MEMORANDUM OPINION

I. INTRODUCTION

Google LLC operates the largest Internet general search engine in the United States. Its brand name has become so ubiquitous that dictionaries recognize it as a verb.¹

A Google search can be performed in a variety of ways—through (1) web browsers, like Apple’s Safari, Microsoft’s Edge, Mozilla’s Firefox, and Google’s Chrome; (2) search widgets

that appear on the face of Android devices; (3) the Google Search application, available through various app stores; and (4) Google’s webpage. Users can search using Google on a host of devices, including personal computers, mobile phones, tablets, and Internet-of-Things (“IoT”) devices such as smart speakers, home appliances, and cars.

There are other search engines, of course: Microsoft’s Bing, Yahoo!, and DuckDuckGo, to name a few. But their market penetration pales in comparison to Google’s. In 2020, Google’s share of the U.S. general search services market was nearly 90%, and even higher on mobile devices. The market share of Google’s closest competitor, Bing, was roughly 6%.

Google, like most search engines, generates revenue from digital advertising. Digital advertising is incredibly lucrative. Advertisers spend over $80 billion annually just to reach general search users (and billions more on other forms of digital advertising). Not surprisingly, because of its large market share in general search services, Google also holds a superior market position in various search-related advertising markets.

A dominant firm like Google does not violate the law, however, merely because it occupies a monopoly market position. It must act in a manner that produces anticompetitive effects in the defined markets. That is, a company with monopoly power acts unlawfully only when its conduct stifles competition.

In these consolidated cases, the United States and the Attorneys General of 38 states have accused Google of doing just that. They contend that Google has violated Section 2 of the Sherman Act, 15 U.S.C. § 2, by unlawfully maintaining monopolies through exclusionary practices in four relevant markets. The United States and Attorneys General jointly allege anticompetitive conduct in the markets for (1) general search services and (2) general search text advertising. The United
States identifies another relevant market for (3) search advertising, and the Attorneys General assert one more, (4) general search advertising.  

Both sets of plaintiffs allege that Google has unlawfully maintained its monopoly power through a set of exclusive contracts. These agreements make Google the default search engine on a range of products in exchange for a share of the advertising revenue generated by searches run on Google. Google has such agreements with (1) web browser developers, most notably Apple and Mozilla, and (2) original equipment manufacturers (like Samsung) and wireless carriers (like Verizon) who sell Android devices. So, for example, when a purchaser buys a new iPad, Google will be the out-of-the-box default search engine on Apple’s Safari web browser. Similarly, if a user prefers Android devices, the search widget that appears on the home screen typically is preloaded with Google’s search engine. Occupying the default search engine position on these products, Plaintiffs contend, is exclusionary conduct that unlawfully prevents Google’s rivals from effectively competing in the relevant markets.

The Attorneys General also charge Google with two other forms of anticompetitive conduct, which they contend reinforce Google’s monopolies. First, the Attorneys General claim that Google’s conduct has weakened Specialized Vertical Providers (“SVPs”), which are companies focused on niche markets—like Expedia or Tripadvisor for travel, OpenTable for restaurant reservations, and Amazon or eBay for shopping. Google has harmed SVPs, the Attorneys General allege, by (1) limiting the visibility of SVPs on Google’s Search Engine Results Page, and (2) demanding that SVPs make their data available to Google on terms no less favorable than it does to others. The weakening of SVPs, the Attorneys General say, harms competition in the general search and general search-related advertising markets.

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2 The relevant markets are discussed in Section III.A.
Second, the Attorneys General claim that Google uses its proprietary search engine marketing tool—SA360—to thwart competition. Buyers use SA360 to purchase digital advertisements across multiple platforms, including on Google (through Google Ads) and its closest rival Bing (through Microsoft Ads). The Attorneys General accuse Google of harming competition by delaying the implementation of various SA360 product features for Microsoft Ads that have long been available for Google Ads, thus harming Microsoft’s ability to compete.

Before the court are Google’s motions for summary judgment as to all claims in both cases. At this stage, Google is not contesting the markets as Plaintiffs have defined them. Nor does it dispute that it possesses monopoly power in those markets. What Google challenges is the accusation that its alleged conduct has harmed competition in the relevant markets.

After having considered the parties’ briefing and the extensive record, and for the reasons explained below, the court grants Google’s motions in part and denies them in part. With respect to the complaint filed by the United States, and joined by the Attorneys General, the court denies summary judgment as to the claim that Google’s alleged exclusive dealing arrangements violate Section 2 of the Sherman Act. There remain genuine disputes of material fact that warrant a trial. Google’s motion is granted, however, insofar as the United States’ claims rest on (1) Google’s Android Compatibility Commitments and Anti-Fragmentation Agreements; (2) Google’s agreements relating to Google Assistant and IoT devices; and (3) Google’s management of its Android Open Source Project. Plaintiffs have not offered any opposition as to those three parts of their claims.

As for the Attorneys General’s additional claims, the court grants judgment in favor of Google insofar as those claims rely on Google’s alleged weakening of SVPs. With respect to those allegations, Plaintiffs have not demonstrated the requisite anticompetitive effect in the relevant
markets to make out a Section 2 prima facie case. However, there remains a genuine dispute of material fact with regard to the anticompetitive effect of Google’s disparate development of SA360’s ad-buying features. Summary judgment is therefore denied as to that part of the Attorneys General’s claims.

II. PROCEDURAL HISTORY

On October 20, 2020, the United States Department of Justice ("DOJ") and the Attorneys General of eleven states\(^3\) (collectively, “DOJ Plaintiffs”) filed a complaint (“DOJ Action”) against Google asserting violations of Section 2 of the Sherman Act. DOJ Compl., ECF No. 1. The DOJ Plaintiffs accused Google of unlawful monopoly maintenance “in the markets for general search services, search advertising, and general search text advertising in the United States through anticompetitive and exclusionary practices.” Id. at 2. Its Complaint contained three Section 2 claims, each corresponding to one of the alleged markets. Id. ¶¶ 173–193.

Two months later, the Attorneys General of 38 states and territories,\(^4\) led by the State of Colorado (“Colorado Plaintiffs”), filed a separate complaint (“Colorado Action”) against Google alleging unlawful monopoly maintenance in the markets for “general search services, general search text advertising, and general search advertising in the United States.” Compl., Colorado v. Google, No. 20-cv-3715 (APM) (D.D.C.) [hereinafter Colorado Docket], ECF No. 3 [hereinafter Colorado Compl.], ¶ 1. The Colorado Action incorporated “[t]he search advertising market defined in the DOJ Complaint” and the claims made by the DOJ Plaintiffs, id. at 22 n.3, and “allege[d] additional facts demonstrating a broader pattern of Google’s anticompetitive conduct,”

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\(^3\) The 11 states that initially joined DOJ are Arkansas, Florida, Georgia, Indiana, Kentucky, Louisiana, Mississippi, Missouri, Montana, South Carolina, and Texas. See DOJ Compl. at 1–2.

The Colorado Plaintiffs also asserted three Section 2 claims, each corresponding to one of the alleged markets. *Id.* ¶¶ 212–232.


After a rigorous period of discovery, Google moved for summary judgment as to all claims in both cases. Def.’s Mot. Summ. J., ECF No. 421 (DOJ Action); Def.’s Mot. for Summ. J., ECF No. 426 (Colorado Action).

### III. BACKGROUND

The following recitation of background facts is largely undisputed by the parties.

#### A. Relevant Markets

*General Search Services.* The general search services market consists of “general search engines, which are ‘one-stop shops’ consumers can use to search the internet for answers to a wide range of queries.” Pls.’ Mem. in Opp’n to Def.’s Mot., ECF No. 476 [hereinafter DOJ Opp’n], Pls.’ Ctstmt. of Mat. Facts, ECF No. 476-2 [hereinafter DOJ CSMF], ¶ 400. Google and Bing are the two leading general search engines in the United States. Smaller players in the market include Yahoo!, DuckDuckGo, Brave, Ecosia, and Neeva. *Id.* ¶ 405.

*General Search Text Advertising.* The general search text advertising market is a subset of the general search advertising market described below. It consists of a specific type of advertisement sold by general search engines that are “typically placed just above or below the
organic search results on a Search Engine Results Page (“SERP”), and resemble the organic results that appear on a general search engine’s SERP, with a subtle notation that they are ‘ads’ or ‘sponsored.’” DOJ Am. Compl. ¶ 101. Figure 1 is an example of a general search text ad.

![Figure 1](image)

**General Search Advertising.** The general search advertising market includes all advertisements sold “by a general search engine in connection with a general search query.” Colorado Compl. ¶ 82. Only the Colorado Plaintiffs allege unlawful monopoly maintenance in this market. *Id.* ¶ 59.

The general search advertising market encompasses not only search text ads, but other types of ads that appear on Google’s SERP, such as “vertically-focused search ads” and “universals.” Pl. States’ Mem. in Opp’n to Def.’s Mot., ECF No. 465, Pl. States’ Stmt. of Mat. Facts as to Which There is No Genuine Issue, ECF No. 465-1 [hereinafter Colorado SMF], ¶¶ 23–26. Vertically focused search ads include product listings, local search ads, and hotel ads. *Id.* ¶ 25. Google also has universals for hotels, flights, shopping, and vacation rentals, to name a few. *Id.* ¶ 26. Figure 2 illustrates the different types of general search ads.
"Google has also developed its own specialized vertical sites that are separate but reachable from the SERP, such as immersive and business listing . . . pages." *Id.* ¶27. An immersive page can be reached by clicking on the search universal. *Id.* ¶29. An example of a Google immersive page for a hotel search in New York City is included below as Figure 3.
Figure 3

Search Advertising. “The search advertising market consists of all types of ads generated in response to online search queries, including general search text ads (offered by general search engines such as Google and Bing) and other, specialized search ads (offered by general search engines and specialized search providers such as Amazon, Expedia, or Yelp).” DOJ Am. Compl.
¶ 97; see also DOJ CSMF ¶ 413 (“There is a search ads market that consists of advertising that is displayed on the SERP that general or specialized search engines return in response to consumer real-time queries.”). Only the DOJ Plaintiffs allege that Google unlawfully monopolizes the search advertising market. DOJ Am. Compl. ¶ 108; Colorado Compl. ¶¶ 59–89.

B. Distribution Agreements

Both the DOJ Plaintiffs and Colorado Plaintiffs contend that “Google has unlawfully maintained its monopolies by implementing and enforcing a series of exclusionary agreements with distributors over at least the last decade.” DOJ Am. Compl. ¶ 112; Colorado Compl. ¶ 58. Plaintiffs\(^5\) take issue with two types of contracts: Browser Agreements and Android Agreements. The court provides a brief summary of these agreements before discussing them in detail.

Browser Agreements are between Google and web browser developers, primarily Apple and Mozilla. Under these arrangements, the developers have agreed to make Google the default search engine for all search access points on their browsers in exchange for a share of the search advertising revenue generated by Google. The Browser Agreements do not, however, prohibit a user from changing the default to a different search engine. So, a user who types a query into Safari’s integrated search bar will search the Internet using Google, unless the user changes the default setting. The same is true on Firefox.

Android Agreements are between Google and original equipment manufacturers (“OEMs”) of Android devices, like Samsung, or phone carriers that sell Android devices, like Verizon. These contracts—there are two—(1) require OEMs that choose to pre-install any of Google’s proprietary apps to pre-install 11 Google apps (including Google Search and Chrome)
and place the Google search widget on the device’s home screen; and (2) as part of a separate revenue share agreement, prohibit OEMs and carriers from preinstalling or otherwise promoting an alternative general search engine. As a result of these agreements, an Android device user that enters a search query on a new device will default to Google, unless the user first changes that setting.

1. Browser Agreements

Web browsers, like Apple’s Safari and Mozilla’s Firefox, have built-in search access points that automatically route user queries to a default search engine. In Plaintiffs’ view, “being the preset default search engine for a search access point on a preinstalled and prominently placed app is the most efficient and effective way for a search engine to reach users.” DOJ CSMF ¶ 445.

Apple. In 2005, Google and Apple entered into an agreement where, Def.’s Stmt. of Mat. Facts as to Which There is No Genuine Issue in Supp. of Mot., ECF No. 423 [hereinafter Google DOJ SMF], ¶ 14; see Google 429 Exs., ECF No. 429, Ex. 7, ECF No. 429-7 [hereinafter Apple Agreement]. Importantly, Safari is the only web browser that is pre-installed on Apple devices. See Google 429 Exs., Ex. 2, ECF No. 429-2, at 126:3–17. Thus, under the Browser Agreement with Apple,

Def.’s Mem. of P. & A. in Supp. of Def.’s Mot. for

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6 Citations to “Google 429 Exs.” refer to Google’s exhibits filed under ECF No. 429. Similarly, citations to “Colorado 470 Exs.” refer to Colorado Plaintiffs’ exhibits filed under ECF No. 470. This citing convention will be used for exhibits throughout the Memorandum Opinion.

7 ECF pagination is used for all exhibits.

Mozilla. The year before it entered into a browser agreement with Apple, Google reached a similar agreement with Mozilla. Under that contract, Google DOJ Mot. at 14; Google DOJ SMF ¶ 109; Google 430 Exs., ECF No. 430, Ex. 32, ECF No. 430-7. In 2014, Mozilla decided to change the default search engine on its Firefox web browser in the United States from Google Search to Yahoo!. See Google 430 Exs., Ex. 31, ECF No. 430-6, at 69:12–19. Two years later it switched back to Google. Id., Ex. 39, ECF No. 430-14. As with Google’s agreements with Apple, the contract with Mozilla did “not limit or preclude” users from changing the default search engine. Id. at 3.

Smaller Web Browser Developers. Google also has agreements with two smaller browser developers, Opera and UCWeb, which “provide revenue-share payments in exchange for being the default search engine upon first use, without preventing the promotion of rival search services or user’s ability . . . to change the default.” Google DOJ Mot. at 18–19.

2. Android Agreements: MADAs and RSAs

The Android Operating System (“Android OS”) is a mobile phone operating system that Google acquired in 2005. DOJ CSMF ¶ 570. It is now the “second most widely used mobile phone operating system in the U.S.” behind Apple’s iOS. Google DOJ SMF ¶ 198. Unlike iOS, which can only be used on Apple devices, Android OS is open source, meaning that numerous OEMs can use Android OS on their smartphones and other devices. Id. ¶ 199. In the United
States, “consumers purchase Android devices directly from OEMs (such as Samsung or Motorola) as well as from carriers (such as Verizon or AT&T).” *Id.* ¶ 223.

The DOJ and Colorado Plaintiffs take issue with two types of agreements between Google and OEMs/carriers—Mobile Application Distribution Agreements (“MADAs”) and Revenue Share Agreements (“RSAs”).

**MADAs.** Google has entered into MADAs with OEMs, whereby Google provides the OEMs a non-exclusive, royalty-free license to 11 proprietary Google applications. *Id.* ¶¶ 212–13. If an OEM chooses to download any of the proprietary apps, absent an exemption, the OEM must “(i) preload on that device [the 11] applications licensed pursuant to the MADA and (ii) place on the device’s default home screen the Google Search widget, the Google Play application, and a folder containing the other MADA applications.” *Id.* ¶ 217. Among the 11 applications are the Google Search App and Chrome browser. DOJ CSMF ¶ 584. The MADA prohibits OEMs from “encouraging, teaching, or helping end users to change an Android device’s out-of-the-box default settings if Google apps are preinstalled on the device.” *Id.* ¶ 585. MADAs do not, however, “restrict an OEM from preloading a search application, widget, or browser provided by a search engine other than Google on any of its devices, including devices on which it chooses to install the MADA applications.” DOJ Opp’n, Pl s.’ Stmt. of Genuine Issues, ECF No. 476-1, [hereinafter DOJ SGI], ¶ 219.

**RSAs.** Under its RSAs with “carriers and OEMs, Google makes monthly payments to the counterparty in exchange for Google being (1) the exclusive general search engine preinstalled on Android devices covered by the RSA, as well as (2) the search default for all search access points

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8 The 11 applications are Google Search, Google Play Store, Google Chrome, YouTube, Google Maps, Gmail, Google Photos, YouTube Music, Google Duo, Google Drive, and Google Play Movies and TV. DOJ 480 Exs., ECF No. 480, Ex. 160, ECF No. 480-12, at 21.
on such devices.” DOJ CSMF ¶ 602. That generally includes search access points on non-Chrome browsers. Id. ¶ 605. The RSA prohibits the carrier or OEM from preinstalling or otherwise including a search engine substantially similar to Google’s. Id. ¶ 604. Some RSAs permit the party to earn Google revenue share on a device-by-device basis,9

Id. ¶ 610. OEMs and carriers can choose among multiple tiers that provide varying levels of “promotion” of Google Search. DOJ SGI ¶ 227.10 “Except for a small number of Android devices . . . the overwhelming majority of Android devices sold in the United States are subject to the search default rules established in Google’s RSAs.” DOJ CSMF ¶ 611.

C. The Colorado Plaintiffs’ Allegations: SVPs and SA360

The Colorado Plaintiffs’ claims against Google overlap with the DOJ Plaintiffs’ claims with respect to the Browser and Android Agreements, but also involve two additional types of alleged exclusionary conduct. That conduct concerns Specialized Vertical Providers (“SVPs”) and Google’s development of SA360—Google’s search engine marketing tool.

1. Specialized Vertical Providers

SVPs are websites or applications that provide search results in a limited number of commercial segments that serve a common group of customers. Colorado SMF ¶ 127. For example, Amazon and Etsy are SVPs that sell products to shoppers, and Expedia and Booking.com are SVPs that sell airline, hotel, and car rental reservations. Id. ¶ 128. The commercial segments for which SVPs provide search results are referred to as “verticals.” Id. ¶ 127. So, Amazon and

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9 A device-by-device agreement means that Samsung, for example, can have different out-of-the-box configurations under its RSA for the Samsung Galaxy Note20 and Samsung Galaxy S10, if it so chooses.

10 For example, Google DOJ SMF ¶ 228.
Etsy are part of the “shopping vertical,” while Expedia and Booking are part of both the “flight vertical” and “hotel vertical.” SVPs differ from general search engines “because of their much narrower commercial focus and because many of them afford users the convenience of completing transactions on their websites, such as purchasing a pair of shoes (Amazon) or reserving a hotel room (Booking).” *Id.* ¶ 129.

**Limited Visibility in Google’s SERP.** To understand the Colorado Plaintiffs’ theory of how Google’s monopoly power affects SVPs, it is critical to understand how Google designs its Search Engine Results Page (“SERP”). Google’s SERP includes three types of search results that appear in response to a query: (1) organic web results, which are the blue “plain text hyperlinks to webpages for which Google does not receive any payment, ranked according to relevancy and quality”; (2) search text ads, which look like the organic web results but are actually “paid advertisements relevant to a query that has been entered”; and (3) specialized search results in various commercial segments (“universals” or “verticals”), including “‘vertical’ units for certain categories of information.” Def.’s Stmt. of Mat. Facts as to Which There is No Genuine Issue in Supp. of Def.’s Mot., ECF No. 428 [hereinafter Google Colorado SMF], ¶¶ 3–5, 8.

The third category, specialized vertical units, refers to results organized around a particular search query. For example, when a user searches for “hotels in Washington, DC,” in addition to organic web results and search text ads, Google “offers a hotels unit organized around hotel listings in a specified location in response to the query.” *Id.* ¶ 6; see Figure 4. “Unlike text ads, vertically-focused search ads look less like algorithmic results and may include photos and information such as prices, customer ratings, and business hours.” Colorado SMF ¶ 24. “Google has universals that can appear on its SERP for hotels, flights, shopping, and vacation rentals, among others.” *Id.* ¶ 26. “Over time, Google has altered its SERP for commercial queries to increasingly display Google’s
own search universals above the unpaid blue links,” and the blue links often appear “below the fold” requiring users to scroll down to see them. *Id.* ¶¶ 33–34.

Plaintiffs take issue with Google’s imposition of “visibility restrictions on SVPs” in certain commercial segments. Errata Pl. States Mem. in Opp’n to Def.’s Mot., ECF No. 491 [hereinafter Colorado Opp’n], at 18. For example, “SVPs cannot appear in results in the free listings in Google’s hotel universal, flights universal, or in the local universal triggered by searches for nearby businesses” and “cannot purchase ads in their own name” or “appear prominently in the title of local services ads on Google’s SERP.” *Id.*; *see* Figure 4. However, SVPs can and do appear in other universals, like vacation rentals. Colorado SMF ¶ 154; *see* Figure 5 (listing SVPs Vio.com, Evolve, and Sojourn).

**Figure 4**
Figure 5

Data-acquisition Agreements. The Colorado Plaintiffs’ allegations concerning SVPs also center on how Google obtains data from them. Google collects information in two primary ways: (1) “by crawling and indexing websites throughout the internet,” Colorado SMF ¶ 6, and (2) by acquiring “structured data” (such as flight availability on a given day or a restaurant’s hours of operation) from third parties, information that “is not otherwise available through Google’s internet crawling and indexing.” Id. ¶¶ 7, 173.

Google acquires “structured data” from SVPs. “[A]s a condition of participating in its vertically-focused search advertising, Google requires certain SVPs to provide access to their data.” Id. ¶ 175. “Google uses SVP data for its own purposes in its hotels, flights, and local universals, in local services ads, and in the hotel and flights immersive pages.” Id. ¶ 180. SVPs who share data with Google are not restricted from providing that same data to Google’s rivals. Id. ¶ 183. However, SVPs are required to give Google “data equivalent to any competitor.” Id.
2. **SA360**

The Colorado Plaintiffs’ claims also concern Google’s development and use of its search engine marketing (“SEM”) tool, SA360. Advertisers can purchase online advertisements in a variety of ways. The three most notable are: (1) directly from online content publishers, like *The New York Times*, (2) directly from online platforms like Google, Amazon, Facebook, and Microsoft through “native tools” or “interface tools,” and (3) through an SEM tool. See Google Colorado SMF ¶ 243. Native advertising tools allow advertisers to place ads directly on a single general search engine or platform. Colorado SMF ¶ 75. For example, an advertiser could use Google’s native tool—Google Ads—to place an ad on Google, and Microsoft’s native tool—Microsoft Ads—to place an ad on Bing. *Id.* Alternatively, advertisers can use SEM tools, which “allow advertisers to plan and manage search advertising campaigns across multiple” general search engines. *Id.* ¶ 76.

“SEM tools are popular because they save advertisers time and effort by allowing them to use a single product to manage and compare ad campaigns across multiple native tools, evaluate the relative performance of ad campaigns across multiple platforms, and use powerful tools to assist with ad placement and bidding strategies.” *Id.* ¶ 81. Google’s SEM tool—SA360—is the most used SEM tool, accounting for [ ] of general search ad revenue among ads placed through SEM tools. *Id.* ¶ 80. Rival SEM tools include Skai, Marin, and Adobe. Google Colorado SMF ¶ 253.11 “When an advertiser places ads through an SEM tool, including SA360, the tool earns a commission on the dollar it manages.” Colorado SMF ¶ 78.

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11 SA360 allows advertisers to place ads across multiple search engines, including Google, Bing, Yahoo! Japan, and Baidu. Google Colorado SMF ¶ 252. Some SEM tools like Skai, Marin, and Adobe “allow advertisers to buy ads on search engines, social media, and other sites, and, unlike SA360, integrate not just with search engines like Google and Bing, but also with sites like Amazon, Facebook, Twitter, and Pinterest.” Google Colorado Mot. at 13; Google Colorado SMF ¶ 254.
**Feature Parity.** SEM tools offer various features that make ad buying campaigns more efficient, such as “language targeting” and “location search specific targeting.” Google 436 Exs., ECF No. 436, Ex. 87, ECF No. 436-7 at 5 [hereinafter Google Ex. 87]. Historically, SA360 has supported more features on Google Ads than Microsoft Ads, meaning users of SA360 could buy ads more efficiently on Google Ads than Microsoft Ads. Colorado SMF ¶¶ 117, 125. The absence of “feature parity”—which “refers to parity between Google Ads features and Microsoft Ads features offered by SA360,” Google Colorado SMF ¶ 268—is not unique amongst SEM tools. “SA360, Marin, Skai, and Adobe offer differing levels of support for Microsoft Ads and other ad platforms.” *Id.* ¶ 250.

In November 2019, Plaintiffs’ Complaint identifies five SA360 features that “Google either delayed support for, or failed to support: auction-time bidding, call extensions, dynamic search ads, responsive search ads, and local inventory ads.” Google Colorado SMF ¶ 272; *see also* Colorado Compl. ¶¶ 152, 160.

A new version of SA360 launched in February 2022, less than two years after Plaintiffs filed the instant complaint. Google Colorado SMF ¶ 291. The new version supported four of the five features for Microsoft Ads that Plaintiffs had identified as lacking: “call extensions, dynamic
search ads, responsive search ads, and local inventory ads.” *Id.* Google began working on developing the fifth feature—auction-time bidding—in early 2021, and it “is currently in the testing phase.” Google Colorado SMF ¶ 308–09; Hr’g Tr., ECF No. 580, at 180:15–181:18 (counsel for the Colorado Plaintiffs conceding that “it is undisputed that Google is going to install the very auction time bidding that [Plaintiffs] have complained” of).

IV. LEGAL STANDARD

A. Summary Judgment

Summary judgment is appropriate if “there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” FED. R. CIV. P. 56. A material fact is one that is capable of affecting the outcome of the litigation, and a genuine dispute exists when “a reasonable jury could return a verdict for the nonmoving party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). The party seeking summary judgment must demonstrate the absence of a genuine issue of material fact. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). When determining whether a genuine issue of material fact exists, the trier of fact must view all facts, and reasonable inferences drawn therefrom, in the light most favorable to the nonmoving party. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587–88 (1986).

B. Monopolization: *Microsoft* Burden-Shifting Framework

Section 2 of the Sherman Act makes it unlawful for a person to “monopolize, or attempt to monopolize, or combine or conspire with any other person or persons[] to monopolize any part of the trade or commerce among the several States.” 15 U.S.C. § 2. The offense of monopolization has two elements: (1) “the possession of monopoly power in the relevant market” and (2) “the willful acquisition or maintenance of that power” through “exclusionary conduct ‘as distinguished from growth or development as a consequence of a superior product, business acumen, or historic
accident.’” United States v. Microsoft Corp., 253 F.3d 34, 50, 58 (D.C. Cir. 2001) (per curiam) (internal quotation marks omitted) (quoting United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966)). For purposes of summary judgment, Google does not contest element one—monopoly power in the relevant markets. Hr’g Tr. at 6:11–12. The sole issue for the court to resolve is whether Google has maintained monopoly power in the relevant markets through “exclusionary conduct” as opposed to procompetitive means. Microsoft, 253 F.3d at 58.

The D.C. Circuit in Microsoft established a burden-shifting framework for determining “[w]hether any particular act of a monopolist is exclusionary, rather than merely a form of vigorous competition.” Id. First, the plaintiff bears the burden of establishing a prima facie case that the monopolist’s conduct has an “anticompetitive effect.” Id. at 58–59. “That is, [the alleged conduct] must harm the competitive process and thereby harm consumers. In contrast, harm to one or more competitors will not suffice.” Id. at 58; id. at 59 (stating that the plaintiff “must demonstrate that the monopolist’s conduct harmed competition, not just a competitor”).

Second, “if a plaintiff successfully establishes a prima facie case under § 2 by demonstrating anticompetitive effect, then the monopolist may proffer a ‘procompetitive justification’ for its conduct.” Id. Conduct is procompetitive if it “is indeed a form of competition on the merits because it involves, for example, greater efficiency or enhanced consumer appeal.” Id. If the defendant offers a procompetitive justification, the burden shifts back to the plaintiff to rebut it. Id.

Finally, “if the monopolist’s procompetitive justification stands unrebutted, then the plaintiff must demonstrate that the anticompetitive harm of the conduct outweighs the procompetitive benefit.” Id. In carrying out this balancing, which resembles a “rule of reason” analysis, courts must focus “upon the effect of [the] conduct, not upon the intent behind it.” Id.
Evidence of intent is relevant only insofar as it bears on the “likely effect of the monopolist’s conduct.” *Id.*

Google’s motion for summary judgment targets the first step of the burden-shifting framework. Hr’g Tr. at 13:6–12. In other words, it has not asked the court to evaluate the procompetitive justification for its alleged conduct nor rule that any procompetitive benefit outweighs the anticompetitive harm. Its argument is simply that “plaintiffs have not made out their prima facie case.” *Id.*

Though the *Microsoft* burden-shifting framework would seem straightforward, the parties disagree on precisely how to apply it. They contest two points: (1) the constituent elements of the *prima facie* case, and (2) whether the challenged conduct should be considered in the aggregate or independently. The court addresses each in turn.

1. Prima Facie Case

The parties disagree about what the *prima facie* case entails. Google contends that establishing a *prima facie* case is a “two-step process.” *Id.* at 14:19–25. First, Plaintiffs must show that the conduct is by nature anticompetitive, as opposed to conduct that is “competition on the merits.” *Id.* Second, Plaintiffs must proffer evidence of substantial anticompetitive effects in the relevant market. *Id.* Plaintiffs disagree with Google’s bifurcation of the *prima facie* burden. *Id.* at 50:3–51:5. In their view, establishing a *prima facie* case is a one-step inquiry that considers only whether the conduct at issue has an anticompetitive effect in the relevant market. *Id.*

Despite their apparent differences, there is not much daylight between the parties on what the *prima facie* showing requires. All parties agree that there are categories of conduct that generally do not harm competition. *Id.* at 51:1–22 (DOJ counsel agreeing that “[t]here are certain things that generally don’t harm competition” like “cutting your price or improving your product,”
and “[s]ome conduct is generally not problematic”); Def.’s Mem. of P. & A in Supp. of Def.’s Mot., ECF No. 427 [hereinafter Google Colorado Mot.], at 20 (“[I]f a product design change improves a product, the conduct reflects ‘competition on the merits,’ and cannot [standing alone] form the basis for an antitrust violation.”). Where they part ways is that Plaintiffs contend that even conduct that is typically thought of as competition on the merits still could be anticompetitive depending on the circumstances. See Hr’g Tr. at 51:15–22. For example, price cutting, though ordinarily procompetitive, can be anticompetitive if done for a predatory purpose. So, Plaintiffs say, the court must determine whether there are anticompetitive effects regardless of the “nature” of the conduct.

Whether conceived as a one-step or two-step inquiry, the prima facie case boils down to one fundamental question: Has the plaintiff shown that the monopolist’s conduct harmed competition? Plaintiffs are not required to make a further showing that the challenged conduct by its nature is anticompetitive.

2. Individual v. Aggregation of Harm

The parties’ more significant disagreement is over how the court should go about determining whether Google’s “conduct indeed has the requisite anticompetitive effect.” Microsoft, 253 F.3d at 58–59. Google maintains that the court should not “consider[] the challenged conduct in the aggregate without first considering whether each category of conduct is exclusionary and in fact has some anticompetitive effect on its own.” Reply in Supp. of Def.’s Mot., ECF No. 523 [hereinafter Google Colorado Reply], at 6.

Plaintiffs take a different view. They insist that “anticompetitive effects are analyzed contextually, not through the formalistic granularity proposed by Google.” DOJ Opp’n at 17. Plaintiffs ask the court to instead aggregate the anticompetitive effects of Google’s conduct—
including conduct that is not anticompetitive on its own—when determining whether the conduct has an overall anticompetitive effect. See id. at 20 n.10 (“Google’s agreements are anticompetitive when the effects of each type of agreement are viewed in light of each other and cumulatively. They are mutually reinforcing, not discrete acts that should be ‘isolatedly viewed.’”) (internal citations omitted); Colorado Opp’n at 24 (“Google wants to rewrite the States’ Complaint to assert three independent claims, thus sidestepping and leaving unchallenged the States’ assertion that the totality of conduct harms competition.”); Hr’g Tr. at 52:18–53:25 (DOJ Plaintiffs’ counsel asserting in response to a hypothetical that the court would be required to consider the Apple Browser Agreement in assessing anticompetitive effect, even if the court were to conclude that the agreement on its own is not anticompetitive).

The Colorado Plaintiffs, in particular, insist that their SA360 and SVP allegations cannot be viewed independently of each other or the exclusive distribution agreements. “[T]aken together,” they assert, “Google’s SA360 and SVP tactics weaken its rivals, amplifying Google’s ability to secure distribution agreements, and creating [a] monopoly feedback loop.” Colorado Opp’n at 27.

Not surprisingly then, the parties offer different interpretations of how the D.C. Circuit measured anticompetitive harm in Microsoft. Plaintiffs contend that “the Microsoft Court illustrated in its careful review of the multiple forms of conduct” that trial courts must conduct “a fact-intensive inquiry that considers whether ‘the monopolist’s conduct on balance harms competition.’” Id. at 22 (quoting Microsoft, 253 F.3d at 59). Microsoft “analyzed five forms of conduct that together constituted the offense of monopoly maintenance under Section 2 of the Sherman Act,” and “[i]n assessing liability, the Court examined the interaction among different contracts and categories of conduct.” Id. at 21–22. In Plaintiffs’ view, “the D.C. Circuit did not
analyze each of Microsoft’s acts in isolation; instead, it examined them in light of each other” and “in light of market realities, including the role that scale played in reinforcing [Microsoft’s] operating systems monopoly.” DOJ Opp’n at 17–18. As an example, Plaintiffs point to the court’s analysis of Microsoft’s agreements with independent software vendors (ISVs). Id. at 17. ISVs represented “a relatively small channel for browser distribution” but Microsoft’s agreements with ISVs were nevertheless found anticompetitive because “Microsoft had largely foreclosed the two primary channels [for browser distribution] to its rivals,” Microsoft, 253 F.3d at 72, and thus “the anticompetitive effect of the ISV agreements took on ‘greater significance’” and “amplified the effect that Microsoft’s conduct had on distorting the competitive process,” DOJ Opp’n at 17–18 (quoting Microsoft, 253 F.3d at 72).12

Google responds that “the Microsoft court did not, as Plaintiffs do here, lump together both exclusionary and non-exclusionary conduct in assessing whether there was an anticompetitive effect,” and “expressly rejected the approach Plaintiffs urge here.” Google Colorado Reply at 6–7. When “assessing whether the [Microsoft] plaintiffs had met their prima facie burden of showing harm to competition,” Google argues, “[t]he court considered only” the particular exclusionary conduct. Id. at 7. Google points to the “range of challenged conduct in the [Internet Access Provider (IAP)] distribution channel” and argues that the D.C. Circuit “analyzed the conduct separately to determine whether it was competitive or exclusionary, and effects from competitive acts were thereafter excluded from the analysis.” Id. at 7.

12 In Microsoft, the trial court had found that Microsoft, through various anticompetitive means, had maintained its monopoly in personal computer operating systems (Windows) by suppressing competition with Netscape’s Navigator web browser. See 253 F.3d at 50. Among other things, Microsoft sought to block distribution channels for Navigator through various agreements. The most cost-effective of those were exclusive agreements with OEMs to install Microsoft’s Internet Explorer as the default web browser. Id. at 60. The second prominent agreement involved bundling its browser with internet access software distributed by Internet Access Providers, like America Online. See id. at 67–68. These two exclusionary arrangements “largely foreclosed the two primary channels [of distribution] to its rivals.” Id. at 72. The third, and smallest, of the distribution channels was through ISVs. Id. It is in this context that the court held the exclusive arrangements with ISVs “amplified” Microsoft’s monopoly power. Id.
The court agrees with Google that, under *Microsoft*, courts must evaluate whether each type of alleged exclusionary practice has the requisite anticompetitive effect. In other words, when determining whether plaintiffs have met their *prima facie* burden, courts can only aggregate conduct that is itself deemed anticompetitive (even if only minimally so). This approach is best illustrated, as Google notes, by the D.C. Circuit’s evaluation of IAP distribution channels in *Microsoft*. The district court had “condemned as exclusionary Microsoft’s agreements with various IAPs,” and had determined that five challenged “actions” were anticompetitive. *Microsoft*, 253 F.3d at 67–68. On appeal, the Circuit analyzed each of the five actions separately and held that only one—an exclusive dealing arrangement—was anticompetitive. *Id.* at 67–71. And, only as to that conduct did the burden shift to Microsoft “to defend its exclusive dealing contracts with IAPs by providing a procompetitive justification for them.” *Id.* at 71. Notably, the Circuit did not evaluate whether the practices deemed separately not to violate Section 2 were in fact anticompetitive when viewed alongside the exclusive dealing arrangement. The other four allegations—which the Circuit found did not harm competition—were not considered further.13

Plaintiffs’ reliance on the D.C. Circuit’s analysis of Microsoft’s agreements with ISVs is misplaced. DOJ Opp’n at 17–18. In those agreements, Microsoft “promised to give preferential support” to ISVs that agreed to, among other things, “use Internet Explorer as the default browsing software.” *Microsoft*, 253 F.3d at 71. The D.C. Circuit found that these were “exclusive deals,” and when determining “what share of the market for browser distribution the exclusive deals with the ISVs foreclose[d],” the Circuit reasoned that “[a]lthough the ISVs are a relatively small channel

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13 The D.C. Circuit’s analysis of “course of conduct” liability is also instructive. *Microsoft*, 253 F.3d at 78. Under this theory, a plaintiff must “point to any series of acts, each of which *harms competition only slightly* but the cumulative effect of which is significant enough to form an independent basis for liability.” *Id.* (emphasis added). Thus, even “course of conduct” liability must be premised on forms of conduct that are, at least, “slightly” anticompetitive. *Id.* *Microsoft* did not suggest that conduct deemed procompetitive could be included in that calculus. The court notes that the Colorado Plaintiffs have eschewed a course-of-conduct theory. See Colorado Opp’n at 25 n.9 (“So, there is no need to consider a separate ‘course of conduct.’”).
for browser distribution, they take on greater significance because, as discussed above, Microsoft had largely foreclosed the two primary channels to its rivals.” Id. at 72. In other words, the court held that, although the ISV market foreclosure on its own was not significant, the exclusive arrangements with the ISVs were anticompetitive when aggregated with the foreclosure occurring through the two main channels of browser distribution.

Microsoft’s aggregation of harm—which aggregates foreclosure in the exclusive dealing context—is different than what Plaintiffs, most notably the Colorado Plaintiffs, have asked the court to do here. They argue that three different types of monopolistic conduct—exclusive distribution agreements, denied or delayed functionality of SA360, and the suppression and exploitation of SVPs—must effectively be viewed as one in order to evaluate harm in the relevant markets. Colorado Opp’n at 25–28. But that is not the approach the Microsoft court took, and it is contrary to how other appeals courts generally have proceeded. See, e.g., Covad Commc’ns Co. v. Bell Atl. Corp., 398 F.3d 666, 672 (D.C. Cir. 2005) (evaluating separately “five types of conduct” alleged to have violated the Sherman Act); In re EpiPen (Epinephrine Injection, USP) Mktg., Sales Pracs. & Antitrust Litig., 44 F.4th 959, 982 (10th Cir. 2022) (When “[r]eal-world monopolists . . . engage in allegedly exclusionary conduct which does not fit within a single paradigm[,] . . . the courts disaggregate the exclusionary conduct into its component parts before applying the relevant law.”); “For the sake of accuracy, precision, and analytical clarity, we must evaluate [the defendant’s] allegedly exclusionary conduct separately. Only then can we evaluate the evidence in totality to see if any synergistic effect saves [the plaintiff’s] case.”) (internal quotation marks omitted); Retractable Techs., v. Becton Dickinson & Co., 842 F.3d 883, 891 (5th Cir. 2016) (stating that a jury’s finding of anticompetitive conduct that rested on “three types of ‘deception’” “must be separately analyzed in light of settled principles of antitrust law”).
The Supreme Court’s decision in *Continental Ore*, on which the Colorado Plaintiffs rely, is inapposite. Colorado Opp’n at 24. In *Continental Ore*, six defendants were accused of “conspiring to restrain, by monopolizing, and by attempting and conspiring to monopolize, trade and commerce” in the vanadium industry. *Cont’l Ore Co. v. Union Carbide & Carbon Corp.*, 370 U.S. 690, 693 (1962). The court of appeals had “examined seriatim” the conduct of various defendants and “ruled separately upon [each defendant’s] alleged damage to Continental.” *Id.* at 698. The Supreme Court found this analysis “improper,” explaining—in language that the Colorado Plaintiffs highlight in their opposition—that “plaintiffs should be given the full benefit of their proof without tightly compartmentalizing the various factual components and wiping the slate clean after scrutiny of each.” *Continental Ore*, 370 U.S. at 699; see Colorado Opp’n at 24.

But the Colorado Plaintiffs fail to cite both what precedes that quotation—“In cases such as this”—and what follows it—“The character and effect of a conspiracy are not to be judged by dismembering it and viewing its separate parts, but only by looking at it as a whole.” *Continental Ore*, 370 U.S. at 699 (cleaned up). The full context thus shows that the Court’s statement concerned proof of antitrust conspiracy, not, as here, an alleged monopolist’s “unilateral conduct.” *Eaton Ergonomics, Inc. v. Rsch. In Motion Corp.*, 826 F. Supp. 2d 705, 710 (S.D.N.Y. 2011); see also *Intergraph Corp. v. Intel Corp.*, 195 F.3d 1346, 1366–67 (Fed. Cir. 1999) (“*Continental Ore* did not hold . . . that the degrees of support for each legal theory should be added up. Each legal theory must be examined for its sufficiency and applicability, on the entirety of the relevant facts.”) (citing *City of Groton v. Conn. Light & Power Co.*, 662 F.2d 921, 929 (2d Cir. 1981) (“Even though many of the issues the municipalities raise are interrelated and interdependent, however, we must, like the municipalities’ briefs, analyze the various issues individually.”)).
The other out-of-circuit cases cited by the Colorado Plaintiffs (*Conwood*, *Actavis*, and *LePage’s*) do not instruct otherwise. Colorado Opp’n at 24–25. In *Conwood Company v. United States Tobacco Company*, the Sixth Circuit determined that the defendant “began a systematic effort to exclude competition” and “sought to achieve its goals of excluding competition and competitors’ products by numerous avenues.” 290 F.3d 768, 783 (6th Cir. 2002). The court evaluated the various kinds of anticompetitive conduct and, in so doing, cited to an earlier Sixth Circuit decision, *Byars v. Bluff City News Co.*, 609 F.2d 843 (6th Cir. 1979). See *Conwood*, 290 F.3d at 784. In *Byars*, the Sixth Circuit observed that, “[i]n a § 2 case, only a thorough analysis of each fact situation will reveal whether the monopolist’s conduct is unreasonably anti-competitive and thus unlawful.” *Byars*, 609 F.2d at 860.

In *New York v. Actavis*, the Second Circuit affirmed that “when a monopolist combines product withdrawal with some other conduct, the overall effect of which is to coerce consumers rather than persuade them on the merits, and to impede competition, its actions are anticompetitive under the Sherman Act.” *N.Y. ex rel. Schneiderman v. Actavis PLC*, 787 F.3d 638, 654 (2d Cir. 2015) (internal citations omitted). There, the defendant company had introduced a new product and withdrawn the old one relatively close in time. *Id.* While acknowledging that “neither product withdrawal nor product improvement alone is anticompetitive,” the Second Circuit reasoned that the combination of the two created a singular “hard switch” that resulted in anticompetitive effects in the relevant market. *Id.* at 653–54.

And in *LePage’s v. 3M*, while the Third Circuit did state that “[t]he relevant inquiry is the anticompetitive effect of 3M’s exclusionary practices considered together,” it did so only after separately finding that 3M’s bundled rebates and exclusive dealing practices were themselves anticompetitive. 324 F.3d 141, 157, 159, 162 (3d Cir. 2003).
None of these cases support the proposition that the court must combine the anticompetitive effects across different types of monopolistic behavior, when deciding whether any particular type of conduct has anticompetitive effects. Rather, the court must “disaggregate the exclusionary conduct into its component parts before applying the relevant law.” *EpiPen*, 44 F.4th at 982.

V. DISCUSSION

A. Joint Claims: Browser Agreements & Android Agreements

Having established the proper framework, the court first addresses Plaintiffs’ allegations concerning Google’s Browser Agreements and Android Agreements. Recall, Plaintiffs claim that both agreements are exclusive contracts that foreclose a substantial part of the relevant markets. DOJ Opp’n at 18–19. Google concedes that the Android RSAs are exclusive but contests the exclusive nature of the Browser Agreements and the Android MADAs. Google DOJ Mot. at 26, 39. Additionally, the parties disagree on how to measure “substantial foreclosure” and the extent of foreclosure. Google Reply in Supp. of Google Mot., ECF No. 522, at 22–25. The court first addresses whether the Browser Agreements and MADAs are exclusive or *de facto* exclusive agreements, and then turns to the proper measure of substantial foreclosure.

1. Exclusive Dealing

“An exclusive dealing arrangement is an agreement in which a buyer agrees to purchase certain goods or services only from a particular seller for a certain period of time.” *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 270 (3d Cir. 2012). “Despite some initial confusion, today exclusive dealing contracts are not disfavored by the antitrust laws.” *E. Food Servs., Inc. v. Pontifical Cath. Univ. Servs. Ass’n*, 357 F.3d 1, 8 (1st Cir. 2004). In many circumstances, exclusive dealing contracts are understood to “pose no competitive threat at all.” *Id.; see also Microsoft*, 253 F.3d at 70 (“[I]mposing upon a firm with market power the risk of an antitrust suit
every time it enters into [an exclusive dealing] contract, no matter how small the effect, would create an unacceptable and unjustified burden upon any such firm.”). Such contracts, however, “are of special concern when imposed by a monopolist.” ZF Meritor, 696 F.3d at 271; Microsoft, 253 F.3d at 70 (acknowledging that a lower foreclosure rate may give rise to a Section 2 violation by a monopolist). The primary worry is that the monopolist might use such agreements “to strengthen its position, which may ultimately harm competition.” ZF Meritor, 696 F.3d at 270.

“The legality of [an exclusive] arrangement ultimately depends on whether the agreement foreclosed a substantial share of the relevant market such that competition was harmed.” Id. at 283 (citing Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320, 326–28 (1961). “The share of the market foreclosed is important because, for the contract to have an adverse effect upon competition, ‘the opportunities for other traders to enter into or remain in that market must be significantly limited.’” Microsoft, 253 F.3d at 69 (quoting Tampa Elec., 365 U.S. at 328). The D.C. Circuit has not conclusively determined what constitutes substantial foreclosure under § 2 of the Sherman Act, but in Microsoft said that “a monopolist’s use of exclusive contracts, in certain circumstances, may give rise to a § 2 violation even though the contracts foreclose less than the roughly 40% or 50% share usually required in order to establish a § 1 violation.” Id. at 70. Plaintiff’s “must both define the relevant market and prove the degree of foreclosure.” Id. at 69.

a. **Browser Agreements**

Google’s Browser Agreements require the developers to set Google as the default search engine on their web browsers but allow end users to change the default. See e.g., Apple Agreement at 4. Still, Plaintiffs contend the agreements constitute exclusive dealing because they make Google “the *de facto* exclusive general search engine.” DOJ Am. Compl. ¶ 119. Plaintiffs’ argument centers on the “stickiness” of the default position—they argue that “[b]eing the default
search engine on a preinstalled and prominently placed app is by far the most efficient and effective way for a general search engine to reach users.” DOJ Opp’n at 8. “Even where search users might want to switch defaults, the effort and knowledge required to make that change biases them towards sticking with the default option,” and “[d]efaults are particularly powerful on mobile devices.” Id. at 9.

Google responds that their “agreements with browser developers such as Apple and Mozilla are not ‘exclusive’ or ‘de facto exclusive’ under any established meaning of those concepts” for two reasons: (1) the agreements “have never prevented [Apple, Mozilla, and other browser developers] from promoting rival search engines to consumers in the same browsers,” and (2) web browser developers “have decided to design their browsers with a single search engine set as the default upon first use” and Google simply “supplied a superior product in response to a customer’s product design demands.” Google DOJ Mot. at 26–27. Alternatively, even if the Browser Agreements were exclusive, Google argues that they “are the product of customer-driven ‘competition on the merits,’ which antitrust law protects rather than condemns,” and therefore could not result in any anticompetitive effect. Id. at 27.

Exclusivity. The court first addresses Google’s argument that the Browser Agreements are not de facto exclusive because the agreements do not restrict web browser developers from promoting rival search engines. Google asserts that, “[g]enerally speaking, ‘[e]xclusive dealing involves an agreement between a vendor and a buyer that prevents the buyer from purchasing a given good from any other vendor.’” Google DOJ Mot. at 28 (quoting Allied Orthopedic Appliances Inc. v. Tyco Health Care Grp. LP, 592 F.3d 991, 996 (9th Cir. 2010)). Plaintiffs’ claims regarding the Browser Agreements “fail at the threshold,” Google maintains, “because the contracts indisputably do not prevent Apple, Mozilla, or other browser developers from integrating
and promoting any other search engine, or users from otherwise accessing search rivals via these browsers.” *Id.* In Google’s view, “agreements ‘are not exclusive dealing arrangements, de facto or actual, unless they prevent the buyer from purchasing a given good from any other vendor.’” *Id.* (quoting FTC v. Qualcomm Inc., 969 F.3d 974, 1004 (9th Cir. 2020)). “Apple and Mozilla not only are permitted to promote other search engines under the terms of their agreements with Google, but actually do promote rival search engines in Safari and Firefox in exchange for revenue-share payments from those rivals.” *Id.* at 28–29. Furthermore, they “have no obligation to ensure that any particular volume of search traffic flows to Google, and the revenue share percentage that Google pays does not vary based on the number or percentage of queries submitted to Google instead of rival search engines.” *Id.* at 30.

Plaintiffs respond that “an agreement need not close off all channels of distribution to be considered exclusive.” DOJ Opp’n at 45. In Plaintiffs’ view, the Browser Agreement with Apple is “exclusive because it requires Apple to make Google the preset default search engine on the only preinstalled search access point on its devices—the address bar in Safari—*Id.* at 44. Google’s Browser Agreements with browser developers Mozilla, Opera, and UCWeb—“which require [them] to make Google the preset default search engine [on their browsers] and cover nearly all search access points on nearly all versions of third-party browsers in the United States”—are also de facto exclusive for the same reason. *Id.* at 47. At a minimum, Plaintiffs contend, “Google’s argument that its distribution agreements are not exclusive...raises factual disputes about whether these agreements are actually or de facto exclusive.” *Id.* at 44.
The court finds that there is a genuine dispute of material fact as to whether Google’s Browser Agreements are, at least, *de facto* exclusive. Google is, of course, correct that its Browser Agreements do not prevent users from switching the default search engine, and do not prohibit browser developers from promoting and entering into revenue-share agreements with other search engines. In fact, developers have entered into such agreements. *See* Google DOJ SMF ¶ 64. But that is not dispositive. “Antitrust analysis must always be attuned to the particular structure and circumstances of the industry at issue.” *Verizon Commc’ns Inc. v. L. Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398, 411 (2004). And “[l]egal presumptions that rest on formalistic distinctions rather than actual market realities are generally disfavored in antitrust law.” *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 466–67 (1992).

The Browser Agreements do lock in Google as the default search engine for years at a time. In the case of Apple products, that means Google is a purchaser’s out-of-the-box search engine. That is arguably a form of exclusivity—rivals are prevented from occupying default position in the browser’s integrated search bar at the time of purchase. *Cf. Microsoft*, 253 F.3d at 68 (finding that Microsoft’s arrangement with AOL that required AOL not to “promote any non-Microsoft browser, nor provide software using any non-Microsoft browser except at the customer’s request” qualified as an exclusive contract) (emphasis added);¹⁴ *ZF Meritor*, 696 F.3d at 283 (“[W]e decline to adopt [the defendant’s] view that a requirements contract covering less than 100% of the buyer’s needs can *never* be an unlawful exclusive dealing arrangement.”).

Critically, the competitive effects of holding default status, when combined with Google’s scale advantage, is a hotly disputed issue in this case. Even Google’s own positions reflect that

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¹⁴ The court acknowledges that there are differences between the Browser Agreements and Microsoft’s agreement with AOL. The Browser Agreements do not, for example, foreclose the browser developers from entering into promotional arrangements with other search engines. *See e.g.*, Google DOJ SMF ¶ 61. In fact, they permit it. *Id.* ¶ 64 However, the legal significance of that factual distinction is a matter left to resolve after a trial.
dispute. Compare Redacted Reply in Supp. of Google’s Mot., ECF No. 560, Google’s Resp. to DOJ CSMF, ECF No. 560-1 [hereinafter Google DOJ CSMF], ¶ 445 (Google denying that “[b]eing the preset default search engine for a search access point on a preinstalled and prominently placed app is the most efficient and effective way for a search engine to reach users.”), with id. ¶ 454 (Google agreeing that “search defaults can increase search volume for the default search provider.”). It is best to await a trial to determine whether, as a matter of actual market reality, Google’s position as the default search engine across multiple browsers is a form of exclusionary conduct.

Google’s second argument against exclusivity fares no better. The fact that the single-preset default search “is a consequence of Apple, Mozilla, and other companies having chosen to design their browsers with a single search engine set as the default upon first use,” Google DOJ Mot. at 32, does not change the fact that Google has exclusive rights to the default across multiple web browsers. A purchaser of an Apple device is not, for example, given the out-of-the-box option to select a default search engine. Google occupies that space by agreement. Again, the competitive market effects of holding the default is a disputed issue. Accordingly, the court finds that Google has not shown as a matter of law that the Browser Agreements are not exclusive contracts.

Competition for the Contract. In the alternative, Google says that, even if the Browser Agreements are exclusive or de facto exclusive, they are lawful because they are “merely a form of vigorous competition” that the antitrust laws encourage rather than condemn.” Id. at 38 (quoting Microsoft, 253 F.3d at 58). Google contends that it “has prevailed in the ongoing competition to be the default search engine in most third-party browsers in the U.S. since the mid-2000s because companies such as Mozilla and Apple have repeatedly determined it is the best option for creating a compelling search experience for their customers.” Id. at 36. Rival search engines “can and do
compete with Google to be the default search engine in Safari, Firefox, and other third-party browsers,” and “[w]hen Google wins this competition, it has done so on the merits as established and judged by its customers, not through anticompetitive or exclusionary conduct.” *Id.* at 35. Google cites the example of Mozilla, which in 2014 switched to Yahoo! as the default search engine for Firefox, only to return to Google soon after. *Id.* at 37. “Any ‘concern’ that may potentially arise under other circumstances involving allegations of ‘exclusive dealing’ is wholly absent here,” Google argues, “as there is no evidence of coercive conduct, and Google has won based on considerations of quality and price.” *Id.* at 38.

Plaintiffs respond that “[t]he existence of multiple bidders does not transform an anticompetitive agreement into a permissible one.” DOJ Opp’n at 27. Under Google’s approach, Plaintiffs warn that “a monopolist could enter into any contract—no matter its effects on competition—so long as one rival existed and made some feeble attempt to secure the business, or the buyer had another option,” and would be insulated from any “Section 2 challenge[] to [an] exclusionary agreement[] until the dominant firm had managed to wipe out all vestiges of present or future competition.” *Id.* at 27–28. “What matters here is whether the terms of Google’s contracts harm competition, not whether Google beat out a rival in imposing those terms,” and “competitors are at a distinct disadvantage relative to a monopolist in the bidding process, which means that a monopolist’s offer will often be the winning bid.” *Id.* at 28. Finally, Plaintiffs contend that “Google fails to cite a single case supporting the proposition that a showing of ‘competition for the contract’ is sufficient to warrant summary judgment against a claim that the contract is exclusionary.” *Id.*

The court thinks that Google’s “competition for the contract” defense cannot be resolved on summary judgment at the *prima facie* stage and is better left for the procompetitive prong of
the *Microsoft* analysis. *See Microsoft*, 253 F.3d at 59 (describing a procompetitive justification as “a nonpretextual claim that [the monopolist’s] conduct is indeed a form of competition on the merits because it involves, for example, . . . *enhanced consumer appeal*”) (emphasis added).

*Microsoft* is instructive here. The D.C. Circuit encountered three types of agreements that were either explicitly exclusive or “exclusive as a practical matter”—Microsoft’s deals with ISVs (independent software vendors), IAPs (internet access providers), and Apple. *Id.* at 71, 76. For each exclusive agreement, at the *prima facie* stage, the Circuit simply determined whether the exclusive agreement foreclosed a substantial share of the market. *Id.* at 71–74. If it did, the court looked to Microsoft to provide a procompetitive justification. *Id.* For instance, when it analyzed the exclusive agreements between Microsoft and ISVs, the D.C. Circuit held that the plaintiff had met its *prima facie* burden because “Microsoft’s exclusive deals with the ISVs had a substantial effect in further foreclosing rival browsers from the market” and “in preserving Microsoft’s monopoly.” *Id.* at 72. Similarly, the Circuit held that Microsoft’s exclusive contract with Apple “ha[d] a substantial effect upon the distribution of rival browsers,” and because it “serve[d] to protect Microsoft’s monopoly, its deal with Apple must be regarded as anticompetitive.” *Id.* at 73–74. The analysis was the same for IAPs. *Id.* at 71.

At no point did the D.C. Circuit, at the *prima facie* stage, consider whether the exclusive agreements were the result of a lawful “competition for the contract” or something akin to that. *Id.* at 71–74. Only after satisfying itself that these agreements were anticompetitive did the court turn to asking whether there was a procompetitive justification for the exclusive arrangements. *See id.* at 71 (IAPs), 72 (ISVs), 74 (Apple). Because Microsoft had offered none, the agreements were deemed exclusionary and therefore violated Section 2. *Id.* Here, Google will have the
opportunity to proffer a procompetitive justification and show that the Browser Agreements resulted from “competition for the contract”—it will just have to wait until trial.

The out-of-circuit cases Google cites (Menasha, Balaklaw, Race Tires, and EpiPen) do not entitle it to judgment as a matter of law at this stage. Google DOJ Mot. at 35–38. Google quotes Menasha to argue that “competition for the contract” is “a vital form of rivalry . . . which the antitrust laws encourage rather than suppress.” Id. at 35 (quoting Menasha Corp. v. News Am. Mktg. In-Store, Inc., 354 F.3d 661, 663 (7th Cir. 2004)). Menasha, however, merely confirms that exclusive agreements are not per se anticompetitive. Menasha, 354 F.3d at 663 (“In the district court Menasha argued that these contractual devices, which it deems exclusionary, are unlawful per se. That argument has been abandoned on appeal—sensibly so, as competition for the contract is a vital form of rivalry, and often the most powerful one, which the antitrust laws encourage rather than suppress.”). In Balaklaw—a Section 1 case—the Second Circuit did state that exclusive agreements “may actually encourage, rather than discourage, competition,” but clarified that “[t]his is not to say that under proper pleading and proof exclusive-dealing contracts could not still be scrutinized under the antitrust laws.” Balaklaw v. Lovell, 14 F.3d 793, 799–800 (2d Cir. 1994). And in Race Tires, the Third Circuit observed that “[i]t is well established that competition among businesses to serve as an exclusive supplier should actually be encouraged,” but emphasized that “such exclusive agreements are not exempt from antitrust scrutiny.” Race Tires Am., Inc. v. Hoosier Racing Tire Corp., 614 F.3d 57, 76, 83 (3d Cir. 2010).

Google also cites to EpiPen to argue that customer-instigated exclusive dealing eases “any anticompetitive concern arising from a monopolist’s use of exclusive dealing contracts,” and that “rival search engines need only ‘offer a better product or a better deal to reverse’” Google’s default status in Safari, Firefox, and other third-party browsers. Google DOJ Mot. at 38 (quoting EpiPen,
While *EpiPen* does state that customer-instigated exclusivity “*sometimes* eases any anticompetitive concern arising from a monopolist’s use of exclusive dealing contracts,” it caveated that observation: “This does not mean that exclusive dealing arrangements instigated by the monopolist cannot be procompetitive or that exclusive dealing arrangements instigated by the customer cannot be anticompetitive.” *EpiPen*, 44 F.4th at 995 n.14 (emphasis added). Ultimately, the Tenth Circuit made clear that to “analyze the legality of exclusive dealing contracts, we apply the rule of reason,” and under that approach, courts must “conclude a fact-specific assessment of market power and market structure to assess the challenged restraint’s actual effect on competition.” *Id.* at 983–84 (citing *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2284 (2018)) (internal quotation marks omitted); *see also Menasha*, 354 F.3d at 663 (stating that even exclusive deals preferred by retailers and manufacturers must be subject to a rule-of-reason analysis). That is an inquiry better left for trial.

Accordingly, Google cannot prevail at this stage based on a “competition for the contract” theory. Importantly, the court is not taking the position that Google’s “competition for the contract” argument is irrelevant to the ultimate Section 2 question. Rather, as stated, the argument is better suited for the procompetitive prong of the *Microsoft* analysis.

Having determined that Plaintiffs have carried their burden of showing that the Browser Agreements are, at least, *de facto* exclusive contracts, they still must be subject to a market foreclosure analysis to determine whether they are anticompetitive. *See Microsoft*, 253 F.3d at 69 (“Following *Tampa Electric*, courts considering antitrust challenges to exclusive contracts have taken care to identify the share of the market foreclosed.”). The court addresses foreclosure in Section V.A.2.
b. **Android Agreements**

The court now considers the Android MADAs and whether they are exclusive dealing arrangements. Plaintiffs argue that Google’s Android Agreements—MADAs and RSAs—are exclusive because they work together as a “belt and suspenders” in order to “guarantee Google is the only preset default search engine on any Android preinstalled search access point.” DOJ Opp’n at 45. “[A]lmost all Android devices sold in the United States” are subject to a MADA, *id.* at 30, and Plaintiffs argue that “[m]arket realities require OEMS to sign MADAs” because, “[f]or an Android mobile device to be successful in the United States, it must have proprietary Google Software preinstalled,” like the Google Play Store, which is only available to MADA signatories. DOJ SGI at 132. MADAs require OEMs to preinstall the Google Search App and Chrome browser, and to place Google’s search widget on the device home screen, all of which default to Google Search. DOJ Opp’n at 32. The RSA then “ensures that all preinstalled search access points will have Google as the preset default and no rival search will be preinstalled.” *Id.* at 46. “When viewed collectively,” Plaintiffs say, “the MADAs and Android RSAs ensure all roads on Android lead to Google. That is exclusivity.” *Id.* at 47.

Google concedes that RSAs are exclusive but argues that MADAs are not because “MADA licensees can preinstall other browsers and search apps and set them as the default upon first use.” Google DOJ Mot. at 39. “Any purported ‘exclusivity’ arguably arises only if an OEM or wireless carrier choose to earn revenue from Google on its Android device by signing an RSA.” *Id.* And, like the Browser Agreements, nothing in the MADA or the RSA prevents the end user from downloading a rival’s search engine from the Google Play Store or changing the default search engine on the preinstalled Chrome browser. *Id.* at 40.
The court finds that although, by its terms, the MADA is not an exclusive contract, there is a dispute of fact as to whether market realities make it one. For instance, Google’s expert Dr. Kevin Murphy admits that OEMs “can’t sign an RSA unless [they have] also signed the MADA,” therefore “thinking about the advantages of the RSA would be relevant for deciding whether to sign a MADA.” DOJ 478 Exs., ECF No. 478, Ex. 87, ECF No. 478-22, at 220:19–22. Indeed, it would seem contrary to an OEM’s economic self-interest to sign a MADA but not an RSA. Further, Google admits that, “[i]n the past three years, no manufacturer has sold an Android phone into the United States, preinstalled with Google’s search widget and an additional search widget for a different search engine.” Google DOJ CSMF ¶ 591. So, even though the MADA permits an OEM to install a second search widget, OEMs have declined to do so. Google says that is by choice, but it may be that market realities are such that once Google occupies the default search widget, a rival cannot realistically hope to compete for another place on an Android device’s home screen. So, as with the Browser Agreement, the mere fact that the MADA does not prohibit an OEM from engaging with competitors does not mean the MADA is not an exclusive agreement.

2. Substantial Foreclosure

As discussed, the Sherman Act does not make it per se unlawful for a monopolist to secure an exclusive contract. Microsoft, 253 F.3d at 70. To determine whether such a deal is anticompetitive, courts must ask how much of the relevant market the agreement forecloses from competition. Id. at 69. In other words, courts must “identify the share of the market foreclosed.” Id. “[W]hat is ‘significant’ may vary depending upon the antitrust provision under which an exclusive deal is challenged.” Id. The Microsoft decision declined to adopt a rigid test of what degree of foreclosure is required for a successful Section 2 challenge but observed “that a monopolist’s use of exclusive contracts, in certain circumstances, may give rise to a § 2 violation
even though the contracts foreclose less than the roughly 40% or 50% share usually required in order to establish a § 1 violation.” *Id.* at 70. Plaintiffs have the burden of proving “a significant degree of foreclosure.” *Id.* at 69. The court therefore must inquire whether Plaintiffs here have met their burden, as part of their *prima facie* case, of showing that the Browser Agreements and Android Agreements have caused “a significant degree of foreclosure.” *Id.*

Plaintiffs contend that substantial foreclosure “is measured by looking at the percentage of the market that is ‘tied up’ by the exclusive-dealing contract, and thus by considering how much of the market is available to rival sellers.” DOJ Opp’n at 47 (quoting 7D-2 Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 768b4 n.39 (5th ed. 2022)). In other words, “the foreclosure created by exclusive contracts is equal to the percentage of the market those contracts cover.” *Id.* So, Plaintiffs ask the court to aggregate the foreclosure numbers resulting from the Browser Agreements and Android Agreements. Their expert’s analysis shows that the Browser Agreements and Android Agreements “cover almost 50% of all U.S. general search traffic . . . 45% of U.S. general search text ads, and 36% of U.S. search ads.” *Id.* at 47–48. “These coverage numbers—especially when viewed in light of the of searches controlled by the Google default on Chrome for Windows and Apple devices—easily qualify as ‘significant foreclosure’ under *Microsoft.*” *Id.* at 48 (internal citations omitted).15

Google’s foreclosure argument focuses only on the Android Agreements. *See* Google DOJ Mot. at 40–43; H’g Tr. at 39:8–18 (Google counsel clarifying that a foreclosure analysis was done

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15 Google rejects Plaintiffs’ attempt to include in the foreclosure analysis any Google searches made through Chrome on Windows and Apple devices, because the default browser on Windows devices is Edge and on Apple devices is Safari. H’g Tr. at 41 (“Our getting search[es] from Chrome on Windows should be counted in a foreclosure analysis? That’s crazy. Or Chrome on Apple devices. We’re not preloaded on Apple devices any more than Apple is not preloaded on Android devices.”). Plaintiffs seem to implicitly concede that the foreclosure analysis should not include searches through Chrome on Windows and Apple devices, *id.* at 56–60 (DOJ counsel stating that “generally speaking, doing what you want with your own products and making them better, that is not exclusionary conduct, and that’s certainly not being challenged here”), but argue that “it’s a market reality the Court needs to consider,” *id.* at 97.
with respect to the Apple Agreement but noting that it wasn’t “focused on” in the briefing). As to the Android Agreements, Google argues that the appropriate way to measure foreclosure is to identify “the impact of those agreements relative to a but-for world in which the alleged unlawful agreements do not exist.” Google DOJ Mot. at 41. Plaintiffs’ expert, Professor Whinston, “has offered no opinion about what a but-for world without Google’s Android MADA or RSA agreements would look like,” but he “has opined that if all Android OEMs and carriers were to choose to display a choice screen prompting their customers in the U.S. to select a default search engine from a list of options . . . Google would be selected more than 90% of the time.” Id. at 41–42. “The estimated ‘shift’ from Google to other search engines in this mandatory choice screen world would total approximately 1% of all search queries in the U.S.” Id. at 42. Google further argues that there is no evidence of substantial foreclosure even if a rival search engine were the “exclusive preinstalled default search engine on all search access points on Android devices in the U.S.” because even Plaintiffs’ expert estimated that, in that scenario, only “approximately 11.6% to 13.5% of total U.S. search queries may have shifted from Google to other general search engines.” Google DOJ SMF ¶ 251; Google 430 Exs., Ex. 40, ECF No. 430-15, ¶ 905 (opining that between 18.2% to 21.2% of U.S. mobile phone queries may shift in such scenario).

As the above summary of the parties’ positions shows, there is sufficient conflict about the extent of foreclosure—and, importantly, the proper way to measure it—to preclude a finding of summary judgment. Among the questions the court will have to consider at trial are: (1) what channels of distribution are included in the foreclosure analysis; (2) whether either the Browser Agreements or Android Agreements, or both, are part of the foreclosure calculus; and (3) whether a but-for approach is the appropriate way to measure foreclosure. Accordingly, Plaintiffs’ claims regarding the Browser Agreements and Android Agreements survive summary judgment.
B. The Colorado Plaintiffs’ Claims: SVPs & SA360

The court now turns to the allegations raised only by the Colorado Plaintiffs related to Google’s treatment of SVPs and Google’s development of SA360, which they contend has anticompetitive effects in three markets: general search services, general search text advertising, and general search advertising. Colorado Opp’n at 2 (citing Colorado Compl. ¶ 59).

1. Google’s Conduct Directed at SVPs

“SVPs deal with Google in two ways.” Colorado Opp’n at 16. “First, SVPs depend on Google as a source of customers, especially new customers, through unpaid results (like the blue links) and advertising.” Id. “Second, SVPs are important suppliers to Google of structured data—proprietary information that SVPs create that is not available to be crawled on the web,” such as hotel and flight availability and prices. Id. Plaintiffs take issue with Google (1) placing “visibility limitations” on SVPs, and (2) requiring SVPs to share data with Google to the same extent they share it with Google’s rivals. Id. at 17–20.

Visibility Limitations. Plaintiffs argue that Google “imposes visibility restrictions on SVPs in certain strategically important commercial arenas such as hotels, flights, and local services.” Id. at 18. For example, (1) “SVPs cannot appear in results in the free listings in Google’s hotel universal, flights universal, or in the local universal triggered by searches for nearby businesses,” (2) “SVPs cannot purchase ads in their own name and cannot appear prominently in the tile of local services ads on Google’s SERP,” and (3) “when a user clicks on an ad paid for by the SVP featuring the name of a supplier, the consumer is directed to another Google site, not the SVP’s site.” Id. Because Google “insert[s] the restricted universals in a prominent place on the SERP, typically above the fold, Google demotes the blue [organic web result] links, in which SVPs often appear, making it less likely users will click on them.” Id. “The demotion of blue links magnifies
the impact of Google’s visibility restrictions on SVPs that are excluded from its universals.” *Id.* at 19. Plaintiffs allege that “Google’s visibility-limitation practices, in combination with its demotion of the unpaid blue links, have raised customer acquisition costs for the affected SVPs, often by inducing them to purchase more advertising in an effort to restore their visibility.” *Id.*

Data Sharing. Plaintiffs also contend that “Google abuses its monopoly power to acquire valuable proprietary data [from SVPs] that it cannot obtain by crawling the web.” *Id.* at 42. “Google mandates that SVPs . . . provide it with data equivalent to what they provide to any of Google’s competitors, robbing SVPs of control over their valuable assets and potentially foreclosing a differentiated data deal with a [general search engine] rival.” *Id.* at 44. Furthermore, “Google uses SVP data within SERP features where SVPs are not permitted to appear, such as in the restricted universals on its SERP, and also uses data without attribution to SVPs in immersives that link to the SERP.” *Id.* at 19.

Plaintiffs’ theory of competitive harm in the relevant markets arising from these practices is as follows: (1) search-related advertising on Google is the primary way users get to SVPs because “Google’s monopoly makes SVPs depend almost entirely on Google,” Colorado Opp’n at 27; (2) because Google has reduced SVPs’ visibility in key selected verticals in multiple ways—i.e., the anticompetitive conduct—SVPs have had to spend more on customer acquisition in the form of higher advertising costs, *see id.* at 16–19; (3) the limited visibility and increased customer acquisition costs weaken SVPs, *see id.*; (4) by weakening SVPs, Google discourages “stronger content partnerships and other arrangements” between its rivals and SVPs, *id.* at 45; (5) if there were there stronger partnerships between Google’s rivals and SVPs, other search engines would be more attractive to end users, leading to greater competition in the search and general search-related ad markets, *id.* at 45; and (6) at the same time, Google’s demand for parity, or “most favored
nation status,” with respect to SVPs’ data “disincentivizes SVPs from investing in the creation of valuable structured data,” which forecloses “differentiated data deal[s]” with Google’s rivals. *Id.* at 44. In Plaintiffs’ view, “[u]nhampered growth of partnerships” between SVPs and Google’s rivals would “facilitate competition in the Relevant Markets” and “aid the growth of innovative challengers to Google’s monopoly.” *Id.* at 45.

Google responds that Plaintiffs “cannot meet either element of their *prima facie* burden” for two primary reasons. Google Colorado Mot. at 23. First, Google argues that “the challenged [SVP] conduct is a genuine product improvement,” *id.*, and where a “product design improve[s] a product . . . it is lawful procompetitive conduct and not exclusionary conduct as a matter of law,” Google Colorado Reply at 12. Second, Plaintiffs fail to “raise a triable issue with respect to the requisite anticompetitive effects.” Google Colorado Mot. at 23. “Plaintiffs have painted themselves into a corner by proposing markets fundamentally disconnected from the harms they allege,” and because SVPs “are outside the proffered general search services and derivative [general-]search advertising markets,” “[t]here is no basis to conclude that the alleged harm to SVPs harms competition in the alleged markets.” *Id.* at 31–32. “Most fundamentally, Plaintiffs have no answer to the question at the core of their harm-to-competition theory: What basis is there to believe that stronger SVPs would somehow increase competition among general search engines?” Google Colorado Reply at 20.

The court agrees with Google’s second argument.16 Plaintiffs’ theory of anticompetitive harm rests on a multi-linked causal sequence that relies not on evidence but almost entirely on the

16 Because the court agrees that Plaintiffs’ SVP claim fails due to the absence of factual dispute showing injury in any of the relevant markets, it does not reach the issue of whether a product design improvement is actionable under Section 2.
opinion and speculation of its expert, Professor Jonathan Baker. Plaintiffs cite Professor Baker’s report for the following propositions:


- “Google’s data requirements disincentivize SVPs from using their data to strike better deals with Google rivals by, for example, providing some of their data to only select [general search engines].” Colorado Opp’n at 45 (citing Baker Opening Rep. ¶¶ 324–25); see Colorado SMF ¶ 187 (citing Colorado 466 Exs, Baker Reply Rep., ECF No. 466-3, ¶ 165).

- “Google’s data restrictions disincentivize SVPs from investing in their data further, as they cannot realize a meaningful return on these investments.” Colorado Opp’n at 44 (citing Baker Opening Rep. ¶ 278; Baker Reply Rep. ¶ 163).

- “[B]y requiring SVPs to provide Google all data provided to any other [general search engine], these mandates appear to prevent SVPs from granting exclusive access to some data to Google’s rivals.” Colorado Opp’n at 44 (citing Colorado SMF ¶ 186 (citing Baker Reply Rep. ¶¶ 166–67)).

Remarkably, not one of Professor Baker’s opinions, on which these fact assertions are based, cites to any record evidence.
Indeed, a closer inspection of Professor Baker’s reports shows that he has largely theorized the anticompetitive effects in the relevant markets of Google’s conduct towards SVPs.

- “Google’s visibility restrictions can reasonably be expected to discourage investment by the affected SVPs.” Baker Rebuttal Rep. ¶ 61 (emphasis added).
- “The terms on which Google often obtains access to structured data can reasonably be expected to discourage the SVPs that invest in assembling such data from using their data in ways that would aid their own expansion and growth.” Baker Opening Rep. ¶ 51 (emphasis added); see also id. ¶ 278 (again stating that Google’s terms of access to data can “reasonably be expected” to discourage SVPs’ investment in such data); id. ¶ 324 (stating that Google’s data requirements have “likely discouraged SVPs from using their data to aid their own expansion and growth”) (emphasis added).
- Opining that, absent Google’s “most favored nation” data provision, “an SVP specializing in hotels might reach an agreement with a search firm rival to Google by which the SVP makes available its lower-priced, lower-quality hotel room inventory through the rival only,” and that “[c]ompetition of this form could potentially be discouraged by the type of contractual provision found in Google’s contracts with Expedia.” Baker Reply Rep. ¶ 167; id. at 88 n.463.

Speculation that Google’s conduct “can reasonably be expected,” “might,” or “could potentially” degrade SVPs and make them less attractive partners to Google’s rivals is not evidence of

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17 Professor Baker does provide some factual support for this opinion, but it is not a material fact. He cites to Rebuttal Rep. ¶ 61. But Professor Baker does not explain how but not harm in the relevant product markets, because SVPs are not competitors in those markets. And, if there were harm, it would be a European market and thus outside the relevant geographic market in this case (the United States). See DOJ Am. Compl. ¶ 107.
anticompetitive effects in the relevant markets. Plaintiffs are required to show with proof "that the monopolist’s conduct indeed has the requisite anticompetitive effect," and they have fallen well short. *Microsoft*, 253 F.3d at 58–59 (emphasis added). 18

The Colorado Plaintiffs confirmed this state of evidence at oral argument. The court asked if there was "any evidence" that Google’s conduct makes SVPs less attractive partners for rival search engines. Hr’g Tr. at 197–98 ("All you need is one SVP representative who says, ‘Before Google made the change, we were a much more attractive partner to Microsoft. But since then, we have been degraded in the following ways that makes us less attractive to Microsoft [Bing], DuckDuckGo, or me or whoever it may be.’"). Plaintiffs identified none. 19 They did not point the court to any evidence showing that any of Google’s rivals viewed SVPs as less desirable partners once SVPs became less visible on Google’s SERP—and Plaintiffs do not dispute that there are

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18 Ironically, Professor Baker does offer record support for one material fact: Baker Opening Rep. ¶ 278 (emphasis added). That fact undermines the notion that Google’s conduct has weakened the ability of SVPs to partner with Google’s rivals, or diminished the incentives for SVPs to invest in structured data.

19 In response to the court’s question, Plaintiffs pointed to a quote from Hr’g Tr. at 198, who was asked, Colorado 470 Exs., Ex. 187, ECF No. 470-27, at 245:20–22.

Id. at 246:5–14 (emphasis added). This answer does not say anything about how Google’s alleged conduct towards SVPs has harmed competition in the relevant markets. Rather, it is simply a response to a hypothetical question that is unconnected to the actual alleged anticompetitive conduct targeting SVPs and, if anything, appears directed at the market for SEM tools.

The Colorado Plaintiffs’ opposition also quotes a Colorado Opp’n at 5 (citing Colorado 466 Exs., Ex. 14, ECF No. 466-14). But the said no such thing. In response to a question about whether

This testimony does not support the theory that Google’s conduct towards SVPs had degraded SVPs so as to make them less desirable partners to Google’s rivals.
many such partnerships. Nor have they cited any evidence that an SVP has reduced or altered in any way its investments in structured data as a result of Google’s data demands, or that an SVP has sought a deal with a Google competitor based on unique structured data only to be stymied because it was also required to provide such data to Google. Simply put, there is no record evidence of anticompetitive harm in the relevant markets resulting from Google’s treatment of SVPs.

That leaves Professor Baker, but Plaintiffs cannot survive summary judgment on his unsupported opinions alone. “To hold that Rule 703 prevents a court from granting summary judgment against a party who relies solely on an expert’s opinion that has no more basis in or out of the record than [the expert’s] theoretical speculations would seriously undermine the policies of Rule 56.” Merit Motors, Inc. v. Chrysler Corp., 569 F.2d 666, 673 (D.C. Cir. 1977). Put more simply, “[i]n this circuit, a party cannot avoid summary judgment when it offers an expert opinion that is speculative and provides no basis in the record for its conclusions.” Martin v. Omni Hotels Mgmt. Corp., 321 F.R.D. 35, 40 (D.D.C. 2017); see also Evers v. Gen. Motors Corp., 770 F.2d 984, 986 (11th Cir. 1985) (“[A] party may not avoid summary judgment solely on the basis of an expert’s opinion that fails to provide specific facts from the record to support its conclusory allegations.”). Professor Baker’s opinions do not rest on facts; only his ruminations about the market effects of Google’s conduct.

Plaintiffs’ various other arguments do not help establish a prima facie case. First, Plaintiffs assert that Google has a motive to diminish SVPs to prevent users from skipping over Google and going directly to the SVPs for specialized information. Colorado Opp’n at 38–39. Such consumer behavior would threaten “Google’s monopoly revenues.” Id. That argument does not, however, describe harm to competition in the relevant markets. If a user bypasses Google to go directly to
an SVP, the user would presumably also bypass a rival search engine. In other words, greater navigation directly to SVPs does not depress competition in the relevant markets because SVPs do not compete with Google in general search or the general search-related ad markets.

Second, Plaintiffs takes Google to task for failing to produce evidence showing that the visibility limits actually benefit users. Colorado Opp’n at 39–40. But that argument puts the cart before the horse. Google need only establish a procompetitive justification for the visibility limits if Plaintiffs first show them to be anticompetitive in the general search or the derivative general search advertising markets. See Microsoft, 253 F.3d at 59. They have not done so.

Third, Plaintiffs contend that Google’s inclusion of SVPs in some verticals—Vacation Rentals and Shopping, for example—undercuts Google’s claim of user benefit. Colorado Opp’n at 40–41. But differential treatment of SVPs among various verticals does not, once again, prove anticompetitive harm in the relevant markets.

Fourth, Plaintiffs point to documented complaints from SVPs about Google’s data demands. Id. at 43–44. The court accepts these statements at face value. The relevant inquiry here, however, is not whether Google is leveraging its monopoly position to unfairly extract data from SVPs, but instead whether that practice harms competition in the marketplaces for general search services and general-search related advertising. Plaintiffs offer only Professor Baker’s speculation that Google’s “data requirements disincentivize SVPs from investing in the creation of valuable structured data,” id. at 44, which in turn makes them “less attractive, and less valuable, as partners” to Google’s rivals, id. at 45. They offer no proof to support those contentions or the chain of causation.

Fifth, Plaintiffs rely on the fact that Google requires SVPs to “provide it with data equivalent to what they provide to any of Google’s competitors” to argue that this “rob[s] SVPs
of control over their valuable assets and potentially foreclosing a differentiated deal with a [general search engine] rival.” Id. at 44. But, once more, Plaintiffs cite only to Professor Baker’s hypothesis that this requirement translates into a weakening of competition in general search and the related general-search advertising markets. Id. Google may be acting heavy-handed with respect to SVPs’ data, but the Colorado Action is not about competition in the marketplace for search advertising (which would include SVPs). Only the DOJ Plaintiffs allege a Section 2 violation in that market. DOJ Compl. ¶ 97.

Finally, Plaintiffs rely on two case studies to support their theory of harm, but neither move the dial. Plaintiffs point to internal Google communications about the “importance of developing strategic partnerships” with SVPs in Japan to compete with Yahoo! Japan. Id. at 45. From that evidence, Plaintiffs assert that “[j]ust as partnerships with SVPs facilitate Google’s competition with Japanese rivals, so too would the unhampered growth of partnerships between SVPs and [general search engines] in the U.S. facilitate competition in the Relevant Market.” Id. No one disputes, however, that partnerships with SVPs are “important.” There is ample evidence that Google’s rivals have entered into partnerships with SVPs. The question is whether Google’s treatment of domestic SVPs has diminished their attractiveness to Google’s general search rivals, and there is no proof to support that proposition.

Plaintiffs also cite the example of  

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Id. at 46. Google does not dispute this factual assertion. See Google Colorado Reply, Def.’s Resp. to Colorado SMF, ECF No. 523-1 [hereinafter Google Colorado CSMF], ¶ 70.
Colorado Opp’n at 45–46. But again, conduct that discourages users from navigating directly to SVPs for information does not harm competition in general search and related general-search ad markets. As previously observed, if a user looks to an SVP for specialized information instead of Google, the user is not using Google’s rivals, either.

In sum, the court holds that Plaintiffs have not shown that there is a genuine dispute of material fact that would warrant a trial to determine whether Google’s treatment of SVPs has anticompetitive effects in the general search and related general-search ad markets. Accordingly, the court grants Google summary judgment as to those portions of the Colorado Plaintiffs’ claims that rest on Google’s conduct directed at SVPs. See Fed. R. Civ. P. 56 (authorizing entry of summary judgment as to a “part” of a claim); id., Committee Notes on Rules—2010 Amend. (stating that summary judgment may be requested not only as to an entire case but also as to each “claim, defense, or part of a claim or defense”) (emphasis added).

2. Google’s Conduct Directed at Rivals as it Relates to SVPs

Plaintiffs argue that Google degrades partnerships between SVPs and its rivals in another way. They write: “One cannot fully understand harm to competition without examining the continuing interrelationship among harmful acts. . . . Google’s SVP conduct weakens SVPs, making them less attractive as partners to Google rivals. In the other direction, Google’s distribution agreements deprive its rivals of users, making them less attractive to SVPs.” Colorado Opp’n at 28 (emphasis added); see also id. at 4 (“Consider the ripple effects of the distribution agreements. By pushing rivals to the edges of the marketplace, these agreements effectively
eliminate the ability of... SVPs to substitute Google rivals for Google as a way to attract users.

“Google has thus degraded both sides of the bargaining table.” Id. at 28.

Plaintiffs’ theory seems to be that (1) Google’s distribution agreements limit its rivals’ ability to attract users, (2) this weakens Google’s rivals, and make them less attractive partners to SVPs, and (3) the inability to form better partnerships with SVPs depresses Google’s rivals’ ability to compete for general search users. There is arguably some evidence to support the theory. See supra note 19 (testimony from ).

Nevertheless, it remains unclear to the court whether Plaintiffs contend that this is a different form of exclusionary conduct, or it is merely a downstream effect of Google’s distribution agreements. It would seem to be the later. Plaintiffs’ papers do not give this theory much airtime, instead focusing on how Google’s conduct allegedly weakens SVPs. The court therefore will defer ruling on what role, if any, this theory will play at trial.

3. SA360

The court now turns to the Colorado Plaintiffs’ allegations regarding Google’s development of SA360 and the lack of “feature parity” between Google Ads and Microsoft Ads.

Google argues that summary judgment is appropriate on Plaintiffs’ SA360 theory because “[t]he record contains no support for Plaintiffs’ only theory of anticompetitive harm—that SA360s feature design and development process has foreclosed advertisers from running campaigns on Microsoft Bing’s search advertising platform.” Google Colorado Mot. at 36–37.20 “Plaintiffs

20 Google further argues that “Plaintiffs have not even attempted to estimate the market foreclosure caused by Google’s [SA360] feature development decisions, much less quantify it.” Google Colorado Mot. at 37. Plaintiffs correctly note that Google’s foreclosure argument “conflates exclusive dealing and exclusionary conduct,” and that “[t]he ‘substantial foreclosure’ test applies only to exclusive dealing contracts.” Colorado Opp’n at 36. “The difference
have identified no advertiser who was prevented or even dissuaded from buying search ads on Microsoft Ads because of SA360’s feature (un)availability,” Google argues, “[n]or can they show that any purported feature delay, individually or collectively, caused advertisers to buy less search advertising on Microsoft Ads, which is their theory of anticompetitive harm.” Id. at 37. “There is literally no record evidence that any lack of specific features for Microsoft Ads on SA360 affects advertisers’ ability or propensity to buy search ads. . . . Nor is there any evidence that advertising spend in the alleged markets would have increased on Microsoft Ads had SA360 developed features for Microsoft Ads sooner.” Id. at 38.

Plaintiffs respond that “by offering ‘day zero support’ for new SA360 features for Google Ads—but not for rival advertising platforms—[Google] makes ad campaigns more efficient on Google than on Bing (and other actual or potential competitors),” and thus “steers ad spend towards Google and away from its competitors.” Colorado Opp’n at 34. “When advertisers cannot access Microsoft Ads features that would make their ad campaigns more efficient and productive, they spend less on Microsoft Ads, which widens the scale gap.” Id. Furthermore, advertisers are compelled to use SA360 because “Google’s undisputed general search monopoly makes Google Search a ‘must have’ for digital advertisers” and “all other advertising alternatives—such as using native advertising tools, switching SEM tools, or using multiple SEM tools—are costly and burdensome for advertisers that place ads on multiple online channels.” Id. Plaintiffs argue that “Google’s claim that advertisers can simply switch SEM tools or avoid SEM tools altogether ignores these market realities.” Id.

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between the traditional rule of reason and the rule of reason for exclusive dealing is that in the exclusive dealing context, courts are bound by Tampa Electric’s requirement to consider substantial foreclosure.” McWane, Inc. v. F.T.C., 783 F.3d 814, 835 (11th Cir. 2015) (citing Microsoft, 253 F.3d at 69). Plaintiffs are not required to proffer evidence of substantial foreclosure resulting from Google’s SA360 conduct because it is not an exclusive dealing contract.
The court finds that there is a genuine dispute of material fact as to anticompetitive effects in the alleged markets that precludes summary judgment. Specifically, Plaintiffs point to Colorado SMF ¶ 124; see Colorado 470 Exs., ECF No. 470, Ex. 168, ECF No. 470-8 [hereinafter Colorado Ex. 168], at 3; Colorado 466 Exs., ECF No. 466, Ex. 21, ECF No. 466-21, at 241:2–5 (testimony from Google responds that Plaintiffs’ “entire causation theory hangs on” this “back of the napkin” calculation, Hr’g Tr. at 145–46, and Google Colorado CSMF ¶ 124. Maybe so. But Google’s effort to discount this evidence goes to its weight and, at this stage, the court must draw all reasonable inferences in Plaintiffs’ favor. Summary judgment is not appropriate in the circumstances.

Google further contends that this “unsubstantiated claim of ‘spend shift’ from Bing to Google on SA360” is not relevant because “the antitrust laws were not designed to . . . protect particular competitors, as opposed to competition itself.” Google Colorado Mot. at 39. Google is right that the antitrust laws are not meant to protect competitors, but that is not the salient issue here. The issue is whether Google’s delayed rollout of SA360 support for Microsoft Ads inhibited or dissuaded advertisers from placing ads on its competitor’s search engine, thereby harming competition in the general search advertising market. Plaintiffs offer some evidence that it has.
Colorado Ex. 168 at 3. The issue of whether advertiser spending actually shifted from Microsoft Ads to Google Ads due to the lack of full feature parity on SA360 is a disputed material fact that precludes a finding of summary judgment.

Finally, Google argues that, at most, Plaintiffs have established a “transitory delay” in providing parity of services in SA360 that does not rise to a Section 2 violation. Google Colorado Mot. at 45. It contends that “building complex features like automated bidding for Google Ads and Microsoft Ads takes substantial time and resources,” and notes that “SA360’s integration of Google Ads’ auction-time bidding feature took at least three years to build.” Id. at 44. Yet, Google admits to evidence suggesting that it was “technically feasible” for Google to have introduced auction-time bidding for Microsoft Ads sooner, but it did not do so because achieving parity was not a priority. Google Colorado CSMF ¶¶ 114–115. It also does not dispute that Id. ¶¶ 112–113. Thus, there remains a genuine dispute of material fact as to whether the time it took Google to create feature parity for Microsoft Ads on SA360 was a mere “transitory delay,” or whether the delay was intended to harm competition. See Microsoft, 253 F.3d at 59 (“Evidence of the intent behind the conduct of a monopolist is relevant only to the extent it helps us understand the likely effect of the monopolist’s conduct.”). Accordingly, the SA360 component of the Colorado Plaintiffs’ claims survive summary judgment.

C. Additional Theories of Anticompetitive Effect

Finally, Google asks the court to grant summary judgment as to those elements of Plaintiffs’ claims related to Google’s Android Compatibility Commitments (“ACCs”) and Anti-

1. ACCs and AFAs

Google’s ACCs (previously known as AFAs) prohibit manufacturers from distributing devices that do not comply with Google’s hardware and software specifications.” See Google DOJ SMF ¶ 270 (ACCs specify that “[a]ll devices based on Android that [an OEM] manufactures, distributes or markets will be Android Compatible Devices,’ which are defined as devices that comply with the [Android Compatibility Definition Document].”). Plaintiffs allege that the ACCs and AFAs “restrict manufacturers’ ability to build and distribute innovative versions of mobile phones . . . smart TVs, watches, and automotive devices” and “inhibit the development of an operating system based on an Android fork that could serve as a viable path to market for a search competitor.” DOJ Am. Compl. ¶¶ 71, 126–32. Google argues that summary judgment is appropriate because Plaintiffs provide no evidence that “limitations on OEMs’ marketing of incompatible Android devices has a substantial anticompetitive effect in a search or search advertising market.” Google DOJ Mot. at 44.

Plaintiffs’ opposition mentions ACCs and AFAs once in passing in a footnote, and simply states that “[o]n top of the MADA’s own compatibility requirements, the MADA also generally requires OEMs to have signed either an Antifragmentation Agreement (AFA) or an Android Compatibility Commitment (ACC), which separately prevent OEMs from distributing Android devices (with limited exceptions) that do not comply with Google’s [Compatibility Definition Document], regardless of whether the OEM preinstalls [Google’s proprietary apps] or not.” DOJ Opp’n at 13 n.7. Because Plaintiffs offer no evidence showing that ACCs and AFAs have an
anticompetitive effect in the relevant markets, summary judgment is granted with respect to those parts of the claims.

2. **Google Assistant and IoT Devices**

   Plaintiffs’ Complaint alleges anticompetitive conduct related to the promotion of Google Assistant in IoT devices, which are “internet-enabled devices such as smart speakers, home appliances, and automobiles.” DOJ Am. Compl. ¶¶ 12, 139–41, 163. “Google’s Assistant, like Apple’s Siri or Amazon’s Alexa, is a virtual assistant that can respond to voice commands” to perform various tasks. Google DOJ Mot. at 47. “Google’s MADAs have recently included the Google Assistant and made it the out-of-the-box default assistant; and Google’s Android RSAs with OEMs and carriers provide for forms of increased promotion for Google Assistant.” *Id.*

   Google argues that summary judgment is warranted on claims related to Google Assistant because “[n]one of Plaintiffs’ experts opine on Google’s IoT Agreements” and “Google’s Assistant agreements lack any substantial anticompetitive effect in search.” *Id.* at 47–48. Plaintiffs’ opposition does not address the Google Assistant arguments. *See generally DOJ Opp’n.* Accordingly, summary judgment is granted to the extent Plaintiffs’ claims rest on conduct relating to Google Assistant. *See Wilkins v. Jackson*, 750 F. Supp. 2d 160, 162 (D.D.C. 2010) (“It is well established that if a plaintiff fails to respond to an argument raised in a motion for summary judgment, it is proper to treat that argument as conceded.”); *Sykes v. Dudas*, 573 F. Supp. 2d 191, 202 (D.D.C. 2008) (“[W]hen a party responds to some but not all arguments raised on a Motion for Summary Judgment, a court may fairly view the unacknowledged arguments as conceded.”).

3. **Android Open-Source Project (AOSP)**

   Finally, Google asks this court to grant summary judgment on the parts of Plaintiffs’ claims relating to “Google’s decisions regarding which Android apps to develop on an open-source or
proprietary basis.” Google DOJ Mot. at 26. Plaintiffs’ Complaint does not allege that Google’s decision-making regarding the AOSP had an anticompetitive effect in the relevant markets. Plaintiffs do allege, however, that “[o]ver time, Google has chosen to include important features and functionality in Google’s own ecosystem of proprietary apps and [application program interfaces], rather than the open-source Android code,” DOJ Am. Compl. ¶ 73, and “as the functionality gap between open-source Android apps and Google’s proprietary apps grows, developers are more dependent on [Google Play Services],” id. ¶ 75.

In their opposition brief, Plaintiffs repeat that “[o]ver time, Google has removed or deprecated many AOSP apps (e.g., calendar, camera, email) and placed newly developed features exclusively within its proprietary apps and services.” DOJ Opp’n at 12. Yet, they offer no proof of any anticompetitive effect in the relevant markets. Accordingly, summary judgment is entered in Google’s favor to the extent Plaintiffs’ claims rest on AOSP development decisions.

VI. CONCLUSION

For the stated reasons, Google’s Motion for Summary Judgment in the DOJ Action, ECF No. 421, is granted in part with respect to the parts of Plaintiffs’ claims that rest on allegations relating to ACCs, AFAAs, Google Assistant, IoT Devices, and AOSP. Google’s Motion for Summary Judgment in the Colorado Action, ECF No. 426, is granted insofar as it is premised on Google’s conduct directed against SVPs. Google’s motions are otherwise denied.

Dated: August 3, 2023

Amit P. Mehta
United States District Judge