UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

STATE OF TEXAS By Attorney General Ken Paxton	§ §	
STATE OF ALASKA By Attorney General Treg R. Taylor	§ §	Civil Action No.: 4:20-CV-957-SDJ
STATE OF ARKANSAS By Attorney General Leslie Rutledge	§ §	**JURY TRIAL DEMANDED**
STATE OF FLORIDA By Attorney General Ashley Moody	§ §	
STATE OF IDAHO By Attorney General Lawrence G. Wasden	§ §	
STATE OF INDIANA By Attorney General Todd Rokita	§ §	
COMMONWEALTH OF KENTUCKY By Attorney General Daniel Cameron	§ §	
STATE OF MISSISSIPPI By Attorney General Lynn Fitch	§ §	
STATE OF MISSOURI By Attorney General Eric Schmitt	§ §	
STATE OF MONTANA By Attorney General Austin Knudsen	§ §	
STATE OF NEVADA By Attorney General Aaron D. Ford	§ §	
STATE OF NORTH DAKOTA By Attorney General Wayne Stenehjem	§ §	
COMMONWEALTH OF PUERTO RICO By Attorney General Domingo Emanuelli-Hernández	§ §	
STATE OF SOUTH DAKOTA By Attorney General Jason R. Ravnsborg	§ §	

	§
and	§
	§
STATE OF UTAH	§
By Attorney General Sean D. Reyes	§
	§
Plaintiffs,	§
	§
vs.	§
	§
GOOGLE LLC,	§
	§
Defendant.	§

AMENDED COMPLAINT

TABLE OF CONTENTS

1. The States of Texas, Alaska, Arkansas, Florida, Idaho, Indiana, Mississippi, Missouri, Montana, Nevada, North Dakota, South Dakota, Utah, and the Commonwealths of Kentucky and Puerto Rico, by and through their Attorneys General (collectively, the "Plaintiff States"), in the above-styled action, file their first Amended Complaint ("Amended Complaint" or "Complaint") against Google LLC ("Google") under federal and state antitrust laws and deceptive trade practices laws and allege as follows:

I. NATURE OF THE CASE

2. The halcyon days of Google's youth are a distant memory. Over twenty years ago, two college students founded a company that forever changed the way that people search the internet. Since then, Google has expanded its business far beyond search and dropped its famous "don't be evil" motto. Its business practices reflect that change. As internal Google documents reveal, Google sought to kill competition and has done so through an array of exclusionary tactics, including an unlawful agreement with Facebook, its largest potential competitive threat, to manipulate advertising auctions. The Supreme Court has warned that there are such things as antitrust evils. This litigation will establish that Google is guilty of such antitrust evils, and it seeks to ensure that Google won't be evil anymore.

3. Google is an advertising company that makes billions of dollars a year by deceptively using individuals' personal information to engage in targeted digital advertising. Google has extended its reach from search advertising to dominate the online advertising landscape for image-based ads on the web, called "display ads." In its complexity, the market for display ads resembles the most complicated financial markets; publishers and advertisers trade display inventory through brokers and on electronic exchanges and networks at lightning speed. As of 2020, Google is a company standing at the apex of power in media and advertising, generating over $161 billion annually with staggering profit margins, almost all from advertising.

4. Google's advertising apparatus extends to the new ad exchanges and brokers through which display ads trade. Indeed, nearly all of today's online publishers (be they large or small) depend on one company—Google—as their middleman to sell their online display ad space in "ad exchanges," i.e., the centralized electronic trading venues where display ads are bought and sold. Conversely, nearly every consumer goods company, e-commerce entity, and small business now depends on Google as their respective middleman for purchasing display ads from exchanges in order to market their goods and services to consumers. In addition to representing both the buyers and the sellers of online display advertising, Google also operates the largest exchange, AdX. In this electronically traded market, Google is pitcher, batter, and umpire, all at the same time.

5. The scale of online display advertising markets in the United States is extraordinary. Google operates the largest electronic trading market in existence. Whereas financial exchanges such as the NYSE and NASDAQ match millions of trades to thousands of company symbols daily, Google's exchange processes about [redacted] online ad spaces each day. In Google's words, [redacted] At the same time, Google owns the largest buy-side and sell-side brokers. As one senior Google employee admitted, [redacted] Or more accurately, the analogy would be if [redacted] were a monopoly financial broker and owned the [redacted] which was a monopoly stock exchange.

6. Google, however, did not accrue its monopoly power through excellence in the marketplace or innovations in its services alone. Google's internal documents belie the public image of brainy Google engineers having fun at their sunny Mountain View campus while trying to make the world a better place. Rather, to cement its dominance across online display markets,

Google has repeatedly and brazenly violated antitrust and consumer protection laws. Its *modus operandi* is to monopolize and misrepresent. Google uses its powerful position on every side of online display markets to unlawfully exclude competition. It also deceptively claims that "we'll never sell your personal information to anyone," but its *entire* business model centers on targeted advertising—the purchase and sale of advertisements targeted to individual users based on their personal information. From its earliest days, Google's carefully curated public reputation of "don't be evil" has enabled it to act with wide latitude. That latitude is enhanced by the extreme opacity and complexity of digital advertising markets, which are at least as complex as the most sophisticated financial markets in the world.

7. The fundamental change for Google dates back to its 2008 acquisition of DoubleClick, the leading provider of the ad server tools that online publishers, including newspapers and other media companies, use to sell their graphical display advertising inventory on exchanges. After acquiring the leading middleman between publishers and exchanges, Google quickly monopolized the publisher ad server and exchange markets by engaging in unlawful tactics. For instance, Google started requiring publishers to license Google's ad server and to transact through Google's exchange in order to do business with those in another market in which Google possessed monopoly power: the one million plus advertisers who used Google as their middleman for buying inventory. So Google was able to demand that it represent the buy-side (i.e., advertisers), where it extracted one fee, as well as the sell-side (i.e., publishers), where it extracted a second fee, and it was also able to force transactions to clear in its exchange, where it extracted a third, even larger, fee.

8. Within a few short years of executing this unlawful tactic, Google successfully monopolized the publisher ad server market and grew its ad exchange to number one, despite

having entered those two markets much later than the competition. With a newfound hold on publisher ad servers, Google then proceeded to further foreclose publishers' ability to trade in non-Google exchanges. Google imposed a one-exchange-rule on publishers, barring them from routing inventory to more than one exchange at a time. At the same time, Google's ad server blocked competition from non-Google exchanges through a program called Dynamic Allocation and falsely told publishers that Dynamic Allocation maximized their revenue. As internal documents reveal, however, Google's real scheme with Dynamic Allocation was to permit its exchange to [redacted] One industry publication put it succinctly: "[t]he lack of competition was costing pub[s] cold hard cash."

9. In an attempt to reinject competition in the exchange market, a new innovation called header bidding was devised. Publishers could use header bidding to simultaneously route their ad inventory to multiple exchanges in order to solicit the highest bid for the inventory. At first, header bidding promised to bypass Google's stranglehold on the exchange market. By 2016, about 70 percent of major online publishers in the United States had adopted the innovation. Advertisers also migrated to header bidding in droves because it helped them to purchase from exchanges offering the same inventory for the lowest price.

10. Google quickly realized that this innovation substantially threatened its exchange's ability to demand a very large—[redacted] percent—cut on all advertising transactions. Header bidding also undermined Google's ability to trade on inside and non-public information from one side of the market to advantage itself on the other—a practice that in other markets would be considered insider trading or front running. Google deceptively [redacted] But privately, Google's internal

communications make clear Google viewed header bidding's promotion of genuine competition as a major threat. In Google's own words, header bidding was an [redacted]

11. Google responded to this threat through a series of anticompetitive tactics. First, Google appeared to cede ground and allow publishers using its ad server to route their inventory to more than one exchange at a time. However, Google secretly made its own exchange win, even when another exchange submitted a higher bid. Google's codename for this program was [redacted]—a reference to Star Wars. And as one Google employee explained internally, Google deliberately designed [redacted] to avoid competition, and [redacted] consequently harmed publishers. In Google's words, the [redacted] program [redacted] Next, Google tried to come up with other creative ways to shut out competition from exchanges in header bidding. During one internal debate, a Google employee proposed a [redacted]. A second employee captured Google's ultimate aim of destroying header bidding altogether, noting in response that [redacted] Google wanted to be more aggressive.

12. Google grew increasingly brazen in its efforts to undermine competition. In March 2017, Google's largest Big Tech rival, Facebook, announced that it would throw its weight behind header bidding. Like Google, Facebook brought millions of advertisers on board to reach the users on its social network. In light of Facebook's deep knowledge of its users, Facebook could use header bidding to operate an electronic marketplace for online ads in competition with Google. Facebook's marketplace for online ads is known as "Facebook Audience Network" or FAN. Google understood the severity of the threat to its position if Facebook were to enter the market and support header bidding. To diffuse this threat, Google made overtures to Facebook. Internal

Facebook communications reveal that [redacted]

13. Any collaboration between two competitors of such magnitude should have set off the loudest alarm bells in terms of antitrust compliance. Apparently, it did not. Internally, Google documented that if it could not [redacted] Indeed, Facebook understood Google's rationale as a monopolist very well. An internal Facebook communication at the highest level reveals that Facebook's header bidding announcement was part of a pre-planned long-term strategy—an [redacted]—to draw Google in. Facebook decided to dangle the threat of competition in Google's face so it could then cut a deal to manipulate publishers' auctions in its favor.

14. In the end, Facebook curtailed its involvement with header bidding in return for Google giving Facebook information, speed, and other advantages in the [redacted] Google runs for publishers' mobile app advertising inventory each month in the United States. As part of this agreement, Google and Facebook work together to identify users using Apple products. The parties also agreed up front on [redacted] for how often Facebook would [redacted] publishers' auctions—literally manipulating the auction with [redacted] for how often Facebook would bid and win. In these auctions, Facebook and Google compete head-to-head as bidders. Google's internal codename for this agreement, signed at the highest-level, was [redacted]—a twist on the Star Wars reference.

15. Above and beyond its unlawful agreement with Facebook, Google employed a number of other anticompetitive tactics to shut down competition from header bidding. Google deceived non-Google exchanges into bidding through Google instead of header bidding, telling them it would stop front running their orders when in fact it would not. Google employees also deceived

publishers, telling one major online publisher that it should cut off a rival exchange in header bidding because of a strain on its servers. After this misrepresentation was uncovered, Google employees discussed playing a trick—a [redacted]"—on the industry to nonetheless get publishers to cut off exchanges in header bidding. Google wanted to [redacted] Google then proceeded to cripple publishers' ability to use header bidding in a variety of ways.

16. Having reached its monopoly position, Google now uses its immense market power to extract a very high tax of [redacted] percent of the ad dollars otherwise flowing to the countless online publishers and content producers such as online newspapers, cooking websites, and blogs who survive by selling advertisements on their websites and apps. These costs invariably are passed on to the advertisers themselves and then to American consumers. The monopoly tax Google imposes on American businesses—advertisers like clothing brands, restaurants, and realtors—is a tax that is ultimately borne by American consumers through higher prices and lower quality on the goods, services, and information those businesses provide. Every American suffers when Google imposes its monopoly pricing on the sale of targeted advertising.

17. From its earliest days, the internet's fundamental tenet has been its decentralization: there is no controlling node, no single point of failure, and no central authority granting permission to offer or access online content. Online advertising is uniquely positioned to provide content to users at a massive scale. However, the open internet is now threatened by a single company. Google has become the controlling node and the central authority for online advertising, which serves as the primary currency enabling a free and open internet.

18. Google's current dominance is also merely a preview of its future plans. Google's latest announcements with respect to its Chrome browser and privacy will further its longstanding plan

to create a "walled garden"—a closed ecosystem—out of the otherwise-open internet. At the same time, Google uses "privacy" as a pretext to conceal its true motives.

19. In sum, Google's anticompetitive conduct has adversely and substantially affected the Plaintiff States' economies, as well as the general welfare in the Plaintiff States. Google's illegal conduct has reduced competition, raised prices, reduced quality, and reduced output in each of the Plaintiff States. This conduct has harmed the Plaintiff States' respective economies by depriving the Plaintiff States and the persons within each Plaintiff State of the benefits of competition.

20. As a result of Google's deceptive trade practices and anticompetitive conduct, including its unlawful agreement with Facebook, Google has violated and continues to violate Sections 1 and 2 of the Sherman Act, 15 U.S.C. §§ 1, 2, as well as state antitrust and consumer protections laws. Plaintiff States bring this action to remove the veil of Google's secret practices and put an end to Google's anticompetitive abuses of its monopoly power in online advertising markets. Plaintiff States seek to restore free and fair competition to these markets and to secure structural, behavioral, and monetary relief to prevent Google from ever again engaging in deceptive trade practices and abusing its monopoly power to foreclose competition and harm consumers.

II. PARTIES

21. Plaintiff States, by and through their respective Attorneys General, bring this action in their respective sovereign capacities and as *parens patriae* on behalf of the citizens, general welfare, and economy of their respective States under their statutory, equitable, or common law powers, and pursuant to Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 & 26.

22. Google is a limited liability company organized and existing under the laws of the State of Delaware, with its principal place of business in Mountain View, California. Google is an online advertising technology company providing internet-related products, including various online

advertising technologies, directly and through subsidiaries and business units it owns and controls. Google is owned by Alphabet Inc., a publicly traded company incorporated and existing under the laws of the State of Delaware and headquartered in Mountain View, California.

III. JURISDICTION

23. The Court has jurisdiction over this action under Sections 1 and 2 of the Sherman Act, 15 U.S.C. §§ 1 & 2; Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15c & 26; and under 28 U.S.C. §§ 1331 and 1337.

24. In addition to pleading violations of federal antitrust law, the Plaintiff States allege violations of state antitrust and consumer protection laws and seek civil penalties, restitution, disgorgement, damages, equitable relief, and other relief under those state laws. All claims under federal and state law are based upon a common nucleus of operative facts, and the entire action commenced by this Complaint constitutes a single case that would ordinarily be tried in one judicial proceeding.

25. This Court has jurisdiction over the non-federal claims under 28 U.S.C. § 1367(a), as well as under principles of pendent jurisdiction. Pendent jurisdiction will avoid unnecessary duplication and multiplicity of actions and should be exercised in the interests of judicial economy, convenience, and fairness.

26. This Court may exercise personal jurisdiction over Google because Google conducts business in this District. Google has established sufficient contacts in this District such that personal jurisdiction is appropriate. Google sells the products at issue throughout the United States and across state lines. Google is engaged in, and its activities substantially affect, interstate trade and commerce. Google provides a range of products and services that are marketed, distributed, and offered to consumers throughout the United States, in the Plaintiff States, across state lines, and internationally.

IV. VENUE

27. Venue is proper in this District under Section 12 of the Clayton Act, 15 U.S.C. § 22, and 28 U.S.C. § 1391. A substantial part of the events or omissions giving rise to the Plaintiff States' claims occurred in this District. Google transacts business and is found within this District.

V. INDUSTRY BACKGROUND

28. The internet revolutionized the way people consume content, and along with it, the types of advertisements that companies can purchase to reach consumers. Image-based ads on the internet (called "display ads"), as well as audio and video ads in the online world, have largely supplanted their traditional print, radio, and television counterparts. In addition, the internet ushered in completely new advertising formats, including targeted text-based ads on search engines, shareable ads on social media, and specialized ads inside mobile phone applications.

29. For online publishers and advertisers alike, the different online advertising formats are not interchangeable. Online media companies that operate websites and mobile applications ("online publishers") are necessarily restricted in the types of ad formats they can sell. A news website, for example, can generally sell display ads alongside its news articles but cannot generally sell search or audio ads to monetize the same content. At the same time, advertisers on the other end of the transaction purchase one format or another to serve their different goals. For instance, advertisers usually purchase search ads to reach consumers actively looking to make a purchase, whereas they typically purchase display ads to increase brand awareness.

30. In addition to introducing new advertising formats, the internet changed how online publishers sell their advertising inventory. Online publishers sell their inventory to advertisers either directly or indirectly through ad marketplaces. The "direct" sales method refers to campaigns that the publisher itself sells directly to advertisers, including those campaigns sold by the publisher's internal sales staff and through the publisher's private auctions. For example, *USA*

Today, as an online publisher, could negotiate directly with Disney, as an advertiser, to display Disney ads atop the *USA Today* homepage one million times in a particular month. But a publisher cannot always predict how many of its ad spaces will be available to sell directly to advertisers because its inventory depends on how many users actually visit the publisher's website. Publishers can therefore find themselves with unsold surplus inventory, and this was the original impetus for the development of a specialized "indirect" distribution channel whereby publishers sell their ad inventory *indirectly* to advertisers.

31. "Indirect" sales occur through centralized electronic trading venues called "ad exchanges" and through "networks" of publishers and advertisers. Publishers selling this way permit ad exchanges to auction off some or all of their inventory to advertisers in real time (and in return, the ad exchange will retain a portion of proceeds).

32. Whether online publishers sell their web display inventory directly or indirectly, the advertisements can target specific users in real time. When a user views a website or mobile app, advertisers purchase the individual spaces for ads ("impressions") targeted to *that* user.

33. Because publishers can target ads to specific users in real time, online publishers manage highly varied, or "heterogeneous," inventory. One might think that a website with three pages and three different ad slots (i.e., impressions) per page would have a total of nine unique ad units to sell. But because online ads are targeted at individual users, the same site with 1,000,000 readers actually has 9,000,000 different ad units to sell: each of the website's impressions targeted to each unique reader. Consequently, an online publisher's inventory is akin to the inventory of seats at a baseball stadium: no two pieces of inventory are the exact same and each is valued by its particulars. In online advertising, this includes the particulars of each person viewing each ad.

34. Google likes to claim that it will "never sell your personal information to anyone," with Google CEO Sundar Pichai deceptively claiming that such a policy is "unequivocal." But Google leverages intimate user data and personal information to broker billions of daily online ad impressions between publishers and advertisers that target individual users based almost entirely on their personal information. Internal documents confirm that Google knows its users are deceived by its misrepresentations, even as it reaps billions from ads that use personal data to target those users. In Orwellian terms, it's a beautiful thing for Google, the destruction of words like "sell" and "personal."

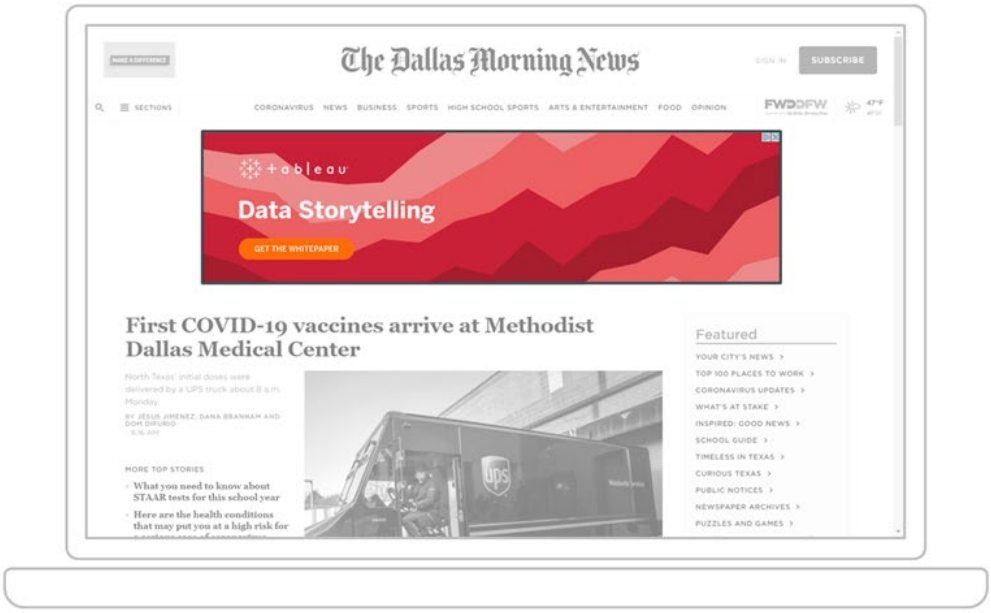
A. Online Display Advertising Markets

35. Online publishers and advertisers depend on several different, distinct, and non-interchangeable products to sell their web display inventory. These products include: (1) the ad server, which acts as the publisher's inventory management system and helps the publisher sell its inventory, (2) the marketplaces that match buyers and sellers of display ads (exchanges and networks, separately), and (3) the ad buying tools that advertisers must use as their middleman to buy display inventory from exchanges. These products conduct the complex tasks associated with pricing, clearing, executing, and settling billions of display impressions every month in the United States. Google possesses monopoly power in each of these distinct markets. Imagine if the financial markets are controlled by one monopoly company, say Goldman Sachs, and that company then owns the NYSE, which is the largest financial exchange, that then trades on that exchange to advantage itself, eliminate competition, and charge a monopoly tax on billions of daily transactions. Obviously, no free, fair and functioning market could operate that way. Yet, that is today's world of online display advertising.

1. Publishers' Inventory Management Systems: Ad Servers

36. Large publishers such as *CBS*, *Time*, *ESPN*, *Weather.com*, and *NPR* depend on a sophisticated inventory management system called an ad server to holistically manage their display inventory on the web. Ad servers keep track of publishers' heterogeneous ad inventory and help them sell that inventory both directly and indirectly through exchanges, with the stated goal of maximizing their advertising revenue. Publishers typically use a single ad server to manage all of their web display inventory; using multiple ad servers would substantially frustrate a publisher's ability to effectively optimize management of their inventory and maximize revenue.

FIGURE 1: Display ad space on an online publisher's website



37. When using an ad server, online publishers necessarily relinquish control over inventory management and revenue maximization. While a publisher can adjust some of the ways their ad server manages and sells inventory, an ad server's features and limitations ultimately limit the publisher's control. Publishers also rely on the specialization of their ad server to help them navigate the complexities of electronic trading: ad server account analysts individually advise

online publishers on how to adjust the ad server's parameters to increase revenue. Put simply, in a competitive market, ad servers advance publishers' interests.

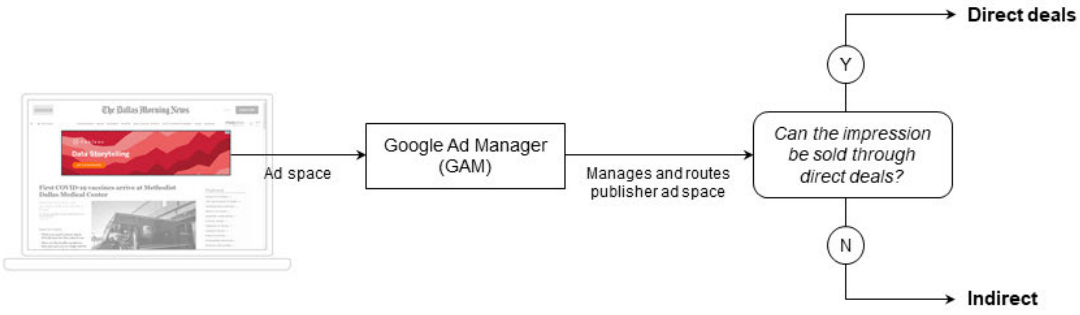
38. To holistically manage a publisher's web display inventory, the ad server performs three internal critical tasks related to selling ad space. First, the ad server identifies the users visiting the publisher's webpage in order to manage ad inventory and maximize yield. When a user visits a webpage, the ad server—on behalf of and with the permission of the publisher—identifies the user through identification technology facilitated by the user's web browser (e.g., Chrome or Safari) and/or mobile device (e.g., Android or iOS). To keep track of individual users, the ad server assigns each user a unique user ID (e.g., 5g77yuu3bjNH). By essentially "tagging" users with a unique user ID, an ad server helps publishers, ad exchanges, and advertisers know the identity and characteristics of each particular user associated with a publisher's ad space. For example, an advertiser can correlate a user's pseudonymous ID (e.g., 5g77yuu3bjNH) with the user's identity (e.g., John Connor) and use that identity "link" to look up additional information about the user (e.g., John Connor lives in Los Angeles, drives Harley-Davidson motorcycles, and wears Oakley sunglasses). This, in turn, allows an advertiser to place a value on the ad space each individual user will see. User IDs are also used for "frequency capping," which limits the number of times a user is shown a particular ad to avoid oversaturating the user. Additionally, user IDs facilitate evaluation of ad campaigns' effectiveness by allowing publishers and advertisers to track whether a user took a subsequent action (e.g., clicking on an ad, signing up for a service, or purchasing a product). This "attribution" is critical for some ad campaign billing models, including cost-per-conversion models whereby advertisers are charged only when users take a specified action.

39. The second critical task ad servers perform is managing how publishers sell ad space *indirectly* through advertising marketplaces such as ad exchanges. Publisher ad servers connect

with multiple marketplaces and let publishers automatically route their inventory into them for sale as the users load publishers' webpages. As the middleman between a publisher and marketplaces (exchanges and networks), the ad server controls how the different marketplaces can access and compete for a publisher's inventory.

40. The third critical task performed by ad servers is routing inventory correctly between a publisher's direct and indirect sales channels. As Google's internal documents show, only a tiny percentage of publishers' ad impressions are considered [redacted] Indeed, publishers generally make almost all ([redacted] percent) of their revenue from just a small portion ([redacted] percent) of their impressions. When a publisher like ESPN sells their most valuable inventory directly to an advertiser like Fanatics.com for premium prices, they rely on their ad server to allocate the impressions targeted to high-value users—e.g., sports fanatics who have a propensity for buying merchandise for their favorite sports team—to those direct deals.

FIGURE 2: How the website's ad server manages and routes ad space



41. Because the ad server sits between a publisher and the publisher's indirect sales channel, the ad server can obstruct competition between the multiple exchanges competing for publishers' impressions in a variety of ways. For example, the ad server might interfere with a publisher's ability to share full information about its impressions with exchanges (e.g., the user

IDs associated with each publisher impression). Alternatively, an ad server might prevent publishers from understanding how their inventory performs in one exchange versus another. Without this transparency of information, a publisher cannot reward a better-performing exchange with more of its business. Transparency fuels competition between marketplaces to maximize value for publishers, and ultimately, for the consumer.

42. Despite the relative complexity of ad servers, prior to Google's entrance into the publisher ad server market, ad servers were "a commodity good." They neutrally routed publishers' inventory to exchanges (thereby helping publishers maximize their inventory yield) and charged a low cost-per-impression rate or monthly subscription fee. Google's conduct substantially changed this market.

43. Now, Google monopolizes the publisher ad server market for display inventory through its product called Google Ad Manager (GAM). Google originally acquired its publisher ad server in 2008 from DoubleClick. In 2011, Google acquired and integrated AdMeld, a yield optimization technology that further helped publishers efficiently route inventory to exchanges and networks. Today, GAM controls over 90 percent of this product market in the United States. Essentially every major website (including, e.g., *USA Today, ESPN, CBS, Time, Walmart, and Weather.com*) uses GAM. GAM, as the middleman between publishers and exchanges, has the power to foreclose competition in the exchange market.

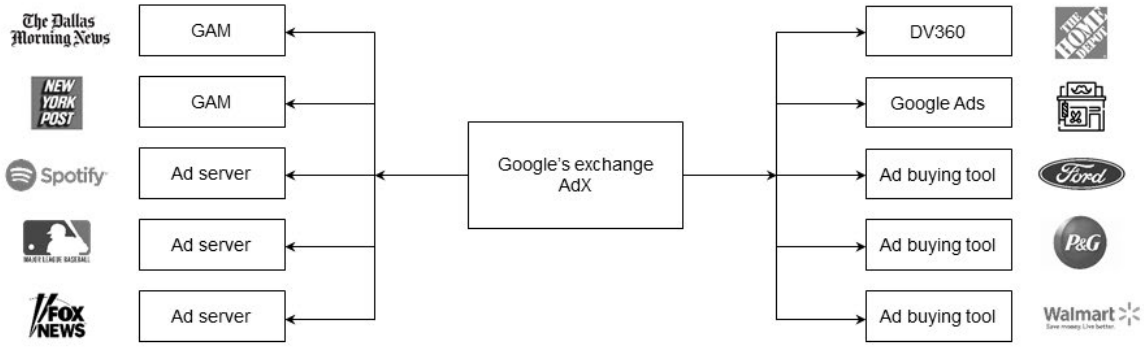
2. Electronic Marketplaces for Display Advertising: Exchanges and Networks

44. The vast majority of online publishers in the United States today sell at least some of their inventory to advertisers indirectly through advertising marketplaces (exchanges and networks). Large publishers like *CNN* and *The Wall Street Journal* predominantly use ad exchanges, whereas smaller publishers like local newspapers and individual blogs typically use ad networks.

i. Display Ad Exchanges

45. Ad exchanges for display ads are real-time auction marketplaces that match multiple buyers and multiple sellers on an impression-by-impression basis. A publisher's ad server can route the publisher's inventory to exchanges in real time as users load webpages. The exchanges then connect with advertisers through their respective middleman (ad buying tools). In other words, the entities that have a "seat" to bid on exchanges are not the actual advertisers (e.g., Ford or a local car dealership), but their respective agents. In addition, exchanges do not bear inventory risk. That is, the ad exchange serves as an intermediary, connecting publishers' inventory with willing buyers in real time.

FIGURE 3: How an exchange transacts with online publishers and advertisers through ad servers and buying tools



46. Ad exchanges are mostly intended for large online publishers. To sell in ad exchanges, online publishers must meet minimum impression or spend requirements. For example, Google's AdX exchange is only open to publishers that have 5 million page views or 10 million impressions per month. These requirements put exchanges out of reach for many small online publishers such as local newspapers and blogs.

47. Google owns and operates the largest display ad exchange in the United States, historically called the Google Ad Exchange or "AdX." Google compares its ad exchange to

financial exchanges like the NYSE and Nasdaq. However, contrary to Google's comparison, AdX is not an open exchange like the NYSE.

48. Ad exchanges charge publishers a share of transaction value, which is currently 5 to 20 percent (or more) of the inventory's clearing price. Google's exchange charges publishers [redacted] percent of exchange clearing prices, which is double to quadruple the prices of some of its nearest exchange competitors. For example, if Google's exchange sells $100,000 worth of a publisher's inventory, Google will extract at least [redacted]. The dramatically higher price (or "take rate") of Google's exchange evidences its substantial market power.

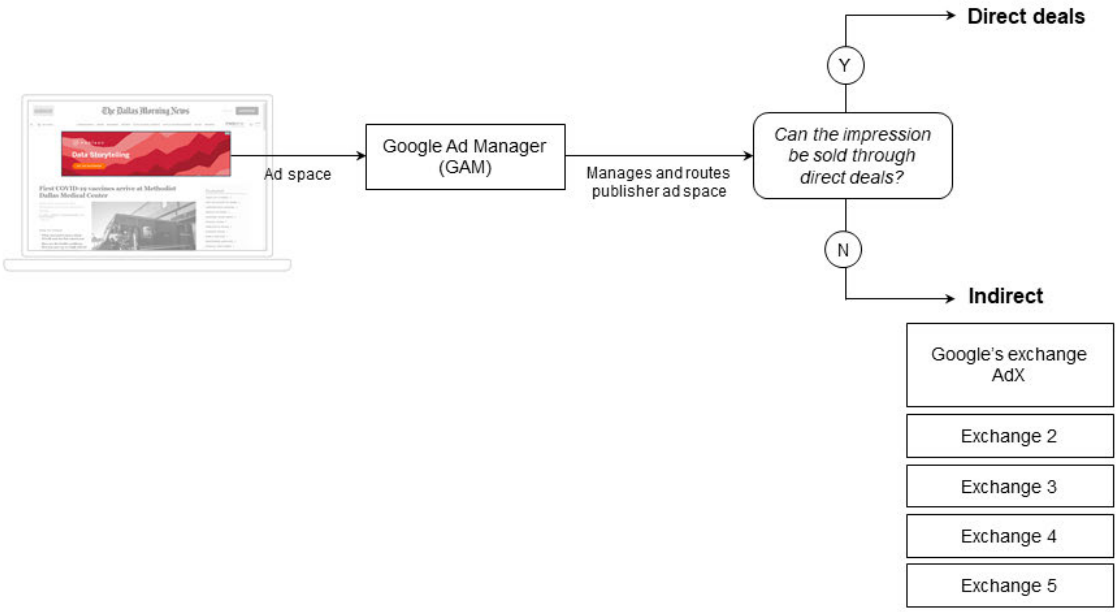
49. Google's exchange fees are also exponentially higher than analogous exchange fees on a stock exchange where, by contrast, fees are low and set by volume instead of transaction value. Imagine if the NYSE charged an individual a fee equivalent to a double-digit percentage of the value of the overall stock trade—e.g., [redacted] as a transaction fee on a $100,000 stock trade. That is how much Google charges on transactions between an online publisher like *ESPN* and an advertiser like Fanatics.

50. Internally, Google concedes that [redacted] As one Google employee frankly conceded, [redacted] like Google's AdX, but should instead be [redacted] As this litigation will make clear, Google can charge these fees for one simple reason: Google uses its monopoly over publishers' ad servers to unlawfully foreclose competition in the exchange market.

51. By controlling publishers' inventory through its ad server and simultaneously operating the largest ad exchange, Google has inherent conflicts of interest between publishers' best interests and its own. Google charges a low cost for acting as publishers' sell-side intermediary but then

makes substantially higher fees when selling those publishers' inventory in its exchange. Accordingly, Google incentivizes itself to steer publishers' inventory towards its exchange, where it can extract [redacted] the rate of some of its nearest exchange competitors.

FIGURE 4: How the ad server routes to many exchanges



ii. Ad Networks for Display and Ad Networks for Mobile In-App Inventory

52. Whereas large online publishers typically sell their inventory through ad exchanges, small online publishers predominantly sell their inventory in marketplaces called "ad networks." Ad networks cater almost exclusively to the needs of smaller and lower-traffic online publishers such as local online newspapers and independent content creators' websites and apps. Like ad exchanges, ad networks match publishers' inventory with their advertisers' demand. But unlike exchanges, networks do not require publishers to meet high monthly minimum impression or spend requirements. Rather, networks obscure prices within auctions, which enables them to capture undisclosed margins; neither the buyers nor sellers will know whether the network takes,

e.g., 20 or 50 percent of matched trades. Moreover, networks often carry inventory risk. That is, they purchase (and then sell) impressions on their own behalf, as opposed to purchasing on behalf of an advertiser or buy-side middleman.

53. In the network market, there are networks for publishers that sell web display inventory, and separately, networks for mobile applications that sell in-app inventory. Google operates the leading web display network, as well as the leading mobile app network.

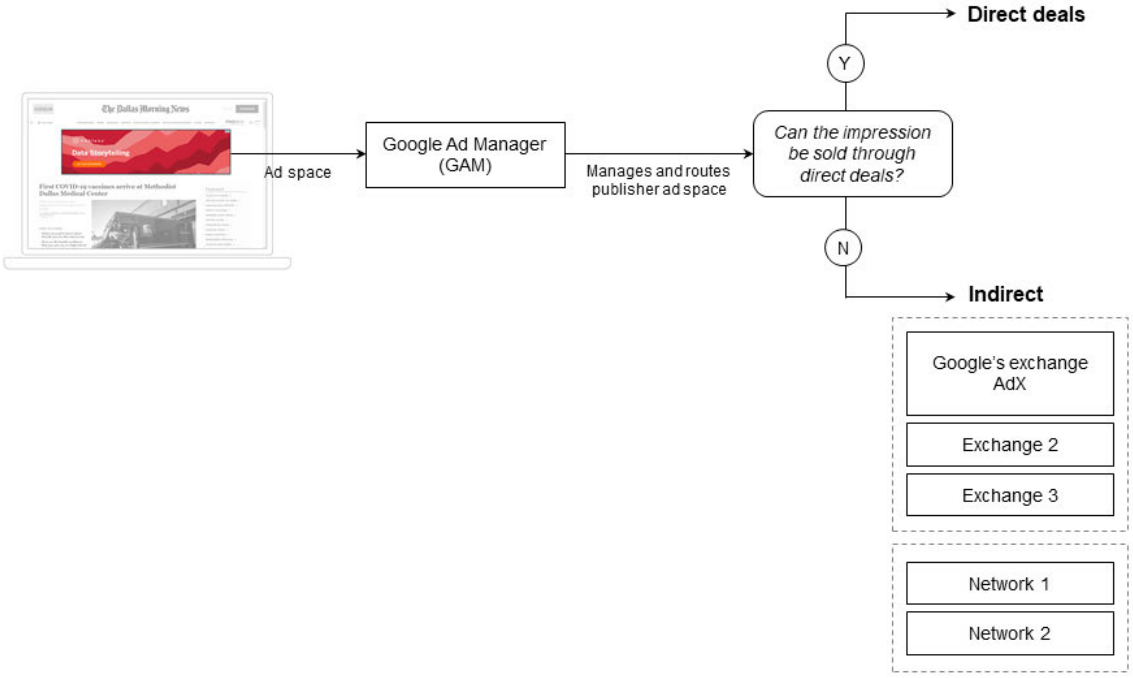
54. Google's display advertising network, known as the Google Display Network ("GDN"), is described by Google as [redacted] GDN operates as a closed marketplace accessible only by advertisers who use one of Google's products to buy publisher ad inventory. Here, Google charges even higher fees—around [redacted] percent of each transaction—to the small publishers and advertisers using GDN than it does to the large players on AdX.

55. Google also owns AdMob, the largest ad network selling mobile app inventory on behalf of mobile app developers such as [redacted] Google's closest competitor in the mobile app network market is Facebook's Audience Network, FAN, although Google internal documents suggest that [redacted] Advertisers can use Facebook's website to purchase ads on Facebook and Instagram, as well as mobile app inventory from third-party apps like Shazam or Huffington Post who sell their inventory via FAN. In the discrete market for mobile app networks competing to sell third-party app publishers' impressions to advertisers, Google and Facebook compete head-to-head.

56. In sum, millions of websites and mobile apps sell their inventory in Google's exchange for display ads and its ad networks for display and mobile in-app ads. As a result, competition on

the buy-side among the middlemen that serve advertisers depends on access to Google's exchange and networks. Google is *the* bottleneck between publishers and advertisers.

FIGURE 5: How Google's ad server controls routing functions to competing exchanges and networks



3. Ad Buying Tools for Large and Small Advertisers

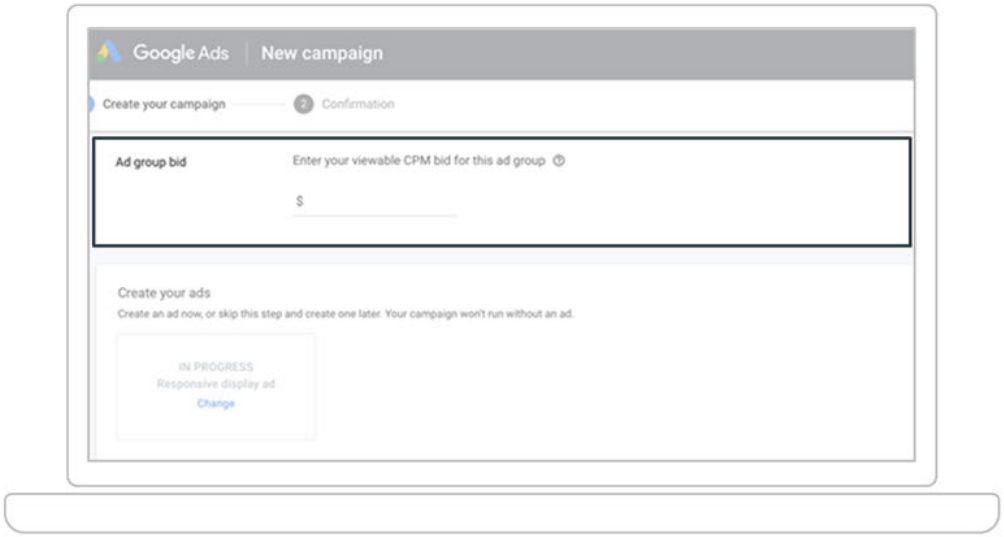
57. Just as publishers rely on ad servers to sell their inventory in ad exchanges, advertisers use specialized middlemen, ad buying tools, to represent their own interests. Large advertisers use ad buying tools called demand-side platforms ("DSPs"), while small businesses use pared-down analogues. Google analogizes these buying tools to "brokerage houses" in financial markets, with small advertisers using a "fund manager to pick stocks for you" and large advertisers "using ETrade to pick stocks yourself."

58. Just as publishers typically use only a single ad server, small advertisers tend to use just one intermediary at a time to optimize buying across multiple exchanges and/or networks. Ad buying tools let advertisers set parameters integral to their purchasing decisions, including details

about the types of users they want to target and the maximum bids they are willing to submit for various types of display ad inventory. On an advertiser's behalf, an ad buying tool uses these parameters to automatically bid on ad space in exchanges and networks in an effort to acquire it at the lowest cost. Some enterprise buying tools, including The Trade Desk, compete by minimizing conflicts of interest and not simultaneously operating an exchange or sell-side ad server.

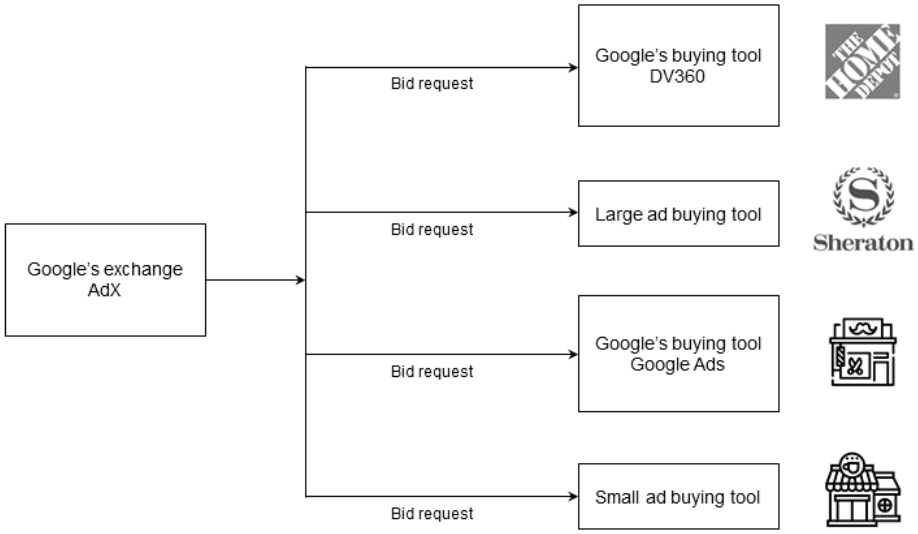
59. Ad buying tools for large advertisers (DSPs) offer robust and complex bidding and trading options ill-suited for smaller and less sophisticated advertisers. In fact, DSPs are so complex that they are frequently not used or managed by the actual advertisers (e.g., Ford), but by the advertisers' specialized ad buying team (e.g., an ad agency or specialized division at an agency called a "trading desk"). The different types of ad buying tools are also sold at different price levels. DSPs usually require high minimum monthly spend commitments, sometimes $10,000 or more, whereas ad buying tools for small advertisers can require just a few dollars to get started. For example, Amazon's DSP requires a monthly commitment of over $35,000, while Google's buying tool for small advertisers (Google Ads) requires no monthly minimum spend.

FIGURE 6: How small advertisers can use the Google Ads buying tool to set their bids



60. When a user visits a publisher's website, the ad server can route the publisher's available impressions to exchanges, along with information about the impression, including the user's ID, the ad slot's parameters, and any rules about pricing. Each exchange then sends a "bid request" to the ad buying tools who have a "seat" to bid in the exchange and act as advertisers' middlemen. These bid requests also contain information about the impression at issue and convey a "timeout," which is the amount of time the advertisers have to respond with their "bid response." Within this timeframe, which is typically a mere fraction of a second, each ad buying tool must unpack the information contained in the bid request, gather and deploy personal information about the user, determine the appropriate price to bid on behalf of the prospective advertiser, and return a bid response to the exchange. When time expires, each exchange closes its auction, excludes any late bids, and chooses a winner. The publisher's ad server then selects the advertisement associated with the highest exchange bid and returns it on the user's page before the page has even finished loading. The user simply sees a display ad adjacent to the web content they are reading. This leveraging of personal information in a real-time auction happens every minute of every day for millions of Americans browsing the internet.

FIGURE 7: How an exchange solicits bids from advertisers' buying tools



61. To compete effectively in an exchange's auction, not only must ad buying tools return bids to exchanges before their timeout expires, but they must be able to adequately identify relevant characteristics of the user associated with each impression (e.g., an impression targeted to John Connor the motorcycle enthusiast verses an impression targeted to a user who has shown no interest motorcycles). An exchange as large as Google's can exclude and harm competition between the bidders in its auction by giving a subset of bidders an advantage in terms of, e.g., information (e.g., more robust information about the user) or speed (e.g., longer timeouts, which translates to more time to calculate and return bids).

62. Google operates the largest buy-side middlemen for advertisers, i.e., the ad buying tools for both large and small advertisers. Google's DSP (enterprise buying tool for large advertisers such as Toyota or Nestle) is called DV360; it arose from Google's acquisition of the DSP Invite Media. Google's ad buying tool for small advertisers, on the other hand, is called "Google Ads," and it is designed for (what Google calls) the [redacted] DV360 charges advertisers an [redacted] percent commission to purchase inventory from exchanges, whereas

Google Ads charges small advertisers a much higher and undisclosed [redacted] percent commission when purchasing inventory from Google's exchange.

63. Although Google executives considered [redacted] they ultimately chose instead to stack the deck in their favor by owning the exchange and giving preferred access to Google's buy-side middlemen. Indeed, Google's exchange gives Google Ads and DV360 information and speed advantages when bidding on behalf of advertisers. Such preferred access helps explain why Google's ad buying tools win the overwhelming majority—over [redacted] percent—of the auctions hosted on Google's dominant ad exchange, AdX.

64. Google's ad buying intermediaries also do not always act in the best interests of their clients. For instance, Google subjects the smaller and less sophisticated advertisers to complicated arbitrages that are extraordinarily difficult to understand. Specifically, when bidding on behalf of those advertisers on Google's exchange, Google can manipulate or adjust their bids. Google also processes their bids through two auctions, keeps a spread between the two, and does not disclose to the advertiser the price that ad space actually cleared on Google's exchange. Google discloses this in fine print distributed across multiple separate documents. When Google ultimately explains why it "automatically" routes advertisers' bids across multiple markets, the language is misleading: "If you go butterfly hunting during the height of summer, the bigger your butterfly net, the more butterflies you'll be able to catch." Google, however, does not clarify *who* it is hunting.

VI. THE RELEVANT MARKETS AND GOOGLE'S MARKET POWER

A. Publisher Inventory Management: Publisher Ad Servers

1. Publisher ad servers for web display inventory in the United States are a relevant antitrust market.

65. Publisher ad servers for web display inventory ("publisher ad servers") in the United States are a relevant antitrust product market. Publisher ad servers are inventory management systems that publishers use to holistically manage their online display advertising inventory—the image-based graphical ads shown alongside web content. Ad servers provide publishers with features such as: (1) reservation-based sales technology to support the publisher's direct sales efforts; (2) inventory forecasting technology to help the publisher determine what inventory will be available to sell; (3) a user interface through which the publisher's sales team can input ad requirements and parameters; (4) co-management of direct and indirect sales channels; (5) report generation of ad inventory performance; (6) invoicing capabilities for the publisher's direct campaigns; (7) a decision engine for determining what ad will ultimately serve on the publisher's page; and (8) yield management technology.

66. Generally, ad servers charge publishers based on the volume of ads served. Most publishers "single home," using just one ad server to holistically manage all of their web display inventory. When a publisher sells more than one type of inventory (e.g., web display, in-app, and/or video), they might use one ad server for their display inventory and a second for their in-app or video inventory, or they might still use a single ad server that manages all of their ad formats. Using multiple ad servers for the same format, however, would create conflicts between the ad servers, thereby defeating the point of the ad servers' crucial inventory management functions.

67. Publisher ad servers are unique. They are not interchangeable with exchanges, networks, advertiser ad servers, or ad buying tools for large or small advertisers. None of those

products can manage a publisher's direct sales channel or offer the reporting, invoicing, or forecasting functions publishers need to holistically manage their inventory and optimize yield.

68. Advertising marketplaces, including ad networks and exchanges, are not effective substitutes for publisher ad servers. For example, Google's exchange is not, and cannot serve as, an ad management platform for direct sales. Google said as much when seeking to acquire DoubleClick, making explicit representations to the United States Federal Trade Commission ("FTC") regarding the non-interchangeability of ad servers and networks. Indeed, Google described any suggestion that ad servers and ad networks are interchangeable as [redacted] More specifically, Google represented that its existing display ad network (then called AdSense) and the ad server it sought to (and then did) acquire (DFP) [redacted] In other words, Google has long acknowledged that while publisher ad servers are substitutes for each other, ad networks and other advertising marketplaces are not.

69. Building an ad server is not a substitute for licensing an ad server. Building an ad server from scratch requires scale, substantial capital, and deep access to highly sophisticated engineering resources; it is a viable option usually only for the very largest online publishers (e.g., Facebook). And the few publishers who have built in house ad server technology do not license it to third parties. So, neither building an ad server from scratch nor licensing another publisher's in house ad server is an alternative to licensing a publisher ad server.

70. Publisher ad servers' customers are large and medium online publishers who need to manage both direct and indirect sales channels, including, e.g., *CBS*, Spotify, *Time*, *ESPN*, Major

League Baseball, Walmart, *Weather.com*, *The New York Times*, *The Wall Street Journal*, eBay, *NBC*, Pandora, Trip Advisor, NPR, *Buzzfeed*, and many more. But smaller publishers lacking significant direct sales volume do not use publisher ad servers. Google advertises this distinction to potential customers: "Google Ad Manager is an ad management platform for large publishers who have significant direct sales."

71. The relevant geographic market for publisher display ad servers is the United States. Publisher ad servers available in other countries are not a reasonable substitute for ad servers available in the United States.

2. Google has monopoly power in the publisher ad server market.

72. Google has monopoly power in the publisher ad server market in the United States. Google's monopoly power in this market is supported and evidenced by its high market share. More than 90 percent of large publishers use Google's publisher ad server, Google Ad Manager ("GAM" f/k/a "DFP"), according to published reports. Google internal documents show that GAM served the vast majority—[redacted] percent—of all online display ad impressions in the United States in the third quarter of 2018.

73. Google's own documents confirm that it has held a consistent monopoly position in the publisher ad server market for at least a decade. By 2012, just four years after Google acquired DoubleClick, Google estimated that [redacted] percent of large online publishers in the United States used Google's ad server. Since then, Google's closest competitors have either exited the market entirely or have been relegated to negligible market shares.

74. As above, Google urged the FTC to permit its acquisition of DoubleClick by positing that several competing publisher ad servers—24/7 Real Media and Atlas/aQuantive—were viable alternatives for publishers if Google were to increase DFP's prices. Those competitors have since exited the market.

75. Google's monopoly power in the publisher ad server market is further confirmed by direct evidence. Defying the existence of competitive restraints, Google has degraded quality and charged supra-competitive fees in the publisher ad server market. For example, Google's ad server now charges publishers for routing their inventory to exchanges and networks. When deciding how much to charge publishers for routing their inventory to non-Google exchanges, Google [redacted]; they did not consider competitive constraints such as what the market would bear. On top of this, Google's ad server charges a [redacted] percent fee of gross transactions for routing publishers' inventory to non-Google ad networks. When publishers route their inventory to exchanges and networks using a non-Google routing service called header bidding, publishers pay no fee whatsoever for routing to exchanges and networks. Google's unilateral ability to extract non-competitive ad server fees demonstrates its monopoly power.

76. Instead of pursuing and providing procompetitive welfare-enhancing innovations with its publisher ad server, many of Google's product changes actually degraded quality, thereby further illustrating Google's monopoly power and the utter lack of real competitive constraints in the publisher ad server market. Examples are numerous and discussed throughout this Complaint; they include unpopular changes such as Dynamic Allocation, Enhanced Dynamic Allocation, and Google's prohibition on publishers setting different price floors for different ad exchanges and ad buying tools (which depresses publishers' inventory yield for Google's direct benefit). Despite widespread publisher dissatisfaction over the price and quality of Google's ad server, Google has not suffered any loss to its ad server market share or dominance.

77. Google's market power in the publisher ad server market is protected by significant barriers to entry and expansion, notably including high switching costs. For publishers, switching ad servers is both risky and resource intensive. Some publishers have inventory on hundreds of

thousands, or even hundreds of millions, of webpages, which makes switching ad servers exceedingly expensive, difficult, and time consuming. Moreover, the switching process also entails significant revenue risk, as even minor glitches during the transition can disrupt and prevent delivery of advertiser campaigns. Industry experts compare a change in ad servers to "switching engines in mid-flight." Google's internal documents [redacted]. Because switching costs are high, publishers are effectively locked in.

78. In addition to high switching costs in the ad server market, Google's own anticompetitive conduct imposes additional barriers to entry and expansion. The most notable is probably Google's tying of its publisher ad server with its ad exchange, ad network, and ad buying tools. As addressed further in the Anticompetitive Conduct section below, once Google had both a publisher ad server (acquired from DoubleClick) and an ad exchange (launched in 2009), they made it so the massive number of advertisers using Google Ads (the ad buying tool for smaller advertisers to bid on display space) could transact only in Google's own ad network and/or ad exchange, not in any non-Google network or exchange. With so many advertisers funneled exclusively into Google's exchange, Google also made it so that publishers could receive bids from these advertisers (necessary for maximizing yield) only by licensing Google's ad server and transacting in Google's exchange. The resulting situation imposes near-insurmountable barriers to entry and expansion for any potential or actual provider of publisher ad server technology. Moreover, this situation further illustrates how Google's pricing power is unencumbered by competitive constraints: Google demanded that it represent the buy-side, where it extracted one fee, as well as the sell-side, where it extracted a second fee, and it also forced transactions to clear in its own network and exchange, where it extracted even more fees.

B. Ad Exchanges

1. Exchanges for web display inventory in the United States are a relevant antitrust market.

79. Exchanges for web display inventory ("exchanges") in the United States are a relevant antitrust product market. They are marketplaces in which publishers' display inventory is auctioned off to end-advertisers (through advertisers' middlemen) on an impression-by-impression basis and in real time. On the sell-side, exchanges generally interface with publishers through the publishers' ad server (e.g., Google's ad server). On the buy-side, they interface with advertisers through ad buying tools, including those for large advertisers (e.g., Google's DV360) and for small advertisers (e.g., Google Ads), and sometimes, even ad networks.

80. Exchange marketplaces exhibit several unique features. First, they do not bear inventory risk. Instead, they connect a publisher's inventory with an immediate willing buyer, as opposed to purchasing and then reselling ad space. Second, exchanges monetize by charging the publisher with a transparent percentage of transaction value, as opposed to monetizing via arbitrage or taking a non-transparent fee. Third, to sell directly on an exchange, most exchanges require publishers to meet minimum monthly requirements for impression volume and/or spend. This puts direct relationships with exchanges out of the reach of smaller publishers, who are effectively relegated to selling their inventory in the less-transparent marketplaces called networks (addressed below). Finally, large advertisers (e.g., Procter & Gamble) purchase primarily in exchanges, not networks; so in order to efficiently sell ad space to these large advertisers, publishers must also transact there.

81. The publishers who license Google's ad server and sell their display inventory through marketplaces primarily do so through exchanges, not networks. For example, one major online

publisher in the United States sold over 80 percent of their indirect display inventory to exchanges, not networks.

82. Ad exchanges are unique and not interchangeable with publisher ad servers, ad networks, or ad buying tools for large or small advertisers; those products serve different types of customers (e.g., advertisers on the buy-side rather than publishers on the sell-side). They also have vastly different sets of features and price points. A small but significant increase in the price of an ad exchange does not cause publishers to switch, e.g., to an ad server, ad network, or ad buying tool, as none of those products provide a real-time auction marketplace with the features unique to exchanges.

83. Ad exchanges are also not interchangeable with direct sales channels. For publishers, selling inventory directly requires substantial investment in and development of expertise around managing, selling, and serving online ad campaigns; it is an expensive proposition for publishers. For advertisers, buying inventory directly likewise requires considerable expertise and ongoing investment. For direct deals, publishers and advertisers alike typically must hire and maintain internal staff to manage these one-to-one relationships. As a result, the direct sales channel tends to be reserved for very high-value publisher-advertiser transactions. For instance, a large online publisher like *The Wall Street Journal* would generally not directly transact with a local Ford dealership, as the monthly value of those transactions would probably be no more than a few thousand dollars. They would, however, gladly transact with that dealership indirectly through an ad exchange, even if the total value of monthly transactions was just a few dollars. Reflecting these differences, ad servers and exchanges charge publishers completely different prices. Ad servers tend to charge publishers a low fixed-cost per volume of ads served, whereas exchanges tend to charge publishers anywhere from 5 to in excess of 20 percent of each impression's clearing price.

Ultimately, a small but significant increase in price for ad exchanges does not cause customers to switch to publisher ad servers, and the barrier to switching outweighs the cost.

84. The relevant geographic market for display ad exchanges is the United States. Display ad exchanges available in other countries are not a reasonable substitute for display ad exchanges available in the United States.

2. Google has monopoly power in the exchange market.

85. Google has monopoly power in the United States in the display ad exchange market. Despite an early competitive landscape, Google's ad exchange (historically called AdX) has enjoyed dominance in the United States since at least 2013. By October 2019, it transacted over [redacted] percent of all display ad inventory sold on ad exchanges in the United States, and that percentage has increased substantially since Google's introduction of Unified Pricing rules in late 2019 (as addressed further in the Anticompetitive Conduct section below).

86. Finally, for online publishers with high-value users, Google's exchange transacts an even greater share of impressions. For example, Google's exchange transacts over [redacted] percent of one major online publisher's exchange impressions, even though the publisher routes and sells its impressions in at least six other exchanges.

87. The closest competitors to Google's exchange include the exchanges provided by Magnite, AT&T's Xandr, and Index Exchange. But those exchanges transact much smaller shares of publishers' exchange impressions; in comparison to the more-than [redacted] percent of indirect impressions flowing through exchanges that Google's exchange routinely transacts, Google's closest exchange competitors typically transact a mere [redacted] percent of the same publishers' exchange impressions.

88. Direct evidence confirms Google's monopoly power in the display ad exchange market. Google's exchange has the power to control prices. It is able to charge supra-competitive

prices, which are [redacted] percent of every trade. By contrast, the prices charged by Google's closest exchange competitors are considerably lower: from [redacted] percent down to a mere [redacted] percent. Despite their lower prices, these competing exchanges are simply unable to grow their market share.

89. Additionally, Google's ability to increase prices (i.e., its take rate) in the exchange market further demonstrates its durable monopoly power. Google's 2018 internal documents observed that [redacted] Nevertheless, Google did not reduce its average exchange take rate from 2017 to 2020. In fact, Google increased its exchange take rate from 2017 to 2019 (from [redacted] percent for third-party buyers buying through AdX in 2017 to [redacted] percent in 2019). The fact that Google did not lower its take rates, and instead increased them, demonstrates that Google has insulated its exchange from any of the competitive market dynamics that would otherwise incentivize them to lower their prices.

90. Google's monopoly power is also evidenced by the fact that its exchange does not lose market share when competitors drop their prices. For example, [redacted]

91. Google's market power in the exchange market is also protected by significant barriers to entry and expansion. The first is a sort of chicken-and-egg problem; a new entrant must achieve a sufficient scale of both publishers and advertisers on its exchange to become viable. A second barrier is imposed by Google itself. Employing a variety of anticompetitive tactics, Google unilaterally captures a large volume of the transactions otherwise available to competing exchanges by causing its publisher ad server to preferentially route transactions to its exchange (as

addressed further in the Anticompetitive Conduct section below). Moreover, Google imposes yet another barrier by exclusively and preferentially routing the bids of advertisers who use DV360 and Google Ads to Google's exchange (through a separate set of anticompetitive conduct addressed below).

C. Ad Networks

1. Networks for web display inventory in the United States are a relevant antitrust market.

92. The market for web display ad networks ("networks") in the United States is a relevant antitrust product market. Display ad networks are a type of indirect marketplace that differ from exchanges in their features and price points. While networks, like exchanges, match publishers' ad inventory with advertisers, networks do not necessarily do this on a real-time impression-by-impression basis. Moreover, networks often carry inventory risk. That is, they purchase (and then sell) impressions on their own behalf, as opposed to purchasing on behalf of an advertiser or buy-side middleman. Networks often do not provide impression-by-impression price transparency to the sell- or buy- sides of the transaction (i.e., the publishers or the advertisers). Instead, networks obscure prices within auctions, which enables them to capture undisclosed margins; neither the buyers nor sellers will know whether the network takes, e.g., 20 or 50 percent of matched trades. The qualitative differences between exchanges and networks result in two entirely different price points: networks are more expensive than exchanges on a per transaction basis.

93. Compared to exchanges, networks tend to match smaller advertisers' ads with ad space from smaller publishers. Smaller publishers (e.g., local newspapers, niche websites, and blogs with a comparatively lower volume of impressions) are attracted to networks because, unlike exchanges, networks rarely require publishers to meet minimum impression or spend requirements. For example, Google does not impose monthly page view or impression

requirements on publishers who sell through Google's network (the Google Display Network or "GDN"). Additionally, networks tend to be more restrictive on the buy-side, often refusing to accept bids from ad buying tools for large advertisers (DSPs).

94. Ad networks are unique. They and not interchangeable with publisher ad servers, exchanges, or ad buying tools for large or small advertisers; those products serve different types of customers (e.g., advertisers on the buy-side rather than publishers on the sell-side). They also have vastly different sets of features and price points. A small but significant increase in the price of an ad network does not cause publishers to switch, e.g., to an ad server, an ad exchange, or an ad buying tool, as none of those products provide smaller publishers and advertisers with the features unique to network marketplaces.

95. The relevant geographic market for display ad networks is the United States. Display ad networks available in other countries are not a reasonable substitute for display ad networks available in the United States.

2. Google has monopoly power in the network market.

96. Google has monopoly power in the web display ad network market in the United States. Google describes its ad network (GDN) as [redacted] GDN reaches more user impressions and websites than any other display network, including over 2 million small online publishers globally. No other display ad network in the United States reaches as many publishers and advertisers. Google has immense scale amongst the long tail of small online publishers.

97. Direct evidence confirms Google's monopoly power in the display ad network market. GDN charges high double-digit commissions of at least [redacted] percent on advertising transactions, which, according to public sources, is [redacted] the "standard rate" elsewhere in the industry. Internally, Google acknowledges that its fees are very high and that it can demand them because

of its market power. For example, in an internal 2016 conversation, Google executives commented that Google's ad networks make [redacted] with its commission, and they acknowledged that they [redacted] explained one Google employee when addressing the lack of viable competing ad networks available to its customers.

98. Significant barriers to entry and expansion protect Google's display ad network monopoly power. Employing a variety of anticompetitive tactics, Google unilaterally captures a large volume of the transactions otherwise available to competing networks by causing its publisher ad server to preferentially route transactions to its display ad network (as addressed further in the Anticompetitive Conduct section below). Moreover, Google imposes yet another barrier by preferentially routing the bids of advertisers who use Google's ad buying tool for small advertisers (Google Ads) to its own GDN ad network (through a separate set of anticompetitive conduct addressed below). Scale also operates as a barrier to entry. Ad networks need scale on both the supply and demand sides; natural network effects make it difficult for any new networks to enter and achieve scale.

D. Ad Buying Tools for Large and Small Advertisers

99. Just as publishers use ad servers to advance their own interests (e.g., inventory management and maximizing revenue), advertisers use ad buying tools to advance their own interests (e.g., accessing and purchasing ad inventory appropriate for their campaigns at the lowest prices). Broadly speaking, ad buying tools let advertisers set parameters integral to their purchasing decisions, including details about the types of users they want to target and the maximum bids they are willing to submit for various types of display ad inventory. Ad buying tools then use these parameters to automatically bid (on the advertiser's behalf) for ad space in exchanges and networks.

100. But there are two distinct types of ad buying tools—those for small advertisers and those for large advertisers—and they are not usually interchangeable with each other. Ad buying tools for small advertisers are, in essence, pared-down analogues of the ad buying tools for large advertisers, which are typically referred to as DSPs (demand-side platforms).

101. These two different types of ad buying tools differ widely in both the features they offer and the pricing and minimum spend requirements they impose. Fundamentally, DSPs serve and are designed for a different type of advertiser than ad buying tools for small advertisers. DSPs offer robust and complex bidding and trading options ill-suited for smaller and less sophisticated advertisers. In fact, DSPs are so complex that they are frequently not used or managed by the actual advertisers (e.g., Ford), but by the advertisers' specialized ad buying team (e.g., an ad agency or specialized division at an agency called a "trading desk"). Conversely, ad buying tools for small advertisers usually do not meet the transparency, optimization, sophistication, or bidding needs of large advertisers.

102. Furthermore, the different types of ad buying tools are also sold at different price levels. DSPs usually require high minimum monthly spend commitments, sometimes $10,000 or more, whereas ad buying tools for small advertisers can require just a few dollars to get started. For example, Amazon's DSP requires a monthly commitment of over $35,000, while Google's buying tool for small advertisers (Google Ads) requires no monthly minimum spend. In 2020, Google Ads had thousands of advertisers that spent less than $250 per month on web display inventory in the United States; none of those advertisers would have been able to switch to Amazon's DSP or The Trade Desk because each has minimum spend requirements of over $1,000 per month. So while Amazon's DSP and The Trade Desk compete with Google's DV360, they do not compete for the small advertisers using Google Ads. Thus, a small but significant increase in price of an ad buying

tool for small advertisers does not cause advertisers to switch to ad buying tool for large advertisers.

1. Web display ad buying tools for small advertisers in the United States constitute a relevant antitrust market.

103. The market for web display ad buying tools ("ad buying tools") for small advertisers in the United States is a relevant antitrust market. These tools provide an interface that smaller advertisers (e.g., real estate agents, plumbers, builders, doctors, and car dealerships) can use to bid on and purchase the display ad inventory available on ad exchanges and in ad networks. These tools allow small advertisers to optimize for their own interests, including purchasing the best quality display ad inventory for the lowest prices.

104. As above, ad buying tools for small advertisers are not usually interchangeable with the ad buying tools for large advertisers. Nor are ad buying tools for small advertisers interchangeable with ad servers, ad networks, or ad exchanges; those products do not provide small advertisers with an interface to bid on and purchase ad inventory in exchanges or networks. Those products also differ significantly from ad buying tools for small advertisers insofar as they serve different types of customers, have different features sets, and come with different price and entry points. Those products are not viable alternatives in response to a small but significant price increase because they do not provide small advertisers with the features of an ad buying tool at an affordable price point.

105. The relevant geographic market for display ad buying tools for small advertisers is the United States. Display ad buying tools for small advertisers available in other countries are not a reasonable substitute for the display ad buying tools for small advertisers available in the United States.

2. Web display ad buying tools for large advertisers in the United States constitute a relevant antitrust market.

106. The market for web display ad buying tools for large advertisers in the United States is a relevant antitrust market. These tools provide an interface that large advertisers (e.g., Ford or Nike) use to bid on and purchase display ad inventory on ad exchanges and in ad networks. These tools allow large advertisers to optimize for their own interests, including purchasing the best quality display ad inventory on exchanges for the lowest prices.

107. As above, ad buying tools for large advertisers are not usually interchangeable with the ad buying tools for small advertisers. Nor are ad buying tools for large advertisers interchangeable with ad servers, ad networks, or ad exchanges; those products do not provide large advertisers with an interface to bid on and purchase ad inventory in exchanges. Those products also differ significantly from ad buying tools for large advertisers insofar as they serve different types of customers, have different features sets, and come with different price and entry points. Thus, a small but significant increase in price of an ad buying tool for large advertisers, would not cause those advertisers to switch to an ad server, an exchange, or network.

108. The relevant geographic market for display ad buying tools for large advertisers is the United States. Display ad buying tools for large advertisers available in other countries are not a reasonable substitute for the display ad buying tools for large advertisers available in the United States.

3. Google has monopoly power in the web display ad buying tool market for small advertisers.

109. Google's ad buying tool Google Ads has monopoly power in the United States in the web display ad buying tool market for small advertisers. Ad buying tools for small advertisers

serve startups and local businesses such as real estate agents, doctors, dentists, restaurants, automotive repair shops, craftsmen, electricians, hair salons, architects, and landscapers.

110. Google's records reveal that advertisers using Google Ads purchase [redacted] of the impressions in Google's ad exchange (which is the largest ad exchange), and over [redacted] percent of the impressions on Google's display network, GDN (which is the largest ad network).

111. The market power of Google Ads is also evidenced by the fact that Google's exchange charges supra-competitive fees for exclusive access to Google Ads advertisers. Google's documents confirm as much, describing [redacted]. The ability to extract such rents, dependent on Google Ads exclusivity, demonstrates Google Ads' monopoly power. Moreover, running sequential auctions allows Google to extract additional non-transparent margins, which it does not disclose to advertisers.

112. Google Ads also has market power over the small advertisers it serves because most rely on a single ad buying tool for a given advertising format (e.g., display ads). These small advertisers tend to single home because using multiple ad buying tools imposes substantial additional costs in terms of the time, effort, training, and expenses that would be necessary to manage campaigns across different ad buying tools. Google Ads also does not permit small advertisers to completely export the data they need to easily switch to another ad buying tool. As a result, while very large advertisers might be able to absorb the costs of using multiple ad buying tools at a time, small advertisers almost always use just one at a time.

113. Google's market power with Google Ads is protected by at least four critical barriers to entry and expansion. First, Google Ads charges opaque fees and does not let advertisers readily audit the ad inventory Google purchases on their behalf. These act as barriers because they impede

advertisers from switching to, e.g., a lower-cost or higher-quality provider. Second, Google's practice of withholding YouTube video inventory from rival ad buying tools (addressed below) effectively locks single-homing small advertisers into Google's ad buying tool. In addition, other providers of ad buying tools indicate that it does not make economic sense to try to compete with Google Ads for small advertisers, because they cannot achieve sufficient scale with smaller advertisers who want to buy display, YouTube, and even search ads, through just one tool. Finally, advertisers use ad buying tools to keep track of the users they have targeted with ads, the users that have made purchases, and the users that they want to keep targeting with more ads. Google Ads limits advertisers from accessing and taking this data with them to another tool. As a result, advertisers are locked in and have high switching costs; switching to a different ad buying tool provider means abandoning the valuable data and intelligence they already gathered in Google Ads and starting over from scratch.

E. YouTube

1. Instream online video advertising is a relevant antitrust market in the United States.

114. The market for instream online video advertising in the United States is a relevant antitrust market. Online instream ads occur within the video stream of a video the user is watching (e.g., a video ad before, during, or after a YouTube video), while outstream ads occur when the user scrolls through other content (e.g., a video ad that automatically plays when scrolling through an article). Instream online video advertising is not interchangeable with other types of online advertising, like search or display advertising. Instream online video advertising typically serves distinct campaign goals for advertisers and usually commands significantly higher prices than online display ads, suggesting that online display ads do not constrain the prices of instream online video ads. Instream online video advertising is also not interchangeable with outstream video

advertising since the end-user behavior differs significantly—an end-user passively watches instream video but scrolls through outstream video—leading advertisers to view the ad spaces differently.

2. Google has market power in the instream online video advertising market.

115. YouTube has market power in the instream online video advertising market. YouTube's share of the overall online video advertising market is at least 43 percent in the United States, and potentially much higher for instream online video advertising. Further, YouTube has immense reach amongst consumers in the United States, reaching approximately 190 million such consumers. Among younger U.S. consumers, 77 percent of U.S. internet users aged 15-25 used YouTube, as measured in Q3 2020. Even amongst older age-groups, YouTube's reach was at least 67 percent. YouTube's substantial reach among U.S. consumers makes it a "must-have" source of online instream video inventory for advertisers and is considered a [redacted] by Google for its buying tool DV360. Accordingly, Google wields significant market power in the instream online video ads market, as demand for YouTube content is unique compared to other online video publishers that sell instream online video advertising adjacent to short-form user created video content.

116. The relevant geographic market for online instream video advertising is the United States. Online instream video advertising available in other countries is not a reasonable substitute for the online instream video advertising available in the United States.

VII. ANTICOMPETITIVE CONDUCT

117. Google unlawfully forecloses competition in the market for publisher ad servers, in the market for ad buying tools for large advertisers, in the market for ad buying tools for small advertisers, and in the separate markets for ad exchanges and ad networks. Google excludes competition by engaging in conduct unlawful under settled antitrust precedent, including through

unlawful tying arrangements, a pattern and practice of exclusionary conduct targeting actual and potential rivals, and even a market allocation and price fixing agreement with Facebook, its largest potential competitive threat in the publisher ad server and ad network markets.

A. Google forces publishers to license Google's ad server and trade in Google's ad exchange.

118. Prior to Google's anticompetitive conduct, the markets for ad exchanges and publisher ad servers were competitive. When Google originally entered the ad exchange market in 2009, publishers and advertisers had been trading in exchanges for some time. Google was late to enter the ad exchange market and faced significant competition from large and well-funded players like Microsoft and Yahoo!. In 2009, the Yahoo! exchange alone, for example, processed nine *billion* daily ad impressions. After launching that same year, Google's exchange transacted fewer than [redacted] daily impressions. At the time, Google also faced significant competition in the publisher ad server market. Google acquired its publisher ad server from DoubleClick in 2008 but faced competition from companies such as 24/7 Real Media (owned by WPP PLC), aQuantive (owned by Microsoft), and ValueClick (publicly traded).

119. Google, however, quickly began pursuing an unlawful strategy to foreclose competition in both markets. At the time, Google operated an ad buying tool for small advertisers and already had significant power in that market. Nearly [redacted] small advertisers across the country—including restaurants, clothing stores, doctors, and electricians—used Google's ad buying tool to bid on display ad space. Immediately after acquiring a publisher ad server and launching its exchange in 2009, Google began to require that the small advertisers bidding through Google Ads transact in both Google's ad network and Google's ad exchange. Google also required that the large publishers wanting to receive bids from this enormous group of small advertisers trade in Google's exchange and license Google's ad server. In essence, Google demanded that it

represent the buy-side, where it extracted one fee, as well as the sell-side, where it extracted a second fee, and it also forced transactions to clear in its own exchange, where it extracted a third fee.

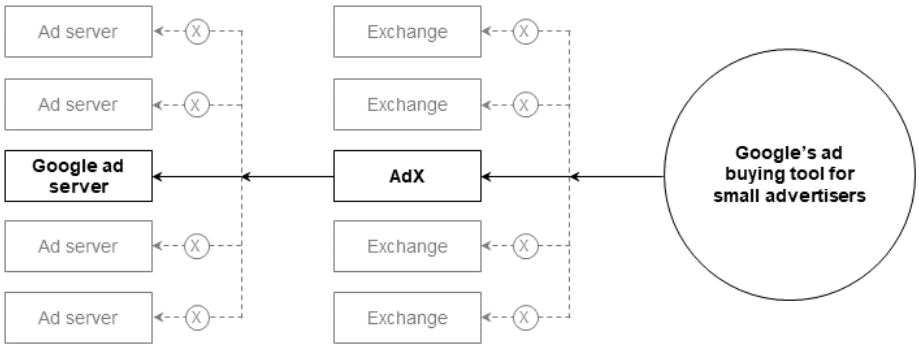
120. Google was able to force publishers and advertisers to trade in Google's exchange, and publishers to license Google's ad server, because Google's ad buying tool for small advertisers has had substantial market power in the United States for at least a decade. Google originally called its product for small advertisers AdWords, but it is now known as Google Ads. In 2009, some 250,000 small and medium advertisers in the United States used this ad buying tool to purchase search and display ads. And since then, the number of advertisers using this tool to purchase display inventory on exchanges has rapidly increased even further. In 2013, the number of advertisers using Google Ads doubled to two million. Today, millions of small- to medium-sized businesses use Google Ads to bid on and purchase display ad space trading in Google's AdX exchange, and those advertisers do not have alternative tools to use. Other ad buying tools attempting to compete reached far fewer advertisers, and most have now exited the market altogether, leaving advertisers without alternatives to Google's dominance.

121. Google gained its monopoly in the market for ad buying tools for small advertisers in part due to its monopoly in the display ad network market and its significant scale in search advertising. By 2009, Google's ad network GDN was the leader in reach (unique visitors to publishers' sites); Google leveraged this fact by requiring the use Google Ads by any advertiser seeking to purchase ad space through GDN. Similarly, Google required small advertisers to use Google Ads to purchase search ads on Google Search. Google's relationships with small advertisers seeking to purchase display advertising is based on its enormous scale in search advertising. Having already established a relationship with small advertisers by selling search

advertising, the marginal cost for selling display advertising to those same small advertisers is negligible. Google's competitors, by contrast, find it uneconomical to reach a sufficient number of small advertisers at scale to offer buying tools to compete with Google Ads.

122. Google Ads also had market power over its small advertisers because those advertisers almost always use just one ad buying tool at a time. When deciding which ad buying tool to use, most advertisers chose Google's because it was the only way to purchase Google Search ads and display ads on Google's leading display network, GDN.

FIGURE 8: Google's buying tool for small advertisers only bids to Google's ad exchange and ad server



123. Google monopolized the exchange and ad server markets by forcing publishers to license Google's ad server and trade in Google's exchange in order to receive bids from the more-than one million advertisers using Google's buying tool, Google Ads. First, Google automatically routed small advertisers' ad network bids to Google's exchange. Additionally, Google refused to route advertisers' bids to non-Google exchanges. Next, Google programmed its exchange to return real-time bids *only* to those publishers using Google's new publisher ad server. [redacted]

124. Through this conduct, Google acted against the best interests of the small advertisers bidding through Google Ads. If Google were serving the interests of the small businesses using Google Ads, Google would have routed their bids to the exchanges that offered the lowest prices for the identical inventory, just as competing ad buying tools did. In a competitive market, advertisers prefer to buy across multiple exchanges in order to reach the largest possible pool of supply at the best possible prices, thereby enabling and fostering competition between the exchanges.

125. Internal Google documents reveal that Google imposed these bid routing restrictions for the express purpose of foreclosing competition. In a Display Strategy document from August 2012, Google noted that they [redacted]

126. Because publishers are interested in exchanges returning real-time bids for their inventory, Google effectively required publishers to use its ad server in order to work with its exchange. Publishers also only use a single ad server at a time to manage their inventory, so they had to forgo either (a) using any competing ad server or (b) access to the enormous pool of advertisers using Google Ads and bidding into Google's exchange. From the first days of Google's AdX exchange, advertisers bidding through Google Ads made up the vast majority of purchases in Google's exchange: around [redacted] of total transactions by revenue within a year of AdX's launch, [redacted] percent of total transactions a few years later, and about [redacted] of all transactions today.

127. An article in *The Wall Street Journal* explained Google's conduct as follows: "Using Google's [ad server] DoubleClick for Publishers is the only way to get full access to Google's

AdX exchange, publishers say. For many years, Google's AdX was the only ad exchange that had access to this fire hose of ad dollars."

128. Google's conduct successfully foreclosed competition in the publisher ad server and exchange markets. When Google acquired the DoubleClick ad server in 2008, Google's share of the publisher ad server market was around 48 to 57 percent, and Google faced competition in both the ad server and ad exchange markets. In the ad server market, Google has now effectively foreclosed publisher ad server competition from companies that included 24/7 Real Media, aQuantive, and ValueClick. As internal Google documents show, by coupling its ad server with its substantial market power on the buy-side, Google prevented publishers from switching to competing ad servers and quickly cornered the remainder of the market. By 2011, approximately [redacted] percent of publishers in the United States used Google's ad server, and by 2019, Google's share of the market increased to over [redacted] percent of large publishers.

129. Google maintained its monopoly power over ad servers and its stranglehold in the ad exchange market by continuing the same type of exclusionary conduct. In 2016, Google started routing the bids of small advertisers from Google's buying tool to non-Google exchanges, but significantly and intentionally restrained the routing of bids to non-Google exchanges for the express purpose of continuing to exclude and suppress competition. Google's exchange also continues to return live bids only to publishers using Google's ad server. In sum, Google did not want to *actually* undo its Google Ads—exchange—ad server tie.

130. Google similarly requires publishers seeking access to large advertisers' bids to trade in Google's exchange (and pay Google's exchange fees) and to license Google's ad server (and pay Google's ad server license fees). Google's strategies here are numerous and discussed throughout this Complaint. For instance, Google uses mandatory price floors (discussed below in

paragraphs 273-279) and other auction manipulations like project [redacted] (discussed below in paragraphs 148-154) to force publishers to transact with DV360 advertisers in Google's exchange. Uniform Price floors are not competition on the merits. Google deployed another project called project [redacted]. Finally, Google makes many of the features in DV360 (e.g., affinity audiences targeting) unavailable to advertisers if they participate in exchanges other than Google's, which results in many advertisers using Google's exchange even though they would not do so in a competitive market. Because Google's exchange then only routes live bids to publishers using Google's publisher ad server, publishers are effectively forced to use Google's publisher ad server to receive bids from DV360 advertisers. This conduct enables Google to maintain its monopoly power in the publisher ad server market and exclude competition in the exchange market. Google has specifically discussed this "[redacted]" effect internally.

B. Google uses its control over publishers' inventory to block exchange competition.

131. In addition to forcing publishers and advertisers to transact in its own exchange, Google used its control over publishers' inventory and its status as publishers' agent to foreclose exchange competition through a host of anticompetitive conduct. Google restricted publishers from selling their inventory in more than one exchange at a time, blocked competition from non-Google exchanges under a false pretense, and blocked publishers from accessing and sharing information about their heterogeneous inventory with non-Google exchanges. In doing so, Google foreclosed competition in the exchange market, enabling its exchange to charge very high fees that even Google could not actually justify. Google internally admits that an exchange should be more of [redacted] and not [redacted] as it is for Google. Google's anticompetitive conduct, however, ensured that publishers and advertisers could not benefit from competition.

1. Google blocks publishers from sending their inventory to more than one marketplace at a time.

132. Around 2009-2010, advertising exchanges (including Google's AdX) started to compete with one another by submitting real-time bids for publishers' inventory. As the market migrated to real-time bidding, Google used its new control over publishers' inventory through its publisher ad server to thwart competition *between* marketplaces. Google accomplished this by forcing publishers to route their ad space to a single exchange, one at a time, rather than all at once. Google foreclosed exchange competition in this manner from 2009 through 2016. The industry referred to this practice as waterfalling.

133. Waterfalling reduced publishers' yields because it blocked competition between exchanges. Routing ad space into multiple exchanges at the same time would permit publishers to benefit from access to greater advertiser demand. One exchange might have an advertiser willing to bid a $2 CPM (cost per thousand) for a publisher's impression, but another exchange might have a different advertiser willing to bid a $3 CPM. Being forced to route to one exchange at a time deprives publishers of the opportunity to receive these higher bids (and therefore higher sales prices).

134. Waterfalling also impeded take rate and quality competition *between* exchanges. Competition between exchanges forces exchanges to compete on quality and take rates, regardless of whether they operate in financial markets or, as here, in openly traded online display ads. The sellers and buyers in an exchange measure an exchange's efficiency using the tightness of the bid-ask spread, i.e., the difference between the bid (the amount for which buyers are willing to sell the instrument) and the ask (the amount for which sellers are willing to sell the instrument). Competition between electronic exchanges leads to pressure on exchange prices and results in

efficiency gains through smaller bid-ask spreads. Google, however, foreclosed exchange competition in this manner from 2009 through 2016.

2. Google blocks competition from non-Google exchanges and deceives publishers about Dynamic Allocation.

135. In addition to blocking real-time competition between exchanges, Google's ad server foreclosed exchange competition by preferentially routing publishers' inventory to Google's new exchange through a process it called Dynamic Allocation.

136. At a high level, Dynamic Allocation granted Google's exchange a superior right of first refusal on all of the impressions a publisher made available to exchanges. Google's ad server let Google's exchange compete for publishers' impressions by returning live bids, while requiring non-Google exchanges to compete for the same impressions with static non-live bids. Usually, an exchange's static bid was set to equal the overall price the exchange historically paid for publishers' impressions. Google's ad server passed the rival's static bid to Google's exchange and permitted Google's exchange to purchase the impression by paying just one penny more. In other words, Google used its control over publishers' inventory to let its exchange view a publisher's valuable impression—like a box seat at a baseball game—and purchase that impression for just a penny more than the average price that a non-Google exchange paid for any old impression—just like the average price for any seat in the stadium.

137. Google's adoption of Dynamic Allocation in 2010 ended DoubleClick's neutrality as a seller's agent. Prior to Google's acquisition of DoubleClick, DoubleClick operated a publisher ad server but did not have an operational exchange. The DoubleClick publisher ad server also routed publishers' impressions to exchanges and networks in a neutral manner to maximize publishers' yield. Under Google's control, Dynamic Allocation ended the neutrality of the DoubleClick ad server and highlighted the problems with Google's conflicts of interest.

138. With waterfalling and Dynamic Allocation, Google's ad server delivered a one-two punch to competition in the exchange market. Google used waterfalling to block other exchanges from competing simultaneously for impressions. Then, through Dynamic Allocation, Google's ad server passed inside information to Google's exchange and permitted Google's exchange to purchase valuable impressions at artificially depressed prices. Competing exchanges were deprived of the opportunity to compete for inventory and left with the low-value impressions passed over by Google's exchange.

139. Once Google routed publishers' impressions to Google's exchange, Google further harmed publishers by foreclosing competition between the bidders in its exchange auction. Google considered, but ultimately [redacted] Instead, Google chose to craft a rigged exchange to benefit its own ad buying tools. In other words, Google chose to [redacted] As a result, Google's exchange suppresses competition in its auction, permitting Google's ad buying tools (Google Ads and DV360) to win over [redacted] percent of the auctions in Google's exchange.

140. Google, mirroring the duties of financial brokers to their clients, promised publishers that its publisher ad server would act in their best interests. Google told publishers, for instance, that Dynamic Allocation maximized their inventory yield; it "maximizes revenue," Google advertised about its publisher ad server. Google also told publishers that, with Dynamic Allocation, publishers have a "risk-free way to get the highest real-time revenues for all their non-guaranteed impressions."

141. In fact, Google concealed the nature of its conduct and knew that Dynamic Allocation did not in fact maximize publishers' yield. Google internally discussed [redacted]. Internal Google documents

reveal Google's knowledge of its own misrepresentations, stating that [redacted] In fact, according to one Google study, competition between exchanges increased publishers' clearing prices by an average of 40 percent. In other words, Dynamic Allocation had permitted Google's exchange to clear publishers' inventory for depressed prices. One industry publication put it succinctly, "[t]he lack of competition was costing pub[s] cold hard cash."

3. Google restricts information to foreclose competition and advantage itself.

142. Google further foreclosed competition in the exchange and ad buying tool markets by blocking publishers' ability to access information about their heterogenous inventory. Google's ad server manages that inventory and promises to maximize publishers' inventory yield. On behalf of publishers, the ad server is what identifies the site visitors associated with the publishers' inventory, assigning individual IDs to each visitor. In 2009, Google's ad server started hashing or encrypting publishers' ad server user IDs, prohibiting publishers from sharing those IDs with non-Google exchanges and non-Google ad buying tools. Thus, Google strategically prevented publishers' users from being easily identified, with one critical caveat: Google enables itself to use that very same information for its *own* trade decisions.

143. At the time of the DoubleClick acquisition, Google made representations to both the FTC and the United States Congress regarding publishers' control and ownership over their critical ad server data. Google assured Congress that DoubleClick "data is owned by the customers, publishers and advertisers, and DoubleClick or Google cannot do anything with it." And Google represented to the FTC that "customer and competitor information that DoubleClick collects currently belongs to publishers, not DoubleClick," and "[r]estrictions in DoubleClick's contracts with its customers, which those customers insisted on, protect that information from disclosure."

Google then "committed to the sanctity of those contracts." In essence, DoubleClick's contracts rendered publishers' data confidential and non-public, thereby prohibiting Google from using that data to act against publishers' interests.

144. In order to sell an ad impression at a price reflective of its true value, publishers (and the exchanges that sell on their behalf) need to be able to adequately identify the user associated with the impression. User IDs permit publishers and their exchanges to understand the value of inventory, cap the number of times users see the same ad, and effectively target and track online advertising campaigns. When exchanges cannot identify users in auctions (e.g., through cookies), the prices of impressions on exchanges can fall by about 50 percent, according to one Google study.

145. However, despite the representations made during its acquisition of DoubleClick, in 2009, Google started restricting publishers' ability to access and share their ad server user IDs. Google accomplished this by hashing or encrypting the user IDs differently for each publisher using Google's ad server (e.g., John Connor = user QWERT12345), as well as for each advertiser bidding through Google's ad buying tools (e.g., John Connor = user YUIOP67890). This change interfered with publishers' ability to share consistent user IDs with non-Google exchanges and networks. As a result, publishers, along with their advertisers, exchanges, and networks, could not easily know that two different user IDs actually belonged to the same user.

146. While Google blocked publishers from accessing and sharing these user IDs with non-Google exchanges and networks, Google shared the same raw IDs with Google's own network and exchange, as well as with Google's own ad buying tools (DV360 and Google Ads). So for Google's network, exchange, and ad buying tools, John Connor is always HJKLM54321. In other words, the only way for publishers and advertisers to easily know that two different user IDs

actually related to the same individual was to use Google's ad buying tools and trade in Google's exchange.

i. Information asymmetry causes publishers and advertisers to trade on non-Google exchanges at their own risk.

147. The restrictions Google imposed on publishers' access to ad server user IDs meant that publishers and advertisers trading on non-Google exchanges did so at their own risk. By blocking publishers' ability to access and share their ad server user IDs, Google's exchange would always have better information about publishers' heterogenous inventory. As a result, advertisers bidding through a non-Google ad buying tool or exchange could not efficiently know if they are bidding on *valuable* impressions, cap the frequency that consumers see their same ads, target audiences, or avoid bidding against themselves in second-price exchange auctions. But, of course publishers and advertisers could simply transact in Google's exchange using Google's ad buying tools and thereby avoid all of these harms Google artificially created. In essence, by scrambling the DoubleClick ad server user IDs, Google created a "heads I win, tails you lose" scenario.

ii. Google forecloses competition by using inside information to win auctions.

148. Google is able to further exploit its monopoly in ad servers to the detriment of publishers. Google's next step was to begin using its exclusive access to publishers' raw ad server user IDs to develop a number of internal non-transparent auction programs that exclude competition in both the exchange and ad buying tool markets. Google uses its artificial information advantage to engage in various forms of price discrimination and opportunity allocation, engineering auction outcomes that are different than those that would result from a free and open bid process. These programs ensured that publishers' impressions, especially the high value ones, would transact through Google's exchange and ad buying tools. So while Google publicly says its

products and product features are good for publishers and advertisers, they are not. Behind the scenes, Google manipulates the bidding process to maximize its own profits, rather than to maximize the profits of individual publishers and advertisers.

149. Google's New York-based [redacted] designed one such program called Reserve Price Optimization ("RPO"). Google's RPO program uses [redacted]. Competing exchanges cannot similarly [redacted].

150. Google's [redacted] team launched another program called [redacted]

[redacted]. Google forecloses competition in the exchange market by [redacted].

151. In 2013, Google's [redacted] team designed Project [redacted] yet another program to exclude competition. [redacted] program helped advertisers bidding through Google's ad buying tool win publishers' valuable impressions in Google's exchange. The [redacted] program is designed so that it is not transparent to publishers.

152. To illustrate how [redacted] works, suppose an advertiser using Google Ads (e.g., a local doctor) bids a $10 CPM for a *USA Today* ad impression targeted to John Connor. And suppose a different advertiser (e.g., Ford) bids a $12 CPM through The Trade Desk ad buying tool. Both ad buying tools then route the advertisers' bids to Google's exchange. In the absence of the [redacted] program, Ford's $12 bid would win and Google would extract only one fee (its exchange fee). But the [redacted] program changes the outcome. [redacted] effectively manipulates the doctor's bid without their knowledge (or anyone's knowledge) before routing it to Google's exchange, ensuring that the doctor nonetheless wins the impression targeted to John Connor. In this situation with [redacted] Google will extract both its exchange fee and a second ad buying

tool fee. In this regard, [redacted] excludes competition from advertisers using non-Google ad buying tools.

153. According to internal Google documents, prior to [redacted] introduction, advertisers bidding through competitors' ad buying tools were actually beating the advertisers bidding through Google's ad buying tools. Google's idea with [redacted] was to trade on inside information to help Google reverse this trend. The program permitted Google to radically influence the amount of trading executed through Google Ads and in Google's exchange. Google looked back at the [redacted] program's success as follows: [redacted] In just the first year of launch, the [redacted] program alone swelled trading in Google's exchange enough to increase annual revenue by [redacted] million.

Screenshot of [redacted], the namesake of Project [redacted] on Google's exchange:

[redacted]

154. The preceding [redacted] programs represent an illustrative but incomplete sample of the sophisticated auction programs Google uses to exclude competition in the exchange and ad buying tool markets. Google's [redacted] team developed other programs, including [redacted], that also use inside information to privilege Google's exchange over rival exchanges. These programs

depend on Google cutting off access to publishers' ad server user IDs and rendering access to those IDs exclusive for Google. The programs create inefficiencies in the allocation of impressions and reduce competitors' ability to compete on price.

155. Moreover, these programs account for substantial additional Google revenue at the direct expense of harm to competition. [redacted]. In short, Google uses its monopoly power to manipulate auctions through algorithms that modify the exchange architecture in order to extract hundreds of millions of dollars in additional revenue and harm consumers by foreclosing competition.

iii. While Google cites "privacy" as the justification for restricting access to user IDs, Google does not actually care about privacy.

156. Google's publicly stated reason for its publisher ad server cutting off publishers' ability to share their ad server user IDs with non-Google exchanges is the purported protection of users' privacy. But Google does not actually care about users' privacy. Rather, Google wants to prevent companies from creating deeper and more comprehensive user profiles by combining different sets of user data. However, Google's ad server shares those very user IDs with Google's exchange and buying tools. Google then does what it wants to prevent others from doing: it combines the data sets to create more comprehensive user profiles and deliver more targeted advertising.

157. To be clear, this meant that contrary to Google's privacy justifications, Google prevented consumers from having similar privacy benefits when a publisher or advertiser used Google's network, or Google's exchange, or when an advertiser used Google's ad buying tools. At the same time, Google fails to provide consumers with benefits derived from allowing publishers to maximize competition for their ad space on all exchanges. The higher advertising

revenue publishers make from exchanges permits publishers to offer consumers better quality content and lower-priced or free access to their content.

158. Furthermore, the egregious ways that Google violates users' privacy further evidence the pretextual nature of Google's purported concerns for privacy. Indeed, Google knowingly failed to disclose the lack of privacy of its Google Drive service, and it has also met secretly with competitors to "slow down" efforts to enhance user privacy.

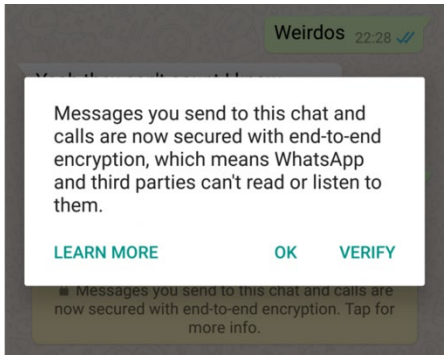
(a) Google violates the privacy of 750+ million Android users.

159. Google's violation of the privacy of 750+ million Android users illustrates the pretext of Google's privacy concerns. Around July of 2015, Google, through its cloud back up service Google Drive, entered into an exclusive agreement with Facebook's private messaging service WhatsApp. As provided in that agreement, starting around October 2015, [redacted].

160. [redacted]. WhatsApp started encrypting users' WhatsApp messages in 2013, completed end-to-end encryption on Android users' messages in 2014, and completed all end-to-end encryption in 2016.

161. WhatsApp prominently marketed the fact the messages that users sent and received using WhatsApp and through its encryption protocol were not accessible by third parties. The WhatsApp website in 2016 and 2017 read: "Many messaging apps only encrypt messages between you and them, but WhatsApp's end-to-end encryption ensures only you and the person you're communicating with can read what is sent … messages are secured with a lock, and only the recipient and you have the special key needed to unlock and read them."

Screenshot of the WhatsApp mobile application the time assuring users that no third party could read or listen to their communications:



162. The privacy of communications from third party access was not a minor issue. Many consumers demanded communications applications that ensured their communications were walled off from anyone else from having access.

163. Media reports reinforced the idea that no third party had access to users' WhatsApp communications, including those backed up to Google Drive. For example, Mike Isaac with *The New York Times* wrote in 2016, "WhatsApp, the messaging app owned by Facebook and used by more than one billion people, on Tuesday introduced full encryption for its service, a way to ensure that only the sender and recipient can read messages sent using the app." In a similar vein, a 2016 report from Lifehacker, a technology site launched by Gawker Media, stated: "WhatsApp can also backup your messages to Google Drive, though they're encrypted so that shouldn't be that big of a deal. Even if law enforcement requested it from Google, they wouldn't be able to read it."

164. However, this was not true. Conceding this fact in a June 2016 memo, Google wrote that [redacted] The memo continued, [redacted] What this meant was that Google, as a third party, could in fact [redacted], that users thought they had shared privately on WhatsApp.

165. Google knew users were misled about the privacy of their communications. The same June 2016 memo acknowledges: [redacted] The memo also states: [redacted]

166. Google also knew that it was important for Google Drive users to know the truth: that Google as a third party had access to their communications. The same June 2016 Google memo memorialized, [redacted]

167. But Google did nothing to correct this misunderstanding. Rather, it failed to disclose the relevant information to its customers, with the intent to sign up more users of Google Drive. For example, in an October 7, 2015 Google blog post explaining the WhatsApp-Google Drive partnership to consumers, Google affirmed that users' WhatsApp backups were private backups: "WhatsApp for Android lets you create a private backup of your chat history, voice messages, photos, and videos in Google Drive." In addition, the Google Drive website, the Google Drive mobile application, and the Google Drive Terms and Privacy policy all failed to disclose to users that Google as a third party had access to their WhatsApp communications. The Google Drive terms of service at the time even permitted Google the ability to use its access to users' private WhatsApp communications in Google Drive to sell advertising.

168. Google also concealed the fact that it could access users' WhatsApp communications. Normally, users can log into their Google Drive account and view their files contained there. But according to an internal Google memo, [redacted]

[redacted]. As a result, users could not log into Google Drive to discover that Google had access to their decrypted WhatsApp communications.

169. Google's privacy affirmations, omissions, and concealment resulted in increased demand for Google's back up service. Users rapidly signed up for Google Drive backup of WhatsApp communications. By June of 2016, about 434 million WhatsApp users backed up approximately 345 billion WhatsApp files to Google Drive, netting for Google Drive about a quarter of a billion new Google Drive customers. By May of 2017, Google Drive had gained approximately 750 million new WhatsApp back up accounts. In short, Google had no problem violating the privacy of almost a billion users if it helped them to grow their business.

(b) Google secretly met with competitors to discuss competition and forestall consumer privacy efforts.

170. The manner in which Google has actively worked with Big Tech competitors to undermine users' privacy further illustrates Google's pretextual privacy concerns. For example, in a closed-door meeting on August 6, 2019 between the five Big Tech companies—including Facebook, Apple, and Microsoft—Google [redacted]

171. Google also sought a coordinated effort to forestall and diminish child privacy protections in proposed regulations by the FTC and in proposed legislation by Senators Markey and Hawley. According to the same July 31, 2019 document, Google wanted to use the upcoming meeting with the other Big Tech firms to [redacted]

[redacted] read the memo.

172. Not unlike concerns for defections in a price-fixing cartel, Google expressed [redacted] said Google, referring to Facebook.

173. Google also sought to [redacted] against Google and other Big Tech companies, which Google described as [redacted]

174. In addition to outlining discussions that Google wanted to have to forestall privacy efforts, the June 31, 2019 memo also outlined that Google wanted to discuss [redacted]

175. Google presents a public image of caring about privacy, but behind the scenes Google coordinates closely with the Big Tech companies to lobby the government to delay or destroy measures that would actually protect users' privacy. Of course, effective competition is concerned with both price and quality, and the fact that Google coordinates with its competitors on the quality metric of privacy—one might call it privacy fixing—underscores Google's selective promotion of privacy concerns only when doing so facilitates its efforts to exclude competition.

4. Google blocks competing exchanges from accessing publishers' high-value inventory and reaps the benefits for itself.

176. Google foreclosed exchange competition for publishers' valuable impressions through a program called Enhanced Dynamic Allocation ("EDA"). Historically, publishers sold their best impressions to advertisers directly for premium prices. With EDA, Google's ad server let Google's exchange compete for and purchase valuable impressions that the ad server would previously allocate to publishers' premium direct deals. Google blocked non-Google exchanges from competing for those same impressions.

177. Before EDA, when a publisher sold their inventory to an advertiser through a direct deal for premium prices, Google's ad server made it a priority to allocate impressions to that direct deal. But with EDA, Google would evaluate each impression's value and then, based on that value, decide whether to allocate the impression towards meeting a direct deal's reservation goal or to instead re-direct it to an exchange auction.

178. In a review of revenue and impressions on AdX in the United States, Google found that the vast majority—[redacted] percent—of web publishers' ad revenue is generated from a much smaller percent—just [redacted] percent—of impressions. Google refers to this internally as [redacted]

179. As a result of this [redacted] dynamic, EDA made it so only Google's exchange could trade publishers' most valuable inventory. However, competition in the exchange market depends on being able to trade both volume and valuable impressions. By blocking non-Google exchanges from competing against Google's exchange, Google foreclosed competition in the exchange market and shielded Google's exchange from competition.

180. At the same time, EDA permitted Google's exchange to purchase publishers' impressions for depressed prices. Specifically, Google's ad server permitted its exchange to

purchase impressions for one penny more than the reserve price floor it instituted and called the [redacted] If Google had set this price to a $7 CPM, but a competing exchange would have returned a $14 CPM bid, Google let itself nonetheless win for $7.01. In other words, EDA let Google's exchange acquire publishers' impressions at depressed and non-competitive prices.

181. EDA also excluded competition from publishers' direct sales channel (direct deals). Google's ad server let its exchange cherry pick the valuable impressions and then funnel lower-value impressions to publishers' direct deals. Advertisers who paid high prices for premium inventory through direct deals unknowingly received publishers' lower quality inventory in return. Over time, as a consequence of this behavior, the value of direct-sold inventory declined and advertisers re-allocated spending towards Google's exchange (where they must pay Google's high exchange fees).

182. Similar to Google's strategy with Dynamic Allocation, Google invited publishers to enable EDA under a false pretense. Wearing their publisher ad server hat, Google falsely told publishers that EDA "maximizes yield." EDA did not, however, maximize publishers' yield. Internally, Google understood that the EDA program was a scheme to let Google's exchange simply [redacted] In fact, cherry-picking the best impressions under EDA helped Google make an additional [redacted] per year.

183. To make matters worse, Google's practice of scrambling user IDs (discussed above in paragraphs 142-147) concealed the true nature of Google's conduct. Publishers could not easily know that, with EDA, Google was cherry-picking impressions. By scrambling the IDs differently for publishers and advertisers, publishers could not easily work with advertisers to confirm that

advertisers were receiving the valuable impressions (e.g., ads shown to users with high net worth) as opposed to the low value ones (e.g., ads shown to a 10-year-old child with no purchasing power).

184. In summary, Google's actions at issue here—including waterfalling and Dynamic Allocation, the encryption of IDs for users that consent to ID sharing, and EDA—were all unlawful schemes to exclude competition. Without being able to compete for publishers' impressions or receive full information about their inventory, non-Google exchanges could not compete on quality (volume) or price (take rate). As a result, even large and powerful companies like Microsoft and Yahoo! exited the market. By blocking competition outright, Google is able to charge very high [redacted] percent commissions on transactions, which is two to four times higher than the commissions charged by competing exchanges. These extra costs invariably are passed onto American consumers, who are harmed through higher prices and lower-quality goods and services.

C. A new industry innovation called "header bidding" promotes exchange competition; Google wants to kill it.

185. In 2014, publishers rapidly adopted a new innovation called "header bidding" (also known as "HB") that permitted them to route inventory to multiple exchanges. Publishers, advertisers, and exchanges quickly adopted the method to facilitate exchange competition. Google, however, did not welcome the competition. Instead, Google wanted to "kill" header bidding. First, Google introduced an alternative that secretly routed publishers' inventory back to Google's exchange, even when another exchange returned a higher bid. In time, Google's goal became to destroy header bidding entirely. In an October 13, 2016 meeting, Google employees discussed [redacted]

1. Header bidding facilitates competition among ad exchanges.

186. Header bidding involves a creative piece of code that publishers could insert into the header section of their webpages to facilitate competition between exchanges. When a user visited a page, the code enabled publishers to direct a user's browser to solicit real-time bids from multiple exchanges, before Google's ad server could prevent them from doing so. Instead of being subject to the restraints of Google's ad server, header bidding shifted routing from the ad server to the browser. Publishers then sent the highest exchange bid in header bidding into their Google ad server. In short, header bidding created a technical workaround for publishers to circumvent Google's efforts to foreclose competition in the exchange market.

187. So, header bidding became quite popular. Some of the biggest tech companies (including, e.g., Amazon) participated in header bidding, and by 2015, publishers and advertisers alike were rapidly adopting the innovation. By 2016, approximately 70 percent of major publishers in the United States were using header bidding to route their inventory to multiple exchanges, sometimes as many as twenty.

188. Publishers in particular adopted the protocol because they came to realize what Google already knew. Waterfalling, Dynamic Allocation, and EDA did not actually maximize publishers' yield. Instead, as Google discussed behind closed doors, [redacted] In fact, it was incredibly good for publishers. With header bidding, publishers saw their ad revenue jump overnight simply because exchanges could actually compete. One Google employee conceded internally how [redacted]. Some publishers' revenue jumped by 40 to over 100 percent.

189. Header bidding was also a positive development for advertisers and consumers. For advertisers, header bidding allowed them to transact through an exchange of their choosing,

including exchanges imposing less than Google's monopolistic [redacted] percent fees. Internally, Google conceded its fees were supra-competitive and not [redacted]

190. Moreover, consumers benefited by virtue of the increased revenue realized by publishers as well as the fees saved by advertisers. With more ad revenue, publishers produce more content and better subsidized content access. Lower exchange take rates also reduced deadweight costs that advertisers ultimately pass on to consumers. Consumers benefit through higher-quality and lower-priced goods and services.

191. Based on a review of Google's internal documents, Google wanted to quash this header bidding innovation for three basic reasons: avoiding price competition, permitting itself to continue to trade on inside information, and foreclosing competition against its publisher ad server monopoly.

192. First, Google wanted to eliminate header bidding in order to protect its high exchange take rates from competition. As Google discussed internally, [redacted] Such a dramatic reduction to Google's exchange take rates toward competitive rates was an obvious threat posed by header bidding competition.

193. Second, Google wanted to destroy header bidding because the innovation threatened Google's practice of trading on inside information. Secretly, Google's ad server shared competing bids on publishers' inventory with Google's ad buying tools (DV360 and Google Ads), thereby allowing those tools to use the information to win auctions. This is similar to a form of insider

trading, whereby Google is the only one able to bid with knowledge of others' bids. As Google discussed the predicament internally, header bidding caused Google to [redacted] into the [redacted] which are [redacted]

194. Finally, Google wanted to eliminate header bidding to foreclose competition with its publisher ad server monopoly. The companies involved with header bidding would have a foothold on a key function of Google's ad server: routing publishers' inventory to exchanges. With that, a major player like Amazon or Facebook using header bidding would be well-positioned to eventually compete directly with Google's monopoly ad server. Without control over publishers' inventory, Google would lose the ability to block exchange competition and tilt trading towards itself.

195. Google discussed how competition was a problem and deliberated over what to do about it. Rather than compete with other exchanges on price or quality, Google adopted a long list of overt and anticompetitive acts with the express purpose to [redacted]

2. Google creates an alternative to header bidding that secretly stacks the deck in Google's favor.

196. Google tried to eliminate competition from exchanges in header bidding by creating an alternative that secretly stacked the deck in Google's favor. Google's ad server started to let publishers route their inventory to more than one exchange at a time with a new program Google marketed as Exchange Bidding, later renamed to Open Bidding. However, Google secretly devised the program in a way to foreclose exchange competition and codenamed it [redacted] Google measured [redacted] success not by financial targets or output increases, [redacted].

197. Google devised Exchange Bidding to exclude competition from exchanges in at least four ways. First, Google diminished the ability of non-Google exchanges to return competitive

bids by further decreasing their ability to identify users associated with publishers' ad space in auctions. Header bidding let each exchange access a cookie on the user's page, which permitted those exchanges to recapture some information about the user's identity. Google's new program prohibited exchanges from directly accessing the user's page. As a result, they identified users in auctions even less often, causing them to bid and win less often.

198. Second, Google foreclosed exchange competition by charging publishers an additional 5 to 10 percent penalty fee for selling inventory in a non-Google exchange. The fee made advertisers' bids through rival exchanges less competitive than advertisers' bids through Google's exchange—because Google's exchange did not pay the additional fee. As Google understood it, because publishers and advertisers measure an exchange's performance in part based on its take rate, this gave Google's exchange a [redacted] when competing against competing exchanges.

199. Third, Google foreclosed exchange competition by forcing its publisher ad server customers to use Google's exchange. When publishers chose to route their ad space from Google's ad server directly to multiple exchanges at the same time, Google's new program required them to route that inventory through Google's exchange, even if they did not want to do so.

200. Fourth, Google foreclosed exchange competition by secretly rigging the Exchange Bidding program to let Google win. Google designed Exchange Bidding to provide Google's exchange a special [redacted] which Google kept secret. Google made it so its own AdX exchange won publishers' inventory even over another exchange's higher bid. [redacted]

[redacted]

201. Internally, Google employees grappled with the fact that Google was falsely telling publishers that Google's header bidding alternative enabled competition and improved yield, since in reality, Google created a program that advantaged itself at the expense of publishers. As one senior Google employee observed, [redacted]

202. Despite the risk of Google's deceptive moves, Google was eager to kill header bidding and force publishers back into the control of Google's ad server. This was an effort that Google executives described as the [redacted] Google feared that its injuries from header bidding could be more than just a flesh wound.

D. Facebook helps Google "kill" header bidding with an unlawful agreement.

203. Google unlawfully excluded competition from header bidding by getting its largest Big Tech rival, Facebook, to stop supporting the technology. After months of signaling followed by drawn-out negotiations, the two giants reached an illegal agreement. [redacted]

[redacted]

204. The principal impetus for this deal began many months before, in March 2017, when Facebook publicly announced it would support header bidding. By doing so, Facebook would enable web and mobile app publishers and advertisers to bypass the fees associated with transacting through Google's ad server. When bidding into Google's ad server's Open Bidding (f/k/a Exchange Bidding) program, Google required networks (e.g., Facebook's network FAN) to bid into exchanges. And on these transactions, publishers had to pay exchange fees. But Google's exchange fee was very high, about [redacted] percent of the value of the transaction. Because header bidding cost nothing, Facebook's use of header bidding would let web publishers, mobile app publishers, and advertisers save on these fees altogether.

205. Google feared that Facebook's support of header bidding would crack Google's publisher ad server monopoly and unlock exchange competition. [redacted]. In a company deck, he outlined the [redacted] for 2017, writing, [redacted]

206. The wider industry also thought Facebook was prepared to challenge Google's monopoly. The same day as Facebook's March 2017 header bidding announcement, industry publication AdAge wrote that Facebook was poised to execute a "digital advertising coup against

rival Google and its DoubleClick empire." A Business Insider headline the same day read: "Facebook made an unprecedented move to partner with ad tech companies – including Amazon – to take on Google."

207. [redacted] According to metrics posted in Facebook's public blog, Facebook was helping publishers and advertisers match two to three times more users in auctions and increase third-party publishers' revenue by 10-30 percent. [redacted]

208. These cost efficiencies for publishers and advertisers were not welcome news to Google. Even before Facebook's March 2017 announcement, Google was concerned about large entrants supporting header bidding. Internal Google documents show that Google's mandate at the time was to stop its competitors [redacted]. In an October 5, 2016 presentation to senior Google executives, [redacted] The presentation plainly asserted that Google's [redacted] was to [redacted]

209. Conversely, internal Facebook communications indicate that Facebook's March 2017 announcement was mainly intended [redacted]. Evidently, Facebook was merely executing a planned long-term strategy—"[redacted]

[redacted]. In other words, Facebook wanted to draw Google in.

210. Facebook's maneuvers proved successful when Google made the first move. According to internal Facebook communications, Google tried to bring Facebook to the negotiating table as early as [redacted]. In one email, a Facebook employee noted that [redacted]

211. Within months of Facebook's official header bidding announcement, Google and Facebook began formal negotiations. According to an internal Google presentation from November 2017 discussing [redacted] Google stated that their endgame was to [redacted].

212. Facebook clearly understood Google's motivations. In an [redacted] email, [redacted] Facebook knew Google's intent was to cut a deal to get Facebook to [redacted].

213. At this time, and extending into 2018, Google and Facebook were engaged in high-stakes brinksmanship. A truce between the two advertising giants was by no means guaranteed. In an August 9, 2018 internal Google presentation, one slide averred that if Google could not [redacted] Google was interested in using Facebook to [redacted].

214. Facebook was highly interested in a successful outcome to these negotiations between horizontal competitors in the ad network market and potential competitors in the publisher ad server market. As internal Facebook documents reveal, Facebook [redacted] Facebook did not want to play [redacted].

215. [redacted].

216. The companies' collective efforts to avoid competition were successful. Facebook chose to cut a deal with Google. The ultimate outcome of the negotiations was a September 2018 Google-Facebook agreement [redacted].

217. Google internally used the code phrase [redacted] to refer to the 2018 Google-Facebook agreement. This phrase was a twist on the reference to Star Wars. Google generally kept this code phrase secret and non-public. Google does not use code words to uniquely refer to any other Open Bidding or Network Bidding agreement.

[redacted]

218. As a result of their bidding agreement, Facebook significantly curtailed its header bidding initiatives and would instead bid through Google's ad server. In return, Google agreed to give Facebook a leg up in its auctions. [redacted].

1. Google gives Facebook a leg up in its auctions in return for Facebook backing off from header bidding.

219. Facebook agreed to shift from routing bids through header bidding to routing bids through Google's ad server in exchange for a number of special auction advantages. Traditionally, when bidding into Google's ad server through Open Bidding, networks for web inventory like FAN had to bid into exchanges and pay exchange fees. But with the [redacted] agreement, Google made Facebook a large-scale concession and [redacted]. Publishers and advertisers measure the efficiency of trading through buy-sell spreads. [redacted] Google imposes on some marketplaces (like FAN) puts those marketplaces at an advantage when competing against the marketplaces with higher fees.

220. Google also provided Facebook with a [redacted]. Google subjects other marketplaces competing for publishers' inventory in Open Bidding to 160 millisecond timeouts. Competitors have actively complained that [redacted] is not enough time to recognize users in auctions and return bids before they are excluded. By comparison, Google nearly [redacted]. These longer timeouts granted by Google were presumably designed to aid FAN in winning more auctions to abide by the spirit of the [redacted] agreement.

221. Google further induced Facebook to help Google [redacted] by letting Facebook have [redacted]. This term was advantageous to Facebook because Google prohibits other exchanges and networks in Open Bidding from having such [redacted]. In fact, Google's policies with other exchanges and networks in this regard are so strict that Google has prohibited marketplaces from [redacted]. The inability to [redacted] constrains marketplaces' ability to operate and compete. One advertising competitor compared Google's business term to a [redacted]

222. On top of [redacted], Google further induced Facebook to help it shut down competition from header bidding by [redacted]. Other networks have asked Google for the same information, but Google has refused. So now Facebook has a further leg up over the competition in Google auctions: [redacted].

223. In the [redacted] agreement, Google also promised to use [redacted] to help Facebook recognize the identity of users in publishers' auctions. The parties agreed

to [redacted], i.e., the percent of users Facebook could identify in auctions over the percent of bid requests received. Google promised Facebook an [redacted] in auctions for mobile inventory and a [redacted] in auctions for web inventory (excluding Safari). Bidders in advertising auctions generally only bid when they recognize the identity of the user. As a result, the [redacted] allow Facebook to bid and win more often in auctions, providing FAN yet another advantage over other bidders.

224. Indeed, since signing the agreement, Google and Facebook have been working closely in an ongoing manner to help Facebook [redacted]. For example, Google and Facebook have [redacted]. They also coordinated with each other to harm publishers through the adoption of Unified Pricing rules, discussed in paragraphs 273-279 below. The companies also have been working together to [redacted]. For instance, according to an April 2, 2019 discussion between Facebook employees, [redacted]. Facebook employees noted, however, that [redacted]. By helping Facebook to [redacted], Google helps Facebook's network FAN bid and win more often than other bidders in Google's auctions.

225. Google also provided Facebook an advantage when it came to Google using Facebook's inside information to beat Facebook in auctions. In entering the agreement, Facebook was wary that Google would use information about Facebook's bids to manipulate auctions. As a result, Facebook was explicit in [redacted]. Dan Rose, Facebook Vice President of Partnerships, explained in an email to Mark Zuckerberg that Facebook had [redacted] Facebook was big enough to extract this concession from Google, whereas no other auction participant has the scale to demand or achieve the same. [redacted]

Screenshot of contractual terms that [redacted]

2. Google and Facebook agree in the [redacted] agreement to a secret [redacted]

226. In the auctions for publishers' inventory that are the subject of the [redacted] agreement, Google and Facebook compete head-to-head as bidders. Specifically, Google's GDN ad network and AdMob bid against Facebook's ad network FAN in these auctions. In this context, Google and Facebook compete against each other. Google internally discussed this [redacted]

227. The Google and Facebook ad networks for web display and in-app mobile inventory (collectively, GDN, AdMob, and FAN) are the largest ad networks in the United States. They are frequently the largest competitors for publishers' inventory in auctions hosted by Google's ad server.

228. In the [redacted] agreement, Google and Facebook agreed to manipulate publisher auctions in Facebook's favor through [redacted]. For example, the agreement outlines that Facebook will use [redacted]

percent of auctions in which Facebook recognizes the end user. The agreement also outlines that, starting in the fourth year of the agreement, [redacted].

229. Google and Facebook also agreed in the [redacted] agreement to a [redacted] The agreement defines the term [redacted] agreement specifies that Facebook would have a [redacted]. The agreement terms require Facebook to bid high enough to win [redacted] irrespective of how high others in the auctions bid.

230. When Facebook "wins" one of these auctions, Facebook is not purchasing ad space for the purpose of advertising Facebook's own products or services. Rather, Facebook's network FAN is acquiring impressions for the purpose of re-selling those impressions to small business advertisers across America who buy advertising from Facebook. Some of these advertisers do not even know that Facebook delivers their ads on non-Facebook websites and apps.

231. The [redacted] agreement allocates markets, and therefore fixes prices, between Google and Facebook as competing bidders in the auctions for publishers' web display and in-app advertising inventory. The agreement allocated a portion of publishers' auction wins to Facebook, subverting the free operation of supply and demand. Furthermore, [redacted] were designed to meet a [redacted] that spans several years. Facebook is locked in and cannot change its mind and switch back to header bidding to compete against Google in the publisher ad server market.

232. By providing Facebook with what Google called [redacted] combined with pre-agreed [redacted] and [redacted] Google further manipulated publishers' auctions. Google already manipulates publishers' auctions by giving Google bidders information and speed advantages. In 2019, these advantages helped them win the overwhelming majority of publishers' auctions hosted by Google: about [redacted] percent of Google AdMob auctions for U.S. mobile app inventory, and about [redacted] percent of Google ad server auctions for mobile inventory. Now Google offered Facebook a [redacted], information advantages, speed advantages, and other prioritizations, to the detriment of other auction participants.

233. As one would expect with a market allocation agreement, Google and Facebook do not disclose their [redacted] agreements to other auction participants. Rather, Google publicly misrepresents that all bidders in publishers' auctions compete on equal footing. "All participants in the unified auction, including Authorized Buyers and third-party yield partners, compete equally for each impression on a net basis," Google publicly markets on its website. This, of course, is patently false. It is false not only because of the special terms in the Facebook agreement, but also because Google used algorithms to systematically manipulate auction outcomes and repeatedly traded on inside information to win auctions.

234. Given the scope and extensive nature of cooperation between the two companies, Google and Facebook were highly aware that their agreement could trigger antitrust violations. So they discussed, negotiated, and memorialized how they would cooperate with one another [redacted] agreement permits the parties to terminate the agreement for [redacted]. If neither party executed those termination options, the agreement permits

termination [redacted]. The agreement also requires the parties to [redacted] relating to their illegal agreement in its answer to this Complaint. The word [redacted] is mentioned no fewer than twenty times throughout the [redacted] agreement.

Screenshot of the [redacted] agreement specifying [redacted]

[redacted]

E. Google forces market participants to re-route trading through Google.

235. In its efforts to kill header bidding and competition in the exchange market, Google went further than colluding with its largest competitor. Google worked tirelessly to stop the innovation of header bidding entirely. Google deceived exchanges to use Google's ad server instead of header bidding. Google employees sometimes deceived publishers who chose to use header bidding, falsely telling one major online publisher that it should cut off a rival exchange in header bidding because of a strain on servers. After the exchange uncovered Google's act, Google employees discussed playing a [redacted] on the industry and [redacted] Google also crippled publishers' ability to measure the efficiency of exchanges in header bidding, limited publishers' use of exchanges in header bidding, and punished publishers and advertisers that used header bidding in Google search rankings, where Google has significant scale.

1. Google trades ahead of bid orders to foreclose exchange competition.

236. Google first excluded competition from header bidding, and in the exchange market, by trading ahead of the bid orders submitted by header bidding exchanges. A publisher like *USA Today* would route their inventory to multiple exchanges through header bidding, then route the winning exchange bid into their Google ad server. Google programmed its ad server to let its exchange displace the winning header bidding exchange bid by paying one penny more. Put another way, Google's ad server let Google's exchange peak at the winning header bidding exchange's bid, then displace the trade. Industry participants called this Google's "Last Look." Other industries call analogous conduct by intermediaries "insider trading" and "front running."

237. With Last Look, and Google's absolute monopoly in the ad server market, Google successfully foreclosed competition in the exchange market and ensured a system where Google always prevailed. Google's exchange cherry picked the best impressions, leaving rival exchanges

the low value impressions left behind by Google's exchange. According to a confidential Google study, Last Look [redacted], protecting Google's market power in both. Google's internal documents also explain that Last Look ensured that header bidding exchanges lose to Google's exchange. The exception was when a publisher set a higher floor for Google's exchange, a feature that Google would later remove from publishers' control.

2. Google deceives exchanges to forgo header bidding.

238. Google unlawfully excluded competition from header bidding and in the exchange market by tricking non-Google exchanges to migrate from header bidding to Exchange Bidding. In March 2017, Google stated that its exchange would no longer trade ahead of other exchanges that bid through Google's Exchange Bidding program. Market participants cheered Google for giving up its "Last Look auction advantage."

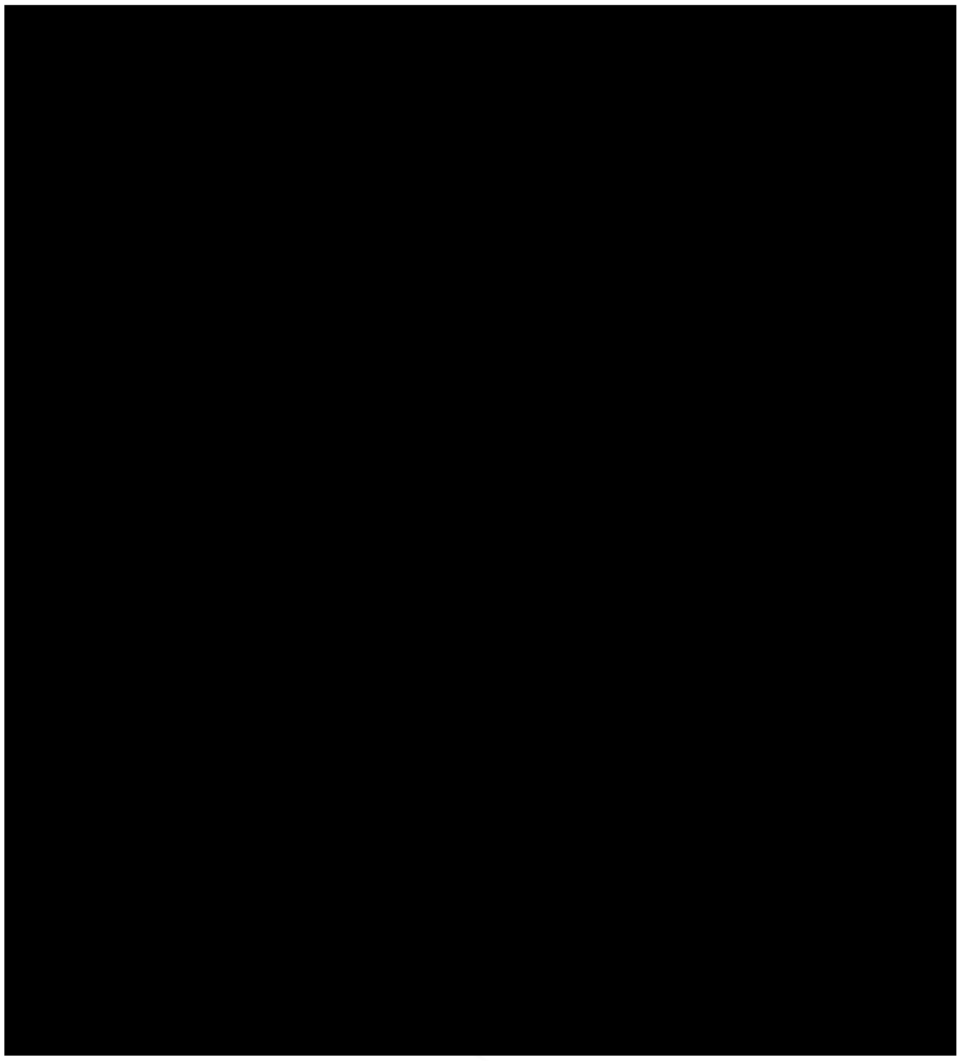
239. However, Google did not actually stop trading ahead of exchanges. Internal documents reveal that Google simply replaced one version of Last Look for another by using a new technique that allowed Google to continue to jump ahead of rival exchange bids. Specifically, Google deployed a bid optimization scheme based on predictive modeling [redacted]. With this new bid optimization, Google abandoned Last Look as that term was understood. However, Google re-engineered its ability to trade ahead of its rivals.

240. Google's new manipulation permitted Google to give up Last Look, as such, but still win just the same— [redacted]. Non-Google exchanges cannot compete with similar bid optimization schemes because Google's ad server restricts publishers from accessing and sharing their user IDs. Truly giving up Last Look

would have cost Google too much; Google predicted a [redacted] percent hit to DV360's revenue and at least a [redacted] percent decrease in Google Ads' revenue.

3. Google deceives publishers to disable rival exchanges in header bidding.

241. Internal communications between Google employees reveal how Google engaged in deception to undermine header bidding and foreclose competition in the exchange market. In one instance, [redacted]. However, a senior Google employee worried its misrepresentations would make it difficult [redacted] Another employee conceded it gave Google a [redacted] Google employees agreed that, in the future, they should find ways to convince publishers to act against their interest and remove competing exchanges in header bidding on their own.



4. Google cripples publishers' ability to measure the success of rival exchanges in header bidding.

242. Beginning in 2018, Google's ad server started redacting various data fields from the consolidated auction records it shared with publishers. These redactions make it nearly impossible for publishers to compare the relative performance of exchanges in header bidding with the performance of exchanges going through Google's ad server. Consequently, Google now renders the entire reason publishers use header bidding—increasing yield through head-to-head exchange competition—unobservable and unmeasurable.

5. Google obstructs publishers' use of header bidding through caps.

243. Google also throttles publishers' use of header bidding by capping the number of permissible "line items"—a feature in Google's ad server that publishers must use to receive bids from exchanges in header bidding. Many publishers requested that Google increase the number of permissible line items so that they could properly utilize header bidding. Internally, Google discussed [redacted] Google consistently rejected publishers' requests for more line items, or at best, would provide only temporary and limited increases. As one employee explained to others, [redacted]

244. In a competitive market, an ad server would *help* publishers use header bidding because it will better optimize publisher yield. The OpenX publisher ad server takes this approach, permitting publishers' liberal use of exchanges in header bidding. Instead of increasing line items to enhance publishers' yield, Google's ad server undermines its own clients' revenue yield.

6. Google uses its scale in search to punish publishers that use header bidding.

245. Google also started using its economies of scale in the search market to strongarm publishers and advertisers to stop using header bidding and re-route trading through Google's ad server. Header bidding is only possible if publishers can insert JavaScript code into the header section of their webpages. To respond to the threat of header bidding, Google created Accelerated Mobile Pages ("AMP"), a framework for developing mobile web pages, and made AMP essentially incompatible with JavaScript and header bidding. Google then used its power in the search market to effectively force publishers into using AMP.

246. Although Google claims that AMP was developed as an open-source collaboration, AMP is actually a Google-controlled initiative. Google originally registered and still owns AMP's

domain, ampproject.org. In addition, until the end of 2018, Google controlled all AMP decision-making. AMP relied on a governance model called "Benevolent Dictator For Life" that vested ultimate decision-making authority in a single Google engineer. Since then, Google has transferred control of AMP to a foundation, but the transfer was superficial. Google controls the foundation's board and debates internally [redacted].

247. Google ad server employees met with AMP employees to strategize about using AMP to impede header bidding, addressing in particular how much pressure publishers and advertisers would tolerate. First, Google restricted the AMP code to prohibit publishers from routing their bids to, or sharing their user data with, more than a few exchanges a time, thereby severely limiting AMP's compatibility with header bidding. However, Google made AMP fully compatible with routing to exchanges through Google's ad server. Google also designed AMP to force publishers to route rival exchange bids through Google's ad server so that Google could continue to peek at their bids and trade on inside information. Third, Google designed AMP so that users loading AMP pages would directly communicate with Google cache servers rather than publishers' servers. This enabled Google's access to publishers' inside and non-public user data. AMP pages also limit the number of ads on a page, the types of ads publishers can sell, and the variety of enriched content that publishers can have on their pages.

248. After crippling AMP's compatibility with header bidding, Google went to market falsely telling publishers that adopting AMP would enhance page load times. But Google employees knew that AMP only improves the [redacted] and AMP pages can actually [redacted]. In other words, the ostensible benefits of faster load times for a Google-cached AMP version of a webpage were not

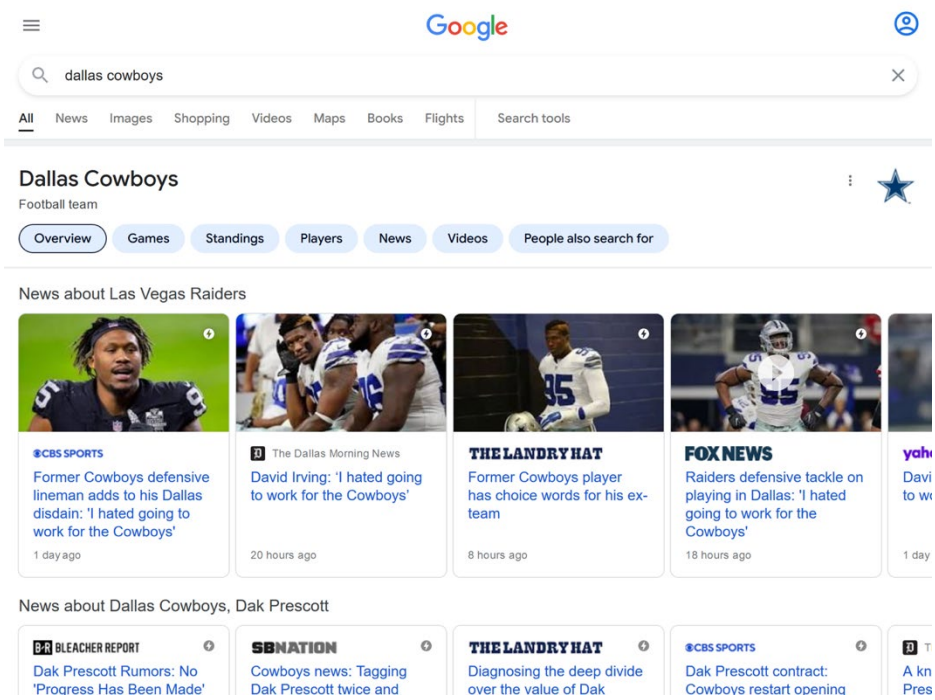
true for publishers that designed their web pages for speed. Some publishers did not adopt AMP because [redacted].

249. The speed benefits Google marketed were also at least partly a result of Google's throttling. Google [redacted] of non-AMP ads by giving them artificial one-second delays in order to give Google AMP a [redacted] slows down header bidding, which Google then uses to denigrate header bidding for being too slow. [redacted] Google falsely claimed. Internally, Google employees grappled with [redacted]

250. Despite the speed benefits Google falsely touted, publishers did not want to use AMP because AMP pages caused their advertising revenue to decline: publishers [redacted]. AMP also degraded quality by restricting content and ad types.

251. Just as publishers have the freedom to make their webpages mobile or desktop compatible, publishers still have the freedom to decide whether to build their pages using the AMP framework. However, [redacted].

Google search results for "Dallas Cowboys"; AMP results are displayed in the carousel along the top:



252. Google gave publishers a Faustian bargain: (1) publishers who used header bidding would see the traffic to their site drop precipitously from Google suppressing their ranking in search and re-directing traffic to AMP-compatible publishers; or (2) publishers could adopt AMP pages to maintain traffic flow but forgo exchange competition in header bidding, which would make them more money on an impression-by-impression basis. Either option was far inferior to the options available to publishers before Google introduced AMP. Just how inferior? According to Google's internal documents, [redacted].

7. Google's ad server gives exchanges that forego header bidding a leg up.

253. Google's ad server excludes competition in the exchange market by withholding critical ad server data, called "minimum bid to win," from exchanges in header bidding. The "minimum bid to win" data is the price an auction participant would have had to bid to win a particular completed auction; Google's ad server shares this data with exchanges in Google's Open

Bidding program at the conclusion of each auction. Exchanges in Open Bidding use this data to adjust their bidding strategy in order to beat exchanges returning bids through header bidding. In other words, exchanges in header bidding will lose more while those bidding in Open Bidding win more.

8. Google excludes competition through "nontransparent pricing."

254. Google excludes competition by purposefully keeping its auction mechanics, terms, and pricing, opaque and "nontransparent." When marketing its exchange to publishers and advertisers, Google has explained that an ad exchange is "just like a stock exchange, which enables stocks to be traded in an open way." However, Google's exchange is not open at all.

255. Google's non-transparent pricing strategy includes obfuscating the take rate that publishers and advertisers pay Google. Google tells the small advertisers who use Google Ads to bid the price they pay Google for ad space, but not the price the inventory actually cleared for in Google's exchange, the revenue the publisher receives, or the markup Google keeps. In a discussion between Google employees about Google Ads' fees, one employee asked: [redacted] Another clarified that the fee [redacted] Even Google employees don't understand Google's fees for small advertisers.

256. Google also obfuscates price transparency for publishers. Overall, evidence suggests that publishers selling inventory through Google receive approximately 70 percent of advertising revenue paid by advertisers, and in some cases that amount is as low as 58 percent. In other words, Google's take rate is approximately 30 percent and in some cases is as high as 42 percent.

257. The lack of transparency decreases competitive pressure at different points in the supply chain and increases opportunities for rent-seeking and arbitrage. As one senior Google employee put it, [redacted]

[redacted] In other words, Google can charge higher fees at points in the supply chain where there is little competition and the lack of transparency around fees impedes other firms from coming in and competing with Google by offering the same services at lower prices.

258. The lack of transparency also forecloses competition because it impedes potential and actual competitors from assessing a possible return on investment and entering the market to compete.

259. Overall, the lack of transparency prevents more efficient competition that would drive greater innovation, increase the quality of intermediary services, increase output, and create downward pricing pressure on intermediary fees.

9. Google is trying to foreclose competition and create a "walled garden" on the open web.

260. Google is excluding competition from header bidding, and in the exchange and ad buying tool markets, by trying to create a "walled garden"—a closed ecosystem—out of the otherwise-open internet. Specifically, Google's aim is to limit publishers' ability to identify and track users, and to position itself as the arbiter of identification and targeting on the open web. To then sell targeted ads, publishers will be required to lean even *more* into Google. Google has advanced two different projects to achieve this anticompetitive end-goal: the first is Project [redacted] and the second, Privacy Sandbox. With both, Google's objective stands in stark contrast to the open internet that Google claims to protect.

i. Project [redacted]

261. Project [redacted] was Google's original plan to create a closed ecosystem out of the open internet. Google documents reveal that Google's motive was to [redacted] For Google, Project [redacted] walled

garden meant two things: controlling the design of publishers' ad space, then forcing those publishers to sell their ad space exclusively through Google's products. According to internal Google documents, this strategy would permit Google to extract even higher intermediation fees. A Google employee aptly described Google's ambition for Project [redacted] by acknowledging that Google wants to [redacted] Google's nickname for this walled garden plan was [redacted] for short. In other words, Google wanted to be able to control and close off independent websites like *The Dallas Morning News* just as Google can control and close off its own sites like YouTube.

262. To get publishers to give Google exclusive access over their ad inventory, Google set publishers up for a lose/lose scenario. First, Google started to leverage its ownership of the largest web browser, Chrome, to track and target publishers' audiences in order to sell Google's advertising inventory. To make this happen, Google first introduced the ability for users to log into the Chrome browser. Then, Google began to steer users into doing this by using deceptive and coercive tactics. For example, Google started to automatically log users into Chrome if they logged into any Google service (e.g., Gmail or YouTube). In this way, Google took the users that choose *not* to log into Chrome and logged them in anyways. If a user tried to log out of Chrome in response, Google punished them by kicking them out of a Google product they were in the process of using (e.g., Gmail or YouTube). On top this, through another deceptive pattern, Google got these users to give the Chrome browser permission to track them across the open web and on independent publisher sites like *The Dallas Morning News*. These users also had to give Google permission to use this new Chrome tracking data to sell Google's own ad space, permitting Google to use Chrome to circumvent reliance on cookie-tracking technology. The effect of this practice is

to rob publishers of the exclusive use of their audience data (e.g., data on what users read on *The Dallas Morning News*), thereby depreciating the value of publishers' ad space and benefitting ad sales on Google's properties (e.g., YouTube).

263. Chrome is the leading computer browser in the United States with almost 60 percent market share. Chrome has power over publishers because it controls a captive segment of their online users; consequently, publishers do not have alternative ways to reach the users that access the internet using Google's browser.

264. After using Chrome to track publishers' users, Google turned around and offered to give publishers the ability to tap into Google's now-deeper trove of user data in exchange for the publishers' agreement to give Google exclusive control over their ad space. If publishers did not agree to the new exclusivity terms, Google would continue to use Chrome to collect data about their users to sell more Google ads at the expense of the publishers' ad space. For Google, Project [redacted] represented a win-win.

ii. Privacy Sandbox

265. As regulatory scrutiny around Google and other Big Tech firms increased globally, Google transitioned from Project [redacted] to "Privacy Sandbox." Regulators around the world were increasingly concerned about the extent to which firms like Google tracked consumers. Of any company on the internet, Google was number one in the world when it came to tracking users online through cookies. The leader in cookie-based tracking needed a way to deflect any potential regulation of its business. To address these concerns, Google would take a new approach to building a walled garden out of the open web and ground that approach in privacy language.

266. Google's new scheme is, in essence, to wall off the entire portion of the internet that consumers access through Google's Chrome browser. By the end of 2022, Google plans to modify Chrome to block publishers and advertisers from using the type of cookies they rely on to track

users and target ads. Then, Google, through Chrome, will offer publishers and advertisers new and alternative tracking mechanisms outlined in a set of proposals that Google has dubbed Privacy Sandbox. Overall, the changes are anticompetitive because they raise barriers to entry and exclude competition in the exchange and ad buying tool markets, which will further expand the already-dominant market power of Google's advertising businesses.

267. Google's new scheme is anticompetitive because it coerces advertisers to shift spend from smaller media properties like *The Dallas Morning News* to large dominant properties like Google's. Chrome is set to disable the primary cookie-tracking technology almost all non-Google publishers currently use to track users and target ads. A small advertiser like a local car dealership will no longer be able to use cookies to advertise across *The Dallas Morning News* and *The Austin Chronicle*. But the same advertiser will be able to continue tracking and targeting ads across Google Search, YouTube, and Gmail—amongst the largest sites in the world—because Google relies on a different type of cookie (which Chrome will not block) and alternative tracking technologies to offer such cross-site tracking to advertisers. By blocking the type of cookies publishers like *The Dallas Morning News* currently use to sell ads, but not blocking the other technologies that Google relies on for cross-site tracking, Google's plan will pressure advertisers to shift to Google money otherwise spent on smaller publishers.

268. Google's new scheme is also anticompetitive because it forecloses competition in the exchange and ad buying tool markets while simultaneously providing Google with a workaround. Non-Google ad buying tools rely primarily on the type of cookies that Chrome is set to block in order to track users and target them with ads. Google's ad buying tools, however, partially circumvent reliance on the same type of cookies because Google grants them exclusive access to user data from Chrome and Google's Android mobile operating system. As a result of these

impending changes, some advertisers are already in the process of preparing to shift their spend from competing ad buying tools to Google's. In addition to increasing its already dominant market positions on the buy-side, because Google's ad buying tools favor Google's exchange, the upcoming changes will further entrench Google's exchange monopoly.

269. Google's new scheme limits competitors' ability to compete with Google and the massive amount of user data that it has accumulated. For over ten years, Google has been the single largest tracker of online users using the very type of cookies that Google will now block. Google has already amassed massive quantities of user data and associated them with individual profiles. Moving forward, Google is also uniquely positioned to continue collecting vast troves of data on individual users: Google will continue individually tracking users on their major properties (e.g., Google Search, Google Maps, YouTube) and through various workarounds (e.g., via Chrome and Android).

270. In addition to excluding competition in these ways, Google's new walled garden scheme poses a systemic risk to online advertising markets in the United States: it blocks publishers and advertisers from transacting through intermediaries that do not have conflicts of interest. By blocking cookies, and through proposals in Privacy Sandbox, Google forcibly inserts itself in the middle of publishers' business relationships with non-Google advertising companies, cutting off publishers' ability to transact with rivals without also going through Google. As internal Google documents make clear, [redacted]. Google operates on the buy-side and the sell-side, runs an exchange, and participates in the market as a buyer and as a seller. The equivalent in financial markets would be working with a broker that also represents the counterparty, runs the exchange, and has a proprietary trading desk—all without ethical walls between business divisions

to protect its customers' welfare. In advertising, a lack of transparency exacerbates advertiser concerns: Google does not permit adequate third-party audits for things like ad fraud, measurement (e.g., render rates), or circulation. Google's upcoming changes will force market participants to rely even more on Google, a conflicted intermediary, as the arbiter of ad transactions.

271. To summarize, Google's upcoming cookie changes in the name of privacy are a ruse to further Google's longstanding plan to advantage itself by creating a closed ecosystem out of the open web. Project [redacted] was Google's first scheme; then, to deflect growing regulatory concern over its own privacy and intrusive cookie practices with consumers, Google launched "Privacy Sandbox," new plans to wall off the internet accessed through Chrome. Google's aim is to further squeeze competition in the exchange and ad buying tool markets by restricting competitors' ability to track users and target ads.

272. At the same time, Google is trying to hide its true intentions behind a pretext of privacy. Google does not actually put a stop to user profiling or targeted advertising—it puts Google's Chrome browser at the center of tracking and targeting. Google does not put a stop to Google's tracking of users on Chrome; it does not put a stop to Google's tracking of users through cookie workarounds; it does not put a stop to Google's tracking of users across the largest sites in the world. In fact, the new Google Chrome tracking groups create something akin to a Google social credit score based on group identity. As The Electronic Frontier Foundation recently summarized: "Today, trackers follow you around the web, skulking in the digital shadows in order to guess at what kind of person you might be. In Google's future, they will sit back, relax and let your browser do the work for them. …. The Sandbox isn't about your privacy. It's about Google's bottom line. At the end of the day, Google is an advertising company that happens to make a browser."

10. Google excludes competition though Unified Pricing rules.

273. Many publishers would prefer to apply higher price floors to Google's AdX exchange than they apply to other exchanges, since the informational and other disadvantages Google creates for other exchanges often mean that AdX is willing to bid more than others. Those higher price floors for Google (or the lower price floors for others) require Google to compete more vigorously, i.e., bid more, for purchasing impressions. One of Google's initial efforts to avoid this heightened competition came in June 2019, when Google manipulated its core search algorithm to punish publishers utilizing higher price floors. It caused some publishers' search traffic to plummet, with one publisher losing half of its search traffic in a single day. Nevertheless, Google repeatedly misrepresented to publishers that it was not manipulating search traffic results to punish publishers who set higher price floors for Google. But in the end, Google would address the issue more directly by imposing Unified Pricing rules, which eliminated differential price floors altogether. In effect, Google used its ad server monopoly to exclude competition in the exchange market.

274. In 2019, Google's ad server started prohibiting publishers from setting different price floors for different exchanges and ad buying tools. As a result, publishers can no longer route their ad space to an exchange like AppNexus at a price floor lower than the price floor they apply when routing the same impression to Google's exchange. Nor can a publisher give one bidder (e.g., Google Ads) a higher price floor (e.g., $10 CPM), while giving another (e.g., The Trade Desk) a lower price floor (e.g., $8 CPM). Google calls these new ad server restrictions Unified Pricing.

275. Unified Pricing prohibits publishers from using price floors to generate competition between Google and non-Google exchanges and ad buying tools. Historically, publishers set different price floors for Google in order to generate competition from non-Google exchanges and ad buying tools. After Google acquired DoubleClick, Google's ad server restricted publishers from sharing their raw and non-scrambled DoubleClick ad server users IDs with non-Google exchanges

and ad buying tools. At the same time, Google's ad server shares those user IDs with Google's exchange and ad buying tools. Consequently, Google's exchange and ad buying tools had a distinct information advantage about publishers' heterogenous inventory. Non-Google intermediaries' corresponding information disadvantage caused them to bid lower for impressions; for instance, they must sometimes bid "blind," unable to adequately evaluate the value of the impression. To create bid competition in their auctions from non-Google ad buying tools, publishers would set their price floors higher for Google. But Google's Unified Pricing rules now block publishers from charging Google a rational information risk premium, and they also effectively preclude publishers from generating competition from bidders unable to match Google's information advantages.

276. Google's blocking of competition via Unified Price rules has resulted in Google's exchange and buy-side winning an increasing portion of publishers' impressions, even though they pay lower prices. [redacted]. Records also show that [redacted]. In sum, Google's Unified Price rules have been extremely effective at blocking and reducing competition from non-Google exchanges and ad buying tools.

277. Unified Pricing rules not only prohibit publishers from discriminating between exchanges and bidders based on price and yield, but also on non-price criteria like ad quality. Publishers cannot favor exchanges and ad buying tools that return higher quality ads.

278. The Unified Pricing rules also result in Google's exchange winning more because they coerce publishers to transact with Google ad buying tools *in* Google's exchange. In other words, they require publishers to use Google's exchange in order to do business with Google's ad buying tools. Previously, publishers could choose to transact with DV360 only in non-Google exchanges by increasing DV360's price floors in Google's exchange. Unified Pricing rules ended this practice and forced publishers to transact with DV360 and Google Ads in Google's exchange. Forcing publishers to transact with Google's ad buying tools only if they also transact in Google's exchange was one of Google's main aims with Unified Pricing.

279. Google misrepresented to publishers its reasons for adopting Unified Pricing. Externally, Google falsely declared that abolishing price floors benefited publishers. Privately, however, Google recognized that Unified Pricing was [redacted] and revealed that the true objective was to allow [redacted] According to an internal Google memorandum summarizing a May 2, 2019 meeting between Google and Facebook, the parties discussed [redacted]. These discussions helped Google later decide to prohibit publishers from setting lower price floors for non-Google ([redacted]) exchanges, networks, and ad buying tools. The Unified Price rules further [redacted].

F. Google forces advertisers to use Google's ad buying tools.

1. Google conduct that excludes competition in the exchange market also excludes competition in the ad buying tool markets.

280. The artificial information disadvantages that Google's ad server and exchange generate for non-Google ad buying tools (e.g., cutting off access to publishers' ad server user IDs) foreclose competition in the ad buying tool markets.

281. The various Google programs discussed in paragraphs 148-154, including the [redacted] program, foreclose competition in the ad buying tool markets for small and large advertisers.

282. Likewise, the Unified Pricing rules discussed in paragraphs 273-279 foreclose competition and protect Google's monopoly in the ad buying tool markets. Before Unified Pricing, publishers could set different price floors to facilitate competition between Google and non-Google ad buying tools.

283. Google's Last Look conduct, as well as Google's new replacement scheme, discussed in paragraphs 236-240, forecloses competition in the ad buying tool markets.

2. Google excludes competition in the market for ad buying tools by cutting YouTube off from competing ad buying tools.

284. Google unlawfully maintains its monopoly power in the ad buying tool markets by cutting YouTube inventory off from competing ad buying tools. Cutting off YouTube access forces advertisers to use Google's ad buying tools because YouTube, as the leading provider of video inventory in the United States, is a "must-have" source of online instream video inventory for advertisers.

285. Google did not always require advertisers to use a Google ad buying tool to purchase YouTube ad inventory. Indeed, advertisers could previously purchase YouTube inventory through many non-Google ad buying tools.

286. However, in 2013, Google noticed that its ad buying tool for large advertisers DV360 was falling behind the competition. Google started to consider withholding YouTube inventory from non-Google ad buying tools for the express purpose of pressuring advertisers to use DV360 and Google Ads. In an internal 2014 Google document, Google strategized that [redacted]

287. Google also recognized that withholding YouTube from competing ad buying tools would give Google's DV360 and Google Ads power as buyers' agent to steer advertisers' budgets back to Google's properties (e.g., Google Search). A 2013 strategy conversation makes this clear:

[redacted] In other words, if YouTube inventory were available exclusively through Google's ad buying tools, advertisers would have to use those tools, which would empower Google to then steer budgets back to Google properties (e.g., Search and YouTube).

288. Rather than competing in the market on the basis of price or quality, Google decided to withhold YouTube inventory from non-Google ad buying tools in order to force advertisers to use Google's tools.

289. By restricting non-Google ad buying tools from selling YouTube inventory, Google also acted against YouTube's interest. Restricting the pool of buyers for YouTube inventory lowered the demand and revenue for YouTube content creators.

290. The harm to competing ad buying tools is magnified because advertisers (and ad agencies) prefer to minimize the number of ad buying tools they use. Advertisers and ad agencies bear significant costs and inefficiencies when using more than one ad buying tool for an ad campaign. For example, using multiple tools increases the rate at which they inadvertently bid against themselves on exchanges, thereby driving up their own advertising costs. As Google knows, advertisers can either use more than one ad buying tool (and increase their costs) or use just Google's tools and avoid these inefficiencies altogether.

291. Cutting off access to YouTube foreclosed competition in the ad buying tool markets and protected Google's market power in these markets. Many DSPs stopped growing, many others went out of business, and the market overall has been closed to entry.

VIII. ANTICOMPETITIVE EFFECTS

292. Google's exclusionary conduct has caused a wide range of anticompetitive effects, including the exit of rival firms and limited and declining entry rates in the relevant antitrust markets (despite the significant profits enjoyed by Google in those markets). Google's harm to competition deprives advertisers, publishers, and consumers of improved quality, greater transparency, greater innovation, increased output, and lower prices.

293. Google's anticompetitive conduct described throughout this Complaint has adversely and substantially affected the Plaintiff States' economies and the general welfare in the Plaintiff States. Google's illegal conduct has reduced competition, raised prices, lowered quality, and reduced output in each of the Plaintiff States. This conduct has harmed the Plaintiff States' respective economies by depriving the Plaintiff States and the persons within each Plaintiff State of the benefits of competition.

294. Google has unlawfully maintained monopolies by using its market power to disadvantage the process of competition via tying, exclusionary conduct, and other conduct in at least the following ways:

i. Substantially foreclosing competition in the exchange market by interfering with and cutting off access to inventory and advertiser demand;

ii. Substantially foreclosing competition in the publisher ad server market by tying its ad server with its market dominant exchange;

iii. Substantially foreclosing competition in the market for publisher ad servers and using market power in the publisher ad server market to harm competition in the exchange

market, the market for display ad buying tools for small advertisers, and the market for display ad buying tools for large advertisers;

iv. Substantially foreclosing competition in the markets for display ad buying tools for small advertisers and display ad buying tools for large advertisers;

v. Increasing barriers to entry in the markets for publisher ad servers, exchanges, display ad buying tools for small advertisers, and display ad buying tools for large advertisers;

vi. Harming innovation which would otherwise benefit publishers, advertisers, and consumers;

vii. Harming publishers' ability to effectively monetize their content, reducing publishers' revenues, and thereby reducing output;

viii. Maintaining opacity on margins and selling processes, harming competition in the exchange and display ad buying tool markets;

ix. Increasing advertisers' costs to advertise and reducing the effectiveness of their advertising, thereby harming businesses' ability to deliver their products and services and reducing output; and

x. Improperly shielding Google's products from competitive pressures, thereby allowing it to continue to extract high margins and avoid the pressure to innovate.

295. This section outlines the effect of Google's conduct on competition in the publisher ad server market, the exchange market, the market for ad buying tools for small advertisers, and the market for ad buying tools for large advertisers, as well as the effects on publishers, advertisers, businesses, and the general public.

A. Anticompetitive Effects in the Publisher Ad Server Market

296. Google's exclusionary conduct has foreclosed competition in the publisher ad server market and created artificial barriers to entry and expansion. Google's exclusionary conduct in this

market includes the tying of its ad server to its exchange (and network and ad buying tools), as well as its unlawful bid rigging agreement with Facebook. Competing publisher ad servers have consequently exited or significantly scaled back their offerings, leaving publishers with little to no choice but to license Google's ad server. Several large public advertising technology firms, including Microsoft, Yahoo!, WPP, and OpenX, once competed in this market; all four firms have since exited the market. Moreover, the entry of new competition has been remarkably weak for a decade, and new entrants are thwarted, because of the Google-created barriers to entry and expansion. For instance, Google thwarted Facebook's potential entry into this market by giving Facebook secret auction [redacted]

297. Google's harm to the competitive process has harmed customers in this market, i.e., online publishers. An ad server is an inventory management system that serves a publisher's interest. In a competitive market, publishers would benefit from ad servers competing on price and quality (e.g., the extent to which ad servers maximize publishers' inventory yield). Google's exclusionary conduct and entry barriers have permitted its ad server to charge supra-competitive fees (e.g., a 5 to 10 percent fee on gross transactions executed in non-Google exchanges and networks) and lower quality below competitive levels (e.g., blocking and interfering with competition from non-Google exchanges that increase publishers' yield).

298. Leading, long-established, and high-quality news publications have faced challenges monetizing via digital advertising, despite large readership and growing subscriber bases. Digital publishers were built on the expectation of fast growth in advertising sales, but that expectation has remained largely unrealized. In 2019, industry commentary described a pattern of struggling publishers heralding the "accelerating deterioration of the sector." Struggling to meet advertising revenue targets, many publishers have had to resort to the downsizing of their workforces and the

production of less content. By reducing the revenue potential for publishers, Google reduces publishers' incentives and resources to produce content, lowering output in this relevant market.

299. Google's harm to the competitive process in the ad server market has also harmed publishers' customers, i.e., individual consumers. Publishers use revenue generated from selling ad space to improve the quality of their content, offer more content, and offer more subsidized content access (i.e., less expensive subscriptions or free content access). Because Google's ad server charges supra-competitive prices and depresses publishers' inventory yield, publishers offer consumers less content (lower output of content), lower-quality content, less innovation in content delivery, more paywalls, and higher subscription fees.

B. Anticompetitive Effects in the Exchange Market

300. Google's exclusionary conduct has foreclosed competition in the exchange market and created artificial barriers to entry and expansion. Google's exclusionary conduct in this market includes deceptively blocking, interfering with, and obstructing exchange competition, cutting off non-Google exchange access to publishers' user IDs, manipulating advertiser bids and exchange price floors (i.e., manipulating the auction), tying of its ad server to its exchange, ad network, and ad buying tools (requiring publishers and advertisers to trade in Google's exchange), an unlawful agreement with Facebook to rig publishers' auctions with advantages and [redacted] for Facebook, and a long list of conduct that Google pursued with the purpose to "kill" header bidding. Competing exchanges have consequently exited the market and new entrants are unable to effectively compete. Over ten years ago, Microsoft, Yahoo!, and top Silicon Valley venture funds competed in the exchange market, with the AdECN, AdBrite, and ADSDAQ exchanges; all three of these exchanges have since exited the market. Competition from new entrants has been weak because of the barriers and obstructions to entry Google has created. For instance, competing exchanges have tried for market share to compete by lowering their take rates to half and even a

quarter of Google's exchange take rates. However, competition is not working: effectively, due to Google interference, lowering prices does not permit exchanges to gain market share.

301. Google's harm to the competitive process has harmed customers in this market, i.e., online publishers and advertisers. In a competitive market, publishers and advertisers would benefit from exchanges competing on take rates and quality. Competition would lead to lower take rates, benefiting publishers and advertisers. Publishers would retain a greater share of their advertising revenue, permitting them to create more content, higher-quality content, and more subsidized content access. Advertisers would pay less to purchase ad space, permitting them to re-invest those cost savings into providing consumers with higher-quality and lower-priced goods and services. Google's foreclosure of competition in the exchange market has permitted its exchange to charge supra-competitive fees (~[redacted] cut on gross transactions) and lower quality below competitive levels. Furthermore, Google's high take rate does not reflect the magnitude of Google's anticompetitive harm because of the inefficiency Google creates in the allocation of impressions. Google has consequently reduced output in the exchange market.

C. Anticompetitive Effects in the Network Market

302. Google's exclusionary conduct has foreclosed competition in the display ad network market and the in-app mobile ad network market and created artificial barriers to entry and expansion. Google's exclusionary conduct in these markets includes Google Ads routing advertisers' bids on display ads to only Google's network, then deceptively re-routing those advertisers' bids to Google's exchange; it also includes the terms of the [redacted] agreement, which provide Facebook's in-app network FAN with [redacted] in auctions for publishers' in-app inventory. Competing display and in-app networks have exited the market and new entrants are unable to effectively compete. Whereas competition in these markets used to be vigorous, today, Google and Facebook control these markets.

303. Google's harm to the competitive process has harmed customers in this market, i.e., small publishers and advertisers. In a competitive market, small publishers and advertisers would benefit from networks competing with each other on take rates and quality. Competition would lead to lower take rates, benefiting publishers and advertisers. Small publishers would retain a greater share of their advertising revenue, permitting them to create more content, higher-quality content, and more subsidized content access. Advertisers would pay less to purchase ad space, permitting them to re-invest those cost savings into providing consumers with higher-quality and lower-priced goods and services. Google's foreclosure of competition in the network market has permitted its display network GDN to charge high double-digit take rates exceeding [redacted] percent. Google's foreclosure of competition in the in-app network market, per the terms of the [redacted] agreement, allocates a [redacted] of auctions for publishers' inventory to Facebook's in-app network FAN irrespective of how high other networks might bid in the same auctions. Market allocation through quotas subverts competition between networks for publishers' in-app inventory and fixes prices in the market. Consequently, Google reduces output in these markets.

D. Anticompetitive Effects in the Markets for Display Ad Buying Tools for Small Advertisers and Display Ad Buying Tools for Large Advertisers

304. Google's exclusionary conduct has foreclosed competition in the ad buying tool markets for both small and large advertisers and created artificial barriers to entry and expansion. Google's exclusionary conduct in these separate markets includes the tying of its ad server to its exchange, ad network, and ad buying tools (requiring publishers and advertisers to trade in Google's exchange), cutting off non-Google ad buying tools' access to publishers' ad server user IDs, manipulating advertiser bids and exchange price floors (i.e., manipulating the auction), and the tying of YouTube with its ad buying tools. Consequently, competing ad buying tools have exited the market and new entrants are unable to effectively compete. Competition in the ad buying

tool markets for small and large advertisers used to be robust; today, Google Ads is effectively the only remaining choice for small advertisers wishing to purchase display ad space from exchanges. And many large advertisers have no choice but to use DV360 because they single home (to reduce bidding risk) and because DV360 has exclusive access to YouTube ad inventory, which is a "must have."

305. Google's harm to the competitive process has harmed customers in these markets, i.e., both small and large advertisers. Ad buying tools, whether for small or large advertisers, are supposed to advance advertisers' best interests (e.g., buying identical ad space for the lowest price). In a competitive market, advertisers would benefit from ad buying tools competing on price and quality (e.g., the extent to which the tools maximize advertisers' best interests). Google's exclusionary conduct has permitted its ad buying tool for small advertisers to charge supra-competitive fees and lower quality below competitive levels (e.g., charging non-transparent fees, manipulating advertisers' bids to purchase ad space for higher prices trading on Google's exchange and network, and arbitraging small advertisers' bids to extract higher fees). Similarly, Google's exclusionary conduct has permitted Google's ad buying tool for large advertisers to charge supra-competitive fees and lower quality below competitive levels (e.g., the lack of adequate auditing of Google conflicts of interests and fraudulent impressions). Google's conduct has consequently also lowered output in these markets.

306. Google's harm to the competitive process in the ad buying tool markets has also harmed advertisers' customers, i.e., consumers. The fees advertisers would save on ad buying tools and ad purchases in the absence of Google's anticompetitive conduct would result in reduced deadweight costs that advertisers would ultimately pass on to consumers. Consumers would benefit through better quality and lower priced goods and services. Advertising also allows consumers to learn of

the range of competitors in a market, their prices, and the nature of the products and services offered. When advertising effectiveness is reduced, competition between products and services is reduced, and consumers are harmed.

E. Harm to Innovation

307. In each of the relevant product markets, Google's exclusionary conduct has resulted in harm to innovation. A critical example of this is how, for many years, Google's publisher ad server depressed publishers' inventory yields by blocking real-time competition from non-Google exchanges. When publishers found a way to work around the restrictions imposed by Google's ad server using header bidding, publishers' yields jumped by 30+ percent, sometimes even over 100 percent. It was not until 2018, about 8 years after the invention of real-time bidding, that Google's ad server finally permitted publishers to route their inventory to multiple exchanges in real time. In other words, the lack of competition caused by Google's foreclosure of competition and entry permitted Google's ad server to get away with significantly depressing publishers' inventory yields for almost ten years.

308. Google's response to header bidding has further harmed innovation in the exchange and publisher ad server markets. Google has used its market power in the publisher ad server market and exchange markets to "kill" header bidding, rather than competing on the merits. Header bidding helped publishers make more money by enhancing exchange access to and competition for publishers' impressions. By crippling interoperability with this new and beneficial invention, Google stifles rather than promotes beneficial innovation in the market.

IX. CLAIMS

A. COUNT I – MONOPOLIZATION IN VIOLATION OF SECTION II OF THE SHERMAN ACT, 15 U.S.C. § 2

309. Plaintiff States repeat and reallege every proceeding allegation as if fully set forth herein.

310. Google wrongfully acquired and unlawfully maintained monopoly power in the market for publisher ad servers, unlawfully acquired or maintained monopoly power in the ad exchange market and ad network markets, unlawfully acquired or maintained monopoly power in the market for ad buying tools for small advertisers, and unlawfully acquired or maintained monopoly power in the market for ad buying tools for large advertisers.

311. Google has willfully maintained and abused its monopoly in the ad server market and adjacent markets to, *inter alia*, restrict publishers from routing inventory to multiple exchanges, preferentially route publisher inventory to Google's exchange, provide Google's exchange exclusive access to high-value inventory, provide information advantages to harm competition, structure key aspects of the exchange market to minimize transparency, trade ahead of header bidding exchanges, use its data advantages to trade on inside information, deceive publishers to encourage them to disable header bidding, cripple publishers' ability to measure header bidding yield, reduce line item capabilities to impede header bidding, redesign how web content is presented to make header bidding incompatible, withhold data from header bidding, enter into agreements with horizontal competitors to entrench its monopoly position, and exclude competition through Unified Pricing.

312. Google has used its economies of scale in search and search advertising to create and maintain a monopoly in the markets for ad buying tools and exchanges.

313. Google has willfully maintained and abused its monopoly power in the instream online video advertising market to force advertisers to use Google's ad buying tools for both small and large advertisers.

314. Plaintiff States have sustained antitrust injury as a direct and proximate cause of Google's unlawful conduct, in at least the following ways: (1) substantial foreclosure of competition in the market for publisher ad servers, and the use of market power in the publisher ad server market to harm competition in the exchange market; (2) substantial foreclosure of competition in the exchange market via foreclosure of rivals' access to publisher inventory and advertiser demand; (3) substantial foreclosure of competition in the markets for ad buying tools by the creation of information asymmetries and unfair auctions enabled by Google's market dominance in the publisher ad serving tools and exchange markets; (4) increased barriers to entry and expansion in the publisher ad server, exchange, and demand-side buying tools markets; (5) decreased innovation, which would otherwise benefit publishers, advertisers, and competitors; (6) harm to publishers' ability to effectively monetize their content, reductions to publishers' revenues, reduced output, and the resulting harms to consumers; (7) reduced advertiser demand and participation in the market from opacity on margins and selling process, and harm to rival exchanges and buying tools; (8) increased advertisers' costs to advertise and reduced effectiveness of advertising, which thereby harms businesses' return on the investment in delivering their products and services, reduces output, and further harms consumers; (9) protection of Google's products from competitive pressures, thereby allowing it to continue to extract high margins while avoiding competitive pressures to innovate.

315. For the reasons set forth above, Google has violated Section 2 of the Sherman Act, 15 U.S.C. § 2.

316. The Plaintiff States are entitled to equitable relief as appropriate to cure Google's unlawful conduct and restore competition in the relevant markets. Consumers in the Plaintiff States are regular users of products in the relevant markets and will continue to purchase such products and suffer further injury if Google's unlawful monopolies are not ended.

B. COUNT II – ATTEMPTED MONOPOLIZATION IN VIOLATION OF SECTION II OF THE SHERMAN ACT, 15 U.S.C. § 2

317. Plaintiff States repeat and reallege every proceeding allegation as if fully set forth herein.

318. As detailed above, Google has monopoly power, or at a minimum, a dangerous probability of acquiring monopoly power, in the relevant online display advertising markets, including the market for publisher ad servers, the ad exchange and ad network markets, and in the markets for ad buying tools for large and small advertisers.

319. Google has willfully, knowingly, and with specific intent to do so, attempted to monopolize the relevant online display advertising markets, including the market for ad servers, the ad exchange and ad network markets, and the markets for ad buying tools for large and small advertisers.

320. Google has attempted to monopolize the ad server market and adjacent markets to, *inter alia*, restrict publishers from routing inventory to multiple exchanges, preferentially route publisher inventory to Google's exchange, provide Google's exchange exclusive access to high-value inventory, provide information advantages to harm competition, structure key aspects of the exchange market to minimize transparency, trade ahead of header bidding exchanges, use its data advantages to trade on inside information, deceive publishers to encourage them to disable header bidding, cripple publishers' ability to measure header bidding yield, reduce line item capabilities to impede header bidding, redesign how web content is presented to make header bidding

incompatible, withhold data from header bidding, and enter into agreements with horizontal competitors to entrench its monopoly position, and exclude competition through Unified Pricing.

321. Google has attempted to monopolize the markets for ad buying tools and exchanges.

322. Google has attempted to monopolize in the instream online video advertising to force advertisers to use Google's ad buying tools for both small and large advertisers.

323. Plaintiff States have sustained antitrust injury as a direct and proximate cause of Google's unlawful conduct, in at least the following ways: (1) substantial foreclosure of competition in the market for publisher ad servers, and the use of market power in the publisher ad server market to harm competition in the exchange market; (2) substantial foreclosure of competition in the exchange market via foreclosure of rivals' access to publisher inventory and advertiser demand; (3) substantial foreclosure of competition in the markets for ad buying tools by the creation of information asymmetries and unfair auctions enabled by Google's market dominance in the publisher ad serving tools and exchange markets; (4) increased barriers to entry and expansion in the publisher ad server, exchange, and demand-side buying tools markets; (5) decreased innovation, which would otherwise benefit publishers, advertisers, and competitors; (6) harm to publishers' ability to effectively monetize their content, reductions to publishers' revenues, reduced output, and the resulting harms to consumers; (7) reduced advertiser demand and participation in the market from opacity on margins and selling process, and harm to rival exchanges and buying tools; (8) increased advertisers' costs to advertise and reduced effectiveness of advertising, which thereby harms businesses' return on the investment in delivering their products and services, reduces output, and further harms consumers; (9) protection of Google's products from competitive pressures, thereby allowing it to continue to extract high margins while avoiding competitive pressures to innovate.

324. For the reasons set forth above, Google has violated Section 2 of the Sherman Act, 15 U.S.C. § 2.

325. The Plaintiff States are entitled to equitable relief as appropriate to cure Google's unlawful conduct and restore competition in the relevant markets. Consumers in the Plaintiff States are regular users of products in the relevant markets and will continue to purchase such products and suffer further injury if Google's unlawful monopolies are not ended.

C. COUNT III – UNLAWFUL TYING IN VIOLATION OF SECTION II OF THE SHERMAN ACT, 15 U.S.C. § 2

326. Plaintiff States repeat and reallege every proceeding allegation as if fully set forth herein.

327. Google's contractual arrangements and other conduct force publishers and others to use Google's ad server (DFP) if they use Google exchange (AdX).

328. Google's DFP and Google AdX are separate products in separate markets.

329. Google AdX has sufficient market power in the exchange market to coerce publishers and others to use DFP even if they would prefer not to do so.

330. Google's tying arrangements affect a significant volume of interstate commerce and have the effect of substantially foreclosing competition in the publisher ad server market by virtue of reducing the number of publishers and others for whom other ad servers can effectively compete. Moreover, these tying arrangements allow Google to maintain supra-competitive prices for AdX that are ultimately passed on to publishers and others, who are also harmed by virtue of having fewer options available at lower prices because of Google's conduct.

331. Google's tying arrangements have caused competing ad servers substantial damages as a direct and proximate cause of this unlawful conduct because Google has foreclosed other ad servers from competing for potential publishers and others and has deprived ad servers of other

business for reasons having nothing to do with the merits of Google DFP or other ad server products.

332. Google's contractual arrangements and other conduct force advertisers and others to use Google's ad buying tools, DV360 or Google Ads, if they seek to purchase ad inventory on YouTube.

333. Ad inventory on YouTube and Google's ad buying tools (DV360 and Google Ads) are separate products in separate markets.

334. YouTube has sufficient power in the online video inventory market to coerce advertisers and others to use Google's ad buying tools (DV360 and Google Ads) even if they would prefer not to do so.

335. Google's tying arrangements affect a significant volume of interstate commerce and have the effect of substantially foreclosing competition in the ad buying tools markets by virtue of reducing the number of advertisers and others for whom other ad buying tools can effectively compete. Moreover, these tying arrangements allow Google to charge supra-competitive prices for ad buying tools that are ultimately passed on to advertisers and others, who are also harmed by virtue of having fewer options available at lower prices because of Google's conduct.

336. Google's contractual arrangements and other conduct force small advertisers and others to use Google's network (GDN) and Google's exchange (AdX), or at least to not use competing networks and exchanges, if they use Google Ads.

337. Google Ads, Google GDN, and Google AdX are separate products in separate markets.

338. Google Ads has sufficient power in the market ad buying tools for small advertisers to coerce advertisers and others to use Google GDN and Google AdX even if they would prefer not to do so.

339. Google's tying arrangements affect a significant volume of interstate commerce and have the effect of substantially foreclosing competition in the network market and ad exchange market by virtue of reducing the number of small advertisers and others for whom other networks and exchanges can effectively compete. Moreover, these tying arrangements allow Google to maintain supra-competitive prices for GDN and AdX that are ultimately passed on to advertisers and others, who are also harmed by virtue of having fewer options available at lower prices because of Google's conduct.

340. Google's tying arrangements have caused competing networks and exchanges substantial damages as a direct and proximate cause of this unlawful conduct because Google has foreclosed other networks and exchanges from competing for potential small advertisers and others, and deprived networks and exchanges of other business for reasons having nothing to do with the merits of Google's network or exchange products.

D. COUNT IV – UNLAWFUL AGREEMENT IN VIOLATION OF SECTION I OF THE SHERMAN ACT, 15 U.S.C. § 1

341. Plaintiff States repeat and reallege every proceeding allegation as if fully set forth herein.

342. Google, by and through its officers, directors, employees or other representatives, entered into an unlawful agreement with its co-conspirator Facebook in restraint of trade and commerce in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1, in which they agreed to allocate display ad auction wins and to fix display ad prices, as described in this Complaint.

343. Google's conduct is a *per se* violation that restrains trade and harms competition through an unlawful agreement in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1.

344. Google's anticompetitive acts have had harmful effects on competition and consumers.

E. COUNT V – SUPPLEMENTAL STATE LAW ANTITRUST CLAIMS

345. Plaintiff State of Texas repeats and realleges every preceding allegation as if fully set forth herein.

346. The aforementioned practices by Google were and are in violation of Texas Business and Commerce Code § 15.01 *et seq.*, including § 15.05(b).

347. Plaintiff State of Alaska repeats and realleges each and every preceding allegation as if fully set forth herein. The aforementioned acts or practices by Google violate the Alaska Restraint of Trade Act ("ARTA"), AS 45.50.562 *et seq.*

348. Google engaged in and is engaging in unlawful conduct in the course of trade or commerce within the meaning of AS 45.50.562 *et seq.* This conduct has harmed and is harming Alaska and its citizens, residents, businesses, and consumers.

349. As provided for under ARTA, Alaska seeks a civil penalty of up to $50,000,000, injunctive relief, damages and penalties, disgorgement, and costs and attorney's fees.

350. The State of Alaska seeks relief on behalf of itself, as provided for in ARTA, and as parens patriae on behalf of its persons, as provided for in AS 45.50.577, as well as under Alaska common law.

351. Plaintiff State of Arkansas repeats and realleges each and every preceding allegation as if fully set forth herein.

352. Google's actions alleged herein violate, and Plaintiff State of Arkansas is entitled to relief under, the Unfair Practices Act, Ark. Code Ann. § 4-75-201 *et seq.*, Monopolies Generally, Ark. Code Ann. § 4-75-301 *et seq.*, and the common law of Arkansas.

353. Plaintiff State of Arkansas seeks relief, including, but not limited to, damages, restitution, and disgorgement. Plaintiff State of Arkansas also seeks, and is entitled to, maximum civil penalties allowed by law, injunctive relief, attorney's fees, costs, investigative expenses, expert witness expenses, and such other relief as this Court deems just and equitable.

354. Plaintiff the State of Florida repeats and realleges each and every preceding allegation as if fully set forth herein. The aforementioned acts or practices by Google violate the Florida Antitrust Act, Fla. Stat. § 542.15 *et seq.*

355. The State of Florida seeks all remedies available under federal law or The Florida Antitrust Act including, without limitation, the following:

a) Injunctive and other equitable relief pursuant to Fla. Stat. § 542.23;

b) Damages as *parens patriae* on behalf of natural persons pursuant to Fla. Stat. § 542.22;

c) Civil penalties pursuant to Fla. Stat. § 542.21, which provides that any person other than a natural person is subject to a penalty of up to $1 million and that "[a]ny person who knowingly violates any of the provisions . . . or who knowingly aids in or advises such violation, is guilty of a felony, punishable by a fine not exceeding $1 million if a corporation"; and

d) Costs and attorneys' fees pursuant to Fla. Stat. § 542.23.

356. Plaintiff State of Idaho repeats and realleges each and every preceding allegation as if fully set forth herein.

357. Google has engaged in Idaho commerce, as that term is defined by Idaho Code § 48 103(1).

358. Google's actions as alleged herein violate the Idaho Competition Act, Idaho Code § 48 105, in that such actions constitute monopolization, an attempt to monopolize, and/or a

combination or conspiracy to monopolize lines of Idaho commerce, as that term is defined by Idaho Code § 48 103(1).

359. Google's actions as alleged herein violate the Idaho Competition Act, Idaho Code § 48 104, in that they have the purpose and/or the effect of unreasonably restraining Idaho commerce, as that term is defined by Idaho Code § 48-103(1).

360. For each and every violation alleged herein, Plaintiff State of Idaho is entitled to all legal and equitable relief available under the Idaho Competition Act, Idaho Code §§ 48-108 and 48-112, including, but not limited to, declaratory judgment, injunctive relief, civil penalties, divestiture of assets, disgorgement, expenses, costs, attorneys' fees, all monetary relief that the Attorney General of the State of Idaho is entitled to recover, as *parens patriae*, on behalf of persons of the State of Idaho for any injury directly or indirectly sustained because of each and every violation of the Act, and such other and further relief as this Court deems just and equitable.

361. Plaintiff State of Indiana repeats and realleges every preceding allegation as if fully set forth herein.

362. The aforementioned practices by Google were and are in violation of Ind. Code §§ 24-1-2-1 and -2.

363. Plaintiff the Commonwealth of Kentucky repeats and realleges each and every preceding allegation as if fully set forth herein. The aforementioned acts or practices by Google violate Kentucky's antitrust statute, Ky. Rev. Stat. § 367.175.

364. Google engaged in and is engaging in unlawful conduct in the course of trade or commerce, within the meaning of Ky. Rev. Stat. § 367.175, that has harmed and is harming the Commonwealth and consumers.

365. Further, pursuant to Ky. Rev. Stat. § 367.990(8), the Commonwealth seeks civil penalties of not more than the greater of five thousand dollars ($5,000) or two hundred dollars ($200) per day for each and every violation of Ky. Rev. Stat. § 367.175. The Commonwealth is entitled to relief including but not limited to: disgorgement, injunctions, civil penalties, damages, and its costs and attorney's fees pursuant to Ky. Rev. Stat. § 367.110-990.

366. The Commonwealth of Kentucky seeks relief on behalf of itself and as *parens patriae* on behalf of its persons, pursuant to Ky. Rev. Stat. § 15.020, Ky. Rev. Stat. § 367.110 *et seq.*, Ky. Rev. Stat. § 367.990, and Kentucky Common Law.

367. Plaintiff State of Mississippi repeats and realleges each and every preceding allegation as if fully set forth herein.

368. Google's acts violate Miss. Code Ann. § 75- 21-1 *et seq.*, and Plaintiff State of Mississippi is entitled to relief under Miss. Code Ann. § 75- 21-1 *et seq.*

369. Pursuant to Miss. Code Ann. § 75-21-1 *et seq.*, Plaintiff State of Mississippi seeks and is entitled to relief, including but not limited to injunctive relief, damages, restitution, disgorgement, civil penalties, costs, attorney fees, and any other just and equitable relief which this Court deems appropriate.

370. Plaintiff State of Missouri repeats and realleges every preceding allegation as if fully set forth herein.

371. The aforementioned practices by Google were and are in violation of the Missouri Antitrust Law, Mo. Rev. Stat. §§ 416.011 *et seq*.

372. Plaintiff State of Montana repeats and realleges every preceding allegation as if fully set forth herein.

373. The aforementioned acts and practices by Google were and are in violation of Montana's Unfair Trade Practices and Consumer Protection Act, Mont. Code Ann. § 30-14-101 *et seq.*, including, but not limited to, § 30-14-103, and Unfair Trade Practices Generally, Mont. Code Ann. § 30-14-201 *et seq.*, including §§ 30-14-205(1), 30-14-205(2), and 30-14-222.

374. Plaintiff the State of Nevada repeats and realleges each and every preceding allegation as if fully set forth herein. The aforementioned acts or practices by Google violate Nevada's antitrust statute, Nev. Rev. Stat. § 598A.060.

375. Google engaged in and is engaging in unlawful conduct in the course of trade or commerce, within the meaning of Nev. Rev. Stat. § 598A.060, that has harmed and is harming the State and consumers.

376. Further, pursuant to Nev. Rev. Stat. § 598A.170, the State of Nevada seeks civil penalties not to exceed 5 percent of the gross income realized by the sale of commodities or services sold by Google in this state in each year in which prohibited activities occurred. The State of Nevada is entitled to relief including but not limited to: disgorgement, injunctions, civil penalties, treble damages, and its costs and attorney's fees pursuant to Nev. Rev. Stat. § 598A.070, Nev. Rev. Stat. § 598A.160, Nev. Rev. Stat. § 598A.170, Nev. Rev. Stat. § 598A.200.

377. The State of Nevada seeks relief on behalf of itself and as *parens patriae* on behalf of its persons, pursuant to Nev. Rev. Stat. § 598A.160.

378. Plaintiff State of North Dakota repeats and realleges every preceding allegation as if fully set forth herein.

379. The aforementioned practices by Google were and are in violation of North Dakota Century Code (N.D.C.C.) § 51-08.1-01 *et seq.*, *Uniform State Antitrust Act*, including §§ 51-08.1-02 and 51-08.1-03.

380. Plaintiff Commonwealth of Puerto Rico repeats and realleges every preceding allegation as if fully set forth herein.

381. The aforementioned practices by Google were in violation of Puerto Rico Law No. 77 of June 25, 1964, also known as "Puerto Rico`s Antitrust and Restrictions of Commerce Law," 10 P.R. Laws Ann. §§ 257 *et seq.*, and 32 P.R. Laws Ann. § 3341.

382. Accordingly, the Commonwealth of Puerto Rico is entitled remedies available under the Puerto Rico`s Antitrust and Restrictions of Commerce Law and 32 P.R. Laws Ann. § 3341, including injunctive relief, civil penalties, damages, and any other appropriate monetary and injunctive relief.

383. Plaintiff State of South Dakota repeats and realleges every preceding allegation as if fully set forth herein.

384. The aforementioned practices by Google constitute separate and multiple violations of South Dakota statutes §§ SDCL 37-1-3.1 and 37-1-3.2.

385. For each and every violation alleged herein, Plaintiff State of South Dakota is entitled to all legal and equitable relief, and all costs and fees, available under SDCL §§ 37-1-3.1 *et seq.* Such relief includes injunctive relief and civil penalties for the State, as authorized by SDCL § 37-1-14.2, and monetary relief, as *parens patriae* on behalf of persons of the State, for injuries sustained, directly or indirectly, because of Google's violations of South Dakota law, as authorized by SDCL §§ 37-1-23, 37-1-24, and 37-1-32.

386. Plaintiff State of Utah repeats and realleges each and every preceding allegation as if fully set forth herein.

387. Google's acts violate the Utah Antitrust Act, Utah Code § 76-10-3101, *et seq.* (the "Act") and Plaintiff State of Utah is entitled to all relief available under the Act for those violations,

including, but not limited to, injunctive relief, civil penalties, disgorgement, attorneys' fees, and costs.

F. COUNT VI – SUPPLEMENTAL STATE LAW DECEPTIVE TRADE PRACTICES CLAIMS

388. Plaintiff State of Texas repeats and realleges every preceding allegation.

389. At all times described herein, Google has engaged in conduct which constitutes "trade" and "commerce" defined in § 17.45(6) of the DTPA.

390. Plaintiff State of Texas has reason to believe that Google has engaged in, and will continue to engage in, the unlawful practices set forth herein, has caused and will cause adverse effects to legitimate business enterprises which lawfully conduct trade and commerce in this State, and will cause damage to the State of Texas and to persons in the State of Texas. Therefore, the Consumer Protection Division of the Office of the Attorney General of the State of Texas believes and is of the opinion that this matter is in the public interest.

391. As alleged in more detail above, Google has engaged in false, deceptive, or misleading acts or practices in connection with each of its roles within the ad tech stack. In each such role, Google at least implicitly misrepresents that it is operating in the best interest of its customer, fails to disclose its conflicts of interest, and misrepresents the many ways that Google operates to disadvantage its customers.

392. For example, in its role as an ad server, Google led publishers to believe that it was acting in the publisher's best interest and would help them maximize revenue, when Google does not seek to maximize the publisher's revenue, but its own.

393. Similarly, in its roles as an ad exchange and ad network, Google misleads both publishers and advertisers regarding the actual price of advertisements. Google is deliberately opaque and nontransparent in its pricing terms, fails to disclose the fee it collects, and generally causes confusion regarding the mechanics, terms, and pricing of its ad exchange and ad network.

394. Google has also engaged in false, deceptive, or misleading acts or practices in its efforts to discourage publishers, ad exchanges, and advertisers from participating in header bidding and to manipulate them into participating in Google's products. Such acts included misrepresenting to publishers that including rival exchanges in header bidding would negatively affect the publisher (e.g., by putting a strain on the publisher's servers), falsely telling publishers that the [redacted] program would increase their revenue, manipulating advertisers' bids and publishers' floors without advertisers' knowledge or consent, misrepresenting to publishers that Open Bidding would benefit them through exchange competition, falsely telling publishers that adopting AMP would enhance load times, falsely claiming that header bidding increased latency, falsely representing that abolishing price floors in Unified Pricing benefited publishers, misrepresenting that it does not manipulate search traffic results to favor publishers where Google makes more ad money, misrepresenting that all bidders in Google's exchanges compete on an equal footing, and misrepresenting that Google had removed its Last Look advantage and would not trade ahead of their bids.

395. Google also misrepresents to participants in the ad tech stack and its users alike that Google encrypts user IDs in order to protect users' privacy, when in fact, Google continues to infringe on users' privacy by continuing to access such information in its own ad tech stack products.

396. As alleged in more detail above, Google has engaged in false, deceptive, or misleading acts or practices by misrepresenting that it will never sell users' personal information to anyone and by misrepresenting, causing confusion and misunderstanding, and failing to disclose how Google uses the information and data of its consumers.

397. Google has also engaged in false, deceptive, or misleading acts or practices by falsely promising users that their WhatsApp messages remained private, by publicly misrepresenting that Google did not have [redacted], and by failing to disclose to users that backing up to Google Drive would [redacted].

398. Through its false, deceptive, or misleading acts, Google has violated § 17.46(a) of the DTPA, including by engaging in conduct specifically defined to be false, deceptive, or misleading by § 17.46(b) such as:

a) Representing that services have sponsorship, approval, characteristics, ingredients, uses, benefits, or quantities which they do not have or that a person has a sponsorship, approval, status, affiliation, or connection which he does not have, in violation of DTPA § 17.46(b)(5);

b) Representing that services are of a particular standard, quality, or grade, if they are of another, in violation of DTPA § 17.46(b)(7);

c) Advertising goods or services with the intent not to sell them as advertised, in violation of DTPA § 17.46(b)(9);

d) Representing that an agreement confers or involves rights, remedies, or obligations which it does not have or involve, or which are prohibited by law, in violation of DTPA § 17.46(b)(12); and

e) Failing to disclose information concerning goods or services which was known at the time of the transaction with the intent to induce the consumer into a transaction into which the consumer would not have entered had the information been disclosed in violation of § 17.46(b)(24).

399. By means of the foregoing unlawful acts and practices, Google has acquired money or other property from persons to whom such money or property should be restored.

400. Plaintiff the State of Alaska repeats and realleges each and every preceding allegation as if fully set forth herein, specifically including all allegations in Count VI of this Complaint. The aforementioned acts or practices by Google violate the Alaska Unfair Trade Practices and Consumer Protection Act ("AUTPCPA"), AS 45.50.471 *et seq.*

401. Google engaged in and is engaging in unlawful conduct in the course of trade or commerce, within the meaning of AS 45.50.471, that has harmed and is harming the State of Alaska, its citizens, residents, businesses, and consumers.

402. Specifically, Google violated AS 45.50.471(b)(11) and (b)(12) by misleading, deceiving, and damaging Alaskans. Among other things, Google omitted material facts, namely their anti-competitive conduct, knowing this would harm Alaskans. Plaintiff State of Alaska is entitled to relief for these violations under AS 45.50.501, .537, and .551, including injunctive relief, civil penalties of between $1,000 and $25,000 for each violation, and costs and attorney's fees.

403. Further, the State of Alaska seeks restitution to Alaska and/or disgorgement pursuant to its statutory and common law.

404. The State of Alaska seeks relief on behalf of itself and as parens patriae on behalf of its persons.

405. Plaintiff State Arkansas repeats and realleges each and every preceding allegation as if fully set forth herein.

406. Google's actions violate the Arkansas Deceptive Trade Practices Act, Ark. Code Ann. § 4-88-101 *et seq.*, and Arkansas is entitled to and seeks relief under the Arkansas Deceptive Trade Practices Act, Ark. Code Ann. § 4-88-113.

407. Plaintiff the State of Florida repeats and realleges each and every preceding allegation as if fully set forth herein. The aforementioned acts or practices by Google violate the Florida Deceptive and Unfair Trade Practices Act, Fla. Stat. § 501.204 *et seq.*

408. In addition, Google's actions offend established public policy and are immoral, unethical, oppressive, unscrupulous, or substantially injurious to consumers in the State of Florida in violation of Fla. Stat. § 501.204 *et seq.*

409. The State of Florida seeks all remedies available under The Florida Deceptive and Unfair Trade Practices Act, including, without limitation, the following:

a) Damages pursuant to Fla. Stat. § 501.207;

b) Disgorgement and restitution pursuant to Fla. Stat. § 501.204 *et seq.*;

c) Injunctive and other equitable relief pursuant to Fla. Stat. § 501.207;

d) Civil penalties pursuant to Fla. Stat. § 501.2075, which provides that anyone who engages in a willful violation "is liable for a civil penalty of not more than $10,000 for each such violation."

e) Costs and attorneys' fees pursuant to Fla. Stat. § 501.2105.

410. Plaintiff State of Idaho repeats and realleges every preceding allegation, including the allegations above in Count VI of this Complaint.

411. The above-mentioned acts and practices by Google violate the Idaho Consumer Protection Act (ICPA), Idaho Code title 48, chapter 6, and the Idaho Rules of Consumer Protection, IDAPA 04.02.01.000 *et seq.*, which prohibit unfair and deceptive acts and practices in the conduct

of trade or commerce and which provide efficient and economical procedures to secure the public's protection from unlawful business practices.

412. At all times described herein, Google has engaged in conduct that constitutes "trade" and "commerce" under Idaho Code § 48-602(2) and IDAPA 04.02.01.020.

413. The Attorney General of the State of Idaho is authorized to bring an action in the name of the State against any person who is using, has used, or is about to use any method, act, or practice declared unlawful by the ICPA. Idaho Code § 48-606. The Attorney General of Idaho has reason to believe that Google has used and is using the acts and practices set forth in this Complaint, which violate the ICPA; that Google has caused and will cause adverse effects for the business enterprises of the State of Idaho that lawfully conduct trade and commerce; and that Google has caused and will cause damage to the State of Idaho and to the persons of the State of Idaho. The Attorney General of Idaho therefore believes that this action is in the public interest.

414. Through its unfair or deceptive acts and practices, Google has violated the ICPA, including by engaging in conduct specifically defined to be unfair or deceptive by Idaho Code § 48-603. For example, Google knows, or in the exercise of due care should know, that it was and is:

a) Representing that goods or services have sponsorship, approval, characteristics, ingredients, uses, benefits, or quantities that they do not have or that a person has a sponsorship, approval, status, affiliation, connection, qualifications, or license that he does not have, in violation of Idaho Code § 48-603(5);

b) Representing that goods or services are of a particular standard, quality, or grade, if they are of another, in violation of Idaho Code § 48-603(7);

c) Advertising goods or services with the intent not to sell them as advertised, in violation of Idaho Code § 48-603(9); and

d) Engaging in any act or practice that is otherwise misleading, false, or deceptive to consumers, such as making any claim or representation, or omitting any material or relevant fact, concerning goods or services that directly, or by implication, has the capacity, tendency, or effect of deceiving or misleading a consumer acting reasonably under the circumstances, in violation of Idaho Code § 48-603(17) and IDAPA 04.02.01.030.

415. Google's unfair or deceptive acts and practices, as alleged above, constitute separate and multiple violations of Idaho Code §§ 48-603(5), 48-603(7), 48-603(9), and 48-603(17), and IDAPA 04.02.01.030. Google's separate and multiple violations of these provisions subject Google to the remedies outlined in Idaho Code §§ 48-606 and 48-607.

416. The Attorney General finds that the purpose of the ICPA would be substantially and materially impaired by delay in bringing, at this time, these claims under the ICPA. Accordingly, he has determined to file these claims, pursuant to Idaho Code § 48-606(3), without first providing Google notice of these proceedings or allowing Google an opportunity to appear before the Attorney General and to execute an assurance of voluntary compliance or a consent judgment under the ICPA.

417. Plaintiff State of Indiana repeats and re-alleges each and every preceding allegation as if fully set forth herein. Acts alleged in Count VI of this Complaint also constitute violations of the Indiana Deceptive Consumer Sales Act, Ind. Code § 24-5-0.5-1 *et seq.*, including knowing violations and incurable deceptive acts. Plaintiff State of Indiana seeks all remedies available under the Indiana Deceptive Consumer Sales Act.

418. Plaintiff the Commonwealth of Kentucky repeats and realleges each and every preceding allegation as if fully set forth herein, specifically including all allegations in Count VI of this Complaint. The aforementioned acts or practices by Google violate the Consumer Protection Act, Ky. Rev. Stat. § 367.110 *et seq.*

419. Google engaged in and is engaging in unlawful conduct in the course of trade or commerce, within the meaning of Ky. Rev. Stat. § 367.170, that has harmed and is harming the Commonwealth and consumers. The above-described conduct has been and is willful within the meaning of Ky. Rev. Stat. § 367.990.

420. The Commonwealth states that the public interest is served by seeking a permanent injunction to restrain the acts and practices described herein. The Commonwealth and its citizens will continue to be harmed unless the acts and practices complained of herein are permanently enjoined pursuant to Ky. Rev. Stat. § 367.190.

421. Further, the Commonwealth seeks restitution to the Commonwealth and/or disgorgement pursuant to Ky. Rev. Stat. § 367.190 - 200. The Commonwealth seeks a civil penalty of up to $2,000 for each such willful violation, or $10,000 for each such violation directed at a person over 60, pursuant to Ky. Rev. Stat. § 367.990(2). The Commonwealth is entitled to relief including but not limited to: disgorgement, injunctions, civil penalties, damages, and its costs and attorney's fees pursuant to Ky. Rev. Stat. § 367.110-990.

422. The Commonwealth of Kentucky seeks relief on behalf of itself and as *parens patriae* on behalf of its persons, pursuant to Ky. Rev. Stat. § 15.020, Ky. Rev. Stat. § 367.110 *et seq.*, Ky. Rev. Stat. § 367.990, and Kentucky Common Law.

423. Plaintiff State of Mississippi repeats and realleges each and every preceding allegation as if fully set forth herein.

424. The aforesaid conduct was not only anti-competitive but was also unfair and deceptive to the consumers of the State of Mississippi, therefore Google's acts violate the Mississippi Consumer Protection Act, Miss. Code Ann. § 75-24-1, *et seq.*, and Plaintiff State of Mississippi is entitled to relief under the Mississippi Consumer Protection Act, Miss. Code Ann. § 75-24-1, *et seq.*

425. Pursuant to the Mississippi Consumer Protection Act, Miss. Code Ann. § 75-24-1, *et seq.*, Plaintiff State of Mississippi seeks and is entitled to relief, including but not limited to injunctive relief, damages, restitution, disgorgement, civil penalties, costs, attorney fees, and any other just and equitable relief which this Court deems appropriate.

426. Plaintiff State of Missouri repeats and realleges every preceding allegation as if fully set forth herein.

427. The aforementioned practices by Google were and are unfair and deceptive practices in violation of Missouri's Merchandising Practices Act, Mo. Rev. Stat. §§ 407.010 *et seq.*, as further interpreted by 15 CSR 60-8.010 *et seq*. and 15 CSR 60-9.01 *et seq*.

428. Plaintiff State of Montana repeats and realleges each and every preceding allegation as if fully set forth herein, specifically including all allegations in Count VI of this Complaint. The forgoing acts and practices by Google were and are in willful violation Montana's Unfair Trade Practices and Consumer Protection Act, Mont. Code Ann. § 30 14-101 *et seq.*, including § 30-14-103, 142(2).

429. Google has engaged in and is engaging in trade and commerce within the meaning of Mont. Code Ann. § 30-14-102(8) and unfair methods of competition and unfair or deceptive acts or practices within the meaning of Mont. Code Ann. § 30-14-103 and *Rohrer v. Knudson*, 203 P.3d 759 (Mont. 2009).

430. Google's unlawful conduct was willful, and Plaintiff State of Montana is entitled to all legal and equitable relief pursuant to, without limitation, Mont. Code Ann. §§ 30-14-111(4); 30-14-131; and, 30-14-142(2).

431. Plaintiff the State of Nevada repeats and realleges each and every preceding allegation as if fully set forth herein, specifically including all allegations in Count VI of this Complaint. The aforementioned acts or practices by Google violate the Nevada Consumer Protection Act, Nev. Rev. Stat. § 598, *et seq.*

432. Google engaged in and is engaging in unlawful conduct in the course of trade or commerce, within the meaning of Nev. Rev. Stat. § 598.0915 and Nev. Rev. Stat. § 598.0923, that has harmed and is harming the State of Nevada and its consumers. The above-described conduct has been and is willful within the meaning of Nev. Rev. Stat. § 598.0999.

433. The State of Nevada states that the public interest is served by seeking a permanent injunction to restrain the acts and practices described herein. The State of Nevada and its citizens will continue to be harmed unless the acts and practices complained of herein are permanently enjoined pursuant to Nev. Rev. Stat. § 598.0963.

434. Further, the State of Nevada seeks restitution to the State and/or disgorgement pursuant to Nev. Rev. Stat. § 598.0963. The State of Nevada seeks a civil penalty under Nev. Rev. Stat. § 598.0999 of up to $2,000 for each such willful violation, or $12,500 for each such violation directed at a person over 60 or who is disabled, pursuant to Nev. Rev. Stat. § 598.0973. The State of Nevada is entitled to relief including but not limited to: disgorgement, injunctions, civil penalties, damages, and its costs and attorney's fees pursuant to Nev. Rev. Stat. § 598.0999 and Nev. Rev. Stat. § 598.0973.

435. The State of Nevada seeks relief on behalf of itself and as *parens patriae* on behalf of its persons, pursuant to Nev. Rev. Stat. § 598A.160 and Nev. Rev. Stat. § 598A.0963 and Nevada Common Law.

436. Plaintiff State of North Dakota repeats and realleges every preceding allegation as if fully set forth herein.

437. The aforementioned practices by Google were and are in violation of N.D.C.C. § 51-15-01 *et seq., Unlawful Sales or Advertising Practices,* including § 51-15-02.

438. The Attorney General of North Dakota is authorized to bring an action in the name of the State against any person who has engaged in, or is engaging in, any practice declared to be unlawful by N.D.C.C. § 51-15-01 *et seq*. The Attorney General has reason to believe that Google has engaged in and continues to engage in such practices, constituting separate and multiple violations of North Dakota law; that Google has caused and will cause adverse effects for the business enterprises of the State; and that Google has caused and will cause damage to the State and to the persons of the State.

439. Google's separate and multiple violations of N.D.C.C. § 51-15-01 *et seq*. subject Google to the remedies outlined in N.D.C.C. §§ 51-15-07, 51-15-10, and 51-15-11.

440. Plaintiff Commonwealth of Puerto Rico repeats and realleges each and every preceding allegation as if fully set forth herein.

441. The aforesaid conduct was not only anti-competitive but was also unfair and deceptive to the consumers of the Commonwealth of Puerto Rico, therefore Google's acts violate 10 L.P.R.A. § 259.

442. Plaintiff State of South Dakota repeats and realleges every preceding allegation as if fully set forth herein.

443. The aforementioned practices by Google were and are in violation of South Dakota statute SDCL § 37-24-6(1).

444. The Attorney General of the State of South Dakota is authorized to bring an action in the name of the State against any person who is using, has used, or is about to use any act or practice declared unlawful by SDCL § 37-24-6. The Attorney General has reason to believe that Google has used and is using the acts and practices set forth in this Complaint, which violate SDCL § 37-24-6; that Google has caused and will cause adverse effects for the business enterprises of the State; and that Google has caused and will cause damage to the State and to the persons of the State. The Attorney General therefore finds that this action is in the public interest.

445. Plaintiff State of Utah, by and through its attorney general who is acting as counsel to the Utah Division of Consumer Protection to enforce the Utah Consumer Sales Practices Act, Utah Code § § 13-11-1 *et seq.*, repeats and realleges every preceding allegation as if fully set forth herein.

446. The aforesaid conduct was not only anticompetitive, but also constituted unconscionable and deceptive practices to the consumers of the State of Utah, therefore Google's conduct violated the Utah Consumer Sales Practices Act. Utah Code §§ 13-11-1, 4, *et seq.*, and Plaintiff the State of Utah, Division of Consumer Protection, is entitled to relief under the Utah Consumer Sales Practices Act, Utah Code §§ 13-11-1, *et seq.*

447. At all times described herein, Google was a "supplier" engaged in "consumer transactions" pursuant to Utah Code §§ 13-11-3(2), (6).

448. Pursuant to the Utah Consumer Sales Practices Act, Utah Code §§ 13-11-1, *et seq.*, Plaintiff the State of Utah, Division of Consumer Protection, is entitled to relief including, but not limited to, injunctive relief, damages, fines determined after considering the factors in Utah Code

§ 13-11-17(6), costs, attorneys' fees, and any other just and equitable relief which this Court deems appropriate. Utah Code §§ 13-11-17, 17.2.

X. PRAYER FOR RELIEF

449. Accordingly, the Plaintiff States request that the Court:

a) Adjudge and decree that Google has committed violations of Section 2 of the Sherman Act, 15 U.S.C. § 2;

b) Adjudge and decree that Google has committed violations of Section 1 of the Sherman Act, 15 U.S.C. § 1;

c) Order monetary damages for violations that Google has committed of Sections 1 & 2 of the Sherman Act, 15 U.S.C. §§ 1, 2;

d) Order monetary relief to the Plaintiff States as *parens patriae* pursuant to 15 U.S.C. § 15c;

e) Order injunctive relief to restore competitive conditions in the relevant markets affected by Google's unlawful conduct;

f) Order structural relief to restore competitive conditions in the relevant markets affected by Google's unlawful conduct;

g) Enjoin and restrain, pursuant to federal and state law, Google and their officers, directors, partners, agents, and employees, and all persons acting or claiming to act on their behalf or in concert with them, from continuing to engage in any anticompetitive conduct and from adopting in the future any practice, plan, program or device having a similar purpose or effect to the anticompetitive actions set forth above;

h) To restore all money or other property acquired by means of unlawful acts or practices, or in the alternative, to compensate identifiable persons for actual damages;

i) To disgorge all sums, monies, and value unlawfully taken from consumers by means of deceptive trade practices, together with all proceeds, interest, income, profits, and accessions thereto; making such disgorgement for the benefit of victimized consumers and Plaintiffs;

j) To disgorge and return all data and information unlawfully taken from consumers by means of deceptive trade practices; making such disgorgement and return for the benefit of victimized consumers and Plaintiffs;

k) Adjudge and decree that Google has committed separate and multiple violations of each of the state laws enumerated in Counts V and VI;

l) Order Google to pay civil fines pursuant to § 15.20(a) of the Texas Business and Commerce Code;

m) Enjoin and restrain, pursuant to the DTPA and/or other State law, Google and its officers, directors, partners, agents, and employees, and all persons acting or claiming to act on its behalf or in concert with it, from continuing to engage in any false, deceptive, or misleading acts or practices and from adopting in the future any acts or practice having a similar purpose or effect to the false, deceptive, or misleading actions set forth above;

n) To pay civil penalties of up to $10,000.00 per violation for each and every violation of the DTPA as authorized by Tex. Bus. & Com. Code § 17.47(c)(1);

o) To pay all costs of Court, costs of investigation, and reasonable attorneys' fees pursuant to Section 17.47 of the DTPA and Tex. Govt. Code Ann. § 402.006(c);

p) Order Google to pay damages to the State of Alaska under its *parens patriae* authority and common law;

q) Order Google to pay disgorgement and restitution pursuant to Alaska statutes and common law;

r) Order injunctive and other equitable relief pursuant to ARTA and AUTPCPA, including a permanent injunction prohibiting Google from engaging in anticompetitive conduct described in this Complaint and unfair, false, misleading, or deceptive, conduct described in this Complaint violating AS 45.50.471;

s) Order Google to pay civil penalties pursuant to AS 45.50.551 and AS 45.50.578;

t) Order Google to pay costs and attorneys' fees as permitted by Alaska statutes, court rules, and common law.

u) Order injunctive and other equitable relief as the Court deems appropriate pursuant to Ark. Code Ann. §§ 4-75-212 and 4-75-315;

v) Order Google to pay actual damages or restitution for loss incurred either directly or indirectly by the State of Arkansas pursuant to Ark. Code Ann. §§ 4-75-212 and 4-75-315;

w) Order Google to pay civil penalties to the State of Arkansas of up to $1,000 per violation of Ark. Code Ann. § 4-75-212;

x) Order Google to pay civil penalties to the State of Arkansas of up to $1,000 per violation of Ark. Code Ann. § 4-75-315;

y) Order Google to pay civil penalties to the State of Arkansas of up to $10,000 per violation for each and every violation of Ark. Code Ann. § 4-88-113;

z) Order Google to pay to the Attorney General of Arkansas all of the State's expenses, costs, and attorneys' fees, pursuant to Ark. Code Ann. §§ 4-75-212, 4-75-315, and 4-88-113;

aa) Order injunctive and other equitable relief pursuant to Fla. Stat. § 542.23;

bb) Order payment of civil penalties pursuant to Fla. Stat. § 542.21;

cc) Order payment of costs and attorneys' fees pursuant to Fla. Stat. § 542.23;

dd) Order payment of damages for consumers under parens patriae authority, pursuant to Fla. Stat. § 501.207;

ee) Order disgorgement and restitution payments pursuant to The Florida Deceptive and Unfair Trade Practices Act, Fla. Stat. § 501.204 *et seq.*;

ff) Order injunctive and other equitable relief pursuant to Fla. Stat. § 501.207;

gg) Order payment of civil penalties pursuant to Fla. Stat. § 501.2075;

hh) Order payment of costs and attorneys' fees pursuant to Fla. Stat. § 501.210;

ii) Order Google to pay civil penalties to the Attorney General of Idaho of up to $50,000 per violation for each and every violation of the Idaho Competition Act, as authorized by Idaho Code § 48-108(1)(d);

jj) Order Google to pay all monetary relief authorized by Idaho Code § 48-108(2) to the State of Idaho as *parens patriae* on behalf of persons of the State of Idaho for any and all injury directly or indirectly sustained because of each and every violation by Google of the Idaho Competition Act;

kk) Order Google to pay to the Attorney General of Idaho all of the State's expenses, costs, and attorneys' fees, as authorized by Idaho Code §§ 48-108(1)(d) § 48-108(2)(a);

ll) Grant such further relief to the Attorney General and the State of Idaho as provided for by law or equity, including by Idaho Code § 48-112(4), or as the Court deems appropriate and just;

mm) Order Google to pay civil penalties to the Attorney General of Idaho of up to $5,000 per violation for each and every violation of the ICPA and the Idaho Rules of Consumer Protection, as authorized by § 48-606(1)(e);

nn) Order Google to pay to the Attorney General on behalf of consumers actual damages or restitution of money, property, or other things received from such consumers by Google in connection with each and every violation of the Idaho Consumer Protection Act and the Idaho Rules of Consumer Protection, as authorized by Idaho Code § 48-606(1)(c);

oo) Order Google to pay to the Attorney General of Idaho all of the State's expenses, costs, and attorneys' fees, as authorized by Idaho Code §§ 48-606(1)(f);

pp) Grant such further relief to the Attorney General and the State of Idaho as provided for by law or equity, including by Idaho Code § 48-607, or as the Court deems appropriate and just;

qq) Order injunctive and other equitable relief pursuant to Ind. Code § 24-5-0.5-4(c)(1);

rr) Order Google to pay restitution pursuant to Ind. Code § 24-5-0.5-4(c)(2) for money unlawfully received through violations of the Indiana Deceptive Consumer Sales Act;

ss) Order Google to pay costs pursuant to Ind. Code § 24-5-0.5-4(c)(4);

tt) Order Google to pay civil penalties pursuant to Ind. Code § 24-5-0.5-4(g) for knowing violations of the Indiana Deceptive Consumer Sales Act;

uu) Order Google to pay civil penalties pursuant to Ind. Code § 24-5-0.5-8 for incurable deceptive acts done as part of a scheme, artifice, or device with intent to defraud or mislead;

vv) Order Google to pay damages for natural and non-natural persons to the Attorney General of Kentucky under his parens patriae authority, pursuant to Ky. Rev. Stat. § 15.020, Ky. Rev. Stat. § 367.110 through § 367.990, and Kentucky Common Law;

ww) Order Google to pay disgorgement and restitution pursuant to Ky. Rev. Stat. § 367.190 – 200;

xx) Order for injunctive and other equitable relief pursuant to Ky. Rev. Stat. § 367.190 – 200, including a permanent injunction prohibiting Google from engaging in anticompetitive conduct described in this Complaint violating Ky. Rev. Stat. § 367.175, and unfair, false, misleading, or deceptive, conduct described in this Complaint violating Ky. Rev. Stat. § 367.170;

yy) Order Google to pay civil penalties pursuant to Ky. Rev. Stat. § 367.990(2) which provides that the Attorney General "may recover, on behalf of the Commonwealth, a civil penalty of not more than two thousand dollars ($2,000) per violation, or where the defendant's conduct is directed at a person aged sixty (60) or older, a civil penalty of not more than ten thousand dollars ($10,000) per violation, if the trier of fact determines that the defendant knew or should have known that the person aged sixty (60) or older is substantially more vulnerable than other members of the public";

zz) Order Google to pay civil penalties pursuant to Ky. Rev. Stat. § 367.990(8) which provides that the Attorney General "may recover, on behalf of the Commonwealth a civil penalty of not more than the greater of five thousand dollars ($5,000) or two hundred dollars ($200) per day for each and every violation of Ky. Rev. Stat. § 367.175";

aaa) Order Google to pay costs and attorneys' fees pursuant to Ky. Rev. Stat. § 367.200, Ky. Rev. Stat. § 367.370, and Ky. Rev. Stat. § 48.005;

bbb) Enjoin and restrain, pursuant to Miss. Code Ann. §§ 75-21-1; 75-21-3; 75-24-9; 75-24-11 and/or other State law, Google and its officers, directors, partners, agents, and employees, and all persons acting or claiming to act on its behalf or in concert with it, to correct, prevent and deter the recurrence of the anticompetitive actions set forth above, to restore and preserve fair competition, and to prevent false, deceptive, or misleading acts or practices;

ccc) Order Google to pay the Attorney General of Mississippi on behalf of consumers restitution pursuant to Miss. Code Ann. § 75-24-11 and the Attorney General's *parens patriae* authority;

ddd) Order Google to pay the Attorney General of Mississippi disgorgement pursuant to Miss. Code Ann. §§ 75-24-11 and 75-24-23 and as an equitable remedy pursuant to common law;

eee) Order Google to pay the Attorney General of Mississippi civil penalties of up to ten thousand dollars ($10,000) per violation for each and every violation of the MCPA pursuant to Miss. Code Ann. § 75-24-19(b);

fff) Order Google to pay the Attorney General of Mississippi's costs and attorneys' fees pursuant to Miss. Code Ann. § 75-24-19(1)(b) and pursuant to common law;

ggg) Other remedies as the court may deem appropriate under the facts and circumstances of the case and pursuant to Miss. Code Ann. §§ 75-24-23 and 11-45-11;

hhh) Order structural and other injunctive relief to enjoin, restrain, and prevent and deter the recurrence of the anticompetitive actions set forth above and to restore and preserve fair competition, including an order to disgorge all revenues, profits and gains achieved in whole or in part through violations of Mo. Rev. Stat. §§ 416.011 *et seq.*;

iii) Order Google to pay civil penalties in an amount of up to $1,000 for each act in connection with each sale or advertisement of merchandise in violation of Mo. Rev. Stat. §§ 407.010 *et seq.*;

jjj) Order structural and other injunctive relief to enjoin, restrain and prevent, and deter the recurrence of the unlawful merchandising practices set forth above, including an order to disgorge all revenues, profits and gains achieved in whole or in part through violations of Mo. Rev. Stat. §§ 407.010 *et seq.*;

kkk) Order an award of restitution, payable to the State of Missouri, to restore all persons in Missouri suffering loss as a result of Google's unlawful merchandising practices in violation of Mo. Rev. Stat. §§ 407.010 *et seq.*, and order additional award equal to 10% of such restitution, payable to the State of Missouri to the credit of the Missouri Merchandising Practices Revolving Fund, as provided in Mo. Rev. Stat. § 407.140, and to

pay all costs, including fees, of investigation and prosecution of these claims pursuant to Mo. Rev. Stat. § 407.130 and § 416.121;

lll) Order Google to pay civil fines of up to $10,000 for each willful violation of Mont. Code Ann. § 30-14-103, pursuant to Mont. Code Ann. § 30-14-142;

mmm) Order structural, injunctive, and all available legal and equitable relief pursuant to Mont. Code Ann. § 30-14-101 *et seq.* and § 30-14-201 *et seq.*;

nnn) Order payment of Plaintiff State of Montana's costs and attorney fees pursuant to Mont. Code Ann. § 30-14-131;

ooo) Order Google to pay treble damages for natural and non-natural persons to the Attorney General of Nevada under his parens patriae authority, pursuant to Nev. Rev. Stat. § 598A.160, Nev. Rev. Stat. § 598A.170, Nev. Rev. Stat. § 598A.200, Nev. Rev. Stat. § 598A.210, and Nev. Rev. Stat. § 598.0963;

ppp) Order Google to pay disgorgement and restitution pursuant to Nev. Rev. Stat. § 598.0963 and Nev. Rev. Stat. § 598A.170;

qqq) Order for injunctive and other equitable relief pursuant to Nev. Rev. Stat. § 598A.070 and Nev. Rev. Stat. § 598.0963 including a permanent injunction prohibiting Google from engaging in anticompetitive conduct described in this Complaint;

rrr) Order Google to pay civil penalties pursuant Nev. Rev. Stat. § 598A.170, which provides that the Attorney General may recover a civil penalty "not to exceed 5 percent of the gross income realized by the sale of commodities or services sold by such persons in this state in each year in which the prohibited activities occurred," and under Nev. Rev. Stat. § 598.0999, of not more than five thousand dollars ($5,000) per violation, or where Google's conduct is directed at a person aged sixty (60) or older, or a disabled person, a civil penalty of not more than twelve thousand dollars five hundred ($12,500) per violation;

sss) Order Google to pay costs and attorneys' fees pursuant to Nev. Rev. Stat. § 598A.200, Nev. Rev. Stat. § 598A.210, Nev. Rev. Stat. § 598.0963, and Nev. Rev. Stat. § 598.0999;

ttt) Order Google to pay civil penalties of not more than fifty thousand dollars ($50,000) for each violation of N.D.C.C. § 51-08.1-01 *et seq.*, pursuant to N.D.C.C. § 51-08.1-07;

uuu) Award the State of North Dakota the costs of this action and its preceding investigation, including reasonable attorneys' fees and costs, as provided for in the Clayton Act and applicable state law, including N.D.C.C. § 51-08.1-08;

vvv) Order Google to pay civil penalties of not more than five thousand dollars ($5,000) for each violation of N.D.C.C. § 51-15-01 *et seq.* pursuant to N.D.C.C. §§ 51-15-11;

www) Order Google to pay reasonable attorney's fees, investigation fees, costs, and expenses pursuant to N.D.C.C. § 51-15-10;

xxx) Order Google to pay to the Attorney General of North Dakota, on behalf of persons of the State, all damages, compensation, or restitution necessary to restore to such persons any money or property that may have been acquired by Google in connection with each and every violation of N.D.C.C. § 51-15-01 *et seq.*, pursuant to N.D.C.C. § 51-15-07;

yyy) Grant such further relief to the Attorney General and the State of North Dakota as provided for by law or equity, including by N.D.C.C. § 51-15-07, or as the Court deems appropriate and just;

zzz) Order Google to pay civil penalties to the State of South Dakota of up to $50,000 per violation for each and every violation of SDCL §§ 37-1-3.1 *et seq.*, pursuant to SDCL § 37-1-14.2;

aaaa) Order Google to pay all monetary relief authorized by SDCL §§ 37-1-23, 37-1-24, and 37-1-32 to the State of South Dakota as *parens patriae* on behalf of persons of the State for any and all injury directly or indirectly sustained because of each and every violation by Google of SDCL §§ 37-1-3.1 *et seq*;

bbbb) Order Google to pay to the Attorney General of South Dakota all of the State's expenses, costs, and attorneys' fees, as authorized by SDCL § 37-1-24;

cccc) Order Google to pay civil penalties to the State of South Dakota of up to $2,000 per violation for each and every violation of SDCL § 37-24-6, as authorized by SDCL § 37-24-27;

dddd) Order Google to grant all relief to the State of South Dakota authorized by SDCL § 37-24-29 to restore to any person in interest all monies or property, real or personal, that Google has acquired by each and every violation of SDCL § 37-24-6;

eeee) Order Google to pay to the Attorney General of South Dakota all of the State's expenses, costs, and attorneys' fees, as authorized by SDCL § 37-24-23;

ffff) Grant such further relief to the Attorney General and the State of South Dakota as provided for by law or equity, including by SDCL § 37-24-29, or as the Court deems appropriate and just;

gggg) Grant declaratory judgment that Google has engaged deceptive acts and practices as contemplated by Utah Code § 13-11-4, and as permitted by Utah Code § 13-11-17;

hhhh) Order Google to pay civil penalties determined after considering the factors in Utah Code § 13-11-17(6);

iiii) Order Google to pay Plaintiff the State of Utah, Division of Consumer Protection, an award of reasonable attorneys' fees, court costs, and costs of investigation (Utah Code § 13-11-17.5);

jjjj) Order other equitable relief as may be appropriate;

kkkk) Grant leave to amend the Complaint to conform to the evidence produced at trial; and

llll) Direct such other and further relief as the Court deems just and proper.

XI. DEMAND FOR A JURY TRIAL

450. Pursuant to Federal Rule of Civil Procedure 38(b), the Plaintiff States demand a trial by jury of all issues properly triable to a jury in this case.

Respectfully submitted,

March 15, 2021

FOR PLAINTIFF STATES OF TEXAS, IDAHO, SOUTH DAKOTA, AND NORTH DAKOTA:

/s/ Ashley Keller
Ashley Keller
Admitted Pro Hac Vice
ack@kellerlenkner.com
Brooke Smith
brooke.smith@kellerlenkner.com
150 N. Riverside Plaza, Suite 4270
Chicago, Illinois 60606
(312) 741-5220
Warren Postman
wdp@kellerlenkner.com
1300 I Street, N.W., Suite 400E
Washington, D.C. 20005
(202) 749-8334
KELLER LENKNER LLC

/s/ Mark Lanier
Mark Lanier (*lead counsel*)
Texas Bar No. 11934600
Mark.Lanier@LanierLawFirm.com
Alex J. Brown
Alex.Brown@LanierLawFirm.com
Zeke DeRose III
Zeke.DeRose@LanierLawFirm.com
10940 W. Sam Houston Parkway N. Suite 100
Houston, Texas 77064
Telephone: (713) 659-5200
Facsimile: (713) 659-2204
THE LANIER LAW FIRM, P.C.

Attorneys for Plaintiff States of Texas, Idaho, South Dakota, and North Dakota

FOR PLAINTIFF STATE OF TEXAS:

KEN PAXTON
Attorney General

/s/ Shawn E. Cowles

Brent Webster, First Assistant Attorney General of Texas
Brent.Webster@oag.texas.gov
Grant Dorfman, Deputy First Assistant Attorney General
Grant.Dorfman@oag.texas.gov
Aaron Reitz, Deputy Attorney General for Legal Strategy
Aaron.Reitz@oag.texas.gov

Shawn E. Cowles, Deputy Attorney General for Civil Litigation
Shawn.Cowles@oag.texas.gov
Nanette DiNunzio, Associate Deputy Attorney General for Civil Litigation
Nanette.Dinunzio@oag.texas.gov

Matthew Bohuslav, Assistant Attorney General, General Litigation Division
Matthew.Bohuslav@oag.texas.gov
Ralph Molina, Assistant Attorney General, General Litigation Division
Ralph.Molina@oag.texas.gov

Paul Singer, Senior Counsel for Public Protection
Paul.Singer@oag.texas.gov

Reynolds Brissenden, Assistant Attorney General, Director of Litigation, Civil Medicaid Fraud
Reyonds.Brissenden@oag.texas.gov

Charles K. Eldred, Special Litigation Counsel, Administrative Law
Charles.Eldred@oag.texas.gov

Kim Van Winkle, Chief, Antitrust Division
Kim.VanWinkle@oag.texas.gov
Bret Fulkerson, Deputy Chief, Antitrust Division
Bret.Fulkerson@oag.texas.gov
David Ashton, Assistant Attorney General Antitrust Division
David.Ashton@oag.texas.gov
Nicholas G. Grimmer, Assistant Attorney General, Antitrust Division
Nick.Grimmer@oag.texas.gov
Trevor Young, Assistant Attorney General, Antitrust Division
Trevor.Young@oag.texas.gov
R. Floyd Walker, Assistant Attorney General, Antitrust Division
Floyd.Walker@oag.texas.gov
Gabriella Gonzalez, Assistant Attorney General, Antitrust Division
Gabriella.Gonzalez@oag.texas.gov
Margaret Sharp, Assistant Attorney General, Antitrust Division
Margaret.Sharp@oag.texas.gov
Kelsey Paine, Assistant Attorney General, Antitrust Division
Kelsey.Paine@oag.texas.gov

OFFICE OF THE ATTORNEY GENERAL OF TEXAS
P.O. Box 12548 (MC059)
Austin, TX 78711-2548
(512) 936-1414

Attorneys for Plaintiff State of Texas

FOR PLAINTIFF STATE OF ALASKA:

TREG R. TAYLOR
Attorney General

By: */s/ Jeff Pickett*
Jeff Pickett
Senior Assistant Attorney General, Special Litigation Section
jeff.pickett@alaska.gov

Application for pro hac vice forthcoming

Attorney for Plaintiff State of Alaska

FOR PLAINTIFF STATE OF ARKANSAS:

LESLIE RUTLEDGE
ATTORNEY GENERAL

By: */s/ Johnathan R. Carter*

Johnathan R. Carter – AR Bar # 2007105
Assistant Attorney General
Office of the Arkansas Attorney General
323 Center Street, Suite 200
Little Rock, AR 72201
Phone: 501.682.8063
Fax: 501.682.8118
Email: Johnathan.Carter@Arkansasag.gov

Attorney for Plaintiff State of Arkansas

FOR PLAINTIFF STATE OF FLORIDA:

ASHLEY MOODY, Attorney General

/s/ R. Scott Palmer
R. SCOTT PALMER, Interim Co-Director, Antitrust Division
FL Bar No. 220353
JOHN GUARD, Chief Deputy Attorney General
LEE ISTRAIL, Assistant Attorney General
CHRISTOPHER KNIGHT, Assistant Attorney General
ANDREW BUTLER, Assistant Attorney General

Office of the Attorney General, State of Florida
PL-01 The Capitol
Tallahassee, Florida 32399
Phone: 850-414-3300
Email: scott.palmer@myfloridalegal.com

Application for pro hac vice forthcoming

Attorneys for Plaintiff State of Florida

FOR PLAINTIFF STATE OF IDAHO:

LAWRENCE G. WASDEN
Attorney General

/s/ John K. Olson
Brett T. DeLange, Division Chief, Consumer Protection Division
John K. Olson, Deputy Attorney General

Consumer Protection Division
Office of the Attorney General
954 W. Jefferson Street, 2nd Floor
P.O. Box 83720
Boise, Idaho 83720-0010
Telephone: (208) 334-2424
brett.delange@ag.idaho.gov
john.olson@ag.idaho.gov

Attorneys for Plaintiff State of Idaho

FOR PLAINTIFF STATE OF INDIANA:

The Office of the Indiana Attorney General

By: 

Scott Barnhart
Chief Counsel and Director of Consumer Protection
Indiana Atty. No. 25474-82
Indiana Government Center South – 5th Fl.
302 W. Washington Street
Indianapolis, IN 46204-2770
Phone: (317) 232-6309
Fax: (317) 232-7979
Email: scott.barnhart@atg.in.gov

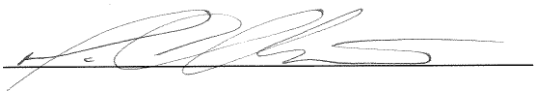
Matthew Michaloski
Deputy Attorney General
Indiana Atty. No. 35313-49
Indiana Government Center South – 5th Fl.
302 W. Washington Street
Indianapolis, IN 46204-2770
Phone: (317) 234-1479
Fax: (317) 232-7979
Email: matthew.michaloski@atg.in.gov

Attorneys for Plaintiff State of Indiana

FOR PLAINTIFF COMMONWEALTH OF KENTUCKY:

DANIEL CAMERON
Attorney General

J. Christian Lewis
Executive Director of Consumer Protection



J. Christian Lewis, Executive Director of Consumer Protection
Christian.Lewis@ky.gov
Justin D. Clark, Deputy Director of Consumer Protection
JustinD.Clark@ky.gov
Philip R. Heleringer, Assistant Attorney General
Philip.Heleringer@ky.gov
Jonathan E. Farmer, Assistant Attorney General
Jonathan.Farmer@ky.gov
Office of the Attorney General,
Commonwealth of Kentucky
1024 Capital Center Drive, Suite 200
Frankfort, Kentucky 40601
Tel: 502-696-5300

Attorneys for Commonwealth of Kentucky

FOR PLAINTIFF STATE OF MISSISSIPPI:

LYNN FITCH, ATTORNEY GENERAL
STATE OF MISSISSIPPI

By: */s/ Hart Martin*

Hart Martin
Consumer Protection Division
Mississippi Attorney General's Office
Post Office Box 220
Jackson, Mississippi 39205
Telephone: 601-359-4223
Fax: 601-359-4231
Hart.martin@ago.ms.gov

Attorney for Plaintiff State of Mississippi

FOR PLAINTIFF STATE OF MISSOURI:

Eric Schmitt
Attorney General

Amy Haywood, Chief Counsel, Consumer Protection Division
Amy.Haywood@ago.mo.gov
Kimberley G. Biagioli, Assistant Attorney General
Kimberley.Biagioli@ago.mo.gov
Missouri Attorney General's Office
P.O. Box 899
Jefferson City, Missouri 65102
Tel: 816-889-3090

Attorneys for Plaintiff State of Missouri

FOR PLAINTIFF STATE OF MONTANA:

AUSTIN KNUDSEN
Montana Attorney General

/s/ David M.S. Dewhirst
DAVID M.S. DEWHIRST
Solicitor General
MARK MATTIOLI
Chief, Office of Consumer Protection
CHUCK MUNSON
Assistant Attorney General
P.O. Box 200151
Helena, MT 59620-0151
Phone: (406) 444-4500
Fax: (406) 442-1894
david.dewhirst@mt.gov
mmattioli@mt.gov
cmunson@mt.gov

Application for pro hac vice forthcoming

Attorneys for Plaintiff State of Montana

FOR PLAINTIFF STATE OF NEVADA:

AARON D. FORD
Attorney General
ERNEST D. FIGUEROA
Consumer Advocate

/s/ Marie W.L. Martin
Marie W.L. Martin (NV Bar No. 7808)
Senior Deputy Attorney General
MWMartin@ag.nv.gov
Lucas J. Tucker (NV Bar No. 10252)
Senior Deputy Attorney General
LTucker@ag.nv.gov
Office of the Nevada Attorney General
Senior Deputy Attorney General
Michelle Newman (NV Bar No. 13206)
mnewman@ag.nv.gov
100 N. Carson St.
Carson City, Nevada 89701
Tel: (775) 684-1100

Application for pro hac vice forthcoming

Attorneys for Plaintiff State of Nevada

FOR PLAINTIFF STATE OF NORTH DAKOTA:

STATE OF NORTH DAKOTA
Wayne Stenehjem
Attorney General

By: */s/ Elin S. Alm*
Parrell D. Grossman, ND ID 04684
Elin S. Alm, ND ID 05924
Assistant Attorneys General
Consumer Protection and Antitrust Division
Office of Attorney General
Gateway Professional Center
1050 E. Interstate Ave, Ste. 200
Bismarck, ND 58503-5574
(701) 328-5570
(701) 328-5568 (fax)
pgrossman@nd.gov
ealm@nd.gov

Attorneys for Plaintiff State of North Dakota

FOR PLAINTIFF COMMONWEALTH OF PUERTO RICO:

/s/ Domingo Emanuelli-Hernández
Domingo Emanuelli-Hernández
Attorney General
Johan M. Rosa Rodríguez
Assistant Attorney General
PR Bar No. 16819
P.O. Box 9020192
San Juan, Puerto Rico 00902-0192
Tel: (787) 721-2900, ext. 1201, 1204
jorosa@justicia.pr.gov

Application for pro hac vice forthcoming

Attorneys for Plaintiff Commonwealth of Puerto Rico

FOR PLAINTIFF STATE OF SOUTH DAKOTA:

JASON R. RAVNSBORG
Attorney General

/s/ Yvette K. Lafrentz
Yvette K. Lafrentz
Assistant Attorney General
Consumer Protection Division
South Dakota Office of the Attorney General
1302 E. Hwy. 14, Suite 1
Pierre, SD 57501
P: 605.773.3215 F:605.773.4106
Yvette.lafrentz@state.sd.us

Attorney for Plaintiff State of South Dakota

FOR PLAINTIFF STATE OF UTAH:

Sean D. Reyes
Utah Attorney General

/s/ David N. Sonnenreich
By David N. Sonnenreich
Deputy Attorney General
Antitrust Section Director
Tara Pincock
Assistant Attorney General, Antitrust Section
Office of the Utah Attorney General
160 E 300 S, 5th Floor
PO Box 140872
Salt Lake City, UT 84114-0872
Telephone: 801-366-0132
Fax: 801-366-0315

Attorneys for Plaintiff State of Utah and as counsel for the Utah Division of Consumer Protection