UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2017
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____.

Commission file number: **001-37580**

Alphabet Inc.
(Exact name of registrant as specified in its charter)

Delaware	**61-1767919**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1600 Amphitheatre Parkway
Mountain View, CA 94043
(Address of principal executive offices) (Zip Code)

(650) 253-0000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Class A Common Stock, $0.001 par value	**Nasdaq Stock Market LLC (Nasdaq Global Select Market)**
Class C Capital Stock, $0.001 par value	**Nasdaq Stock Market LLC (Nasdaq Global Select Market)**

Securities registered pursuant to Section 12(g) of the Act:

Title of each class
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer (Do not check if a smaller reporting company)	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of June 30, 2017, the aggregate market value of shares held by non-affiliates of the registrant (based upon the closing sale prices of such shares on the Nasdaq Global Select Market on June 30, 2017) was approximately $554.3 billion. For purposes of calculating the aggregate market value of shares held by non-affiliates, we have assumed that all outstanding shares are held by non-affiliates, except for shares held by each of our executive officers, directors and 5% or greater stockholders. In the case of 5% or greater stockholders, we have not deemed such stockholders to be affiliates unless there are facts and circumstances which would indicate that such stockholders exercise any control over our company, or unless they hold 10% or more of our outstanding common stock. These assumptions should not be deemed to constitute an admission that all executive officers, directors and 5% or greater stockholders are, in fact, affiliates of our company, or that there are not other persons who may be deemed to be affiliates of our company. Further information concerning shareholdings of our officers, directors and principal stockholders is included or incorporated by reference in Part III, Item 12 of this Annual Report on Form 10-K.

As of January 31, 2018, there were 298,492,525 shares of the registrant's Class A common stock outstanding, 46,961,288 shares of the registrant's Class B common stock outstanding, and 349,843,717 shares of the registrant's Class C capital stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the 2018 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2017.

Alphabet Inc.
Form 10-K
For the Fiscal Year Ended December 31, 2017

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NOTE ABOUT FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include, among other things, statements regarding:

- the growth of our business and revenues and our expectations about the factors that influence our success and trends in our business;
- our plans to continue to invest in new businesses, products, services and technologies, systems, facilities, and infrastructure, to continue to hire aggressively and provide competitive compensation programs, as well as to continue to invest in acquisitions;
- seasonal fluctuations in internet usage and advertiser expenditures, underlying business trends such as traditional retail seasonality, and macroeconomic conditions, which are likely to cause fluctuations in our quarterly results;
- our expectation related to our renewable energy efforts;
- the potential for declines in our revenue growth rate;
- our expectation that we will continue to take steps to improve the relevance of the ads we deliver and to reduce the number of accidental clicks;
- fluctuations in the rate of change in revenue and revenue growth, as well as the rate of change in paid clicks and average cost-per-click and various factors contributing to such fluctuations;
- our expectation that our foreign exchange risk management program will not fully offset our net exposure to fluctuations in foreign currency exchange rates;
- the expected variability of costs related to hedging activities under our foreign exchange risk management program;
- our expectation that our cost of revenues, research and development expenses, sales and marketing expenses, and general and administrative expenses will increase in dollars and may increase as a percentage of revenues;
- our potential exposure in connection with pending investigations, proceedings, and other contingencies;
- our expectation that our monetization trends will fluctuate, which could affect our revenues and margins in the future;
- our expectation that our traffic acquisition costs (TAC) and the associated TAC rates will increase in the future;
- our expectation that our results will be impacted by our performance in international markets as users in developing economies increasingly come online;
- our expectation that the portion of our revenues that we derive from non-advertising revenues will continue to increase and may impact margins;
- our expectation that our other income (expense), net, will fluctuate in the future, as it is largely driven by market dynamics;
- estimates of our future compensation expenses;
- fluctuations in our effective tax rate;
- the impact of the U.S. Tax Cuts and Jobs Act (Tax Act);
- the sufficiency of our sources of funding;
- our payment terms to certain advertisers, which may increase our working capital requirements;
- fluctuations in our capital expenditures;
- our expectations related to the operating structure implemented pursuant to the Alphabet holding company reorganization;
- the expected timing and amount of Alphabet Inc.'s share repurchases;

as well as other statements regarding our future operations, financial condition and prospects, and business strategies. Forward-looking statements may appear throughout this report and other documents we file with the Securities and Exchange Commission (SEC), including without limitation, the following sections: Item 1 "Business," Item 1A "Risk Factors," and Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations." Forward-looking statements generally can be identified by words such as "anticipates," "believes," "estimates," "expects," "intends," "plans," "predicts," "projects," "will be," "will continue," "may," "could," "will likely result," and similar expressions. These forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties, which could cause our actual results to differ materially from those reflected in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in this Annual Report on Form 10-K, and in particular, the risks discussed under the caption "Risk Factors" in Item 1A of this report and those discussed in other documents we file with the SEC. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

As used herein, "Alphabet," "the company," "we," "us," "our," and similar terms include Alphabet Inc. and its subsidiaries, unless the context indicates otherwise.

"Alphabet," "Google," and other trademarks of ours appearing in this report are our property. This report contains additional trade names and trademarks of other companies. We do not intend our use or display of other companies' trade names or trademarks to imply an endorsement or sponsorship of us by such companies, or any relationship with any of these companies.

PART I

ITEM 1. BUSINESS

Overview

As our founders Larry and Sergey wrote in the original founders' letter, "Google is not a conventional company. We do not intend to become one." That unconventional spirit has been a driving force throughout our history – inspiring us to do things like rethink the mobile device ecosystem with Android and map the world with Google Maps. As part of that, our founders also explained that you could expect us to make "smaller bets in areas that might seem very speculative or even strange when compared to our current businesses." From the start, the company has always strived to do more, and to do important and meaningful things with the resources we have.

Alphabet is a collection of businesses – the largest of which, of course, is Google. It also includes businesses that are generally pretty far afield of our main Internet products such as Access, Calico, CapitalG, GV, Nest, Verily, Waymo, and X. We report all non-Google businesses collectively as Other Bets. Our Alphabet structure is about helping each of our businesses prosper through strong leaders and independence.

Access and technology for everyone

The Internet is one of the world's most powerful equalizers, capable of propelling new ideas and people forward. At Google, our mission is to make sure that information serves everyone, not just a few. So whether you're a child in a rural village or a professor at an elite university, you can access the same information. We are helping people get online by tailoring digital experiences to the needs of emerging markets. We're also making sure our core Google products are fast and useful, especially for users in areas where speed and connectivity are central concerns.

Other Alphabet companies are also pursuing initiatives with similar goals. For instance, in October 2017, Project Loon within X deployed its network of stratospheric balloons to deliver basic internet connectivity to more than 100,000 people in Puerto Rico following Hurricane Maria.

Moonshots

Many companies get comfortable doing what they have always done, making only incremental changes. This incrementalism leads to irrelevance over time, especially in technology, where change tends to be revolutionary, not evolutionary. People thought we were crazy when we acquired YouTube and Android and when we launched Chrome, but those efforts have matured into major platforms for digital video and mobile devices and a safer, popular browser. We continue to look toward the future and continue to invest for the long-term. As we said in the original founders' letter, we will not shy away from high-risk, high-reward projects that we believe in because they are the key to our long-term success.

The power of machine learning

Across the company, machine learning and artificial intelligence (AI) are increasingly driving many of our latest innovations. Within Google, our investments in machine learning over a decade have enabled us to build products that are smarter and more useful – it's what allows you to use your voice to ask the Google Assistant for information, to translate the web from one language to another, to see better YouTube recommendations, and to search for people and events in Google Photos. Machine learning is also showing great promise in helping us tackle big issues, like dramatically improving the energy efficiency of our data centers. Across Other Bets, machine learning helps self-driving cars better detect and respond to others on the road, and can also improve the ability of clinicians to detect diseases such as diabetic retinopathy.

Google

Serving our users

We have always been a company committed to making big bets that have the potential to improve the lives of millions of people. Our product innovations have made our services widely used, and our brand one of the most recognized in the world. Google's core products and platforms such as Android, Chrome, Gmail, Google Maps, Google Play, Search, and YouTube each have over one billion monthly active users. But most important, we believe we are just beginning to scratch the surface. Our vision is to remain a place of incredible creativity and innovation that uses our technical expertise to tackle big problems. As the majority of Alphabet's big bets continue to reside within Google, an important benefit of the shift to Alphabet has been the tremendous focus that we're able to have on Google's many extraordinary opportunities.

Google's mission to organize the world's information and make it universally accessible and useful has always been our North Star, and our products have come a long way since the company was founded nearly two decades ago. Instead of just showing ten blue links in our search results, we are increasingly able to provide direct answers – even if you're speaking your question using Voice Search – which makes it quicker, easier and more natural to find what you're looking for. You can also type or talk with the Google Assistant in a conversational way across multiple devices like phones, speakers, headphones, televisions and more. And with Google Lens, you can now use your phone's camera to identify an unfamiliar landmark or find a trailer from a movie poster. Over time, we have also added other services that let you access information quickly and easily – like Google Maps, which helps you navigate to a store while showing you current traffic conditions, or Google Photos, which helps you store and organize your photos.

This drive to make information more accessible has led us over the years to improve the discovery and creation of digital content, on the web and through platforms like Google Play and YouTube. And with the migration to mobile, people are consuming more digital content by watching more videos, playing more games, listening to more music, reading more books, and using more apps than ever before. Working with content creators and partners, we continue to build new ways for people around the world to find great digital content.

Fueling all of these great digital experiences are powerful platforms and hardware. That's why we continue to invest in platforms like our Android mobile operating system, Chrome browser, Chrome operating system, and Daydream virtual reality platform, as well as growing our family of great hardware devices. We see tremendous potential for devices to be helpful, make your life easier, and even get better over time, by combining the best of Google's AI, software, and hardware. This is reflected in our latest generation of hardware products like the newest additions to the Google Home family called Mini and Max, Pixel 2 phone, and Pixelbook laptop. Creating beautiful products that people rely on every day is a journey that we are investing in for the long run.

Google was a company built in the cloud and has been investing in infrastructure, security, data management, analytics, and AI from the very beginning. We have continued to enhance these strengths with features like data migration, modern development environments and machine learning tools to provide enterprise-ready cloud services, including Google Cloud Platform and G Suite, to our customers. Google Cloud Platform enables developers to build, test, and deploy applications on Google's highly scalable and reliable infrastructure. Our G Suite productivity tools – which include apps like Gmail, Docs, Drive, Calendar, Hangouts, and more – are designed with real-time collaboration and machine intelligence to help people work smarter. Because more and more of today's great digital experiences are being built in the cloud, our Google Cloud products help businesses of all sizes take advantage of the latest technology advances to operate more efficiently.

How we make money

The goal of our advertising business is to deliver relevant ads at just the right time and to give people useful commercial information, regardless of the device they're using. We also provide advertisers with tools that help them better attribute and measure their advertising campaigns across screens. Our advertising solutions help millions of companies grow their businesses, and we offer a wide range of products across screens and formats. We generate revenues primarily by delivering both performance advertising and brand advertising.

- **Performance advertising** creates and delivers relevant ads that users will click on, leading to direct engagement with advertisers. Most of our performance advertisers pay us when a user engages in their ads. Performance advertising lets our advertisers connect with users while driving measurable results.

  For performance advertisers, AdWords, our primary auction-based advertising program, helps create simple text-based ads that appear on Google properties and the properties of Google Network Members. In addition, Google Network Members use our AdSense program to display relevant ads on their properties, generating revenues when site visitors view or click on the ads. We continue to invest in our advertising programs and make significant upgrades.

- **Brand advertising** helps enhance users' awareness of and affinity with advertisers' products and services, through videos, text, images, and other interactive ads that run across various devices. We help brand advertisers deliver digital videos and other types of ads to specific audiences for their brand-building marketing campaigns.

  We have built a world-class ad technology platform for brand advertisers, agencies, and publishers to power their digital marketing businesses. We aim to ensure great user experiences by serving the right ads at the right time and by building deep partnerships with brands and agencies. We also seek to improve the measurability of brand advertising so advertisers know when their campaigns are effective.

We have allocated substantial resources to stopping bad advertising practices and protecting users on the web. We focus on creating the best advertising experiences for our users and advertisers in many ways, ranging from filtering out invalid traffic, removing hundreds of millions of bad ads from our systems every year to closely monitoring the sites, apps, and videos where ads appear and blacklisting them when necessary to ensure that ads do not fund bad content.

Beyond our advertising business, we also generate revenues in other areas, such as digital content, enterprise cloud services, and hardware.

Other Bets

Throughout Alphabet, we are also using technology to try and solve big problems across many industries. Alphabet's Other Bets are early-stage businesses, and our goal is for them to become thriving, successful businesses in the medium to long term. To do this, we make sure we have a strong CEO to run each company while also rigorously handling capital allocation and working to make sure each business is executing well.

While these early-stage businesses naturally come with considerable uncertainty, some of them are already generating revenue and making important strides in their industries. For instance, Nest recently expanded its connected home product line by introducing the Nest Thermostat E and a new home security solution that includes the Nest Hello video doorbell, Nest Cam IQ outdoor security camera, and the Nest Secure alarm system. Our self-driving car company, Waymo, continues to progress the development and testing of its technology and now has a fleet of vehicles in Phoenix, Arizona, driving without a person behind the wheel. Life sciences company Verily has also made significant progress on key programs, like the launch of its Project Baseline study with Duke University and Stanford Medicine, and received an $800 million investment in 2017 from Temasek to accelerate its strategic programs.

We continue to build these businesses thoughtfully and systematically to capitalize on the opportunities ahead. We are investing for the long term while being very deliberate about the focus, scale and pace of investments. We generate revenues from internet and TV services, licensing and R&D services, and Nest branded hardware.

Competition

Our business is characterized by rapid change as well as new and disruptive technologies. We face formidable competition in every aspect of our business, particularly from companies that seek to connect people with online information and provide them with relevant advertising. We face competition from:

- General purpose search engines and information services, such as Baidu, Microsoft's Bing, Naver, Seznam, Verizon's Yahoo, and Yandex.
- Vertical search engines and e-commerce websites, such as Amazon and eBay (e-commerce), Kayak (travel queries), LinkedIn (job queries), and WebMD (health queries). Some users will navigate directly to such content, websites, and apps rather than go through Google.
- Social networks, such as Facebook, Snap, and Twitter. Some users increasingly rely on social networks for product or service referrals, rather than seeking information through traditional search engines.
- Other forms of advertising, such as billboards, magazines, newspapers, radio, and television. Our advertisers typically advertise in multiple media, both online and offline.
- Other online advertising platforms and networks, including Amazon, AppNexus, Criteo, and Facebook, that compete for advertisers that use AdWords, our primary auction-based advertising platform.
- Providers of digital video services, such as Amazon, Facebook, Hulu, and Netflix.
- Companies that design, manufacture, and market consumer electronics products, including businesses that have developed proprietary platforms.
- Providers of enterprise cloud services, including Alibaba, Amazon, and Microsoft.
- Digital assistant providers, such as Amazon, Apple, and Microsoft.

Competing successfully in our advertising-related businesses depends heavily on our ability to deliver and distribute innovative products and technologies to the marketplace so that we can attract and retain:

- Users, for whom other products and services are literally one click away, primarily on the basis of the relevance and usefulness of our search results and the features, availability, and ease of use of our products and services.
- Advertisers, primarily based on our ability to generate sales leads, and ultimately customers, and to deliver their advertisements in an efficient and effective manner across a variety of distribution channels.

- Content providers, primarily based on the quality of our advertiser base, our ability to help these partners generate revenues from advertising, and the terms of our agreements with them.

Intellectual Property

We rely on various intellectual property laws, confidentiality procedures and contractual provisions to protect our proprietary technology and our brand. We have registered, and applied for the registration of, U.S. and international trademarks, service marks, domain names and copyrights. We have also filed patent applications in the U.S. and foreign countries covering certain of our technology, and acquired patent assets to supplement our portfolio. We have licensed in the past, and expect that we may license in the future, certain of our rights to other parties.

Culture and Employees

We take great pride in our culture. We embrace collaboration and creativity, and encourage the iteration of ideas to address complex technical challenges. Transparency and open dialogue are central to how we work, and we like to ensure that company news reaches our employees first through internal channels.

Despite our rapid growth, we still cherish our roots as a startup and wherever possible empower employees to act on great ideas regardless of their role or function within the company. We strive to hire great employees, with backgrounds and perspectives as diverse as those of our global users. We work to provide an environment where these talented people can have fulfilling careers addressing some of the biggest challenges in technology and society.

Our employees are among our best assets and are critical for our continued success. We expect to continue investing in hiring talented employees and to provide competitive compensation programs to our employees. As of December 31, 2017, we had 80,110 full-time employees. Although we have work councils and statutory employee representation obligations in certain countries, our U.S. employees are not represented by a labor union. Competition for qualified personnel in our industry is intense, particularly for software engineers, computer scientists, and other technical staff.

Seasonality

Our business is affected by seasonal fluctuations in Internet usage, advertising expenditures, and underlying business trends such as traditional retail seasonality.

Other Items

Climate change is one of the most significant global challenges of our time, and we've long been committed to improving our energy consumption. In 2012, we set a goal to reach 100% renewable energy for our operations. While we are still performing final analysis for the year, in 2017, we purchased a total wind and solar capacity of about three gigawatts, which we expect will be enough renewables to match the energy consumption of our global operations.

We continue to invest in our existing products and services as well as developing new products and services through research and product development. We often release early-stage products. We then use data and user feedback to decide if and how to invest further in those products. Research and development expenses include the vast majority of engineering and technical headcount responsible for research and development of our existing and new products and services, as well as their associated costs. For more information, please refer to the Consolidated Statements of Income included in Part II of this Annual Report on Form 10-K.

For information about segments and geographic areas, please refer to Note 15 of the Notes to Consolidated Financial Statements included in Part II of this Annual Report on Form 10-K.

As part of the Alphabet reorganization, we converted Google Inc. into a limited liability company in September 2017.

Available Information

Our website is located at www.abc.xyz, and our investor relations website is located at www.abc.xyz/investor. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and our Proxy Statements are available through our investor relations website, free of charge, after we file them with the SEC. We also provide a link to the section of the SEC's website at www.sec.gov that has all of the reports that we file or furnish with the SEC. You may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. You can get information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

We webcast via our investor relations website our earnings calls and certain events we participate in or host with members of the investment community. Our investor relations website also provides notifications of news or announcements regarding our financial performance, including SEC filings, investor events, press and earnings releases, and blogs. Further corporate governance information, including our certificate of incorporation, bylaws, governance guidelines, board committee charters, and code of conduct, is also available on our investor relations website under the heading "Other." The content of our websites are not incorporated by reference into this Annual Report on Form 10-K or in any other report or document we file with the SEC, and any references to our websites are intended to be inactive textual references only.

ITEM 1A. RISK FACTORS

Our operations and financial results are subject to various risks and uncertainties, including but not limited to those described below, which could adversely affect our business, financial condition, results of operations, cash flows, and the trading price of our common and capital stock.

Risks Related to Our Businesses and Industries

We face intense competition. If we do not continue to innovate and provide products and services that are useful to users, we may not remain competitive, and our revenues and operating results could be adversely affected.

Our businesses are rapidly evolving, intensely competitive, and subject to changing technologies, shifting user needs, and frequent introductions of new products and services. Competing successfully depends heavily on our ability to accurately anticipate technology developments and deliver innovative, relevant and useful products, services, and technologies to the marketplace in a timely manner. As our businesses evolve, the competitive pressure to innovate will encompass a wider range of products and services, including products and services that may be outside of our historical core business. As a result, we must continue to invest significant resources in research and development, including through acquisitions, in order to enhance our technology and our existing products and services, and introduce new products and services that people can easily and effectively use.

We have many competitors in different industries. Our current and potential domestic and international competitors range from large and established companies to emerging start-ups. Some companies have longer operating histories and more established relationships with customers and users. They can use their experiences and resources in ways that could affect our competitive position, including by making acquisitions, continuing to invest heavily in research and development and in hiring talent, aggressively initiating intellectual property claims (whether or not meritorious), and continuing to compete aggressively for users, advertisers, and content providers. Emerging start-ups may be able to innovate and provide products and services faster than we can or may foresee the consumer need for products and services before us.

In addition, new products and services can sometimes present new and difficult technological and legal challenges, which may negatively impact our brands and demand for our products and services and adversely impact our revenues and operating results. Our operating results would also suffer if our innovations are not responsive to the needs of our users, advertisers, and content providers; are not appropriately timed with market opportunities; or are not effectively brought to market. As technologies continue to develop, our competitors may be able to offer user experiences that are, or that are seen to be, substantially similar to or better than ours. This may force us to compete in different ways and expend significant resources in order to remain competitive. If our competitors are more successful than we are in developing compelling products or in attracting and retaining users, advertisers, and content providers, our revenues and operating results could be adversely affected.

We generate substantially all of our revenues from advertising, and reduced spending by advertisers or a loss of partners could harm our advertising business.

We generated over 86% of total revenues from advertising in 2017. Many of our advertisers, companies that distribute our products and services, digital publishers, and content partners can terminate their contracts with us at any time. Those partners may not continue to do business with us if we do not create more value (such as increased numbers of users or customers, new sales leads, increased brand awareness, or more effective monetization) than their available alternatives. If we do not provide superior value or deliver advertisements efficiently and competitively, we could see a decrease in revenue and other adverse impacts to our business. In addition, expenditures by advertisers tend to be cyclical, reflecting overall economic conditions and budgeting and buying patterns. Adverse macroeconomic conditions can also have a material negative impact on user activity and the demand for advertising and cause our advertisers to reduce the amounts they spend on advertising, which could adversely affect our revenues and advertising business.

Our ongoing investment in new businesses and new products, services, and technologies is inherently risky, and could disrupt our current operations.

We have invested and expect to continue to invest in new businesses, products, services, and technologies. The creation of Alphabet as a holding company in 2015 and the investments that we are making across various areas in Google and Other Bets are a reflection of our ongoing efforts to innovate and provide products and services that are useful to users. Such endeavors may involve significant risks and uncertainties, including insufficient revenues from such investments to offset any new liabilities assumed and expenses associated with these new investments, inadequate return of capital on our investments, distraction of management from current operations, use of alternative investment or compensation structures, and unidentified issues not discovered in our due diligence of such strategies and offerings that could cause us to fail to realize the anticipated benefits of such investments and incur unanticipated liabilities. Because these new ventures are inherently risky, no assurance can be given that such strategies and offerings will be successful and will not adversely affect our reputation, financial condition, and operating results.

The Internet is accessed through a variety of platforms and form factors that continue to evolve with the advancement of technology and user preferences. If manufacturers and users do not widely adopt versions of our search technology, products, or operating systems developed for these devices and modalities, our business could be adversely affected.

The number of people who access the Internet through devices other than desktop computers, including mobile phones, smartphones, laptops and tablets, video game consoles, voice-assisted speakers, automobiles, and television set-top devices, is increasing dramatically. The functionality and user experience associated with some alternative devices and modalities may make the use of our products and services or the generation of advertising revenue through such devices more difficult (or just different), and the versions of our products and services developed for these devices may not be compatible or compelling to users, manufacturers, or distributors of alternative devices. Each manufacturer or distributor may establish unique technical standards for its devices, and our products and services may not work or be viewable on these devices as a result. Some manufacturers may also elect not to include our products on their devices. In addition, search queries are increasingly being undertaken via apps tailored to particular devices or social media platforms, which could affect our search and advertising business over time. As new devices and platforms are continually being released, it is difficult to predict the problems we may encounter in adapting our products and services and developing competitive new products and services. We expect to continue to devote significant resources to the creation, support, and maintenance of products and services across multiple platforms and devices. If we are unable to attract and retain a substantial number of alternative device manufacturers, suppliers, distributors, developers, and users to our products and services, or if we are slow to develop products and technologies that are more compatible with alternative devices and platforms, we will fail to capture the opportunities available as consumers and advertisers continue to exist in a dynamic, multi-platform environment.

Our revenue growth rate could decline over time, and we anticipate downward pressure on our operating margin in the future.

Our revenue growth rate could decline over time as a result of a number of factors, including:

- increasing competition,
- changes in device mix, geographic mix, ongoing product and policy changes, product mix, and property mix,
- the challenges in maintaining our growth rate as our revenues increase to higher levels,
- the evolution of the online advertising market, including the increasing variety of online platforms for advertising, and the other markets in which we participate, and
- the rate of user adoption of our products, services, and technologies.

We believe our margins could experience downward pressure as a result of increasing competition and increased costs for many aspects of our business as well as the continuing shift to mobile, changes in device mix, and the contribution of new businesses to overall revenue. For instance, the margin on revenues we generate from our Google Network Members is significantly less than the margin on revenues we generate from advertising on Google properties. Consequently, our margins will experience downward pressure if a greater percentage of our revenues comes from ads placed on our Google Network Members' properties compared to revenues generated through ads placed on Google properties. Additionally, the margin we earn on revenues generated from our Google Network Members could decrease in the future if we pay an even larger percentage of advertising fees to our Google Network Members.

Furthermore, in our multi-device world, we generate our advertising revenues increasingly from mobile and newer advertising formats, and the margins from the advertising revenues from these sources have generally been lower than those from traditional desktop search. We also expect our TAC paid to our distribution partners to increase due to changes in device mix between mobile, desktop, and tablet, partner mix, partner agreement terms, and the percentage of queries channeled through paid access points.

Additionally, our margins could experience downward pressure as revenues from the sale of hardware products and cloud-based services increase as a percentage of consolidated revenues because the margin on the sale of these products and services have generally been lower than that from Google search. Furthermore, our margins could be impacted adversely if we spend a proportionately larger amount to promote new products and services or distribute certain products or if we invest more heavily in our innovation efforts across the Company (such as our Other Bets businesses) than we have historically.

We are subject to increasing regulatory scrutiny that may negatively impact our business. Additionally, changes in public policies governing a wide range of topics may adversely affect our business.

The growth of our company and our expansion into a variety of new fields involves a variety of new regulatory issues, and we have experienced increased regulatory scrutiny as we have grown. For instance, various regulatory agencies are reviewing aspects of our search and other businesses, which can lead to increased scrutiny from other regulators and legislators, that may affect our reputation, brand and third-party relationships. Such reviews may also result in substantial regulatory fines, changes to our business practices and other penalties, which could negatively impact our business and results of operations. We continue to cooperate with the European Commission and other regulatory authorities around the world in investigations they are conducting with respect to our business.

Additionally, changes in social, political, and regulatory conditions or in laws and policies governing a wide range of topics may disrupt our business practices. These changes could negatively impact our business and results of operations in material ways.

A variety of new and existing laws could subject us to claims or otherwise harm our business.

We are subject to numerous U.S. and international laws and regulations covering a wide variety of subject matters. New laws and regulations (or new interpretations of existing laws and regulations) may make our products and services less useful, require us to incur substantial costs, expose us to unanticipated civil or criminal liability, or cause us to change our business practices. For example, current and new patent laws such as U.S. patent laws and European patent laws may affect the ability of companies, including us, to protect their innovations and defend against claims of patent infringement. Similarly, changes to copyright laws being considered in Europe and elsewhere may increase costs or require companies, including us, to change or cease offering certain existing services. The costs of compliance with these laws and regulations are high and are likely to increase in the future.

Claims have been, or may be, threatened and filed against us under both U.S. and international laws for defamation, invasion of privacy and other tort claims, unlawful activity, patent, copyright and trademark infringement, product liability, or other theories based on the nature and content of the materials searched and the ads posted by our users, our products and services, or content generated by our users. Furthermore, many of these laws do not contemplate or address the unique issues raised by a number of our new businesses, products, services and technologies. In addition, the applicability and scope of these laws, as interpreted by the courts, remain uncertain.

Other laws that could subject us to claims or otherwise harm our business include, among others:

- We rely on statutory safe harbors, as set forth in the Digital Millennium Copyright Act in the United States and the E-Commerce Directive in Europe, against copyright liability for various linking, caching, and hosting activities. Any legislation or court rulings impacting these safe harbors may adversely impact us.
- The General Data Protection Regulation, coming into effect in the European Union in May of 2018, which creates a range of new compliance obligations, which could cause us to change our business practices, and will increase financial penalties for noncompliance significantly.
- Court decisions such as the judgment of the Court of Justice of the European Union on May 13, 2014 on the ‘right to be forgotten,’ which allows individuals to demand that Google remove search results about them in certain instances, may limit the content we can show to our users and impose significant operational burdens.
- Court decisions that require Google to suppress content not just in the jurisdiction of the issuing court, but for all of our users worldwide, including locations where the content at issue is lawful. The Supreme Court of Canada issued such a decision against Google in June 2017, and others could treat its decision as persuasive. For instance, with respect to the ‘right to be forgotten,’ a follow-up case is pending before the Court of Justice of the European Union, which could result in an order to apply delisting actions under the ‘right to be forgotten’ worldwide.
- Various U.S. and international laws that restrict the distribution of materials considered harmful to children and impose additional restrictions on the ability of online services to collect information from minors.

- Various laws with regards to content removal and disclosure obligations, such as the recently enacted Network Enforcement Act in Germany, which may impact our businesses and operations and may subject us to significant fines if such laws are interpreted and applied in a manner inconsistent with our practices.
- Data protection laws passed by many states within the U.S. and by certain countries that require notification to users when there is a security breach of personal data.
- Data localization laws, which generally mandate that certain types of data collected in a particular country be stored and/or processed within that country.
- Privacy laws, which could be interpreted over-broadly to limit some product offerings and increase costs.

We face risks and costs overseas as our products and services are offered in international markets and may be subject to additional regulations. Any failure on our part to comply with these laws and regulations can result in negative publicity and diversion of management time and effort and may subject us to significant liabilities and other penalties.

We are regularly subject to claims, suits, government investigations, and other proceedings that may result in adverse outcomes.

We are regularly subject to claims, suits, and government investigations involving competition, intellectual property, privacy, consumer protection, tax, labor and employment, commercial disputes, content generated by our users, goods and services offered by advertisers or publishers using our platforms, and other matters. The manufacturing and sale of an expanded suite of products, including hardware, further exposes us to the risk of product liability and other litigation as well as consumer protection concerns related to product defects, as well as health and safety, hazardous materials usage, and other environmental concerns. We may also be subject to claims, including product warranty claims, if users experience service disruptions, failures, or other issues. In addition, our businesses face intellectual property litigation, as discussed later, that exposes us to the risk of exclusion and cease and desist orders, which could limit our ability to sell products and services.

Such claims, suits, and government investigations are inherently uncertain. Regardless of the outcome, any of these types of legal proceedings can have an adverse impact on us because of legal costs, diversion of management resources, and other factors. Determining reserves for our pending litigation is a complex, fact-intensive process that requires significant judgment. It is possible that a resolution of one or more such proceedings could result in substantial fines and penalties that could adversely affect our business, consolidated financial position, results of operations, or cash flows in a particular period. These proceedings could also result in reputational harm, criminal sanctions, consent decrees, or orders preventing us from offering certain features, functionalities, products, or services, requiring a change in our business practices or product recalls or corrections, or requiring development of non-infringing or otherwise altered products or technologies. Any of these consequences could adversely affect our business and results of operations.

We may be subject to legal liability associated with providing online services or content.

We host and provide a wide variety of services and products that enable users to exchange information, advertise products and services, conduct business, and engage in various online activities both domestically and internationally. The law relating to the liability of providers of these online services and products for activities of their users is still somewhat unsettled both within the U.S. and internationally. Claims have been threatened and have been brought against us for defamation, negligence, breaches of contract, copyright or trademark infringement, unfair competition, unlawful activity, tort, including personal injury, fraud, or other theories based on the nature and content of information that we publish or to which we provide links or that may be posted online or generated by us or by third parties, including our users. In addition, we are and have been and may again in the future be subject to domestic or international actions alleging that certain content we have generated or third-party content that we have made available within our services violates U.S. and international law.

We also place advertisements which are displayed on third-party publishers and advertising networks properties, and we offer third-party products, services, or content. We may be subject to claims concerning these products, services, or content by virtue of our involvement in marketing, branding, broadcasting, or providing access to them, even if we do not ourselves host, operate, provide, or provide access to these products, services, or content. Defense of any such actions could be costly and involve significant time and attention of our management and other resources, which may result in monetary liabilities or penalties, and may require us to change our business in an adverse manner.

Privacy concerns relating to our technology could damage our reputation and deter current and potential users or customers from using our products and services. If our security measures are breached resulting in the improper use and disclosure of user data, or if our services are subject to attacks that degrade or deny the ability of users to access our products and services, our products and services may be perceived as not

being secure, users and customers may curtail or stop using our products and services, and we may incur significant legal and financial exposure.

From time to time, concerns have been expressed about whether our products, services, or processes compromise the privacy of users, customers, and others. Concerns about our practices with regard to the collection, use, disclosure, or security of personal information or other privacy related matters, even if unfounded, could damage our reputation and adversely affect our operating results.

Our products and services involve the storage and transmission of users' and customers' proprietary information, and theft and security breaches expose us to a risk of loss of this information, improper use and disclosure of such information, litigation, and potential liability. Any systems failure or compromise of our security that results in the release of our users' data, or in our or our users' ability to access such data, could seriously harm our reputation and brand and, therefore, our business, and impair our ability to attract and retain users. We expect to continue to expend significant resources to maintain state-of-the-art security protections that shield against theft and security breaches.

We experience cyber attacks of varying degrees on a regular basis. Our security measures may also be breached due to employee error, malfeasance, system errors or vulnerabilities, including vulnerabilities of our vendors, suppliers, their products, or otherwise. Such breach or unauthorized access, increased government surveillance, or attempts by outside parties to fraudulently induce employees, users, or customers to disclose sensitive information in order to gain access to our data or our users' or customers' data could result in significant legal and financial exposure, damage to our reputation, and a loss of confidence in the security of our products and services that could potentially have an adverse effect on our business. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently, become more sophisticated, and often are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. Additionally, cyber attacks could also compromise trade secrets and other sensitive information and result in such information being disclosed to others and becoming less valuable, which could negatively affect our business. If an actual or perceived breach of our security occurs, the market perception of the effectiveness of our security measures could be harmed and we could lose users and customers.

Our business is subject to complex and evolving U.S. and international laws and regulation regarding privacy and data protection. Many of these laws and regulations are subject to change and uncertain interpretation and could result in claims, changes to our business practices, penalties, increased cost of operations, or declines in user growth or engagement, or otherwise harm our business.

Regulatory authorities around the world are considering a number of legislative and regulatory proposals concerning data protection, including measures to ensure that encryption of users' data does not hinder law enforcement agencies' access to that data. In addition, the interpretation and application of consumer and data protection laws in the U.S., Europe and elsewhere are often uncertain and in flux. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our data practices. These legislative and regulatory proposals, if adopted, and such interpretations could, in addition to the possibility of fines, result in an order requiring that we change our data practices, which could have an adverse effect on our business and results of operations. Complying with these various laws could cause us to incur substantial costs or require us to change our business practices in a manner adverse to our business.

Recent legal developments in Europe have created compliance uncertainty regarding certain transfers of personal data from Europe to the United States. For example, the General Data Protection Regulation (GDPR), coming into application in the European Union (EU) on May 25, 2018, will apply to all of our activities conducted from an establishment in the EU or related to products and services that we offer to EU users. The GDPR will create a range of new compliance obligations, which could cause us to change our business practices, and will significantly increase financial penalties for noncompliance (including possible fines of up to 4% of global annual turnover for the preceding financial year or €20 million (whichever is higher) for the most serious infringements).

In addition, the European Commission in July 2016 and the Swiss Government in January 2017 approved the EU-U.S. and the Swiss-U.S. Privacy Shield frameworks, respectively, which are designed to allow U.S. companies that self-certify to the U.S. Department of Commerce and publicly commit to comply with the Privacy Shield requirements to freely import personal data from the EU and Switzerland. However, these frameworks face a number of legal challenges and their validity remains subject to legal, regulatory and political developments in both Europe and the U.S. This has resulted in some uncertainty, and compliance obligations could cause us to incur costs or require us to change our business practices in a manner adverse to our business.

We are, and may in the future be, subject to intellectual property or other claims, which are costly to defend, could result in significant damage awards, and could limit our ability to use certain technologies in the future.

Internet, technology, media, and other companies own large numbers of patents, copyrights, trademarks, and trade secrets and frequently enter into litigation based on allegations of infringement or other violations of intellectual property rights. In addition, patent holding companies may continue to seek to monetize patents they have purchased or otherwise obtained. As we have grown, the number of intellectual property claims against us has increased and may continue to increase as we develop new products, services, and technologies.

We have had patent, copyright, and trademark infringement lawsuits filed against us claiming that certain of our products, services, and technologies infringe the intellectual property rights of others. Third parties have also sought broad injunctive relief against us by filing claims in U.S. and international courts and the U.S. International Trade Commission (ITC) for exclusion and cease and desist orders, which could limit our ability to sell our products or services in the U.S. or elsewhere if our products or services or those of our customers or suppliers are found to infringe the intellectual property subject to the claims. Adverse results in any of these lawsuits may include awards of substantial monetary damages, costly royalty or licensing agreements (if licenses are available at all), or orders preventing us from offering certain features, functionalities, products, or services, and may also cause us to change our business practices and require development of non-infringing products, services or technologies, which could result in a loss of revenues for us and otherwise harm our business.

Many of our agreements with our customers and partners, including certain suppliers, require us to indemnify them for certain intellectual property infringement claims against them, which could increase our costs as a result of defending such claims, and may require that we pay significant damages if there were an adverse ruling in any such claims. Such customers and partners may also discontinue the use of our products, services, and technologies, as a result of injunctions or otherwise, which could result in loss of revenues and adversely impact our business. Moreover, intellectual property indemnities provided to us by our suppliers, when obtainable, may not cover all damages and losses suffered by us and our customers from covered products. Furthermore, in connection with our divestitures, we have agreed, and may in the future agree, to provide indemnification for certain potential liabilities, including those associated with intellectual property claims.

Regardless of their merits, intellectual property claims are often time consuming, expensive to litigate or settle, and cause significant diversion of management attention. To the extent such claims are successful, they may have an adverse effect on our business, consolidated financial position, results of operations, or cash flows.

Our intellectual property rights are valuable, and any inability to protect them could reduce the value of our products, services, and brand.

Our patents, trademarks, trade secrets, copyrights, and other intellectual property rights are important assets for us. Various events outside of our control pose a threat to our intellectual property rights, as well as to our products, services and technologies. For example, effective intellectual property protection may not be available in every country in which our products and services are distributed or made available through the Internet. Also, the efforts we have taken to protect our proprietary rights may not be sufficient or effective. Although we seek to obtain patent protection for our innovations, it is possible we may not be able to protect some of these innovations. Moreover, we may not have adequate patent or copyright protection for certain innovations that later turn out to be important. Furthermore, there is always the possibility, despite our efforts, that the scope of the protection gained will be insufficient or that an issued patent may be deemed invalid or unenforceable.

We also seek to maintain certain intellectual property as trade secrets. The secrecy of such trade secrets and other sensitive information could be compromised by outside parties, or by our employees, which could cause us to lose the competitive advantage resulting from these trade secrets. We also face risks associated with our trademarks. For example, there is a risk that the word "Google" could become so commonly used that it becomes synonymous with the word "search." If this happens, we could lose protection for this trademark, which could result in other people using the word "Google" to refer to their own products, thus diminishing our brand.

Any significant impairment of our intellectual property rights could harm our business and our ability to compete. Also, protecting our intellectual property rights is costly and time consuming. Any increase in the unauthorized use of our intellectual property could make it more expensive to do business and harm our operating results.

Acquisitions, joint ventures, investments, and divestitures could result in operating difficulties, dilution, and other consequences that may adversely impact our business and results of operations.

Acquisitions, joint ventures, investments and divestitures are important elements of our overall corporate strategy and use of capital, and these transactions could be material to our financial condition and results of operations. We expect to continue to evaluate and enter into discussions regarding a wide array of potential strategic transactions. Effecting these strategic transactions could create unforeseen operating difficulties and expenditures. The areas where we face risks include, among others:

- Diversion of management time and focus from operating our business to challenges related to acquisitions and other strategic transactions.
- Failure to successfully further develop the acquired business or technology.
- Implementation or remediation of controls, procedures, and policies at the acquired company.
- Integration of the acquired company's accounting, human resource, and other administrative systems, and coordination of product, engineering, and sales and marketing functions.
- Transition of operations, users, and customers onto our existing platforms.
- Failure to obtain required approvals on a timely basis, if at all, from governmental authorities, or conditions placed upon approval that could, among other things, delay or prevent us from completing a transaction, or otherwise restrict our ability to realize the expected financial or strategic goals of an acquisition or other strategic transaction.
- In the case of foreign acquisitions, the need to integrate operations across different cultures and languages and to address the particular economic, currency, political, and regulatory risks associated with specific countries.
- Cultural challenges associated with integrating employees from the acquired company into our organization, and retention of employees from the businesses we acquire.
- Liability for activities of the acquired company before the acquisition, including patent and trademark infringement claims, privacy issues, violations of laws, commercial disputes, tax liabilities, and other known and unknown liabilities.
- Litigation or other claims in connection with the acquired company, including claims from terminated employees, customers, former stockholders, or other third parties.

Our failure to address these risks or other problems encountered in connection with our past or future acquisitions and other strategic transactions could cause us to fail to realize their anticipated benefits, incur unanticipated liabilities, and harm our business generally.

Our acquisitions could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, or amortization expenses, or impairment of goodwill and/or purchased long-lived assets, and restructuring charges, any of which could harm our financial condition or results. Also, the anticipated benefits or value of our acquisitions and other strategic transactions may not materialize. In connection with our divestitures, we have agreed, and may in the future agree, to provide indemnification for certain potential liabilities, which may adversely impact our financial condition or results.

Our business depends on strong brands, and failing to maintain and enhance our brands would hurt our ability to expand our base of users, advertisers, content providers, and other partners.

Our strong brands have significantly contributed to the success of our business. Maintaining and enhancing the brands within Google and Other Bets increases our ability to enter new categories and launch new and innovative products that better serve the needs of our users. Our brands may be negatively impacted by a number of factors, including, among others, reputational issues, third-party content shared on our platforms, data privacy issues and developments, and product or technical performance failures. For example, if we fail to appropriately respond to the sharing of objectionable content on our services or objectionable practices by advertisers, or to otherwise adequately address user concerns, our users may lose confidence in our brands. Our brands may also be negatively affected by the use of our products or services to disseminate information that is deemed to be misleading.

Furthermore, if we fail to maintain and enhance equity in the Google brand, our business, operating results, and financial condition may be materially and adversely affected. Our success will depend largely on our ability to remain a technology leader and continue to provide high-quality, innovative products and services that are truly useful and play a meaningful role in people’s everyday lives.

We face a number of manufacturing and supply chain risks that, if not properly managed, could adversely impact our financial results and prospects.

We face a number of risks related to manufacturing and supply chain management. These manufacturing and supply chain risks could impact our ability to supply both our products and our internet-based services.

We rely on third parties to manufacture many of our assemblies and finished products, third-party arrangements for the design of some components and parts, and third party distributors, including cellular network carriers. Our business could be negatively affected if we are not able to engage third parties with the necessary capabilities or capacity on reasonable terms, or if those we engage fail to meet their obligations (whether due to financial difficulties or other reasons), or make adverse changes in the pricing or other material terms of our arrangements with them.

We have in the past, and may experience in the future, supply shortages and price increases driven by raw material availability, manufacturing capacity, labor shortages, industry allocations, natural disasters and significant changes in the financial or business condition of our suppliers. We may experience shortages or other supply chain disruptions in the future that could negatively impact our operations. In addition, some of the components we use in our technical infrastructure and products are available only from a single source or limited sources, and we may not be able to find replacement vendors on favorable terms or at all in the event of a supply chain disruption. In addition, a significant hardware supply interruption could delay critical data center upgrades or expansions.

We may enter into long term contracts that commit us to significant terms and conditions of supply. We may be liable for material and product that is not consumed due to market acceptance, technological change, obsolescences, quality, product recalls, and warranty issues. For instance, because many of our hardware supply contracts have volume-based pricing or minimum purchase requirements, if the volume of our hardware sales decreases or does not reach projected targets, we could face increased materials and manufacturing costs or other financial liabilities that could make our products more costly per unit to manufacture and therefore less competitive and negatively impact our financial results. Furthermore, certain of our competitors may negotiate more favorable contractual terms based on volume and other commitments that may provide them with competitive advantages and may impact our supply.

Additionally, the products and services we sell or offer may have quality issues resulting from the design or manufacture of the product, or from the software used. Sometimes, these issues may be caused by components we purchase from other manufacturers or suppliers. If the quality of our products and services does not meet our customers' expectations or our products or services are found to be defective, then our sales and operating earnings, and ultimately our reputation, could be negatively impacted.

We also require our suppliers and business partners to comply with law and, where applicable, our company policies regarding workplace and employment practices, data security, environmental compliance and intellectual property licensing, but we do not control them or their practices. If any of them violates laws or implements practices regarded as unethical, we could experience supply chain disruptions, canceled orders, terminations of or damage to key relationships, and damage to our reputation. If any of them fails to procure necessary license rights to third-party intellectual property, legal action could ensue that could impact the saleability of our products and expose us to financial obligations to third parties.

The Dodd-Frank Wall Street Reform and Consumer Protection Act includes disclosure requirements regarding the use of certain minerals mined from the Democratic Republic of Congo and adjoining countries (DRC) and procedures pertaining to a manufacturer's efforts regarding the source of such minerals. SEC rules implementing these requirements may have the effect of reducing the pool of suppliers who can supply DRC conflict free components and parts, and we may not be able to obtain DRC conflict free products or supplies in sufficient quantities for our operations. Since our supply chain is complex, we may face reputational challenges with our customers, stockholders and other stakeholders if we are unable to sufficiently verify the origins for the minerals used in our products.

Web spam and content farms could decrease our search quality, which could damage our reputation and deter our current and potential users from using our products and services.

Web spam refers to websites that attempt to violate a search engine's quality guidelines or that otherwise seek to rank higher in search results than a search engine's assessment of their relevance and utility would rank them.

Although English-language web spam in our search results has been significantly reduced, and web spam in most other languages is limited, we expect web spammers will continue to seek ways to improve their rankings inappropriately. We continuously combat web spam, including through indexing technology that makes it harder for spam-like, less useful web content to rank highly. We face challenges from low-quality and irrelevant content websites, including content farms, which are websites that generate large quantities of low-quality content to help them improve their search rankings. We are continually launching algorithmic changes focused on low-quality websites. If our search results display an increasing number of web spam and content farms, this could hurt our reputation for delivering relevant information or reduce user traffic to our websites. In addition, as we continue to take actions to improve our search quality and reduce low-quality content, this may in the short run reduce our Google Network Members' revenues, since some of these websites are Google Network Members.

Interruption or failure of our information technology and communications systems could hurt our ability to effectively provide our products and services, which could damage our reputation and harm our operating results.

The availability of our products and services depends on the continuing operation of our information technology and communications systems. Our systems are vulnerable to damage or interruption from earthquakes, terrorist attacks, natural disasters, the effects of climate change (such as sea level rise, drought, flooding, wildfires, and increased storm severity), power loss, telecommunications failures, computer viruses, computer denial of service attacks, or other attempts to harm our systems. Some of our data centers are located in areas with a high risk of major earthquakes or other natural disasters. Our data centers are also subject to break-ins, sabotage, and intentional acts of vandalism, and to potential disruptions if the operators of certain of these facilities have financial difficulties. Some of our systems are not fully redundant, and our disaster recovery planning cannot account for all eventualities. The occurrence of a natural disaster, a decision to close a facility we are using, or other unanticipated problems at our data centers could result in lengthy interruptions in our service. In addition, our products and services are highly technical and complex and may contain errors or vulnerabilities, which could result in interruptions in our services or the failure of our systems.

Our international operations expose us to additional risks that could harm our business, operating results, and financial condition.

Our international operations are significant to our revenues and net income, and we plan to continue to grow internationally. International revenues accounted for approximately 53% of our consolidated revenues in 2017. In certain international markets, we have limited operating experience and may not succeed.

In addition to risks described elsewhere in this section, our international operations expose us to other risks, including the following:

- Restrictions on foreign ownership and investments, and stringent foreign exchange controls that might prevent us from repatriating cash earned in countries outside the U.S.
- Import and export requirements, tariffs, trade disputes and barriers, and customs classifications that may prevent us from offering products or providing services to a particular market and may increase our operating costs.
- Longer payment cycles in some countries, increased credit risk, and higher levels of payment fraud.
- Evolving foreign laws and legal systems.
- Uncertainty regarding liability for services and content, including uncertainty as a result of local laws and lack of legal precedent.
- Different employee/employer relationships, existence of workers' councils and labor unions, and other challenges caused by distance, language, and cultural differences, making it harder to do business in certain jurisdictions.

Additionally, changes in international local political, economic, regulatory, tax, social, and labor conditions may adversely harm our business, and compliance with complex international and U.S. laws and regulations that apply to our international operations increases our cost of doing business. These numerous and sometimes conflicting laws and regulations include, among others, internal control and disclosure rules, privacy and data protection requirements, anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act, and other local laws prohibiting corrupt payments to governmental officials, and competition regulations, among others. Violations of these laws and regulations could result in fines and penalties, criminal sanctions against us, our officers, or our employees, prohibitions on the conduct of our business and on our ability to offer our products and services in one or more countries, and could also materially affect our brand, our international growth efforts, our ability to attract and retain employees, our business, and our operating results. Although we have implemented policies and procedures designed to ensure compliance with these laws and regulations, there can be no assurance that our employees, contractors, or agents will not violate our policies.

Finally, since we conduct business in currencies other than U.S. dollars but report our financial results in U.S. dollars, we face exposure to fluctuations in foreign currency exchange rates. Although we hedge a portion of our international currency exposure, significant fluctuations in exchange rates between the U.S. dollar and foreign currencies may adversely affect our revenues and earnings. Additionally, hedging programs are inherently risky and could expose us to additional risks that could adversely affect our financial condition and results of operations.

Our operating results may fluctuate, which makes our results difficult to predict and could cause our results to fall short of expectations.

Our operating results may fluctuate as a result of a number of factors, many outside of our control. As a result, comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. Our quarterly, year-to-date, and annual expenses as a percentage of our revenues may differ significantly from our historical or projected rates. Our operating results in future quarters may fall below expectations. Any of these events could cause our stock price to fall. Each of the risk factors listed in this section in addition to the following factors may affect our operating results:

- Our ability to continue to attract and retain users to our products and services.
- Our ability to monetize (or generate revenues from) traffic on Google properties and our Google Network Members' properties across various devices.
- Revenue fluctuations caused by changes in device mix, geographic mix, ongoing product and policy changes, product mix, and property mix.
- The amount of revenues and expenses generated and incurred in currencies other than U.S. dollars, and our ability to manage the resulting risk through our foreign exchange risk management program.
- The amount and timing of operating costs and expenses and capital expenditures related to the maintenance and expansion of our businesses, operations, and infrastructure.
- Our focus on long-term goals over short-term results.
- The results of our acquisitions, divestitures, and our investments in risky projects, including new businesses, products, services, and technologies.
- Our ability to keep our products and services operational at a reasonable cost and without service interruptions.
- Our ability to attract user adoption of and generate significant revenues from new products, services, and technologies in which we have invested considerable time and resources.
- The seasonal fluctuations in Internet usage, advertising spending, and underlying business trends such as traditional retail seasonality. Our rapid growth has tended to mask the cyclicality and seasonality of our business. As our growth rate has slowed, the cyclicality and seasonality in our business has become more pronounced and caused our operating results to fluctuate.

Because our businesses are changing and evolving, our historical operating results may not be useful to you in predicting our future operating results.

If we were to lose the services of key personnel, we may not be able to execute our business strategy.

Our future success depends in a large part upon the continued service of key members of our senior management team. In particular, Larry Page and Sergey Brin are critical to the overall management of Alphabet and its subsidiaries, and they, along with Sundar Pichai, the Chief Executive Officer of Google, play an important role in the development of our technology. They also play a key role in maintaining our culture and setting our strategic direction. All of our executive officers and key employees are at-will employees, and we do not maintain any key-person life insurance policies. The loss of key personnel could seriously harm our business.

We rely on highly skilled personnel and, if we are unable to retain or motivate key personnel, hire qualified personnel, or maintain our corporate culture, we may not be able to grow effectively.

Our performance largely depends on the talents and efforts of highly skilled individuals. Our future success depends on our continuing ability to identify, hire, develop, motivate, and retain highly skilled personnel for all areas of our organization. Competition in our industry for qualified employees is intense, and certain of our competitors have directly targeted our employees. In addition, our compensation arrangements, such as our equity award programs, may not always be successful in attracting new employees and retaining and motivating our existing employees. Our continued ability to compete effectively depends on our ability to attract new employees and to retain and motivate our existing employees.

In addition, we believe that our corporate culture fosters innovation, creativity, and teamwork. As our organization grows, and we are required to implement more complex organizational management structures, particularly in light of our holding company structure, we may find it increasingly difficult to maintain the beneficial aspects of our corporate culture. This could negatively impact our future success.

Our business depends on continued and unimpeded access to the Internet by us and our users. Internet access providers may be able to restrict, block, degrade, or charge for access to certain of our products and services, which could lead to additional expenses and the loss of users and advertisers.

Our products and services depend on the ability of our users to access the Internet, and certain of our products require significant bandwidth to work effectively. Currently, this access is provided by companies that have significant market power in the broadband and internet access marketplace, including incumbent telephone companies, cable companies, mobile communications companies, and government-owned service providers. Some of these providers have taken, or have stated that they may take measures, including legal actions, that could degrade, disrupt, or increase the cost of user access to certain of our products by restricting or prohibiting the use of their infrastructure to support or facilitate our offerings, or by charging increased fees to us or our users to provide our offerings. Some jurisdictions have adopted regulations prohibiting certain forms of discrimination by Internet access providers, but there is substantial uncertainty in the United States and elsewhere regarding such protections. In addition, in some jurisdictions, our products and services have been subject to government-initiated restrictions or blockages. Such interference could result in a loss of existing users, advertisers, and goodwill, and increased costs, and could impair our ability to attract new users and advertisers, thereby harming our revenues and growth.

New and existing technologies could block ads online, which would harm our business.

Technologies have been developed that enable users to block the display of ads altogether and some providers of online services have integrated technologies that could potentially impair the core functionality of third-party digital advertising. Most of our Google revenues are derived from fees paid to us in connection with the display of ads online. As a result, such technologies and tools could adversely affect our operating results.

We are exposed to fluctuations in the market values of our investments.

Given the global nature of our business, we have investments both domestically and internationally. Market values of these investments can be negatively impacted by liquidity, credit deterioration or losses, financial results, foreign exchange rates, changes in interest rates, or other factors. As a result, the value or liquidity of our cash equivalents and marketable securities could decline and result in a material impairment, which could materially adversely affect our financial condition and operating results.

We could be subject to changes in tax rates, the adoption of new U.S. or international tax legislation, or exposure to additional tax liabilities.

Our future income taxes could be adversely affected by earnings being lower than anticipated in jurisdictions that have lower statutory tax rates and higher than anticipated in jurisdictions that have higher statutory tax rates, the net gains and losses recognized by legal entities on certain hedges and related hedged intercompany and other transactions under our foreign exchange risk management program, changes in the valuation of our deferred tax assets or liabilities, or changes in tax laws, regulations, or accounting principles, as well as certain discrete items.

In addition, we are subject to regular review and audit by both domestic and foreign tax authorities. As a result, we have received, and may in the future receive, assessments in multiple jurisdictions on various tax-related assertions, including transfer pricing adjustments or permanent establishment. Any adverse outcome of such a review or audit could have a negative effect on our operating results and financial condition. In addition, the determination of our worldwide provision for income taxes and other tax liabilities requires significant judgment, and there are many transactions and calculations where the ultimate tax determination is uncertain. Although we believe our estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded in our financial statements and may materially affect our financial results in the period or periods for which such determination is made.

Furthermore, due to shifting economic and political conditions, tax policies, laws or rates in various jurisdictions may be subject to significant change, which could materially affect our financial position and results of operations.

The ongoing effects of the Tax Act and the refinement of provisional estimates could make our results difficult to predict.

Our effective tax rate may fluctuate in the future as a result of the Tax Act, which was enacted on December 22, 2017. The Tax Act introduces significant changes to U.S. income tax law that will have a meaningful impact on our provision for income taxes. Accounting for the income tax effects of the Tax Act requires significant judgments and estimates in the interpretation and calculations of the provisions of the Tax Act.

Due to the timing of the enactment and the complexity involved in applying the provisions of the Tax Act, we made reasonable estimates of the effects and recorded provisional amounts in our financial statements for the year ended December 31, 2017. The U.S. Treasury Department, the Internal Revenue Service (IRS), and other standard-setting bodies may issue guidance on how the provisions of the Tax Act will be applied or otherwise administered that is different from our interpretation. As we collect and prepare necessary data, and interpret the Tax Act and any additional guidance issued by the IRS or other standard-setting bodies, we may make adjustments to the provisional amounts that could materially affect our financial position and results of operations as well as our effective tax rate in the period in which the adjustments are made.

Risks Related to Ownership of Our Stock

The trading price for our Class A common stock and non-voting Class C capital stock may continue to be volatile.

The trading price of our stock has at times experienced substantial price volatility and may continue to be volatile. For example, from January 1, 2017 through December 31, 2017, the closing price of our Class A common stock ranged from $807.77 per share to $1,085.09 per share, and the closing price of our Class C capital stock ranged from $786.14 to $1,077.14 per share.

In addition to the factors discussed in this Annual Report on Form 10-K, the trading price of our Class A common stock and Class C capital stock may fluctuate widely in response to various factors, many of which are beyond our control, including, among others:

- Quarterly variations in our results of operations or those of our competitors.
- Announcements by us or our competitors of acquisitions, divestitures, investments, new products, significant contracts, commercial relationships, or capital commitments.
- Recommendations by securities analysts or changes in earnings estimates.
- Announcements about our earnings that are not in line with analyst expectations, the risk of which is enhanced because it is our policy not to give guidance on earnings.
- Announcements by our competitors of their earnings that are not in line with analyst expectations.
- Commentary by industry and market professionals about our products, strategies, and other matters affecting our business and results, regardless of its accuracy.
- The volume of shares of Class A common stock and Class C capital stock available for public sale.
- Sales of Class A common stock and Class C capital stock by us or by our stockholders (including sales by our directors, executive officers, and other employees).
- Short sales, hedging, and other derivative transactions on shares of our Class A common stock and Class C capital stock.
- The perceived values of Class A common stock and Class C capital stock relative to one another.
- Our share repurchase program.

In addition, the stock market in general, which can be impacted by various factors, including overall economic and political conditions, and the market for technology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. These broad market and industry factors may harm the market price of our Class A common stock and our Class C capital stock regardless of our actual operating performance.

We cannot guarantee that our share repurchase program will be fully consummated or that our share repurchase program will enhance long-term stockholder value, and share repurchases could increase the volatility of the price of our stock and could diminish our cash reserves.

In October 2016, our board of directors authorized our company to repurchase up to $7,019,340,976.83 of our Class C capital stock. In January 2018, our board of directors authorized the repurchase of up to an additional$8,589,869,056 of our Class C capital stock. The repurchase program does not have an expiration date. The share repurchase program, authorized by our board of directors, does not obligate Alphabet to repurchase any specific dollar amount or to acquire any specific number of shares. The share repurchase program could affect the price of our stock and increase volatility and may be suspended or terminated at any time, which may result in a decrease in the trading price of our stock.

The concentration of our stock ownership limits our stockholders' ability to influence corporate matters.

Our Class B common stock has 10 votes per share, our Class A common stock has one vote per share, and our Class C capital stock has no voting rights. As of December 31, 2017, Larry, Sergey, and Eric E. Schmidt beneficially owned approximately 92.7% of our outstanding Class B common stock, which represented approximately 56.7% of the voting power of our outstanding capital stock. Larry, Sergey, and Eric therefore have significant influence over management and affairs and over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or our assets, for the foreseeable future. In addition, because our Class C capital stock carries no voting rights (except as required by applicable law), the issuance of the Class C capital stock, including in future stock-based acquisition transactions and to fund employee equity incentive programs, could prolong the duration of Larry and Sergey's current relative ownership of our voting power and their ability to elect all of our directors and to determine the outcome of most matters submitted to a vote of our stockholders. Together with Eric, they would also continue to be able to control any required stockholder vote with respect to certain change in control transactions involving Alphabet (including an acquisition of Alphabet by another company).

This concentrated control limits or severely restricts our stockholders' ability to influence corporate matters and, as a result, we may take actions that our stockholders do not view as beneficial. As a result, the market price of our Class A common stock and our Class C capital stock could be adversely affected.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable.

Provisions in Alphabet's certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. These provisions include the following:

- Our certificate of incorporation provides for a tri-class capital stock structure. As a result of this structure, Larry, Sergey, and Eric have significant influence over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or our assets. This concentrated control could discourage others from initiating any potential merger, takeover, or other change of control transaction that other stockholders may view as beneficial. As noted above, the issuance of the Class C capital stock could have the effect of prolonging the influence of Larry, Sergey, and Eric.
- Our board of directors has the right to elect directors to fill a vacancy created by the expansion of the board of directors or the resignation, death, or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors.
- Our stockholders may not act by written consent. As a result, a holder, or holders, controlling a majority of our capital stock would not be able to take certain actions without holding a stockholders' meeting.
- Our certificate of incorporation prohibits cumulative voting in the election of directors. This limits the ability of minority stockholders to elect director candidates.
- Stockholders must provide advance notice to nominate individuals for election to the board of directors or to propose matters that can be acted upon at a stockholders' meeting. These provisions may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.
- Our board of directors may issue, without stockholder approval, shares of undesignated preferred stock. The ability to issue undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us.

As a Delaware corporation, we are also subject to certain Delaware anti-takeover provisions. Under Delaware law, a corporation may not engage in a business combination with any holder of 15% or more of its outstanding voting stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction. Our board of directors could rely on Delaware law to prevent or delay an acquisition of us.

Risks Related to Our Holding Company Reorganization

As a holding company, Alphabet is dependent on the operations and funds of its subsidiaries.

On October 2, 2015, we completed a reorganization pursuant to which Alphabet became a holding company with no business operations of its own. Alphabet's only significant assets are the outstanding equity interests in its subsidiaries, including Google. As a result, we rely on cash flows from subsidiaries to meet our obligations, including to service any debt obligations of Alphabet.

We may not obtain the anticipated benefits of our reorganization into a holding company structure.

We believe that our holding company reorganization and the current operating structure increases management scale and allows us to focus on running our diverse businesses independently with the goal of maximizing each business' potential. The benefits of this reorganization may not be obtained if circumstances prevent us from taking advantage of the strategic and business opportunities that we expect it may afford us. As a result, we may incur the costs of a holding company structure without realizing the benefits, which could adversely affect our reputation, financial condition, and operating results.

Alphabet's management is dedicating significant effort to the Other Bets' operating structures and business operations. These efforts may divert management's focus and resources from Alphabet's overall business, corporate initiatives, or strategic opportunities, which could have an adverse effect on our businesses, results of operations, financial condition, or prospects. Additionally, our subsidiaries may be restricted in their ability to pay cash dividends or to make other distributions to Alphabet, as the new holding company.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our headquarters are located in Mountain View, California. We also own and lease office and building space in the surrounding areas near our headquarters, which in the aggregate (including our headquarters) represent approximately 11.1 million square feet of office/building space and approximately forty-five acres of developable land to accommodate anticipated future growth. In addition, we own and lease office/building space and research and development sites around the world, primarily in North America, Europe, South America, and Asia. We own and operate data centers in the U.S., Europe, South America, and Asia. We believe our existing facilities, both owned and leased, are in good condition and suitable for the conduct of our business.

ITEM 3. LEGAL PROCEEDINGS

For a description of our material pending legal proceedings, please see Note 10 "Commitments and Contingencies - Legal Matters" of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K, which is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

As of October 2, 2015, Alphabet Inc. became the successor issuer of Google Inc. pursuant to Rule 12g-3(a) under the Exchange Act.

Price Range of Common Stock and Capital Stock

Our Class A common stock has been listed on the Nasdaq Global Select Market under the symbol "GOOG" since August 19, 2004 and under the symbol "GOOGL" since April 3, 2014. Prior to August 19, 2004, there was no public market for our stock. The following table sets forth for the indicated periods the high and low sales prices per share for our Class A common stock on the Nasdaq Global Select Market.

Fiscal Year 2017 Quarters Ended:	High	Low
March 31, 2017	$ 872.37	$ 807.77
June 30, 2017	$ 1,004.28	$ 839.88
September 30, 2017	$ 998.31	$ 919.46
December 31, 2017	$ 1,085.09	$ 966.78

Fiscal Year 2016 Quarters Ended:	High	Low
March 31, 2016	$ 780.91	$ 701.02
June 30, 2016	$ 787.68	$ 681.14
September 30, 2016	$ 815.95	$ 704.89
December 31, 2016	$ 835.74	$ 753.22

Our Class B common stock is neither listed nor traded.

Our Class C capital stock has been listed on the Nasdaq Global Select Market under the symbol "GOOG" since April 3, 2014. The following table sets forth for the indicated periods the high and low sales prices per share for our Class C capital stock on the Nasdaq Global Select Market.

Fiscal Year 2017 Quarters Ended:	High	Low
March 31, 2017	$ 852.12	$ 786.14
June 30, 2017	$ 983.68	$ 823.35
September 30, 2017	$ 980.34	$ 898.70
December 31, 2017	$ 1,077.14	$ 951.68

Fiscal Year 2016 Quarters Ended:	High	Low
March 31, 2016	$ 764.65	$ 678.11
June 30, 2016	$ 766.61	$ 668.26
September 30, 2016	$ 787.21	$ 694.49
December 31, 2016	$ 813.11	$ 736.08

Holders of Record

As of December 31, 2017, there were approximately 2,100 and 2,101 stockholders of record of our Class A common stock and Class C capital stock, respectively, and the closing prices of our Class A common stock and Class C capital stock were $1,053.40 and $1,046.40 per share, respectively, as reported by the NASDAQ Global Select Market. Because many of our shares of Class A common stock and Class C capital stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders. As of December 31, 2017, there were approximately 62 stockholders of record of our Class B common stock.

Dividend Policy

We have never declared or paid any cash dividend on our common or capital stock. We intend to retain any future earnings and do not expect to pay any cash dividends in the foreseeable future.

Issuer Purchases of Equity Securities

The following table presents information with respect to Alphabet's repurchases of Class C capital stock during the quarter ended December 31, 2017:

Period	Total Number of Shares Purchased (in thousands) [1]	Average Price Paid per Share [2]	Total Number of Shares Purchased as Part of Publicly Announced Programs (in thousands) [1]	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program (in millions)
October 1 - 31	0	$ 0.00	0	$ 4,274
November 1 - 30	1,231	$ 1,028.78	1,231	$ 3,008
December 1 - 31	806	$ 1,035.28	806	$ 2,173
Total	2,037	$ 1,031.35	2,037	

(1) In October 2016, the board of directors of Alphabet authorized the company to repurchase up to $7.0 billion of its Class C capital stock. The repurchases are being executed from time to time, subject to general business and market conditions and other investment opportunities, through open market purchases or privately negotiated transactions, including through Rule 10b5-1 plans. The repurchase program does not have an expiration date. See Note 11 in Part II, Item 8 of this Annual Report on Form 10-K for additional information related to share repurchases.

(2) Average price paid per share includes costs associated with the repurchases.

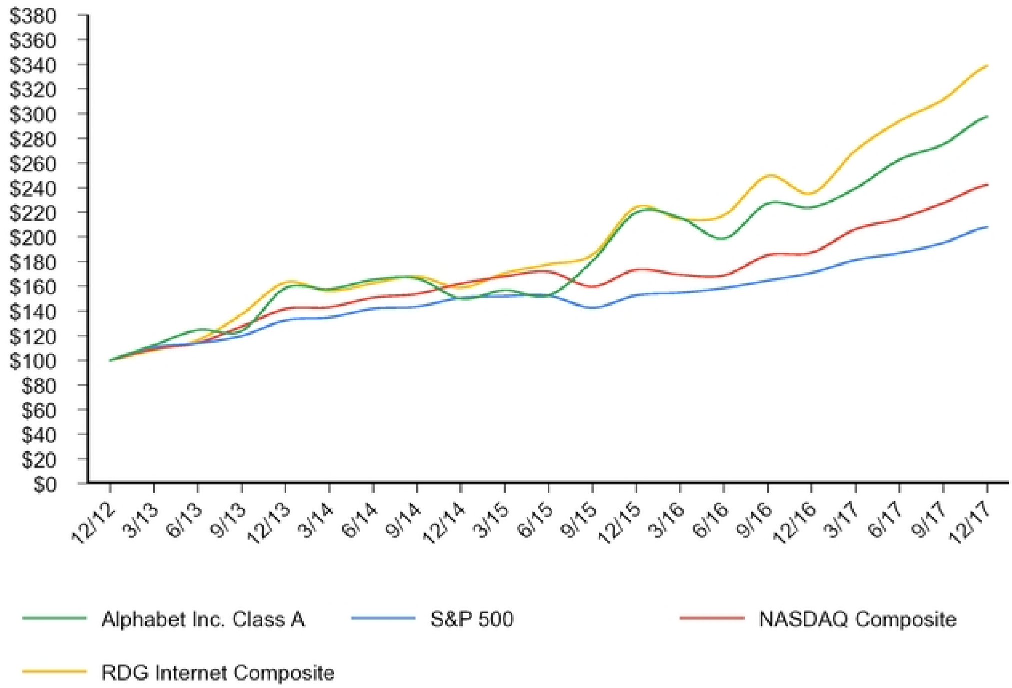
Stock Performance Graphs

The following graph compares the 5-year cumulative total return to shareholders on Alphabet Inc.'s Class A common stock relative to the cumulative total returns of the S&P 500 index, the RDG Internet Composite index, and the NASDAQ Composite index. An investment of $100 (with reinvestment of all dividends) is assumed to have been made in the company's Class A common stock and in each index on December 31, 2012 and its relative performance is tracked through December 31, 2017. The returns shown are based on historical results and are not intended to suggest future performance.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Alphabet Inc., the S&P 500 Index, the

NASDAQ Composite Index, and the RDG Internet Composite Index



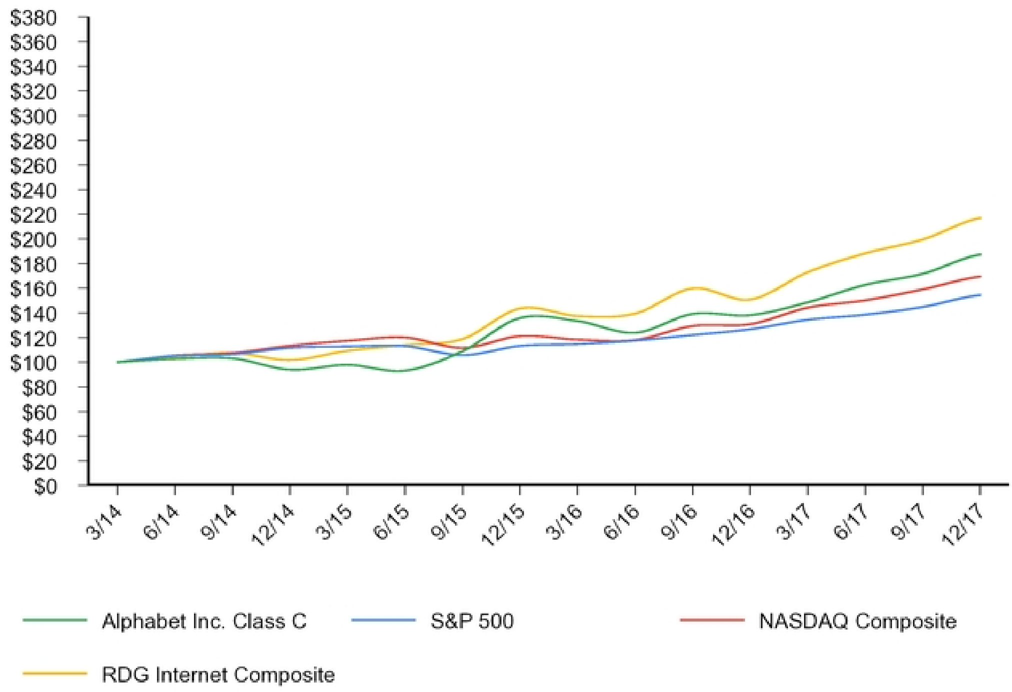
*$100 invested on December 31, 2012 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

The following graph compares the cumulative total return to shareholders on Alphabet Inc.'s Class C capital stock relative to the cumulative total returns of the S&P 500 index, the RDG Internet Composite index, and the NASDAQ Composite index. An investment of $100 (with reinvestment of all dividends) is assumed to have been made in the company's Class C capital stock and in each index on April 3, 2014 and its relative performance is tracked through December 31, 2017. The returns shown are based on historical results and are not intended to suggest future performance.

COMPARISON OF CUMULATIVE TOTAL RETURN*

Among Alphabet Inc., the S&P 500 Index, the

NASDAQ Composite Index, and the RDG Internet Composite Index



*$100 invested on April 3, 2014 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

These performance graphs shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the Exchange Act), or incorporated by reference into any filing of Alphabet under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

ITEM 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes appearing in Item 8 "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K. The historical results are not necessarily indicative of the results to be expected in any future period.

	Year Ended December 31,				
	2013	2014	2015	2016	2017
	(in millions, except per share amounts)				
Consolidated Statements of Income Data:					
Revenues	$ 55,519	$ 66,001	$ 74,989	$ 90,272	$ 110,855
Income from operations	15,403	16,496	19,360	23,716	26,146
Net income from continuing operations	13,160	13,620	16,348	19,478	12,662
Net income (loss) from discontinued operations	(427)	516	0	0	0
Net income	12,733	14,136	16,348	19,478	12,662
Basic net income (loss) per share of Class A and B common stock:					
Continuing operations	$ 19.77	$ 20.15	$ 23.11	$ 28.32	$ 18.27
Discontinued operations	(0.64)	0.76	0.00	0.00	0.00
Basic net income per share of Class A and B common stock	$ 19.13	$ 20.91	$ 23.11	$ 28.32	$ 18.27
Basic net income (loss) per share of Class C capital stock:					
Continuing operations	$ 19.77	$ 20.15	$ 24.63	$ 28.32	$ 18.27
Discontinued operations	(0.64)	0.76	0.00	0.00	0.00
Basic net income per share of Class C capital stock	$ 19.13	$ 20.91	$ 24.63	$ 28.32	$ 18.27
Diluted net income (loss) per share of Class A and B common stock:					
Continuing operations	$ 19.42	$ 19.82	$ 22.84	$ 27.85	$ 18.00
Discontinued operations	(0.63)	0.75	0.00	0.00	0.00
Diluted net income per share of Class A and B common stock	$ 18.79	$ 20.57	$ 22.84	$ 27.85	$ 18.00
Diluted net income (loss) per share of Class C capital stock:					
Continuing operations	$ 19.42	$ 19.82	$ 24.34	$ 27.85	$ 18.00
Discontinued operations	(0.63)	0.75	0.00	0.00	0.00
Diluted net income per share of Class C capital stock	$ 18.79	$ 20.57	$ 24.34	$ 27.85	$ 18.00

	As of December 31,				
	2013	2014	2015	2016	2017
	(in millions)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents, and marketable securities	$ 58,717	$ 64,395	$ 73,066	$ 86,333	$ 101,871
Total assets	$ 109,050	$ 129,187	$ 147,461	$ 167,497	$ 197,295
Total long-term liabilities	$ 6,165	$ 8,548	$ 7,820	$ 11,705	$ 20,610
Total stockholders' equity	$ 86,977	$ 103,860	$ 120,331	$ 139,036	$ 152,502

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Please read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and related notes included under Item 8 of this Annual Report on Form 10-K.

Trends in Our Business

The following trends have contributed to the results of our consolidated operations, and we anticipate that they will continue to impact our future results:

- **Users' behaviors and advertising continue to shift online as the digital economy evolves.**

The continuing shift from an offline to online world has contributed to the growth of our business since inception, resulting in increasing revenues, and we expect that this online shift will continue to benefit our business.

- **As online advertising evolves, we continue to expand our product offerings which may impact our monetization.**

As interactions between users and advertisers change and as online user behavior evolves, we continue to expand and evolve our product offerings to serve their changing needs. Over time, we expect our monetization trends to fluctuate. For example, we have seen an increase in YouTube engagement ads, which monetize at a lower rate than traditional desktop search ads. Additionally, we continue to see a shift to programmatic buying which presents opportunities for advertisers to connect with the right user, in the right moment, in the right context. Programmatic buying has a different monetization profile than traditional advertising buying on Google properties.

- **Users are increasingly using multiple devices and modalities to access our products and services, and our advertising revenues are increasingly coming from mobile and other new formats.**

Our users are accessing the Internet via multiple devices and modalities and want to feel connected no matter where they are or what they are doing. We seek to expand our products and services to stay in front of this shift in order to maintain and grow our business.

We generate our advertising revenues increasingly from mobile and newer advertising formats, and the margins from the advertising revenues from these sources have generally been lower than those from traditional desktop search. Accordingly, we expect TAC paid to our distribution partners to increase due to changes in device mix between mobile, desktop, and tablet, partner mix, partner agreement terms, and the percentage of queries channeled through paid access points. We expect these trends to continue to put pressure on our overall margins.

- **As users in developing economies increasingly come online, our revenues from international markets continue to increase and movements in foreign exchange rates impact such revenues.**

The shift to online, as well as the advent of the multi-device world, has brought opportunities outside of the U.S., including in emerging markets, and we continue to develop localized versions of our products and relevant advertising programs useful to our users in these markets. This has led to a trend of increased revenues from international markets over time and we expect that our results will continue to be impacted by our performance in these markets, particularly as low-cost mobile devices become more available.

Our international revenues represent a significant portion of our revenues and are subject to fluctuations in foreign currency exchange rates relative to the U.S. dollar. While we have a foreign exchange risk management program designed to reduce our exposure to these fluctuations, this program does not fully offset their effect on our revenues and earnings.

- **The portion of our revenues that we derive from non-advertising revenues is increasing and may impact margins.**

Non-advertising revenues have grown over time. We expect this trend to continue as we focus on expanding our offerings to our users through products and services like Google Cloud, Google Play, hardware products, and YouTube subscriptions. Across these initiatives, we currently derive non-advertising revenues primarily from sales of apps, in-app purchases, digital content products, and hardware; and licensing and service fees including fees received for Google Cloud offerings. The margins on these non-advertising businesses vary significantly and may be lower than the margins on our advertising business. A number of our Other Bets initiatives are in their initial development stages, and as such, the sources of revenues from these businesses could change over time and the revenues could be volatile.

- **As we continue to look for new ways to serve our users and expand our businesses, we will invest heavily in R&D and our capital expenditures will continue to fluctuate.**

We continue to make significant research and development (R&D) investments in areas of strategic focus such as advertising, cloud, machine learning, and search, as well as in new products and services. The amount of our capital expenditures has fluctuated and may continue to fluctuate in the long term as we invest heavily in our systems, data centers, real estate and facilities, and information technology infrastructure.

In addition, acquisitions remain an important part of our strategy and use of capital, and we expect to continue to spend cash on acquisitions and other investments. These acquisitions generally enhance the breadth and depth of our offerings, as well as expand our expertise in engineering and other functional areas.

- **Our employees are critical to our success and we expect to continue investing in them.**

Our employees are among our best assets and are critical for our continued success. Their energy and talent drive Alphabet and create our success. We expect to continue hiring talented employees around the globe and to provide competitive compensation programs to our employees.

Executive Overview of Results

Below are our key financial results for the fiscal year ended December 31, 2017 (consolidated unless otherwise noted):

- Revenues of $110.9 billion and revenue growth of 23% year over year, constant currency revenue growth of 24% year over year.
- Google segment revenues of $109.7 billion with revenue growth of 23% year over year and Other Bets revenues of $1.2 billion with revenue growth of 49% year over year.
- Revenues from the United States, EMEA, APAC, and Other Americas were $52.4 billion, $36.0 billion, $16.2 billion, and $6.1 billion, respectively.
- Cost of revenues was $45.6 billion, consisting of TAC of $21.7 billion and other cost of revenues of $23.9 billion. Our TAC as a percentage of advertising revenues was 23%.
- Operating expenses (excluding cost of revenues) were $39.1 billion.
- Income from operations was $26.1 billion.
- Effective tax rate was 53%.
- Net income was $12.7 billion with diluted net income per share of $18.00.
- Operating cash flow was $37.1 billion.
- Capital expenditures were $13.2 billion.
- Number of employees was 80,110 as of December 31, 2017.

Information about Segments

We operate our business in multiple operating segments. Google is our only reportable segment. None of our other segments meet the quantitative thresholds to qualify as reportable segments; therefore, the other operating segments are combined and disclosed below as Other Bets.

Our reported segments are:

- Google – Google includes our main products such as Ads, Android, Chrome, Commerce, Google Cloud, Google Maps, Google Play, Hardware, Search, and YouTube. Our technical infrastructure and some newer efforts like virtual reality are also included in Google. Google generates revenues primarily from advertising; sales of apps, in-app purchases, digital content products, and hardware; and licensing and service fees, including fees received for Google Cloud offerings.
- Other Bets – Other Bets is a combination of multiple operating segments that are not individually material. Other Bets includes businesses such as Access, Calico, CapitalG, GV, Nest, Verily, Waymo, and X. Revenues from the Other Bets are derived primarily through the sales of internet and TV services through Fiber, sales of Nest products and services, and licensing and R&D services through Verily.

Please refer to Note 15 of the Notes to Consolidated Financial Statements included in Part II of this Annual Report on Form 10-K for further information.

Revenues

The following table presents our revenues, by segment and revenue source (in millions):

	Year Ended December 31,		
	2015	2016	2017
Google segment			
Google properties revenues	$ 52,357	$ 63,785	$ 77,788
Google Network Members' properties revenues	15,033	15,598	17,587
Google advertising revenues	67,390	79,383	95,375
Google other revenues	7,154	10,080	14,277
Google segment revenues	$ 74,544	$ 89,463	$ 109,652
Other Bets			
Other Bets revenues	$ 445	$ 809	$ 1,203
Revenues	$ 74,989	$ 90,272	$ 110,855

Google segment

The following table presents our Google segment revenues (in millions), and changes in our aggregate paid clicks and cost-per-click (expressed as a percentage):

	Year Ended December 31,		
	2015	2016	2017
Google segment revenues	$ 74,544	$ 89,463	$ 109,652
Google segment revenues as a percentage of total revenues	99.4%	99.1 %	98.9 %
Aggregate paid clicks change		34 %	46 %
Aggregate cost-per-click change		(11)%	(19)%

Use of Monetization Metrics

When assessing our advertising revenues performance, we present information regarding the percentage change in the number of paid clicks and cost-per-click for our Google properties and Google Network Members' properties. Management views these as important metrics for understanding our business.

Paid clicks for our Google properties represent engagement by users and include clicks on advertisements by end-users related to searches on Google.com, clicks related to advertisements on other owned and operated properties including Gmail, Google Maps, and Google Play, and viewed YouTube engagement ads. Paid clicks for our Google Network Members' properties include clicks by end-users related to advertisements served on Google Network Members' properties participating in AdMob, AdSense for Content, and AdSense for Search. In some cases, such as programmatic and reservation based advertising buying, we primarily charge advertisers by impression; while growing, this represents a small part of our consolidated revenues base.

Cost-per-click is defined as click-driven revenues divided by our total number of paid clicks and represents the average amount we charge advertisers for each engagement by users.

We periodically review, refine and update our methodologies for monitoring, gathering, and counting the number of paid clicks and for identifying the revenues generated by click activity.

In the first quarter of 2017, we refined our methodology for paid clicks and cost-per-click to include additional categories of TrueView engagement ads and exclude non-engagement based trial ad formats. This change resulted in a modest increase in growth of paid clicks and a modest decrease in growth of cost-per-click. For comparison purposes, we have included updated data for historical periods in the table below:

	Three Months Ended				Year Ended
	Mar 31, 2016	Jun 30, 2016	Sep 30, 2016	Dec 31, 2016	Dec 31, 2016
Year-over-year change					
Aggregate paid clicks	29 %	28 %	32 %	39 %	34 %
Paid clicks on Google properties	38 %	36 %	41 %	47 %	43 %
Paid clicks on Google Network Members' properties	2 %	0 %	1 %	7 %	3 %
Aggregate cost-per-click	(8)%	(6)%	(10)%	(17)%	(11)%
Cost-per-click on Google properties	(11)%	(8)%	(12)%	(18)%	(13)%
Cost-per-click on Google Network Members' properties	(8)%	(8)%	(14)%	(19)%	(13)%
Quarter-over-quarter change					
Aggregate paid clicks	(2)%	7 %	9 %	22 %	N/A
Paid clicks on Google properties	(3)%	9 %	11 %	25 %	N/A
Paid clicks on Google Network Members' properties	4 %	(3)%	1 %	6 %	N/A
Aggregate cost-per-click	(1)%	(1)%	(5)%	(10)%	N/A
Cost-per-click on Google properties	1 %	(2)%	(6)%	(12)%	N/A
Cost-per-click on Google Network Members' properties	(12)%	(2)%	(6)%	0 %	N/A

Our advertising revenue growth, as well as the change in paid clicks and cost-per-click on Google properties and Google Network Members' properties and the correlation between these items, have fluctuated and may continue to fluctuate because of various factors, including:

- advertiser competition for keywords;
- changes in advertising quality or formats;
- changes in device mix;
- changes in foreign currency exchange rates;
- fees advertisers are willing to pay based on how they manage their advertising costs;
- general economic conditions;
- growth rates of revenues from Google properties, including YouTube, compared to growth rates of revenues from Google Network Members' properties;
- seasonality;
- shift in the proportion of non-click based revenues generated on Google properties and Google Network Members' properties, including an increase in programmatic and reservation based advertising buying; and
- traffic growth in emerging markets compared to more mature markets and across various advertising verticals and channels.

Our advertising revenue growth rate has fluctuated over time as a result of a number of factors, including challenges in maintaining our growth rate as revenues increase to higher levels, changes in our product mix, increasing competition, query growth rates, our investments in new business strategies, shifts in the geographic mix of our revenues, and the evolution of the online advertising market. We also expect that our revenue growth rate will continue to be affected by evolving user preferences, the acceptance by users of our products and services as they are delivered on diverse devices and modalities, our ability to create a seamless experience for both users and advertisers, and movements in foreign currency exchange rates.

Google properties

The following table presents our Google properties revenues (in millions), and changes in our paid clicks and cost-per-click (expressed as a percentage):

	Year Ended December 31,		
	2015	2016	2017
Google properties revenues	$ 52,357	$ 63,785	$ 77,788
Google properties revenues as a percentage of Google segment revenues	70.2%	71.3 %	70.9 %
Paid clicks change		43 %	54 %
Cost-per-click change		(13)%	(21)%

Google properties revenues consist primarily of advertising revenues that are generated on:

- Google search properties which includes revenues from traffic generated by search distribution partners who use Google.com as their default search in browsers, toolbars, etc.; and
- Other Google owned and operated properties like Gmail, Google Maps, Google Play, and YouTube.

Our Google properties revenues increased $14,003 million from 2016 to 2017. The growth was primarily driven by increases in mobile search resulting from ongoing growth in user adoption and usage, as well as continued growth in advertiser activity. We also experienced growth in YouTube driven primarily by video advertising, as well as growth in desktop search due to improvements in ad formats and delivery. The growth was partially offset by the general strengthening of the U.S. dollar compared to certain foreign currencies.

The number of paid clicks through our advertising programs on Google properties increased from 2016 to 2017 due to growth in YouTube engagement ads, increases in mobile search queries, improvements we have made in ad formats and delivery, and continued global expansion of our products, advertisers and user base. The positive impact on our revenues from an increase in paid clicks was partially offset by a decrease in the cost-per-click paid by our advertisers from 2016 to 2017. The decrease in cost-per-click was primarily driven by continued growth in YouTube engagement ads where cost-per-click remains lower than on our other advertising platforms. Cost-per-click was also impacted by changes in device mix, geographic mix, ongoing product changes, product mix, property mix, and fluctuations of the U.S. dollar compared to certain foreign currencies.

Our Google properties revenues increased $11,428 million from 2015 to 2016 and also increased as a percentage of Google segment revenues. The growth was primarily driven by increases in mobile search most notably due to ongoing improvements in ad formats and delivery launched during 2016. We also experienced growth in YouTube revenue driven primarily by video advertising across TrueView with a growing contribution from ad buying on DoubleClick Bid Manager, as well as improvements in ad formats and delivery. The growth was partially offset by the general strengthening of the U.S. dollar compared to certain foreign currencies.

The number of paid clicks through our advertising programs on Google properties increased from 2015 to 2016 due to growth in the adoption of YouTube engagement ads, improvements we have made in ad formats and delivery, and continued global expansion of our products, advertisers, and user base across all platforms, particularly mobile. The positive impact on our revenues from paid clicks was partially offset by a decrease in the cost-per-click paid by our advertisers. The decrease in cost-per-click was primarily driven by continued growth in YouTube engagement ads where cost-per-click remains lower than on our other advertising platforms, and also impacted by changes in device mix, property mix, product mix, geographic mix, ongoing product changes, and the general strengthening of the U.S. dollar compared to certain foreign currencies.

Google Network Members' properties

The following table presents our Google Network Members' properties revenues (in millions) and changes in our paid clicks and cost-per-click (expressed as a percentage):

	Year Ended December 31,		
	2015	2016	2017
Google Network Members' properties revenues	$ 15,033	$ 15,598	$ 17,587
Google Network Members' properties revenues as a percentage of Google segment revenues	20.2%	17.4 %	16.0 %
Paid clicks change		3 %	10 %
Cost-per-click change		(13)%	(9)%

Google Network Members' properties revenues consist primarily of advertising revenues generated from ads placed on Google Network Member properties through:

- AdMob;
- AdSense (such as AdSense for Content, AdSense for Search, etc.); and
- DoubleClick AdExchange.

Our Google Network Members' properties revenues increased $1,989 million from 2016 to 2017. The growth was primarily driven by strength in both programmatic advertising buying and AdMob, offset by a decline in our traditional AdSense businesses and the general strengthening of the U.S. dollar compared to certain foreign currencies.

The increase in paid clicks from 2016 to 2017 resulted primarily from growth in AdMob and an increase from our traditional AdSense for Search business. The positive impact on our revenues from an increase in paid clicks was partially offset by a decrease in the cost-per-click paid by our advertisers. The changes in cost-per-click from 2016 to 2017 was impacted by changes in device mix, geographic mix, ongoing product and policy changes, product mix, property mix, and fluctuations of the U.S. dollar compared to certain foreign currencies.

Our Google Network Members' properties revenues increased $565 million from 2015 to 2016. The growth was primarily driven by strength in programmatic advertising buying as well as strength in AdMob, offset by a decline in our traditional AdSense business and the general strengthening of the U.S. dollar compared to certain foreign currencies.

The increase in paid clicks from 2015 to 2016 resulted from the growth in AdMob offset by declines in AdSense. The decrease in cost-per-click paid by our advertisers from 2015 to 2016 resulted from changes in the product mix of Google Network Members advertising revenues, ongoing product and policy changes, changes in property and device mix, geographic mix, and relative fluctuations of the U.S. dollar compared to certain foreign currencies.

Google other revenues

The following table presents our Google other revenues (in millions):

	Year Ended December 31,		
	2015	2016	2017
Google other revenues	$ 7,154	$ 10,080	$ 14,277
Google other revenues as a percentage of Google segment revenues	9.6%	11.3%	13.0%

Google other revenues consist primarily of revenues from:

- Apps, in-app purchases, and digital content in the Google Play store;
- Google Cloud offerings; and
- Hardware.

Our Google other revenues increased $4,197 million from 2016 to 2017. The increase was primarily driven by revenues from Google Cloud offerings, hardware sales, and revenues from Google Play, largely relating to in-app purchases (revenues which we recognize net of payout to developers).

Our Google other revenues increased $2,926 million from 2015 to 2016 and increased as a percentage of Google segment revenues. These increases were primarily due to the growth in revenues from Google Play, primarily relating to in-app purchases (revenues which we recognize net of payout to developers), hardware sales, and Google Cloud offerings.

Other Bets

The following table presents our Other Bets revenues (in millions):

	Year Ended December 31,		
	2015	2016	2017
Other Bets revenues	$ 445	$ 809	$ 1,203
Other Bets revenues as a percentage of total revenues	0.6%	0.9%	1.1%

Other Bets revenues consist primarily of revenues and sales from:

- Internet and TV services;
- Licensing and R&D services; and
- Nest branded hardware.

Our Other Bets revenues increased $394 million from 2016 to 2017. The increase was primarily driven by revenues from sales of Nest branded hardware, Fiber internet and TV services, and Verily licensing and R&D services.

Our Other Bets revenues increased $364 million from 2015 to 2016 and increased as a percentage of consolidated revenues. These increases were primarily driven by sales of Nest branded hardware and revenues from Fiber internet and TV services. There was also an increase in revenues from Verily licensing and R&D services from 2015 to 2016.

Due to the early stage of our Other Bets businesses and because their revenues aggregate a number of businesses operating in different industries, our Other Bets revenues may fluctuate in future periods. Additionally, our Other Bets revenues may fluctuate due to one-time items.

Revenues by Geography

The following table presents our revenues by geography as a percentage of revenues, determined based on the billing addresses of our customers:

	Year Ended December 31,		
	2015	**2016**	**2017**
United States	46%	47%	47%
EMEA	35%	34%	33%
APAC	14%	14%	15%
Other Americas	5%	5%	5%

For the amounts of revenues by geography, please refer to Note 2 of the Notes to Consolidated Financial Statements included in Part II of this Annual Report on Form 10-K.

Use of Constant Currency Revenues and Constant Currency Revenue Growth

The impact of currency exchange rates on our business is an important factor in understanding period to period comparisons. Our international revenues are favorably impacted as the U.S. dollar weakens relative to other foreign currencies, and unfavorably impacted as the U.S. dollar strengthens relative to other foreign currencies. Our international revenues are also favorably impacted by net hedging gains and unfavorably impacted by net hedging losses.

We use non-GAAP constant currency revenues and constant currency revenue growth for financial and operational decision-making and as a means to evaluate period-to-period comparisons. We believe the presentation of results on a constant currency basis in addition to GAAP results helps improve the ability to understand our performance because they exclude the effects of foreign currency volatility that are not indicative of our core operating results.

Constant currency information compares results between periods as if exchange rates had remained constant period over period. We define constant currency revenues as total revenues excluding the impact of foreign exchange rate movements and hedging activities, and use it to determine the constant currency revenue growth on a year-on-year basis. Constant currency revenues are calculated by translating current period revenues using prior period exchange rates, as well as excluding any hedging impacts realized in the current period.

Constant currency revenue growth (expressed as a percentage) is calculated by determining the increase in current period revenues over prior period revenues where current period foreign currency revenues are translated using prior period exchange rates and hedging impacts are excluded from revenues of both periods.

These results should be considered in addition to, not as a substitute for, results reported in accordance with GAAP. Results on a constant currency basis, as we present them, may not be comparable to similarly titled measures used by other companies and are not a measure of performance presented in accordance with GAAP.

The following table presents our foreign exchange impact on our international revenues and total revenues (in millions):

	Twelve Months Ended December 31,		
	2015	2016	2017
EMEA revenues	$ 26,368	$ 30,304	$ 36,046
Exclude foreign exchange impact on current period revenues using prior year rates	3,802	1,291	(5)
Exclude hedging impact recognized in current period	(989)	(479)	190
EMEA constant currency revenues	$ 29,181	$ 31,116	$ 36,231
Prior period EMEA revenues, excluding hedging impact	$ 24,497	$ 25,379	$ 29,825
EMEA revenue growth		15%	19%
EMEA constant currency revenue growth		23%	21%
APAC revenues	$ 9,887	$ 12,559	$ 16,235
Exclude foreign exchange impact on current period revenues using prior year rates	1,076	(362)	26
Exclude hedging impact recognized in current period	(323)	(31)	(43)
APAC constant currency revenues	$ 10,640	$ 12,166	$ 16,218
Prior period APAC revenues, excluding hedging impact	$ 8,169	$ 9,564	$ 12,528
APAC revenue growth		27%	29%
APAC constant currency revenue growth		27%	29%
Other Americas revenues	$ 3,924	$ 4,628	$ 6,125
Exclude foreign exchange impact on current period revenues using prior year rates	712	344	(148)
Exclude hedging impact recognized in current period	(88)	(29)	22
Other Americas constant currency revenues	$ 4,548	$ 4,943	$ 5,999
Prior period Other Americas revenues, excluding hedging impact	$ 3,681	$ 3,836	$ 4,599
Other Americas revenue growth		18%	32%
Other Americas constant currency revenue growth		29%	30%
United States revenues	$ 34,810	$ 42,781	$ 52,449
United States revenue growth		23%	23%
Total revenues	$ 74,989	$ 90,272	$ 110,855
Total constant currency revenues	$ 79,179	$ 91,006	$ 110,897
Total revenue growth		20%	23%
Total constant currency revenue growth		24%	24%

Our EMEA revenues from 2016 to 2017 were unfavorably impacted, primarily as a result of an unfavorable impact from hedging losses, slightly offset by a favorable impact from foreign currency exchange rates. The foreign exchange impact was due to the U.S. dollar weakening relative to the Euro and Russian ruble, partially offset by the impact of the U.S. dollar strengthening relative to the British pound and Turkish lira.

Our EMEA revenues from 2015 to 2016 were unfavorably impacted, primarily as a result of an unfavorable impact from foreign currency exchange rates, offset by a favorable impact from hedging benefits. The foreign exchange impact was due to the U.S. dollar strengthening relative to the British pound, Euro, and Russian ruble.

Our revenues from APAC from 2016 to 2017 were relatively flat, primarily as a result of a favorable impact from hedging benefits, offset by an unfavorable impact from foreign currency exchange rates. The foreign exchange impact was due to the U.S. dollar strengthening relative to the Japanese yen, partially offset by the impact of the U.S. dollar weakening relative to the Australian dollar, Indian rupee, South Korean won, and Taiwanese dollar.

Our revenues from APAC from 2015 to 2016 were relatively flat, primarily as a result of slight favorable impacts from foreign currency exchange rates and hedging benefits. The foreign exchange impact was due to the U.S. dollar weakening relative to the Japanese yen, partially offset by the impact of the U.S. dollar strengthening relative to the Indian rupee and Australian dollar.

Our revenues from Other Americas from 2016 to 2017 were favorably impacted, primarily as a result of a favorable impact from foreign currency exchange rates, slightly offset by an unfavorable impact from hedging losses. The foreign exchange impact was due to the U.S. dollar weakening relative to the Brazilian real and Canadian dollar, partially offset by the impact of the U.S. dollar strengthening relative to the Argentine peso.

Our revenues from Other Americas from 2015 to 2016 were unfavorably impacted, primarily as a result of an unfavorable impact from foreign currency exchange rates, slightly offset by a favorable impact from hedging benefits. The foreign exchange impact was due to the U.S. dollar strengthening relative to certain currencies including the Argentine peso, Canadian dollar, Brazilian real, and the Mexican peso.

Costs and Expenses

Cost of Revenues

Cost of revenues consists of TAC which are paid to Google Network Members primarily for ads displayed on their properties and amounts paid to our distribution partners who make available our search access points and services. Our distribution partners include browser providers, mobile carriers, original equipment manufacturers, and software developers.

The cost of revenues related to revenues generated from ads placed on Google Network Members' properties are significantly higher than the costs of revenues related to revenues generated from ads placed on Google properties because most of the advertiser revenues from ads served on Google Network Members’ properties are paid as TAC to our Google Network Members.

Additionally, other cost of revenues (which is the cost of revenues excluding TAC) includes the following:

- Amortization of certain intangible assets;
- Content acquisition costs primarily related to payments to content providers from whom we license video and other content for distribution on YouTube and Google Play (we pay fees to these content providers based on revenues generated or a flat fee);
- Credit card and other transaction fees related to processing customer transactions;
- Expenses associated with our data center and other operations (including bandwidth, compensation expenses (including SBC), depreciation, energy, and other equipment costs); and
- Inventory related costs for hardware we sell.

The following tables present our cost of revenues, including TAC (in millions):

	Year Ended December 31,		
	2015	2016	2017
TAC	$ 14,343	$ 16,793	$ 21,672
Other cost of revenues	13,821	18,345	23,911
Total cost of revenues	$ 28,164	$ 35,138	$ 45,583
Total cost of revenues as a percentage of revenues	37.6%	38.9%	41.1%

	Year Ended December 31,		
	2015	2016	2017
TAC to distribution partners	$ 4,101	$ 5,894	$ 9,031
TAC to distribution partners as a percentage of Google properties revenues[(1)] (Google properties TAC rate)	7.8%	9.2%	11.6%
TAC to Google Network Members	$ 10,242	$ 10,899	$ 12,641
TAC to Google Network Members as a percentage of Google Network Members' properties revenues[(1)] (Network Members TAC rate)	68.1%	69.9%	71.9%
TAC	$ 14,343	$ 16,793	$ 21,672
TAC as a percentage of advertising revenues[(1)] (Aggregate TAC rate)	21.3%	21.2%	22.7%

(1) Revenues include hedging gains(losses) which impact TAC rates.

Cost of revenues increased $10,445 million from 2016 to 2017. The increase was due to an increase in TAC of $4,879 million. The increase in TAC to distribution partners was a result of an increase in Google properties revenues and the associated TAC rate. The increase in TAC to Google Network Members was a result of an increase in Google Network Members' properties revenues and the associated TAC rate.

The increase in the Google properties TAC rate was driven by changes in partner agreements and the ongoing shift to mobile, which carries higher TAC because more mobile searches are channeled through paid access points. The increase in the Network Members TAC rate was driven by the continued underlying shift in advertising buying from our traditional network business to programmatic advertising buying. The increase in the aggregate TAC rate was also partially offset by a favorable revenue mix shift from Google Network Members' properties to Google properties.

Other cost of revenues increased $5,566 million from 2016 to 2017. The increase was due to various factors, including an increase in data center and other operations costs, which include depreciation, compensation expenses (including SBC), energy, bandwidth, and other equipment costs as a result of business growth; hardware costs associated with new hardware launches; and content acquisition costs as a result of increased activities related to YouTube.

Cost of revenues increased $6,974 million from 2015 to 2016 due to various factors including traffic acquisition costs, data center costs, content acquisition costs, and hardware costs. The increase in traffic acquisition costs of $2,450 million was due to increases in advertising revenues primarily from the growth of mobile search and programmatic ad buying which carry higher TAC. The increase in other cost of revenues of $4,524 million was primarily due to increases in (1) data center costs including depreciation, labor, energy, bandwidth, and other equipment costs as a result of business growth, (2) content acquisition costs as a result of increased activities related to YouTube, (3) hardware costs associated with new hardware launches, and (4) stock-based compensation.

The aggregate TAC rate remained relatively flat from 2015 to 2016 primarily as a result of a shift of mix from Google Network Members' properties revenue to Google properties revenue. Our aggregate TAC rate was also impacted by the increase in mobile and programmatic advertising buying, which generally carry overall higher TAC. The increase in Google properties TAC rate was primarily driven by a shift to mobile and more mobile searches are subject to TAC. The increase in Network Members' TAC rate was primarily driven by the shift in advertising buying from our traditional network business to programmatic advertising buying.

We expect cost of revenues to increase in dollar amount and as a percentage of total revenues in future periods based on a number of factors, including the following:

- Google Network Members TAC rates, which are affected by the continued underlying shift in advertising buying from our traditional network business to programmatic advertising buying which carries higher TAC;
- Google properties TAC rates, which are affected by changes in device mix between mobile, desktop, and tablet, partner mix, partner agreement terms such as revenue share arrangements, and the percentage of queries channeled through paid access points;
- Growth rates of expenses associated with our data center and other operations, content acquisition costs, as well as our hardware inventory and related costs;
- Increased proportion of non-advertising revenues, whose costs are generally higher in relation to our advertising revenues;
- Relative revenue growth rates of Google properties and our Google Network Members' properties.

Research and Development

The following table presents our R&D expenses (in millions):

	Year Ended December 31,		
	2015	2016	2017
Research and development expenses	$ 12,282	$ 13,948	$ 16,625
Research and development expenses as a percentage of revenues	16.4%	15.5%	15.0%

R&D expenses consist primarily of:

- Compensation expenses, including SBC, and facilities-related costs for employees responsible for R&D of our existing and new products and services; and
- Depreciation and equipment-related expenses.

R&D expenses increased $2,677 million from 2016 to 2017. The increase was primarily due to an increase in compensation expenses, including SBC, and facilities-related costs of $1,886 million, largely resulting from a 16% increase in headcount. In addition, there was an increase in depreciation and equipment-related expenses of $569 million.

R&D expenses increased $1,666 million from 2015 to 2016. The increase was primarily due to an increase in stock-based compensation expense of $667 million and an increase in labor and facilities-related costs of $326 million, both largely as a result of a 16% increase in R&D headcount, partially offset by higher expenses resulting from project milestones in Other Bets in 2015. In addition, there was an increase in depreciation and equipment-related expenses of approximately $388 million and an increase in professional services of $267 million due to additional expenses incurred for consulting, outsourced services, and temporary services.

We expect that R&D expenses will increase in dollar amount and may fluctuate as a percentage of revenues in future periods.

Sales and Marketing

The following table presents our sales and marketing expenses (in millions):

	Year Ended December 31,		
	2015	2016	2017
Sales and marketing expenses	$ 9,047	$ 10,485	$ 12,893
Sales and marketing expenses as a percentage of revenues	12.1%	11.6%	11.6%

Sales and marketing expenses consist primarily of:

- Advertising and promotional expenditures related to our products and services; and
- Compensation expenses, including SBC, and facilities-related costs for employees engaged in sales and marketing, sales support, and certain customer service functions.

Sales and marketing expenses increased $2,408 million from 2016 to 2017. The increase was primarily due to an increase in advertising and promotional expenses of $1,266 million, largely resulting from increases in marketing and promotion-related expenses for our hardware products, Cloud offerings, and YouTube. In addition, there was an increase in compensation expenses, including SBC, and facilities-related costs of $853 million, largely resulting from a 6% increase in headcount.

Sales and marketing expenses increased $1,438 million from 2015 to 2016. The increase was primarily due to an increase in advertising and promotional expenses of $679 million, largely due to increases in marketing and promotion-related expenses for our hardware products. Additionally, there was an increase in labor and facilities-related costs of $482 million, and stock-based compensation expense of $179 million, both largely resulting from a 10% increase in sales and marketing headcount.

We expect that sales and marketing expenses will increase in dollar amount and may fluctuate as a percentage of revenues in future periods.

General and Administrative

The following table presents our general and administrative expenses (in millions):

	Year Ended December 31,		
	2015	2016	2017
General and administrative expenses	$ 6,136	$ 6,985	$ 6,872
General and administrative expenses as a percentage of revenues	8.2%	7.7%	6.2%

General and administrative expenses consist primarily of:

- Amortization of certain intangible assets;
- Compensation expenses, including SBC, and facilities-related costs for employees in our facilities, finance, human resources, information technology, and legal organizations;
- Depreciation and equipment-related expenses; and
- Professional services fees primarily related to audit, information technology consulting, outside legal, and outsourcing services.

General and administrative expenses decreased $113 million from 2016 to 2017. The decrease was primarily from reduced allocations to general and administrative expenses with an offsetting increase to costs of revenues and other operating expenses. The decrease was partially offset by an increase in compensation expenses, including SBC, and facilities-related costs of $271 million, largely resulting from a 9% increase in headcount. Additionally, there was an increase in professional service fees of $253 million due to additional expenses incurred for outsourced services and consulting services.

General and administrative expenses increased $849 million from 2015 to 2016. The increase was primarily due to increases in labor and facilities-related costs of $460 million, and stock-based compensation expense of $421 million, both largely resulting from a 15% increase in general and administrative headcount, as well as increases in other miscellaneous expenses. These increases were offset by a decrease in professional service fees of $194 million due to lower legal-related costs.

We expect general and administrative expenses will increase in dollar amount and may fluctuate as a percentage of revenues in future periods.

European Commission Fine

In June 2017, the EC announced its decision that certain actions taken by Google regarding its display and ranking of shopping search results and ads infringed European competition law. The EC decision imposed a €2.42 billion (approximately $2.74 billion as of June 27, 2017) fine, which was accrued in the second quarter of 2017.

Other Income (Expense), Net

The following table presents other income (expense), net, (in millions):

	Year Ended December 31,		
	2015	2016	2017
Other income (expense), net	$ 291	$ 434	$ 1,047
Other income (expense), net, as a percentage of revenues	0.4%	0.5%	0.9%

Other income (expense), net, increased $613 million from 2016 to 2017. This increase was primarily driven by reduced costs of our foreign currency hedging activities, decreased losses on marketable securities and an increase in interest income.

Other income (expense), net, increased $143 million from 2015 to 2016. This increase was primarily driven by an increase in interest income and decreased losses on non-marketable investments, partially offset by increased losses from our foreign currency transactions and impairments for certain assets.

The costs of our foreign exchange hedging activities recognized in other income (expense), net, are primarily a function of the notional amount of the option and forward contracts and their related duration, the movement of foreign exchange rates relative to the contract prices, the volatility of foreign exchange rates and forward points. The hedging costs expensed in other income (expense), net, decreased as a result of less option premiums paid after we began to use foreign currency forward contracts to hedge our forecasted revenues in the fourth quarter of 2016.

We expect that other income (expense), net, will fluctuate in dollar amount in future periods as it is largely driven by market dynamics.

Provision for Income Taxes

The following table presents our provision for income taxes (in millions) and effective tax rate:

	Year Ended December 31,		
	2015	2016	2017
Provision for income taxes	$ 3,303	$ 4,672	$ 14,531
Effective tax rate	16.8%	19.3%	53.4%

Our provision for income taxes and our effective tax rate increased from 2016 to 2017, due to the Tax Act that was enacted in December 2017. Please refer to Note 14 of the Notes to Consolidated Financial Statements included in Part II of this Annual Report on Form 10-K for further information.

Our provision for income taxes and our effective tax rate increased from 2015 to 2016, largely due to proportionately more earnings generated in jurisdictions that have higher statutory tax rates and discrete items in 2015 and 2016, partially offset by the stock-based compensation benefits recognized resulting from the adoption of Accounting Standards Update No. 2016-09 (ASU 2016-09).

Our future effective tax rate will be affected by the Tax Act. Effective in 2018, the Tax Act reduces the U.S. statutory tax rate from 35% to 21% and creates new taxes on certain foreign-sourced earnings and certain related-party payments, which are referred to as the global intangible low-taxed income tax and the base erosion tax, respectively.

Our future effective tax rate could be adversely affected by earnings being lower than anticipated in countries that have lower statutory rates and higher than anticipated in countries that have higher statutory rates, the net gains and losses recognized by legal entities on certain hedges and related hedged intercompany and other transactions under our foreign exchange risk management program, changes in the valuation of our deferred tax assets or liabilities, or changes in tax laws, regulations, or accounting principles, as well as certain discrete items.

Quarterly Results of Operations

The following tables presenting our quarterly results of operations should be read in conjunction with the consolidated financial statements and related notes included in Item 8 of this Annual Report on Form 10-K. We have prepared the unaudited information on the same basis as our audited consolidated financial statements. Our operating results for any quarter are not necessarily indicative of results for any future quarters or for a full year.

The following table presents our unaudited quarterly results of operations for the eight quarters ended December 31, 2017. This table includes all adjustments, consisting only of normal recurring adjustments, that we consider necessary for a fair presentation of our consolidated financial position and operating results for the quarters presented. Both seasonal fluctuations in internet usage, advertising expenditures and underlying business trends such as traditional retail seasonality have affected, and are likely to continue to affect, our business. Commercial queries typically increase significantly in the fourth quarter of each year. These seasonal trends have caused, and will likely continue to cause, fluctuations in our quarterly results, including fluctuations in sequential revenue growth rates.

	Quarter Ended							
	Mar 31, 2016	Jun 30, 2016	Sep 30, 2016	Dec 31, 2016	Mar 31, 2017	Jun 30, 2017	Sep 30, 2017	Dec 31, 2017
	(In millions, except per share amounts) (unaudited)							
Consolidated Statements of Income Data:								
Revenues	$ 20,257	$ 21,500	$ 22,451	$ 26,064	$ 24,750	$ 26,010	$ 27,772	$ 32,323
Costs and expenses:								
Cost of revenues	7,648	8,130	8,699	10,661	9,795	10,373	11,148	14,267
Research and development	3,367	3,363	3,596	3,622	3,942	4,172	4,205	4,306
Sales and marketing	2,387	2,415	2,565	3,118	2,644	2,897	3,042	4,310
General and administrative	1,513	1,624	1,824	2,024	1,801	1,700	1,595	1,776
European Commission fine	0	0	0	0	0	2,736	0	0
Total costs and expenses	14,915	15,532	16,684	19,425	18,182	21,878	19,990	24,659
Income from operations	5,342	5,968	5,767	6,639	6,568	4,132	7,782	7,664
Other income (expense), net	(213)	151	278	218	251	245	197	354
Income from continuing operations before income taxes	5,129	6,119	6,045	6,857	6,819	4,377	7,979	8,018
Provision for income taxes	922	1,242	984	1,524	1,393	853	1,247	11,038
Net income	$ 4,207	$ 4,877	$ 5,061	$ 5,333	$ 5,426	$ 3,524	$ 6,732	$ (3,020)
Basic net income per share of Class A and B common stock and Class C capital stock	$ 6.12	$ 7.11	$ 7.36	$ 7.73	$ 7.85	$ 5.09	$ 9.71	$ (4.35)
Diluted net income per share of Class A and B common stock and Class C capital stock	$ 6.02	$ 7.00	$ 7.25	$ 7.56	$ 7.73	$ 5.01	$ 9.57	$ (4.35)

Capital Resources and Liquidity

As of December 31, 2017, we had $101.9 billion in cash, cash equivalents, and marketable securities with $62.8 billion held by our foreign subsidiaries. Cash equivalents and marketable securities are comprised of time deposits, money market and other funds, highly liquid debt instruments of the U.S. government and its agencies, debt instruments issued by foreign governments, debt instruments issued by municipalities in the U.S., corporate debt securities, mortgage-backed securities, and asset-backed securities. From time to time, we may hold marketable equity securities obtained through acquisitions or strategic investments in private companies that subsequently go public.

On December 22, 2017, the Tax Act was enacted and we recorded a tax liability for the one-time transition tax on accumulated foreign subsidiary earnings of $10.2 billion, of which $890 million and $9.3 billion were presented within “income tax payable, current” and “income tax payable, non-current,” respectively, on our Consolidated Balance Sheets as of December 31, 2017. As permitted by the Tax Act, we intend to pay the one-time transition tax in eight annual interest-free installments beginning in 2018.

Our principal sources of liquidity are our cash, cash equivalents, and marketable securities, as well as the cash flow that we generate from our operations. We have a short-term debt financing program of up to $5.0 billion through the issuance of commercial paper. Net proceeds from this program are used for general corporate purposes. We had no commercial paper outstanding as of December 31, 2017. We have a $4.0 billion revolving credit facility expiring in February 2021. The interest rate for the credit facility is determined based on a formula using certain market rates. As of December 31, 2017, no amounts were outstanding under the credit facility. We believe that our sources of funding will be sufficient to satisfy our currently anticipated cash requirements including capital expenditures, working capital requirements, potential acquisitions and other liquidity requirements through at least the next 12 months.

As of December 31, 2017, we have senior unsecured notes outstanding due in 2021, 2024, and 2026 with a total carrying value of $3.9 billion and a total estimated fair value of $4.0 billion.

In October 2016, the Board of Directors of Alphabet authorized the repurchase of up to $7.0 billion of Alphabet Class C capital stock. In 2017, we repurchased and subsequently retired 5.2 million shares of Alphabet Class C capital stock for an aggregate amount of $4.8 billion. In January 2018, the Board of Directors authorized the repurchase of up to an additional $8.6 billion of Alphabet Class C capital stock. The repurchases are expected to be executed from time to time, subject to general business and market conditions and other investment opportunities, through open market purchases or privately negotiated transactions, including through Rule 10b5-1 plans.

In January 2017, Temasek, a Singapore-based investment company, signed a binding commitment to purchase a non-controlling interest in Verily for an aggregate of $800 million in cash. We received the first tranche of $480 million in the first quarter of 2017 and the final tranche of $320 million in the third quarter of 2017.

The following table presents our cash flows (in millions):

	Year Ended December 31,		
	2015	2016	2017
Net cash provided by operating activities	$ 26,572	$ 36,036	$ 37,091
Net cash used in investing activities	$ (23,711)	$ (31,165)	$ (31,401)
Net cash used in financing activities	$ (4,225)	$ (8,332)	$ (8,298)

Cash Provided by Operating Activities

Our largest source of cash provided by our operations are advertising revenues generated by Google properties and Google Network Members' properties. Additionally, we generate cash through sales of apps, in-app purchases, digital content products, and hardware; and licensing and service fees including fees received for Google Cloud offerings.

Our primary uses of cash from our operating activities include payments to our Google Network Members and distribution partners, and payments for content acquisition costs. In addition, uses of cash from operating activities include compensation and related costs, hardware costs, other general corporate expenditures, and income taxes.

Net cash provided by operating activities increased from 2016 to 2017 primarily due to increases in cash received from advertising revenues and Google other revenues (net of payouts to app developers), offset by increases in cash paid for cost of revenues, operating expenses, and income taxes.

Net cash provided by operating activities increased from 2015 to 2016 primarily due to increases in cash received from advertising revenues and Google other revenues, offset by increases in cash paid for cost of revenues and operating expenses. Additionally, the timing of tax payments and refunds had a favorable impact to our cash flows from operations for 2016 compared to 2015.

Cash Used in Investing Activities

Cash provided by or used in investing activities primarily consists of purchases of property and equipment, purchases, maturities, and sales of marketable securities in our investment portfolio, cash collateral received or returned from our securities lending program, payments for acquisitions, and the proceeds from the collection of notes receivable.

Net cash used in investing activities increased slightly from 2016 to 2017 primarily due to increases in purchases of marketable securities and increases in purchases of property and equipment, offset by increases in the maturities and sales of marketable securities, decreases in cash collateral paid related to securities lending, and increase in proceeds received from collections of notes receivables.

Net cash used in investing activities increased from 2015 to 2016 primarily due to increases in purchases of marketable securities, increases in cash collateral paid related to securities lending and increases in spend related to acquisitions, partially offset by increases in maturities and sales of marketable securities and decreases in purchases of non-marketable investments.

Cash Used in Financing Activities

Cash used in financing activities consists primarily of net proceeds or payments from issuance or repayments of debt, repurchases of capital stock, and net proceeds or payments from stock-based award activities.

Net cash used in financing activities decreased slightly from 2016 to 2017 primarily driven by decreases in the net cash outflow from repayments and issuance of debt, offset by increases in the repurchases of capital stock.

Net cash used in financing activities increased from 2015 to 2016 primarily driven by decreases in proceeds from issuance of debt, and increases in the repurchases of capital stock and net payments related to stock-based award activities, partially offset by a decrease in debt repayments.

Contractual Obligations as of December 31, 2017

The following summarizes our contractual obligations as of December 31, 2017 (in millions):

	Payments Due By Period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating lease obligations, net of sublease income amounts[1]	$ 8,753	$ 1,160	$ 2,182	$ 1,796	$ 3,615
Purchase obligations[2]	7,154	4,548	1,910	241	455
Long-term debt obligations[3]	4,744	112	224	1,170	3,238
Tax payable[4]	10,233	890	1,746	1,746	5,851
Other long-term liabilities reflected on our balance sheet[5]	2,416	348	619	511	938
Total contractual obligations	$ 33,300	$ 7,058	$ 6,681	$ 5,464	$ 14,097

(1) For further information, refer to Note 10 of the Notes to Consolidated Financial Statements included in Part II of this Annual Report on Form 10-K.

(2) Represents non-cancelable contractual obligations primarily related to data center operations and build-outs; digital media content licensing arrangements; and purchases of inventory. The amounts included above represent the non-cancelable portion of agreements or the minimum cancellation fee. For those agreements with variable terms, we do not estimate the non-cancelable obligation beyond any minimum quantities and/or pricing as of December 31, 2017. Excluded from the table above are open orders for purchases that support normal operations.

(3) Represents our principal and interest payments. For further information on long-term debt, refer to Note 6 of the Notes to Consolidated Financial Statements included in Part II of this Annual Report on Form 10-K.

(4) Represents one-time transition tax payable related to known amounts of cash taxes payable in future years as a result of the Tax Act. For further information, refer to Note 14 of the Notes to Consolidated Financial Statements included in Part II of this Annual Report on Form 10-K. Excluded from the table above are long-term taxes payable of $3.5 billion as of December 31, 2017 related to uncertain tax positions. At this time, we are unable to make a reasonably reliable estimate of the timing of payments for uncertain tax positions in individual years beyond 12 months due to uncertainties in the timing of tax audit outcomes.

(5) Represents cash obligations recorded on our consolidated balance sheets, including the short-term portion of these long-term liabilities, and consist primarily of facility build-outs and payments owed in connection with certain commercial agreements.

Off-Balance Sheet Arrangements

As of December 31, 2017, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K, that have or are reasonably likely to have a current or future effect on our financial condition, changes in our financial condition, revenues, or expenses, results of operations, liquidity, capital expenditures, or capital resources that is material to investors.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in accordance with U.S. Generally Accepted Accounting Principles (GAAP). In doing so, we have to make estimates and assumptions that affect our reported amounts of assets, liabilities, revenues, and expenses, as well as related disclosure of contingent assets and liabilities. In some cases, we could reasonably have used different accounting policies and estimates. In some cases, changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ materially from our estimates. To the extent that there are material differences between these estimates and actual results, our financial condition or results of operations will be affected. We base our estimates on past experience and other assumptions that we believe are reasonable under the circumstances, and we evaluate these estimates on an ongoing basis. We refer to accounting estimates of this type as critical accounting policies and estimates, which we discuss further below. We have reviewed our critical accounting policies and estimates with the audit committee of our board of directors.

Please see Note 1 of Part II, Item 8 of this Annual Report on Form 10-K for the summary of significant accounting policies.

Revenues

For the sale of third-party goods and services, we evaluate whether we are the principal, and report revenues on a gross basis, or an agent, and report revenues on a net basis. In this assessment, we consider if we obtain control of the specified goods or services before they are transferred to the customer, as well as other indicators such as the party primarily responsible for fulfillment, inventory risk, and discretion in establishing price.

Income Taxes

We are subject to income taxes in the U.S. and foreign jurisdictions. Significant judgment is required in evaluating our uncertain tax positions, determining our provision for income taxes, and evaluating the impact of the Tax Act.

The Tax Act was enacted on December 22, 2017 and introduces significant changes to U.S. income tax law. Effective in 2018, the Tax Act reduces the U.S. statutory tax rate from 35% to 21% and creates new taxes on certain foreign-sourced earnings and certain related-party payments, which are referred to as the global intangible low-taxed income tax and the base erosion tax, respectively. In addition, in 2017 we are subject to a one-time transition tax on accumulated foreign subsidiary earnings not previously subject to U.S. income tax. Accounting for the income tax effects of the Tax Act requires significant judgments and estimates in the interpretation and calculations of the provisions of the Tax Act.

Due to the timing of the enactment and the complexity involved in applying the provisions of the Tax Act, we have made reasonable estimates of the effects and recorded provisional amounts in our financial statements for the year ended December 31, 2017. As we collect and prepare necessary data, and interpret any additional guidance issued by the U.S. Treasury Department, the IRS or other standard-setting bodies, we may make adjustments to the provisional amounts. Those adjustments may materially impact the provision for income taxes and the effective tax rate in the period in which the adjustments are made. The accounting for the tax effects of the enactment of the Tax Act will be completed in 2018.

Although we believe we have adequately reserved for our uncertain tax positions, no assurance can be given that the final tax outcome of these matters will not be different. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will impact the provision for income taxes and the effective tax rate in the period in which such determination is made.

The provision for income taxes includes the impact of reserve provisions and changes to reserves that are considered appropriate as well as the related net interest and penalties. In addition, we are subject to the continuous examination of our income tax returns by the IRS and other tax authorities which may assert assessments against us. We regularly assess the likelihood of adverse outcomes resulting from these examinations and assessments to determine the adequacy of our provision for income taxes.

Loss Contingencies

We are regularly subject to claims, suits, government investigations, and other proceedings involving competition and antitrust, intellectual property, privacy, non-income taxes, labor and employment, commercial disputes, content generated by our users, goods and services offered by advertisers or publishers using our platforms, and other matters. Certain of these matters include speculative claims for substantial or indeterminate amounts of damages. We record a liability when we believe that it is probable that a loss has been incurred and the amount can be reasonably estimated. If we determine that a loss is reasonably possible and the loss or range of loss can be estimated, we disclose the possible loss in the Notes to the Consolidated Financial Statements.

We evaluate, on a regular basis, developments in our legal matters that could affect the amount of liability that has been previously accrued, and the matters and related reasonably possible losses disclosed, and make adjustments and changes to our disclosures as appropriate. Significant judgment is required to determine both the likelihood of there being, and the estimated amount of, a loss related to such matters. Until the final resolution of such matters, there may be an exposure to loss in excess of the amount recorded, and such amounts could be material. Should any of our estimates and assumptions change or prove to have been incorrect, it could have a material impact on our business, consolidated financial position, results of operations, or cash flows. See Note 10 of Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for additional information regarding contingencies.

Business Combinations

We allocate the fair value of purchase consideration to the tangible assets acquired, liabilities assumed, and intangible assets acquired based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. When determining the fair values of assets acquired and liabilities assumed, management makes significant estimates and assumptions, especially with respect to intangible assets.

Critical estimates in valuing certain intangible assets include but are not limited to future expected cash flows (primarily from customer relationships and acquired patents and developed technology) and discount rates. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates.

Other estimates associated with the accounting for acquisitions may change as additional information becomes available regarding the assets acquired and liabilities assumed, as more fully discussed in Note 8 of Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K.

Goodwill

Goodwill is allocated to reporting units expected to benefit from the business combination. We evaluate our reporting units when changes in our operating structure occur, and if necessary, reassign goodwill using a relative fair value allocation approach. We test goodwill for impairment at the reporting unit level at least annually, or more frequently if events or changes in circumstances indicate that the asset may be impaired. Goodwill impairment tests require judgment, including the identification of reporting units, assignment of assets and liabilities to reporting units, assignment of goodwill to reporting units, and determination of the fair value of each reporting unit.

Long-lived Assets

Long-lived assets, including property and equipment, long-term prepayments, and intangible assets, excluding goodwill, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The evaluation is performed at the lowest level of identifiable cash flows independent of other assets. An impairment loss would be recognized when estimated undiscounted future cash flows generated from the assets are less than their carrying amount. Measurement of an impairment loss would be based on the excess of the carrying amount of the asset group over its fair value.

Impairment of Securities

We periodically review our securities for impairment. If we conclude that any of these investments are impaired, we determine whether such impairment is other-than-temporary. Factors we consider to make such determination include the duration and severity of the impairment, the reason for the decline in value and the potential recovery period and our intent to sell. For marketable debt securities, we also consider whether (1) it is more likely than not that we will be required to sell the security before recovery of its amortized cost basis, and (2) the amortized cost basis cannot be recovered as a result of credit losses. If any impairment is considered other-than-temporary, we will write down the asset to its fair value and record the corresponding charge as other income (expense), net.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to financial market risks, including changes in foreign currency exchange rates and interest rates.

Foreign Currency Exchange Risk

We transact business globally in multiple currencies. Our international revenues, as well as costs and expenses denominated in foreign currencies, expose us to the risk of fluctuations in foreign currency exchange rates against the U.S. dollar. In general, we are a net receiver of foreign currencies and therefore benefit from a weakening of the U.S. dollar and are adversely affected by a strengthening of the U.S. dollar. Principal currencies hedged included the Australian dollar, British pound, Canadian dollar, Euro and Japanese yen.

We use foreign currency forwards and option contracts, including collars (an option strategy comprised of a combination of purchased and written options) to protect our forecasted U.S. dollar-equivalent earnings from changes in foreign currency exchange rates. When the U.S. dollar strengthens, gains from foreign currency options and forwards reduce the foreign currency losses related to our earnings. When the U.S. dollar weakens, losses from foreign currency collars and forwards offset the foreign currency gains related to our earnings. These hedging contracts reduce, but do not entirely eliminate, the impact of foreign currency exchange rate movements. We designate these contracts as cash flow hedges for accounting purposes. We record the effective portion of these contracts as a component of accumulated other comprehensive income (AOCI) and subsequently reclassify them into revenues to offset the hedged exposures as they occur. For foreign currency collars, we include the change in time value in our assessment of hedge effectiveness. For forwards and all other option contracts, we exclude the change in the forward points and time value from our assessment of hedge effectiveness. We recognize changes of the excluded components in other income (expense), net.

We considered the historical trends in foreign currency exchange rates and determined that it was reasonably possible that changes in exchange rates of 10% could be experienced in the near term. If the U.S. dollar weakened by 10% as of December 31, 2016 and December 31, 2017, the amount recorded in AOCI related to our foreign exchange contracts before tax effect would have been approximately $920 million and $950 million lower as of December 31, 2016 and December 31, 2017, respectively. The change in the value recorded in AOCI would be expected to offset a corresponding foreign currency change in forecasted hedged revenues when recognized.

In addition, we use foreign exchange forward contracts to offset the foreign exchange risk on our assets and liabilities denominated in currencies other than the local currency of the subsidiary. These forward contracts reduce, but do not entirely eliminate, the impact of foreign currency exchange rate movements on our assets and liabilities. The foreign currency gains and losses on the assets and liabilities are recorded in other income (expense), net, which are offset by the gains and losses on the forward contracts.

We considered the historical trends in foreign currency exchange rates and determined that it was reasonably possible that adverse changes in exchange rates of 10% for all currencies could be experienced in the near term. These reasonably possible adverse changes in exchange rates of 10% were applied to total monetary assets and liabilities denominated in currencies other than the local currencies at the balance sheet dates to compute the adverse impact these changes would have had on our income before income taxes in the near term. These changes would have resulted in an adverse impact on income before income taxes of approximately $40 million and $52 million as of December 31, 2016 and 2017, respectively. The adverse impact as of December 31, 2016 and 2017 is after consideration of the offsetting effect of approximately $554 million and $374 million, respectively, from foreign exchange contracts in place for the months ended December 31, 2016 and December 31, 2017.

Interest Rate Risk

Our investment strategy is to achieve a return that will allow us to preserve capital and maintain liquidity requirements. We invest primarily in debt securities including those of the U.S. government and its agencies, corporate debt securities, mortgage-backed securities, money market and other funds, municipal securities, time deposits, asset backed securities, and debt instruments issued by foreign governments. By policy, we limit the amount of credit exposure to any one issuer. Our investments in both fixed rate and floating rate interest earning securities carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than predicted if interest rates fall. Unrealized gains or losses on our marketable debt securities are primarily due to interest rate fluctuations as a result of higher market interest rates compared to interest rates at the time of purchase. We account for both fixed and variable rate securities at fair value with changes on gains and losses recorded in AOCI until the securities are sold.

To enhance our assessment of the interest rate risk associated with our investment portfolio, we use value-at-risk (VaR) analysis to determine the potential impact of fluctuations in interest rates on the value of our marketable debt security portfolio. The VaR is the expected loss in fair value, for a given confidence interval, for our investment portfolio due to adverse movements in interest rates. We use a variance/covariance VaR model with 95% confidence interval. The estimated one-day loss in fair value of our marketable debt securities as of December 31, 2016 and 2017 are shown below (in millions):

	As of December 31,		12-Month Average As of December 31,	
	2016	**2017**	**2016**	**2017**
Risk Category - Interest Rate	$ 107	$ 84	$ 99	$ 87

Actual future gains and losses associated with our marketable debt security portfolio may differ materially from the sensitivity analyses performed as of December 31, 2016 and 2017 due to the inherent limitations associated with predicting the timing and amount of changes in interest rates and our actual exposures and positions. VaR analysis is not intended to represent actual losses but is used as a risk estimation.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Alphabet Inc.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

The supplementary financial information required by this Item 8 is included in Item 7 under the caption "Quarterly Results of Operations."

REPORT OF ERNST & YOUNG LLP, INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Alphabet Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Alphabet Inc. (the Company) as of December 31, 2016 and 2017, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes and financial statement schedule listed in the Index at Item 15(a)2 (collectively referred to as the "financial statements"). In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2016 and 2017, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report February 5, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1999.

San Jose, California
February 5, 2018

REPORT OF ERNST & YOUNG LLP, INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Alphabet Inc.

Opinion on Internal Control over Financial Reporting

We have audited Alphabet Inc.'s internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Alphabet Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2016 and 2017, and the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes and financial statement schedule listed in the Index at Item 15(a)2, of the Company and our report dated February 5, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitation of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

San Jose, California
February 5, 2018

Alphabet Inc.
CONSOLIDATED BALANCE SHEETS
(In millions, except share and par value amounts which are reflected in thousands, and par value per share amounts)

	As of December 31, 2016	As of December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 12,918	$ 10,715
Marketable securities	73,415	91,156
Total cash, cash equivalents, and marketable securities	86,333	101,871
Accounts receivable, net of allowance of $467 and $674	14,137	18,336
Income taxes receivable, net	95	369
Inventory	268	749
Other current assets	4,575	2,983
Total current assets	105,408	124,308
Non-marketable investments	5,878	7,813
Deferred income taxes	383	680
Property and equipment, net	34,234	42,383
Intangible assets, net	3,307	2,692
Goodwill	16,468	16,747
Other non-current assets	1,819	2,672
Total assets	$ 167,497	$ 197,295
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 2,041	$ 3,137
Accrued compensation and benefits	3,976	4,581
Accrued expenses and other current liabilities	6,144	10,177
Accrued revenue share	2,942	3,975
Deferred revenue	1,099	1,432
Income taxes payable, net	554	881
Total current liabilities	16,756	24,183
Long-term debt	3,935	3,969
Deferred revenue, non-current	202	340
Income taxes payable, non-current	4,677	12,812
Deferred income taxes	226	430
Other long-term liabilities	2,665	3,059
Total liabilities	28,461	44,793
Commitments and Contingencies (Note 10)		
Stockholders' equity:		
Convertible preferred stock, $0.001 par value per share, 100,000 shares authorized; no shares issued and outstanding	0	0
Class A and Class B common stock, and Class C capital stock and additional paid-in capital, $0.001 par value per share: 15,000,000 shares authorized (Class A 9,000,000, Class B 3,000,000, Class C 3,000,000); 691,293 (Class A 296,992, Class B 47,437, Class C 346,864) and 694,783 (Class A 298,470, Class B 46,972, Class C 349,341) shares issued and outstanding	36,307	40,247
Accumulated other comprehensive loss	(2,402)	(992)
Retained earnings	105,131	113,247
Total stockholders' equity	139,036	152,502
Total liabilities and stockholders' equity	$ 167,497	$ 197,295

See accompanying notes.

Alphabet Inc.
CONSOLIDATED STATEMENTS OF INCOME
(In millions, except per share amounts)

	Year Ended December 31, 2015	2016	2017
Revenues	$ 74,989	$ 90,272	$ 110,855
Costs and expenses:			
Cost of revenues	28,164	35,138	45,583
Research and development	12,282	13,948	16,625
Sales and marketing	9,047	10,485	12,893
General and administrative	6,136	6,985	6,872
European Commission fine	0	0	2,736
Total costs and expenses	55,629	66,556	84,709
Income from operations	19,360	23,716	26,146
Other income (expense), net	291	434	1,047
Income before income taxes	19,651	24,150	27,193
Provision for income taxes	3,303	4,672	14,531
Net income	$ 16,348	$ 19,478	$ 12,662
Less: Adjustment Payment to Class C capital stockholders	522	0	0
Net income available to all stockholders	$ 15,826	$ 19,478	$ 12,662
Basic net income per share of Class A and B common stock	$ 23.11	$ 28.32	$ 18.27
Basic net income per share of Class C capital stock	$ 24.63	$ 28.32	$ 18.27
Diluted net income per share of Class A and B common stock	$ 22.84	$ 27.85	$ 18.00
Diluted net income per share of Class C capital stock	$ 24.34	$ 27.85	$ 18.00

See accompanying notes.

Alphabet Inc.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In millions)

	Year Ended December 31,		
	2015	2016	2017
Net income	$ 16,348	$ 19,478	$ 12,662
Other comprehensive income (loss):			
Change in foreign currency translation adjustment	(1,067)	(599)	1,543
Available-for-sale investments:			
Change in net unrealized gains (losses)	(715)	(314)	307
Less: reclassification adjustment for net (gains) losses included in net income	208	221	105
Net change (net of tax effect of $29, $0, and $0)	(507)	(93)	412
Cash flow hedges:			
Change in net unrealized gains (losses)	676	515	(638)
Less: reclassification adjustment for net (gains) losses included in net income	(1,003)	(351)	93
Net change (net of tax effect of $115, $64, and $247)	(327)	164	(545)
Other comprehensive income (loss)	(1,901)	(528)	1,410
Comprehensive income	$ 14,447	$ 18,950	$ 14,072

See accompanying notes.

Alphabet Inc.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In millions, except share amounts which are reflected in thousands)

	Class A and Class B Common Stock, Class C Capital Stock and Additional Paid-In Capital		Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Stockholders' Equity
	Shares	Amount			
Balance as of December 31, 2014	680,172	$ 28,767	$ 27	$ 75,066	$ 103,860
Common and capital stock issued	8,714	664	0	0	664
Stock-based compensation expense	0	5,151	0	0	5,151
Stock-based compensation tax benefits	0	815	0	0	815
Tax withholding related to vesting of restricted stock units	0	(2,779)	0	0	(2,779)
Repurchases of capital stock	(2,391)	(111)	0	(1,669)	(1,780)
Adjustment Payment to Class C capital stockholders	853	475	0	(522)	(47)
Net income	0	0	0	16,348	16,348
Other comprehensive loss	0	0	(1,901)	0	(1,901)
Balance as of December 31, 2015	687,348	32,982	(1,874)	89,223	120,331
Cumulative effect of accounting change	0	180	0	(133)	47
Common and capital stock issued	9,106	298	0	0	298
Stock-based compensation expense	0	6,700	0	0	6,700
Tax withholding related to vesting of restricted stock units	0	(3,597)	0	0	(3,597)
Repurchases of capital stock	(5,161)	(256)	0	(3,437)	(3,693)
Net income	0	0	0	19,478	19,478
Other comprehensive loss	0	0	(528)	0	(528)
Balance as of December 31, 2016	691,293	36,307	(2,402)	105,131	139,036
Cumulative effect of accounting change	0	0	0	(15)	(15)
Common and capital stock issued	8,652	212	0	0	212
Stock-based compensation expense	0	7,694	0	0	7,694
Tax withholding related to vesting of restricted stock units	0	(4,373)	0	0	(4,373)
Repurchases of capital stock	(5,162)	(315)	0	(4,531)	(4,846)
Sale of subsidiary shares	0	722	0	0	722
Net income	0	0	0	12,662	12,662
Other comprehensive income	0	0	1,410	0	1,410
Balance as of December 31, 2017	694,783	$ 40,247	$ (992)	$ 113,247	$ 152,502

See accompanying notes.

Alphabet Inc.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Year Ended December 31,		
	2015	2016	2017
Operating activities			
Net income	$ 16,348	$ 19,478	$ 12,662
Adjustments:			
Depreciation and impairment of property and equipment	4,132	5,267	6,103
Amortization and impairment of intangible assets	931	877	812
Stock-based compensation expense	5,203	6,703	7,679
Deferred income taxes	(179)	(38)	258
Loss on marketable and non-marketable investments, net	334	275	194
Other	212	174	137
Changes in assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(2,094)	(2,578)	(3,768)
Income taxes, net	(179)	3,125	8,211
Other assets	(318)	312	(2,164)
Accounts payable	203	110	731
Accrued expenses and other liabilities	1,597	1,515	4,891
Accrued revenue share	339	593	955
Deferred revenue	43	223	390
Net cash provided by operating activities	26,572	36,036	37,091
Investing activities			
Purchases of property and equipment	(9,950)	(10,212)	(13,184)
Proceeds from disposals of property and equipment	35	240	99
Purchases of marketable securities	(74,368)	(84,509)	(92,195)
Maturities and sales of marketable securities	62,905	66,895	73,959
Purchases of non-marketable investments	(2,326)	(1,109)	(1,745)
Maturities and sales of non-marketable investments	154	494	533
Cash collateral related to securities lending	(350)	(2,428)	0
Investments in reverse repurchase agreements	425	450	0
Acquisitions, net of cash acquired, and purchases of intangible assets	(236)	(986)	(287)
Proceeds from collection of notes receivable	0	0	1,419
Net cash used in investing activities	(23,711)	(31,165)	(31,401)
Financing activities			
Net payments related to stock-based award activities	(2,375)	(3,304)	(4,166)
Adjustment Payment to Class C capital stockholders	(47)	0	0
Repurchases of capital stock	(1,780)	(3,693)	(4,846)
Proceeds from issuance of debt, net of costs	13,705	8,729	4,291
Repayments of debt	(13,728)	(10,064)	(4,377)
Proceeds from sale of subsidiary shares	0	0	800
Net cash used in financing activities	(4,225)	(8,332)	(8,298)
Effect of exchange rate changes on cash and cash equivalents	(434)	(170)	405
Net decrease in cash and cash equivalents	(1,798)	(3,631)	(2,203)
Cash and cash equivalents at beginning of period	18,347	16,549	12,918
Cash and cash equivalents at end of period	$ 16,549	$ 12,918	$ 10,715
Supplemental disclosures of cash flow information			
Cash paid for taxes, net of refunds	$ 3,651	$ 1,643	$ 6,191
Cash paid for interest, net of amounts capitalized	$ 96	$ 84	$ 84

See accompanying notes.

Alphabet Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Nature of Operations and Summary of Significant Accounting Policies

Nature of Operations

Google was incorporated in California in September 1998 and re-incorporated in the State of Delaware in August 2003. In 2015, we implemented a holding company reorganization, and as a result, Alphabet Inc. (Alphabet) became the successor issuer to Google.

We generate revenues primarily by delivering relevant, cost-effective online advertising.

Basis of Consolidation

The consolidated financial statements of Alphabet include the accounts of Alphabet and entities consolidated under the variable interest and voting models. All intercompany balances and transactions have been eliminated.

Use of Estimates

Preparation of consolidated financial statements in conformity with generally accepted accounting principles in the United States (GAAP) requires us to make estimates and assumptions that affect the amounts reported and disclosed in the financial statements and the accompanying notes. Actual results could differ materially from these estimates. On an ongoing basis, we evaluate our estimates, including those related to the accounts receivable and sales allowances, fair values of financial instruments, intangible assets and goodwill, useful lives of intangible assets and property and equipment, income taxes, and contingent liabilities, among others. We base our estimates on assumptions, both historical and forward looking, that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

Revenue Recognition

We recognize revenues when we transfer control of promised goods or services to our customers in an amount that reflects the consideration to which we expect to be entitled to in exchange for those goods or services.

See Note 2 for further discussion on Revenues.

Cost of Revenues

Cost of revenues consists of TAC and other costs of revenues.

TAC represents the amounts paid to Google Network Members primarily for ads displayed on their properties and amounts paid to our distribution partners who make available our search access points and services. Our distribution partners include browser providers, mobile carriers, original equipment manufacturers, and software developers.

Other costs of revenues (which is the cost of revenues excluding TAC) include the following:

- Amortization of certain intangible assets;
- Content acquisition costs primarily related to payments to content providers from whom we license video and other content for distribution on YouTube and Google Play (we pay fees to these content providers based on revenues generated or a flat fee);
- Credit card and other transaction fees related to processing customer transactions;
- Expenses associated with our data centers and other operations (including bandwidth, compensation expense (including SBC), depreciation, energy, and other equipment costs); and
- Inventory related costs for hardware we sell.

Stock-based Compensation

Stock-based compensation primarily consists of Alphabet restricted stock units (RSUs). RSUs are equity classified and measured at the fair market value of the underlying stock at the grant date. We recognize RSU expense using the straight-line attribution method over the requisite service period and account for forfeitures as they occur.

For RSUs, shares are issued on the vesting dates net of the applicable statutory tax withholding to be paid by us on behalf of our employees. As a result, fewer shares are issued than the number of RSUs outstanding. We record a liability for the tax withholding to be paid by us as a reduction to additional paid-in capital.

Additionally, stock-based compensation includes other types of stock-based awards that may be settled in the stock of our subsidiaries or in cash. Certain awards are liability classified and are remeasured at fair value through settlement.

Performance Fees

We have compensation arrangements with payouts based on investment returns. We recognize compensation expense based on the estimated payouts. The amounts are recorded in general and administrative expenses and were not material for the years ended December 31, 2015, 2016, and 2017.

Certain Risks and Concentrations

Our revenues are primarily derived from online advertising, the market for which is highly competitive and rapidly changing. In addition, our revenues are generated from a multitude of vertical market segments in countries around the world. Significant changes in this industry or changes in customer buying or advertiser spending behavior could adversely affect our operating results.

We are subject to concentrations of credit risk principally from cash and cash equivalents, marketable securities, foreign exchange contracts, and accounts receivable. Cash equivalents and marketable securities consist primarily of time deposits, money market and other funds, highly liquid debt instruments of the U.S. government and its agencies, debt instruments issued by foreign governments, debt instruments issued by municipalities in the U.S., corporate debt securities, mortgage-backed securities, and asset-backed securities. Foreign exchange contracts are transacted with various financial institutions with high credit standing. Accounts receivable are typically unsecured and are derived from revenues earned from customers located around the world. We perform ongoing evaluations to determine customer credit and we limit the amount of credit we extend. We generally do not require collateral from our customers. We maintain reserves for estimated credit losses and these losses have generally been within our expectations.

No individual customer or groups of affiliated customers represented more than 10% of our revenues in 2015, 2016, or 2017. In 2015, 2016, and 2017, we generated approximately 46%, 47%, and 47% of our revenues, respectively, from customers based in the U.S. See Note 2 for further details.

Fair Value of Financial Instruments

Our financial assets and liabilities that are measured at fair value on a recurring basis include cash equivalents, marketable securities, derivative contracts, and non-marketable debt securities. Our financial assets that are measured at fair value on a nonrecurring basis when impairment is identified or assets are held for sale include long-lived assets and non-marketable equity securities. Other financial assets and liabilities are carried at cost with fair value disclosed, if required.

Fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or a liability. Assets and liabilities recorded at fair value are measured and classified in accordance with a three-tier fair value hierarchy based on the observability of the inputs available in the market used to measure fair value:

Level 1 - Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 - Include other inputs that are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant inputs are observable in the market or can be derived from observable market data. Where applicable, these models project future cash flows and discount the future amounts to a present value using market-based observable inputs including interest rate curves, foreign exchange rates, and credit ratings.

Level 3 - Unobservable inputs that are supported by little or no market activities.

The fair value hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

Cash, Cash Equivalents, and Marketable Securities

We invest all excess cash primarily in debt securities including those of the U.S. government and its agencies, corporate debt securities, mortgage-backed securities, money market and other funds, municipal securities, time deposits, asset backed securities, and debt instruments issued by foreign governments.

We classify all investments that are readily convertible to known amounts of cash and have stated maturities of three months or less from the date of purchase as cash equivalents and those with stated maturities of greater than three months as marketable securities.

We determine the appropriate classification of our investments in marketable securities at the time of purchase and reevaluate such designation at each balance sheet date. We have classified and accounted for our marketable securities as available-for-sale. After consideration of our risk versus reward objectives, as well as our liquidity requirements, we may sell these securities prior to their stated maturities. As we view these securities as available to support current operations, we classify highly liquid securities with maturities beyond 12 months as current assets under the caption marketable securities in the Consolidated Balance Sheets. We carry these securities at fair value, and report the unrealized gains and losses, net of taxes, as a component of stockholders' equity, except for unrealized losses determined to be other-than-temporary, which we record within other income (expense), net. We determine any realized gains or losses on the sale of marketable securities on a specific identification method, and we record such gains and losses as a component of other income (expense), net.

Non-Marketable Investments

We account for non-marketable equity investments either under the equity or cost method. Investments through which we exercise significant influence but do not have control over the investee are accounted for under the equity method. Investments through which we are not able to exercise significant influence over the investee are accounted for under the cost method. We classify non-marketable investments as non-current assets on the Consolidated Balance Sheet as those investments do not have stated contractual maturity dates.

We account for our non-marketable investments that meet the definition of a debt security as available-for-sale securities.

Variable Interest Entities

We determine at the inception of each arrangement whether an entity in which we have made an investment or in which we have other variable interests in is considered a Variable Interest Entity (VIE). We consolidate VIEs when we are deemed to be the primary beneficiary. The primary beneficiary of a VIE is the party that meets both of the following criteria: (1) has the power to make decisions that most significantly affect the economic performance of the VIE; and (2) has the obligation to absorb losses or the right to receive benefits that in either case could potentially be significant to the VIE. Periodically, we determine whether any changes in our interest or relationship with the entity impact our determination of whether the entity is still a VIE and, if so, whether we are the primary beneficiary. If we are not deemed to be the primary beneficiary in a VIE, we account for the investment or other variable interests in a VIE in accordance with applicable GAAP.

Impairment of Investments

We periodically review our investments for impairment. If we conclude that any of these investments are impaired, we determine whether such impairment is other-than-temporary. Factors we consider to make such determination include the duration and severity of the impairment, the reason for the decline in value and the potential recovery period and our intent to sell. For debt securities, we also consider whether (1) it is more likely than not that we will be required to sell the security before recovery of its amortized cost basis, and (2) the amortized cost basis cannot be recovered as a result of credit losses. If any impairment is considered other-than-temporary, we will write down the asset to its fair value and record the corresponding charge as other income (expense), net.

Accounts Receivable

We record accounts receivable at the invoiced amount. We maintain an allowance for doubtful accounts to reserve for potentially uncollectible receivables. We review the accounts receivable by amounts due by customers which are past due to identify specific customers with known disputes or collectability issues. In determining the amount of the reserve, we make judgments about the creditworthiness of significant customers based on ongoing credit evaluations. We also maintain a sales allowance to reserve for potential credits issued to customers. We determine the amount of the reserve based on historical credits issued.

Property and Equipment

We account for property and equipment at cost less accumulated depreciation. We compute depreciation using the straight-line method over the estimated useful lives of the assets. We depreciate buildings over periods up to 25 years. We generally depreciate information technology assets over periods up to 7 years. We depreciate leasehold improvements over the shorter of the remaining lease term or the estimated useful lives of the assets. Construction in progress is the construction or development of property and equipment that have not yet been placed in service for our intended use. Depreciation for equipment, buildings, and leasehold improvements commences once they are ready for our intended use. Land is not depreciated.

Inventory

Inventory consists primarily of finished goods and is stated at the lower of cost and net realizable value. Cost is computed using the first-in, first-out method.

Software Development Costs

We expense software development costs, including costs to develop software products or the software component of products to be sold, leased, or marketed to external users, before technological feasibility is reached. Technological feasibility is typically reached shortly before the release of such products and as a result, development costs that meet the criteria for capitalization were not material for the periods presented.

Software development costs also include costs to develop software to be used solely to meet internal needs and cloud based applications used to deliver our services. We capitalize development costs related to these software applications once the preliminary project stage is complete and it is probable that the project will be completed and the software will be used to perform the function intended. Costs capitalized for developing such software applications were not material for the periods presented.

Business Combinations

We include the results of operations of the businesses that we acquire as of the acquisition date. We allocate the purchase price of our acquisitions to the assets acquired and liabilities assumed based on their estimated fair values. The excess of the purchase price over the fair values of these identifiable assets and liabilities is recorded as goodwill. Acquisition-related expenses are recognized separately from the business combination and are expensed as incurred.

Long-Lived Assets, Goodwill and Other Acquired Intangible Assets

We review property and equipment, long-term prepayments and intangible assets, excluding goodwill, for impairment when events or changes in circumstances indicate the carrying amount may not be recoverable. We measure recoverability of these assets by comparing the carrying amounts to the future undiscounted cash flows that the assets or the asset group are expected to generate. If the carrying value of the assets are not recoverable, the impairment recognized is measured as the amount by which the carrying value of the asset exceeds its fair value. Intangible asset impairments were not material in 2015, 2016, or 2017.

We allocate goodwill to reporting units based on the expected benefit from the business combination. We evaluate our reporting units when changes in our operating structure occur, and if necessary, reassign goodwill using a relative fair value allocation approach. We test our goodwill for impairment at least annually, or more frequently if events or changes in circumstances indicate that the asset may be impaired. No goodwill impairment occurred in 2015, 2016, or 2017.

Intangible assets with definite lives are amortized over their estimated useful lives. We amortize intangible assets on a straight-line basis with definite lives over periods ranging from one to twelve years.

Income Taxes

We account for income taxes using the asset and liability method, under which we recognize the amount of taxes payable or refundable for the current year and deferred tax assets and liabilities for the future tax consequences of events that have been recognized in our financial statements or tax returns. We measure current and deferred tax assets and liabilities based on provisions of enacted tax law. We evaluate the realization of our deferred tax assets based on all available evidence and establish a valuation allowance to reduce deferred tax assets when it is more likely than not that they will not be realized.

We recognize the financial statement effects of a tax position when it is more likely than not that, based on technical merits, the position will be sustained upon examination. The tax benefits of the position recognized in the financial statements are then measured based on the largest amount of benefit that is greater than 50% likely to be realized upon settlement with a taxing authority. In addition, we recognize interest and penalties related to unrecognized tax benefits as a component of the income tax provision.

Foreign Currency

Generally, the functional currency of our international subsidiaries is the local currency. We translate the financial statements of these subsidiaries to U.S. dollars using month-end exchange rates for assets and liabilities, and average rates for the annual period derived from month-end exchange rates for revenues, costs, and expenses. We record translation gains and losses in accumulated other comprehensive income as a component of stockholders' equity. We reflect net foreign exchange transaction gains and losses resulting from the conversion of the transaction currency to functional currency as a component of foreign currency exchange losses in other income (expense), net.

Advertising and Promotional Expenses

We expense advertising and promotional costs in the period in which they are incurred. For the years ended December 31, 2015, 2016 and 2017, advertising and promotional expenses totaled approximately $3.2 billion, $3.9 billion, and $5.1 billion, respectively.

Recent Accounting Pronouncements

Recently issued accounting pronouncements not yet adopted

In January 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2016-01 (ASU 2016-01) "Financial Instruments-Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities." ASU 2016-01 amends various aspects of the recognition, measurement, presentation, and disclosure of financial instruments. The most significant impact to our consolidated financial statements relates to the recognition and measurement of equity investments at fair value in our consolidated statements of income. We have elected to use the measurement alternative, defined as cost, less impairments, adjusted by observable price changes. We anticipate that the adoption of ASU 2016-01 will increase the volatility of our other income (expense), net, as a result of the remeasurement of our equity securities upon the occurrence of observable price changes and impairments. We will adopt ASU 2016-01 effective January 1, 2018.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02 (Topic 842) "Leases." Topic 842 supersedes the lease recognition requirements in Accounting Standards Codification (ASC) Topic 840, "Leases." Under Topic 842, lessees are required to recognize assets and liabilities on the balance sheet for most leases and provide enhanced disclosures. Leases will continue to be classified as either finance or operating. As currently issued, entities are required to use a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. There are additional optional practical expedients that an entity may elect to apply. We anticipate that the adoption of Topic 842 will materially affect our Consolidated Balance Sheets. We are in the process of implementing changes to our systems and processes in conjunction with our review of existing lease agreements. We will adopt Topic 842 effective January 1, 2019 and expect to elect certain available transitional practical expedients.

In June 2016, the FASB issued Accounting Standards Update No. 2016-13 (ASU 2016-13) "Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss methodology, which will result in more timely recognition of credit losses. ASU 2016-13 is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019. We are currently in the process of evaluating the impact of the adoption of ASU 2016-13 on our consolidated financial statements.

In October 2016, the FASB issued Accounting Standards Update No. 2016-16 (ASU 2016-16) "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other than Inventory." ASU 2016-16 generally accelerates the recognition of income tax consequences for asset transfers between entities under common control. Entities are required to adopt using a modified retrospective approach with a cumulative adjustment to opening retained earnings in the year of adoption for previously unrecognized income tax expense. We anticipate a retained earnings adjustment of approximately $700 million upon adoption related to the unrecognized income tax effects of asset transfers that occurred prior to adoption. We will adopt ASU 2016-16 effective January 1, 2018.

In January 2017, the FASB issued Accounting Standards Update No. 2017-04 (ASU 2017-04) “Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment.” ASU 2017-04 eliminates step two of the goodwill impairment test and specifies that goodwill impairment should be measured by comparing the fair value of a reporting unit with its carrying amount. Additionally, the amount of goodwill allocated to each reporting unit with a zero or negative carrying amount of net assets should be disclosed. ASU 2017-04 is effective for annual or interim goodwill impairment tests performed in fiscal years beginning after December 15, 2019; early adoption is permitted. We currently do not anticipate that the adoption of ASU 2017-04 will have a material impact on our consolidated financial statements.

Recently adopted accounting pronouncements

In May 2014, the FASB issued Accounting Standards Update No. 2014-09 (Topic 606) "Revenue from Contracts with Customers." Topic 606 supersedes the revenue recognition requirements in Topic 605 “Revenue

Recognition" (Topic 605), and requires entities to recognize revenues when control of the promised goods or services is transferred to customers at an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. We adopted Topic 606 as of January 1, 2017 using the modified retrospective transition method. See Note 2 for further details.

In January 2017, the FASB issued Accounting Standards Update No. 2017-01 (ASU 2017-01) "Business Combinations (Topic 805): Clarifying the Definition of a Business." ASU 2017-01 provides guidance to evaluate whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. If substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single asset or a group of similar assets, the assets acquired (or disposed of) are not considered a business. We adopted ASU 2017-01 as of January 1, 2017 on a prospective basis and there was no material impact to our consolidated financial statements.

Prior Period Reclassifications

Certain amounts in prior periods have been reclassified to conform with current period presentation.

Note 2. Revenues

Adoption of ASC Topic 606, "Revenue from Contracts with Customers"

On January 1, 2017, we adopted Topic 606 using the modified retrospective method applied to those contracts which were not completed as of January 1, 2017. Results for reporting periods beginning after January 1, 2017 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under Topic 605.

We recorded a net reduction to opening retained earnings of $15 million, net of tax, as of January 1, 2017 due to the cumulative impact of adopting Topic 606, with the impact primarily related to our non-advertising revenues. The impact to revenues as a result of applying Topic 606 was an increase of $34 million for the twelve months ended December 31, 2017.

Revenue Recognition

Revenues are recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

The following table presents our revenues disaggregated by revenue source (in millions). Sales and usage-based taxes are excluded from revenues.

	Twelve Months Ended December 31,		
	2015[(1)]	2016[(1)]	2017
Google properties	$ 52,357	$ 63,785	$ 77,788
Google Network Members' properties	15,033	15,598	17,587
Google advertising revenues	67,390	79,383	95,375
Google other revenues	7,154	10,080	14,277
Other Bets revenues	445	809	1,203
Total revenues[(2)]	$ 74,989	$ 90,272	$ 110,855

(1) As noted above, prior period amounts have not been adjusted under the modified retrospective method.
(2) Revenues include hedging gains (losses) of $1.4 billion, $539 million, and $(169) million for the years ended December 31, 2015, 2016, and 2017, respectively, which do not represent revenues recognized from contracts with customers.

The following table presents our revenues disaggregated by geography, based on the billing addresses of our customers (in millions):

	Twelve Months Ended December 31,		
	2015	2016	2017
United States	$ 34,810	$ 42,781	$ 52,449
EMEA[(1)]	26,368	30,304	36,046
APAC[(1)]	9,887	12,559	16,235
Other Americas[(1)]	3,924	4,628	6,125
Total revenues[(2)]	$ 74,989	$ 90,272	$ 110,855

(1) Regions represent Europe, the Middle East, and Africa (EMEA); Asia-Pacific (APAC); and Canada and Latin America (Other Americas).
(2) Revenues include hedging gains (losses) for the the years ended December 31, 2015, 2016, and 2017.

Advertising Revenues

We generate revenues primarily by delivering advertising on Google properties and Google Network Members' properties.

Google properties revenues consist primarily of advertising revenues generated on Google.com, the Google Search app, and other Google owned and operated properties like Gmail, Google Maps, Google Play, and YouTube.

Google Network Members' properties revenues consist primarily of advertising revenues generated on Google Network Members' properties.

Our customers generally purchase advertising inventory through AdWords, DoubleClick AdExchange, and DoubleClick Bid Manager, among others.

Most of our customers pay us on a cost-per-click basis (CPC), which means that an advertiser pays us only when a user clicks on an ad on Google properties or Google Network Members' properties or views certain YouTube engagement ads. For these customers, we recognize revenue each time a user clicks on the ad or when a user views the ad for a specified period of time.

We also offer advertising on other bases such as cost-per-impression (CPM), which means an advertiser pays us based on the number of times their ads are displayed on Google properties or Google Network Members' properties. For these customers, we recognize revenue each time an ad is displayed.

Certain customers may receive cash-based incentives or credits, which are accounted for as variable consideration. We estimate these amounts based on the expected amount to be provided to customers and reduce revenues recognized. We believe that there will not be significant changes to our estimates of variable consideration.

For ads placed on Google Network Members' properties, we evaluate whether we are the principal (i.e., report revenues on a gross basis) or agent (i.e., report revenues on a net basis). Generally, we report advertising revenues for ads placed on Google Network Members' properties on a gross basis, that is, the amounts billed to our customers are recorded as revenues, and amounts paid to Google Network Members are recorded as cost of revenues. Where we are the principal, we control the advertising inventory before it is transferred to our customers. Our control is evidenced by our sole ability to monetize the advertising inventory before it is transferred to our customers, and is further supported by us being primarily responsible to our customers and having a level of discretion in establishing pricing.

Other Revenues

Google other revenues and Other Bets revenues consist primarily of revenues from:

- Apps, in-app purchases, and digital content in the Google Play store;
- Google Cloud offerings;
- Hardware; and
- Other miscellaneous products and services.

As it relates to Google other revenues, the most significant judgment is determining whether we are the principal or agent for app sales and in-app purchases through the Google Play store. We report revenues from these transactions on a net basis because our performance obligation is to facilitate a transaction between app developers and end users, for which we earn a commission. Consequently, the portion of the gross amount billed to end users that is remitted to app developers is not reflected as revenues.

Arrangements with Multiple Performance Obligations

Our contracts with customers may include multiple performance obligations. For such arrangements, we allocate revenues to each performance obligation based on its relative standalone selling price. We generally determine standalone selling prices based on the prices charged to customers or using expected cost plus margin.

Deferred Revenues

We record deferred revenues when cash payments are received or due in advance of our performance, including amounts which are refundable. The increase in the deferred revenue balance for the twelve months ended December 31, 2017 is primarily driven by cash payments received or due in advance of satisfying our performance obligations, offset by $985 million of revenues recognized that were included in the deferred revenue balance as of December 31, 2016.

Our payment terms vary by the type and location of our customer and the products or services offered. The term between invoicing and when payment is due is not significant. For certain products or services and customer types, we require payment before the products or services are delivered to the customer.

Practical Expedients and Exemptions

We generally expense sales commissions when incurred because the amortization period would have been one year or less. These costs are recorded within sales and marketing expenses.

We do not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed.

Note 3. Financial Instruments

We classify our cash equivalents and marketable securities within Level 1 or Level 2 in the fair value hierarchy because we use quoted market prices or alternative pricing sources and models utilizing market observable inputs to determine their fair value. We classify our foreign currency and interest rate derivative contracts primarily within Level 2 in the fair value hierarchy as the valuation inputs are based on quoted prices and market observable data of similar instruments.

Cash, Cash Equivalents, and Marketable Securities

The following tables summarize our cash, cash equivalents and marketable securities by significant investment categories as of December 31, 2016 and 2017 (in millions):

	As of December 31, 2016					
	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Cash and Cash Equivalents	Marketable Securities
Cash	$ 7,078	$ 0	$ 0	$ 7,078	$ 7,078	$ 0
Level 1:						
Money market and other funds	4,783	0	0	4,783	4,783	0
U.S. government notes	38,454	46	(215)	38,285	613	37,672
Marketable equity securities	160	133	0	293	0	293
	43,397	179	(215)	43,361	5,396	37,965
Level 2:						
Time deposits(1)	142	0	0	142	140	2
Mutual funds(2)	204	7	0	211	0	211
U.S. government agencies	1,826	0	(11)	1,815	300	1,515
Foreign government bonds	2,345	18	(7)	2,356	0	2,356
Municipal securities	4,757	15	(65)	4,707	2	4,705
Corporate debt securities	12,993	114	(116)	12,991	2	12,989
Mortgage-backed securities	12,006	26	(216)	11,816	0	11,816
Asset-backed securities	1,855	2	(1)	1,856	0	1,856
	36,128	182	(416)	35,894	444	35,450
Total	$ 86,603	$ 361	$ (631)	$ 86,333	$ 12,918	$ 73,415

	As of December 31, 2017					
	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Cash and Cash Equivalents	Marketable Securities
Cash	$ 7,158	$ 0	$ 0	$ 7,158	$ 7,158	$ 0
Level 1:						
Money market and other funds	1,833	0	0	1,833	1,833	0
U.S. government notes	37,256	2	(310)	36,948	1,241	35,707
Marketable equity securities	242	100	(2)	340	0	340
	39,331	102	(312)	39,121	3,074	36,047
Level 2:						
Time deposits(1)	359	0	0	359	357	2
Mutual funds(2)	232	20	0	252	0	252
U.S. government agencies	3,713	0	(29)	3,684	0	3,684
Foreign government bonds	2,948	6	(14)	2,940	0	2,940
Municipal securities	7,631	2	(53)	7,580	0	7,580
Corporate debt securities	24,269	21	(135)	24,155	126	24,029
Mortgage-backed securities	11,157	9	(163)	11,003	0	11,003
Asset-backed securities	5,632	4	(17)	5,619	0	5,619
	55,941	62	(411)	55,592	483	55,109
Total	$ 102,430	$ 164	$ (723)	$ 101,871	$ 10,715	$ 91,156

(1) The majority of our time deposits are foreign deposits.
(2) The fair value option was elected for mutual funds with gains (losses) recognized in other income (expense), net.

We determine realized gains or losses on the sale of marketable securities on a specific identification method. We recognized gross realized gains of $357 million, $272 million, and $207 million for the years ended December 31, 2015, 2016, and 2017, respectively. We recognized gross realized losses of $565 million, $482 million, and $287 million for the years ended December 31, 2015, 2016, and 2017, respectively. We reflect these gains and losses as a component of other income (expense), net, in the Consolidated Statements of Income.

The following table summarizes the estimated fair value of our investments in marketable debt securities, accounted for as available-for-sale securities and classified by the contractual maturity date of the securities (in millions):

	As of December 31, 2017
Due in 1 year	$ 19,486
Due in 1 year through 5 years	56,056
Due in 5 years through 10 years	2,676
Due after 10 years	12,346
Total	$ 90,564

Impairment Considerations for Marketable Investments

The following tables present gross unrealized losses and fair values for those investments that were in an unrealized loss position as of December 31, 2016 and 2017, aggregated by investment category and the length of time that individual securities have been in a continuous loss position (in millions):

	As of December 31, 2016					
	Less than 12 Months		12 Months or Greater		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
U.S. government notes	$ 26,411	$ (215)	$ 0	$ 0	$ 26,411	$ (215)
U.S. government agencies	1,014	(11)	0	0	1,014	(11)
Foreign government bonds	956	(7)	0	0	956	(7)
Municipal securities	3,461	(63)	46	(2)	3,507	(65)
Corporate debt securities	6,184	(111)	166	(5)	6,350	(116)
Mortgage-backed securities	10,184	(206)	259	(10)	10,443	(216)
Asset-backed securities	391	(1)	0	0	391	(1)
Total	$ 48,601	$ (614)	$ 471	$ (17)	$ 49,072	$ (631)

	As of December 31, 2017					
	Less than 12 Months		12 Months or Greater		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
U.S. government notes	$ 18,325	$ (134)	$ 16,136	$ (176)	$ 34,461	$ (310)
U.S. government agencies	2,913	(22)	767	(7)	3,680	(29)
Foreign government bonds	1,932	(8)	342	(6)	2,274	(14)
Municipal securities	5,666	(47)	415	(6)	6,081	(53)
Corporate debt securities	18,300	(114)	1,710	(21)	20,010	(135)
Mortgage-backed securities	7,261	(89)	3,314	(74)	10,575	(163)
Asset-backed securities	3,800	(16)	135	(1)	3,935	(17)
Marketable equity securities	39	(2)	0	0	39	(2)
Total	$ 58,236	$ (432)	$ 22,819	$ (291)	$ 81,055	$ (723)

During the years ended December 31, 2016 and 2017, there were no other-than-temporary impairment losses. During the year ended December 31, 2015, we recognized $281 million of other-than-temporary impairment losses related to our marketable equity securities and fixed-income bond funds. Those losses are included in gain (loss) on marketable securities, net as a component of other income (expense), net, in the Consolidated Statements of Income. See Note 7 for further details on other income (expense), net.

Derivative Financial Instruments

We recognize derivative instruments as either assets or liabilities in the Consolidated Balance Sheets at fair value. We record changes in the fair value (i.e., gains or losses) of the derivatives in the Consolidated Statements of

Income as either other income (expense), net, or revenues, or in the Consolidated Balance Sheets in accumulated other comprehensive income (AOCI), as discussed below.

We enter into foreign currency contracts with financial institutions to reduce the risk that our cash flows and earnings will be adversely affected by foreign currency exchange rate fluctuations. We also use interest rate derivative contracts to hedge interest rate exposures on our fixed income securities and debt issuances. Our program is not used for trading or speculative purposes.

We enter into master netting arrangements, which reduce credit risk by permitting net settlement of transactions with the same counterparty. To further reduce credit risk, we enter into collateral security arrangements under which the counterparty is required to provide collateral when the net fair value of certain financial instruments fluctuates from contractually established thresholds. We can take possession of the collateral in the event of counterparty default. As of December 31, 2016 and 2017, we received cash collateral related to the derivative instruments under our collateral security arrangements of $362 million and $15 million, respectively.

Cash Flow Hedges

We use foreign currency forwards and option contracts, including collars (an option strategy comprised of a combination of purchased and written options), designated as cash flow hedges to hedge certain forecasted revenue transactions denominated in currencies other than the U.S. dollar and at times we use interest rate swaps to effectively lock interest rates on anticipated debt issuances. These transactions are designated as cash flow hedges. The notional principal of these contracts was approximately $10.7 billion and $11.7 billion as of December 31, 2016 and 2017, respectively. These contracts have maturities of 2 years or less.

We reflect the gains or losses on the effective portion of a cash flow hedge as a component of AOCI and subsequently reclassify cumulative gains and losses to revenues or interest expense when the hedged transactions are recorded. If the hedged transactions become probable of not occurring, the corresponding amounts in AOCI are immediately reclassified to other income (expense), net. For foreign currency collars, we include the change in time value in our assessment of hedge effectiveness. For other foreign currency options and forward contracts, we exclude the change in the forward points and time value from our assessment of hedge effectiveness. We recognize changes of the excluded components in other income (expense), net.

As of December 31, 2017, the effective portion of our cash flow hedges before tax effect was a net accumulated loss of $187 million, of which a net loss of $219 million is expected to be reclassified from AOCI into earnings within the next 12 months.

Fair Value Hedges

We use forward contracts designated as fair value hedges to hedge foreign currency risks for our investments denominated in currencies other than the U.S. dollar. We exclude changes in forward points for forward contracts from the assessment of hedge effectiveness. The notional principal of these contracts was $2.4 billion and $2.9 billion as of December 31, 2016 and 2017, respectively.

Gains and losses on these forward contracts are recognized in other income (expense), net, along with the offsetting gains and losses of the related hedged items.

Other Derivatives

Other derivatives not designated as hedging instruments consist of foreign currency forward contracts that we use to hedge intercompany transactions and other monetary assets or liabilities denominated in currencies other than the local currency of a subsidiary. We recognize gains and losses on these contracts, as well as the related costs in other income (expense), net, along with the foreign currency gains and losses on monetary assets and liabilities. The notional principal of the outstanding foreign exchange contracts was $7.9 billion and $15.2 billion as of December 31, 2016 and 2017, respectively.

The fair values of our outstanding derivative instruments were as follows (in millions):

		As of December 31, 2016		
	Balance Sheet Location	Fair Value of Derivatives Designated as Hedging Instruments	Fair Value of Derivatives Not Designated as Hedging Instruments	Total Fair Value
Derivative Assets:				
Level 2:				
Foreign exchange contracts	Other current and non-current assets	$ 539	$ 57	$ 596
Total		$ 539	$ 57	$ 596
Derivative Liabilities:				
Level 2:				
Foreign exchange contracts	Accrued expenses and other liabilities, current and non-current	$ 4	$ 9	$ 13
Total		$ 4	$ 9	$ 13

		As of December 31, 2017		
	Balance Sheet Location	Fair Value of Derivatives Designated as Hedging Instruments	Fair Value of Derivatives Not Designated as Hedging Instruments	Total Fair Value
Derivative Assets:				
Level 2:				
Foreign exchange contracts	Other current and non-current assets	$ 51	$ 29	$ 80
Total		$ 51	$ 29	$ 80
Derivative Liabilities:				
Level 2:				
Foreign exchange contracts	Accrued expenses and other liabilities, current and non-current	$ 230	$ 122	$ 352
Total		$ 230	$ 122	$ 352

The effect of derivative instruments in cash flow hedging relationships on income and other comprehensive income (OCI) is summarized below (in millions):

	Gains (Losses) Recognized in OCI on Derivatives Before Tax Effect (Effective Portion)		
	Year Ended December 31,		
Derivatives in Cash Flow Hedging Relationship	2015	2016	2017
Foreign exchange contracts	$ 964	$ 773	$ (955)

		Gains (Losses) Reclassified from AOCI into Income (Effective Portion)		
		Year Ended December 31,		
Derivatives in Cash Flow Hedging Relationship	Location	2015	2016	2017
Foreign exchange contracts	Revenues	$ 1,399	$ 539	$ (169)
Interest rate contracts	Other income (expense), net	5	5	5
Total		$ 1,404	$ 544	$ (164)

Derivatives in Cash Flow Hedging Relationship	Gains (Losses) Recognized in Income on Derivatives (Amount Excluded from Effectiveness Testing and Ineffective Portion) [(1)]			
		Year Ended December 31,		
	Location	2015	2016	2017
Foreign exchange contracts	Other income (expense), net	$ (297)	$ (381)	$ 83

(1) Gains (losses) related to the ineffective portion of the hedges were not material in all periods presented.

The effect of derivative instruments in fair value hedging relationships on income is summarized below (in millions):

Derivatives in Fair Value Hedging Relationship	Gains (Losses) Recognized in Income on Derivatives[(2)]			
		Year Ended December 31,		
	Location	2015	2016	2017
Foreign Exchange Hedges:				
Foreign exchange contracts	Other income (expense), net	$ 170	$ 145	$ (174)
Hedged item	Other income (expense), net	(176)	(139)	197
Total		$ (6)	$ 6	$ 23

(2) Amounts excluded from effectiveness testing and the ineffective portion of the fair value hedging relationships were not material in all periods presented.

The effect of derivative instruments not designated as hedging instruments on income is summarized below (in millions):

Derivatives Not Designated As Hedging Instruments	Gains (Losses) Recognized in Income on Derivatives			
		Year Ended December 31,		
	Location	2015	2016	2017
Foreign exchange contracts	Other income (expense), net	$ 198	$ 130	$ (230)

Offsetting of Derivatives

We present our forwards and purchased options at gross fair values in the Consolidated Balance Sheets. For foreign currency collars, we present at net fair values where both purchased and written options are with the same counterparty. Our master netting and other similar arrangements allow net settlements under certain conditions. As of December 31, 2016 and 2017, information related to these offsetting arrangements were as follows (in millions):

Offsetting of Assets

	As of December 31, 2016						
				Gross Amounts Not Offset in the Consolidated Balance Sheets, but Have Legal Rights to Offset			
	Gross Amounts of Recognized Assets	Gross Amounts Offset in the Consolidated Balance Sheets	Net Presented in the Consolidated Balance Sheets	Financial Instruments	Cash Collateral Received	Non-Cash Collateral Received	Net Assets Exposed
Derivatives	$ 596	$ 0	$ 596	$ (11) (1)	$ (337)	$ (73)	$ 175

	As of December 31, 2017						
				Gross Amounts Not Offset in the Consolidated Balance Sheets, but Have Legal Rights to Offset			
	Gross Amounts of Recognized Assets	Gross Amounts Offset in the Consolidated Balance Sheets	Net Presented in the Consolidated Balance Sheets	Financial Instruments	Cash Collateral Received	Non-Cash Collateral Received	Net Assets Exposed
Derivatives	$ 102	$ (22)	$ 80	$ (64) (1)	$ (4)	$ (2)	$ 10

(1) The balances as of December 31, 2016 and 2017 were related to derivative liabilities which are allowed to be net settled against derivative assets in accordance with our master netting agreements.

Offsetting of Liabilities

	As of December 31, 2016						
				Gross Amounts Not Offset in the Consolidated Balance Sheets, but Have Legal Rights to Offset			
	Gross Amounts of Recognized Liabilities	Gross Amounts Offset in the Consolidated Balance Sheets	Net Presented in the Consolidated Balance Sheets	Financial Instruments	Cash Collateral Pledged	Non-Cash Collateral Pledged	Net Liabilities
Derivatives	$ 13	$ 0	$ 13	$ (11) (2)	$ 0	$ 0	$ 2

	As of December 31, 2017						
				Gross Amounts Not Offset in the Consolidated Balance Sheets, but Have Legal Rights to Offset			
	Gross Amounts of Recognized Liabilities	Gross Amounts Offset in the Consolidated Balance Sheets	Net Presented in the Consolidated Balance Sheets	Financial Instruments	Cash Collateral Pledged	Non-Cash Collateral Pledged	Net Liabilities
Derivatives	$ 374	$ (22)	$ 352	$ (64) (2)	$ 0	$ 0	$ 288

(2) The balances as of December 31, 2016 and 2017 were related to derivative assets which are allowed to be net settled against derivative liabilities in accordance with our master netting agreements.

Note 4. Non-Marketable Investments

Our non-marketable investments include non-marketable equity investments and non-marketable debt securities.

Non-Marketable Equity Investments

Our non-marketable equity investments are investments in privately-held companies accounted for under the equity or cost method and are not required to be consolidated under the variable interest or voting models. As of December 31, 2016 and 2017, investments accounted for under the equity method had a carrying value of approximately $1.7 billion and $1.4 billion, respectively. Our share of gains and losses in equity method investments including impairment was a net loss of $227 million, $202 million, and $156 million for the years ended December 31, 2015, 2016, and 2017, respectively. As of December 31, 2016 and 2017, investments accounted for under the cost method had a carrying value of $3.0 billion and $4.5 billion, respectively, and a fair value of approximately $8.1 billion and $8.8 billion, respectively. The fair value of the cost method investments are primarily determined from data leveraging private-market transactions and are classified within Level 3 in the fair value hierarchy. We reflect our share of equity method investee earnings and losses and impairments of non-marketable equity investments as a component of other income (expense), net, in the Consolidated Statements of Income.

Non-Marketable Debt Securities

Our non-marketable debt securities are primarily preferred stock that are redeemable at our option and convertible notes issued by private companies and measured at fair value as available for sale debt securities. The cost of these securities was $1.1 billion as of December 31, 2016 and 2017. These debt securities do not have readily determinable market values and are categorized accordingly as Level 3 in the fair value hierarchy. To estimate the fair value of these securities, we use a combination of valuation methodologies, including market and income approaches based on prior transaction prices; estimated timing, probability, and amount of cash flows; and illiquidity considerations. Financial information of private companies may not be available and consequently we estimate the value based on the best available information at the measurement date.

The following table presents a reconciliation for our non-marketable debt securities measured and recorded at fair value on a recurring basis, using significant unobservable inputs (Level 3) (in millions):

	Year Ended December 31,	
	2016	2017
Beginning balance	$ 1,024	$ 1,165
Total net gains (losses)		
Included in earnings	0	(10)
Included in other comprehensive income	106	707
Purchases	78	88
Sales	(18)	(2)
Settlements	(25)	(54)
Ending balance	$ 1,165	$ 1,894

Note 5. Variable Interest Entities (VIEs)

Consolidated VIEs

We consolidate VIEs in which we hold a variable interest and are the primary beneficiary. The results of operations and statements of financial position of these VIEs are included in our consolidated financial statements.

For certain consolidated VIEs, their assets are not available to us and their creditors do not have recourse to us. As of December 31, 2016 and 2017, assets that can only be used to settle obligations of these VIEs were $1.1 billion and $1.7 billion, respectively, and the liabilities for which creditors do not have recourse to us were $668 million and $997 million, respectively.

Calico

Calico is a life science company with a mission to harness advanced technologies to increase our understanding of the biology that controls lifespan. As of December 31, 2017, we have contributed $240 million to Calico in exchange for Calico convertible preferred units and are committed to fund an additional $490 million on an as-needed basis.

In September 2014, AbbVie Inc. (AbbVie) and Calico announced a research and development collaboration agreement intended to help both companies discover, develop, and bring to market new therapies for patients with age-related diseases, including neurodegeneration and cancer. As of December 31, 2017, AbbVie has contributed $750 million to fund the collaboration pursuant to the agreement, which reflects its total commitment. As of December 31, 2017, Calico has contributed $250 million and committed up to an additional $500 million.

Calico has used its scientific expertise to establish a world-class research and development facility, with a focus on drug discovery and early drug development; and AbbVie provides scientific and clinical development support and its commercial expertise to bring new discoveries to market. Both companies share costs and profits equally. AbbVie's contribution has been recorded as a liability on Calico's financial statements, which is reduced and reflected as a reduction to research and development expense as eligible research and development costs are incurred by Calico.

Verily

Verily is a life science company with a mission to make the world's health data useful so that people enjoy healthier lives.

In January 2017, Temasek, a Singapore-based investment company, signed a binding commitment to purchase a noncontrolling interest in Verily for an aggregate of $800 million in cash. In February 2017, the first tranche of the investment closed and we received $480 million. The second and final tranche of the investment closed in July 2017 and we received the remaining $320 million. The transaction is accounted for as an equity transaction and no gain or loss was recognized. Of the $800 million received, $78 million was recorded as noncontrolling interest and $722 million was recorded as additional paid-in capital. Noncontrolling interest and net loss attributable to noncontrolling interest were not separately presented on our consolidated financial statements as of and for the year ended December 31, 2017 as the amounts were not material.

Unconsolidated VIEs

Certain renewable energy investments included in our non-marketable equity investments accounted for under the equity method are VIEs. These entities' activities involve power generation using renewable sources. We have determined that the governance structures of these entities do not allow us to direct the activities that would significantly impact their economic performance such as setting operating budgets. Therefore, we do not consolidate these VIEs in our consolidated financial statements. The carrying value and maximum exposure of these VIEs were $1.2 billion and $0.9 billion as of December 31, 2016 and 2017, respectively. The maximum exposure is based on current investments to date. We have determined the single source of our exposure to these VIEs is our capital investment in them.

Other unconsolidated VIEs were not material as of December 31, 2016 and 2017.

Note 6. Debt

Short-Term Debt

We have a debt financing program of up to $5.0 billion through the issuance of commercial paper. Net proceeds from this program are used for general corporate purposes. We had no commercial paper outstanding as of December 31, 2016 and December 31, 2017, respectively.

Long-Term Debt

Google issued $3.0 billion of senior unsecured notes in three tranches (collectively, 2011 Notes) in May 2011, due in 2014, 2016, and 2021, as well as $1.0 billion of senior unsecured notes (2014 Notes) in February 2014 due in 2024.

In April 2016, we completed an exchange offer with eligible holders of Google's 2011 Notes due 2021 and 2014 Notes due 2024 (collectively, the Google Notes). An aggregate principal amount of approximately $1.7 billion of the Google Notes was exchanged for approximately $1.7 billion of Alphabet notes with identical interest rate and maturity. Because the exchange was between a parent and the subsidiary company and for substantially identical notes, the change was treated as a debt modification for accounting purposes with no gain or loss recognized.

In August 2016, Alphabet issued $2.0 billion of senior unsecured notes (2016 Notes) due 2026. The net proceeds from the issuance of the 2016 Notes were used for general corporate purposes, including the repayment of outstanding commercial paper. The Alphabet notes due in 2021, 2024, and 2026 rank equally with each other and are structurally subordinate to the outstanding Google Notes.

The total outstanding long-term debt is summarized below (in millions):

	As of December 31, 2016	As of December 31, 2017
3.625% Notes due on May 19, 2021	$ 1,000	$ 1,000
3.375% Notes due on February 25, 2024	1,000	1,000
1.998% Notes due on August 15, 2026	2,000	2,000
Unamortized discount for the Notes above	(65)	(57)
Subtotal[(1)]	$ 3,935	$ 3,943
Capital lease obligation	0	26
Total long-term debt	$ 3,935	$ 3,969

(1) Includes the outstanding (and unexchanged) Google Notes issued in 2011 and 2014 and the Alphabet notes exchanged in 2016.

The effective interest yields based on proceeds received from the outstanding notes due in 2021, 2024, and 2026 were 3.734%, 3.377%, and 2.231%, respectively, with interest payable semi-annually. We may redeem these notes at any time in whole or in part at specified redemption prices. The total estimated fair value of all outstanding notes was approximately $3.9 billion as of December 31, 2016 and $4.0 billion as of December 31, 2017. The fair value was determined based on observable market prices of identical instruments in less active markets and is categorized accordingly as Level 2 in the fair value hierarchy.

As of December 31, 2017, the aggregate future principal payments for long-term debt including long-term capital leases for each of the next five years and thereafter are as follows (in millions):

2018	$ 0
2019	1
2020	1
2021	1,001
2022	1
Thereafter	3,022
Total	$ 4,026

Credit Facility

We have a $4.0 billion revolving credit facility which expires in February 2021. The interest rate for the credit facility is determined based on a formula using certain market rates. No amounts were outstanding under the credit facility as of December 31, 2016 and December 31, 2017.

Note 7. Supplemental Financial Statement Information

Property and Equipment, Net

Property and equipment, net, consisted of the following (in millions):

	As of December 31, 2016	As of December 31, 2017
Land and buildings	$ 19,804	$ 23,183
Information technology assets	16,084	21,429
Construction in progress	8,166	10,491
Leasehold improvements	3,415	4,496
Furniture and fixtures	58	48
Property and equipment, gross	47,527	59,647
Less: accumulated depreciation	(13,293)	(17,264)
Property and equipment, net	$ 34,234	$ 42,383

As of December 31, 2016 and 2017, assets under capital lease with a cost basis of $299 million and $390 million were included in property and equipment, respectively.

Note Receivable

In connection with the sale of our Motorola Mobile business to Lenovo Group Limited (Lenovo) in October 2014, we received an interest-free, three-year prepayable promissory note (Note Receivable) due October 2017. The Note Receivable was included on our Consolidated Balance Sheets in other current assets as of December 31, 2016. Based on the general market conditions and the credit quality of Lenovo at the time of the sale, we discounted the Note Receivable at an effective interest rate of 4.5%. As of December 31, 2016, the outstanding principal was $1.4 billion with an unamortized discount of $51 million, and we did not recognize a valuation allowance. The Note Receivable was fully repaid in May 2017.

Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consisted of the following (in millions):

	As of December 31, 2016	As of December 31, 2017
European Commission fine[(1)]	$ 0	$ 2,874
Accrued customer liabilities	1,256	1,489
Other accrued expenses and current liabilities	4,888	5,814
Accrued expenses and other current liabilities	$ 6,144	$ 10,177

(1) Includes the effects of foreign exchange and interest.

Accumulated Other Comprehensive Income (Loss)

The components of AOCI, net of tax, were as follows (in millions):

	Foreign Currency Translation Adjustments	Unrealized Gains (Losses) on Available-for-Sale Investments	Unrealized Gains (Losses) on Cash Flow Hedges	Total
Balance as of December 31, 2014	$ (980)	$ 421	$ 586	$ 27
Other comprehensive income (loss) before reclassifications	(1,067)	(715)	676	(1,106)
Amounts reclassified from AOCI	0	208	(1,003)	(795)
Other comprehensive income (loss)	(1,067)	(507)	(327)	(1,901)
Balance as of December 31, 2015	$ (2,047)	$ (86)	$ 259	$ (1,874)
Other comprehensive income (loss) before reclassifications	(599)	(314)	515	(398)
Amounts reclassified from AOCI	0	221	(351)	(130)
Other comprehensive income (loss)	(599)	(93)	164	(528)
Balance as of December 31, 2016	$ (2,646)	$ (179)	$ 423	$ (2,402)
Other comprehensive income (loss) before reclassifications	1,543	307	(638)	1,212
Amounts reclassified from AOCI	0	105	93	198
Other comprehensive income (loss)	1,543	412	(545)	1,410
Balance as of December 31, 2017	$ (1,103)	$ 233	$ (122)	$ (992)

The effects on net income of amounts reclassified from AOCI were as follows (in millions):

		Gains (Losses) Reclassified from AOCI to the Consolidated Statement of Income		
		Year Ended December 31,		
AOCI Components	Location	2015	2016	2017
Unrealized gains (losses) on available-for-sale investments				
	Other income (expense), net	$ (208)	$ (221)	$ (105)
	Provision for income taxes	0	0	0
	Net of tax	$ (208)	$ (221)	$ (105)
Unrealized gains (losses) on cash flow hedges				
Foreign exchange contracts	Revenue	$ 1,399	$ 539	$ (169)
Interest rate contracts	Other income (expense), net	5	5	5
	Benefit (provision) for income taxes	(401)	(193)	71
	Net of tax	$ 1,003	$ 351	$ (93)
Total amount reclassified, net of tax		$ 795	$ 130	$ (198)

Other Income (Expense), Net

The components of other income (expense), net, were as follows (in millions):

	Year Ended December 31,		
	2015	2016	2017
Interest income	$ 999	$ 1,220	$ 1,312
Interest expense[(1)]	(104)	(124)	(109)
Foreign currency exchange losses, net [(2)]	(422)	(475)	(121)
Loss on marketable securities, net	(208)	(210)	(80)
Loss on non-marketable investments, net	(126)	(65)	(114)
Other	152	88	159
Other income (expense), net	$ 291	$ 434	$ 1,047

(1) Interest expense is net of interest capitalized of $0 million, $0 million, and $48 million for the years ended December 31, 2015, 2016, and 2017, respectively.

(2) Our foreign currency exchange losses, net, are related to the option premium costs and forward points for our foreign currency hedging contracts, our foreign exchange transaction gains and losses from the conversion of the transaction currency to the functional currency, offset by the foreign currency hedging contract losses and gains. The net foreign currency transaction losses were $123 million, $112 million, and $226 million for the years ended December 31, 2015, 2016, and 2017, respectively.

Note 8. Acquisitions

2017 Acquisitions

During the year ended December 31, 2017, we completed various acquisitions and purchases of intangible assets for total consideration of approximately $322 million. In aggregate, $12 million was cash acquired, $117 million was attributed to intangible assets, $221 million was attributed to goodwill, and $28 million was attributed to net liabilities assumed. These acquisitions generally enhance the breadth and depth of our offerings and expand our expertise in engineering and other functional areas. The amount of goodwill expected to be deductible for tax purposes is approximately $60 million.

Pro forma results of operations for these acquisitions have not been presented because they are not material to the consolidated results of operations, either individually or in aggregate.

For all intangible assets acquired and purchased during the year ended December 31, 2017, patents and developed technology have a weighted-average useful life of 3.7 years, customer relationships have a weighted-average useful life of 2.0 years, and trade names and other have a weighted-average useful life of 8.8 years.

Agreement with HTC Corporation (HTC)

In January 2018, we completed the acquisition of a team of engineers and a non-exclusive license of intellectual property from HTC for $1.1 billion in cash. The transaction will be accounted for as a business combination. We expect this transaction to accelerate Google's ongoing hardware efforts. We are currently in the process of valuing the assets acquired and liabilities assumed in the transaction. We will provide all required disclosures upon the completion of the valuation in the first quarter of 2018.

2016 Acquisitions

Apigee

In October 2016, we completed the acquisition of Apigee Corp., a provider of application programming interface (API) management, for approximately $571 million in cash. We expect the acquisition to accelerate our Google Cloud customers' move to supporting their businesses with high quality digital interactions. Of the total purchase price of $571 million, $41 million was cash acquired, $127 million was attributed to intangible assets, $376 million was attributed to goodwill, and $27 million was attributed to net assets acquired. Goodwill, which was recorded in the Google segment, is primarily attributable to synergies expected to arise after the acquisition and is not deductible for tax purposes.

Other Acquisitions

During the year ended December 31, 2016, we completed other acquisitions and purchases of intangible assets for total consideration of approximately $448 million. In aggregate, $12 million was cash acquired, $143 million was attributed to intangible assets, $288 million was attributed to goodwill, and $5 million was attributed to net assets acquired. These acquisitions generally enhance the breadth and depth of our offerings, as well as expanding our expertise in engineering and other functional areas. The amount of goodwill expected to be deductible for tax purposes is approximately $67 million.

Pro forma results of operations for these acquisitions have not been presented because they are not material to the consolidated results of operations, either individually or in aggregate.

For all intangible assets acquired and purchased during the year ended December 31, 2016, patents and developed technology have a weighted-average useful life of 4.5 years, customer relationships have a weighted-average useful life of 3.4 years, and trade names and other have a weighted-average useful life of 6.2 years.

Note 9. Goodwill and Other Intangible Assets

Goodwill

The changes in the carrying amount of goodwill allocated to our disclosed segments for the years ended December 31, 2016 and 2017 were as follows (in millions):

	Google	Other Bets	Total Consolidated
Balance as of December 31, 2015	$ 15,456	$ 413	$ 15,869
Acquisitions	625	39	664
Foreign currency translation and other adjustments	(54)	(11)	(65)
Balance as of December 31, 2016	$ 16,027	$ 441	$ 16,468
Acquisitions	212	9	221
Foreign currency translation and other adjustments	56	2	58
Balance as of December 31, 2017	$ 16,295	$ 452	$ 16,747

Other Intangible Assets

Information regarding purchased intangible assets were as follows (in millions):

	As of December 31, 2016		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Patents and developed technology	$ 5,542	$ 2,710	$ 2,832
Customer relationships	352	197	155
Trade names and other	463	143	320
Total	$ 6,357	$ 3,050	$ 3,307

	As of December 31, 2017		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value
Patents and developed technology	$ 5,260	$ 3,040	$ 2,220
Customer relationships	359	263	96
Trade names and other	544	168	376
Total	$ 6,163	$ 3,471	$ 2,692

Patents and developed technology, customer relationships, and trade names and other have weighted-average remaining useful lives of 3.8 years, 1.4 years, and 4.6 years, respectively.

Amortization expense relating to purchased intangible assets was $892 million, $833 million, and $796 million for the years ended December 31, 2015, 2016, and 2017, respectively.

As of December 31, 2017, expected amortization expense relating to purchased intangible assets for each of the next five years and thereafter are as follows (in millions):

2018	$ 728
2019	615
2020	493
2021	459
2022	212
Thereafter	185
	$ 2,692

Note 10. Commitments and Contingencies

Operating Leases

We have entered into various non-cancelable operating lease agreements for certain of our offices, facilities, land, and data centers throughout the world with lease periods expiring between 2018 and 2063. We are committed to pay a portion of the actual operating expenses under certain of these lease agreements. These operating expenses are not included in the table below. Certain of these arrangements have free or escalating rent payment provisions. We recognize rent expense on a straight-line basis.

As of December 31, 2017, future minimum payments under operating leases having initial or remaining non-cancelable lease terms in excess of one year, net of sublease income amounts, were as follows (in millions):

	Operating Leases(1)	Sub-lease Income	Net Operating Leases
2018	$ 1,175	$ 15	$ 1,160
2019	1,133	13	1,120
2020	1,073	11	1,062
2021	975	7	968
2022	831	3	828
Thereafter	3,616	1	3,615
Total minimum payments	$ 8,803	$ 50	$ 8,753

(1) Includes future minimum payments for leases which have not yet commenced.

We have entered into certain non-cancelable lease agreements with lease periods expiring between 2021 and 2044 where we are the deemed owner for accounting purposes of new construction projects. Excluded from the table above are future minimum lease payments under such leases totaling approximately $2.1 billion, for which a $1.3 billion liability is included on the Consolidated Balance Sheets as of December 31, 2017.

Rent expense under operating leases was $734 million, $897 million, and $1.1 billion for the years ended December 31, 2015, 2016, and 2017, respectively.

Purchase Obligations

As of December 31, 2017, we had $7.2 billion of other non-cancelable contractual obligations, primarily related to data center operations and build-outs, digital media content licensing, and purchases of inventory.

Indemnifications

In the normal course of business, to facilitate transactions in our services and products, we indemnify certain parties, including advertisers, Google Network Members, and lessors with respect to certain matters. We have agreed to hold certain parties harmless against losses arising from a breach of representations or covenants, or out of intellectual property infringement or other claims made against certain parties. Several of these agreements limit the time within which an indemnification claim can be made and the amount of the claim. In addition, we have entered into indemnification agreements with our officers and directors, and our bylaws contain similar indemnification obligations to our agents.

It is not possible to make a reasonable estimate of the maximum potential amount under these indemnification agreements due to the unique facts and circumstances involved in each particular agreement. Additionally, we have a limited history of prior indemnification claims and the payments we have made under such agreements have not had a material adverse effect on our results of operations, cash flows, or financial position. However, to the extent that valid indemnification claims arise in the future, future payments by us could be significant and could have a material adverse effect on our results of operations or cash flows in a particular period.

As of December 31, 2017, we did not have any material indemnification claims that were probable or reasonably possible.

Legal Matters

Antitrust Investigations

On November 30, 2010, the European Commission's (EC) Directorate General for Competition opened an investigation into various antitrust-related complaints against us.

On April 15, 2015, the EC issued a Statement of Objections (SO) regarding the display and ranking of shopping search results and ads, to which we responded on August 27, 2015. On July 14, 2016, the EC issued a Supplementary SO regarding shopping search results and ads. On June 27, 2017, the EC announced its decision that certain actions taken by Google regarding its display and ranking of shopping search results and ads infringed European competition law. The EC decision imposed a €2.42 billion (approximately $2.74 billion as of June 27, 2017) fine. On September 11, 2017, we appealed the EC decision and on September 27, 2017, we implemented product changes to bring shopping ads into compliance with the EC's decision. We recognized a charge of approximately $2.74 billion for the fine in the second quarter of 2017. The fine is included in accrued expenses and other current liabilities on our Consolidated Balance Sheets as we provided bank guarantees in lieu of a cash payment for the fine.

On April 20, 2016, the EC issued an SO regarding certain Android distribution practices. On July 14, 2016, the EC issued an SO regarding the syndication of AdSense for Search. We responded to the SOs and continue to respond to the EC's informational requests. There is significant uncertainty as to the outcomes of these investigations; however, adverse decisions could result in fines and directives to alter or terminate certain conduct. Given the nature of these cases, we are unable to estimate the reasonably possible loss or ranges of loss, if any. We remain committed to working with the EC to resolve these matters.

The Comision Nacional de Defensa de la Competencia in Argentina, the Competition Commission of India (CCI), Brazil's Council for Economic Defense (CADE), and the Korean Fair Trade Commission have also opened investigations into certain of our business practices. In November 2016, we responded to the CCI Director General's report with interim findings of competition law infringements regarding search and ads.

Patent and Intellectual Property Claims

We have had patent, copyright, and trademark infringement lawsuits filed against us claiming that certain of our products, services, and technologies infringe the intellectual property rights of others. Adverse results in these lawsuits may include awards of substantial monetary damages, costly royalty or licensing agreements, or orders preventing us from offering certain features, functionalities, products, or services, and may also cause us to change our business practices, and require development of non-infringing products or technologies, which could result in a loss of revenues for us and otherwise harm our business. In addition, the U.S. International Trade Commission (ITC) has increasingly become an important forum to litigate intellectual property disputes because an ultimate loss for a company or its suppliers in an ITC action could result in a prohibition on importing infringing products into the U.S. Because the U.S. is an important market, a prohibition on importation could have an adverse effect on us, including preventing us from importing many important products into the U.S. or necessitating workarounds that may limit certain features of our products.

Furthermore, many of our agreements with our customers and partners require us to indemnify them for certain intellectual property infringement claims against them, which would increase our costs as a result of defending such claims, and may require that we pay significant damages if there were an adverse ruling in any such claims. Our customers and partners may discontinue the use of our products, services, and technologies, as a result of injunctions or otherwise, which could result in loss of revenues and adversely impact our business.

Oracle America, Inc. (Oracle) brought a copyright lawsuit against Google in the Northern District of California, alleging that Google's Android operating system infringes Oracle's copyrights related to certain Java application programming interfaces. After trial, final judgment was entered by the district court in favor of Google on June 8, 2016, and the court decided post-trial motions in favor of Google. Oracle has appealed. We believe this lawsuit is without merit and are defending ourselves vigorously. Given the nature of this case, we are unable to estimate the reasonably possible loss or range of loss, if any, arising from this matter.

Other

We are also regularly subject to claims, suits, regulatory and government investigations, and other proceedings involving competition (such as the pending EC investigations described above), intellectual property, privacy, tax, labor and employment, commercial disputes, content generated by our users, goods and services offered by advertisers or publishers using our platforms, personal injury, consumer protection, and other matters. Such claims, suits, regulatory and government investigations, and other proceedings could result in fines, civil or criminal penalties, or other adverse consequences.

Certain of our outstanding legal matters include speculative claims for substantial or indeterminate amounts of damages. We record a liability when we believe that it is probable that a loss has been incurred and the amount can be reasonably estimated. If we determine that a loss is reasonably possible and the loss or range of loss can be estimated, we disclose the reasonably possible loss. We evaluate developments in our legal matters that could affect the amount of liability that has been previously accrued, and the matters and related reasonably possible losses disclosed, and make adjustments as appropriate. Significant judgment is required to determine both likelihood of there being, and the estimated amount of, a loss related to such matters.

With respect to our outstanding legal matters, based on our current knowledge, we believe that the amount or range of reasonably possible loss will not, either individually or in the aggregate, have a material adverse effect on our business, consolidated financial position, results of operations, or cash flows. However, the outcome of such legal matters is inherently unpredictable and subject to significant uncertainties.

We expense legal fees in the period in which they are incurred.

Non-Income Taxes

We are under audit by various domestic and foreign tax authorities with regards to non-income tax matters. The subject matter of non-income tax audits primarily arises from disputes on the tax treatment and tax rate applied to the sale of our products and services in these jurisdictions and the tax treatment of certain employee benefits. We accrue non-income taxes that may result from examinations by, or any negotiated agreements with, these tax authorities when a loss is probable and reasonably estimable. If we determine that a loss is reasonably possible and the loss or range of loss can be estimated, we disclose the reasonably possible loss. We believe these matters are without merit and we are defending ourselves vigorously. Due to the inherent complexity and uncertainty of these matters and judicial process in certain jurisdictions, the final outcome may be materially different from our expectations.

For information regarding income tax contingencies, see Note 14.

Note 11. Stockholders' Equity

Convertible Preferred Stock

Our board of directors has authorized 100 million shares of convertible preferred stock, $0.001 par value, issuable in series. As of December 31, 2016 and 2017, no shares were issued or outstanding.

Class A and Class B Common Stock and Class C Capital Stock

Our board of directors has authorized three classes of stock, Class A and Class B common stock, and Class C capital stock. The rights of the holders of each class of our common and capital stock are identical, except with respect to voting. Each share of Class A common stock is entitled to one vote per share. Each share of Class B common stock is entitled to 10 votes per share. Class C capital stock has no voting rights, except as required by applicable law. Shares of Class B common stock may be converted at any time at the option of the stockholder and automatically convert upon sale or transfer to Class A common stock.

Share Repurchases

In October 2015, the board of directors of Alphabet authorized the company to repurchase up to $5.1 billion of its Class C capital stock, commencing in the fourth quarter of 2015. In January 2016, the board of directors of Alphabet authorized the company to repurchase an additional amount of approximately 514,000 shares. The repurchases were executed, subject to general business and market conditions and other investment opportunities, through open market purchases or privately negotiated transactions, including through the use of 10b5-1 plans. During 2016, we repurchased and subsequently retired 5.2 million shares of Alphabet Class C capital stock for an aggregate amount of $3.7 billion. We completed all authorized share repurchases under this repurchase program as of June 2016.

In October 2016, the board of directors of Alphabet authorized the company to repurchase up to $7.0 billion of its Class C capital stock. The repurchases are being executed from time to time, subject to general business and market conditions and other investment opportunities, through open market purchases or privately negotiated transactions, including through Rule 10b5-1 plans. The repurchase program does not have an expiration date. During 2017, we repurchased and subsequently retired 5.2 million shares of Alphabet Class C capital stock for an aggregate amount of $4.8 billion.

Note 12. Net Income Per Share

We compute net income per share of Class A and Class B common stock and Class C capital stock using the two-class method. Basic net income per share is computed using the weighted-average number of shares outstanding during the period. Diluted net income per share is computed using the weighted-average number of shares and the effect of potentially dilutive securities outstanding during the period. Potentially dilutive securities consist of restricted stock units and other contingently issuable shares. The dilutive effect of outstanding restricted stock units and other contingently issuable shares is reflected in diluted earnings per share by application of the treasury stock method. The computation of the diluted net income per share of Class A common stock assumes the conversion of Class B common stock, while the diluted net income per share of Class B common stock does not assume the conversion of those shares.

The rights, including the liquidation and dividend rights, of the holders of our Class A and Class B common stock and Class C capital stock are identical, except with respect to voting. Furthermore, there are a number of safeguards built into our certificate of incorporation, as well as Delaware law, which preclude our board of directors from declaring or paying unequal per share dividends on our Class A and Class B common stock and Class C capital stock. Specifically, Delaware law provides that amendments to our certificate of incorporation which would have the effect of adversely altering the rights, powers, or preferences of a given class of stock must be approved by the class of stock adversely affected by the proposed amendment. In addition, our certificate of incorporation provides that before any such amendment may be put to a stockholder vote, it must be approved by the unanimous consent of our board of directors. As a result, the undistributed earnings for each year are allocated based on the contractual participation rights of the Class A and Class B common shares and Class C capital stock as if the earnings for the year had been distributed. As the liquidation and dividend rights are identical, the undistributed earnings are allocated on a proportionate basis. Furthermore, as we assume the conversion of Class B common stock in the computation of the diluted net income per share of Class A common stock, the undistributed earnings are equal to net income for that computation.

In the years ended December 31, 2016 and 2017, the net income per share amounts are the same for Class A and Class B common stock and Class C capital stock because the holders of each class are legally entitled to equal per share dividends or distributions in liquidation in accordance with the Amended and Restated Certificate of Incorporation of Alphabet Inc.

In the year ended December 31, 2015, the Class C Adjustment Payment was allocated to the numerator for calculating net income per share of Class C capital stock from net income available to all stockholders and the remaining undistributed earnings were allocated on a pro rata basis to Class A and Class B common stock and Class C capital stock based on the number of shares used in the per share computation for each class of stock. The weighted-average share impact of the Class C Adjustment Payment is included in the denominator of both basic and diluted net income per share computations for the year ended December 31, 2015.

The following table sets forth the computation of basic and diluted net income per share of Class A and Class B common stock and Class C capital stock (in millions, except share amounts which are reflected in thousands and per share amounts):

	Year Ended December 31, 2015					
	Class A		Class B		Class C	
Basic net income per share:						
Numerator						
Adjustment Payment to Class C capital stockholders	$	0	$	0	$	522
Allocation of undistributed earnings		6,695		1,196		7,935
Total	$	6,695	$	1,196	$	8,457
Denominator						
Number of shares used in per share computation		289,640		51,745		343,241
Basic net income per share	$	23.11	$	23.11	$	24.63
Diluted net income per share:						
Numerator						
Adjustment Payment to Class C capital stockholders	$	0	$	0	$	522
Allocation of undistributed earnings for basic computation	$	6,695	$	1,196	$	7,935
Reallocation of undistributed earnings as a result of conversion of Class B to Class A shares		1,196		0		0
Reallocation of undistributed earnings		(39)		(14)		39
Allocation of undistributed earnings	$	7,852	$	1,182	$	7,974
Denominator						
Number of shares used in basic computation		289,640		51,745		343,241
Weighted-average effect of dilutive securities						
Add:						
Conversion of Class B to Class A common shares outstanding		51,745		0		0
Restricted stock units and other contingently issuable shares		2,395		0		5,909
Number of shares used in per share computation		343,780		51,745		349,150
Diluted net income per share	$	22.84	$	22.84	$	24.34

	Year Ended December 31, 2016		
	Class A	Class B	Class C
Basic net income per share:			
Numerator			
Allocation of undistributed earnings	$ 8,332	$ 1,384	$ 9,762
Denominator			
Number of shares used in per share computation	294,217	48,859	344,702
Basic net income per share	$ 28.32	$ 28.32	$ 28.32
Diluted net income per share:			
Numerator			
Allocation of undistributed earnings for basic computation	$ 8,332	$ 1,384	$ 9,762
Effect of dilutive securities in equity method investments and subsidiaries	(9)	(2)	(10)
Allocation of undistributed earnings for diluted computation	8,323	1,382	9,752
Reallocation of undistributed earnings as a result of conversion of Class B to Class A shares	1,382	0	0
Reallocation of undistributed earnings	(94)	(21)	94
Allocation of undistributed earnings	$ 9,611	$ 1,361	$ 9,846
Denominator			
Number of shares used in basic computation	294,217	48,859	344,702
Weighted-average effect of dilutive securities			
Add:			
Conversion of Class B to Class A common shares outstanding	48,859	0	0
Restricted stock units and other contingently issuable shares	2,055	0	8,873
Number of shares used in per share computation	345,131	48,859	353,575
Diluted net income per share	$ 27.85	$ 27.85	$ 27.85

	Year Ended December 31,		
	2017		
	Class A	Class B	Class C
Basic net income per share:			
Numerator			
Allocation of undistributed earnings	$ 5,438	$ 862	$ 6,362
Denominator			
Number of shares used in per share computation	297,604	47,146	348,151
Basic net income per share	$ 18.27	$ 18.27	$ 18.27
Diluted net income per share:			
Numerator			
Allocation of undistributed earnings for basic computation	$ 5,438	$ 862	$ 6,362
Reallocation of undistributed earnings as a result of conversion of Class B to Class A shares	862	0	0
Reallocation of undistributed earnings	(74)	(14)	74
Allocation of undistributed earnings	$ 6,226	$ 848	$ 6,436
Denominator			
Number of shares used in basic computation	297,604	47,146	348,151
Weighted-average effect of dilutive securities			
Add:			
Conversion of Class B to Class A common shares outstanding	47,146	0	0
Restricted stock units and other contingently issuable shares	1,192	0	9,491
Number of shares used in per share computation	345,942	47,146	357,642
Diluted net income per share	$ 18.00	$ 18.00	$ 18.00

Note 13. Compensation Plans

Stock Plans

Under our 2012 Stock Plan, RSUs or stock options may be granted. An RSU award is an agreement to issue shares of our publicly traded stock at the time the award vests. Incentive and non-qualified stock options, or rights to purchase common stock, are generally granted for a term of 10 years. RSUs granted to participants under the 2012 Stock Plan generally vest over four years contingent upon employment or service with us on the vesting date.

As of December 31, 2017, there were 38,505,768 shares of stock reserved for future issuance under our Stock Plan.

Stock-Based Compensation

For the years ended December 31, 2015, 2016 and 2017, total stock-based compensation expense was $5.3 billion, $6.9 billion and $7.9 billion, including amounts associated with awards we expect to settle in Alphabet stock of $5.2 billion, $6.7 billion, and $7.7 billion, respectively.

For the years ended December 31, 2015, 2016 and 2017, we recognized tax benefits on total stock-based compensation expense, which are reflected in the provision for income taxes in the Consolidated Statements of Income, of $1.1 billion, $1.5 billion, and $1.6 billion, respectively.

For the years ended December 31, 2015, 2016 and 2017, tax benefit realized related to awards vested or exercised during the period was $1.5 billion, $2.1 billion and $2.7 billion, respectively. These amounts do not include the indirect effects of stock-based awards, which primarily relate to the research and development tax credit.

Stock-Based Award Activities

The following table summarizes the activities for our unvested RSUs for the year ended December 31, 2017:

	Unvested Restricted Stock Units	
	Number of Shares	Weighted-Average Grant-Date Fair Value
Unvested as of December 31, 2016	25,348,955	$ 624.92
Granted	8,097,708	$ 845.06
Vested	(12,071,413)	$ 623.94
Forfeited/canceled	(1,297,904)	$ 659.61
Unvested as of December 31, 2017	20,077,346	$ 712.45

The weighted-average grant-date fair value of RSUs granted during the years ended December 31, 2015 and 2016, was $546.46 and $713.89, respectively. Total fair value of RSUs, as of their respective vesting dates, during the years ended December 31, 2015, 2016, and 2017 were $6.9 billion, $9.0 billion, and $11.3 billion, respectively.

As of December 31, 2017, there was $12.9 billion of unrecognized compensation cost related to unvested employee RSUs. This amount is expected to be recognized over a weighted-average period of 2.4 years.

401(k) Plans

We have two 401(k) Savings Plans that qualify as deferred salary arrangements under Section 401(k) of the Internal Revenue Code. Under these 401(k) Plans, matching contributions are based upon the amount of the employees' contributions subject to certain limitations. We contributed approximately $309 million, $385 million, and $448 million for the years ended December 31, 2015, 2016, and 2017, respectively.

Note 14. Income Taxes

Income from continuing operations before income taxes included income from domestic operations of $8.3 billion, $12.0 billion, and $10.7 billion for the years ended December 31, 2015, 2016, and 2017, and income from foreign operations of $11.4 billion, $12.1 billion, and $16.5 billion for the years ended December 31, 2015, 2016, and 2017.

The provision for income taxes consists of the following (in millions):

	Year Ended December 31,		
	2015	2016	2017
Current:			
Federal and state	$ 2,838	$ 3,826	$ 12,608
Foreign	723	966	1,746
Total	3,561	4,792	14,354
Deferred:			
Federal and state	(241)	(70)	220
Foreign	(17)	(50)	(43)
Total	(258)	(120)	177
Provision for income taxes	$ 3,303	$ 4,672	$ 14,531

The U.S. Tax Cuts and Jobs Act (Tax Act) was enacted on December 22, 2017 and introduces significant changes to U.S. income tax law. Effective in 2018, the Tax Act reduces the U.S. statutory tax rate from 35% to 21% and creates new taxes on certain foreign-sourced earnings and certain related-party payments, which are referred to as the global intangible low-taxed income tax and the base erosion tax, respectively. In addition, in 2017 we were subject to a one-time transition tax on accumulated foreign subsidiary earnings not previously subject to U.S. income tax.

Due to the timing of the enactment and the complexity involved in applying the provisions of the Tax Act, we have made reasonable estimates of the effects and recorded provisional amounts in our financial statements as of December 31, 2017. As we collect and prepare necessary data, and interpret the Tax Act and any additional guidance issued by the U.S. Treasury Department, the IRS, and other standard-setting bodies, we may make adjustments to the provisional amounts. Those adjustments may materially impact our provision for income taxes and effective tax rate in the period in which the adjustments are made. The accounting for the tax effects of the Tax Act will be completed in 2018.

Provisional amounts for the following income tax effects of the Tax Act have been recorded as of December 31, 2017 and are subject to change during 2018.

One-time transition tax

The Tax Act requires us to pay U.S. income taxes on accumulated foreign subsidiary earnings not previously subject to U.S. income tax at a rate of 15.5% to the extent of foreign cash and certain other net current assets and 8% on the remaining earnings. We recorded a provisional amount for our one-time transitional tax liability and income tax expense of $10.2 billion. We have recorded provisional amounts based on estimates of the effects of the Tax Act as the analysis requires significant data from our foreign subsidiaries that is not regularly collected or analyzed.

Deferred tax effects

The Tax Act reduces the U.S. statutory tax rate from 35% to 21% for years after 2017. Accordingly, we have remeasured our deferred taxes as of December 31, 2017 to reflect the reduced rate that will apply in future periods when these deferred taxes are settled or realized. We recognized a deferred tax benefit of $376 million to reflect the reduced U.S. tax rate and other effects of the Tax Act. Although the tax rate reduction is known, we have not collected the necessary data to complete our analysis of the effect of the Tax Act on the underlying deferred taxes and as such, the amounts recorded as of December 31, 2017 are provisional.

The net tax expense recognized in 2017 related to the Tax Act was $9.9 billion. As we complete our analysis of the Tax Act and incorporate additional guidance that may be issued by the U.S. Treasury Department, the IRS or other standard-setting bodies, we may identify additional effects not reflected as of December 31, 2017.

The reconciliation of federal statutory income tax rate to our effective income tax rate is as follows:

	Year Ended December 31,		
	2015	2016	2017
U.S. federal statutory tax rate	35.0 %	35.0 %	35.0 %
Foreign income taxed at different rates	(13.4)%	(11.0)%	(14.2)%
Impact of the Tax Act			
One-time transition tax	0.0 %	0.0 %	37.6 %
Deferred tax effects	0.0 %	0.0 %	(1.4)%
Federal research credit	(2.1)%	(2.0)%	(1.8)%
Stock-based compensation expense	0.3 %	(3.4)%	(4.5)%
European Commission Fine	0.0 %	0.0 %	3.5 %
Other adjustments	(3.0)%	0.7 %	(0.8)%
Effective tax rate	16.8 %	19.3 %	53.4 %

Our effective tax rate for each of the years presented was impacted by earnings realized in foreign jurisdictions with statutory tax rates lower than the federal statutory tax rate. Substantially all of the income from foreign operations was earned by an Irish subsidiary. Beginning in 2018, earnings realized in foreign jurisdictions will be subject to U.S. tax in accordance with the Tax Act.

On July 27, 2015, the United States Tax Court, in an opinion in Altera Corp. v. Commissioner, invalidated the portion of the Treasury regulations issued under IRC Section 482 requiring related-party participants in a cost sharing arrangement to share stock-based compensation costs. The U.S. Tax Court issued the final decision on December 28, 2015. The IRS served a Notice of Appeal on February 22, 2016 and the case is being heard by the Ninth Circuit Court of Appeals. At this time, the U.S. Treasury has not withdrawn the requirement to include stock-based compensation from its regulations. We have evaluated the opinion and continue to record a tax benefit related to reimbursement of cost share payments for the previously shared stock-based compensation costs. In accordance with the Tax Act, the Altera tax benefit was remeasured from 35% to 21%. We also remeasured the tax benefit expected to be realized upon settlement including the expected future new taxes enacted by the Tax Act due upon resolution of the matter. The tax liability recorded as of December 31, 2016 for the U.S. tax cost of the potential repatriation associated with the contingent foreign earnings was reversed due to the Tax Act introducing a territorial tax system and providing a 100% dividend received deduction on certain qualified dividends from foreign subsidiaries. We will continue to monitor developments related to the case and the potential impact on our consolidated financial statements.

Deferred Income Taxes

Deferred income taxes reflect the net effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. We recorded a provisional adjustment to our U.S. deferred income taxes as of December 31, 2017 to reflect the reduction in the U.S. statutory tax rate from 35% to 21% resulting from the Tax Act. Significant components of our deferred tax assets and liabilities are as follows (in millions):

	As of December 31,	
	2016	2017
Deferred tax assets:		
Stock-based compensation expense	$ 574	$ 251
Accrued employee benefits	939	285
Accruals and reserves not currently deductible	500	717
Tax credits	631	1,187
Basis difference in investment of Arris	1,327	849
Prepaid cost sharing	4,409	498
Net Operating Losses	305	320
Other	621	379
Total deferred tax assets	9,306	4,486
Valuation allowance	(2,076)	(2,531)
Total deferred tax assets net of valuation allowance	7,230	1,955
Deferred tax liabilities:		
Depreciation and amortization	(877)	(551)
Identified intangibles	(844)	(419)
Renewable energy investments	(788)	(531)
Foreign earnings	(4,409)	(68)
Other	(155)	(136)
Total deferred tax liabilities	(7,073)	(1,705)
Net deferred tax assets	$ 157	$ 250

As of December 31, 2017, our federal and state net operating loss carryforwards for income tax purposes were approximately $931 million and $785 million, respectively. If not utilized, the federal net operating loss carryforwards will begin to expire in 2021 and the state net operating loss carryforwards will begin to expire in 2018. It is more likely than not that certain federal net operating loss carryforwards and our state net operating loss carryforwards will not be realized; therefore, we have recorded a valuation allowance against them. The net operating loss carryforwards are subject to various annual limitations under the tax laws of the different jurisdictions. Our foreign net operating loss carryforwards for income tax purposes were $327 million that will begin to expire in 2021.

As of December 31, 2017, our California research and development credit carryforwards for income tax purposes were approximately $1.8 billion that can be carried over indefinitely. We believe the state tax credit is not likely to be realized.

As of December 31, 2017, we maintained a valuation allowance with respect to certain of our deferred tax assets relating primarily to investment losses that are capital in nature, California deferred tax assets, certain federal net operating losses, and certain foreign net operating losses that we believe are not likely to be realized. We established a deferred tax asset for the book-to-tax basis difference in our investments in Arris shares received from the sale of the Motorola Home business to Arris in 2013. Since any future losses to be recognized upon the sale of Arris shares will be capital losses, a valuation allowance has been recorded against this deferred tax asset to the extent such deferred tax asset is not likely to be covered by capital gains generated as of December 31, 2017. We reassess the valuation allowance quarterly and if future evidence allows for a partial or full release of the valuation allowance, a tax benefit will be recorded accordingly.

Uncertain Tax Positions

The following table summarizes the activity related to our gross unrecognized tax benefits from January 1, 2015 to December 31, 2017 (in millions):

	2015	2016	2017
Beginning gross unrecognized tax benefits	$ 3,294	$ 4,167	$ 5,393
Increases related to prior year tax positions	224	899	685
Decreases related to prior year tax positions	(176)	(157)	(257)
Decreases related to settlement with tax authorities	(27)	(196)	(1,875)
Increases related to current year tax positions	852	680	750
Ending gross unrecognized tax benefits	$ 4,167	$ 5,393	$ 4,696

The total amount of gross unrecognized tax benefits was $4.2 billion, $5.4 billion, and $4.7 billion as of December 31, 2015, 2016, and 2017, respectively, of which, $3.6 billion, $4.3 billion, and $3.0 billion if recognized, would affect our effective tax rate. The decrease in gross unrecognized tax benefits in 2017 was primarily as a result of the resolution of a multi-year U.S. audit.

As of December 31, 2016 and 2017, we had accrued $493 million and $362 million in interest and penalties in provision for income taxes, respectively.

We file income tax returns in the U.S. federal jurisdiction and in many state and foreign jurisdictions, our two major tax jurisdictions are the U.S. federal and Ireland. We are subject to the continuous examination of our income tax returns by the IRS and other tax authorities. The IRS completed its examination through our 2012 tax years; all issues have been concluded except for one which is currently under review in the U.S. Tax Court. The IRS is currently examining our 2013 through 2015 tax returns. We have also received tax assessments in multiple foreign jurisdictions asserting transfer pricing adjustments or permanent establishment. We continue to defend any and all such claims as presented.

Our 2016 tax year remains subject to examination by the IRS for U.S. federal tax purposes, and our 2011 through 2016 tax years remain subject to examination by the appropriate governmental agencies for Irish tax purposes. There are other ongoing audits in various other jurisdictions that are not material to our financial statements.

We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. We continue to monitor the progress of ongoing discussions with tax authorities and the impact, if any, of the expected expiration of the statute of limitations in various taxing jurisdictions.

We believe that an adequate provision has been made for any adjustments that may result from tax examinations. However, the outcome of tax audits cannot be predicted with certainty. If any issues addressed in our tax audits are resolved in a manner not consistent with management's expectations, we could be required to adjust our provision for income taxes in the period such resolution occurs. Although the timing of resolution, settlement, closure of audits is not certain, it is reasonably possible that certain U.S. federal and non-U.S. tax audits may be concluded within the next 12 months, which could significantly increase or decrease the balance of our gross unrecognized tax benefits.

We estimate that our unrecognized tax benefits as of December 31, 2017 could possibly decrease by approximately $500 million in the next 12 months. Positions that may be resolved include various U.S. and non-U.S. matters.

Note 15. Information about Segments and Geographic Areas

We operate our business in multiple operating segments. Google is our only reportable segment. None of our other segments meet the quantitative thresholds to qualify as reportable segments; therefore, the other operating segments are combined and disclosed as Other Bets.

Our reported segments are:

- Google – Google includes our main products such as Ads, Android, Chrome, Commerce, Google Cloud, Google Maps, Google Play, Hardware, Search, and YouTube. Our technical infrastructure and some newer efforts like virtual reality are also included in Google. Google generates revenues primarily from advertising; sales of apps, in-app purchases, digital content products, and hardware; and licensing and service fees, including fees received for Google Cloud offerings.
- Other Bets – Other Bets is a combination of multiple operating segments that are not individually material. Other Bets includes businesses such as Access, Calico, CapitalG, GV, Nest, Verily, Waymo, and X. Revenues

from the Other Bets are derived primarily through the sales of internet and TV services through Fiber, sales of Nest products and services, and licensing and R&D services through Verily.

Revenues, cost of revenues, and operating expenses are generally directly attributed to our segments. Inter-segment revenues are not presented separately, as these amounts are immaterial. Our Chief Operating Decision Maker does not evaluate operating segments using asset information.

Information about segments during the periods presented were as follows (in millions):

	Year Ended December 31,		
	2015	2016	2017
Revenues:			
Google	$ 74,544	$ 89,463	$ 109,652
Other Bets	445	809	1,203
Total revenues	$ 74,989	$ 90,272	$ 110,855

	Year Ended December 31,		
	2015	2016	2017
Operating income (loss):			
Google	$ 23,319	$ 27,892	$ 32,908
Other Bets	(3,456)	(3,578)	(3,355)
Reconciling items[1]	(503)	(598)	(3,407)
Total income from operations	$ 19,360	$ 23,716	$ 26,146

(1) Reconciling items are primarily comprised of the European Commission fine for the year ended December 31, 2017, as well as corporate administrative costs and other miscellaneous items that are not allocated to individual segments for all periods presented.

	Year Ended December 31,		
	2015	2016	2017
Capital expenditures:			
Google	$ 8,868	$ 9,417	$ 12,605
Other Bets	850	1,385	507
Reconciling items[2]	232	(590)	72
Total capital expenditures as presented on the Consolidated Statements of Cash Flows	$ 9,950	$ 10,212	$ 13,184

(2) Reconciling items are related to timing differences of payments as segment capital expenditures are on accrual basis while total capital expenditures shown on the Consolidated Statements of Cash Flow are on cash basis and other miscellaneous differences.

Stock-based compensation (SBC) and depreciation, amortization, and impairment are included in segment operating income (loss) as shown below (in millions):

	Year Ended December 31,		
	2015	2016	2017
Stock-based compensation:			
Google	$ 4,610	$ 5,926	$ 7,038
Other Bets	475	647	493
Reconciling items[3]	118	130	148
Total stock-based compensation[4]	$ 5,203	$ 6,703	$ 7,679
Depreciation, amortization, and impairment:			
Google	$ 4,839	$ 5,800	$ 6,520
Other Bets	203	340	395
Reconciling items[5]	21	4	—
Total depreciation, amortization, and impairment as presented on the Consolidated Statements of Cash Flows	$ 5,063	$ 6,144	$ 6,915

(3) Reconciling items represent corporate administrative costs that are not allocated to individual segments.
(4) For purposes of segment reporting, SBC represents awards that we expect to settle in Alphabet stock.
(5) Reconciling items are primarily related to corporate administrative costs and other miscellaneous items that are not allocated to individual segments.

The following table presents our long-lived assets by geographic area (in millions):

	As of December 31, 2016	As of December 31, 2017
Long-lived assets:		
United States	$ 47,383	$ 55,113
International	14,706	17,874
Total long-lived assets	$ 62,089	$ 72,987

For revenues by geography, see Note 2.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Exchange Act, as of the end of the period covered by this Annual Report on Form 10-K.

Based on this evaluation, our chief executive officer and chief financial officer concluded that, as of December 31, 2017, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) of the Exchange Act. Our management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2017. Management reviewed the results of its assessment with our Audit Committee. The effectiveness of our internal control over financial reporting as of December 31, 2017 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its report which is included in Item 8 of this Annual Report on Form 10-K.

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item will be included under the caption “Directors, Executive Officers, and Corporate Governance” in our Proxy Statement for 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2017 (2018 Proxy Statement) and is incorporated herein by reference. The information required by this item regarding delinquent filers pursuant to Item 405 of Regulation S-K will be included under the caption “Section 16(a) Beneficial Ownership Reporting Compliance” in the 2018 Proxy Statement and is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item will be included under the captions “Director Compensation,” “Executive Compensation” and “Directors, Executive Officers, and Corporate Governance—Corporate Governance and Board Matters—Compensation Committee Interlocks and Insider Participation” in the 2018 Proxy Statement and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item will be included under the captions “Common Stock Ownership of Certain Beneficial Owners and Management” and “Equity Compensation Plan Information” in 2018 Proxy Statement and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item will be included under the captions “Certain Relationships and Related Transactions” and “Directors, Executive Officers, and Corporate Governance—Corporate Governance and Board Matters—Director Independence” in the 2018 Proxy Statement and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item will be included under the caption “Independent Registered Public Accounting Firm” in the 2018 Proxy Statement and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) We have filed the following documents as part of this Annual Report on Form 10-K:

1. Consolidated Financial Statements

2. Financial Statement Schedules

Schedule II: Valuation and Qualifying Accounts

The table below details the activity of the allowance for doubtful accounts and sales credits for the three years ended December 31, 2017 (in millions):

	Balance at Beginning of Year	Additions	Usage	Balance at End of Year
Year ended December 31, 2015	$ 225	$ 579	$ (508)	$ 296
Year ended December 31, 2016	$ 296	$ 942	$ (771)	$ 467
Year ended December 31, 2017	$ 467	$ 1,131	$ (924)	$ 674

Note: Additions to the allowance for doubtful accounts are charged to expense. Additions to the allowance for sales credits are charged against revenues.

All other schedules have been omitted because they are not required, not applicable, or the required information is otherwise included.

3. Exhibits

Exhibit Number	Description	Incorporated by reference herein: Form	Date
2.01	Agreement and Plan of Merger, dated October 2, 2015, by and among Google Inc., the Registrant and Maple Technologies Inc.	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
3.01	Amended and Restated Certificate of Incorporation of the Registrant, dated October 2, 2015	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
3.02	Amended and Restated Bylaws of the Registrant, dated October 2, 2015	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
4.01	Specimen Class A Common Stock certificate	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
4.02	Specimen Class C Capital Stock certificate	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
4.03	Alphabet Inc. Deferred Compensation Plan	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
4.04	Transfer Restriction Agreement, dated October 2, 2015, between the Registrant and Larry Page and certain of his affiliates	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015

Exhibit Number		Description	Incorporated by reference herein	
			Form	Date
4.05		Transfer Restriction Agreement, dated October 2, 2015, between the Registrant and Sergey Brin and certain of his affiliates	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
4.06		Transfer Restriction Agreement, dated October 2, 2015, between the Registrant and Eric E. Schmidt and certain of its affiliates	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
4.07		Class C Undertaking, dated October 2, 2015, executed by the Registrant	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
4.08		Indenture, dated February 12, 2016, between the Registrant and The Bank of New York Mellon Trust Company, N.A., as Trustee	Registration Statement on Form S-3 (File No. 333-209510)	February 12, 2016
4.09		Registrant Registration Rights Agreement dated December 14, 2015	Registration Statement on Form S-3 (File No. 333-209518)	February 12, 2016
4.10		First Supplemental Indenture, dated April 27, 2016, between the Registrant and The Bank of New York Mellon Trust Company, N.A., as trustee	Current Report on Form 8-K (File No. 001-37580)	April 27, 2016
4.11		Form of the Registrant's 3.625% Notes due 2021 (included in Exhibit 4.10)		
4.12		Form of the Registrant's 3.375% Notes due 2024 (included in Exhibit 4.10)		
4.13		Form of the Registrant's 1.998% Note due 2026	Current Report on Form 8-K (File No. 001-37580)	August 9, 2016
10.01		Form of Indemnification Agreement entered into between the Registrant, its affiliates and its directors and officers	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
10.02	◆	Compensation Plan Agreement, dated October 2, 2015, between Google Inc. and the Registrant	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
10.03	◆	Director Arrangements Agreement, dated October 2, 2015, between Google Inc. and the Registrant	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
10.04	◆	Alphabet Inc. Deferred Compensation Plan	Current Report on Form 8-K (File No. 001-37580)	October 2, 2015
10.05	◆	Google Inc. 2004 Stock Plan, as amended	Current Report on Form 8-K (File No. 000-50726)	June 7, 2011
10.05.1	◆	Google Inc. 2004 Stock Plan - Form of Google Stock Option Agreement	Annual Report on Form 10-K (File No. 000-50726)	March 30, 2005
10.05.2	◆	Google Inc. 2004 Stock Plan - Form of Google Restricted Stock Unit Agreement	Annual Report on Form 10-K (File No. 000-50726)	March 30, 2005
10.05.3	◆	Google Inc. 2004 Stock Plan - Amendment to Stock Option Agreements	Registration Statement on Form S-3 (File No. 333-142243)	April 20, 2007
10.06	◆	Alphabet Inc. 2012 Stock Plan	Current Report on Form 8-K (File No. 001-37580)	June 9, 2017
10.06.1	◆	Alphabet Inc. 2012 Stock Plan - Form of Alphabet Restricted Stock Unit Agreement	Quarterly Report on Form 10-Q (File No. 001-37580)	November 3, 2016
10.07	◆	Motorola Mobility Holdings, Inc. 2011 Incentive Compensation Plan	Registration Statement on Form S-8 (File No. 333-181661)	May 24, 2012

Exhibit Number		Description	Incorporated by reference herein	
			Form	Date
10.08	◆	AdMob, Inc. 2006 Stock Plan and UK Sub-Plan of the AdMob, Inc. 2006 Stock Plan	Registration Statement on Form S-8 (File No. 333-167411)	June 9, 2010
10.09	◆	Apigee Corporation 2015 Equity Incentive Plan	Registration Statement on Form S-8 (File No. 333-214573)	November 10, 2016
10.09.1	◆	Apigee Corporation 2015 Equity Incentive Plan - Form of Restricted Stock Unit Agreement	Registration Statement on Form S-8 (File No. 333-214573)	November 10, 2016
12.01	*	Computation of Earnings to Fixed Charge Ratios		
14.01	*	Code of Conduct of the Registrant as amended on September 21, 2017		
21.01	*	Subsidiaries of the Registrant		
23.01	*	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm		
24.01	*	Power of Attorney (incorporated by reference to the signature page of this Annual Report on Form 10-K)		
31.01	*	Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002		
31.02	*	Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002		
32.01	‡	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002		
99.01		Google blog post dated June 27, 2017	Current Report on Form 8-K (File No. 001-37580)	June 27, 2017
101.INS	*	XBRL Instance Document		
101.SCH	*	XBRL Taxonomy Extension Schema Document		
101.CAL	*	XBRL Taxonomy Extension Calculation Linkbase Document		
101.DEF	*	XBRL Taxonomy Extension Definition Linkbase Document		
101.LAB	*	XBRL Taxonomy Extension Label Linkbase Document		
101.PRE	*	XBRL Taxonomy Extension Presentation Linkbase Document		

◆ Indicates management compensatory plan, contract, or arrangement.

* Filed herewith.

‡ Furnished herewith.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 5, 2018

ALPHABET INC.

By: /S/ LARRY PAGE

Larry Page
Chief Executive Officer
(Principal Executive Officer of the Registrant)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Larry Page and Ruth M. Porat, jointly and severally, his or her attorney-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/S/ LARRY PAGE **Larry Page**	Chief Executive Officer, Co-Founder, and Director (Principal Executive Officer)	February 5, 2018
/S/ RUTH M. PORAT **Ruth M. Porat**	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 5, 2018
/S/ JAMES G. CAMPBELL **James G. Campbell**	Vice President, Corporate Controller, and Chief Accounting Officer (Principal Accounting Officer)	February 5, 2018
/S/ SERGEY BRIN **Sergey Brin**	President, Co-Founder, and Director	February 5, 2018
/S/ JOHN L. HENNESSY **John L. Hennessy**	Director, Chair	February 5, 2018
/s/ ERIC E. SCHMIDT **Eric E. Schmidt**	Director	February 5, 2018
/S/ L. JOHN DOERR **L. John Doerr**	Director	February 5, 2018
/S/ ROGER W. FERGUSON, JR. **Roger W. Ferguson, Jr.**	Director	February 5, 2018
/S/ DIANE B. GREENE **Diane B. Greene**	Director	February 5, 2018
/S/ ANN MATHER **Ann Mather**	Director	February 5, 2018
/S/ ALAN R. MULALLY **Alan R. Mulally**	Director	February 5, 2018
/s/ SUNDAR PICHAI **Sundar Pichai**	Director	February 5, 2018
/S/ K. RAM SHRIRAM **K. Ram Shriram**	Director	February 5, 2018
/S/ SHIRLEY M. TILGHMAN **Shirley M. Tilghman**	Director	February 5, 2018