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15	THE SUPERIOR COURT (OF THE STATE OF ARIZONA
16	IN AND FOR THE CO	OUNTY OF MARICOPA
17		
18	STATE OF ARIZONA, ex rel. MARK BRNOVICH, Attorney General,	Case No:
19	Plaintiff,	COMPLAINT FOR INJUNCTIVE AND OTHER RELIEF
20	V.) Assigned to the Hon:
21	GOOGLE LLC, a Delaware limited liability company,) (Non-classified; Consumer Fraud)
22	Defendant.) REQUEST ASSIGNMENT TO COMPLEX
23) COÙRT
24) JURY TRIAL DEMANDED
25)_ -
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TABLE OF CONTENTS

2				Page
3	I.	INTR	RODUCTION	1
4	II.	PART	TIES, JURISDICTION, AND VENUE	5
5		A.	Plaintiff	5
6		B.	Defendant	5
7		C.	Jurisdiction and Venue	5
8	III.	FACT	TUAL ALLEGATIONS	6
9		A.	Google Engages in Acts and Practices In Connection With the Sale and	
10			Advertisement of Merchandise In And Affecting The State of Arizona	6
11		B.	Overview of Google's Many Location-Related Settings	10
12		C.	Google Admits Its Location-Related Settings Are a "Mess" That Mislead and	
13			Deceive	12
14			1. Google Misleads and Deceives Users Through Its Location History and	
15			Web & App Activity Settings.	14
16			2. Google Misleads Users Into Sharing Their Location Via Its Misleading	
17			WiFi Scanning and WiFi Connectivity Settings	19
18		D.	Google Uses Its Users' Locations Even When Users Turn Off the Relevant	
19			Permissions	21
20			1. Google Shares Location with Apps That Users Explicitly Forbid From	
21			Using Location	21
22			2. Google Collects Location Data Even When Users Turn Their Device	
23			Location Off	24
24			3. Google Serves Personalized Ads Based on User Location Even When	
25			Users Turn Off Personalization	26
26		E.	Google Automatically Changes the State of Permissions Without Notifying Users.	27
27		F.	Google Changes the Android User Interface to Increase Location	
28			at the Expense of User Choice and Consent	29

TABLE OF CONTENTS (cont.)

1		TABLE OF CONTENTS (cont.)	
2			Page
3		G. Google Misleads and Deceives Users Regarding Its Deletion of Their Location	
4		Information	33
5		H. Google Has Engaged In Willful Violations Of The Arizona Consumer Fraud Act	34
6	IV.	ARIZONA'S INVESTIGATION INTO GOOGLE'S UNFAIR AND DECEPTIVE ACTS	
7		AND PRACTICES	36
8	V.	CLAIM FOR RELIEF	41
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			

Plaintiff State of Arizona *ex rel*. Mark Brnovich, Attorney General, for its Complaint against Defendant Google LLC ("Google"), alleges as follows:

I. INTRODUCTION

- 1. This case concerns Google's widespread and systemic use of deceptive and unfair business practices to obtain information about the location of its users, including its users in Arizona, which Google then exploits to power its lucrative advertising business.
- 2. The average consumer likely associates Google with its popular products and services including Google Search, Google Maps, the Google Chrome browser, YouTube, and Android, but these products and services are not Google's principal business.
- 3. From a revenue perspective, Google's principal business is selling advertisements and displaying them to the users of Google's products and services.
- 4. This reality is reflected by Google's financials. In 2019, for example, over 80% of Google's massive revenues—\$135 billion out of \$161 billion total—were generated by advertising.
- 5. Google's advertising revenues are driven by the company's collection of detailed information about its users, including information about where those users are located. Location information allows Google to enable advertisers to target users in a specific geographic location, and it also allows Google to validate the effectiveness of ads by reporting to advertisers how often online ad clicks are converted into real-world store visits.
- 6. Given the lucrative nature of Google's advertising business, which depends on having detailed location information about its users, Google goes to great lengths to collect its users' location information. Indeed, according to Harvard Professor Shoshana Zuboff, "Google's proprietary methods enable it to surveil, capture, expand, construct and claim behavioral" data, "including data that users intentionally choose not to share." *See* Shoshana Zuboff, The AGE of Surveillance Capitalism 80 (2019). In this regard, individual users of Google products and services are the targets of a sweeping surveillance apparatus designed to collect their behavioral data *en masse*, including data pertaining to user location. *Id.* at 8–10.

- 7. The tactics Google deploys to surveil its users' locations—including users in Arizona—include willfully deceptive and unfair acts and practices within the meaning of the Arizona Consumer Fraud Act.
- 8. One aspect of Google's deceptive conduct came into public view with the August 2018 publication of an Associated Press article entitled, "Google tracks your movements, like it or not." The article discusses Google's Location History service, which enables users to view where they have been. Google provided users the ability to disable Location History. At the same time, Google told users that "with Location History off, the places you go are no longer stored." But the AP article revealed that this statement was blatantly false—even with Location History off, Google would surreptitiously collect location information through other settings such as Web & App Activity and use that information to sell ads.
- 9. Arizona's investigation has revealed that Google's deceptive and unfair conduct extends well beyond its false Location History disclosure. Indeed, such acts and practices pervade Google's seemingly relentless drive to (i) collect as much user location information as possible and (ii) make it exceedingly hard for users to understand what is going on with their location information, let alone optout of this morass. This is demonstrated by the following examples:
 - a. As described in the AP article, with Location History off, Google continues to collect location information through Web & App Activity—a title that reveals nothing about the setting's connection to harvesting location data. Through Web & App Activity, Google logs information relating to a user's activity on Google websites and apps, such as conducting a search on Google Search. A critical component of this information from Google's perspective is a user's location. Nevertheless, until early-to mid-2018, Google's disclosures during account creation made no mention of the fact that location information was collected through Web & App Activity, which is defaulted to "on." And even today the title itself is misleading by failing to disclose any connection to location.
 - b. Devices running the Android operating system have a device-level location setting.Google tells users that "the types of data we collect depend in part on your device and

account settings. For example, you can turn your Android device's location on or off using the device's settings app." A reasonable conclusion from this disclosure is that "off means off"—*i.e.*, that Google simply will not collect and exploit user location information when a device's location setting is turned off. But that is not true.



- c. Google's WiFi settings mislead users about Google's collection and use of location information. There are two relevant settings—WiFi scanning and WiFi connectivity. Only the WiFi scanning setting is presented within location settings, which would lead a reasonable user to believe that turning it off would result in Google no longer discerning a user's location through WiFi scans.
- d. In recent versions of Android, individual Google apps ask for the user's permission to use their location data. A reasonable inference is that, if the user denies this app-level permission to an app, that app will not be able to use the user's location. But this is not true—Google apps that are denied permission by the user can still obtain location information from other Google apps and products that *have* been granted permission.
- e. The deception also manifests in ads personalization. As explained above, Google serves personalized ads to its users based in part on information Google has about a user's location. Google purports, however, to allow users to opt out of ads personalization by turning off a setting of that name ("GAP"). But contrary to what a reasonable user would expect, turning ads personalization off does not stop Google from presenting ads based on a user's location. Rather, Google will instead

simply present ads based on more general location information. Moreover, Google has a *second* ads service ("DoubleClick") through which it serves ads on third-party websites. The setting that controls DoubleClick's service of location-based ads is in a completely separate user interface from the GAP setting. And, like the GAP setting, if a user turns off the DoubleClick setting, Google will still target the user with DoubleClick ads based on the user's coarse location. Even worse, the DoubleClick setting has no effect on the GAP setting, and vice versa. Thus, a user who thought she had opted out of receiving ads based on her location is wrong on two counts: Google still serves her location-based ads (based on her coarse location) via that same service, and Google also serves location-based ads (based on more precise location signals) via the other service.

f.	Users are more likely to disable their device's location setting if they are readily
	offered such a setting.

- 10. Users, including in Arizona, have come to rely on Google's products and services on a daily basis. At the same time, through these deceptive and unfair acts and practices, Google makes it impractical if not impossible for users to meaningfully opt-out of Google's collection of location information, should the users seek to do so.
- 11. Google has engaged in these deceptive and unfair acts and practices with the purpose of enhancing its ability to collect and profit from user location information. And profited it has, to the tune of over \$134 billion in advertising revenue in 2019 alone. On information and belief, hundreds of millions of dollars of these advertising revenues were generated from ads presented to millions of users in the State of Arizona.

12. Arizona brings this action to put a stop to Google's deceptive and unfair acts and practices; force Google to disgorge all profits, gains, gross receipts, and other benefits obtained for the period of time when it engaged in any unlawful practice; recover restitution for Arizona consumers; and impose civil penalties for Google's willful violations of the Arizona Consumer Fraud Act.

II. PARTIES, JURISDICTION, AND VENUE

A. Plaintiff

13. Plaintiff is the State of Arizona, *ex rel*. Mark Brnovich, Attorney General ("Arizona"). The Attorney General is authorized to bring this action in the name of the State under A.R.S. § 44-1521 *et seq*.

B. Defendant

- 14. Google LLC is a Delaware limited liability company with its principal place of business at 1600 Amphitheatre Parkway, Mountain View, California.
- 15. Google is a technology company that specializes in Internet-related products and services, which include online advertising technologies, search, cloud computing, and other software and hardware.
- 16. Google markets and advertises its products and services throughout the United States, and on information and belief the number of Google's Arizona users is in the millions.
- 17. Google touts that "[i]n 2019, [it] helped provide \$6.22 billion of economic activity for 28,900 Arizona businesses, publishers, nonprofits, creators, and developers."
- 18. At all relevant times Google acted with the knowledge and understanding that the activities described in this Complaint would affect users of Google's products and services throughout the United States, including in the State of Arizona.

C. Jurisdiction and Venue

19. This Court has subject-matter jurisdiction over this matter, including under Article VI, Section 14 of the Arizona Constitution.

¹ https://economicimpact.google.com/state/az/.

- 20. This Court may enter appropriate orders both prior to and following a determination of liability pursuant to the Arizona Consumer Fraud Act, A.R.S. § 44-1521, *et seq*.
 - 21. Venue is proper in Maricopa County pursuant to A.R.S. § 12-401.

III. FACTUAL ALLEGATIONS

- A. Google Engages in Acts and Practices In Connection With the Sale and Advertisement of Merchandise In And Affecting The State of Arizona
- 22. Google's deceptive and unfair acts and practices alleged herein are in connection with the sale or advertisement of merchandise for several reasons, including the following:
 - a. Google sells its own Android devices to consumers in Arizona, and those devices both run Google's proprietary forks of the Android operating system and come preloaded with several Google apps. As part of activating and setting up their phones after purchasing them for consideration, consumers purportedly "consent" to the settings described herein that result in Google's collection of location data. Google's acts, practices, representations, and omissions regarding those settings, including during setup, are thus in connection with the sale of Google's Android phones.
 - b. Google creates both software that is part of the Android operating system (*i.e.*, proprietary forks) and also Google apps that it causes to be included on Android devices sold by other manufacturers to consumers in Arizona. As part of activating and setting up those devices after purchasing them for consideration, consumers purportedly "consent" to the settings described herein and Google's collection of location data. Google's acts, practices, representations, and omissions regarding those settings are thus in connection with the sale of certain third-party Android phones.
 - c. Google advertises the devices and software described in (a) and (b), *supra*, to consumers. Google also advertises software that runs on other operating systems (*e.g.*, iOS). Google's acts, practices, representations, and omissions when advertising devices and software are thus in connection with the advertisement of merchandise.
 - d. Google sells ad placements (*i.e.*, "merchandise") to third parties for consideration (Google's principal business), which advertisements are powered by the fruits of the

deceptive and unfair acts and practices alleged herein relating to collection of user location data. Google's acts, practices, representations, and omissions when selling ad placements to purchasers of such ad placements are thus in connection with the sale of merchandise.

- e. Google markets (*i.e.*, advertises) its ad business to potential and actual buyers of its advertisements. Google's acts, practices, representations, and omissions when marketing its ad business to potential buyers of ads are thus in connection with the advertisement of merchandise.
- f. Google's unfair and deceptive acts and practices lead to targeted advertisements to Arizona consumers based on user location data, and Google also tracks "conversions" of such ads to physical store visits. Google's acts, practices, representations, and omissions when serving advertisements to consumers on behalf of the third parties who have purchased such ads, and tracking conversions from such ads, are thus in connection with the advertisement and sale of merchandise by those third parties.
- 23. Google's own "device" offerings include smartphones in the Google Pixel and Google Nexus families of phones. For example, Google has sold and/or advertised the following devices:
 - Google Pixel family
 - o Pixel C (released 2015)
 - o Pixelbook (released 2017)
 - o Pixel Slate (released 2018)
 - o Pixel 1 (released 2016)
 - o Pixel 2 (released 2017)
 - o Pixel 3 (released 2018)
 - o Pixel 4 (released 2019)
 - Google Nexus family
 - o Nexus One (released January 2010)
 - o Nexus S (released December 2010)
 - o Galaxy Nexus (released November 2011)

- 27. Google also collects users' location data from its Android operating system. Google's Android is a popular smartphone operating system in the United States. Beyond smartphones, Android also runs on various other types of devices, such as tablets, televisions, home appliances, and fitness trackers. Android is also the operating system that is installed on all of Google's own smartphone devices.
- 28. Android is technically an open-source software, meaning that anyone can take the Android source code, modify it in any way, and install it on a compatible device. Such modifications are called "forks" of Android.
- 29. While third-party smartphone manufacturers ("OEMs") are technically free to pre-install any Android fork on their phones, a "vast majority" of Android phones sold in the United States install Google's version of Android. 2/28/2020 EUO Tr. at 448:9–17.
- 30. Google causes its preferred versions of Android to be pre-installed on many smartphones, and forbids OEMs from pre-installing any Google apps (such as Search or Maps) on other versions of Android. Google has a large incentive to do this: its own version of Android contains Google Mobile Services ("GMS"), which makes it easier for Google to collect location information from users.² Indeed,

2/28/2020 EUO Tr. at 444:8–445:9; see also Ex. 201 (GOOG-GLAZ-00149241)

31. The location data that Google collects—from any source—adds an enormous amount of value to Google's advertising offerings. As explained above, Google is primarily an advertising

² GMS "is a collection of apps and services that an OEM is required to have to . . . license Android." 9/25/2019 EUO Tr. at 139:1–6. That collection includes "software libraries, APIs, and other software, including YouTube, Maps, and Google Play." *Id.* at 138:4–10; *see also* https://www.android.com/gms/ (GMS is "a collection of Google applications and APIs that help support functionality across devices. These apps work together seamlessly to ensure your device provides a great user experience right out of the box.").

company—in 2019, Google made \$161 billion in revenue, of which \$135 billion (84%) came from advertising.

32. For instance, one of Google's advertising offerings is called Store Visits. With this product, Google is able to inform its advertisers how effective their ads are by informing them when viewing an ad online drives a physical store visit. Google is only able to do this by collecting massive amounts of user location data.

B. Overview of Google's Many Location-Related Settings

- 33. As explained further below, Google's products and services include a web of interrelated settings that relate to Google's collection of a user's location-related information. These settings, individually and collectively, are in many cases deceptive, and their use by Google to collect users' location data is unfair and deceptive.
- 34. The settings fall into three categories: (i) account-level, (ii) device-level, and (iii) applevel. In many instances, these settings are defaulted to enable collection of user location data, unless the user affirmatively disables the settings. In many instances, the settings can conflict with one another, but Google collects user location data regardless. In many instances, locating and/or understanding the appropriate setting is extraordinarily difficult and confusing.
- 35. Device-level settings are those that are specific to a given hardware device, like a smartphone or tablet. A user may have a single Google Account that is used on multiple devices. For example, a device-level location setting may be turned off for that user's Pixel phone, but turned on for the user's tablet.
- 36. Account-level settings are those that apply to a user's entire Google Account and are propagated to all devices associated with that Google Account.
- 37. App-level settings are settings specific to a particular app. An app-level setting can relate to a Google app, such as Google Maps. An app-level setting can also apply to third-party apps that are installed on an Android device.
- 38. Although these various settings have changed over time (including recently), the following table includes some of the relevant settings today:

Setting Name	Category	Description
Device Location (or	Device-level	This setting is the main location setting on a device and
Location Master)	setting	controls whether a device's location setting is on. When it
,		is on, GPS is used to obtain a user's location.
Google Location	Device-level	GLA is a network-based location service that uses signals
Accuracy (formerly	setting	other than GPS to obtain a user's location. Specifically,
known as Google		GLA obtains location from WiFi, cellular networks and a
Location Services)		variety of sensors (barometer, gyroscope, magnetometer,
("GLA")		and accelerometer).
Usage & Diagnostics	Device-level	When turned on, this setting purportedly helps Google
	setting	improve the Android operating system ("OS"). It collects
		the user's IP addresses, which can be used to infer
		location.
WiFi Scanning	Device-level	This setting allows apps and services to be able to obtain
	setting	WiFi scans even when the WiFi setting is off. Google can
		use WiFi scans to augment the location information it
		obtains.
Bluetooth Scanning	Device-level	This setting allows apps and services to be able to obtain
	setting	Bluetooth scans even when the Bluetooth setting is off.
	_	Google can use Bluetooth scans to augment the location
		information it obtains.
App-level location	App-level	When on, this setting gives an app permission to access the
permission	setting	location of the corresponding device's location.
Location History	Account-level	When on, this setting allows Google to build a
("LH")	setting	comprehensive list of everywhere the user goes with their
		devices that also have Location Reporting (explained
		below) turned on, even when the user is not using a
		Google service. LH also powers a product called Timeline,
		which is a user-facing product in which users can view and
		delete the places they have been.
Location Reporting	Device-level	This is a sub-setting of LH. When on, it enables the device
	setting	to report location via Google's Location History setting.
Web & App Activity	Account-level	When this setting is on, Google saves a user's Google
("WAA")	setting	activity. For example, when a user uses Google Search or
		Google Maps to search for "restaurants near me," Google
		collects the search term as well as information about that
		activity, such as a user's location and IP address. WAA
		also powers a product called My Activity, which is a user-
		facing product in which users can view and delete their
		WAA.
Supplemental Web	Device- and	This is a sub-setting to WAA. When it is on, it allows a
& App Activity	account-level	user's Chrome history and activity from websites and apps
("sWAA")	setting	that use Google services to be collected.
Google Location	Account-level	This setting allows a Google Account holder to share his
Sharing	setting	real-time location with others.

Setting Name	Category	Description
Google Ad Personalization ("GAP")	Account-level setting	When off, this setting purports to prevent Google from targeting a user with ads based on the user's location.

See, e.g., Ex. 202 (Google's Consolidated Final Responses to the First, Second, and Third CIDs ("Google's Responses to CIDs 1–3")) at 17–20 (4/17/2019 response to DFI 7 from the First CID); Ex. 203 (GOOG-GLAZ-00076994) at 7000–002; 9/25/2019 EUO Tr. at 83:11–89:14.

39. Location History in particular is central to Google's revenue stream. Among other things,

Ex. 204 (GOOG-GLAZ-00085882) at 882.

40.

Id.

41.

Id.

C. Google Admits Its Location-Related Settings Are a "Mess" That Mislead and Deceive

- 42. The array of location-related settings described above misleads and deceives users of Google's products into believing that they are not sharing location information when they actually are. Their use by Google also constitutes unfair acts and practices.
- 43. Indeed, for years, Google has known that the user experience they designed misleads and deceives users. The evidence obtained from within Google—such as internal emails, presentations, and memos—is overwhelming in this regard. Ex. 56 (GOOG-GLAZ-00002914) (October 2014 presentation regarding "Simplifying Location History Settings (on Android)"); Ex. 205 (GOOG-GLAZ-00055259) at 259
 - 44. Google's own employees have clearly identified the problem:
 - Ex. 206 (GOOG-GLAZ-00055452) at 452.
 - "The current UI feels like it is designed to make things possible, yet difficult enough that people won't figure it out." Ex. 207 (GOOG-GLAZ-00077898) at 899.

1	• "Some people (including even Googlers) don't know that there is a global switch and a
2	per-device switch." Ex. 208 (GOOG-GLAZ-00055552) at 553.
3	•
4	Ex. 209 (GOOG-GLAZ-00057477) at 477.
5	•
6	Ex. 210
7	(GOOG-GLAZ-00057940) at 940.
8	•
9	9/25/2019
10	EUO Tr. at 275:9–277:6.
11	•
12	
13	Ex. 211 (GOOG-GLAZ-
14	00017790) at 790–91.
15	•
16	
17	
18	Ex. 212 (GOOG-GLAZ-00161717) at 717.
19	F 212 (COOC CL AZ 00020001) 4 00 (07
20	Ex. 213 (GOOG-GLAZ-00028891) at 896–97.
21 22	Ex. 214 (GOOG-GLAZ-00101814) at 14.
23	"So our messaging around [location tracking] is enough to confuse a privacy focused
24	Google-SWE. That's not good." Ex. 215 (GOOG-GLAZ-00163209) at 213.
25	45. Even top-level Google employees do not understand under what conditions Google
26	collects location data. See, e.g., Ex. 43 (GOOG-GLAZ-00031017) at 019–23
27	at the time (9/25/2019 EUO Tr. at 49:17–50), expressing confusion regarding
28	how three different location-related settings interact).
	COMPLAINT FOR INJUNCTIVE AND OTHER RELIEF
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46.	Though Google has published a variety of documentation for users,
	See Ex. 216 (GOOG-GLAZ-
00078009) a	at 037
	059
	Ex. 214 (GOOG-GLAZ-
00101814) a	t 814
47.	The result of this complex web of settings and purported "consents" is an "overall
mess wit	th regards to data collection, consent and storage" (Ex. 209 (GOOG-GLAZ-00057477) at
478) that mis	sleads users into handing over their location data to Google.
48.	Thus, though Google claims to have obtained consent to collect and store its users' data
that consent	is based on a misleading user interface, as well as other unfair and deceptive acts and
practices.	
49.	
	See Ex. 217 (GOOG-GLAZ-00046967) at 968
	And Google even collects data without
user consent	, as explained more fully below. E.g., Ex. 218 (GOOG-GLAZ-00114667) at 667–68
1.	Google Misleads and Deceives Users Through Its Location History and Web & Ap
	Activity Settings
50.	While Google obtains its users' location information through numerous settings and
products, tw	o of the primary settings through which Google misleads, deceives, and conceals material
facts from us	sers are Location History and Web & App Activity.
	-14-

-15-

•	"Indeed we aren't very good at explaining this to users. Add me to the list of Googlers
who di	dn't understand how this worked an [sic] was surprised when I read the article we
shippe	d a UI that confuses users"). Id. at 290.
_	

GLAZ-00057861) at 861.

• "The complaint in this article is that if you have Web and App Activity enabled and the location toggle enabled, then your search history entries contain your approximate location at the time you made a query. It's also not possible to remove them by clearing your location history, which is counter-intuitive – you have to clear your search history instead." Ex. 224 (GOOG-GLAZ-00149867) at 868.

Ex. 223 (GOOG-

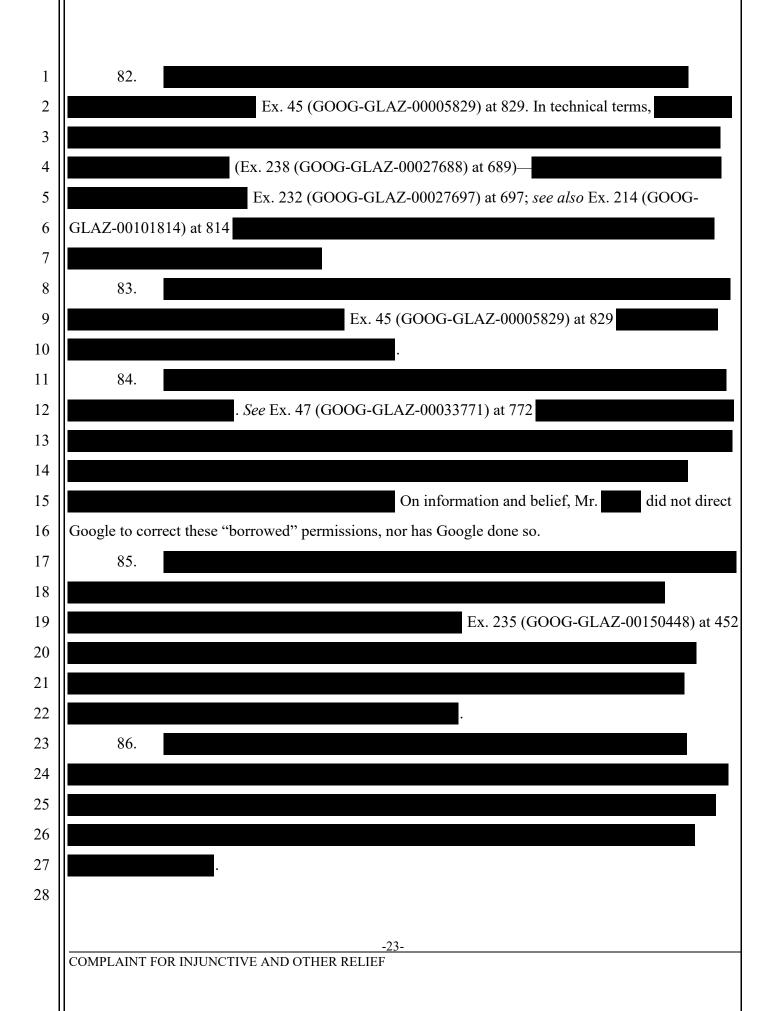
- "Definitely confusing from a user point of view if we need googlers [to] explain it to us." *Id.* at 867.
- "I agree with the article. Location off should mean location off, not except for this case or that case." Ex. 18 (GOOG-GLAZ-00001266) at 270.
- "[C]omms and policy are looking for an update on where we are in terms of fixing 'location history' fixes and having one single place to turn off instead of 3." Ex. 20 (GOOG-GLAZ-00001521) at 523.
- 62. Completely independent of its connection to Location History, Web & App Activity itself is another source of deceptive and unfair acts and practices and unlawful concealment by Google. Until around early- to mid-2018, Google's disclosures during account creation made no mention of the fact that location information was collected via WAA, which is defaulted to "on." 7/12/2019 EUO Tr. at 175:7–15, 374:1–13.
- 63. Even after Google changed this policy, users had to click on a "Learn More" link to view that disclosure until late 2018, when Google finally disclosed that WAA may include location data collection without users having to click on "Learn More." *Id.* at 376:15–3. Thus, users who had set up an account prior to 2018 would never receive a disclosure that WAA collects location data when setting up their account on a new device. *Id.* at 381:16–23. The same was true after account setup if a user wanted

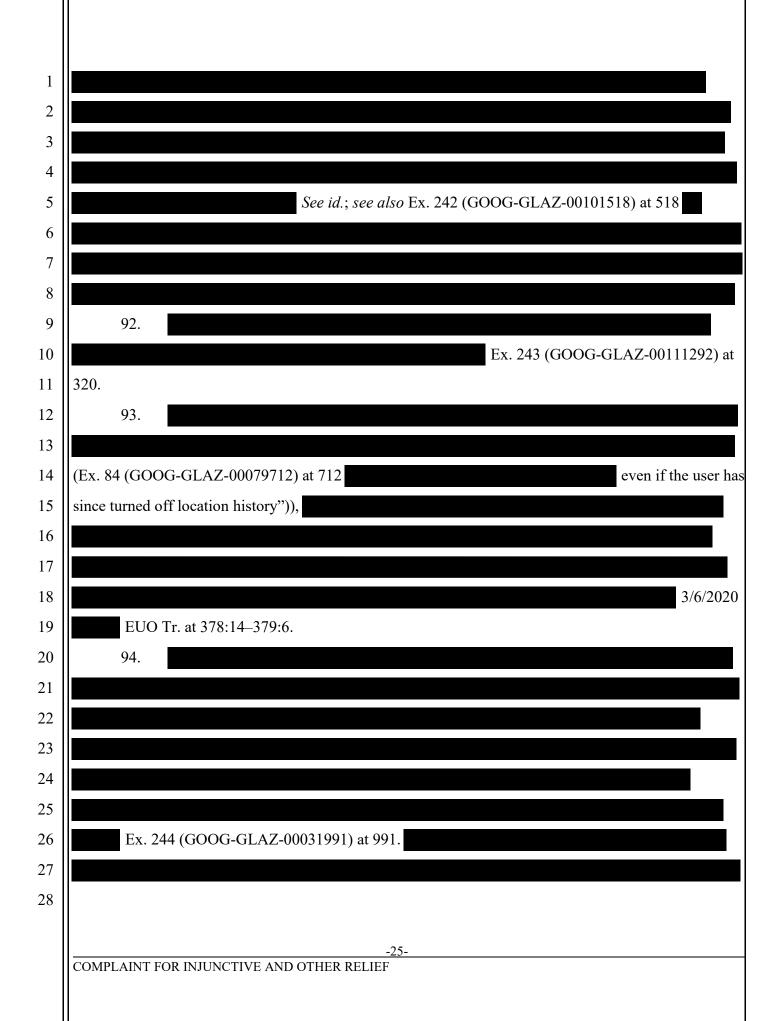
1	to enable a Google product that required WAA to be "on": the WAA disclosure made no mention of
2	location collection. Ex. 225 (GOOG-GLAZ-00101684) at 684 (Google Now setup interface requiring
3	WAA opt-in without disclosing its connection to location).
4	64. Additionally, until Android Q, an Android user could not directly access the WAA
5	settings on his phone. 7/12/2019 EUO Tr. at 164:16–166:19.4 Instead, a user would have to
6	navigate to the device's settings, then to a Google link which took the user to his Google Account, then
7	navigate down to WAA. Id.
8	65.
9	Ex. 226 (GOOG-GLAZ-00107030) at 030
10	.5
11	66.
12	
13	7/12/2019 EUO Tr. at 182:23–194:12.
14	
15	. Id. See id. at
16	183:24–184:10; Ex. 227 (GOOG-GLAZ-00084080) at 1
17	
18	67.
19	
20	Ex. 228 (GOOG-GLAZ-00106193)
21	at 194.
22	68. Notably, Google did not make "any changes to the privacy policy, terms and conditions,
23	help desk or help center website that reflected the change." 7/12/2019
24	
25	⁴ At least prior to Android Q, the same was true of the Location History setting. See 7/12/2019
26	EUO Tr. at 165:13-166:4, 170:6-171:1. Android Q, also known as Android 10, was released on
27	September 3, 2019. <i>See</i> https://www.theverge.com/2019/9/3/20842507/google-android-10-q-pixel-release-download-availability.
28	5
	7/12/2019 EUO Tr. at 69:15–18.
	COMPLAINT FOR INJUNCTIVE AND OTHER RELIEF

1	205:22: Ex.	202 (Google's Responses to CIDs 1–3) at 92–95 (9/4/2019 response to DFI 23 from the
2		("The relevant parts of Google's Privacy Policy have not been updated in the timeframe
3		but."). Rather, the only way users would have been able to see the change is if they happened
4		t their WAA data was suddenly more precise/coarsened via the My Activity tool. Thus,
5	_	vely concealed and suppressed the type of location information it collected from its users.
6	69.	
7		
8		
9		
10		
11		
12		2/27/2020 EUO Tr. at
13	52:22–58:13	0.6
14		<i>Id.</i> at 55:3–13.
15		<i>Id.</i> at 58:14–59:2.
16	70.	Thus, even when users explicitly tell Google that they do not want their web and app
17	activity to be	e tracked, Google ignores those requests and collects that data (including location-related
18	data), thereb	y deceiving users and promising something it does not deliver.
19	2.	Google Misleads Users Into Sharing Their Location Via Its Misleading WiFi
20		Scanning and WiFi Connectivity Settings
21	71.	One of Google's location settings is WiFi Scanning. WiFi Scanning and WiFi
22	connectivity	are independent settings, and both can be switched off. 9/25/2019 EUO Tr. at 90:2–7.
23		WiFi connectivity setting "allows a connection to WiFi or cuts off a connection to WiFi,"
24		,
25		
26	6.07	
		"is a term used within Google that refers to a specific cookie that is assigned to "any visitor om or a Google owned and operated property," regardless of whether they are signed in or
27	out. 2/27/20	EUO Tr. at 57:20–58:13. "GAIA" is the Google account identifier and refers to a
28	signed-in Go	pogle user. <i>Id.</i> at 157:10–20.
		-19-
	COMPLAINT	FOR INJUNCTIVE AND OTHER RELIEF

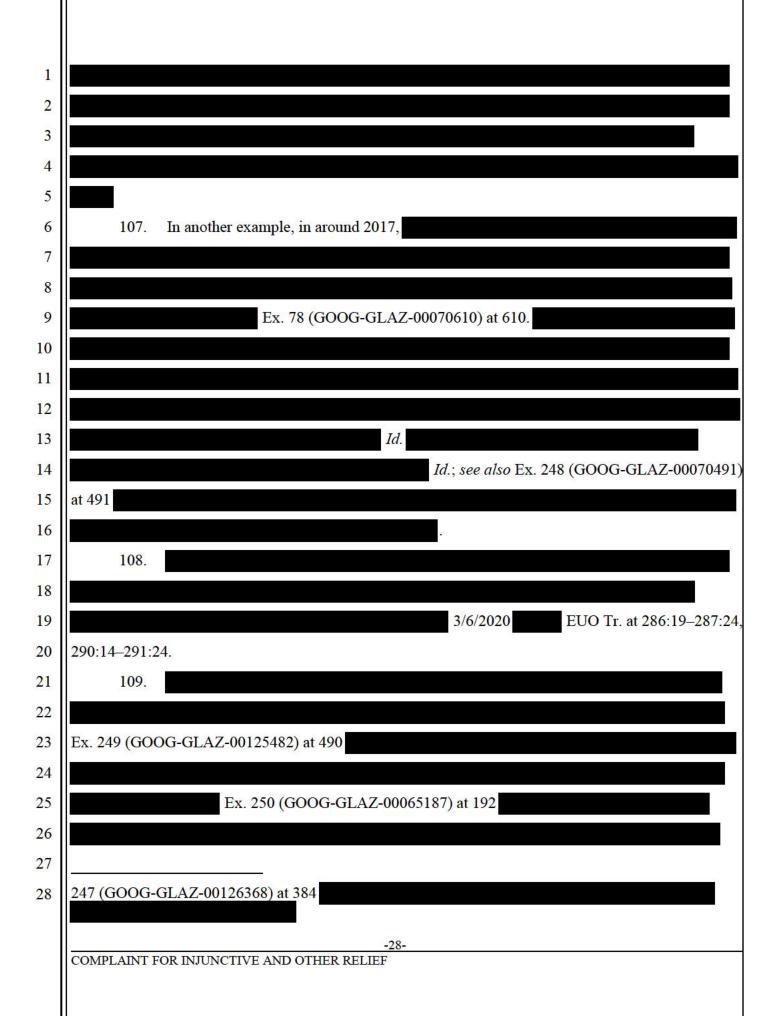
1	the WiFi Scanning setting controls whether "system apps and third-party apps can request WiFi scans."
2	Id. at 117:4–118:5.
3	72. Google's written disclosures at most suggest to users only that WiFi Scanning (as
4	opposed to WiFi connectivity) is related to location data. Ex. 230 (GOOG-GLAZ-00001105) at 106
5	("To help apps get better location info, you can let your device scan for nearby Wi-Fi access points
6	Tap Advanced > Scanning Turn Wi-Fi scanning on or off").
7	
8	73. The user interface for the WiFi Scanning setting is housed within location settings, while
9	the WiFi connectivity setting itself is separate.8 This leads users to believe that the two functions
10	(scanning and connectivity) are separate, and that if they disable the WiFi Scanning permission on their
11	device, Google no longer collects, uses, or stores location information derived from WiFi scans.
12	74. However, Google Location Accuracy (GLA; formerly known as Google Location
13	Services) gets location data from WiFi scans when either the WiFi Scanning setting
14	is on. 9/25/2019 EUO Tr. at 88:23–89:10. If WiFi Scanning is <i>off</i> , "Google
15	will periodically collect WiFi scans in order to build the estimated location for where WiFi Access
16	Points are," so long as other toggles (e.g., GLA and
17	of at least November 1, 2017,
18	
19	Ex. 43 (GOOG-GLAZ-00031017) at 022.
20	75. Thus, despite the user attempting to prevent the reporting of WiFi-based location data—
21	and despite the user affirmatively turning the Location Master off—
22	
23	
24	
25	7
26	Ex. 231 (GOOG-GLAZ-00109617) at 617
27	⁸ Depending on the OEM and build of Android, the path can look like Settings > Privacy and safety >
28	Location > Improve accuracy > WiFi scanning. See https://www.solveyourtech.com/turn-off-wifi-bluetooth-scanning-location-accuracy-android-marshmallow/ .
	-20-
	COMPLAINT FOR INJUNCTIVE AND OTHER RELIEF

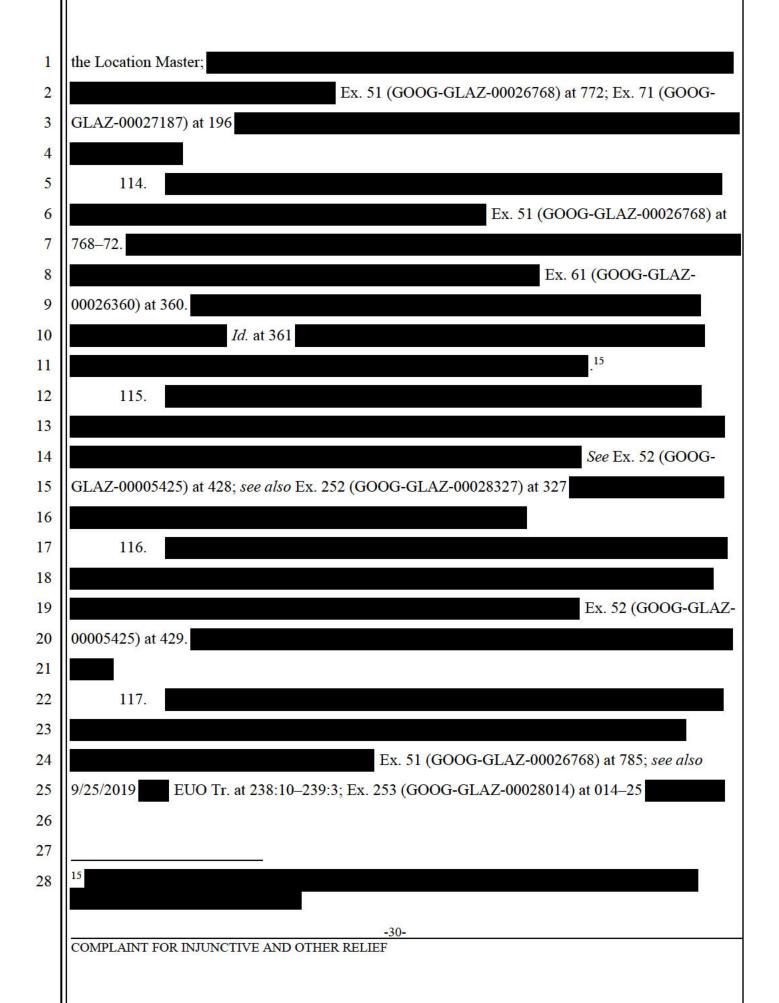
1	sought a user's permission only when the app was installed for the first time. 9/25/2019 EUO Tr. at
2	163:3–12, 215:3–216:7. Run-time permissions were introduced with Android Marshmallow. <i>Id</i> . ¹¹
3	80. Thus, under the run-time model, Google represents to its users that a given app would not
4	be able to obtain a user's location if the user denies app-level location permissions. Ex. 232 (GOOG-
5	GLAZ-00027697) at 700
6	Ex. 233 (GOOG-GLAZ-00000381) at 381
7	(public-facing help page explaining that users "can control which apps can see and use your phone's
8	location. For example, you could let Google Maps use your phone's location to give you driving
9	directions, but not share the location with a game or social media app.").
10	81.
11	
12	Ex. 45 (GOOG-GLAZ-00005829) at 829–
13	32
14	; Ex. 234 (GOOG-GLAZ-00060013) at 013
15	; Ex. 114
16	(GOOG-GLAZ-00198467) at 469
17	
18	; ¹² Ex. 235 (GOOG-GLAZ-00150448) at
19	; Ex. 236 (GOOG-GLAZ-00027379) at
20	379-83 (indicating that "cross-product data use may hurt user trust if we are providing locations to
21	XYZ via the ULR-loophole when the user has explicitly denied it," and that Google has been aware of
22	the issue "for 2+ years"); Ex. 237 (GOOG-GLAZ-00096366) at 378
23	·
24	
25	11 Android Marshmallow was publicly released in October 2015.
26	https://www.theverge.com/2015/10/5/9454437/android-6-0-marshmallow-now-available.
27	is a service within Google that returns an estimate of a user's location given multiple inputs, such as the user's device location, Location History, and signals. See 2/27/2020 EUO Tr.
28	at 117:1–3, 119:17–19. , in turn, is a service within Google that maps IP addresses to geographic
	locations. <i>See id.</i> at 98: 19–99:4.

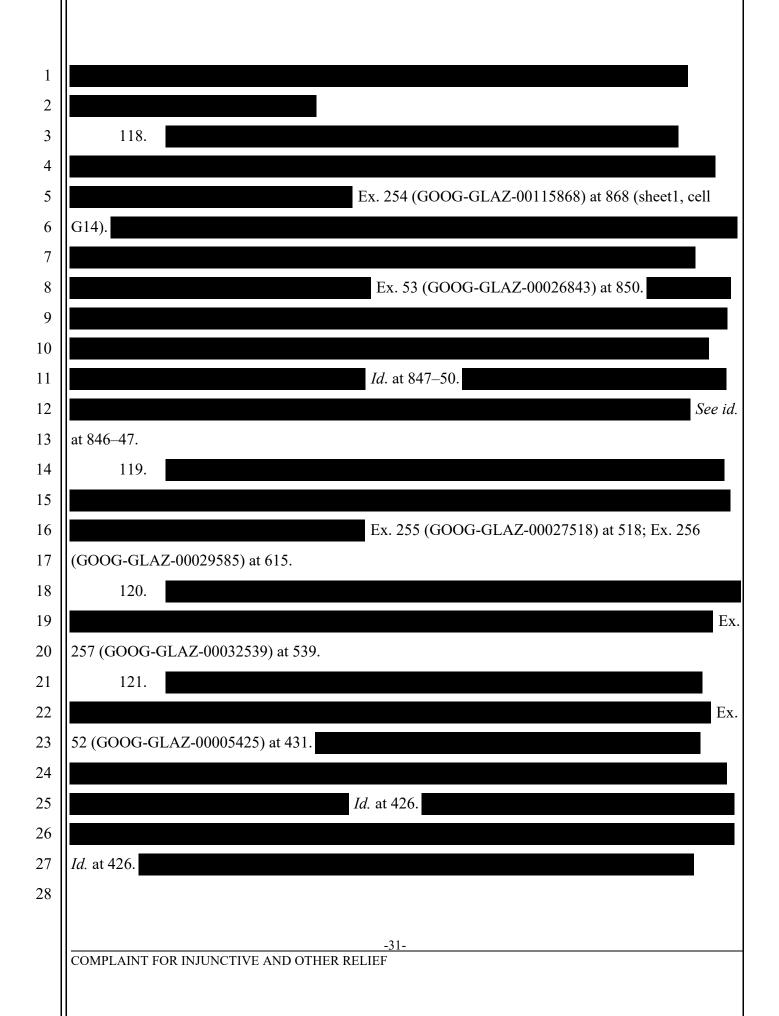


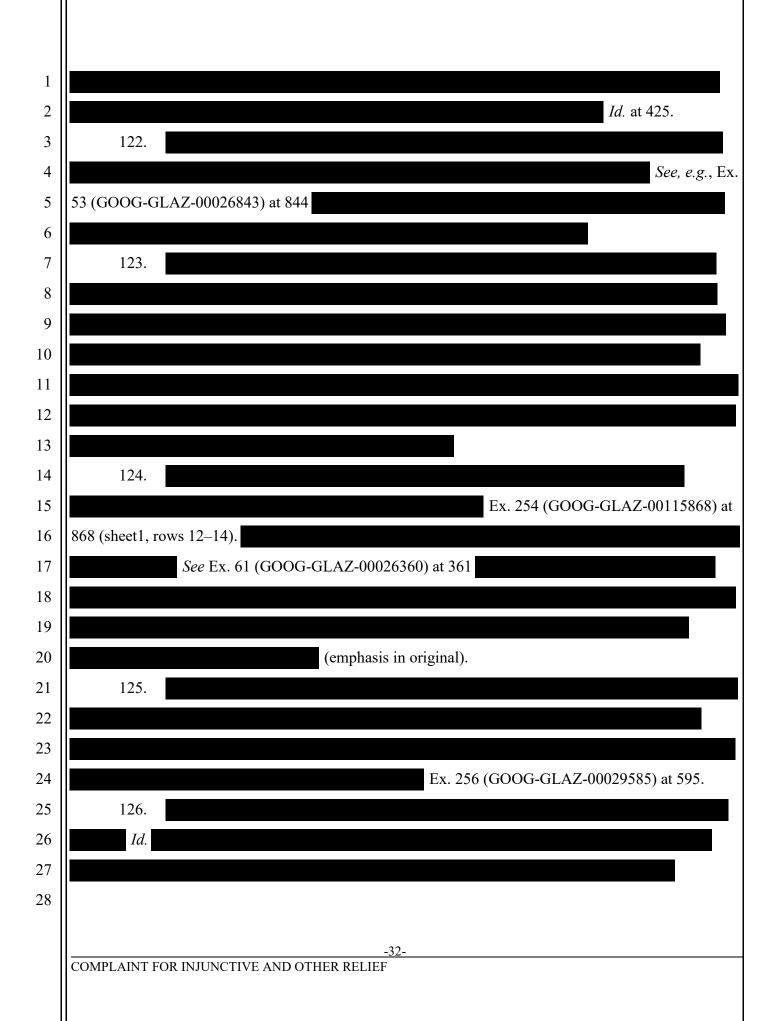


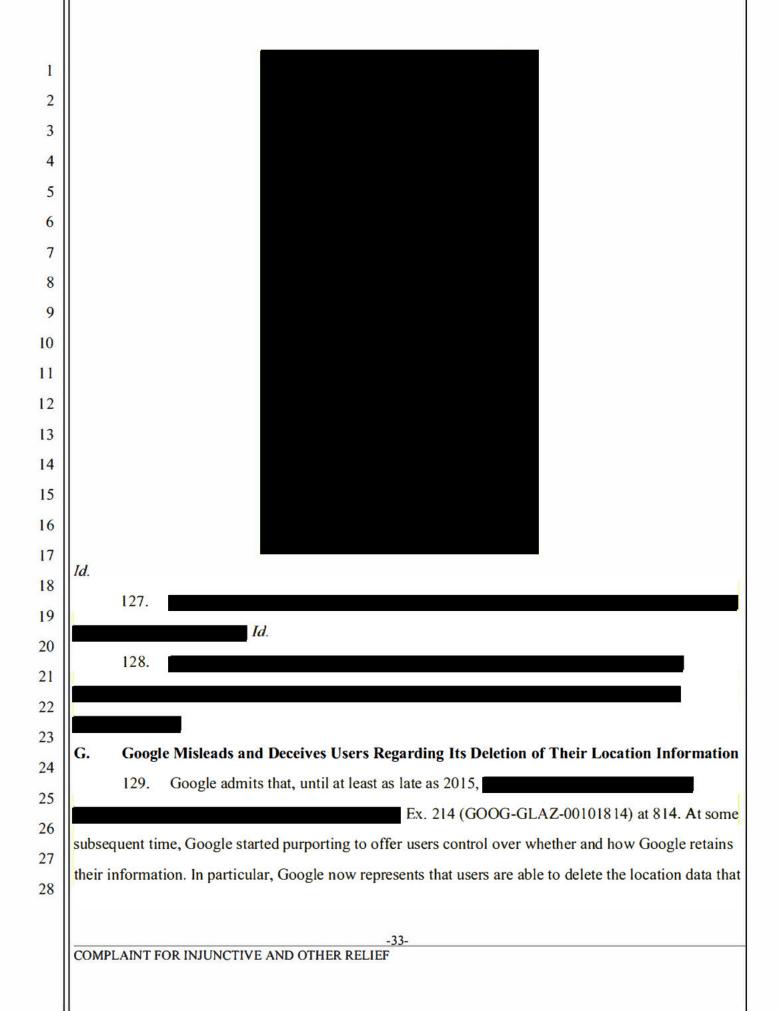
	2/27/2020 EUO Tr. at 172:2–15 (when GAP is off)
Googl	le still targets users with ads based on their location through DoubleClick).
	103.
	2/27/2020 EUO Tr. at
189:1	8–190:17.
	104.
E.	Google Automatically Changes the State of Permissions Without Notifying Users
	105. Presumably, the entire point of including various toggles and consents on devices and
accou	ants is to give the user control over the state of their device and/or account. However, Google h
pushe	ed a variety of updates that automatically change the user's location settings and defaults without
inforn	ming the user, much less seeking or obtaining consent.
	106. For example, in August 2016,
	Ex. 79 (GOOG-GLAZ-00057389) at 389; see also Ex. 246 (GOOG-GLAZ-00058103
104 ("	"As of Aug 2016, switching the account level sWAA bit will toggle the device-level sWAA fo
device	es owned by the GAIA" resulting in "a fairly large increase in devices reporting appusage [sic]
since	Aug"). 13
¹³ As	described above, sWAA is a setting, housed within WAA as a checkbox, that collects data from
203 (0	in WAA. 1 GOOG-GLAZ-00076994) at 7002. This supplemental setting is itself misleading for users. <i>See</i>
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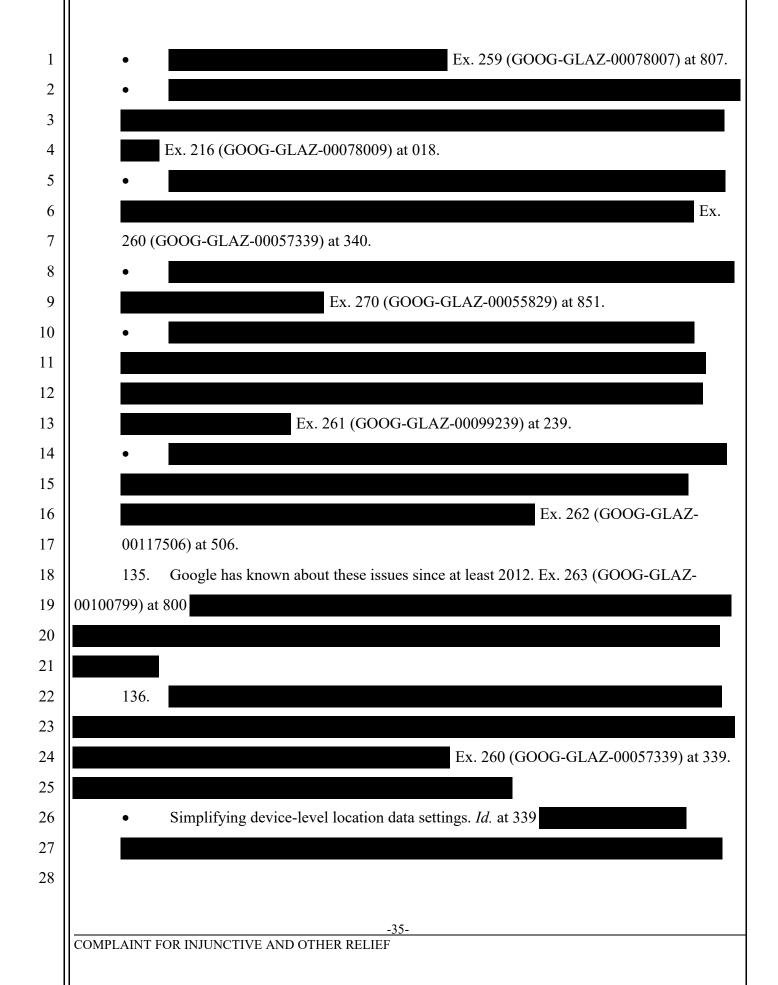












-36-

COMPLAINT FOR INJUNCTIVE AND OTHER RELIEF

at 71:7–17.

AGO—both in the First CID and in two subsequent CIDs up to that point—Google at first produced only 402 documents totaling 1543 pages (mostly poor-quality reproductions of publicly available information) and failed to substantively respond to *any* of the AGO's Demands for Information. Over these months, the AGO repeatedly expressed its frustrations to Google. Repeatedly, Google promised to deliver information but failed to follow through.

- 141. As it relates to products operating on the Android operating systems, Google insisted for months that it could not provide (and did not have) responsive information or documents apart from Google's own Pixel-branded phones. For months, Google also claimed it did not have documents or information concerning the collection of user location data on devices using the Android operating systems (outside of those installed on Pixel devices), or concerning the operation of any of Google's own apps installed on non-Pixel phones. Google's reason was that it purportedly had no control over how third-party OEMs modified the open-source Android software. The AGO's investigation later confirmed that Google's positions were inaccurate and misleading. Google witness testified that he was the in the Android operating software that is responsible for computing location. 3/6/2020 EUO Tr. at 67:20–70:11. Mr. confirmed unequivocally that this FLP was not necessarily designed for Google-branded smartphones, but more broadly for "Android devices more generally." *Id.*
- As other witnesses explained, while Android is an open-source software, Google exercises control over what version of Android a vast majority of OEMs install on their devices: if any OEMs want to install Google's library of very popular apps (included in GMS, which include, for example, Google Maps and Search), OEMs must install Google's preferred version of Android.

 2/28/2020 EUO Tr. at 448:9–17; 9/25/2019 EUO Tr. at 139:1–140:21. Google perpetuates its location data collection through any phone—made by Google or not—that has GMS installed.

 2/28/2020 EUO Tr. at 444:8–445:17, 448:9–17; see also 9/25/2019 EUO Tr. at 64:6–13.
- 143. In other words, contrary to Google's long-standing position in the investigation, Google very much has information and documents concerning the collection of user location data from "Android devices more generally" because, among other things, Google designed and controls that

 collection process through the FLP in the Android operating system. Indeed, Google collects data about the number of devices reporting Location History not only from all Android devices, but also from iOS devices. 3/6/2020 EUO Tr. at 122:6–124:2.

144. Similarly, when the AGO requested information concerning ad revenue early in the investigation, Google objected that it "does not understand, and the AGO has not provided any guidance, regarding any nexus of revenue from the Android mobile devices and location information." Ex. 202 (Google's Response to CIDs 1–3) at 51 (5/30/2019 response to RFP 19 from the First CID).

- 5/21/2020 Rough EUO Tr. at 84:15–19.
- 145. Google also took it upon itself to dictate the scope of the AGO's investigation. For example, for months Google insisted that the AGO's investigation was somehow limited to the facts identified in the AP news article, while refusing to provide any other information or documents, even as the AGO repeatedly instructed Google otherwise. Similarly, Google insisted that the AGO's investigation is somehow limited to a one-year period. Google initially agreed to search for documents covering only a six-month time period and, even as to that time period, Google refused to do any kind of meaningful search or production.
- 146. For months, Google also refused to provide testimony under oath as to any of the topics identified by the AGO. For example, on May 11, 2019, the AGO served a subpoena seeking testimony from Google's person most knowledgeable as to twenty topics identified in the subpoena. Google refused to provide testimony on the topics identified by the AGO and, instead, Google identified its own topics for which it was willing to provide testimony. But even as to those topics, Google did not provide straightforward testimony.
- 147. More fundamentally, for months, Google tried to cabin all questioning of its witnesses to the *inner* workings of *either* Location History *or* Web & App Activity. The AGO's investigation ultimately revealed that much of the location related data for Google products and services is provided

1	part of his preparation (all regarding one specific subject), with the remaining time spent speaking to					
2	lawyers. 16 2/27/2020 EUO Tr. at 34:1–35:7, 115:18–23.					
3	151. Mr. did not know the answers to many questions that fell squarely within his					
4	designated topics, and he referred the AGO to Mr. for answers. But when Mr.					
5	later deposed, he also claimed ignorance. In one clear example, Mr.					
6	inputs into "with Mr. to prepare for his EUO, but when Mr. was asked, "Do					
7	you know what the inputs to are?" he responded, "I do not." 2/27/2020 EUO Tr. at					
8	115:18–23; 5/8/2020 EUO Tr. at 115:11–17. In another example, Mr. Berlin explained that					
9	prior to coarsening user locations to 3 square kilometers in certain instances (as it apparently does					
10	today), Google coarsened user locations to 1 square kilometer, but he did not know what Google's					
11	coarsening policy was prior to the 1-square-kilometer policy—he referred the AGO to Mr.					
12	the answer to that question. 2/27/2020 EUO Tr. at 125:2–12. However, Mr.					
13	unknowledgeable even about the 1-square-kilometer policy. 5/8/2020 EUO Tr. at 61:7–18,					
14	102:17–103:6.					
15	152. Indeed, Mr. referred the AGO to yet another Google employee,					
16	who is located in Zurich and is supposedly actually knowledgeable about the relevant Google					
17	technologies. E.g., 5/8/2020 EUO Tr. at 57:9–12, 59:25–60:17, 61:3–62:4, 79:10–80:12,					
18	115:15–20; see also id. at 111:22–24 ("Q. Who is the person or group of people at Google most familian					
19	with A. "").					
20	153. In another attempt to get testimony on on July 31, 2019 and again on January 10					
21	2020, the AGO served a subpoena for an EUO of who was had been identified at an earlier					
22	examination as leading the team. Google refused to comply. At some point, Mr.					
23	apparently replaced Mr. as the head of . Google failed to disclose that					
24						
25	16 Mr. spoke with Mr. regarding , but Mr. , the leader of the					
26	team, later testified that he only spends about 10% of his day-to-day work on and led the					
27	team only because his direct report actually oversees it; indeed, Mr. had very little actual knowledge on the workings of and made clear he only exercised a general managerial role.					
28	5/8/2020 EUO Tr. at 28:4–21, 59:18–60:17, 61:3–6, 64:24–65:7, 70:16–71:6, 72:16–74:8, 106:6–19.					
COMPLAINT FOR INJUNCTIVE AND OTHER RELIEF						

-41-

COMPLAINT FOR INJUNCTIVE AND OTHER RELIEF

- 161. In particular, and as described above, Google's unlawful practices, in violation of the Arizona Consumer Fraud Act, include the following:
 - a. Engaging in deceptive and unfair acts and practices by making the deceptive misrepresentation and false promise that "[w]ith Location History off, the places you go are no longer stored," when in fact Google continued to collect and store user location information even with Location History turned off.
 - b. Concealing, suppressing, or omitting the material fact that Google continued to collect and store user location information even with Location History turned off.
 - c. Concealing, suppressing, or omitting during account creation the material fact that location information was collected through Web & App Activity—which defaulted to "on."
 - d. Engaging in deceptive and unfair acts and practices by making the deceptive misrepresentation and false promise that users "can turn [their] Android device's location on or off using the device's settings app" despite the fact that

e. Concealing, suppressing, or omitting the material fact that

f. Engaging in deceptive and unfair acts and practices by

g. Concealing, suppressing, or omitting the material fact that

h. Engaging in deceptive and unfair acts and practices by knowingly maintaining a misleading and diverse array of settings related to location tracking that makes it difficult if not impossible to understand the conditions in which Google will collect location data.

i.	Concealing, suppressing	, or omitting the material	facts about the	conditions	in which
	Google will collect locat	ion data.			

- k. Concealing, suppressing, or omitting the material fact that location settings were on.
- Engaging in deceptive and unfair acts and practices by failing to disclose that Google
 apps that have been denied permission to access location data can still obtain that data
 from other Google apps that have been granted permission.
- m. Concealing, suppressing, or omitting the material fact that Google apps that have been denied permission to access location data can still obtain that data from other Google apps that have been granted permission.
- n. Engaging in deceptive and unfair acts and practices by knowingly maintaining a confusing and misleading presentation of the WiFi scanning and WiFi connectivity settings that
- o. Concealing, suppressing, or omitting the material fact that
- p. Engaging in deceptive and unfair acts and practices by continuing to present location-based advertisements to users even after they have opted out of ad personalization, and maintaining two separate settings relating to location-based advertising that users find confusing, to the extent that they are even aware of them at all.
- q. Concealing, suppressing, or omitting the material fact that Google would continue to collect and store users' location information unless they disabled two separate settings relating to location-based advertising, and that even with both settings disabled Google would still use user location data to target ads.

- r. Engaging in deceptive and unfair acts and practices by misleading users into believing that Google immediately deletes their location-related data when, in reality, Google keeps the data long afterwards.
- s. Concealing, suppressing, or omitting the material fact that Google did not immediately delete location-related data, and in reality, kept the data long afterwards.
- 162. With respect to its concealment, suppression, and omission of material facts described above, Google intends that users rely on the concealment, suppression, or omission.
- 163. Consumers in Arizona have in fact been the subject of deception, deceptive/unfair acts/practices, false pretense and promises, misrepresentations, and concealment, suppression, or omission of material facts described above.
- 164. Google's purpose in engaging in these unlawful practices is simple: increasing revenue and profit. Google generates over one hundred billion dollars of revenue and tens of billions of dollars of profit every year from advertising, including, on information and belief, hundreds of millions of dollars from ads shown to users in Arizona. These advertising profits are driven in large part by Google's ability to collect and store its users' location data, which enables Google to sell advertisers on the ability to target ads to users in particular locations. It also enables Google to track "conversions" of ad clicks to store visits. Google therefore goes to great lengths to collect location information from its users, including by engaging in the unlawful activities alleged in this Complaint. Those unlawful activities were done in connection with the sale or advertisement of merchandise within the meaning of A.R.S. § 44-1522(A).
- 165. While engaging in the unlawful acts and practices alleged in this Complaint, Google has at all times acted "willfully" as defined by A.R.S. § 44-1531: Google knew or should have known that its conduct was of the nature prohibited by the Arizona Consumer Fraud Act.
- 166. Google's violations present a continuing harm and the unlawful acts and practices complained of here affect the public interest.
- 167. Google's actions to date have failed to fully address the misleading and deceptive nature of its business activities and the company continues to engage in acts prohibited by the Arizona Consumer Fraud Act.

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PRAYER FOR RELIEF

WHEREFORE, Arizona respectfully requests that the Court enter Judgment against Google as follows:

- A. Order Google to disgorge all profits, gains, gross receipts, and other benefits obtained by means of any unlawful practice as alleged herein, pursuant to A.R.S. §44-1528(A)(3);
 - B. Order Google to pay full restitution to consumers, pursuant to A.R.S. §44-1528(A)(2);
- C. Order Google to pay Arizona a civil penalty of not more than \$10,000 for each willful violation of the Arizona Consumer Fraud Act, pursuant to A.R.S. § 44-1531;
- D. Enter an injunction against Google, permanently prohibiting it from continuing the unlawful acts and practices alleged in this Complaint or doing any acts in furtherance of such unlawful acts of practices, pursuant to A.R.S. § 44-1528(A)(1);
- E. Order Google to pay Arizona its costs of investigation and prosecution of this matter, including its reasonable attorneys' fees, pursuant to A.R.S. § 44-1534; and
- F. Award Arizona such further relief as the Court deems just and proper under the circumstances.

Dated: May 27, 2020

By: /s/ Brunn W. Roysden III

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