Questions for the Record from the Honorable David N. Cicilline, Chairman, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary

Questions for Mr. Adam Cohen, Director of Economic Policy, Google LLC

- 1. Please identify the average number of daily search queries submitted in the U.S. to Google Search for each quarter since 2004, broken down by:
 - a. Number of queries submitted on desktop; and
 - b. Number of queries submitted on mobile.
- 2. Please identify the average number of daily search queries submitted globally to Google Search for each quarter since 2004, broken down by:
 - a. Number of queries submitted on desktop; and
 - b. Number of queries submitted on mobile.
- 3. Please identify the percentage of search queries per year since 2004 that have terminated on Google's search engine results page (SERP).
- 4. Please identify the percentage of search queries per year since 2004 that have terminated on a page with a Google domain (including on Google's SERP).
- 5. Please identify the percentage of search queries per year since 2004 that have resulted in a click-through to a non-Google domain.
- 6. For each year since 2004, please identify the percentage of clicks on Google's search engine results page that have been directed to:
 - a. A non-Google domain; and
 - b. A Google-owned domain.
- 7. Please describe how Google currently measures the quantity of traffic it refers to other websites through paid results and organic results.
- 8. Does Google set targets for search metrics? If yes, please identify all targets and describe Google's reason or method for setting each target.
- 9. Please describe Google's current policy on copying or scraping content from third parties.
- 10. Please identify which, if any, third parties have expressly permitted Google to copy or scrape their content, including the form and substance of the communications.

- 11. Please describe the steps third parties can take to prevent Google from copying or scraping their content.
- 12. Please explain how Google's algorithm takes into account whether a third party has allowed or disallowed Google from scraping its content.
- 13. Has Google ever represented to any third party that it would remove the third party's listing or content from its general web search results unless the third party permitted Google to copy or scrape their content? If yes, please describe the relevant circumstances.
- 14. For each of the past five years, please identify the percentage of clicks on Google's search engine results page that consist of news articles.
- 15. For each of the past five years, please identify the percentage of clicks on "Trending Queries" that consist of news content.
- 16. For each of the past five years, please identify the percentage of clicks on high-volume queries in Google Search that consist of news content.
- 17. For each of the past five years, please identify the value of news articles crawled on Google Search, including but not limited to any value derived for:
 - a. Drawing traffic to Google Search;
 - b. Improving search results on Google Search;
 - c. Collecting data for Google Ads;
 - d. Collecting data for Google Home; and
 - e. Collecting data for any machine learning projects.
- 18. For each of the past five years, please identify the percentage of video search results on Google that consist of YouTube results.
- 19. For each of the past five years, please identify the percentage of video search traffic on Google that terminates on YouTube.
- 20. Since 2014, Google has stopped allowing video providers such as Vimeo, Wistia, and others to be embedded on Google web pages and displayed in Google's video results.
 - a. Why did Google institute this change?
 - b. Please describe the effects of this change.
- 21. Does Google plan to continue favoring YouTube in this manner for the foreseeable future?
- 22. Why is Google review content excluded from the organic index?

- 23. In Google's view, is it economically feasible to develop a competitive search engine without either (a) creating a comprehensive and up-to-date index of websites; or (b) entering into an arrangement with a search syndicator? Please explain why or why not.
- 24. Does Google obtain, or seek to obtain, any data related to, or associated with, individual search queries from search syndication partners? If yes, please identify the types of data and describe the relevant circumstances.
- 25. Does Google require, or has it ever required, search syndication partners to share any type of data with Google as a condition of using Google's syndication services?
 - a. If yes, please identify what types of data Google requires search syndication partners to share with Google.
 - b. If yes, please explain why Google requires search syndication partners to share this data.
 - c. If yes, please describe how Google uses this data.
- 26. Does Google offer differential terms to search syndication partners based on whether they do or do not share user data with Google? If yes, please describe them and explain the reasons for each differential term.
- 27. Please identify and describe any conditions that Google imposes, or seeks to impose, on downstream providers who provide users with ad-blocker or tracker-blocker functionality. Please explain how these conditions vary across platforms or devices, such as desktop, mobile, apps, extensions, and browsers.
- 28. Does Google ever require downstream providers to allow ads and/or trackers embedded in ads to pass through ad- or tracker-blocker filters? If yes, please explain why Google requires this and describe the relevant circumstances.
- 29. Please describe the types of algorithms that Google offers or markets to downstream providers as part of its search syndication services.
- 30. Does Google allow downstream providers to purchase an algorithm feed on commercially reasonable terms without requiring an accompanying ad feed?
- 31. Does Google impose any kind of exclusivity provisions in its agreements with search syndication partners? If yes, please describe each type of exclusivity provision and explain why Google requires it.

- 32. Are there any categories of vertical search feeds (e.g., images, news, video) that Google does not make available for syndication? If yes, please identify each category and explain why it is not made available.
- 33. Does Google require search syndication partners to include any additional product or service components? If yes, please identify each required product or service and explain why it is required.
- 34. Does Google specify any product design features that its search syndication partners must adopt (e.g., minimum number of ads per results page, notice-screens, default settings). If yes, please identify each required feature and explain why it is required.
- 35. Does Google constrain search syndication partners from blocking, moving, labeling, or re-ordering advertisements? If yes, please describe each type of constraint and explain all the reasons each constraint is imposed.
- 36. How does Google determine which developers are permitted to use Widevine?
- 37. What factors determine whether Google's services (e.g., Google Docs, Gmail, YouTube) work as well on non-Google browsers as they do on Chrome? Please identify each factor that does or could account for any difference in functionality and explain the basis for including each factor.
- 38. What steps does Google take to ensure that Google's services work as well on rival browsers as they do on Chrome?
- 39. When Google updates Google's services, what processes does Google have in place to inform non-Google browsers of those changes?
- 40. In September 2018, Google modified Chrome so that users who log into any Google service (e.g., Gmail) would automatically be signed into Chrome, subjecting users to greater tracking by Google. Does Google permit users to sign into Google services while using Chrome without also being signed into Chrome? If yes, please describe all the steps a user would need to take in order to prevent Google from signing the user into Chrome every time the user signs into a separate Google service. If no, please explain why.
- 41. If a user visits, using a non-Google browser, a website that uses Google Analytics, will the website be slower to load than if the user had accessed the same website through Chrome? If yes, please describe the average length of delay and the source of the delay.
- 42. Does Google use Google Analytics to disadvantage non-Google web browsers? If yes, please describe the relevant circumstances and explain why Google engages in this conduct.

- 43. If a user visits, using a non-Google browser that blocks Google Analytics, a website that uses Google Analytics, will the website be slower to load than if the user accesses the same website through a browser that does not block Google Analytics? If yes, please describe the average length of delay and the source of the delay.
- 44. Does Google in any way limit the ability of users to install third-party extensions that affect how websites display and operate on Chrome and Chromium? If yes, please describe each limitation and explain all the reasons why each is imposed.
- 45. Has Google made, or does Google plan to make, any changes that will impede the ability of ad-blocking extensions to reliably detect ads? If yes, please describe each change and explain all the reasons Google has made, or plans to make, each change.
- 46. Has Google made, or does Google plan to make, any changes to Chromium that will require non-Google web browsers to invest resources to restore previous levels of functionality? If yes, please describe each change and explain all the reasons Google has made, or plans to make, each change.
- 47. Please identify all of the ways that Google Search differentiates its treatment of publishers based on whether the publisher has or has not adopted Google's Accelerated Mobile Pages (AMP) and explain all the reasons for treating them differently.
- 48. When a user clicks on content that has adopted AMP, why does Google display that third-party content through a Google URL?
- 49. Does Google Search privilege publishers who use AMP over publishers that adopt non-Google technical solutions that would also guarantee fast-loading pages? If yes, please describe the relevant circumstances and explain all the reasons why Google engages in this preferential treatment.
- 50. For each of the past five years, what percentage of searches on Google are "location searches" that return a Google OneBox containing location information for an establishment?
- 51. How does Google determine which establishments are highlighted in Google Maps?
- 52. For each year since 2014, what percentage of mobile apps with map functionality have used the Google Maps Platform?
- 53. Please identify any conditions that Google imposes on app developers who use Google Maps Platform functionality in their apps.

- 54. Please identify all of the ways that Google limits the ability of app developers who use the Google Maps Platform to also use non-Google mapping services and explain all the reasons for each limitation.
- 55. Is the placement a business receives in Google Maps at all affected by whether that business purchases ads through Google? If yes, describe the relevant circumstances and explain why Google engages in this conduct.
- 56. Does Google permit non-Google mapping services to appear in map results in local search boxes? If no, please explain all the reasons why.
- 57. Does Google require users or developers to utilize any part of the Google Maps Platform as a condition for using any other Google service? If yes, please identify each requirement and explain all the reasons for each requirement.
- 58. Does Google require users or developers to utilize another Google service as a condition for using the Google Maps Platform? If yes, please identify each requirement and explain all the reasons for each requirement.
- 59. What types of data does Google collect from apps that use the Google Maps Platform? Please identify each type of data and explain how each is used.
- 60. Does Google use any data collected from apps using Google Maps for Google's advertising business? If yes, please identify each type of data and explain how each is used.
- 61. Please identify all the factors that Google uses to determine when to allow or disallow non-Google properties to be listed in Google results across all of Google's products. For example, a hotel will not appear in Google Hotels unless that hotel is part of the Google Hotels program, but news stories will appear in Google News regardless of any affiliation with Google. Please explain what accounts for this and similar differences in how Google treats Google and non-Google properties.
- 62. Please describe the Google My Business (GMB) program.
- 63. Please identify and describe each level of the digital ad tech supply chain.
- 64. Please identify and describe each step of the digital ad tech supply chain where ad spend is debited.
- 65. Assuming that an advertiser chooses to use Google's ad tech at each step of the supply chain, please identify the average amount that would be debited at each step, assuming \$100 in ad spend.
- 66. Please identify the number of impressions generated by Google in the U.S. for each of the past five years for each of the following:

- a. AdSense for display on Google Network members;
- b. AdX for display on Google Network members (broken down between Open Auction, Private Auctions, and Preferred Deals);
- c. DoubleClick For Publishers (DFP) (now rebranded as Google Ad Manager);
- d. DV360 for display on Google Network members; and
- e. Google Ads for display on Google Network members.
- 67. Please identify the annual revenue generated by Google in the U.S. for each of the past five years for each of the following:
 - a. AdSense for display on Google Network members;
 - b. AdX for display on Google Network members (broken down between Open Auction, Private Auctions, and Preferred Deals);
 - c. DFP:
 - d. DV360 for display on Google Network members; and
 - e. Google Ads for display on Google Network members.
- 68. For each of the past five years, please identify the number of publishers in the U.S. that used DFP.
- 69. For each of the past five years, please identify the number of impressions served by DFP for publishers in the U.S.
- 70. For each of the past five years, please identify the revenues paid to Google Network members.
- 71. For each of the past five years, please identify the revenues paid to Google Network members, broken down by source, including but not limited to the following sources:
 - a. Direct sales to advertisers;
 - b. Non-Google ad tech buyers;
 - c. Google Ads; and
 - d. Display and Video 360.
- 72. For each of the past five years, please identify the percentage of ad revenue generated by Google ad services that was retained by:
 - a. Publishers participating in AdSense; and
 - b. Publishers participating in AdX.
- 73. Please identify any fees or other deductions that Google subtracts from the amounts paid by advertisers before calculating publishers' revenue and explain all the reasons for each fee or deduction.

- 74. For each of the past five years, identify the percentage of impressions traded on AdX that are:
 - a. Sold to Google Ads; and
 - b. Sold to DV360 users.
- 75. Please identify all the types of data that Google provide to publishers who participate in Google Ads.
- 76. Does Google provide publishers with log-level data on prices paid by advertisers? If no, please explain all the reasons why.
- 77. Does Google give advertisers the opportunity to share log-level data with publishers? If no, please explain all the reasons why.
- 78. Please describe how Google Ads converts the winning cost-per-click (CPC)-based bid into a cost-per-mille (CPM)-based bid in AdX.
- 79. Please identify whether the CPC-to-CPM conversion is informed by Google Ad Manager historic data or real-time data and explain why.
- 80. Please describe how Google calculates the click-through-rate (CTR) of an ad.
- 81. Google states that AdX may, "at its discretion," make adjustments to the bid submitted by the buyer "for the purpose of optimizing the auction." Please describe how Google exercises this discretion.
- 82. Please identify what duties Google Ads has towards publishers when Google engages in brokerage and trading activities in the marketplace for digital ads.
- 83. Please identify what duties Google Ads has towards advertisers when Google engages in brokerage and trading activities in the marketplace for digital ads.
- 84. Please identify and describe any contractual limitations or legal requirements that prevent Google Ads from buying ads for the minimum amount possible and selling them for the maximum amount possible.
- 85. Are Google Search ad inventories available to advertisers that do not participate in Google Ads? If no, please explain why.

¹ *Training Guide: Authorized Buyers auction model*, GOOGLE, https://support.google.com/authorizedbuyers/answer/6077702?hl=en.

- 86. Has Google ever threatened to remove a producer's video content from YouTube if the producer did not permit YouTube to sell ads on the producer's video? If yes, please describe the relevant circumstances.
- 87. Is the YouTube ad inventory available to advertisers that do not participate in DV360? If no, please explain why.
- 88. Does Google Ads ever purchase third-party ad inventory through non-Google platforms? If yes, please describe the relevant circumstances.
- 89. Please identify if and describe how the level of interoperability between AdX and Google Ads differs from the level of interoperability between AdX and non-Google demand-side platforms.
- 90. Please identify if and describe how the level of interoperability between AdX and DV360 differs from the level of interoperability between AdX and non-Google demand-side platforms.
- 91. Please describe how Google Ads allocates bids from "Display Network only" and "Search Network with Display Select" campaigns between Google's display inventory and third-party inventory.
- 92. Please describe how Google Ads allocates bids between AdSense inventory and AdX inventory.
- 93. Please explain all the reasons why Google switched to a unified price auction.
- 94. Please explain how the switch to a unified price auction has affected Google's business, including but not limited to how the switch to a unified price auction has affected AdX and/or any other platform for real-time bidding.
- 95. Does AdX provide access to real-time bids to non-Google ad servers? If no, please explain why.
- 96. Does AdX participate in header-bidding? Please explain why or why not.
- 97. Please identify all types of data that Google collects on users who visit websites that use Google Ad Manager.
- 98. Please describe how Google uses any user data that it collects through Google Ad Manager including but not limited to identifying whether any of this data is used by Google Ads.

- 99. Please indicate whether Google has the ability to collect user data and/or use first-party identifiers on non-Google websites after users opt to remove the use of third-party cookies on:
 - a. Safari 12; or
 - b. Chrome.
- 100. When Google purchased DoubleClick in 2007, Sergey Brin stated that privacy would be Google's "number one priority when we contemplate new kinds of advertising products." Yet in 2016, Google began combining DoubleClick cookie information with personally identifiable information collected through Gmail and other tools. How does Google reconcile Mr. Brin's claimed support for privacy with Google's decision to combine forms of data in ways that undermine user privacy?
- 101. Please describe how Google's decision to combine DoubleClick cookie information with personally identifiable information has affected Google's business, including but not limited to its effects on any changes in Google's ad revenue.
- 102. Please identify what specific steps a user can take to prevent Google from combining the user's DoubleClick data from the user's personally identifiable information. Please identify the exact number of clicks that a user must make in order to achieve this setting.
- 103. Please share all findings and reports issued by the Media Ratings Council about Google's products since 2017.
- 104. What is the prevalence of ad fraud in digital advertising markets?
- 105. What specific steps does Google take to detect ad fraud?
- 106. What specific steps does Google take to prevent ad fraud?
- 107. In what instances does Google inform advertisers that their ad spend has been affected by ad fraud? Please describe the relevant circumstances.
- 108. What processes does Google have in place to provide refunds to advertisers affected by ad fraud through Google?
- 109. Please identify the non-Alphabet services that advertisers can use to:
 - a. Assess the success of their ad campaigns on Google; and
 - b. Identify ad fraud on Google.

- 110. Please identify the specific steps that an advertiser can take to report suspected ad fraud to Google.
- 111. Does Google permit non-Google companies that provide competing ad servers, ad networks, or demand-side platforms to place ads on YouTube? Please explain why or why not.
- 112. Does Google permit non-Google companies that provide competing ad servers, ad networks, or demand-side platforms to participate in Google's ad auctions? Please explain why or why not.
- 113. In the sale of its ad services, does Google offer different terms or services to companies that compete with Google's servers, ad networks, or demand-side platforms and those that do not? If yes, please describe the relevant circumstances.
- 114. In the sale of its ad services, does Google offer differential terms of services to companies that exclusively use Google's ad services and companies that use both Google and non-Google ad services? If yes, please describe the relevant circumstances.
- 115. What types of data does Google provide to companies participating in Google ads? If Google's provision of data varies by type of market participant, please identify and explain any differences.
- 116. Please provide a complete list of Alphabet products, features, and services that collect personally identifiable data.
- 117. Please describe how Alphabet handles a user's data after that user has deleted its Alphabet account including but not limited to identifying whether Alphabet deletes the user's data or retains its data in any identifiable or de-associated form.
- 118. Please indicate whether Alphabet is able to link user data anonymized by Google to a user's device or account.
- 119. Does Google permit Android users to download apps from the Google Play Store without using a Gmail or other Google-based account? If Google requires Android users to have a Gmail or any other Google-based account in order to download apps from the Play Store, please explain why.
- 120. Please provide a complete list of user data that Android collects.
- 121. Please provide a complete list of user data that Android collects when an Android user has turned off all location-tracking on the Android device.

- 122. Does Alphabet track a user through the user's IP address, even if that user has turned off all location-tracking on the Android device?
- 123. What types of Android-collected user data does Google use for advertising purposes?
- 124. For each of the past five years, please identify, to the nearest terabyte, the average amount of data that Google collects from Android devices in the U.S. (excluding photo and video data actively submitted by Android users).
- 125. Has Alphabet entered any agreements with original equipment manufacturers (OEMs) that provide Google exclusive rights to collect data from the OEM's devices? If yes, please identify the OEMs with which Google has any such agreement and describe the relevant provisions.
- 126. Does Google restrict any OEMs from receiving, storing, or monetizing consumer data collected by the OEM's devices as a condition of using Android or having Google Play services on the device? If yes, please describe these restrictions and all the reasons why Google imposes them.
- 127. Please provide a full list of the apps that Google has suspended from the Google Play Store over the past five years and all the reasons for each suspension.
- 128. Please identify which of these suspended apps, if any, competed with Google's own app or service offerings.
- 129. Please describe Google's level of access to the user data provided by a user to a non-Google app.
- 130. Please describe all steps that Google takes when it suspects that a developer is in violation of the Google Play Store policies, including whether Google communicates the specific policy violation to the developer.
- 131. Please identify the minimum level of information that a Google employee is required to share with an app developer when communicating that the developer's app has been suspended from the Google Play Store.
- 132. If Google suspends an app without detailing the precise basis for the suspension, how does Google expect the app to remedy the violation and bring itself in compliance with Google's policies?
- 133. Does Google give apps an opportunity to address alleged violations of Google Play Store policies before Google suspends the app from the Google Play Store?

- 134. What appeal processes does Google have in place for app developers who believe their apps have been wrongly suspended from the Play Store?
- 135. Has Google ever represented to app developers that their AdMob account manager can help them resolve any issues developers are having with Play Store suspensions? If yes, please describe the relevant circumstances.
- 136. Does the Google Play Store differentiate its treatment of non-Google apps based on whether an app has chosen to integrate with adjacent Google product offerings? If yes, please describe the relevant circumstances.
- 137. How does Google determine which categories of apps are required to use Google's inapp payment or purchasing services?
- 138. Over the last five years, has Google changed its method for determining which apps must use Google's in-app payment or purchasing services? If yes, please describe each of these changes and all the reasons for each change.
- 139. Please identify how much it costs Google to produce a Google Home device.
- 140. Please identify what types of data Google collects through its Google Home products and explain how each type of data is used.
- 141. Does Google allow developers to make a skill available through and/or compatible with Google Home without sharing user skill data with Google? Please explain why or why not.
- 142. Please identify which categories or teams of Alphabet employees have access to data or information that Google collects through Google Home products, specify the types of data to which each has access, and describe where in Alphabet's organization chart the teams or employees are located.
- 143. Google Home can offer local search solutions. How does Google determine which local service is returned to the consumer?
- 144. Has Google entered any marketing deals or arrangements with merchants to guarantee those merchants referrals through Google Home? If yes, identify and describe these deals or arrangements.
- 145. Has Google ever demanded, as a condition for entering into a business partnership with another company, access to any data collected by that company, including the company's own proprietary data? If yes, please describe the relevant circumstances.

- 146. Has Google ever used information gathered as a result of a business partnership with another company to guide its product strategy? If yes, has Google ever used this information to introduce Google products that directly compete with the business partner's product?
- 147. Has Google ever threatened to remove a company from Google Search due to a business dispute with that company in one of Google's other areas of business?
- 148. Does Google include or has it ever included in any contract with business partners a waiver of some or all intellectual property rights whereby a business partner agrees not to bring some or all intellectual property infringement claims with regard to a Google product or service? If yes, please describe the relevant circumstances.
- 149. Does Google include or has it ever included in any contract with business partners a termination clause maintaining the right to end a business partnership if the business partner asserts any intellectual property infringement claims against Google? If yes, please describe the relevant circumstances.
- 150. Does Google include or has it ever included in any contract with business partners a waiver of some or all antitrust claims whereby a business partner agrees not to bring some or all antitrust claims with regards to Google's conduct? If yes, please describe the relevant circumstances.
- 151. Please describe how Google's algorithm determines the tab in which a sender's email is slotted in Gmail.
- 152. Please identify the primary factors that impact a mass sender's e-mail open rates, where a "mass-sender" is defined as an entity that regularly sends e-mails to more than 50,000 users.
- 153. How do open rates vary based on the type of Gmail tab that is assigned to an e-mail? Please identify the average open rates for e-mails in 2018, broken down by the tab that Google assigned to the e-mail.
- 154. If a sender's e-mails are consistently delivered to the "Primary" inbox tab, but—pursuant to an algorithmic change—are later shifted to the "Promotions" tab, how would this change affect the rate at which the sender's e-mails are opened?
- 155. If the Gmail algorithm is changed such that a given sender's e-mails will be delivered into a new tab, does Google inform the sender of this change before or after implementing it? Please describe any processes in place to alert e-mail senders of this type of change.
- 156. When and why did Google implement the e-mail tab structure?

- 157. Please describe how Google's ad revenues on a per-email basis compare one year before and one year after the tab structure was implemented.
- 158. How does Google advise organizations who seek to change the tab in which their emails are slotted?
- 159. Has Google ever recommended that organizations seeking to change their tab designation purchase ads in order to achieve higher open rates? If yes, please describe the relevant circumstances.
- 160. Please identify what types of data Google collects through Google Cloud and explain how each type of data is used.
- 161. Please identify all types of information Google tracks on a Google Cloud user or customer that are not made available to the Google Cloud user or customer.
- 162. Has Google ever used a Google Cloud customer's usage patterns or any other Google Cloud data to inform Google's investment decisions? If yes, please describe the relevant circumstances.
- 163. Has Google ever used aggregate forms of Google Cloud usage data to inform Google's investment decisions? If yes, please describe the relevant circumstances.
- 164. Has Google ever used a Google Cloud customer's usage patterns or any other Google Cloud data growth to inform Google's product strategy? If yes, please describe the relevant circumstances.
- 165. Has Google ever used aggregate forms of Google Cloud usage data to inform Google's product strategy? If yes, please describe the relevant circumstances.
- 166. Google has publicly announced that it intends to implement DNS over HTTPS (DoH) as the default setting in its Chrome browser. Please explain the effects that implementing DoH will have on domain name traffic.
- 167. Does Google plan to implement DoH as the default option in the Android operating system? If yes, what effect will implementing DoH by default in the Android operating system have on Google's ability to collect data on Android customers' web browsing habits and app usage?
- 168. Does Google have any plans to use data collected or processed through DoH for commercial purposes?

- a. If yes, please provide a description of each plan, including the expected timing and benefits.
- b. If no, please indicate whether Google has considered any such plans and why it rejected them.
- 169. Will Google's plan to implement DoH prevent non-Google firms from either accessing data they previously had access to or policing harmful network activity? If yes, please identify all the types of data non-Google firms will no longer be able to access.
- 170. In partnership with Mozilla, Cloudflare has agreed to collect a minimal amount of information about DNS requests and has agreed to delete that information within twenty-four hours of Cloudflare's receipt. It also has made a commitment not to "retain or sell or transfer to any third party (except as may be required by law) any personal information, IP addresses or other user identifiers from the DNS queries." Has Google agreed to these commitments?
 - a. If yes, please provide a copy of these commitments.
 - b. If no, please explain why not.
 - c. If no, please indicate whether Google has any plans to monetize information collected or processed through DoH and provide a description of any such plans, including the expected timing and benefits.
- 171. Please identify which categories or teams of Alphabet employees have access to data or information that Google collects through Google Cloud, specify the types of data and information to which each has access, and describe where in Alphabet's organization chart the teams or employees are located.
- 172. Please identify the percentage of Google users that are subject to a mandatory arbitration clause and/or class action waiver in their agreement with Google, describe the relevant provisions, and identify any types or categories of Google user contracts that do not contain a mandatory arbitration clause and/or class action waiver.
- 173. Since 2014, how many Google users have initiated arbitration proceedings to adjudicate a legal claim against Google, in total and broken down by type of legal claim?
- 174. Please identify the percentage of Google employees that are subject to a mandatory arbitration clause and/or class action waiver in their agreement with Google, describe the relevant provisions, and identify any types or categories of Google employee contracts do not contain a mandatory arbitration clause and/or class action waiver.
- 175. Since 2014, how many current or former Google employees have initiated arbitration proceedings to adjudicate a legal claim against Google, in total and broken down by type of legal claim?

- 176. Please identify the percentage of Google contractors that are subject to a mandatory arbitration clause and/or class action waiver in their agreement with Google, describe the relevant provisions, and identify any types or categories of Google contractor contracts that do not contain a mandatory arbitration clause and/or class action waiver.
- 177. Since 2014, how many current or former Google contractors have initiated arbitration proceedings to adjudicate a legal claim against Google, in total and broken down by type of legal claim?
- 178. Please identify the percentage of Google business partners that are subject to a mandatory arbitration clause and/or class action waiver in their agreement with Google, describe the relevant provisions, and identify any types or categories of Google's contracts with business partners that do not contain a mandatory arbitration clause and/or class action waiver.
- 179. Since 2014, how many current or former Google business partners have initiated arbitration proceedings to adjudicate a legal claim against Google, in total and broken down by type of legal claim?
- 180. Please identify the percentage of Google employees and contractors that are subject to a non-compete clause in their agreement with Google, describe the relevant provisions, and identify any types or categories of Google employees and contractors that are not subject to a non-compete clause.
- 181. Since 2014, how many former Google employees and contractors has Google sued or initiated arbitration proceedings against in connection with an alleged breach of a non-compete clause? Please break down this number by type of legal relationship (e.g., employee or contractor) and describe the relevant circumstances that gave rise to each suit or arbitration.

Instructions for Responding to Questions for the Record from the Honorable David N. Cicilline, Chairman, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary

- Provide a wholly contained answer to each question. A question's answer should not cross-reference answers provided in other questions or previous submissions to the Committee.
- 2. Provide answers to each question in a machine-readable and searchable format. For example, data should be produced in an Excel spreadsheet.
- 3. If a question asks for a yes or no answer, provide a yes or no answer first and then provide any subsequent explanation.
- 4. If a question asks for a choice between two options, state which of the options applies or that neither applies, followed by any subsequent explanation.
- 5. Any word or term that the Company considers vague or insufficiently defined has the meaning most frequently assigned to it by the Company in the ordinary course of business.
- 6. If you disagree with the premise of how a question is phrased or structured, respond to the question as written and then articulate both the premise with which you disagree and the basis for that disagreement.
- 7. To the extent that an answer depends on an ambiguity in the question asked, please state the ambiguity you perceive in the question and provide multiple answers that articulate each possible reasonable interpretation of the question in light of the ambiguity.
- 8. If it is impossible to answer a question without divulging confidential or privileged information, please clearly state the basis for confidentiality or privilege invoked and provide as extensive an answer as possible without breaching that confidentiality or privilege. For questions calling for answers requiring confidential information, please provide a complete answer in a sealed, confidential form. These materials will be kept confidential until further notice. For questions calling for privileged information, please describe the privileged relationship and identify the privileged documents or materials that, if disclosed, would fully answer the question.
- 9. In responding to each question, be aware that (unless otherwise determined by the Committee) the Committee does not recognize: any purported non-disclosure privileges associated with the common law including but not limited to the deliberative-process privilege, the attorney-client privilege, and attorney work product protections; any purported privileges or protections from disclosure under the Freedom of Information Act; or any purported contractual privileges, such as non-disclosure agreements.