000 teens spend five or more hours per day. The latter chart reflects that, in the

U.S., 1,021,961 teens spend 14-21 hours per week on Instagram; 429,288 spend 21-

28 hours per week; and 407,354 spend 28 or more.

184. The Director of Data Science also identified that while teens are 18% of US Daily Active Users, they "make up a larger portion of people spending **5+ hrs [on Instagram] in a day**." (Emphasis added).

185. In a separate September 2021 exchange between Meta employees regarding the Netflix documentary, one employee observed that "Reels seems to be everything they denounce in the stupid documentary, and everything we know from our research: passive consumption of an endless feed, without any connection to the content creator. Yay." A Meta mental health researcher responded, "Exactly. Ugh."

186. As a final example of Meta's internal findings that Instagram causes Young Users to utilize the platform compulsively: in November 2021, Meta conducted an internal analysis titled "Well-being: Problematic Use." In this analysis, Meta identified the specific ways that compulsive use manifested on Instagram. It stated that "more reliable proxies for identifying problematic use" included: "'passive' consumption, frequent low-engagement sessions, disproportionate night-time usage, repetitive app checking, and receiving and responding to more push notifications." That same analysis acknowledged that "problematic use"[52] was "**more common among teens** and people in their 20s."

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[52] "Problematic use" is Meta's euphemism for compulsive and excessive use of Meta's social media platforms, including Instagram. According to an internal Meta presentation on "Well-being: Problematic Use," "'social media addiction' is a colloquial term, not a formal clinical diagnosis… We and other experts use the term 'Problematic Use' as a more accurate term to describe habitual or undesired use of [Meta's social media platforms]. Definitions vary widely, but internally we define problematic use as a lack of control over social media use that leads to negative life outcomes."

Then, harkening to Meta's research and expectations regarding what makes teens tick, biologically, Meta observed: "**this is consistent with young people having problems with self-regulation**." (Emphasis added).

5. Compulsive and Excessive Instagram Use Causes Young Users Harm, As Meta's Internal Research Found

187. As referenced above in Paragraphs 164-173, Meta's internal studies found that compulsive and excessive Instagram use:

   a) Caused "negative impact[s] on mental health";

   b) Was "bad for [users] mental health";

   c) Was "negative but… [users were] powerless to resist [it]"; and, among other examples,

   d) Makes users, including those with existing serious mental health issues, "feel worse."

188. Meta likewise found that Instagram was interfering with a critical part of Young People's development: sleep. For example:

   a) In one internal study referenced above, Meta concluded that Instagram caused users to "stay up later than they [knew they] should."

   b) In an April 2021 analysis, Meta found that "peak" hours for Instagram messaging were "in the late evenings," with the highest rate of "sessions with message sends" occurring between 9:00 and 11:00 PM. That same analysis found that on weekdays, US teens spent the most time on Instagram between

9:00-11:00 PM. After reviewing that information, a Meta data

scientist commented, "Honestly the only insight I see in these

charts is that teens are really into using IG [Instagram] at

11pm when they should probably be sleeping :("

189.   Meta's internal findings were and are buttressed by mounting

academic studies concluding that compulsive and excessive social media usage

harms Young People—and by a recent U.S. Surgeon General Advisory regarding

this precise topic that relied, in part, on these mounting studies.

190.   In May 2023, the U.S. Surgeon General issued an Advisory titled

"Social Media and Youth Mental Health" regarding the harms to Young People of

compulsive and excessive social media usage (the "Advisory").[53]

191.   As the Advisory explains, "[a] Surgeon General's advisory is a public

statement that calls the American people's attention to an urgent public health

issue… Advisories are reserved for significant public health challenges that require

the nation's immediate awareness and action."[54]

192.   According to the Surgeon General, the "effects of social media on youth

mental health" is one such significant public health challenge. Within that context,

according to the Surgeon General, "[s]cientific evidence suggests that harmful

content exposure **as well as excessive and problematic social media use are**

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[53] U.S. Dep't of Health & Hum. Servs., *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
[54] *Id.* at 3.

primary areas for concern."[55]

193.   "According to one recent model," the Advisory stated, "nearly a third (31%) of social media use may be attributable to self-control challenges magnified by habit formation."[56] The Advisory points to "Push notifications, autoplay, infinite scroll, quantifying and displaying popularity (i.e., 'likes'), and algorithms that leverage user data to serve content recommendations" as "some examples of these features that maximize engagement."[57]

194.   Referring to an array of academic studies, the Advisory described several of the harms that social media platforms cause Young Users by inducing their compulsive and excessive platform usage.[58]

195.   It stated, "[e]xcessive and problematic social media use, such as compulsive or uncontrollable use, has been linked to sleep problems, attention problems, and feelings of exclusion among adolescents," with "sleep [being] essential for the healthy development of adolescents."[59]

196.   Elaborating on the negative health impacts of sleep disruption alone, the Advisory stated:

> A systematic review of 42 studies on the effects of excessive social media use found a consistent relationship between social media use and poor sleep quality, reduced sleep duration, sleep difficulties, and depression among youth. Poor sleep has been linked to altered neurological development in adolescent brains, depressive symptoms,

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[55] *Id.* at 8.
[56] *Id.* at 9.
[57] *Id.*
[58] *Id.* at 9-10.
[59] *Id.*

and suicidal thoughts and behaviors.[60]

197.   Further, according to the Advisory, compulsive social media use causes "changes in brain structure similar to changes seen in individuals with substance use or gambling addictions" and "altered neurological development."[61] The Advisory notes that compulsive social media use has likewise been associated with "attention deficit/hyperactivity disorder (ADHD)" and "depression, anxiety and neuroticism."[62]

198.   However, despite Meta's internal findings that Instagram's design causes Young Users to use the platform compulsively and excessively, and despite Meta's internal findings that compulsive and excessive Instagram use harms Young Users, Meta has failed to undertake any meaningful effort to remediate Instagram to prevent or reduce these serious harms. For Meta to do so would require that Meta overhaul its fundamental business design.

199.   As a Meta Vice President of Product told Instagram's leadership in February 2021, to address "problematic use…[would] require more **fundamental changes to our goals, what type of work they incentive** [sic]**, and therefore how core mechanics work** (feed design, ranking, sharing, notifications])." (Emphasis added).

200.   Thus, Meta continues to exact harms on Young Users for profit.

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[60] *Id.*
[61] *Id.* at 9.
[62] *Id.* at 10.

6. **Further, Instagram Causes Young Users Serious Harms Beyond Compulsive & Excessive Use, As Meta's Internal Research Found**

201. For years, Meta has internally researched the nature and extent of Instagram's harms to Young Users beyond compulsive and excessive platform usage. And, for years, Meta has internally concluded that, beyond compulsive platform usage, Instagram harms Young Users—and particularly young women—in a multiplicity of serious ways.

202. For example, in September and October of 2018, Meta surveyed and interviewed active Instagram users to gauge the association between Instagram and those users' "negative social comparison." "Negative social comparison" is where one person compares themselves to another person and feels worse about themselves as a result.

203. As Meta acknowledged in relation to this research project, "[n]egative social comparison lowers well-being (loneliness, life satisfaction, self-worth, and self efficacy)."

204. Further, as Meta noted, "people with lower well-being may be more prone to negative social comparison," meaning that the negative effects of negative social comparison can compound on themselves.

205. Ultimately, In Meta researchers' own words, the study found that, on Instagram, "**some of this association [between Instagram use and negative social comparison] is causal**." (Emphasis added).

206. Specifically, Meta found that "33% of people have been feeling worse

about themselves on [Instagram as a result of using Instagram] for 'several months to a year.'" Meta noted that, for Instagram users, "there is a relationship between tenure [of time spent on Instagram] and the length of negative [social comparison]."

207.   That study also found that Instagram drives negative social comparison for teen girls and young women in particular. Specifically, it found that:

a) **66% of 13–17-year-olds** experience negative social comparison on Instagram; and

b) In comparison to men who are at least 25 years old, women are five times more likely, and **teen girls are eight times more likely**, to experience negative social comparison due to Instagram use.

208.   The study found that drivers of negative social comparison included posts of pictures or videos; the number of "likes" that a post receives; the number of followers an account has; other peoples' comments; and the specific account that shares a given post. It found that "beauty, fitness, and fashion are the top three contents that trigger negative comparison for women."

209.   After 2018, Meta continued to study and confirm the various ways in which Instagram use harms its Young Users. For instance, Meta's research concluded that Instagram caused or contributed to:

a) **Mental Health Harms**. For example, on November 13, 2019, Meta internally published the results of a 22,000-person survey of Instagram users from the United States and several other

countries. The survey found that "a sizable proportion of users (under a third) think we make issues related to mental health worse"; that "at least 1 in 2 [Instagram] users had experienced at least one mental health related issue in the last 30 days"; and that Instagram made these mental health issues worse, including with respect to "Problematic social media usage," "Body Image," "Social Comparison," "FOMO," "Sleep Problems," "Eating Problems," "Anxiety," "Loneliness," "SSI [suicide and self-injury]," and "Sadness/Depression."

b) **Negative Social Comparison**.

   i. For example, an October 2019 internal study by Meta found that:

       a. Of teens who felt unattractive, 41% said the feeling started on Instagram;

       b. Of teens who felt they did not have enough friends, 32% said the feeling started on Instagram;

       c. Of teens who felt alone or lonely, 21% said the feeling started on Instagram;

       d. Of teens who felt they were not good enough, 24% said the feeling started on Instagram;

       e. Of teens who wanted to hurt themselves, 9% said the feeling started on Instagram; and

     f.   Of teens who wanted to kill themselves, 6% said the feeling started on Instagram.

     ii.   On March 13, 2020, Meta internally distributed findings from a Meta-sponsored literature review which found that "[s]ubstantial evidence suggests that experiences on Instagram or Facebook make body dissatisfaction worse," and that users "perceived body image as a problem that Instagram worsened the most, more than when they end a relationship or lose a job."

     iii.   In March and April of 2020, Meta conducted a survey of 100,000 individuals in the United States and other countries to better understand "social comparison on Instagram." From this survey, Meta found that "[a]bout 1 out of 10 people experience negative social comparison on Instagram *often or always*."

210.   Meta has found that Instagram is particularly devastating for teen girls. Specifically, Meta's internal research has found that:

    a) "**Nearly half of teen girls (48%)** often or always compare their appearances on [Instagram], **and one-third (34%)** feel intense pressure to look perfect."

    b) **68% of teen girls** experience negative social comparison and that this issue is "not an influencer problem, **it's an**

Instagram problem."

c) "**Approximately 70% of teen girls** may see enough "sensitive content"—*i.e.,* content that is associated with negative appearance comparison—that they are likely to experience "appearance comparison **at least half the time**" they are on Instagram.

d) "The topics that elicit appearance comparison comprise 1/4 of the content people see on Instagram, and **1/3 for teen girls**."

e) "For every piece of friend content a teen girl sees, she sees 5x as many pieces of content from top accounts"—accounts that, per Meta's research, strongly drive negative appearance comparison.

f) Roughly 1 in 5 pieces of content young girls see on Instagram is focused on makeup, cosmetics, skin care and other topics associated with negative appearance comparison.

g) Instagram's "Explore" surface increases users' "exposure to [negative appearance comparison-provoking] content beyond the preferences that people have indicated by the choice of accounts they follow." Consequently, "17% of people see substantially more (at least 20 percentage points) [negative appearance comparison-provoking] content in Explore than in Feed. **It's worse for women and teen girls**."

211.   Likewise, in a March 2020 internal study, Meta found that:

a) **66% of teen girls** on Instagram experience negative social comparison, compared to 40% of teen boys;

b) **32% of teen girls** said that "when they felt bad about their bodies, Instagram made them feel worse";

c) **For teen girls, negative social comparison is a "spiral"** that "mimics stages of grief," causing an individual to cycle through "Bargaining" (i.e. questioning why they are not a certain way and wondering what they need to do to be that certain way); "Insecurity" (i.e., feeling "less than"); "Dysmorphia" (i.e., obsessively self-criticizing through an unfair "magnifying glass"); "Anger" (at their circumstances); "Paralysis" (i.e., being unable to change the status quo in that moment); and "Withdrawal (i.e., "giving up");

d) For teen girls, Instagram features create **the "perfect storm"** for negative social comparison; and that

e) For teen girls, the "[m]ental health outcomes related to" negative social comparison can be **severe**," including body dissatisfaction, body dysmorphia, eating disorders, loneliness, and depression. (Emphases added).

212.   Further confirming and deepening Meta's understanding of Instagram's harms to youth, in mid-2021, Meta developed and first administered an

extensive survey of Instagram users to "develop a holistic, consistent picture of user

bad experiences on Instagram that allows [Meta] to track [its] progress each half

[year]."

213.   This survey—which Meta referred to internally as a BEEF ("Bad

Experiences and Encounters Framework") survey—measured Instagram users'

exposure to a variety of categories of harmful content and harmful experiences on

Instagram, including the extent to which users—including Young Users,

specifically—viewed violence, adult sexual activity, and self-harm, and the extent to

which users—including Young Users, specifically—experienced negative social

comparison, unwanted sexual advances, bullying, and hate speech. The survey

included a control group of Instagram users[63] to establish a foundation for

"determin[ing] causality."

214.   For example, the survey asked:

    a) Regarding negative social comparison: "Have you ever felt

       worse about yourself because of other peoples' posts on

       Instagram?"

    b) Regarding receiving unwanted sexual advances: "Have you ever

       received unwanted sexual advances on Instagram?"

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[63] On information and belief, certain subsets of Instagram accounts are randomly
designated as control groups in Meta's studies of Instagram-users' "well being."
These accounts—referred to as "minimum integrity holdout" or "well-being holdout"
groups—are afforded even fewer protections against harmful content than most
Instagram accounts. Meta does not disclose to Young Users—or parents or
guardians of Young Users—if or when a Young User's account is designated as a
control account in this manner.

c) Regarding being the target of bullying: "Has anyone ever done any of these things to you on Instagram? Insulted or disrespected you. Contacted you in an inappropriate way. Damaged your reputation. Threatened you. Excluded you or left you out."

d) Regarding seeing violence: "Have you ever seen any violent, bloody, or distributing images on Instagram that bothered you?"

e) Regarding seeing self-harm: "Have you ever seen someone harm themselves, or threaten to do so, on Instagram?"

f) Regarding seeing nudity: "Have you ever seen nudity or sexual images on Instagram that you didn't want to see?"

g) Regarding seeing hate and discrimination: "Have you ever seen anyone discriminating against people on Instagram because of their gender, religion, race, sexual orientation, or another part of their identity?"[64]

215. All survey questions had the same response options:

a) "Yes, during the last 7 days";

b) "Yes, but more than 7 days ago"; and

c) "No."

216. Meta surveyed at least 237,923 respondents across a range of age

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[64] *Id.*

groups (13-15, 16-17, 18-21, 22-26, 27-34, 35-44, and 45+). In Meta's determination, the sample size of respondents for each age group was large enough to constitute a representative sample of all Instagram users for each such age group.[65]

217. Based on this BEEF survey, Meta found that, during just the prior seven days:

a) 19.2% of Instagram users had experienced negative social comparison (at an average of 4.22 times during that period);

b) 11.9% of Instagram users received unwanted sexual advances (at an average of 3.14 times during that period);

c) 16.3% of users viewed nudity that they "did not want to see" (at an average of 4.33 times during that period);

d) 12.8% of users viewed violent images that "bothered them" (at an average of 3.44 times during that period);

e) 8.1% of users were the target of bullying (at an average of 3.24 times during that period);

f) 6.7% of users saw self-harm (at an average of 3.28 times during that period);

g) 28.3% of users witnessed bullying (at an average of 3.96 times during that period); and

h) And 25.3% of users witnessed discrimination (at an average of

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[65] Meta asked each respondent about five issues from a set of twenty-two issues. If a respondent reported experiencing at least one of the five issues, the survey system randomly chose one of the issues and asked a series of follow up questions.

4.22 times during that period).

218. Meta found that, among all Instagram users, Young Users reported experiencing higher rates of these "bad experiences." For example:

a) Meta found that, among 13-15 years olds, during just the prior seven days: 21.4% experienced negative comparison; 13% experienced unwanted sexual advances; 10.8% had been the target of bullying; 19.2% had viewed nudity they did not want to see; 12.8% had viewed violence that bothered them; 8.4% had viewed self-harm; 27.2% had witnessed bullying; and 26% had witnessed discrimination.

b) Meta found that, among 16-17 year olds, during just the prior seven days: 19.5% experienced negative comparison; 14.1% experienced unwanted sexual advances; 9.7% had been the target of bullying; 18.4% had viewed nudity they did not want to see; 14.3% had viewed violence that bothered them; 7.2% had viewed self-harm; 29.4% had witnessed bullying; and 28.5% had witnessed discrimination.

219. Among all respondent age-groups, 13-15 year olds reported the highest incidences of negative comparison; being the target of bullying; witnessing self-harm; and unwanted exposure to nudity.

220. Of note, as Meta has internally found, Young Users do not wander into harmful content on Instagram serendipitously. Instagram's Algorithmic

Recommendation System proactively and gradually pushes many Young Users to increasingly distressing content because, per this System's objectives, this proactive, gradual push maximizes these young users' "engagement" with the platform.[66] For this reason, Instagram can take girls who seek information on weight loss and push them into and down dark holes of content ultimately promoting extreme weight loss and eating disorders.[67]

221. Ultimately, by Meta's own internal measure, only **2% of content that Young People encounter on Meta's platforms is "age appropriate nutritious" or "the sort of content we would like to promote to teens**."

222. Given Meta's internal findings that Instagram exposes Young Users to an array of harmful content and harmful experiences, it is all the more egregious that Meta designs and maintains Instagram and its features such that, as Meta has

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[66] Meta uses the term "preference amplification" to describe the way in which Meta's Algorithmic Recommendation System takes a user's "preference" regarding a certain kind of content and "amplif[ies]" it, seeking to maximize user engagement. According to one Meta researcher, Instagram users "tend to 'drift' towards what the [Algorithmic Recommendation System] shows them, which is further picked up by the model, which makes the problem even worse." Meta has found that, on Instagram's Explore surface, when teen girls were subject to "amplified exposure" of "High-NAC" content—or, content highly likely to induce negative appearance comparison—then they consumers substantially more High-NAC content in the following six weeks. In that regard, per Meta's own researchers, Meta's "algorithms may be increasing exposure to High-NAC content beyond the preferences that people have indicated."
[67] *See, e.g., 'Thinstagram': Instagram's algorithm fuels eating disorder epidemic*, Tech Transparency Project (December 8, 2021), https://www.techtransparencyproject.org/articles/thinstagram-instagrams-algorithm-fuels-eating-disorder-epidemic; *see also Designing for Disorder: Instagram's Pro-eating Disorder Bubble*, Fairplay (Apr. 14, 2022), https://fairplayforkids.org/wp-content/uploads/2022/04/designing_for_disorder.pdf

found, Instagram causes Young Users to use the platform compulsively and excessively.

7.   Despite Senior Employee Internal Recommendations, Meta Has Declined to Remediate Instagram's Known Harms

223.   As described above, Meta employees were and are aware that a critical mass of internal and external research demonstrated and demonstrates that Instagram harms users, including Young Users. Meta employees—including senior personnel—have raised these research findings to Meta's senior decision-makers and recommended internal investment to address concerns regarding teens' well-being. Meta's senior decision-makers—led by Zuckerberg—have rebuffed them.

224.   For example, on or around March 8, 2019, a team of Meta researchers sent Sheryl Sandberg—then Meta's Chief Operating Officer—a report warning that "there is increasing scientific evidence (particularly in the US)" that Meta's social media platform, Facebook, was harmful—and net negative—to users.

225.   The report identified "[t]hree negative drivers that occur frequently on [Facebook] and impact people's well being"": (1) "problematic use" (Meta's euphemism for compulsive and excessive use); (2) "social comparison"; and (3) "loneliness."

226.   The report observed that 58.1% of Facebook users experienced varying degrees of problematic use; 45% experienced varying degrees of social comparison; and 43% experienced varying degrees of loneliness.

227.   The report stated that "work suggests the impact of Instagram on well-being is similar to using Facebook…."

228. The report warned Sandberg that Meta needed meaningful funding to Meta's "Well-Being" initiatives[68] to remedy these harms. It stated: "On [Instagram], we have a fraction of a researcher and no DE/DS/Design/PMs. With no additional investment, we are on a trajectory to deliver exploratory findings (and NO product changes)." "We recommend investing in both the product effort and the [research] effort."

229. On April 8, 2019, this Meta research team escalated this warning by email to Zuckerberg, Sandberg, and Meta's Head of Instagram Adam Mosseri. The researchers stated, "we continue to face external scrutiny on Facebook and Instagram's impact on well being, especially around areas of problematic use/addiction and teens." The researchers then reiterated the warning they had first shared with Sandberg: "there is increasing scientific evidence (particularly in the US)" that Meta's social media platforms were harmful to users.

230. Like their report to Sandberg, the research team's email to Zuckerberg, Mosseri, and Sandberg raised chief concern with "Problematic use," "Social comparison," and "Loneliness," and implored that "there is a strong need to increase our investment in these areas to make a meaningful shift over the next year and beyond." "Given [the] **prevalence of [problematic use]**," the email recommended, "we will tackle this area first."

231. The email reiterated: "Without additional investment, we are on a

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[68] Historically, Meta has couched its work or initiatives regarding user health and safety as "Well Being" work or initiatives.

trajectory to deliver exploratory findings and continue our research at a slower pace

(and NO product changes)."

232.	Several days later, a member of Meta's finance team—speaking on

behalf of Zuckerberg and Sandberg—told the research team that Meta would not

fund the recommended investments.

233.	Later that same day, Mosseri reiterated to the research team that

their recommended research would not be funded. He stated: "[u]nfortunately I

don't see us funding this from Instagram any time soon."

234.	Between 2019 and 2021, Meta's senior personnel continued to express

concern that Meta lacked funds and plans to address Instagram's harms to Young

Users—to no avail.

235.	For example: In September 2019, Fidji Simo—then Head of Facebook—

told Mosseri that, "we need to increase investment" to improve well-being on Meta's

platforms. Mosseri replied, "100% agree. My current take is the biggest problem is:

Well-being is the existential question we face, and we lack a . . . roadmap of work

that demonstrates we care about well-being."

236.	Similarly, in August 2021, Nick Clegg—Meta's President of Global

Affairs and former Deputy Prime Minister of the United Kingdom—emailed

Zuckerberg directly recommending "additional investment to strengthen our

position on wellbeing across the company."

237.	Clegg stated: "[f]rom a Policy perspective, this work has become

increasingly urgent over recent months. Politicians in the US, UK, EU and

Australia are publicly and privately expressing concerns about the impact of our products on young people's mental health. In the US, this was specifically raised with me by the Surgeon General, and is the subject of potential legal action from state AGs. We have received numerous policymaker inquiries and hearing requests."

238. Clegg concluded that while Meta had a "strong program of research [regarding the impact of Instagram on young people's mental health]," it "need[ed] to do more and we are being held back by a lack of investment on the **product side** which means that we're not able to make changes and innovations at the pace required."

239. Zuckerberg declined to respond to Clegg's request for months. In the meantime, the Wall Street Journal obtained a leak of an internal Meta "social comparison research deck" from 2020 and, based on that leak, published a story arguing that Instagram's design was particularly harmful to teenage girls, contributing to their poor mental health, self-harm, and suicide.

240. As it turns out, Zuckerberg's attention was elsewhere. While Clegg and others worried about public backlash from the article, Zuckerberg was preoccupied with public perception of his hydrofoil—an aquatic recreation device.

241. On September 21, 2021, while Meta's previously undisclosed internal research was a leading headline, Meta's Public Affairs team worked to dissuade Zuckerberg from publicly mocking a different news story that mistakenly referred to Zuckerberg's hydrofoil as an "electric surfboard."

242.   According to a member of the team, Zuckerberg was "eager" to publicly state: "Look, it's one thing for journalists to make false claims about my work, but it's crossing a line to say I'm riding an electric surfboard when it's clearly a hydrofoil and I'm pumping that thing with my legs."

243.   Later in the same conversation, an unamused Clegg observed the absurdity of Zuckerberg's inclination:

> Am I missing something here? On the day a [Meta] rep[resentative] is pulled apart by US Senators on whether we care enough about children on our services, [Zuckerberg] is going to post about . . . surfboards? Maybe I've lost my humor about this whole thing, but I really think this would seem to any casual observer to be pretty tone deaf given the gravity of the things we're accused of . . . If I was him, I wouldn't want to be asked "while your company was being accused of aiding and abetting teenage suicide why was your only public pronouncement a post about surfing?"... [The Wall Street Journal's reporting about Instagram's mental health impacts] has dramatically consolidated a wider narrative (that we're bad for kids) which had been brewing for some time. It now makes regulation... certain, and in my view makes launching [Instagram] Kids nigh impossible. I've told [Zuckerberg] and [Sandberg] this already.

244.   In a contemporaneous discussion with a member of Meta's finance team, Clegg implored, "the WSJ story about [Instagram] and teenage depression and suicide will have a huge impact on regulatory/political pressure on us going forward . . . I'm worried that none of this is – yet – being reflected in [Zuckerberg's] decision making [sic] on [staffing]."

245.   Clegg was not alone—other members of Meta's senior leadership team were also becoming increasingly alarmed.

246.   For instance, following significant media coverage of Meta platforms'

harms to young people, Meta's VP of Research emailed Clegg to share, "I feel even

more convinced that we need to make more progress on well-being on the product

side."

247.   Similarly, in an October 2021 exchange about Clegg's well-being

recommendation (to which Zuckerberg still had not responded), Mosseri

complained, "I'm really worried about this . . . we've been talking about this for a

long time but have made little progress."

248.   Meta's VP of Product agreed with Mosseri, observing that Meta's

"biggest gap is getting [Meta's] research into product roadmaps. **We got 0 new**

well-being funding for 2022."

249.   Meta's VP of Product reiterated the same concern with other Meta

employees: "We've made a lot of progress on research . . . We've not made a lot of

progress on getting the research into product."

250.   By November 2021, Zuckerberg had still not responded to Clegg, so

Clegg wrote Zuckerberg again. He wrote: "Circling back re: investment needed to

strengthen Meta's position on well-being (see original email from Aug below). This

investment is important to ensure we have the product roadmaps necessary to

stand behind our **external narrative** of well-being on our apps.... This work &

narrative has of course become a more critical focal point for policymakers,

regulators et al in recent weeks – this is not likely to diminish going forward."

(Emphases added).

251.   Of note, Clegg's email implied that there was and is a difference between what Meta is telling the public about "well-being on [Instagram]"—its "external narrative"—and Instagram's actual impact on users' "well-being."

252.   Upon information and belief, Meta never funded the well-being investments recommended by Clegg.

253.   As a final example, on October 5, 2021, Arturo Bejar—then a senior contractor for Meta and formerly Meta's Director of Engineering (also responsible for "Site Integrity")—emailed Zuckerberg, Sandberg, Chief Product Officer Chris Cox, and Mosseri pointing to a "critical gap in how [Meta] as a company approach[es] harm." He raised concern that Meta's "prevalence" metrics, as contrasted with Meta's BEEF survey metrics, "only cover a single digit percentage of what is harming people…."

254.   In light of this "gap," he recommended that "it is important to get the following efforts **well-funded and prioritized**: What is the content that is causing bad experiences for our users? How intense is the experience? What % of that content is policy violating? What are visible product solutions that make the community better over time?…." (Emphasis added).

255.   Zuckerberg, with whom Bejar worked directly for several years, did not respond to Bejar's email. Bejar has stated that he could "not think of an[other] email that [he] sent to Mark [Zuckerberg] during [his] time [at Meta] that [Zuckerberg] didn't read or respond to."

256.   Thus, even Meta's CEO was aware of Instagram's varied harms to

youth; of his senior managers' pleas to address these harms with meaningful investment; and of domestic and international political, regulatory, and legal pressure on Meta to meaningfully address these harms, as well. And Zuckerberg did not respond.

257.   Rather, at every turn, Meta has continued its efforts to maximize the amount of time that Young Users spend on Instagram.

C.   Meta Engages in Deceptive Conduct By Mispresenting and Omitting the Nature and Extent to Which Instagram Harms Young Users

258.   For years, Meta has deceptively led Vermont consumers—including prospective and actual Young Users of Instagram and their parents and guardians—to believe that Instagram is a safe social media platform for Young People. It has promoted misleading messages and metrics about the incidence of harms to Young Users on the platform. Before U.S. Congress, it has downplayed the meaning of leaked internal Meta research on Instagram's harms to youth and teen girls, in particular; deceptively testified that Instagram is safe and provides age-appropriate experiences; and deceptively testified that Instagram does not cause compulsive and excessive platform use.

259.   In the meantime, Meta has failed to disclose to consumers its internal findings that Instagram causes compulsive and excessive platform use; that such use causes Young Users harms; and that, beyond compulsive and excessive platform use, Instagram exposes Young Users to harmful content and harmful experiences. Indeed, in 2021, Meta commenced systemically concealing these internal findings

from the majority of its employees, cabining them to a secret team.

260. Just as Meta maintains a deceptive public narrative about Instagram's impact on Young Users' health generally, it maintains deceptive public narratives about the impact of individual Instagram features on Young Users' health. For example, in order to maintain the public appearance of caring for Young User's mental health, Meta publicly flaunted a broken Instagram tool purportedly meant to help Instagram users manage their time on the platform. Likewise, Meta omitted and omits from the public known harms of individual Instagram features, like the cosmetic selfie filter.

261. Meta's misrepresentations and omissions are designed to assuage consumers—including Young Users and their parents and guardians—that Meta is safe for Young Users when Meta knows—from its own internal research—that it is not.

1. Meta Promoted Misleading Messages and Metrics About the Incidence of Harm on Instagram

262. For years, Meta has made affirmative misrepresentations to consumers to create the public impression—and to assuage Young Users' parents and guardians—that Instagram is a safe platform on which harmful content and harmful experiences are rarely encountered. These representations contradicted Meta's internal data that Instagram users frequently encounter a wide range of harmful content and experiences on the platform.

263. Specifically, Meta has deceptively publicly broadcasted that Instagram

was safe for Young Users through its "Transparency Center,"[69] "Policies,"[70] and "Community Standard Enforcement Reports."[71]

264. On its website, Meta maintains a Transparency Center to inform consumers of its Policies and to provide consumers quarterly Community Standard Enforcement Reports.[72]

265. Meta's Policies define what content "is and is not allowed on Meta technologies [including Instagram]."[73] Specifically, Meta's Policies define and (theoretically) prohibit each of the following categories of content, among several others:

a) "Violent and Graphic Content";

b) Content that encourages "Suicide and Self-Injury";

c) "Bullying and Harassment";

d) "Adult Nudity and Sexual Activity"; and

e) "Hate Speech."[74]

266. On a quarterly basis, Meta publishes Community Standard Enforcement Reports ("CSE Reports"), which, as described by Meta, "report on how

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[69] Meta Transparency Center, https://transparency.fb.com/ (last visited Oct. 17, 2023).
[70] Meta Policies, Meta Transparency Center: Policies, https://transparency.fb.com/policies/ (last visited Oct. 17, 2023).
[71] Meta Transparency Reports, Meta Transparency Center: Reports, https://transparency.fb.com/reports (last visited Oct. 17, 2023).
[72] Meta Transparency Center, *supra* note 69.
[73] Meta Policies, *supra* note 70.
[74] *Id.*

well we're doing at enforcing our policies on… Instagram."[75] When Meta publishes a

new CSE Report on its Transparency Center each quarter, it publicizes the new

report through a press release, as well.

267.   Meta's Transparency Center, Polices, and CSE Reports all create the

impression that Instagram is a safe environment for Young Users. For example:

a) The Transparency Center States that "At Meta, we're

committed to giving people a voice and keeping them safe….

This means we remove harmful content that goes against our

policies…."[76] It also states: "We keep people safe…. If content

goes against our policies, we take action on it."[77]

b) Meta's Policies state in no uncertain terms that, if a piece of

Instagram content falls into a category of prohibited content,

"we remove [it]."[78]

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[75] Meta Transparency Reports, *supra* note 71.

[76] Meta Transparency Center, *supra* note 69.

[77] Meta Policies, *supra* note 70.

[78] *See Violent and Graphic Content*, Meta Transparency Center: Policies,
https://transparency.fb.com/policies/community-standards/violent-graphic-content/
(last visited Oct. 17, 2023) ("We remove content that is particularly violent or
graphic."); *Suicide and Self Injury*, Meta Transparency Center: Policies,
https://transparency.fb.com/policies/community-standards/suicide-self-injury/ (last
visited Oct. 17, 2023) ("We remove any content that encourages suicide or self-
injury, including fictional content such as memes or illustrations and any self-
injury content which is graphic, regardless of context. We also remove content
that identifies and negatively targets victims or survivors of suicide or self-
injury seriously, humorously or rhetorically, as well as real time depictions of
suicide or self-injury."); *Bullying and Harassment*, Meta Transparency Center:
Policies, https://transparency.fb.com/policies/community-standards/bullying-
harassment/ (last visited Oct. 17, 2023) ("We remove content that's meant to
degrade or shame…."); *Adult Nudity and Sexual Activity*, Meta Transparency

c) Each CSE Report delineates the "prevalence" of policy-violating content on Instagram during the given quarter. According to Meta, "prevalence" is the estimated "number of views" of "policy-violating content" on Instagram divided by the total number of views of Instagram content. Each CSE Report breaks down the purported "prevalence" of policy-violating content for the given period by "Policy" category—e.g., the "prevalence" of "Adult Nudity and Sexual Activity," "Bullying and Harassment," "Hate Speech," etc. And, as detailed below, each CSE Report suggests that it is incredibly rare for Instagram users to encounter "policy violating" content across each Policy category.

268. Meta's Transparency Center also implies that, between Meta's publication of its Policies and CSE Reports, Meta provides the public accurate statistics on the primary safety risks that Instagram presents Young Users. It states: "We keep people safe and let people hold us accountable by sharing our policies, enforcement and [CSE Reports]."[79]

Center: Policies, https://transparency.fb.com/policies/community-standards/adult-nudity-sexual-activity/ (last visited Oct. 17, 2023) ("We restrict the display of nudity or sexual activity because some people in our community may be sensitive to this type of content. Additionally, we default to removing sexual imagery to prevent the sharing of non-consensual or underage content."); *Hate Speech*, Meta Transparency Center: Policies, https://transparency.fb.com/policies/community-standards/hate-speech/ (last visited Oct. 17, 2023) ("[W]e don't allow hate speech on [Instagram].")
[79] Meta Transparency Center, *supra* note 69.

269.   However, Meta's Transparency Center, Policies, and CSE Reports are misleading. They grossly understate the degree to which Young Instagram Users are exposed to harmful content and harmful experiences on the platform.

270.   Meta's CSE Reports—the meat of Meta's periodic reporting to consumers on the real-time "safety" of Instagram—are misleading in design and effect.

271.   In terms of being misleading by design:

a) CSE Reports only state the "prevalence" of harmful content on Instagram insofar as Meta has defined such content to be "policy violating." The "prevalence" metric necessarily excludes content that is harmful but not considered "policy violating" because, for example, Meta's definition of what violates the relevant Policy—i.e., what constitutes "Violent and graphic content"—is inappropriately narrow.

b) Likewise, CSE Reports only state the "prevalence" of "policy violating" content on Instagram insofar as Meta *successfully identifies* content that qualifies as "policy violating" in a given sample of Instagram content for the purposes of generating "prevalence" statistics.

c) CSE Reports only report the purported "prevalence" of policy-violating content as viewed by *all Instagram users*, not Young Users, despite that—as the above-referenced BEEF survey

indicated—Young Instagram Users are exposed to unwanted

and harmful content at substantially higher rates than adult

Instagram users.

d) Finally, CSE Reports fail to identify and address some of the

greatest risks and harms Instagram presents to Young Users,

including, but not limited to, compulsive and excessive

Instagram use and negative social comparison.

272. As a result, CSE Reports present skewed, deceptive results. The extent

of the skew and deception is laid plain by contrasting a CSE Report—take, for

example, the third quarterly CSE report of 2021—with the roughly

contemporaneous BEEF survey of Instagram users referenced above. Across

categories of harm, the CSE Reports grossly understate the frequency with which

Young Users are exposed to harmful content and harmful experiences.

273. For example, Meta's third quarterly CSE Report of 2021 stated that,

on Instagram, between just "0.05% to 0.06%" of users' views were of content that

violated Meta's standards against bullying and harassment."[80] This representation

created the impression that it was very rare for Instagram users to observe or

experience bullying or harassment on Instagram.

274. However, Meta's contemporaneous internal BEEF survey findings

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[80] Guy Rosen, *Community Standards Enforcement Report, Third Quarter 2021* (Nov. 9, 2021)*,*
https://about.fb.com/news/2021/11/community-standards-enforcement-report-q3-2021/

showed that, during **just the seven days** prior to taking the BEEF survey, 8.1% of

Instagram users—including 10.8% of 13-15 year olds and 9.7% of 16-17 year olds—

had been the target of bullying on the platform, and 28.3% of Instagram users—

including 27.2% of 13-15 year olds and 29.4% of 16-17 year olds—had witnessed

bullying on the platform.

275.   Likewise, and contrary to the CSE Report's representation that

harassment on Instagram was rare, Meta's contemporaneous internal BEEF survey

demonstrated that, during just the seven days prior to taking the survey, 11.9% of

Instagram users—including 13% of 13-15 year olds and 14.1% of 16-17 year olds—

had received unwanted sexual advances on the platform.

276.   Similarly:

a) **As to suicide and self-injury**: Meta's 2021 third quarter CSE

Report stated that, on Instagram, "less than 0.05% of views

were of content that violated our standards against suicide &

self-injury." This representation created the impression that it

was very rare for users to experience content relating to suicide

and self-injury on Instagram. However, Meta's

contemporaneous internal BEEF survey data showed that,

during just the seven days prior to the survey, 6.7% of

Instagram users had seen self-harm on Instagram, including

8.4% of 13-15 year olds and 7.2% of 16-17 year olds.

b) **As to violence**: Meta's 2021 third quarter CSE Report stated

that on Instagram, less than .02% of views were of content that violated Meta's policies against "Violence and incitement."[81] This representation created the impression that it was very rare for users to experience violent content on Instagram. However, Meta's contemporaneous internal BEEF survey data showed that, during just the seven days prior to the survey, 12.8% of Instagram users had seen violence on Instagram that "bothered" them, including 12.8% of 13-15 year olds and 14.3% of 16-17 year olds.

c) **As to adult nudity and sexual activity**: Meta's 2021 third quarter CSE Report stated that on Instagram, only .02-.03% of views were of content that violated Meta's policies against "Adult Nudity and Sexual Activity." However, Meta's contemporaneous internal BEEF survey data showed that, during just the seven days prior to the survey, 16.3% of Instagram users had seen nudity "they did not want to see," including 19.2% of 13-15 year olds and 18.4% of 16-17 year olds.

d) **Finally, as to hate speech**: Meta's 2021 third quarter CSE Report stated that on Instagram, only .02% of views were of content that violated Meta's policies against "Hate speech."[82]

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[81] Guy Rosen, *supra* note 80.
[82] Guy Rosen, *supra* note 80.

However Meta's contemporaneous internal BEEF survey data showed that, during just the seven days prior to the survey, 25.3% of Instagram users had seen hateful or "discriminatory" content on Instagram, including 26% of 13-15 year olds and 28.5% of 16-17 year olds.

277. Across the board, the contrast between Meta's internal findings (via BEEF survey) and external reporting (via CSE Report) regarding the frequency of Young Instagram Users' exposure to harmful content and harmful experiences is stark:

Kind of Harm	Internal Findings for 13-15 year olds	External Reporting
Exposure to bullying & harassment	10.8% (bullying) 13% (unwanted sexual advances)	.05-.06%
Exposure to suicide & self-injury	8.4%	Under .05%
Exposure to adult nudity and sexual activity	19.2%	.02-.03%
Exposure to violence	12.8%	Under .02%
Exposure to hate speech	26%	.02%

278. Further, as noted above, Meta's third quarterly CSE Report of 2021

failed to publicly disclose Meta's internal findings regarding other significant harms Instagram causes Young Users—like compulsive and excessive Instagram use and negative social comparison.

279. Indeed, Meta has publicly disseminated and promoted its Transparency Center, Policies, and CSE Reports to conceal and downplay the routine and widespread harmful experiences that Instagram users, including Young Users, encounter on—and as a result of using—the platform.

280. Of note, during the State's investigation, Meta's former Director of Engineering (also responsible for "Site Integrity"), Arturo Bejar, referenced above in Paragraphs 253-255, testified that Meta adopted and promoted the "prevalence" metric for measuring and reporting Instagram users' exposure to harmful ("policy-violating") content and experiences precisely in order to mislead the public.[83]

281. When asked if he believed "that Mr. Zuckerberg and other Company leaders focused on the 'prevalence' metric because it created a distorted picture about the safety of Meta's platforms," Bejar testified "I do."

282. When asked if he thought "Mr. Zuckerberg's public statements about prevalence created a misleading picture of the harmfulness of Meta's platforms," Bejar testified "I do."

283. And when asked if he was "aware of any instances where the Company, in [his] view, minimized the harms users were experiencing on Meta's

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[83] Indeed, at one time, Meta directed its employees to tout CSE Reports' "prevalence" metric as "the most important measure of a healthy online community."

platforms," Bejar testified: "Every time that a Company spokesperson in the context of harms quotes Prevalence statistics I believe that is what they are doing, that they're minimizing the harms that people are experiencing in the product."

284. Also as referenced above in Paragraphs 253-255, on October 5, 2021, Bejar emailed Zuckerberg, Sandberg, Cox, and Mosseri indicating that there was a "critical gap in how [Meta] as a company approach[es] harm." He raised concern that "[Prevalence] only cover[s] a single digit percentage of what is harming people…."

285. Meta's senior leadership did not respond to Bejar. Undeterred, Meta continues to publish misleading CSE Reports, unchanged in nature.

2. In Congressional Testimony, Meta Doubled Down On Its Deceptive External Narrative That Instagram Is Safe For Young Users

286. As referenced above, in September 2021, the Wall Street Journal covered and published a limited volume of leaked internal Meta research regarding the negative impact of Instagram on teen girls. Later that month, a U.S. Senate Committee invited Meta executives and senior managers to Capitol Hill to testify regarding the impacts of Instagram on Young Users' mental health.

287. Before that Committee, Meta's representatives downplayed the meaning of the internal Meta research the Wall Street Journal had publicized. Further, they deceptively testified that Instagram provides Young Users age-appropriate experiences; does not cause compulsive and excessive platform usage; and that Meta routinely uses its internal research findings on teen mental health to

improve the safety of its platforms.

a) Meta Downplayed Its Internal Research And Testified That Instagram Provides Age-Appropriate Experiences Despite Its Internal Findings to The Contrary

288.   On September 20, 2021, Meta's Global Head of Safety Antigone Davis testified to the U.S. Senate Subcommittee on Consumer Protection, Product Safety, and Data Security at a hearing regarding "Protecting Kids Online: Facebook, Instagram, and Mental Health Harms."[84]

289.   As to the internal Meta research that was leaked to, and published by, the Wall Street Journal, Davis testified that this research in fact demonstrated that for "teen girls who were struggling," Instagram was "affirmatively helping them," not "making things worse."

290.   Davis testified: "My team works tirelessly with our colleagues across the company to put in the place the right policies, products, and precautions so that people who use our services have a safe and positive experience…. We [Meta] have put in place multiple protections to create safe and age-appropriate experiences for people between the ages of 13 and 17."[85]

291.   In subsequent questioning from U.S. Senators, Davis testified that "[w]hen it comes to those between 13 and 17, we consult with experts to ensure that

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[84] Written Testimony of Antigone Davis Global Head of Safety, Facebook, hearing before the U.S. S. Comm. on Science, Commerce, and Transportation, Subcomm. on Consumer Protection, Product Safety, and Data Security (Sept. 30, 2021), https://www.commerce.senate.gov/services/files/9128BE85-15A8-42E8-A804-2988D8306D59
[85] *Id*. at 1.

our policies properly account for their presence, for example, by age-gating content."[86]

292.   Davis testified that Meta does not "allow young people to see certain types of content. And we have age gating around certain types of content."[87]

293.   Davis also testified that Meta does not "direct people towards content that promotes eating disorders."[88]

294.   During the hearing, Senator Amy Klobuchar asked Davis: "What specific steps did you… take in response to your own research [into Instagram users' body image issues] and when?"[89]

295.   Davis responded: "Senator Klobuchar, I don't know that I'll be able to give you exact dates, but what I can tell you is that this research has **fueled numerous product changes**."[90]

296.   Likewise, in December 2021, Head of Instagram Adam Mosseri testified to the same Senate Subcommittee. He echoed Davis' statement that Meta has "put in place multiple protections to create safe and age-appropriate experiences for people between the ages of 13 and 18" on Instagram.[91]

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[86] *Facebook Head of Safety Testimony on Mental Health Effects: Full Senate Hearing Transcript*, Rev (Sept. 30, 2021), https://www.rev.com/blog/transcripts/facebook-head-of-safety-testimony-on-mental-health-effects-full-senate-hearing-transcript
[87] *Id.*
[88] *Id.*
[89] *Id.*
[90] *Id.*
[91] Written Testimony of Adam Mosseri Head of Instagram, Meta Platforms Inc., hearing before the U.S. S. Comm. on Science, Commerce, and Transportation, Subcomm. on Consumer Protection, Product Safety, and Data Security (Dec. 8,

297.   During that testimony, Senator Ted Cruz asked Mosseri: "How did you change your policies as a result of [Meta's internal research into Instagram users' suicidal thoughts] to protect young girls?"

298.   Mosseri responded: "Senator, I appreciate the question. We use research to not only change our policies, but to **change our product on a regular basis**."

299.   Davis and Mosseri's testimony were misleading on two similar fronts.

300.   First, their testimony created the impression that Instagram provides "age-appropriate" and "safe" experiences for youth. However:

   a) As detailed in above in Paragraphs 201-221, Meta has internally found that, on Instagram, Young Users routinely encounter content and experiences on Meta's platforms that are neither age-appropriate nor safe. For example, they encounter content depicting violence and adult sexual activity, as well as content promoting excessive weight loss, eating disorders, self-harm and suicide. And they experience compulsive and excessive platform use, negative social comparison, and unwanted sexual advances.

   b) As detailed above in Paragraphs 210-211, Meta has internally found that Instagram is disproportionately damaging to teen

2021), https://www.commerce.senate.gov/services/files/3FC55DF6-102F-4571-B6B4-01D2D2C6F0D0

girls, particularly with regard to negative social comparison.[92] For example, a June 2021 internal study by Meta shows that on Instagram, "approximately 70% of teen girls see 'too much' sensitive content," *i.e.* content that makes them "often feel worse about themselves." Another June 2021 internal study showed that "roughly 1 in 5 pieces of content" teen girls see is "associated with more negative appearance comparison."

c) Of note, in October 2020, Davis herself had authored an internal report, at Meta, titled "Child Safety: State of Play", in which Davis found that Meta lacked critical protections for Young Instagram Users. For example, according to Davis' report, Instagram had only **"weak" methods for age-gating** its users; **had "minimal child safety protections" needed to prevent "Child Sexual Exploitation"**; and presented **"inappropriate/harmful content and experiences for minors**." (Emphases added).

301.   Second, Davis and Mosseri's testimony created the impression that Meta "regular[ly]" used internal research findings on teen mental health to improve product safety.

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[92] In September 2020, Davis told Meta colleagues that the Company would require "larger investment" to successfully shield users on its platforms from eating disorder content. Upon information and belief, Meta never undertook such investment.

302. However, as described above, members of Meta's leadership—including Mosseri—acknowledged the Company's failure to translate research findings into product changes (1) shortly after Davis' testimony and (2) preceding Mosseri's testimony.

303. To briefly restate that evidence: in October 2021—just two months before Mosseri's testimony—a senior Meta employee explicitly told Mosseri that Meta had "not made a lot of progress on getting the research into product."

304. Around the same time, Mosseri complained about Meta's failure to translate research findings into product safety improvements, stating: "I'm really worried about this… we've been talking about this for a long time but have made little progress."

305. And in November 2021—just one month before Mosseri's testimony— another senior Meta employee sent an email to Zuckerberg, Mosseri, and others, underscoring Meta's outstanding need "to ensure we have the product roadmaps necessary to stand behind our external narrative of well-being on our apps."

b) Meta Testified that Instagram Does Not Cause Compulsive and Excessive Usage Despite Its Internal Findings to The Contrary

306. During Davis' September 2021 Congressional testimony, Davis also testified that Meta does not build its products to be addictive and disputed the addictive nature of Meta's products.[93]

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[93] *Facebook Head of Safety Testimony on Mental Health Effects: Full Senate Hearing Transcript*, Rev (Sept. 30, 2021), https://www.rev.com/blog/transcripts/facebook-head-of-safety-testimony-on-mental-health-effects-full-senate-hearing-transcript

307. In response, Senator Dan Sullivan asked Davis, "[b]ut isn't part of your business model to have more eyeballs for a longer amount of time engaged using your services?"

308. Davis responded: "Respectfully, Senator that's not actually how we build our products."

309. Similarly, in December 2021, Mosseri testified to Congress that "I don't believe that research suggests that our products are addictive."[94]

310. In fact, as detailed in Paragraphs 86-188 above, long before Davis and Mosseri's testimony, Meta designed Instagram to cause users, including Young Users, to utilize the platform compulsively and excessively; had found that Instagram *in fact* caused Young People to use the platform compulsively and excessively; and had found that compulsive and excessive Instagram use was harmful to Young Users.[95]

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[94] Taylor Hatmaker, *Instagram's Adam Mosseri defends the app's teen safety track record to Congress*, TechCrunch+ (Dec. 8, 2021, 5:18 PM), https://techcrunch.com/2021/12/08/instagrams-adam-mosseri-senate-hearing-teen-safety/

[95] Relatedly, in March 2021, Zuckerberg testified to a U.S. House of Representatives Subcommittee regarding Meta's products. During that testimony, a Representative asked Zuckerberg, "[s]o do you agree that [Meta's] business model and the design of [Meta's] products is to get as many people on the platform as possible and to keep them there for as long as possible?" In response, Zuckerberg testified: "[O]ur goal is not – we don't – I don't give our… Instagram team goals around increasing the amount of time that people spend." Another Representative asked Zuckerberg, "Do you agree to much time in front of screens, passively consuming content, is harmful to children's mental health?" In response, Zuckerberg testified, "I don't think that the research is conclusive on that." Testimony of Mark Zuckerberg, Meta Platforms Inc., hearing before the U.S. House of Representatives Subcomm. on Communications and Technology joint with Subcomm. on Consumer Protection and

311. Meta's use of equivocal and deceptive public representations to mislead consumers in the wake of the Wall Street Journal coverage referenced above stirred one of the Company's PHD-level researchers, who emailed colleagues to state:

> Pre-[Meta] I spent a lot of time working on public health and environmental issues, and this sounds eerily similar to what tobacco companies and climate change deniers say. Uncertainty/doubt is a key component of the scientific method, but it can also be weaponized to push back on critics (e.g., ' . . . but this one scientist thinks cigarettes don't cause cancer,' 'we need more research to know for sure whether climate change is man made,' 'evolution is just a theory,' etc etc) . . . **[W]hen we use language like this it puts us in very bad company**.

3. Meta Concealed From Consumers Its Internal Findings That Instagram Harms Young Users And Is Particularly Damaging to Young Women

312. While Meta systematically and affirmatively misrepresented to consumers that Instagram was safe for Young Users, Meta systematically concealed from consumers its extensive research findings to the contrary.

313. For example, Paragraphs 164-221 above detail Meta's internal research—including studies and surveys of Young Instagram Users—finding that Instagram causes Young Users to use Instagram compulsively and excessively; that compulsive and excessive Instagram use harms Young Users; that, beyond compulsive use, Instagram exposes Young Users to an array of harmful content and harmful experiences; and that Instagram is particularly damaging to teen girls.

Commerce (March 5, 2021), https://www.congress.gov/117/meeting/house/111407/documents/HHRG-117-IF16-Transcript-20210325.pdf Zuckerberg's testimony was also misleading per Paragraphs 69-70 and 86-197 above.

314. Meta concealed this research and these findings from consumers.

315. To date, consumers have only been made aware of an extremely limited portion of internal Meta research reflecting that Instagram is harmful to Young Users—and only because a former Meta employee leaked this internal research to the media.

316. Meta is aware of this tension. On August 27, 2021, for example, an Instagram spokesperson wrote to Mosseri to flag that a journalist from the Wall Street Journal had obtained the leaked internal research referenced above and was "writing a story that that essentially argues that [Instagram's] design is inherently bad for teenage girls (leads to [suicide and self-harm], poor mental health, dysmorphia)." The spokesperson observed that the journalist's "arguments [are] based on [Meta's] own research so [they] are difficult to rebut" and stated, tellingly, that the article could expose "**that [Meta's] own research confirmed what everyone has long suspected**."

4. Meta Concealed Its Internal "Well-being" Research From Its Own Employees to Avoid Leaks to Consumers

317. Not only did Meta conceal its internal research findings from the public; as Meta's products, including Instagram, faced growing public scrutiny over their harms to Young Users, Meta commenced "sanitizing" and locking down access to its internal research findings *within the company*.

318. For example, on August 27, 2021—shortly after Meta learned of the impending Wall Street Journal coverage referenced above—one Instagram research manager stated that the Company was "locking down access to some of the extra

sensitive pieces of work."

319.   The same manager subsequently instructed a research colleague to "make sure that any of our shareable deliverables or insights docs that you own on the mental well-being space are locked down."

320.   Similarly, on October 20, 2021, a senior Meta well-being researcher complained about a new Meta policy requiring Meta's Communications team to review research findings even before they could be shared *internally*.

321.   As one employee put it, **if internal research "needs to be sanitized** to share with [internal] people that need to know (i.e., the people in focused, closed groups) **then we've got a big problem**."

322.   Despite those concerns, the communications team did, in fact, begin "sanitizing" internal research findings before those findings were circulated within the Company. For example, on one occasion, the communications team "took issue with language describing a [survey] finding as applying to a general population instead of just survey responders" despite that Meta weighted the survey responses in question so that they would be reflective of the general user population. "The discussion that followed left [a researcher] feeling that [Meta]" wanted to describe the research finding as applying to just survey responders, not the general user population, "**so that [Meta] could more easily dismiss inconvenient findings."**

323.   A different researcher concluded: **"This is a huge moral hazard, in my opinion**." Another Meta-employed social scientist responded, "[a]greed!"

324.   Likewise, in the latter half of 2021, Meta restricted internal access to the BEEF survey results detailed above.

325.   As one Meta employee observed on September 30, 2021, **"[t]he results of BEEF… are only being shared in private and select groups, to avoid leaks. Sad new world**." According to the same employee, Meta narrowed BEEF survey result access to a "66-person **secret group**."

326.   Meta's internal culture of secrecy regarding Meta's harms to Young People was and is designed to keep consumers—including Young Users and their parents and guardians—in the dark about the harms Instagram causes to Young People.

5.   Meta Deceptively Promoted Instagram "Well being" Features While Omitting Known Harms of Instagram Features Designed To Maximize Engagement, Like Cosmetic Selfie Filters

327.   Meta has also misrepresented that Instagram features—like its "Time Spent" tool—were positive and meaningful for Young Users when they were ineffectual while omitting that other Instagram features designed to maximize user engagement—like cosmetic selfie filters—were harmful to Young Users.

a) Meta Deceived Consumers By Promoting a "Time Spent" Tool Despite Its Inaccuracies

328.   On August 1, 2018, Meta announced "new tools to help people manage their time on… Instagram." The announcement touted a new in-app dashboard that would allow each Instagram user to see the average amount of time they spent

using Instagram per day during the prior week.[96]

329.   In launching this "Time Spent" tool, Meta stated: "[w]e have a responsibility to help people understand how much time they spend on our platforms so they can better manager their experience." [97] It expressed "hope… that these tools give people more control over the time they spend on our platforms and also foster conversations between parents and teens about the online habits that are right for them."[98]

330.   Meta boasted that it had engineered the "Time Spent" tool "based on collaboration and inspiration from leading mental health experts and organizations, academics, [Meta's] own extensive research and feedback from [Meta's] community."[99]

331.   Through these public statements and others, Meta led consumers, including Young Users and their parents and guardians, to believe that they could rely on Meta's "Time Spent" tool to track and manage Young Users' time spent on Instagram in a meaningful, accurate way.

332.   These representations were false. By March 2020, Meta employees had found that the Time Spent tool was broken, providing users materially incorrect

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[96] Ameet Ranadive and David Ginsberg, *New Time Management Tools on Instagram and Facebook*, Instagram (Aug. 1, 2018), https://about.instagram.com/blog/announcements/new-time-management-tools-on-instagram-and-facebook#:~:text=To%20access%20the%20tools%2C%20go,total%20time%20for%20that%20day.
[97] *Id.*
[98] *Id.*
[99] *Id.*

data about the amount of time they spent on Instagram.

333.   As Instagram's Director of Engineering observed at the time, "[o]ur [Time Spent] data as currently shown is incorrect. It's not just that Apple / Google have better data. Ours is wrong. Far worse. **We're sharing bad metrics externally**… The reason this is relevant is we vouch for these numbers. Any day they're out there is a legal liability."

334.   By the middle of 2020, Instagram's internal team charged with decommissioning platform features recommended that Meta's Time Spent tool should be removed from Instagram.

335.   But Meta did not follow that recommendation because the "Time Spent" tool was a key part of Meta's (false) "narrative" to users, parents, and guardians that Instagram cared about ensuring Instagram was a platform where the risks of addiction were low and manageable.

336.   For example, when Instagram's Head of Policy learned about the effort to remove the Time Spent tool, she expressed fear that removing the tool would strip Meta of its "biggest proof point" on "tech addiction/problematic use" with "the most positive sentiment from our mental health stakeholders." She wrote: "there's no product work we've done in the last four years that comes close and we wouldn't have the credibility we now have in the social comparison/mental health parent space had we not launched this." She advocated that the Time Spent tool remain in place, despite its inaccuracy.

337.   Meta's effort to maintain its "credibility… in the social

comparison/mental health parent space" continued well into 2020, as users spent more time on Meta's platforms during the COVID-19. For example, in July of 2020, Meta's Product Marketing and Communications teams told colleagues that Meta should not remove the inaccurate Time Spent tool because:

a) "[Meta] just deprioritized the mental health team, so no new or upcoming [mental health-promoting] features to point to here";

b) "[Facebook] launched their v2 time spent tool on iOS in Q2 (Android coming in Q3) and got decent press around the re-launch"; and

c) "Upcoming moments make the market environment sensitive in this area (suicide prevention day (sept), world mental health day (oct)) and there is concern that back-to-school will spark new issues in market perception due to the majority being online/remote learning so time spent online will likely be top-of-mind for many."

338.   Ultimately, Meta preferred to maintain the façade because the truth—that Meta's Time Spent tool was not providing a meaningful, accurate mechanism to help Instagram users (and their parents and guardians) combat or reduce compulsive and excessive Instagram use—would undermine public "sentiment" regarding Meta, and therefore undermine Meta's business interests.

339.   In the words of one Meta employee who originally advocated for the removal of the inaccurate tool: "I don't think we can touch [the Time Spent tool] for

months, maybe even more. **The regulatory and brand risk from removing our only addiction-related features outweighs . . . the wins around user trust in the data**…."

b) Meta Omitted the Harms Individual Instagram Features Caused Young Users, including the Cosmetic Selfie Filter

340.   Paragraphs 120-162 describe the manner in which individual Instagram features pose health risks to Young Users. Meta failed to publicly disclose these risks.

341.   Likewise, Meta failed to disclose to consumers the meaningful health risks associated with Instagram's "cosmetic" selfie filters.

342.   As context, "cosmetic" selfie filters refer to in-app camera filters that purportedly "beautify" the appearance of the photo-subject's face. They color skin, smooth over skin pores, hide "imperfections," plump up limps, extend eyelashes, brighten eyes, and even alter face shape, including to make a face appear more "skinny."[100]

343.   Generally, as the phrase "cosmetic selfie filter" implies, Instagram users apply "cosmetic" filters in the context of taking and posting pictures of themselves.

344.   By 2017, Meta determined that, to compete with Snapchat, it needed to launch cosmetic filters on Instagram. Specifically, Meta staff concluded that "face filters are viewed as the key differentiator to keep [content creators] using

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[100] *See, e.g., Best Instagram beauty filters in 2022,* Reader's Digest (July 3, 2022), https://www.readersdigest.co.uk/lifestyle/fashion-beauty/best-instagram-beauty-filters-in-2022

Snapchat—in particular very large talent is eager for a simple beauty filter to help them be more comfortable to put their face on camera."

345.   Shortly thereafter, Meta worked to integrate these augmented reality filter effects into Instagram with the "strategic goal" of "see[ing] if [augmented reality] effects can get strong product market fit . . . by tapping into [Instagram's] teens community and cultural moments."

346.   That "strategic goal" was intended to benefit "Instagram, Teens, and Partners" in specific ways. For Instagram's part, integrating augmented reality filter effects would "[i]ncrease [c]amera [e]ngagement in order to drive more sharing" and "**[b]uild a daily behavior by giving [t]eens reasons to check the camera everyday** [sic] though scalable new content."

347.   In other words, Meta predicted that the camera filters would increase teen engagement with Instagram—and, consequently, Meta's profits.

348.   But by 2018, Meta employees were wary that augmented reality filters might harm users—particularly considering, as one employee put it, the "growing body of research that social media may be driving significant increases in rates of anxiety and depression, esp[ecially] among young women."

349.   A Meta employee explained, "[t]his is a hard issue to navigate because I know there is a lot of competitive pressure and a lot of market demand for filters that go much more directly into the beautification space. And if we test any of these things, they will undoubtedly perform well. But just because people like and want something in the short term doesn't mean it's healthy for them."

350. Consequently, in October 2018, Meta commissioned "a researcher and licensed psychologist at Duke who specializes in eating disorders and body image issues among adolescents and adults" to undertake a literature review titled "Consequences and Implications of Selfie Manipulation on Well-Being."

351. Meta's commissioned literature review regarding the mental health impacts of selfie manipulation found that:

    a) "Social acceptance and belongingness were at one point central to human survival. This fundamental need to belong motivates our efforts to selectively present or modify ourselves during social interactions was a way to increase our worth and attractiveness to others…. Social comparison can be adaptive… It also provides us with a multitude of ways to feel 'not good enough' and cause profound suffering (e.g., depression, low self-esteem, anxiety, eating disorders."

    b) "[F]indings to date suggest [that selfie manipulation] exacerbates risk and maintenance of several mental health concerns including body dissatisfaction, eating disorders and body dysmorphic disorder cross-culturally."

    c) "Research indicates that young girls believe manipulated photos of peers are realistic and experience increases in body dissatisfaction after being exposed to edited selfies."

    d) "Whether adolescents and young women are from Asia,

America or Australia, studies indicate they are all engaging in photo-editing to achieve unachievable beauty standards in response to continuous feedback back that they, as they are, are not 'good enough'.… This is turn only perpetuates and exacerbates the risk for body dissatisfaction, eating disorder behaviors, depression and anxiety across the globe."

e) "An analysis of the costs and benefits of editing selfies and viewing manipulated photos indicate the **risks far outweigh the benefits**."

352. Nevertheless, Meta's decision-makers implemented cosmetic selfie filters on Instagram—and did so without publicly disclosing the related mental health risks.

353. In mid-October 2019, Meta received sharp public rebuke from press and mental health experts for implementing these particular features. These constituencies observed that certain selfie filters available on the Instagram platform promoted plastic surgery, raising serious mental health concerns.

354. Internally, Meta employees referred to this as a "PR fire" of "negative press coverage, questions from regulators, and growing concern from experts."

355. In response to that public pressure—and roughly one year after receiving unequivocal warning from the psychologist Meta commissioned to conduct the above-referenced literature review—Meta installed a set of *interim* policies banning augmented reality filters that explicitly promoted cosmetic plastic surgery.

356.   After installing these interim policies, Meta devoted substantial consideration to what its long-term position regarding these augmented filters should be.

357.   For example, employees consulted "[i]ndependent experts… from around the world" to study the issue. According to a subsequent internal Meta presentation, those experts "generally agree that Cosmetic Surgery Effects raise significant concerns related to mental health and wellbeing, especially for teenage girls." The presentation recommended "continuing the ban and erring on the side of protecting users from potential mental health impacts."

358.   In November 2019, Meta employees formally submitted a long-term policy proposal to the Company's decision-makers. It recommended that the Company should "[r]eject cosmetic effects that change the user's facial structure in a way that's only achievable by cosmetic surgery for the purposes of beautification (in a way that cannot be achieved by makeup)." The proposal clarified, "[t]his *does not apply* to effects that change a user's facial structure for the purpose of turning the user into a character or animal."

359.   But Meta put business first.

360.   For example, on November 14, 2019, Andrew Bosworth—then, Meta's VP of Augmented Reality and Virtual Reality—opposed the policy proposal. He stated: "I agree filters that encourage plastic surgery (as the one on [Instagram that caused the October 2019 'PR fire']) are too far but . . . I worry we are taking too aggressive a stance."

361. Bosworth continued, "I… find the research compelling. However I worry if we are too severe in denying users something for which they have demand[ed] then all we will do in practice is move them to other apps[101] which aren't likely to be as restrained."

362. A day later, Instagram's Head of Public Policy questioned Bosworth's perspective. She noted that the "strong recommendation" to "disallow[] effects that mimic plastic surgery" was made after consulting with Meta's Communications, Marketing, and Policy Teams—as well as engagement "with nearly 20 outside experts and academics."

363. Instagram's Head of Public Policy stated, "**we're talking about actively encouraging young girls into body dysmorphia… the outside academics and experts consulted were nearly unanimous on the harm here**."

364. Two days later, a second Meta employee likewise challenged Bosworth's viewpoint: "[T]he argument that this decision [to prohibit cosmetic surgery selfie filters] might move people into other apps doesn't carry weight with me [i]f it means we're not setting a good example/being a good steward for young people."

365. On March 30, 2020, Sandberg also expressed support for maintaining Meta's ban on cosmetic surgery effect filters: "I really hope we can keep the ban

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[101] Of note, in September 2019, Google contacted Meta asking to work together to mitigate "over-beautification" of selfie camera filters, but Meta "declined to engage" with Google's overture.

since we already have it… Let's not break something that is not broken."

366.   Shortly thereafter, the question of "whether [Meta] should continue, modify, or lift the temporary ban on Cosmetic Surgery [augmented reality] Effects" was elevated to Zuckerberg.

367.   On May 8, 2020, notwithstanding his fellow executives' and senior employees' "strong recommendation" based on a chorus of aligned experts, Zuckerberg lifted Meta's ban on cosmetic surgery filters, putting them into play.

368.   Later that week, a senior Meta employee memorialized her disagreement with Zuckerberg's decision, stating "I… just [want to] say for the record that I don't think it's the right call given the risks…. I just hope that years from now we will look back and feel good about the decision we made here…."

369.   Nearly a year later, Meta employees were still not "feeling good" about the Company's decision to push forward with these effects. Reacting to an article that referred to social media's widespread use of augmented reality filters as "a mass experiment on girls and young women," a Meta employee remarked, "[t]his makes me so sad to read. Especially knowing how hard we fought to prevent these on [Instagram]."

370.   Meta's cosmetic selfie filters remain accessible to Young People on Instagram to this day. And, to date, Meta has never publicly disclosed its internal findings that these particular filters and effects are harmful to Young Users—and particularly young women—leading consumers to believe that Instagram is safer than it is.

371. Individually and in the aggregate, the above-referenced misrepresentations and omissions were likely to have affected, and are likely to be affecting, consumers' decisions to use Instagram.

IV. VIOLATIONS OF THE LAW

COUNT ONE
Unfair Acts and Practices in Violation of 9 V.S.A. § 2453

372. The State realleges and incorporates by reference each of the allegations contained in all paragraphs of this Complaint as though fully alleged herein.

373. Defendants have engaged in and are continuing to engage in unfair acts and practices in commerce, in violation of the Vermont Consumer Protection Act, 9 V.S.A. § 2453(a), which are immoral, unethical, oppressive or unscrupulous; or cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or to competition.

374. Defendants' unfair acts include:

a) Designing and maintaining Instagram such that it causes Young People to use Instagram compulsively and excessively;

b) Designing and maintaining Instagram in such a manner despite that, as Meta internally found, Young People are harmed by compulsive and excessive Instagram use;

c) Designing and maintaining Instagram in such a manner despite that, as Meta internally found, Instagram exposes Young Users to harmful content and harmful experiences, aside from

compulsive and excessive platform use;

d) Misrepresenting to consumers the extent to which Instagram causes compulsive and excessive platform use; the extent to which such use is harmful to Young Users; and the extent to which, beyond causing compulsive and excessive platform use, Instagram exposes Young Users to harmful content and harmful experiences;

e) Misrepresenting to consumers the extent to which Instagram's features are individually harmful to Young Users;

f) Failing to disclose to consumers the extent to which Instagram is designed to cause Young Users to use Instagram compulsively and excessively and the extent to which Instagram in fact causes Young Users to use Instagram compulsively and excessively;

g) Failing to disclose to consumers the extent to which compulsive and excessive Instagram usage is harmful to Young Users, and the extent to which, beyond causing compulsive platform usage, Instagram exposes Young Users to harmful content and harmful experiences otherwise;

h) Failing to disclose to consumers the extent to which Instagram's features are individually harmful to Young Users; and

i) Contrary to Instagram's Terms, failing to verify Instagram users'

age upon account creation and thereby exposing youth under the age of 13 to Instagram, despite that, as Meta internally found, Instagram causes Young Users compulsive and excessive platform use that is harmful and exposes Young Users to harmful content and harmful experiences otherwise.

COUNT TWO
Deceptive Acts and Practices in Violation of 9 V.S.A. § 2453

375.   The State realleges and incorporates by reference each of the allegations contained in all paragraphs of this Complaint as though fully alleged herein.

376.   Defendants engaged in and are continuing to engage in deceptive acts and practices in commerce, in violation of the Vermont Consumer Protection Act, 9 V.S.A. § 2453(a), by making material misrepresentations that are likely to deceive a reasonable consumer. The meaning ascribed to Defendant's claims herein is reasonable given the nature of those claims.

377.   Defendant's deceptive acts include making materially false or misleading omissions and statements regarding:

    a) The extent to which Instagram features are designed to maximize Young Users' time spent on, and engagement with, Instagram;

    b) The extent to which Instagram causes Young Users to use the platform compulsively and excessively;

    c) The extent to which Young Users' compulsive and excessive use of Instagram harms Young Users;

d) The extent to which Instagram exposes Young Users to harmful content;

e) The extent to which Instagram exposes Young Users to harmful experiences aside from compulsive and excessive platform use, including negative social comparison, bullying, and unwanted sexual contact;

f) The extent to which Instagram's features, like cosmetic selfie filters, are individually harmful to Young Users;

g) The extent to which Instagram's "well-being"-related initiatives and features, like the "Time Spent Tool," are dysfunctional and/or ineffectual; and

h) The extent to which Young Users' Instagram accounts are "control" accounts for a Meta study and therefore, by design, afforded even fewer protections against harmful content and harmful experiences than a typical Instagram account.

378. These representations and omissions were likely to mislead consumers, affecting their decisions regarding the use of Instagram. The meaning Plaintiff ascribes to Defendants' misrepresentations herein is reasonable, given the nature thereof.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff State of Vermont respectfully request the Court enter judgment in its favor and the following relief:

1.	A judgment determining that Defendants have violated the Vermont Consumer Protection Act;

2.	A permanent injunction prohibiting Defendant from engaging in the unfair and deceptive acts and practices identified herein;

3.	A judgment requiring Defendant to disgorge all profits obtained as a result of their violations of the Vermont Consumer Protection Act;

4.	Civil penalties of $10,000 for each violation of the Vermont Consumer Protection Act;

5.	A finding that each instance in which a Young Person accessed the Instagram platform in the State of Vermont represents a distinct violation of the Vermont Consumer Protection Act;

6.	The award of investigative and litigation costs and fees to the State of Vermont; and

7.	Such other and further relief as the Court may deem just and appropriate.

Dated at Montpelier, Vermont this 24th day of October, 2023.

Respectfully submitted,

CHARITY R. CLARK
Attorney General

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Jamie D. Renner
Jill S. Abrams
Rizlaine M. Sabiani
Assistant Attorneys General
Office of the Attorney General
Consumer Protection Unit
109 State Street
Montpelier, Vermont 05609
Phone: (802) 828-3171
Jamie.renner@vermont.gov
Jill.abrams@vermont.gov
Rizlaine.sabiani@vermont.gov

Attorneys for Plaintiff, State of Vermont