





**CCO HOLDINGS, LLC**  
**CCO HOLDINGS CAPITAL CORP.**  
**FORM 10-K — FOR THE YEAR ENDED DECEMBER 31, 2023**

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This annual report on Form 10-K is for the year ended December 31, 2023. The United States Securities and Exchange Commission (“SEC”) allows us to “incorporate by reference” information that we file with the SEC, which means that we can disclose important information to you by referring you directly to those documents. Information incorporated by reference is considered to be part of this annual report. In addition, information that we file with the SEC in the future will automatically update and supersede information contained in this annual report. In this annual report, “CCO Holdings,” “we,” “us” and “our” refer to CCO Holdings, LLC and its subsidiaries.

## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS:

This annual report includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, regarding, among other things, our plans, strategies and prospects, both business and financial including, without limitation, the forward-looking statements set forth in Part I. Item 1. under the heading “Business” and in Part II. Item 7. under the heading “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in this annual report. Although we believe that our plans, intentions and expectations reflected in or suggested by these forward-looking statements are reasonable, we cannot assure you that we will achieve or realize these plans, intentions or expectations. Forward-looking statements are inherently subject to risks, uncertainties and assumptions, including, without limitation, the factors described in Part I. Item 1A. under “Risk Factors” and in Part II. Item 7. under the heading, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in this annual report. Many of the forward-looking statements contained in this annual report may be identified by the use of forward-looking words such as “believe,” “expect,” “anticipate,” “should,” “planned,” “will,” “may,” “intend,” “estimated,” “aim,” “on track,” “target,” “opportunity,” “tentative,” “positioning,” “designed,” “create,” “predict,” “project,” “initiatives,” “seek,” “would,” “could,” “continue,” “ongoing,” “upside,” “increases,” “grow,” “focused on” and “potential,” among others. Important factors that could cause actual results to differ materially from the forward-looking statements we make in this annual report are set forth in this annual report and in other reports or documents that we file from time to time with the SEC, and include, but are not limited to:

- our ability to sustain and grow revenues and cash flow from operations by offering Internet, video, voice, mobile, advertising and other services to residential and commercial customers, to adequately meet the customer experience demands in our service areas and to maintain and grow our customer base, particularly in the face of increasingly aggressive competition, the need for innovation and the related capital expenditures;
- the impact of competition from other market participants, including but not limited to incumbent telephone companies, direct broadcast satellite (“DBS”) operators, wireless broadband and telephone providers, digital subscriber line (“DSL”) providers, fiber to the home providers and providers of video content over broadband Internet connections;
- general business conditions, unemployment levels and the level of activity in the housing sector and economic uncertainty or downturn;
- our ability to obtain programming at reasonable prices or to raise prices to offset, in whole or in part, the effects of higher programming costs (including retransmission consents and distribution requirements);
- our ability to develop and deploy new products and technologies including consumer services and service platforms;
- any events that disrupt our networks, information systems or properties and impair our operating activities or our reputation;
- the effects of governmental regulation on our business including subsidies to consumers, subsidies and incentives for competitors, costs, disruptions and possible limitations on operating flexibility related to, and our ability to comply with, regulatory conditions applicable to us;
- the ability to hire and retain key personnel;
- our ability to procure necessary services and equipment from our vendors in a timely manner and at reasonable costs including in connection with our network evolution and rural construction initiatives;
- the availability and access, in general, of funds to meet our debt obligations prior to or when they become due and to fund our operations and necessary capital expenditures, either through (i) cash on hand, (ii) free cash flow, or (iii) access to the capital or credit markets; and
- our ability to comply with all covenants in our indentures and credit facilities, any violation of which, if not cured in a timely manner, could trigger a default of our other obligations under cross-default provisions.

All forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by this cautionary statement. We are under no duty or obligation to update any of the forward-looking statements after the date of this annual report.

## PART I

### Item 1. *Business.*

#### Introduction

We are a leading broadband connectivity company and cable operator serving more than 32 million customers in 41 states through our Spectrum brand. Over an advanced communications network, we offer a full range of state-of-the-art residential and business services including Spectrum Internet<sup>®</sup>, TV, Mobile and Voice. For small and medium-sized companies, Spectrum Business<sup>®</sup> delivers the same suite of broadband products and services coupled with special features and applications to enhance productivity, while for larger businesses and government entities, Spectrum Enterprise<sup>®</sup> provides highly customized, fiber-based solutions. Spectrum Reach<sup>®</sup> delivers tailored advertising and production for the modern media landscape. We also distribute award-winning news coverage and sports programming to our customers through Spectrum Networks.

CCO Holdings is a holding company whose principal assets are the equity interests in its operating subsidiaries. CCO Holdings is a direct subsidiary of CCH I Holdings, LLC, which is an indirect subsidiary of Charter Communications, Inc. (“Charter”), Charter Communications Holdings, LLC (“Charter Holdings”) and Spectrum Management Holding Company, LLC.

Our network, which we own and operate, passes nearly an estimated 57 million households and businesses across the United States. Our strategy is focused on the evolution of our network and products, expansion of our footprint, and the execution of high quality operations, including customer service. This strategy allows us to maintain a state-of-the-art network delivering the most compelling converged connectivity services in a capital and time-efficient manner, and in turn, offer advanced services to consumers at highly attractive prices, together with outstanding customer service. Offering high quality, competitively priced products and outstanding service allows us to increase both the number of customers we serve over our network and the number of products we sell to each customer. This combination also reduces the number of service transactions we perform per relationship, yielding higher customer satisfaction and lower customer churn, which results in lower costs to acquire and serve customers and greater profitability.

#### *Evolution – Expanding the Capability of Our Network and Products*

Our network and product evolution plan is progressing, with a clear path to delivering symmetrical and multi-gig speeds to our customers across our footprint, meeting the needs of today and anticipating the demand for faster speeds for years to come. We continue to evolve our hybrid fiber coaxial network using a number of technologies, including spectrum expansion, initially to 1.2 GHz and then to 1.8 GHz, changing the bandwidth allocation to a “high split” to increase upstream speeds, Distributed Access Architecture (“DAA”) and DOCSIS 4.0 technology. Through this process, which we expect to complete in 2026, we will transform our network to enable multi-gigabit data speeds to customers. Those faster speeds will be offered in conjunction with our Spectrum Mobile product and Advanced WiFi, providing customers seamless and convenient, ultra-fast converged connectivity in attractively priced packages, such as our Spectrum One offer. In addition, we expect our network evolution to enable us to offer fiber on demand across the majority of our footprint. In October 2023, we began deploying Xumo Stream Boxes (“Xumo”) to new video customers. Xumo combines a live TV experience with access to hundreds of content applications, and features unified search and discovery, along with a curated content offering based on the customer's interests and subscriptions. Combined with our Spectrum TV<sup>®</sup> app, Xumo is now our preferred go-to-market platform for new video sales.

#### *Expansion – Building Our Future by Extending Our Network*

Since inception in the beginning of 2022, we have spent \$3.4 billion on our subsidized rural construction initiative and activated approximately 420,000 passings. Rural builds present strategic footprint expansion opportunities to unserved and underserved passings. Including amounts spent to date, we expect to invest over \$8 billion in total in our subsidized rural construction initiative, a portion of which we expect to offset with government funding, including over \$2 billion of support awarded through December 31, 2023 in the Rural Development Opportunity Fund (“RDOF”) auction and other federal, state and municipal grants. We also expect to participate in additional federal, state and municipal grant programs over the coming years, including the Broadband Equity, Access and Deployment (“BEAD”) program, if regulatory conditions are conducive to private investment. Our rural investments will allow us to offer a suite of broadband connectivity services, including fixed Internet, WiFi and mobile to over 1.6 million passings in unserved areas in states where we currently operate. We have also renewed our focus on building to more passings inside and at the edge of our existing and expanding network. To accomplish all of this, we have invested in new teams, new training and new equipment. These investments will allow us to generate long-term

infrastructure-style returns by taking further advantage of our scale efficiencies, network quality and construction capabilities, while offering our high quality products and services to more homes and businesses.

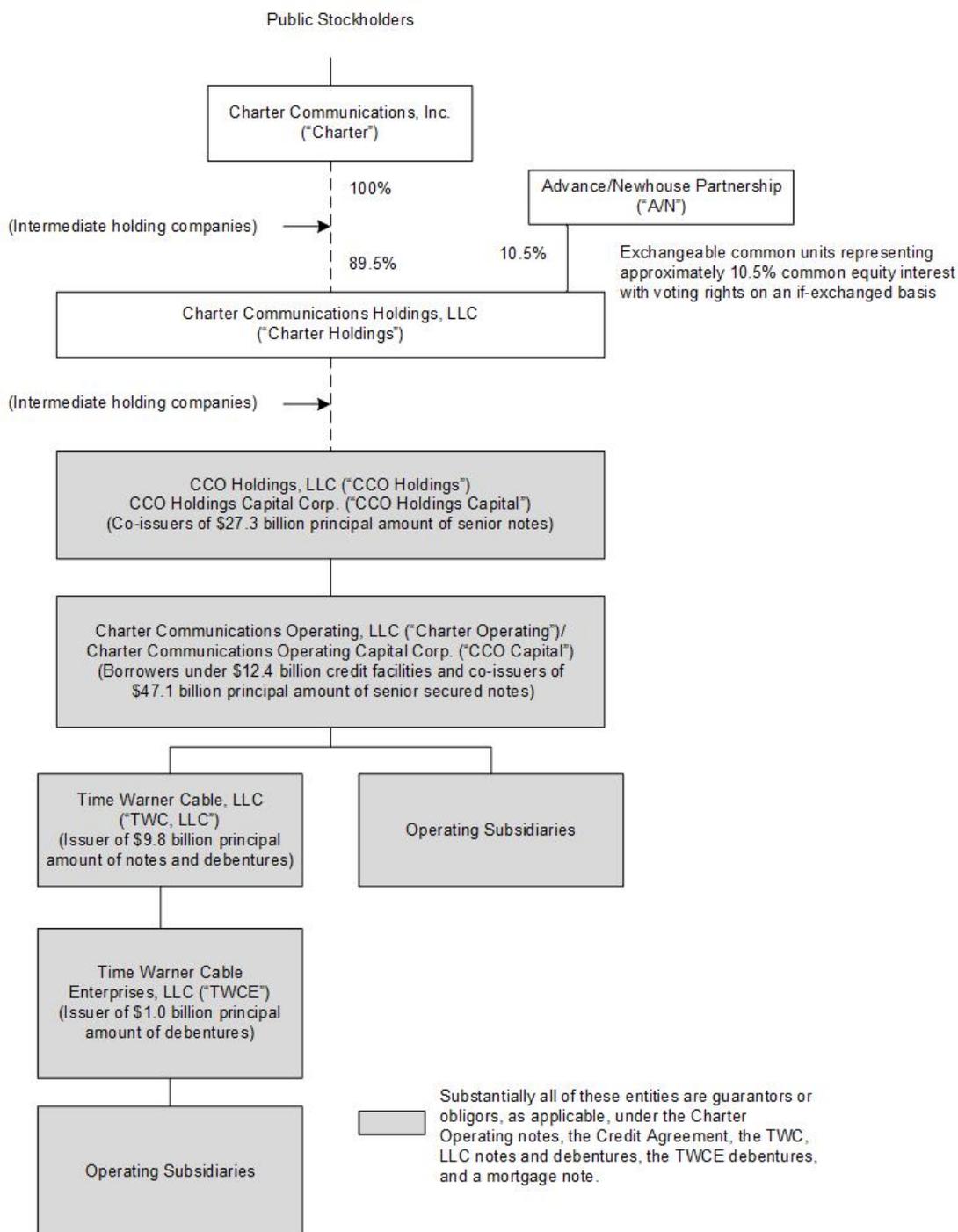
***Execution – Turning Our Strategy Into Success***

Our operating strategy is grounded in our desire to deliver high quality products to consumers at an attractive price. In addition, our focus on service quality complements our products and price. We are improving the customer experience by digitizing service where customers prefer, performing proactive maintenance, and improving the quality of our interactions by investing in our systems and operations teams. As part of our investment in operations teams, we have made targeted adjustments to job structure, pay and benefits and career paths to improve the skills and tenure of our workforce.

Our principal executive offices are located at 400 Washington Blvd., Stamford, Connecticut 06902. Our telephone number is (203) 905-7801, and Charter has a website accessible at [ir.charter.com](http://ir.charter.com). Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and all amendments thereto, are available on Charter's website free of charge as soon as reasonably practicable after they have been filed. The information posted on Charter's website is not incorporated into this annual report.

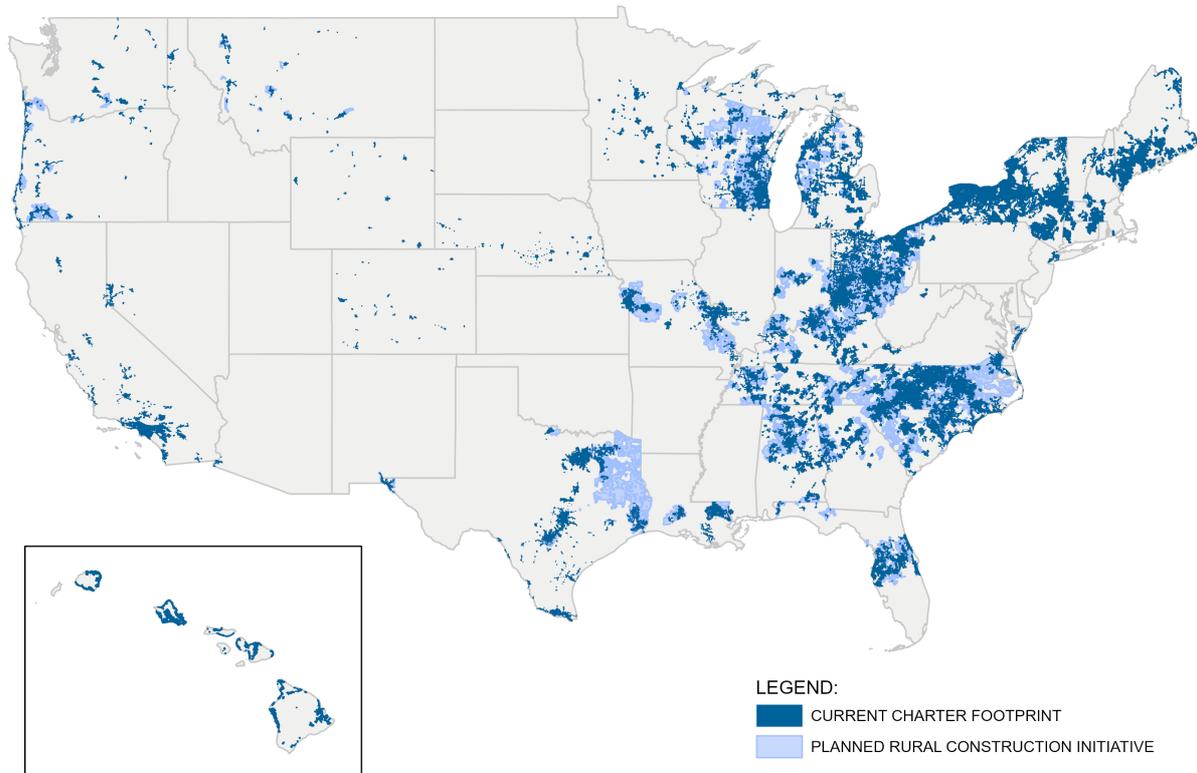
## Corporate Entity Structure

The chart below sets forth our entity structure and that of our direct and indirect parents and subsidiaries. The chart does not include all of our affiliates and subsidiaries and, in some cases, we have combined separate entities for presentation purposes. The equity ownership percentages shown below for Charter Holdings are approximations. Indebtedness amounts shown below are principal amounts as of December 31, 2023. See Note 8 to the accompanying consolidated financial statements contained in “Part II. Item 8. Financial Statements and Supplementary Data,” which also includes the accreted values of the indebtedness described below.



## Footprint

We operate in geographically diverse areas which are managed centrally on a consolidated level. The map below highlights our footprint along with our planned rural expansion over the next several years based on grants awarded as of December 31, 2023.



## Products and Services

We offer our customers subscription-based Internet services, video services, and mobile and voice services, with prices and related charges based on the types of service selected, whether the services are sold as a “bundle” or on an individual basis, and based on the equipment necessary to receive our services. Bundled services, including some combination of our Internet, video, voice and/or mobile products are available to substantially all of our passings.

The following table summarizes our customer statistics for Internet, video, voice and mobile as of December 31, 2023 and 2022 (in thousands except per customer data and footnotes).

	Approximate as of December 31,	
	2023 <sup>(a)</sup>	2022 <sup>(a)</sup>
<b>Customer Relationships <sup>(b)</sup></b>		
Residential	29,904	29,988
Small and Medium Business ("SMB")	2,222	2,207
<b>Total Customer Relationships</b>	<b>32,126</b>	<b>32,195</b>
Monthly Residential Revenue per Residential Customer <sup>(c)</sup>	\$ 119.89	\$ 119.38
Monthly SMB Revenue per SMB Customer <sup>(d)</sup>	\$ 163.64	\$ 166.36
<b>Internet</b>		
Residential	28,544	28,412
SMB	2,044	2,021
<b>Total Internet Customers</b>	<b>30,588</b>	<b>30,433</b>
<b>Video</b>		
Residential	13,503	14,497
SMB	619	650
<b>Total Video Customers</b>	<b>14,122</b>	<b>15,147</b>
<b>Voice</b>		
Residential	6,712	7,697
SMB	1,293	1,286
<b>Total Voice Customers</b>	<b>8,005</b>	<b>8,983</b>
<b>Mobile Lines <sup>(e)</sup></b>		
Residential	7,519	5,116
SMB	247	176
<b>Total Mobile Lines</b>	<b>7,766</b>	<b>5,292</b>
<b>Enterprise Primary Service Units ("PSUs") <sup>(f)</sup></b>	<b>303</b>	<b>284</b>

<sup>(a)</sup> We calculate the aging of customer accounts based on the monthly billing cycle for each account in accordance with our collection policies. On that basis, as of December 31, 2023 and 2022, customers include approximately 135,800 and 144,100 customers, respectively, whose accounts were over 60 days past due, approximately 54,700 and 52,800 customers, respectively, whose accounts were over 90 days past due, and approximately 286,000 and 214,100 customers, respectively, whose accounts were over 120 days past due. Bad debt expense associated with these past due accounts has been reflected in our consolidated statements of operations. The increase in accounts past due more than 120 days is predominately due to pre-existing and incremental unsubsidized amounts of customers' bills for those customers participating in government assistance programs, including video services. These customers are downgraded to a subsidized Internet-only service.

<sup>(b)</sup> Customer relationships include the number of customers that receive one or more levels of service, encompassing Internet, video, voice and mobile services, without regard to which service(s) such customers receive. Customers who reside in residential multiple dwelling units ("MDUs") and that are billed under bulk contracts are counted based on the number of billed units within each bulk MDU. Total customer relationships exclude enterprise and mobile-only customer relationships.

<sup>(c)</sup> Monthly residential revenue per residential customer is calculated as total residential annual revenue divided by twelve divided by average residential customer relationships during the respective year and excludes mobile-only customers.

<sup>(d)</sup> Monthly SMB revenue per SMB customer is calculated as total SMB annual revenue divided by twelve divided by average SMB customer relationships during the respective year and excludes mobile-only customers.

- (e) Mobile lines include phones and tablets which require one of our standard rate plans (e.g., "Unlimited" or "By the Gig"). Mobile lines exclude wearables and other devices that do not require standard phone rate plans.
- (f) Enterprise PSUs represent the aggregate number of fiber service offerings counting each separate service offering at each customer location as an individual PSU.

## **Residential Services**

### ***Connectivity Services***

We provide our customers with a suite of broadband connectivity services, including fixed Internet, WiFi and mobile, which when bundled together provides our customers with a differentiated converged connectivity experience while saving consumers and businesses money.

We offer Spectrum Internet products with speeds up to 1 Gbps across our entire footprint. Spectrum Internet bundled with our in-home Advanced WiFi allows multiple people within a single household to stream high definition ("HD") video content while simultaneously using our Internet service for other purposes including two-way video conferencing, gaming and virtual reality, among other things.

Our in-home WiFi product provides our Internet customers with high performance wireless routers and a managed WiFi service to maximize their wireless Internet experience. We offer Advanced WiFi service across all of our footprint along with WiFi 6E routers capable of delivering speeds over 2 Gbps. With Advanced WiFi, customers enjoy a cloud-optimized WiFi connection and have the ability to view and control their WiFi network through our Spectrum app ("My Spectrum App"). The service enables parental control schedules to be set for children's devices or to limit access entirely to unknown devices attempting to access the network. We also offer Spectrum Security Shield across our footprint which protects all devices in the home using network-based security. Spectrum Security Shield is an automatically-enabled security feature that works to defend our customers and their devices from online threats by detecting and blocking malicious websites, phishing scams, data theft and Internet-originated attacks against devices in the home. Customers also have the option to add Spectrum WiFi pods to Advanced WiFi. WiFi pods are small, discreet access points that plug into electrical outlets in the home, providing broader and more consistent WiFi coverage.

We also offer the capabilities of the Advanced WiFi service to MDUs as Advanced Community WiFi ("ACW"). With ACW, tenants receive the same visibility and control over their apartment's WiFi networks through the My Spectrum App, while building managers will be able to see and manage the entire building's network through a purpose-built property service portal.

Our Spectrum Mobile service is offered to customers subscribing to our Internet service and uses both our Spectrum Mobile network (comprised of out-of-home WiFi access points across our footprint combined with out-of-home WiFi access points from other networks with which we partner) as well as leveraging Verizon Communications Inc.'s ("Verizon") cellular network. We leverage the Verizon cellular network to provide nationwide coverage including unlimited calls, text and data using Verizon's fourth generation and fifth generation ("5G") service including their 5G wide band services. Spectrum Mobile also uses Verizon's international roaming partner network to ensure customers have coverage around the globe. Customers can use their Spectrum Mobile device to connect to their Spectrum WiFi, which increases speeds and provides a superior experience while in the home. In addition, we continue to focus on improving the customer experience and integrating our mobile and fixed Internet products with enhancements such as Spectrum Mobile Speed Boost ("Speed Boost"). Customers are eligible for Speed Boost if they have both Spectrum Mobile and Spectrum Internet, a DOCSIS 3.1 modem and an Advanced WiFi router. When connected on their Spectrum Mobile device through Advanced WiFi service, customers are now experiencing the fastest overall speeds up to 1 Gbps.

We provide wireline voice communications services using voice over Internet protocol ("VoIP") technology to transmit digital voice signals over our network. Our voice services include unlimited local and long distance calling to the United States, Canada, Mexico and Puerto Rico, voicemail, call waiting, caller ID, call forwarding and other features and offers international calling either by the minute, or through packages of minutes per month. For customers that subscribe to both our voice and video offerings, caller ID on TV is also available in most areas. We also offer Call Guard, an advanced caller ID and robocall blocking solution, for our residential and SMB voice customers. Call Guard reduces customer frustration and improves security by blocking malicious calls while ensuring our customers continue to receive the legitimate automated calls they need from schools or healthcare providers.

## ***Video Services***

We provide our customers with a choice of video programming services on a variety of platforms including through a digital Spectrum Receiver or an Internet Protocol ("IP") device. Video customers have access to a variety of programming packages with approximately 375 channels available in home and out of home allowing our customers to access the programming they want, when they want it, on any device. Our video customers also have access to programmer authenticated applications such as Fox Sports, Starz, NBC, ESPN and CBS and direct-to-consumer ("DTC") applications such as Disney+ which, beginning in 2024, is included with a customer's video subscription at no additional cost.

Our video service also includes access to an interactive programming guide with parental controls, and in virtually all of our footprint, video on demand ("VOD") or pay-per-view services. VOD service allows customers to select from approximately 90,000 titles at any time. VOD programming options may be accessed at no additional cost if the content is associated with a customer's linear subscription, or for a fee on a transactional basis. VOD services are also offered on a subscription basis, included in a digital tier premium channel subscription, or for a monthly fee. Pay-per-view channels allow customers with a set-top box to pay on a per-event basis to view a single showing of a one-time special sporting event, music concert, or similar event on a commercial-free basis. We also offer digital video recorder ("DVR") service that enables customers to digitally record programming and to pause and rewind live programming on set-top boxes. Our cloud DVR service allows customers to schedule, record and watch their favorite programming anytime from the Spectrum TV app as well as SpectrumTV.com.

In October 2023, we began deploying Xumo to new video customers. Xumo combines a live TV experience with access to hundreds of content applications and features unified search and discovery along with a curated content offering based on the customer's interests and subscriptions. Combined with our Spectrum TV app, Xumo is now our preferred go-to-market platform for new video sales.

Customers are increasingly accessing their subscription video content through our highly rated Spectrum TV app via mobile devices and connected IP devices, such as Xumo, Roku and Samsung TV. Access to the Spectrum TV app is included in all Spectrum TV video plans. The Spectrum TV app allows users to stream content across a growing number of platforms as well as access their full TV lineup and watch on demand content. It also supports DVR functionality through our cloud DVR offering.

## **Commercial Services**

We offer scalable broadband communications solutions for businesses and carrier organizations of all sizes, selling Internet access, data networking, fiber connectivity to cellular towers and office buildings, video entertainment services and business telephone services.

### ***Small and Medium Business***

Spectrum Business offers Internet, voice and video services to SMBs over our hybrid fiber coaxial network. In 2023, we launched Advanced WiFi service to SMBs, which leverages the residential platform features, including Security Shield, with features specific to small and medium-size business such as a guest service set identifier ("SSID"). In addition, we offer our Spectrum Mobile service to SMB customers. Spectrum Business includes a full range of video programming and offers Internet speeds up to 1 Gbps across our entire footprint. Spectrum Business also includes a set of business services including static IP and business WiFi, e-mail and security, and voice services through either a traditional voice offering or hosted voice solution. Spectrum Business Connect with RingCentral is an SMB communications solution that includes Spectrum Internet, voice and complementary mobility features allowing our customers' remote and office employees to stay more easily connected regardless of their location. We also offer Wireless Internet Backup to our SMB customers which is designed to enhance and protect Internet service for SMBs in the event of a network disruption.

### ***Enterprise***

Spectrum Enterprise offers tailored communications products and managed service solutions over a high-capacity last-mile network with speeds up to 100 Gbps to larger businesses and government entities (local, state and federal), in addition to wholesale services to mobile and wireline carriers. The Spectrum Enterprise product portfolio includes connectivity services such as Internet Access (fiber, wireless and coax delivered); Wide Area Network ("WAN") solutions (Ethernet, Software Defined ("SD")-WAN and cloud connectivity) that privately and securely connect geographically dispersed customer locations and cloud service providers; and Managed Services which address a wide range of enterprise networking (e.g. routing, Local Area Network ("LAN"), WiFi) and security (e.g. firewall, Distributed Denial of Service ("DDoS") protection) challenges. To

meet the communications needs of these more sophisticated customers, Spectrum Enterprise also offers an array of voice trunking services and unified messaging, communications and collaboration solutions. We offer Unified Communications with RingCentral, which integrates Spectrum Enterprise's managed services to complement its other solutions and gives customers more choices for enhancing their digital experience across locations and devices. In addition, for industries such as hospitality, education and healthcare where specialized video solutions are demanded, Spectrum Enterprise offers a wide range of solutions designed to meet those requirements. Spectrum Enterprise serves businesses nationally by combining its large serviceable footprint with a robust portfolio of fiber lit buildings and a significant wholesale partner network. As a result, these customers benefit by obtaining advanced solutions from a single provider who is committed to an exceptional customer experience and who delivers compelling value by simplifying procurement and offering competitive pricing potentially reducing our customers' costs.

## **Advertising Services**

Our advertising sales division, Spectrum Reach, offers local, regional and national businesses the opportunity to advertise in individual and multiple service areas on cable television networks, various streaming services and numerous advanced advertising platforms. We receive revenues from the sale of local advertising across various platforms for networks such as TBS, CNN and ESPN. We insert local advertising on up to 100 channels in over 90 markets. Our large footprint provides opportunities for advertising customers to address broader regional audiences from a single provider and thus reach more customers with a single transaction. Our size also provides scale to invest in new technology to create more targeted and addressable advertising capabilities.

Available advertising time is generally sold by our advertising sales force. In some service areas, we have formed advertising interconnects or entered into representation agreements with other video distributors, including, among others, Verizon, DirecTV and Comcast, under which we sell advertising on behalf of those operators. In other service areas, we enter into representation agreements under which another operator in the area will sell advertising on our behalf. These arrangements enable us and our partners to represent and deliver commercials on their inventory across wider geographic areas, replicating the reach of local broadcast television stations to the extent possible. In addition, we enter into interconnect agreements from time to time with other cable operators, which, on behalf of a number of video operators, sells advertising time to national and regional advertisers in individual or multiple service areas.

Additionally, we sell the advertising inventory of our owned and operated local sports and news channels, of our regional sports networks that carry Los Angeles Lakers' basketball games and other sports programming and of SportsNet LA, a regional sports network that carries Los Angeles Dodgers' baseball games and other sports programming.

In conjunction with other multichannel video programming distributors ("MVPDs"), Spectrum Reach enables multi-channel cable networks (e.g. AMC, Univision) to deploy household addressability on their own inventory in our footprint, charging them an enablement fee. We also offer Ad Portal, which allows small businesses to purchase local cable advertising and/or creative services via our web portal with limited sales personnel interaction at a price within their budgets. Our fully deployed Audience App, which uses our proprietary set-top box viewership data (all anonymized and aggregated), allows us to create data-driven linear TV campaigns for local advertisers. Spectrum Reach also offers a programmatic sales platform allowing advertising agencies and advertisers to buy inventory in a fully automated way. Streaming TV, which is largely comprised of Spectrum TV app impressions, as well as those from numerous over-the-top streaming content providers, is part of our suite of advanced advertising products available to the marketplace. Spectrum Reach is also now employing multi-screen deterministic attribution services for television and streaming services that lets advertisers know the effectiveness of their advertising on Spectrum Reach's platform.

## **Other Services**

### ***Regional Sports Networks***

We have an agreement with the Los Angeles Lakers for rights to distribute all locally available Los Angeles Lakers' games through 2033. We broadcast those games on our regional sports network, Spectrum SportsNet. American Media Productions, LLC ("American Media Productions"), an unaffiliated third party, owns SportsNet LA, a regional sports network carrying the Los Angeles Dodgers' baseball games and other sports programming. In accordance with agreements with American Media Productions, we act as the network's exclusive affiliate and advertising sales representative and have certain branding and programming rights with respect to the network. In addition, we provide certain production and technical services to American Media Productions. The affiliate, advertising, production and programming agreements continue through 2038. We also own

26.8% of Sterling Entertainment Enterprises, LLC (doing business as SportsNet New York), a New York City-based regional sports network that carries New York Mets' baseball games as well as other regional sports programming.

### ***News Channels***

We own and manage 38 local news channels, including Spectrum News NY1® and Spectrum News SoCal, 24-hour news channels focused on New York City and Los Angeles, respectively. Our local news channels connect the diverse communities and neighborhoods we serve providing 24/7 news, weather and community content focused on hyperlocal stories that address the deeper needs and interests of our customers. Customers can also read, watch and listen to news stories by our Spectrum News journalists and local partner publications on their mobile device on our Spectrum News application and certain smart TVs and streaming devices.

### ***Community Solutions***

Spectrum Community Solutions ("SCS") delivers broadband connectivity solutions to apartments, single-family gated communities, off-campus student housing, senior residences and RV parks and marinas. Services offered by SCS include Internet speeds up to 2 Gbps, property-wide managed WiFi coverage, and traditional and streaming video packages, as well as customized fiber and coaxial solutions for new construction and established communities. SCS also manages our relationships with third-party resellers of Spectrum services to small and medium-size businesses as well as large, complex coax customers. In addition, SCS is responsible for our non-bulk MDU salesforce covering sales within existing, serviceable MDU properties. Our SCS bulk customers are serviced by dedicated call centers.

### **Pricing of Our Products and Services**

Our revenues are principally derived from the monthly fees customers pay for the services we provide. We typically charge a one-time installation fee which is sometimes waived or discounted in certain sales channels during certain promotional periods.

Our Spectrum pricing and packaging ("SPP") generally offers a standardized price across our services and add-on services allowing customers to design a bundle offering that fits their needs. We believe SPP:

- offers a higher quality and more value-based set of services relative to our competitors, including fast Internet speeds, hundreds of HD channels and a transparent pricing structure;
- offers simplicity for customers to understand our offers, and for our employees in service delivery;
- drives our ability to package more services at the time of sale, thus increasing revenue per customer;
- drives higher customer satisfaction, lower service calls and churn; and
- allows for gradual price increases at the end of promotional periods.

We also have specialized offerings to enhance affordability of our Internet product for qualified low-income households, including Spectrum Internet Assist, a 50 megabits per second ("Mbps") service, and Internet 100, a 100 Mbps service. Both are low cost and include a modem for no additional charge. In addition, many of our customers are eligible for a subsidy through the Federal Communications Commission's ("FCC") Affordable Connectivity Program ("ACP") which provides eligible low-income households with up to \$30 per month towards Internet service. The FCC has announced that ACP funding is expected to run out in April 2024 and has prohibited service providers from enrolling new ACP customers after February 7, 2024.

Our Spectrum One offering, which brings together Spectrum Internet, Advanced WiFi and Unlimited Spectrum Mobile, offers consumers fast, reliable and secure online connections on their favorite devices at home and on-the-go in a high-value package. Alternatively, our mobile customers can choose one of two simple ways to pay for data. Customers can choose from unlimited or by-the-gig data usage plans and can easily switch between mobile data plans during the month. All plans include 5G service, free nationwide talk and text, and simple pricing that includes all taxes and fees. Customers can also purchase mobile devices and accessory products and have the option to pay for devices under interest-free monthly installment plans. Our device portfolio includes 5G models from Apple, Google and Samsung and we offer trade-in options along with a bring-your-own-device ("BYOD") program which lowers the costs for our customers switching to Spectrum Mobile from other mobile operators.

### **Our Network Technology**

Our network includes three key components: a national backbone, regional/metro networks and a "last-mile" network. Both our national backbone and regional/metro network components utilize a redundant IP ring/mesh fiber architecture. The national

backbone component provides connectivity from regional demarcation points to nationally centralized content, connectivity and services. The regional/metro network components provide connectivity between the regional demarcation points and headends within a specific geographic area and enable the delivery of content and services between these network components.

Our last-mile network utilizes a hybrid fiber coaxial cable (“HFC”) architecture, which combines the use of fiber optic cable with coaxial cable. In most systems, we deliver our signals via fiber optic cable from the headend to a group of nodes, and use coaxial cable to deliver the signal from individual nodes to the homes served by that node. Our design standard allows spare fiber strands to each node to be utilized for additional residential traffic capacity, and enterprise customer needs as they arise. For our Spectrum Enterprise customers, fiber optic cable is extended to the customer’s site. For most new buildouts, including for our rural construction initiative, and MDU sites, we utilize a fiber deployment. We believe that this hybrid network design provides high capacity and signal quality with a cost efficient path to increased speeds.

HFC architecture benefits include:

- bandwidth capacity to enable traditional and two-way video and broadband services;
- dedicated bandwidth for delivering two-way services, signal quality and higher service reliability, which provides an advantage over fixed wireless offerings;
- the ability to upgrade capacity at a lower incremental capital cost relative to our competitors; and
- a powered network enabling out-of-home Advanced WiFi and 5G small cell access points.

Our systems currently provide a two-way all-digital platform, leveraging DOCSIS 3.1 technology and bandwidth of 750 megahertz or greater, to virtually all of our estimated passings. This bandwidth-rich network enables us to offer a large selection of HD channels and Spectrum Internet Gig across all of our footprint which enables us to provide fast, reliable and secure online connections, meeting current customer demands.

Through our network evolution initiative, we are currently expanding our spectrum to 1.2 Ghz through a module upgrade in the hub, node and amplifier and using high splits and DAA to deliver multi-gig speed capabilities while using the current DOCSIS 3.1 customer premise equipment. When paired with the next generation of DOCSIS modem, DOCSIS 4.0, we will be able to deliver even faster speeds. Next, we will begin to deploy DOCSIS 4.0 technology in the network, and further increase our spectrum to 1.8 Ghz enabling even higher speed capabilities. This network evolution will also allow us to extend fiber services to the home in a success based “Fiber on Demand” manner.

We plan to complement our wireline investments with planned WiFi upgrades for in-home routers. With nearly 500 million devices connected wirelessly to our network in our customers’ homes and businesses, we are unlocking our network investments for multi-gigabit speeds through the deployment of WiFi 6E which began in 2023, and a planned shift to WiFi 7 in late 2024.

We own 210 Citizen Broadband Radio Service (“CBRS”) Priority Access Licenses (“PALs”). We intend to use these licenses along with unlicensed CBRS spectrum to build our own 5G data-only mobile network on targeted 5G small cell sites leveraging our HFC network to provide power and data connectivity to the majority of the sites. These 5G small cells, combined with growing WiFi capabilities, increase speed and reliability along with improving our cost structure through offload of wireless data onto our owned networks. In 2023, we commercialized our first market with our 5G network and will continue deploying 5G small cell sites in targeted areas of our footprint, as part of our broader multi-year 5G mobile network buildout, based on disciplined cost reduction targets.

### **Subsidized Rural Construction Initiative**

In 2023, we continued our subsidized rural construction initiative in which we intend to expand our network to offer a suite of broadband connectivity services, including fixed Internet, WiFi and mobile to over 1.6 million passings in unserved areas in states where we currently operate. Since inception in the beginning of 2022, we have spent \$3.4 billion on our subsidized rural construction initiative and activated approximately 420,000 passings. Including amounts spent to date, we expect to invest over \$8 billion in total over the next several years, a portion of which we expect to offset with government funding, including over \$2 billion of support awarded through December 31, 2023 in the RDOF auction and other federal, state and municipal grants. We also expect to participate in additional federal, state and municipal grant programs over the coming years, including the BEAD program, if regulatory conditions are conducive to private investment. In addition to construction in areas subsidized by various government grants, we expect to continue rural construction in areas near our current plant and in areas surrounding subsidized construction where synergies can be achieved. These investments will allow us to generate long-term infrastructure-style returns by further taking advantage of our scale efficiencies, network quality and construction capabilities, while offering

our high quality products and services to more homes and businesses. We expect these newly-served homes will be enabled to engage in remote work, virtual learning, telemedicine and other bandwidth-heavy applications that require high speed broadband connectivity. Newly-served rural areas will also benefit from our high-value SPP structure including our voice and mobile offerings, as well as our comprehensive selection of video products. The successful and timely execution of such fiber-based construction is dependent on a variety of external factors, including the make-ready and utility pole permitting processes. With fewer homes and businesses in these areas, broadband providers need to access multiple poles per home, as opposed to multiple homes per pole in higher-density settings. As a result, pole applications, pole replacement rules and their affiliated issue resolution processes are all factors that can have a significant impact on construction timing and speed to completion. The RDOF auction rules and other subsidy grants establish construction milestones for the build-out utilizing subsidized funding. Failure to meet those milestones could subject us to financial penalties.

### **Management, Customer Operations and Marketing**

Our operations are centralized, with senior executives responsible for coordinating and overseeing operations, including establishing company-wide strategies, policies and procedures. Sales and marketing, field operations, customer operations, network operations, engineering, advertising sales, human resources, legal, government relations, information technology and finance are all directed at the corporate level. Regional and local field operations are responsible for customer premise service transactions and maintaining and constructing that portion of our network which is located outdoors. Our field operations strategy includes completing a significant portion of our activity with our employees which we find drives consistent and higher quality services. In 2023, our in-house field operations workforce handled approximately 80% of our customer premise service transactions. In addition, we have been growing our in-house construction teams to perform a portion of our network expansion initiatives.

We continue to focus on improving the customer experience through enhanced product offerings, reliability of services, and delivery of quality customer service. As part of our operating strategy, we insource most of our customer operations workload. Our in-house call centers handle all of our customer service calls. We manage our customer service call centers centrally to ensure a consistent, high quality customer experience. In addition, we route calls by call type to specific agents that only handle such call types, enabling agents to become experts in addressing specific customer needs, creating a better customer experience. Service from our call centers continues to become more efficient as a result of new tool enhancements that give our front-line customer service agents more context and real-time information about the customer and their services which allows them to more effectively troubleshoot and resolve issues. Our call center agent desktop interface tool enables virtualization of all call centers thereby better serving our customers. Virtualization allows calls to be routed across our call centers regardless of the location origin of the call, reducing call wait times, and saving costs.

We also provide customers with the opportunity to interact with us in the manner they choose through self-service options on our customer website and mobile device application, or via telephonic communication, online chat and social media. Our customer websites and mobile applications enable customers to pay their bills, manage their accounts, order and activate new services and utilize self-service help and support. In addition, our self-install program has been beneficial for customers who need flexibility in the timing of their installation.

We sell our residential and commercial services using national brand platforms known as Spectrum, Spectrum Business, Spectrum Enterprise, Spectrum Reach and Spectrum Community Solutions. These brands reflect our comprehensive approach to industry-leading products, driven by speed, performance and innovation. Our marketing strategy emphasizes the sale of our bundled services through targeted direct response marketing programs to existing and potential customers, and increases awareness and the value of the Spectrum brand. Our marketing organization creates and executes marketing programs intended to grow customer relationships, increase the number of services we sell per relationship, retain existing customers and cross-sell additional products to current customers. We monitor the effectiveness of our marketing efforts, customer perception, competition, pricing, and service preferences, among other factors, in order to increase our responsiveness to our customers and to improve our sales and customer retention. The marketing organization manages all residential and SMB sales channels including inbound, direct sales, online, outbound telemarketing and stores.

### **Programming**

We believe that offering a wide variety of video programming choices influences a customer's decision to subscribe to and retain our video and Internet services. We obtain basic and premium programming, usually pursuant to written contracts from a number of suppliers. We are also beginning to obtain access to the related DTC services pursuant to those contracts. Media corporation and broadcast station group consolidation has, however, resulted in fewer suppliers and additional selling power on the part of programming suppliers.

Programming is usually made available to us for a license fee, which is generally paid based on the number of customers to whom we make that programming available. Programming license fees may include various discounts such as “volume” discounts and other financial incentives and/or ongoing marketing support, as well as discounts for service penetration. We receive revenue to carry home shopping channels. We also offer VOD and pay-per-view channels of movies and events that are subject to a revenue split with the content provider.

## **Competition**

### **Residential Services**

We face intense competition for residential customers, both from existing competitors and, as a result of the rapid development of new technologies, services and products, from new entrants.

#### ***Internet Competition***

Our residential Internet service faces competition across our footprint from fiber-to-the-home (“FTTH”), fixed wireless broadband, Internet delivered via satellite and DSL services. AT&T Inc. (“AT&T”), Frontier Communications Corporation (“Frontier”) and Verizon are our primary FTTH competitors. Given the FTTH deployments of our competitors, launches of broadband services offering 1 Gbps or more of speed have recently grown. Several competitors, including AT&T, Frontier, Verizon, WideOpenWest, Inc. (“WOW”) and Google Fiber, deliver 1 Gbps broadband speed (and some deliver multi Gbps) in at least a portion of their footprints which overlap our footprint. Additionally, several national mobile network operators offer long-term evolution (“LTE”) or 5G delivered fixed wireless home Internet service in our markets. In several markets, we also face competition from one or more fixed wireless providers that deliver point-to-point Internet connectivity. DSL service is offered across our footprint often at prices lower than our Internet services, although typically at speeds much lower than the minimum speeds we offer as part of SPP. In addition, commercial areas, such as retail malls, restaurants and airports, offer WiFi Internet service. Numerous local governments are also considering or actively pursuing publicly subsidized WiFi Internet access networks. In addition, providers are constructing open access networks that can deliver services from multiple underlying Internet service providers. These options offer alternatives to cable-based Internet access. We face terrestrial broadband Internet (defined as at least 25 Mbps) competition from three primary competitors, AT&T, Frontier and Verizon, in approximately 35%, 11% and 6% of our operating footprint, respectively.

#### ***Video Competition***

Our residential video service faces growing competition across our footprint from a number of other sources, including companies that deliver linear network programming, movies and television shows on demand and other video content over broadband Internet connections to televisions, computers, tablets and mobile devices. These competitors include virtual MVPDs such as Hulu Live, YouTube TV, Sling TV, Philo and DirecTV Stream. Other online video business models and products have also developed, some offered by programmers, including, (i) subscription video on demand (“SVOD”) services such as Netflix, Apple TV+, Amazon Prime and Hulu Plus, (ii) programmer DTC applications such as Disney+, Peacock and Paramount+, (iii) ad-supported free online video products, including YouTube and Pluto TV, some of which offer programming for free to consumers that we currently purchase for a fee, (iv) pay-per-view products, such as iTunes, and (v) additional offerings from mobile providers which continue to integrate and bundle video services and mobile products. Historically, we have generally viewed SVOD online video services as complementary to our own video offering and, in the case of programmer DTC offerings, have begun to package the DTC services with the linear offerings. However, services from virtual MVPDs and DTC offerings, as well as piracy and password sharing, negatively impact the number of customers purchasing our video product.

Our residential video service also faces competition from DBS service providers, which have a national footprint and compete in all of our operating areas. DBS providers offer satellite-delivered pre-packaged programming services that can be received by relatively small and inexpensive receiving dishes. DBS providers offer aggressive promotional pricing and video services that are comparable in many respects to our residential video service. Our residential video service also faces competition from large telecommunications companies, primarily Verizon, which offer wireline video services in significant portions of our operating areas.

### ***Voice Competition***

Our residential voice service competes with wireless and wireline phone providers across our footprint, as well as other forms of communication, such as text messaging on cellular phones, instant messaging, social networking services, video conferencing and email. We also compete with “over-the-top” phone providers, such as Vonage, Skype, magicJack, Google Voice and Ooma, Inc., as well as companies that sell phone cards at a cost per minute for both national and international service. The increase in the number of different technologies capable of carrying voice services and the number of alternative communication options available to customers as well as the replacement of wireline services by wireless have intensified the competitive environment in which we operate our residential voice service.

### ***Mobile Competition***

Our mobile service faces competition from national mobile network operators including AT&T, Verizon and T-Mobile US, Inc. (“T-Mobile”), as well as a variety of regional operators and mobile virtual network operators. Most carriers offer unlimited data packages to customers while some also offer free or highly discounted devices. Various operators also offer wireless Internet services delivered over networks which they continue to enhance to deliver faster speeds. AT&T, Verizon and T-Mobile continue to expand 5G mobile services. Additionally, Dish Network Corporation completed its 5G network development and expansion and now offers 5G broadband service to over 70% of the U.S. population. We also compete for retail activations with other resellers that buy bulk wholesale service from wireless service providers for resale.

### ***Regional Competitors***

In some of our operating areas, other competitors have built networks that offer Internet, video and voice services that compete with our services. For example, in certain service areas, our residential Internet, video and voice services compete with WOW, alfiber, Google Fiber and Astound Broadband.

### ***Additional Competition***

In addition to multi-channel video providers, cable systems compete with other sources of news, information and entertainment, including over-the-air television broadcast reception, live events, movie theaters and the Internet. Competition is also posed by fixed wireless and satellite master antenna television (“SMATV”) systems serving MDUs, such as condominiums, apartment complexes, and private residential communities.

### **Business Services**

We face intense competition across each of our business services product offerings. Our SMB Internet, video and voice services face competition from a variety of providers as described above. Our enterprise solutions also face competition from the competitors described above as well as cloud-based application-service providers, managed service providers and other telecommunications carriers, such as metro and regional fiber-based carriers.

### **Advertising**

We face intense competition for advertising revenue across many different platforms and from a wide range of local and national competitors. Advertising competition has increased and will likely continue to increase as new advertising platforms seek to attract the same advertisers. We compete for advertising revenue against, among others, local broadcast stations, national cable and broadcast networks, radio stations, print media, connected device platforms and online advertising companies and content providers.

### **Seasonality and Cyclicity**

Our business is subject to seasonal and cyclical variations. Our results are impacted by the seasonal nature of customers receiving our cable services in college and vacation service areas. Our revenue is subject to cyclical advertising patterns and changes in viewership levels. Our advertising revenue is generally higher in the second and fourth calendar quarters of each year, due in part to increases in consumer advertising in the spring and in the period leading up to and including the holiday season. U.S. advertising revenue is also cyclical, benefiting in even-numbered years from advertising related to candidates running for political office and issue-oriented advertising. Our capital expenditures and trade working capital are also subject to significant seasonality based on the timing of subscriber growth, network programs, specific projects and construction.

## **Regulation and Legislation**

The following summary addresses the key regulatory and legislative developments affecting the cable industry and our services for both residential and commercial customers. Cable systems and related communications networks and services are extensively regulated by the federal government (primarily the FCC), certain state governments and many local governments. A failure to comply with these regulations could subject us to substantial penalties. Our business can be dramatically impacted by changes to the existing regulatory framework, whether triggered by legislative, administrative, or judicial rulings. Congress and the FCC have frequently revisited the subject of communications regulation and they are likely to do so again in the future. We could be materially disadvantaged in the future if we are subject to new laws, regulations or regulatory actions that do not equally impact our key competitors. For example, Internet-delivered streaming video services compete with our traditional video service, but they are not subject to the same level of federal, state, and local regulation. We cannot provide assurance that the already extensive regulation of our business will not be expanded in the future.

### **Video Service**

#### ***Must Carry/Retransmission Consent***

There are two alternative legal methods for carriage of local broadcast television stations on cable systems. Federal “must carry” regulations require cable systems to carry local broadcast television stations upon the request of the local broadcaster. Alternatively, federal law includes “retransmission consent” regulations, by which popular commercial television stations can prohibit cable carriage unless the cable operator first negotiates for “retransmission consent,” which may be conditioned on significant payments or other concessions. Popular stations routinely invoke “retransmission consent” and demand substantial compensation increases in their negotiations with cable operators, thereby significantly increasing our operating costs.

#### ***Pole Attachments***

The Communications Act of 1934, as amended (the “Communications Act”), requires investor-owned utilities to provide cable systems with access to poles and conduits upon non-discriminatory terms and at rates that are subject to either federal or state regulation. The federally regulated rates applicable to pole attachments used for cable or telecommunications services, including when offered together with Internet service, are substantially similar. The FCC's approach does not directly affect the rate in states that self-regulate, but many of those states have substantially the same rate for all communications attachments. We sometimes face challenges getting access to poles in rural areas where upfront construction and make ready costs can be higher and where pole owners may be slow to grant our permit requests, especially when the FCC pole attachment rules do not apply.

#### ***Other FCC Regulatory Matters***

The Communications Act and FCC regulations cover a variety of additional areas applicable to our video services, including, among other things: (1) licensing of systems and facilities, including the grant of various spectrum licenses; (2) equal employment opportunity obligations; (3) customer service standards; (4) technical standards; (5) mandatory blackouts of certain network and syndicated programming; (6) restrictions on political advertising; (7) restrictions on advertising in children’s programming; (8) ownership restrictions; (9) posting of certain information on an FCC “public file” website, including but not limited to political advertising records, equal employment opportunity practices, compliance with children’s programming requirements, policies for commercial leased access, system information, and channel carriage information including disclosure of our ownership interests in channels we carry; (10) emergency alert systems; (11) inside wiring and contracts for MDU complexes; (12) accessibility of content, including requirements governing video-description and closed-captioning; (13) competitive availability of cable equipment; (14) the provision of up to 15% of video channel capacity for commercial leased access by unaffiliated third parties; and (15) public, education and government entity access requirements. Each of these regulations restricts our business practices to varying degrees and may impose additional costs on our operations.

The FCC regulates spectrum usage in ways that could impact our operations including for microwave backhaul, broadcast, unlicensed WiFi and CBRS. Our ability to access and use spectrum that may become available in the future is uncertain and may be limited by further FCC auction or allocation decisions. New spectrum obtained by other parties could also lead to additional wireless competition to our existing and future services.

It is possible that Congress or the FCC will expand or modify its regulation of cable systems or the services delivered over cable systems and competing services in the future. For example, in December 2023, the FCC sought comment on a proposed rule that would prohibit cable television providers from charging fees for early termination of a contract and would require

them to provide a prorated credit or rebate for the remaining days in a billing cycle after the cancellation of video service. We cannot predict at this time what new requirements may be adopted and how such changes might impact our business.

### ***Copyright***

The carriage of television and radio broadcast signals by cable systems are subject to a federal compulsory copyright license. The copyright law provides copyright owners the right to audit our payments under the compulsory license, and the Copyright Office is currently considering modifications to the license's royalty calculations and reporting obligations. The possible modification or elimination of this license is the subject of continuing legislative proposals and administrative review and could adversely affect our ability to obtain desired broadcast programming.

### ***Franchise Matters***

Our cable systems generally are operated pursuant to nonexclusive franchises, permits, and similar authorizations granted by a municipality or other state or local government entity in order to utilize and cross public rights-of-way.

Cable franchises generally are granted for fixed terms and in many cases include monetary penalties for noncompliance and may be terminable if the franchisee fails to comply. The specific terms and conditions of cable franchises vary significantly between jurisdictions. They generally contain provisions governing cable operations, franchise fees, system construction, maintenance, technical performance, customer service standards, supporting and carrying public, education and government access channels, and changes in the ownership of the franchisee. Although local franchising authorities have considerable discretion in establishing franchise terms, certain federal protections benefit cable operators. For example, federal law imposes a cap on franchise fees of 5% of gross revenues from the provision of cable services over the cable system. In 2019, the FCC clarified that the value of in-kind contribution requirements set forth in cable franchises is subject to the statutory cap on franchise fees, and it reaffirmed that state and local authorities are barred from imposing franchise fees on revenues derived from non-cable services, such as Internet services, provided by cable operators over cable systems. Those rules were generally upheld by a federal court in 2021.

A number of states have adopted franchising laws that provide for state-issued franchising. Generally, state-issued cable franchises are for a fixed term (or in perpetuity), streamline many of the traditional local cable franchise requirements and eliminate local negotiation and enforcement of terms.

The Communications Act provides for an orderly franchise renewal process in which granting authorities may not unreasonably deny renewals. If we fail to obtain renewals of franchises representing a significant number of our customers, it could have a material adverse effect on our consolidated financial condition, results of operations, or our liquidity. Similarly, if a franchising authority's consent is required for the purchase or sale of a cable system, the franchising authority may attempt to impose more burdensome requirements as a condition for providing its consent.

### ***Internet Service***

The FCC originally classified broadband Internet access services, such as those we offer, as an "information service," which exempted the service from traditional communications common carrier laws and regulations. In 2015, the FCC reclassified broadband Internet access services as "telecommunications service" and, on that basis, imposed a number of "net neutrality" rules governing the provision of broadband service. In 2017, the FCC reversed its 2015 decision and eliminated the 2015 rules, other than a transparency requirement, which obligates us to disclose performance statistics and other service information to consumers. In 2023, the FCC opened a new net neutrality proceeding in which it proposed rules that would again reclassify our Internet access services as telecommunications services and thereby subject the services to additional regulation including rules that would prohibit Internet service providers from engaging in paid prioritization, throttling, or content blocking. We cannot predict the outcome of that proceeding or legal challenges to any new rules. It is also possible that Congress might enact legislation affecting the rules applicable to our Internet access services. The application of new legal requirements to our Internet services could adversely affect our business.

In 2022, the FCC adopted new rules to expand the surviving transparency requirement by requiring Internet service providers to post standardized labels disclosing their network management policies and performance of our broadband Internet access services similar to the format of food nutrition labels for each of our currently available consumer Internet offerings. These new rules are scheduled to become applicable to our services in April 2024.

The 2017 FCC decision reclassifying Internet access services also ruled that state regulators may not impose obligations similar to federal network neutrality obligations that the FCC eliminated, but this blanket prohibition was vacated by the U.S. Court of Appeals in 2019. The court left open the possibility that individual state laws could be deemed preempted on a case by case basis if it is shown that they conflict with federal law. Several states have adopted rules similar to the network neutrality requirements that were eliminated by the FCC, and the California rules were upheld in federal court.

California has also adopted other regulations on Internet services, including network resiliency rules to assure backup power is available after natural disasters and other outages, and it has an open proceeding to consider the imposition of service quality metrics on Internet service providers. New York adopted legislation that would have required Internet service providers to offer a discounted Internet service to qualifying low-income consumers, but a federal district judge enjoined enforcement as likely to be deemed rate regulation of Internet service that would be preempted by federal law. That decision is currently being appealed. We cannot predict what other legislation and regulations may be adopted by states or how challenges to such requirements will be resolved.

In March 2023, the FTC proposed rules that would limit the ability of companies that offer subscription services to make retention offers to consumers who are considering canceling their service. The rules would also apply to our video and voice services. We cannot predict the outcome of that proceeding or legal challenges to any new rules. The application of the proposed rules could adversely affect our business.

In November 2023, the FCC adopted new rules governing digital discrimination, pursuant to The Infrastructure Investment and Jobs Act of 2021 (the "IIJA"), to prevent discrimination of access to broadband Internet services. These rules are scheduled to go into effect in 2024, but have been challenged in federal court and the outcome of such challenge cannot be predicted. The application of the proposed rules could adversely affect our business.

In recent years, the federal, state and local governments have offered billions of dollars in subsidies to companies deploying broadband to areas deemed to be "unserved" or "underserved," using funds from the FCC's RDOF auction in 2020, The American Rescue Plan Act of 2021 ("ARPA"), and IIJA. We support such subsidies, provided they are not directed to areas that are already served, and have sought and expect to continue to seek subsidies for our own broadband construction in unserved and underserved areas through programs including RDOF and those created pursuant to ARPA and, if regulatory requirements are reasonable, the IIJA. We have been awarded over \$2 billion in the RDOF auction and other federal, state and municipal grants that will partially fund, along with our substantial additional investment, the construction of new broadband infrastructure to more than one million estimated passings. Our awards through RDOF and ARPA include a number of regulatory requirements, such as serving as the carrier of last resort and completing increasingly larger portions of the network construction by certain dates. If we fail to meet these obligations, we could be subject to substantial government penalties.

Also, the FCC has adopted rules for service providers to report broadband availability, pursuant to the Broadband Data Act. Providers are required to report their service areas twice a year. The service areas reported are subject to challenge. A broadband provider who provides inaccurate maps may be subject to enforcement action by the FCC. The FCC can also fine a provider for filing incorrect maps.

The market for our Internet services is affected by participation in and the general availability of programs that offer federal subsidies for certain low-income consumers for the purchase of Internet access service. In 2021, pursuant to Congressional appropriation for COVID relief, the FCC established a temporary monthly Emergency Broadband Benefit Program ("EBB") subsidy of up to \$50 for most eligible low-income households. With the funding for EBB set to run out, Congress in the IIJA authorized \$14.2 billion for the successor ACP that provides up to a \$30 monthly discount for most eligible customers paid to the household's broadband provider. We elected to participate in the EBB and ACP, and the FCC regulates many of the terms on which we provide ACP services, including restrictions on our ability to refuse service to prospective eligible customers based upon their credit or payment history. The FCC's Enforcement Bureau or Office of Inspector General can also audit our ACP customer base and could assess fines or recoup subsidies if our customer qualifications were inappropriate. The ACP discount enables eligible households to purchase our Spectrum Internet Assist and other promotional broadband service tiers at no cost to them. Existing ACP funding is expected to run out in April 2024, and we cannot predict whether Congress or the FCC will provide additional funding to extend the ACP, or on what terms.

### **Wireline Voice Service**

The FCC has never classified the VoIP wireline telephone services we offer as "telecommunications services" that are subject to traditional federal common carrier regulation, but instead has imposed some of these regulatory requirements on a case-by-case basis, such as requirements relating to 911 emergency services ("E911"), Communications Assistance for Law

Enforcement Act (“CALEA”) (the statute governing law enforcement access to and surveillance of communications), Universal Service Fund contributions, customer privacy and Customer Proprietary Network Information (“CPNI”) protections, number portability, network and/or 911 outage reporting, rural call completion, disability access, regulatory fees, back-up power, robocall mitigation and discontinuance of service. It is possible that the FCC or Congress will impose additional federal requirements on our VoIP telephone services in the future.

Our VoIP telephone services are subject to certain state and local regulatory fees such as E911 fees and contributions to state universal service funds. Additionally, in California and New York and to comply with RDOF program requirements, we have chosen in the RDOF areas to offer Lifeline VoIP telephone services subject to traditional federal and state common carrier regulations. Except where we have chosen to offer VoIP telephone services in such a manner, we believe that our VoIP telephone services should be governed primarily by federal regulation. A federal appellate court affirmed our successful challenge to Minnesota’s attempt to generally apply telephone regulation to our VoIP services, but that ruling is limited to the seven states in the 8th Circuit. Some states have attempted to subject cable VoIP services, such as our VoIP telephone service, to state level regulation. California has imposed reporting and other obligations on our VoIP services, including backup power requirements, and has proposed the imposition of service quality metrics on VoIP services. California is also currently assessing requiring providers of VoIP services to comply with new registration and/or certification requirements in order to conduct business in the state. We have registered with or obtained certificates or authorizations from the FCC and the state regulatory authorities in those states in which we offer competitive voice services in order to ensure the continuity of our services. However, it is unclear whether and how these and other ongoing regulatory matters ultimately will be resolved. State regulatory commissions and legislatures may continue to consider imposing regulatory requirements on our fixed wireline voice telephone services.

### **Mobile Service**

Our Spectrum Mobile service offers mobile Internet access and telephone service. We provide this service as a mobile virtual network operator (“MVNO”) using Verizon’s network and our network through Spectrum WiFi. As an MVNO, we are subject to many of the same FCC regulations that apply to facilities-based wireless carriers, as well as certain state or local regulations, including (but not limited to): E911, local number portability, customer privacy, CALEA, universal service fund contribution, robocall mitigation and hearing aid compatibility and safety and emission requirements for mobile devices. Spectrum Mobile’s broadband Internet access service is also subject to the FCC’s transparency rule and will be subject to the new labeling rules scheduled to become applicable to us in April 2024.

The FCC or other regulatory authorities may adopt new or different regulations for MVNOs and/or mobile service providers in the future, or impose new taxes or fees applicable to Spectrum Mobile, which could adversely affect the service offering or our business generally. For example, California has proposed the imposition of service quality metrics on mobile services.

### **Privacy and Information Security Regulation**

The Communications Act limits our ability to collect, use, and disclose customers’ personally identifiable information for our Internet, video and voice services. We are subject to additional federal, state, and local laws and regulations that impose additional restrictions on the collection, use and disclosure of consumer information. All broadband providers are also obliged by CALEA to configure their networks in a manner that facilitates the ability of state and federal law enforcement, with proper legal process authorized under the Electronic Communications Privacy Act, to wiretap and obtain records and information concerning our customers, including the content of their communications. Further, the FCC, Federal Trade Commission (“FTC”), and many states regulate and restrict the marketing practices of communications service providers, including telemarketing and sending unsolicited commercial emails. The FTC currently has the authority, pursuant to its general authority to enforce against unfair or deceptive acts and practices, to protect the privacy of Internet service customers, including our use and disclosure of certain customer information.

Our operations are also subject to federal and state laws governing information security. All states have data breach notification laws that would require us to inform individuals and regulators in the event of a breach that could impact personal information of our customers. In the event of an information security breach, such rules may require consumer and government agency notification and may result in regulatory enforcement actions with the potential of monetary forfeitures. The FCC, the FTC and state attorneys general regularly bring enforcement actions against companies related to information security breaches and privacy violations.

Various security standards provide guidance to telecommunications companies in order to help identify and mitigate cybersecurity risks. We describe those standards in Item 1C. Cybersecurity - Risk Management and Strategy. The FCC is

considering expansion of its cybersecurity guidelines or the adoption of cybersecurity requirements. The Department of Homeland Security's Cybersecurity and Infrastructure Security Agency is also developing cyber incident reporting rules, pursuant to 2022 legislative requirements, that require critical infrastructure entities to report substantial cyber incidents within 72 hours of their discovery.

Many states and local authorities have considered legislative or other actions that would impose restrictions on our ability to collect, use and disclose, and safeguard certain consumer information. Many states have enacted comprehensive consumer data privacy laws, and some states have enacted issue-specific privacy laws covering health information and children's information. For example, the California Consumer Privacy Act ("CCPA") became effective on January 1, 2020. The CCPA, under certain circumstances, regulates companies' use and disclosure of the personal information of California residents and authorizes enforcement actions by the California Attorney General and private class actions for data breaches. In addition, effective January 1, 2023, the California Consumer Privacy Rights Act ("CPRA") amended CCPA to impose additional obligations on companies that handle the personal information of California residents and the California Privacy Protection Agency ("CPPA") issued specific regulations implementing provisions of the CCPA and CPRA effective in 2023 and 2024. The Maine Act to Protect Privacy of Online Customer Information, which regulates how Internet service providers use and disclose customers' personal information and requires Internet service providers to take reasonable measures to protect customers' personal information, became effective on July 1, 2020. Virginia, Colorado and Connecticut's new privacy laws became effective in 2023, and Utah's new privacy law became effective on December 31, 2023. New comprehensive data privacy laws are scheduled to become effective in Florida, Oregon and Texas on July 1, 2024, in Montana on October 1, 2024, in Iowa and Delaware on January 1, 2025, in New Jersey on January 6, 2025, in Tennessee on July 1, 2025, and in Indiana on January 1, 2026. Each of these laws will regulate the way that companies collect, use, and share personal information about consumers. Several other state legislatures are considering the adoption of new data security and cybersecurity legislation that could result in additional network and information security requirements for our business. The FTC has an ongoing Advance Notice of Proposed Rulemaking ("ANPR") to explore rules related to the collection, analysis, and monetization of consumers' information, as well as companies' data security practices and related disclosures to consumers. Congress may also adopt new privacy and data security obligations. We cannot predict whether any of these efforts will be successful, challenged, upheld, vacated, or preempted, or how new legislation and regulations, if any, would affect our business.

## **Human Capital Management**

As of December 31, 2023, we had approximately 101,100 active full-time equivalent employees. The vast majority of our employees sell or service our products. We believe that attracting, developing and retaining our highly-skilled workforce is critical to successfully executing our operating strategy. With competitive wages, robust and affordable healthcare benefits, a generous retirement program with company match, and opportunities for job training and advancement, our employees develop skills and expertise necessary to build a long and successful career with us. In addition, the diversity of the communities we serve is reflected in our workforce, and our success in serving these communities requires a commitment to diversity and inclusion in every aspect of our business. We value the unique backgrounds, perspectives, and experiences of our employees. Embracing these differences brings us together for the common mission of exceeding our customers' needs. There are several ways in which we attract, develop, and retain highly qualified talent, including:

### ***Pay and Benefits***

- We provide compensation packages that are market competitive, taking into account the location and responsibilities of the role.
- All hourly employees have a starting minimum wage of at least \$20 per hour, which is well above any state or federal minimum wage level.
- Nearly 85% of our employees are eligible for additional variable compensation based on their performance, including annual bonus eligibility for all frontline supervisors and other salaried employees not already on a sales commission or bonus plan.
- We offer enhanced career progression opportunities.
- We provide high-quality, comprehensive medical, dental, and vision coverage for all full-time and part-time employees. It is our priority to keep this coverage affordable for our employees and their families, and so for the last eleven years, we have absorbed the full premium cost increase for medical, dental, and vision coverage.
- We provide competitive financial benefits to all employees such as a 401(k) Plan with a dollar for dollar company match up to 6% of their eligible pay. In addition, most of our employees are also eligible to receive an additional non-elective contribution to a Retirement Accumulation Plan equal to 3% of their eligible pay.
- We have a stock incentive plan and grant equity awards to eligible employees on an annual basis.

## ***Training and Development***

- The substantial skills, experience and industry knowledge of our employees and our training of our customer-facing employees benefit our operations and performance. We offer thousands of learning experiences spanning leadership development, new hire, and professional skills training both online and in the classroom.
- In 2023, we introduced a new tuition-free degree and certificate program, removing the financial barrier for employees to continue their education through convenient online learning.
- We also provide traditional tuition reimbursement of up to \$10,000 per year for employees who want to pursue other outside programs.
- The vast majority of our customer-facing roles have the opportunity for upward advancement including through supervisory and leadership roles. Our Field Operations organization has a formalized self-progression structure where employees who maintain exceptional levels of performance can complete online coursework to advance to next level within their job family.
- Our Broadband Technician Apprenticeship Program is one of our promising strategies for building our skilled workforce. This program, certified by the U.S. Department of Labor, is aligned with our broadband technician career progression and includes thousands of hours of on-the-job training along with classroom instruction. When enrolled employees complete the program, they become certified broadband technicians.
- We conduct annual talent planning to review the overall performance of our leaders and their potential to serve in larger, more complex roles. Executive leadership reviews the results of talent conversations, which open possibilities for career growth opportunities and cross-organizational movement.

## ***Diversity and Inclusion***

- Our commitment to diversity and inclusion is based on our aspiration to reflect the markets and communities we serve, deliver high quality products and services that exceed our customers' expectations as well as foster an inclusive environment where all employees can thrive and have a long-term career with the company.
- We have five Business Resource Groups ("BRGs") focused on people with disabilities, the LGBTQ community, employees with multicultural backgrounds, veterans and women. These voluntary groups connect employees with shared characteristics, life experiences, and interests, and enable them to engage in activities that advance our culture of inclusion and contribute to business success. Our BRGs have empowered our team members to grow and succeed by providing networking, mentorship and skill-building opportunities.
- Several initiatives promote inclusion and belonging in our workplace including the BRGs, educational opportunities that build the skills and competency of leaders to foster diverse and inclusive teams as well as additional communications tools and resources.
- Our efforts are guided by an External Diversity & Inclusion Council and an internal Executive Steering Committee. Diversity and Inclusion is addressed with the Board of Directors annually.

## **Item 1A. Risk Factors.**

### **Risks Related to Our Business**

***We operate in a very competitive business environment, which affects our ability to attract and retain customers and can adversely affect our business, operations and financial results.***

The industry in which we operate is highly competitive and has become more so in recent years. In some instances, we compete against companies with fewer regulatory burdens, access to better financing and greater and more favorable brand name recognition. Increasing consolidation in the telecommunications and content industries have provided additional benefits to certain of our competitors, either through access to financing, resources, or efficiencies of scale including the ability to launch new products and services.

Our Internet service faces competition from other companies' FTTH, fixed wireless broadband, Internet delivered via satellite and DSL services. Various operators offer wireless Internet services delivered over networks which they continue to enhance to deliver faster speeds and also continue to expand 5G mobile services. Our voice and mobile services compete with wireless and wireline phone providers, as well as other forms of communication, such as text, instant messaging, social networking services, video conferencing and email. Competition from these companies, including intensive marketing efforts with aggressive pricing, may have an adverse impact on our ability to attract and retain customers.

Our video service faces competition from a number of sources, including DBS services, and companies that deliver linear network programming, movies and television shows on demand and other video content over broadband Internet connections to televisions, computers, tablets and mobile devices often with password sharing among multiple users and security that makes content susceptible to piracy. Newer products and services, particularly alternative methods for the distribution, sale and viewing of content may continue to be developed, further increasing the number of competitors that we face.

The increasing number of choices available to audiences, including low-cost or free choices, could negatively impact not only consumer demand for our products and services, but also advertisers' willingness to purchase advertising from us. We compete for the sale of advertising revenue with television networks and stations, as well as other advertising platforms, such as online media, radio and print. Competition related to our service offerings to businesses continues to increase as well, as more companies deploy more fiber to more buildings, which may negatively impact our growth and put pressure on margins.

A failure to effectively anticipate or adapt to new technologies (including those that use artificial intelligence ("AI")) and changes in customer expectations and behavior could significantly adversely affect our competitive position with respect to the leisure time and discretionary spending of our customers and, as a result, affect our business and results of operations. Competition may also reduce our expected growth of future cash flows which may contribute to future impairments of our franchises and goodwill and our ability to meet cash flow requirements, including debt service requirements. For additional information regarding the competition we face, see "Item 1. Business -Competition" and "-Regulation and Legislation."

***We depend on third-party service providers, suppliers and licensors; thus, if we are unable to procure the necessary services, equipment, software or licenses on reasonable terms and on a timely basis, our ability to offer services could be impaired, and our growth, operations, business, financial results and financial condition could be materially adversely affected.***

We depend on a limited number of third-party service providers, suppliers and licensors to supply some of the services, hardware, software and operational support necessary to provide some of our services and execute our network evolution and rural construction initiatives. Some of our hardware, software and operational support vendors and service providers represent our sole source of supply or have, either through contract or as a result of intellectual property rights, a position of some exclusivity. Our ability to provide some services and complete our network evolution and rural construction initiatives might be materially adversely affected, or the need to procure or develop alternative sources of the affected materials or services might interrupt or delay our ability to serve existing and new customers, if any of these parties experience or engage in the following:

- breach or terminate or elect not to renew their agreements with us or otherwise fail to perform their obligations in a timely manner;
- demand exceeds these vendors' capacity;
- tariffs are imposed that impact vendors' ability to perform their obligations or significantly increase the amount we pay;
- experience operating or financial difficulties;
- significantly increase the amount we are required to pay (including demands for substantial non-monetary compensation) for necessary products or services; or
- cease production of any necessary product due to lack of demand, profitability or a change in ownership or are otherwise unable to provide the equipment or services we need in a timely manner at our specifications and at reasonable prices.

In addition, the existence of only a limited number of vendors of key technologies can lead to less product innovation and higher costs. Any of these events could materially and adversely affect our ability to retain and attract customers and our operations, business, financial results and financial condition.

***We may not have the ability to pass on to our customers all of the increases in programming costs, which could adversely affect our cash flow and operating margins.***

Programming costs are one of our largest expense items. Our programming costs have historically increased in excess of customary inflationary and cost-of-living type increases. While decreases in video customers combined with a change in the mix of customers choosing lower cost packages have offset total programming cost increases, we expect contractual programming rates per service subscriber to continue to increase as a result of annual increases pursuant to our programming contracts and contract renewals with programmers. Although we pass along amounts paid for local broadcast station retransmission consent to the majority of our customers, the inability to fully pass programming cost increases on to our customers has had, and is expected in the future to have, an adverse impact on our cash flow and operating margins associated with the video product. Additionally, the demands of large media companies, with additional selling power as a result of media

and broadcast station group consolidation, who link carriage of their most popular networks to carriage and cost increases of their less popular networks, and require us to carry their most popular networks to a large percentage of our video subscribers, have limited our flexibility in selling more tailored and cost-sensitive programming packages for consumers. In order to mitigate impacts to our operating margins due to increasing programming rates, we continue to review our pricing and programming packaging strategies. Further, some programmers have begun to simulcast and/or move popular programming to DTC apps which, in some cases, are no longer accessible by our customers through their current video subscription, despite increasing rates, driving customer dissatisfaction and in turn, customer losses. We are seeking to obtain access to these DTC apps, where applicable, as we renew agreements, so that we may include in our customers' video subscriptions.

Increases in the cost of sports programming and the amounts paid for local broadcast station retransmission-consent have been the largest contributors to the growth in our programming costs over the last few years. Federal law allows commercial television broadcast stations to make an election between "must-carry" rights and an alternative "retransmission-consent" regime. When a station opts for the retransmission-consent regime, we are not allowed to carry the station's signal without that station's permission. In retransmission-consent negotiations, broadcasters often condition consent with respect to one station on carriage of one or more other stations or programming services in which they or their affiliates have an interest. Carriage of these other services, as well as increased fees for retransmission rights, may increase our programming expenses which could have an adverse effect on our business and financial results.

Our programming contracts are generally for a fixed period of time, with potentially significant spend subject to negotiated renewal in any particular year. We will seek to renew these agreements on terms that we believe are favorable. There can be no assurance that these agreements will be renewed on favorable or comparable terms. To the extent that we are unable to reach agreement with certain programmers on terms that we believe are reasonable, we have been, and may in the future be, forced to remove such programming channels from our line-up, which may result in a loss of customers. Any failure to carry programming that is attractive to our customers could adversely impact our customer levels, operations and financial results.

***Any failure to respond to technological developments and meet customer demand for new products and services could adversely affect our ability to compete effectively.***

We operate in a highly competitive, consumer-driven and rapidly changing environment. From time to time, we may pursue strategic initiatives to launch products or enhancements to our products. Our success is, to a large extent, dependent on our ability to acquire, develop, adopt, upgrade and exploit new and existing technologies to address consumers' changing demands and distinguish our services from those of our competitors. We may not be able to accurately predict technological trends or the success of new products and services. If we choose technologies or equipment that are less effective, cost-efficient or attractive to customers than those chosen by our competitors, if technologies or equipment on which we have chosen to rely cease to be available to us on reasonable terms or conditions, if we offer services that fail to appeal to consumers, are not available at competitive prices or that do not function as expected, if we are not able to fund the expenditures necessary to keep pace with technological developments, or if we are no longer able to make our services available to our customers on a third-party device on which a substantial number of customers have relied to access our services, our competitive position could deteriorate, and our business and financial results could suffer.

The ability of some of our competitors to introduce new technologies, products and services more quickly than we do may adversely affect our competitive position. Furthermore, advances in technology, decreases in the cost of existing technologies or changes in competitors' product and service offerings may require us in the future to make additional research and development expenditures or to offer, at no additional charge or at a lower price, certain products and services that we currently offer to customers separately or at a premium. In addition, the uncertainty of our ability, and the costs, to obtain intellectual property rights from third parties could impact our ability to respond to technological advances in a timely and effective manner.

Any failure to maintain and expand our upgraded systems and provide advanced services in a timely manner, or to anticipate the demands of the marketplace, could materially adversely affect our ability to attract and retain customers. In addition, as we continue to grow our mobile services using virtual network operator rights from a third party, we expect continued growth-related sales and marketing and other customer acquisition costs as well as negative working capital impacts from the timing of device-related cash flows when we provide devices pursuant to equipment installation plans. We also continue to consider and pursue opportunities in the mobile space which may include the acquisition of additional licensed spectrum and may include entering into or expanding joint ventures or partnerships with wireless or cable providers which may require significant investment. For example, we now hold CBRS PALs to support existing and future mobile services. These licenses are subject to revocation and expiration. Although we expect to be able to maintain and renew these licenses, the loss of one or more licenses could significantly impair our ability to offload mobile traffic and achieve cost reductions. If we are unable to continue

to grow our mobile business and achieve the outcomes we expect from our investments in the mobile business, our growth, financial condition and results of operations could be adversely affected.

***Our business may be adversely affected if we cannot continue to license or enforce the intellectual property rights on which our business depends.***

We rely on patent, copyright, trademark and trade secret laws and licenses and other agreements with our employees, customers, suppliers and other parties to establish and maintain our intellectual property rights in technology and the products and services used in our operations. Also, because of the rapid pace of technological change, we both develop our own technologies, products and services and rely on technologies developed or licensed by third parties. However, any of our intellectual property rights, or the rights of our suppliers, could be challenged or invalidated, or such intellectual property rights may not be sufficient to permit us to take advantage of current industry trends or otherwise to provide competitive advantages, which could result in costly redesign efforts, discontinuance of certain product or service offerings or other competitive harm. We may not be able to obtain or continue to obtain licenses from these third parties on reasonable terms, if at all. In addition, claims of intellectual property infringement could require us to enter into royalty or licensing agreements on unfavorable terms, incur substantial monetary liability or be enjoined preliminarily or permanently from further use of the intellectual property in question, which could require us to change our business practices or offerings and limit our ability to compete effectively. Even unsuccessful claims can be time-consuming and costly to defend and may divert management's attention and resources away from our business. Infringement claims continue to be brought frequently in the communications and entertainment industries, and we are also often a party to such litigation alleging that certain of our services or technologies infringe the intellectual property rights of others.

***Various events could disrupt or result in unauthorized access to our networks, information systems or properties and could impair our operating activities and negatively impact our reputation and financial results.***

Network and information systems technologies are critical to our operating activities, both for our internal uses, such as network management, and supplying services to our customers, including customer service operations and programming delivery. Network or information system shutdowns or other service disruptions caused by events such as computer hacking, phishing, dissemination of computer viruses, worms and other destructive or disruptive software, "cyber attacks" such as ransomware, process breakdowns, denial of service attacks and other malicious activity pose increasing risks. Both unsuccessful and successful "cyber attacks" on companies have continued to increase in frequency, scope and potential harm in recent years, and the increasing use of AI may intensify these cybersecurity risks. While we develop and maintain systems seeking to prevent systems-related events and security breaches from occurring, the development and maintenance of these systems is costly and requires ongoing monitoring and updating as techniques used in such attacks become more sophisticated and change frequently. We, and the third parties on which we rely, may be unable to anticipate these techniques or implement adequate preventive measures. While from time to time attempts have been made to access our network, these events have not as yet resulted in any material release of information, degradation or disruption to our network and information systems.

Our network and information systems are also vulnerable to damage or interruption from power outages, telecommunications failures, accidents, natural disasters (including extreme weather arising from short-term or any long-term changes in weather patterns), terrorist attacks and similar events. Our system redundancy may be ineffective or inadequate, and our disaster recovery planning may not be sufficient for all eventualities.

Any of these events, if directed at, or experienced by, us or technologies upon which we depend, could have adverse consequences on our network, our customers and our business, including degradation of service, service disruption, excessive call volume to call centers, and damage to our or our customers' equipment and data. Large expenditures may be necessary to repair or replace damaged property, networks or information systems or to protect them from similar events in the future. Moreover, the amount and scope of insurance that we maintain against losses resulting from any such events or security breaches may not be sufficient to cover our losses or otherwise adequately compensate us for any disruptions to our business that may result. Any such significant service disruption could result in damage to our reputation and credibility, customer dissatisfaction and ultimately a loss of customers or revenue. Any significant loss of customers or revenue, or significant increase in costs of serving those customers, could adversely affect our growth, financial condition and results of operations.

Furthermore, our operating activities could be subject to risks caused by misappropriation, misuse, leakage, falsification or accidental release or loss of information maintained in our information technology systems and networks and those of our third-party vendors, including customer, personnel and vendor data. We provide certain confidential, proprietary and personal information to third parties in connection with our business, and there is a risk that this information may be compromised.

We process, store, and transmit large amounts of data, including the personal information of our customers. Ongoing increases in the potential for misuse of personal information, the public's awareness of the importance of safeguarding personal information, and the volume of legislation that has been adopted or is being considered regarding the protection, privacy and security of personal information have resulted in increases to our information-related risks. We could be exposed to significant costs if such risks were to materialize, and such events could damage our reputation, credibility and business and have a negative impact on our revenue. We could be subject to regulatory actions and claims made by consumers in private litigations involving privacy issues related to consumer data collection and use practices. We also could be required to expend significant capital and other resources to remedy any such security breach.

***Issues related to the development and use of AI could give rise to legal or regulatory action, damage our reputation or otherwise materially harm our business.***

We currently incorporate AI technology in certain parts of our business operations. Our research and development of such technology remains ongoing. AI presents risks, challenges and unintended consequences that could affect our and our customers' adoption and use of this technology. AI algorithms and training methodologies may be flawed. Additionally, AI technologies are complex and rapidly evolving. While we aim to develop and use AI responsibly and attempt to identify and mitigate ethical and legal issues presented by its use, we may be unsuccessful in identifying or resolving issues before they arise. AI-related issues, deficiencies or failures could give rise to legal or regulatory action, including with respect to proposed legislation regulating AI or as a result of new applications of existing data protection, privacy, intellectual property and other laws, and could damage our reputation or otherwise materially harm our business.

***Our exposure to the economic conditions of our current and potential customers, vendors and third parties could adversely affect our cash flow, results of operations and financial condition.***

We are exposed to risks associated with the economic conditions of our current and potential customers, the potential financial instability of our customers and their financial ability to purchase our products. If there were a prolonged general economic downturn, we may experience increased cancellations or non-payment by our customers or unfavorable changes in the mix of products purchased. This may include an increase in the number of homes that replace their video service with Internet-delivered or over-air content, as well as an increase in the number of Internet and voice customers substituting mobile data and voice products for wireline services, which would negatively impact our ability to attract customers, increase rates and maintain or increase revenue. In addition, our ability to gain new customers is dependent to some extent on growth in occupied housing in our service areas, which is influenced by both national and local economic conditions. Weak economic conditions may also have a negative impact on our advertising revenue. These events have adversely affected us in the past, and may adversely affect our cash flow, results of operations and financial condition if a downturn were to continue.

In addition, we are susceptible to risks associated with the potential financial instability of the vendors and third parties on which we rely to provide products and services or to which we outsource certain functions. The same economic conditions that may affect our customers, as well as volatility and disruption in the capital and credit markets, also could adversely affect vendors and third parties and lead to significant increases in prices, reduction in output or the bankruptcy of our vendors or third parties upon which we rely. Further, inflationary pressures may impact the ability of vendors and other third parties to satisfy their obligations to us. Any interruption in the services provided by our vendors or by third parties could adversely affect our cash flow, results of operation and financial condition.

***If we are unable to retain key employees, our ability to manage our business could be adversely affected.***

Our operational results have depended, and our future results will depend, upon the retention and continued performance of our management team. Our ability to hire and retain key employees for management positions could be impacted adversely by the competitive environment for management talent in the broadband communications and technology industries. The loss of the services of key members of management and the inability or delay in hiring new key employees could adversely affect our ability to manage our business and our future operational and financial results.

## **Risks Related to Our Indebtedness**

***We have a significant amount of debt and expect to incur significant additional debt, including secured debt, in the future, which could adversely affect our financial condition and our ability to react to changes in our business.***

We have a significant amount of debt and expect to (subject to applicable restrictions in our debt instruments) incur additional debt in the future as Charter maintains its stated objective of 4.0 to 4.5 times Adjusted EBITDA leverage (net debt divided by

the last twelve months Adjusted EBITDA). As of December 31, 2023, our total principal amount of debt was approximately \$97.6 billion and Charter's leverage ratio was 4.42 times Adjusted EBITDA. As of December 31, 2023, \$70.3 billion of our debt was rated investment grade and \$27.3 billion was rated high yield debt. This split rating allows us to access both the investment grade debt market and the high yield debt market.

Our significant amount of debt could have adverse consequences, such as:

- impact our ability to raise additional capital at reasonable rates, or at all;
- make us vulnerable to interest rate increases, in part because approximately 14% of our borrowings as of December 31, 2023 were, and may continue to be, subject to variable rates of interest;
- expose us to increased interest expense to the extent we refinance existing debt with higher cost debt;
- require us to dedicate a significant portion of our cash flow from operating activities to make payments on our debt, reducing our funds available for capital expenditures and other general corporate purposes;
- limit our flexibility in planning for, or reacting to, changes in our business, the cable and telecommunications industries, and the economy at large;
- place us at a disadvantage compared to our competitors that have proportionately less debt; and
- adversely affect our relationship with customers and suppliers.

To the extent our current debt amounts increase more than expected, our operating results are lower than expected, or credit rating agencies downgrade our debt thereby increasing our costs of borrowing and potentially limiting our access to investment grade markets, the related risks that we now face will intensify.

***The agreements and instruments governing our debt contain restrictions and limitations that could significantly affect our ability to operate our business, as well as significantly affect our liquidity.***

The indentures governing the CCO Holdings notes contain a number of significant covenants that could adversely affect our operations, liquidity and results of operations. These covenants restrict, among other things, CCO Holdings, CCO Holdings Capital Corp. and all of their restricted subsidiaries' ability to:

- incur additional debt;
- pay dividends on equity or repurchase equity;
- make investments;
- sell all or substantially all of their assets or merge with or into other companies;
- sell assets;
- in the case of restricted subsidiaries, create or permit to exist dividend or payment restrictions with respect to CCO Holdings, guarantee their parent companies' debt, or issue specified equity interests;
- engage in certain transactions with affiliates; and
- grant liens (with respect to only CCO Holdings).

Additionally, the Charter Communications Operating, LLC ("Charter Operating") credit facilities require Charter Operating to comply with a maximum total leverage covenant and a maximum first lien leverage covenant. The Charter Operating credit facilities, the Charter Operating notes, the Time Warner Cable, LLC ("TWC, LLC") senior notes and debentures, and the Time Warner Cable Enterprises, LLC ("TWCE") debentures include customary negative covenants, including restrictions on the ability to incur liens securing indebtedness for borrowed money and consolidating, merging or conveying or transferring substantially all of the respective obligor's assets. The breach of any covenants or obligations in our indentures or credit facilities, not otherwise waived or amended, could result in a default under the applicable debt obligations and could trigger acceleration of those obligations, which in turn could trigger cross defaults under other agreements governing our long-term indebtedness. In addition, the secured lenders under our secured notes and the Charter Operating credit facilities could foreclose on their collateral, which includes equity interests in substantially all of our subsidiaries, and exercise other rights of secured creditors.

#### **Risks Related to Ownership Position of Liberty Broadband Corporation and Advance/Newhouse Partnership**

***Liberty Broadband Corporation ("Liberty Broadband") and Advance/Newhouse Partnership ("A/N") have governance rights that give them influence over corporate transactions and other matters.***

Liberty Broadband currently owns a significant amount of Charter Class A common stock and is entitled to certain governance rights with respect to Charter and us. A/N currently owns Charter Class A common stock and a significant amount of

membership interests in our indirect parent company, Charter Holdings, which are convertible into Charter Class A common stock, and is entitled to certain governance rights with respect to Charter. Members of Charter's Board of Directors include a director who is also an officer and director of Liberty Broadband and directors who are current or former officers and directors of A/N. Mr. Greg Maffei is the President and Chief Executive Officer of Liberty Broadband. Steven Miron is the Chief Executive Officer of A/N and Michael Newhouse is co-president of the parent of A/N and its affiliates. As of December 31, 2023, Liberty Broadband beneficially held approximately 28.50% of Charter's voting stock and A/N beneficially held approximately 12.46% of Charter's voting stock. Pursuant to the Amended and Restated Stockholders Agreement among Charter, Liberty Broadband and A/N, dated as of May 23, 2015 (as amended, the "Stockholders Agreement"), Liberty Broadband currently has the right to designate up to three directors as nominees for Charter's Board of Directors and A/N currently has the right to designate up to two directors as nominees for Charter's Board of Directors. Each of A/N and Liberty Broadband is entitled to nominate at least one director to each of the committees of Charter's Board of Directors, subject to applicable stock exchange listing rules and certain specified voting or equity ownership thresholds for each of A/N and Liberty Broadband, and provided that the Nominating and Corporate Governance Committee and the Compensation and Benefits Committee each have at least a majority of directors independent from A/N, Liberty Broadband and Charter (referred to as the "unaffiliated directors" in the Stockholders Agreement).

The Stockholders Agreement and Charter's amended and restated certificate of incorporation fixes the size of the board at 13 directors. Liberty Broadband and A/N are required to vote (subject to the applicable voting cap) their respective shares of Charter Class A common stock and Charter Class B common stock for the director nominees nominated by the Nominating and Corporate Governance Committee, including the respective designees of Liberty Broadband and A/N, and against any other nominees, except that, with respect to the unaffiliated directors, Liberty Broadband and A/N must instead vote in the same proportion as the voting securities are voted by stockholders other than A/N and Liberty Broadband or any group which includes any of them are voted, if doing so would cause a different outcome with respect to the unaffiliated directors. As a result of their rights under the Stockholders Agreement and their significant equity and voting stakes in Charter, Liberty Broadband and/or A/N, who may have interests different from those of other stockholders, will be able to exercise substantial influence over certain matters relating to the governance of Charter, including the approval of significant corporate actions, such as mergers and other business combination transactions.

### **Risks Related to Regulatory and Legislative Matters**

*Our business is subject to extensive governmental legislation and regulation, which could adversely affect our business.*

The services we offer are subject to numerous laws and regulations that can increase operational and administrative expenses and reduce revenues, including those covering the following:

- the provision of high-speed Internet service, including network management, broadband label, broadband availability reporting, digital discrimination and transparency rules;
- the provision of fixed and mobile voice communications, including rules for emergency communications, network and/or 911 outage reporting, CPNI safeguards and reporting, local number portability, efforts to limit unwanted robocalls, and, for mobile devices, hearing aid compatibility, safety and emission requirements;
- the fees that must be included in our advertised prices and bills, and the means by which our customers can cancel services;
- access by law enforcement;
- cable franchise renewals and transfers;
- the provisioning, marketing and billing of cable and Internet equipment;
- customer and employee privacy and data security;
- copyright royalties for retransmitting broadcast signals;
- the circumstances when a cable system must carry a broadcast station and the circumstances when it first must obtain retransmission consent to carry a broadcast station;
- limitations on our ability to enter into exclusive agreements with multiple dwelling unit complexes and control our inside wiring;
- equal employment opportunity;
- the resiliency of our networks to maintain service during and after disasters and power outages;
- emergency alert systems, disability access, pole attachments, commercial leased access and technical standards;
- marketing practices, customer service, and consumer protection; and
- approval for mergers and acquisitions often accompanied by the imposition of restrictions and requirements on an applicant's business in order to secure approval of the proposed transaction.

Legislators and regulators at all levels of government frequently consider changing, and sometimes do change, existing statutes, rules, regulations, or interpretations thereof, or prescribe new ones. Any future legislative, judicial, regulatory or administrative actions may increase our costs or impose additional restrictions on our businesses.

***Changes to the existing legal and regulatory framework under which we operate or the regulatory programs in which we or our competitors participate, including the possible elimination of the federal broadband ACP subsidy for low-income consumers, could adversely affect our business.***

There are ongoing efforts to amend or expand the federal, state and local regulation of some of the services offered over our cable systems, particularly our retail broadband Internet access service. Potential legislative and regulatory changes could adversely impact our business by increasing our costs and competition and limiting our ability to offer services in a manner that would maximize our revenue potential. These changes have in the past, and could in the future, include, for example, the reclassification of Internet services as regulated telecommunications services or other utility-style regulation of Internet services; restrictions on how we manage our Internet access services and networks; the adoption of new customer service or service quality requirements for our Internet access services; the adoption of new privacy restrictions on our collection, use and disclosure of certain customer information; new data security and cybersecurity mandates that could result in additional network and information security and cyber incident reporting requirements for our business; new restraints on our discretion over programming decisions; new restrictions on the rates we charge to consumers for one or more of the services or equipment options we offer; changes to the cable industry's compulsory copyright to retransmit broadcast signals; new requirements to assure the availability of navigation devices from third-party providers; new Universal Service Fund contribution obligations on our Internet service revenues that would add to the cost of that service; increases in government-administered broadband subsidies to rural areas that could result in subsidized overbuilding of our facilities; changes to the FCC's administration of spectrum; pending court challenges to the legality of the FCC's Universal Service programs, which, if successful, could adversely affect our receipt of universal service funds, including but not limited to FCC RDOF grants to expand our network, FCC E-rate funds to serve schools and libraries and FCC Rural Health Care funds to serve eligible health care providers; and changes in the regulatory framework for VoIP telephone service, including the scope of regulatory obligations associated with our VoIP telephone service and our ability to interconnect our VoIP telephone service with incumbent providers of traditional telecommunications service.

We participate in the federal ACP that provides up to a \$30 monthly subsidy enabling eligible low-income households to purchase our Internet products at a discount or, for a portion of those households, at no cost. The FCC has announced that ACP funding is expected to run out in April 2024 and has prohibited service providers from enrolling new ACP customers after February 7, 2024. If Congress does not provide additional funding, this will be disruptive to our business. We will lose customers and revenues and could face greater difficulty in providing services to low-income households in the future.

As a winning bidder in the FCC's RDOF auction in 2020, we must comply with numerous FCC and state requirements to continue receiving such funding. To comply with these requirements, in RDOF areas, we have chosen to offer certain of our VoIP telephone services, such as our Lifeline services, subject to certain traditional federal and state common carrier regulations. Additionally, in some areas where we are building pursuant to subsidy programs, we will offer certain of our broadband Internet access services subject to required discounts and other marketing-related terms. If we fail to comply with those requirements, the governing regulatory agency could consider us in default and we could incur substantial penalties or forfeitures. If we fail to attain certain specified infrastructure build-out requirements under the RDOF program, the FCC could also withhold future support payments until those shortcomings are corrected. Any failure to comply with the rules and requirements of a subsidy grant could result in us being suspended or barred from future governmental programs or contracts for a significant period of time, which could adversely affect our results of operations and financial condition.

If any laws or regulations are enacted that would expand the regulation of our services, they could affect our operations and require significant expenditures. We cannot predict future developments in these areas, and any changes to the regulatory framework for our Internet, video, mobile or VoIP services could have a negative impact on our business and results of operations.

It remains uncertain what rule changes, if any, will ultimately be adopted by Congress, the FCC, the FTC and state legislatures, and what operating or financial impact any such rules might have on us, including on the operation of our broadband networks, customer privacy and the user experience. In addition, the FCC, the FTC, and various state agencies and attorney generals actively investigate industry practices and could impose substantial forfeitures for alleged regulatory violations.

***Tax legislation and administrative initiatives or challenges to our tax and fee positions could adversely affect our results of operations and financial condition.***

We offer services and operate cable systems in locations throughout the United States and, as a result, we are subject to the tax laws and regulations of federal, state and local governments. From time to time, legislative and administrative bodies change laws and regulations that change our effective tax rate or tax payments. Certain states and localities have imposed or are considering imposing new or additional taxes or fees on our services or changing the methodologies or base on which certain fees and taxes are computed. Potential changes include additional taxes or fees on our services which could impact our customers, changes to income tax sourcing rules and other changes to general business taxes, central/unit-level assessment of property taxes and other matters that could increase our income, franchise, sales, use and/or property tax liabilities. In addition, federal, state and local tax laws and regulations are extremely complex and subject to varying interpretations. There can be no assurance that our tax positions will not be challenged by relevant tax authorities or that we would be successful in any such challenge.

***Our cable system franchises are subject to non-renewal or termination and are non-exclusive. The failure to renew a franchise or the grant of additional franchises in one or more service areas could adversely affect our business.***

Our cable systems generally operate pursuant to franchises, permits and similar authorizations issued by a state or local governmental authority controlling the public rights-of-way. Many franchises establish comprehensive facilities and service requirements, as well as specific customer service standards and monetary penalties for non-compliance. In many cases, franchises are terminable if the franchisee fails to comply with significant provisions set forth in the franchise agreement governing system operations. Franchises are generally granted for fixed terms and must be periodically renewed. Franchising authorities may resist granting a renewal if either past performance or the prospective operating proposal is considered inadequate. Franchise authorities often demand concessions or other commitments as a condition to renewal. In some instances, local franchises have not been renewed at expiration, and we have operated and are operating under either temporary operating agreements or without a franchise while negotiating renewal terms with the local franchising authorities.

We cannot assure you that we will be able to comply with all significant provisions of our franchise agreements and certain of our franchisors have from time to time alleged that we have not complied with these agreements. Additionally, although historically we have renewed our franchises without incurring significant costs, we cannot assure you that we will be able to renew, or to renew as favorably, our franchises in the future. A termination of or a sustained failure to renew a franchise in one or more service areas could adversely affect our business in the affected geographic area.

Our cable system franchises are non-exclusive. Consequently, local and state franchising authorities can grant additional franchises to competitors in the same geographic area or operate their own cable systems. In some cases, local government entities and municipal utilities may legally compete with us on more favorable terms.

**Item 1B. Unresolved Staff Comments.**

None.

**Item 1C. Cybersecurity.**

**Risk Management and Strategy**

Cybersecurity risks are classified as a Tier 1 risk within our enterprise risk management program. We are committed to protecting the security and integrity of our systems, networks, databases and applications. We routinely invest to develop and implement numerous cybersecurity programs and processes, including risk management and assessment programs, security and event monitoring capabilities, detailed incident response plans, and other advanced detection, prevention and protection capabilities, including practices and tools to monitor and mitigate insider threats. We regularly assess cybersecurity risks to identify and enumerate threats to us and vulnerabilities these threats can exploit to adversely impact our business operations. In some instances, we engage third parties to conduct or assist us with conducting cybersecurity risk assessments.

Our cybersecurity program employs various risk-tracking tools, industry data, monitoring, detection and response tools, vulnerability scanning, security dashboards and scorecards and other tools to support our continued evaluation of cybersecurity threats and regulatory requirements. Our cybersecurity program addresses the continuously evolving and extensive attack vectors and methods through layered security controls informed by constant threat analysis. Threats include a wide variety of perpetrators aiming for political, personal or financial gain, utilizing a broad set of tactics including ransomware, advanced

malware, DDoS, account takeover, phishing/SMSing and social engineering, among others. These risks threaten our internal systems as well as third-party systems that we use and rely upon for the delivery of services and support of our operations. Our risk mitigation techniques include technology risk management, network segmentation, deployment of enhanced detection tools across our network, systems, databases, and applications and monitoring compliance with security standards.

Various security standards provide guidance to telecommunications companies in order to help identify and mitigate cybersecurity risks, including the voluntary framework released by the National Institute for Standards and Technology (“NIST”) in 2014 and updated in 2018, in cooperation with other federal agencies and owners and operators of U.S. critical infrastructure. The NIST cybersecurity framework provides a prioritized and flexible model for organizations to identify and manage cyber risks inherent to their business. Our security infrastructure is comprised of multiple security capabilities designed with a defense-in-depth model informed by the NIST cybersecurity framework, as well as a variety of other industry standards and best practices. The risk-based approach of the NIST cybersecurity framework has enabled us to implement cybersecurity programs tailored to our particular network architectures, customer environments and institutional resources.

Our cybersecurity risk management program also attempts to assess third-party vendor, service provider, business partner and supply chain risk management issues. Our efforts aim to better understand the cybersecurity posture of our third-party vendors, service providers, business partners and suppliers by analyzing their cybersecurity risk management programs. Our third-party cybersecurity risk management processes include reviewing and revising our service provider and vendor management programs and the related agreements to require prompt notification of cyber incidents, outages and software vulnerabilities to facilitate timely assessment and disclosure of third-party cyber risks. Generally, our agreements require our third-party providers to abide by specific privacy, confidentiality and security processes, particularly for third-party data-processing activities. For vendors that offer software as a service solutions involving personal information, our third-party risk management program generally requires third-party attestation of their security practices such as a System and Organization Controls 2 report or ISO27001 certification. Our due diligence and selection processes also require third parties to complete a cybersecurity and data privacy questionnaire that includes questions about contractor track record. Our third-party security reviews are limited by their disclosures; therefore, a risk-based approach is used in making vendor and contractual decisions based on those disclosures and the totality of the circumstances, such as whether the third party will have access to personal information or our network.

As of the date of this report, we are not aware of any risks from cybersecurity threats that have materially affected or are reasonably likely to materially affect us, including our business strategy, results of operations and financial condition.

## **Governance**

Our organizational objectives are aligned to address our cybersecurity risks and management plays a pivotal role in assessing and managing our material risks from cybersecurity threats. Management’s role in assessing and managing material cybersecurity risks includes various management positions and committees responsible for assessing such risks. Our internal processes require escalation of material cybersecurity risks to our executive leadership and Charter’s Board of Directors, as well as management and committees who are tasked with the prevention, detection, mitigation and remediation of cybersecurity incidents. These processes provide guidance for consistent and effective incident handling and response and set standards for internal notifications and escalations, as well as external notification considerations with respect to a cybersecurity event or incident requiring disclosure or notification to a state and/or federal agency or affected customers.

Charter’s Board of Directors has delegated to the Audit Committee oversight of our privacy and data security, including cybersecurity, risk exposures, policies and practices, including the steps management have taken to detect, monitor and control such risks and the potential impact of those exposures on our business, financial results, operations and reputation. Charter’s Audit Committee receives quarterly updates on the enterprise risk management program, including information on cybersecurity risks and initiatives undertaken to identify, assess and mitigate such risks. This cybersecurity reporting may include threat and incident reporting, vulnerability detection reporting, risk mitigation metrics, systems and security operations updates or internal audit observations, if applicable.

We have a unified cybersecurity leadership team, composed of members of our Security Executive Steering Committee (“Security ESC”) to oversee implementation of appropriate cybersecurity protections and promote accountability. The Security ESC is led by senior executives in our information technology (“IT”) and network operations groups and is comprised of senior executive leaders across the organization with the goal of driving cybersecurity focus through not just technical teams, but the entire business. The Security ESC reviews and evaluates current cyber threats and risks and improvements to our program and provides quarterly updates to the Chief Executive Officer as well as ad hoc updates on urgent matters. We also have a Cyber Security Council (“CSC”) and Security Operations Steering Committee that, under the direction of the Security ESC,

collectively focus on cybersecurity across Charter and the overall protection of our internal network and related processes, policy, training and actions to protect customer and employee data. The CSC is comprised of senior leaders across the organization and operates under the auspices of the Security ESC, which is ultimately accountable under our enterprise risk management program for cybersecurity.

The executive team members overseeing our cybersecurity program are Magesh Srinivasan, Executive Vice President, Network Operations, and Jake Perlman, Executive Vice President, Software Development & IT. Our Security Operations Center and Security Compliance teams (including Software Development and IT and Network Security Operations) are unified under our Chief Information Security Officer, Greg Temm, to provide a centralized view of our risk posture to prevent vulnerabilities and more effectively manage cybersecurity threats across the enterprise.

Mr. Srinivasan is responsible for network operations across our 41-state footprint. He joined Charter in 2016, and most recently served as Senior Vice President in Network Operations, first in Core and Backbone Operations and most recently in Video Operations. Prior to that, he served in several senior engineering roles at Time Warner Cable Inc. ("TWC"), including as Group Vice President of Commercial Engineering and Operations, Vice President of Commercial Engineering for TWC's West Region, and Director in the Texas Region. Mr. Srinivasan began his career at Sprint Corporation in a series of engineering roles with increased responsibility. He received a bachelor of science from Anna University, a master's degree and doctorate in materials science from Kansas State University, and a master's degree in business administration from the Graduate School of Business at the University of Kansas.

Mr. Perlman leads software development, security, technical integration, and IT. His scope includes software design and development for customer service agent, field technician, and customer self-service applications. Mr. Perlman joined Charter as a Senior Vice President in 2016, initially overseeing Video and Shared Software Services. He added Video Engineering, Voice Engineering, Lab Infrastructure and Deployment Support to his team in 2019. Before joining Charter, Mr. Perlman served as Chief information Officer for Bright House Networks, where he oversaw all of IT including Billing System Management, Software Development, Online Development, Internal IT, Information Security, and other functions. Prior to that, he held various IT roles at CenturyLink. Mr. Perlman holds a bachelor of arts from Brown University and a master of business administration from the University of Colorado – Boulder Leeds School of Business.

Mr. Temm joined Charter in 2020 as Group Vice President, IT Security, where he maintained responsibility for cybersecurity across our IT infrastructure, leading cyber threat intelligence, vulnerability management, security operations, incident response, information security engineering and architecture, risk management and security awareness. Previously, Mr. Temm was Chief Information Risk Officer for the Financial Services-Information Sharing and Analysis Center (FS-ISAC) where he collaborated with global financial services companies – foremost cybersecurity providers, law enforcement and government agencies – to protect the financial services sector against cyber and physical threats while coordinating responses to sector-wide incidents. Prior to FS-ISAC, Mr. Temm spent nearly two decades with Mastercard, serving in various leadership roles in cybersecurity, corporate security, network operations and debit operations. He holds a bachelor of science in business administration from Lindenwood University, where he graduated with Great Distinction. He is also a Certified Information Systems Security Professional ("CISSP").

## **Item 2. *Properties.***

Our principal physical assets consist of cable distribution plant and equipment, including signal receiving, encoding and decoding devices, headend reception facilities, distribution systems, and customer premise equipment for each of our cable systems. Our cable plant and related equipment are generally attached to utility poles under pole rental agreements with local public utilities and telephone companies, and in certain locations are buried in underground ducts or trenches. We own or lease real property for signal reception sites and own our service vehicles. We generally lease space for business offices. Our headend locations are located on owned or leased parcels of land. The physical components of our cable systems require maintenance as well as periodic upgrades to support the new services and products we introduce. See "Item 1. Business – Our Network Technology." We believe that our properties are generally in good operating condition and are suitable for our business operations.

## **Item 3. *Legal Proceedings.***

The legal proceedings information set forth in Note 17 to the accompanying consolidated financial statements contained in "Part II. Item 8. Financial Statements and Supplementary Data" in this Annual Report on Form 10-K 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.

Our membership interests are not publicly traded. All of the membership interests of CCO Holdings are owned by CCH I Holdings, LLC. All of the outstanding capital stock of CCO Holdings Capital Corp. is owned by CCO Holdings.

### Securities Authorized for Issuance Under Equity Compensation Plans

The following information is provided as of December 31, 2023 with respect to Charter's equity compensation plans.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans
Equity compensation plans approved by security holders	15,029,325 <sup>(1)</sup>	\$ 403.81	5,113,241 <sup>(1)</sup>
Equity compensation plans not approved by security holders	—	\$ —	—
TOTAL	<u>15,029,325 <sup>(1)</sup></u>		<u>5,113,241 <sup>(1)</sup></u>

<sup>(1)</sup> This total does not include 10,609 shares issued pursuant to restricted stock grants made under Charter's 2019 Stock Incentive Plan, which are subject to vesting based on continued service.

For information regarding securities issued under Charter's equity compensation plans, see Note 14 to our accompanying consolidated financial statements contained in "Part II. Item 8. Financial Statements and Supplementary Data."

### Item 6. [Reserved]

Not applicable.

### Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Reference is made to "Part I. Item 1A. Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements," which describe important factors that could cause actual results to differ from expectations and non-historical information contained herein. In addition, the following discussion should be read in conjunction with the audited consolidated financial statements and accompanying notes thereto of CCO Holdings included in "Part II. Item 8. Financial Statements and Supplementary Data."

### Overview

We are a leading broadband connectivity company and cable operator serving more than 32 million customers in 41 states through our Spectrum brand. Over an advanced communications network, we offer a full range of state-of-the-art residential and business services including Spectrum Internet, TV, Mobile and Voice. For small and medium-sized companies, Spectrum Business delivers the same suite of broadband products and services coupled with special features and applications to enhance productivity, while for larger businesses and government entities, Spectrum Enterprise provides highly customized, fiber-based solutions. Spectrum Reach delivers tailored advertising and production for the modern media landscape. We also distribute award-winning news coverage and sports programming to our customers through Spectrum Networks. See "Part I. Item 1. Business — Products and Services" for further description of these services, including customer statistics for different services.

During the year ended December 31, 2023, we added 2,474,000 mobile lines and 155,000 Internet customers. We spent \$1.9 billion on our subsidized rural construction initiative during the year ended December 31, 2023 and activated approximately 295,000 subsidized rural passings. Our mobile line and Internet customer additions were supported by our Spectrum One offering, which brings together Spectrum Internet, Advanced WiFi and Unlimited Spectrum Mobile to offer consumers fast, reliable and secure online connections on their favorite devices at home and on-the-go in a high-value package, and were further supported by growth in our legacy and new subsidized rural markets.

We continue to upgrade our network to provide higher Internet speeds and reliability and invest in our products and customer service platforms. We currently offer Spectrum Internet products with speeds up to 1 Gbps across our entire footprint and we are upgrading our network to provide multi-gigabit speeds. Our Advanced WiFi, a managed WiFi service that provides customers an optimized home network and greater control over connected devices with enhanced security and privacy, is available to all of our Internet customers. We continue to invest in our ability to provide a differentiated Internet connectivity experience for our mobile and fixed Internet customers with increasing availability of out-of-home WiFi access points across our footprint. In addition, we continue to work towards the construction of our own 5G mobile data-only network in targeted areas of our footprint leveraging our CBRS Priority Access Licenses.

We also continue to develop our video product. In September 2023, we entered into a new affiliation agreement with The Walt Disney Company ("Disney"), which provides a template for a new programming affiliation approach where we partner with content providers to provide access to both linear and app-based DTC content. In October 2023, we began deploying Xumo to new video customers. Xumo combines a live TV experience with access to hundreds of content applications, and features unified search and discovery along with a curated content offering based on the customer's interests and subscriptions. By continually improving our product set and offering consumers the opportunity to save money by switching to our services, we believe we can continue to penetrate our expanding footprint and sell additional products to our existing customers. We are also beginning to see operational benefits from the targeted investments we are making in employee wages and benefits to build employee skill sets and tenure, as well as the continued investments in digitization of our customer service platforms and proactive maintenance, all with the goal of improving the customer experience, reducing transactions and driving customer growth and retention.

We realized revenue, Adjusted EBITDA and income from operations during the periods presented as follows (in millions; all percentages are calculated using whole numbers; minor differences may exist due to rounding).

	Years ended December 31,		
	2023	2022	Growth
Revenues	\$ 54,607	\$ 54,020	1.1 %
Adjusted EBITDA	\$ 21,747	\$ 21,513	1.1 %
Income from operations	\$ 12,377	\$ 11,882	4.2 %

Adjusted EBITDA is defined as net income attributable to CCO Holdings member plus net income attributable to noncontrolling interest, net interest expense, income taxes, depreciation and amortization, stock compensation expense, other income (expense), net and other operating expenses, net, such as special charges and (gain) loss on sale or retirement of assets. See "—Use of Adjusted EBITDA and Free Cash Flow" for further information on Adjusted EBITDA and free cash flow.

Growth in total revenue was primarily due to growth in our residential Internet customers and residential mobile lines partly offset by lower residential video and advertising sales revenues. Adjusted EBITDA and income from operations growth was driven by growth in revenue and increases in operating costs and expenses, primarily mobile device and other mobile direct costs and costs to service customers, partly offset by a decrease in programming expense. Income from operations was also affected by a gain on the sale of towers and lower depreciation and amortization expense, partly offset by an increase in stock compensation expense.

Approximately 90% of our revenues for each of the years ended December 31, 2023 and 2022 are attributable to monthly subscription fees charged to customers for our Internet, video, voice, mobile and commercial services as well as regional sports and news channels. Generally, these customer subscriptions may be discontinued by the customer at any time subject to a fee for certain commercial customers. The remaining 10% of our revenue is derived primarily from advertising revenues, franchise and other regulatory fee revenues (which are collected by us but then paid to local authorities), sales of mobile and video devices, processing fees or reconnection fees charged to customers to commence or reinstate service, installation, VOD and pay-per-view programming, and commissions related to the sale of merchandise by home shopping services.

### Critical Accounting Policies and Estimates

Certain of our accounting policies require our management to make difficult, subjective and/or complex judgments. Management has discussed these policies with the Audit Committee of Charter's Board of Directors, and the Audit Committee has reviewed the following disclosure. We consider the following policies to be the most critical in understanding the

estimates, assumptions and judgments that are involved in preparing our financial statements, and the uncertainties that could affect our results of operations, financial condition and cash flows:

- Capitalization of labor and overhead costs
- Defined benefit pension plans

### ***Capitalization of labor and overhead costs***

Costs associated with network construction or upgrades, placement of the customer drop to the dwelling and the placement of outlets within a dwelling along with the costs associated with the deployment of new customer premise equipment necessary to provide Internet, video or voice services, are capitalized. Costs capitalized include materials, direct labor and certain indirect costs. These indirect costs consist of compensation and overhead costs associated with support functions. While our capitalization is based on specific activities, once capitalized, we track these costs on a composite basis by fixed asset category at the cable system level, and not on a specific asset basis. For assets that are sold or retired, we remove the estimated applicable cost and accumulated depreciation. The costs of disconnecting service and removing customer premise equipment from a dwelling and the costs to reconnect a customer drop or to redeploy previously installed customer premise equipment are charged to operating expense as incurred. Costs for repairs and maintenance are charged to operating expense as incurred, while plant and equipment replacement, including replacement of certain components, betterments, and replacement of cable drops and outlets, are capitalized.

We make judgments regarding the installation and construction activities to be capitalized. We capitalized direct labor and overhead of \$2.3 billion and \$1.8 billion for the years ended December 31, 2023 and 2022, respectively. We capitalize direct labor and overhead using standards developed from actual costs and applicable operational data. We calculate standards annually (or more frequently if circumstances dictate) for items such as the labor rates, overhead rates, and the actual amount of time required to perform a capitalizable activity. For example, the standard amounts of time required to perform capitalizable activities are based on studies of the time required to perform such activities. Overhead rates are established based on an analysis of the nature of costs incurred in support of capitalizable activities, and a determination of the portion of costs that is directly attributable to capitalizable activities. The impact of changes that resulted from these studies were not material in the periods presented.

Labor costs directly associated with capital projects are capitalized. Capitalizable activities performed in connection with installations include such activities as:

- dispatching a “truck roll” to the customer’s dwelling or business for service connection or placement of new equipment;
- costs to package and ship new equipment to a customer’s home for self-installation;
- verification of serviceability to the customer’s dwelling or business (i.e., determining whether the customer’s dwelling is capable of receiving service by our cable network);
- customer premise activities performed by in-house field technicians and third-party contractors in connection with the installation, replacement and betterment of equipment and materials to enable Internet, video or voice services; and
- verifying the integrity of the customer’s network connection by initiating test signals downstream from the headend to the customer premise equipment, as well as testing signal levels at the utility pole or pedestal.

Judgment is required to determine the extent to which overhead costs incurred result from specific capital activities, and therefore should be capitalized. The primary costs that are included in the determination of the overhead rate are (i) employee benefits and payroll taxes associated with capitalized direct labor, (ii) direct variable costs associated with capitalizable activities, (iii) the cost of support personnel, such as care personnel and dispatchers, who assist with capitalizable installation activities, and (iv) indirect costs directly attributable to capitalizable activities.

While we believe our existing capitalization policies are appropriate, a significant change in the nature or extent of our operating practices could affect management’s judgment about the extent to which we should capitalize direct labor or overhead in the future. We monitor the appropriateness of our capitalization policies, and perform updates to our internal studies on an ongoing basis to determine whether facts or circumstances warrant a change to our capitalization policies.

### ***Defined benefit pension plans***

We sponsor qualified and unqualified defined benefit pension plans that provide pension benefits to a majority of employees who were employed by TWC before the merger with TWC. As of December 31, 2023, the accumulated benefit obligation and

fair value of plan assets was \$2.4 billion and \$2.6 billion, respectively, and the net funded asset was recorded as a \$149 million noncurrent asset, \$3 million current liability and \$19 million long-term liability. As of December 31, 2022, the accumulated benefit obligation and fair value of plan assets was \$2.2 billion and \$2.6 billion, respectively, and the net funded asset was recorded as a \$362 million noncurrent asset, \$5 million current liability and \$17 million long-term liability. In June 2023, we purchased a buy-in group annuity contract from a highly rated insurer and in October 2023, we announced plans to fully terminate the qualified pension plan. The benefit obligation for the qualified pension plan as of December 31, 2023 of \$2.4 billion was therefore determined on a plan termination basis for which it is assumed that a portion of eligible active and deferred vested participants will elect lump sum payments.

Pension benefits are based on formulas that reflect the employees' years of service and compensation during their employment period. Actuarial gains or losses are changes in the amount of either the benefit obligation or the fair value of plan assets resulting from experience different from that assumed or from changes in assumptions. We have elected to follow a mark-to-market pension accounting policy for recording the actuarial gains or losses annually during the fourth quarter, or earlier if a remeasurement event occurs during an interim period. We use a December 31 measurement date for our pension plans.

We recognized net periodic pension cost of \$216 million in 2023 and net periodic pension benefit of \$254 million in 2022. Net periodic pension benefit or cost is determined using certain assumptions, including the expected long-term rate of return on plan assets, discount rate and mortality assumptions. We determined the discount rate used to compute pension cost based on the yield of a large population of high-quality corporate bonds with cash flows sufficient in timing and amount to settle projected future defined benefit payments. In developing the expected long-term rate of return on assets, we considered the current pension portfolio's composition, past average rate of earnings, and our asset allocation targets. We used a discount rate of 4.65% to determine the December 31, 2023 pension plan benefit obligation. A decrease in the discount rate of 25 basis points would result in an \$80 million increase in our pension plan benefit obligation as of December 31, 2023 and net periodic pension cost recognized in 2023 under our mark-to-market accounting policy. The expected long-term rate of return on plan assets used to determine net periodic pension benefit for the year ended December 31, 2024 is expected to be 5.00%. A decrease in the expected long-term rate of return of 25 basis points to 4.75%, while holding all other assumptions constant, would result in a decrease in our 2024 net periodic pension benefit of approximately \$6 million. See Note 18 to the accompanying consolidated financial statements contained in "Part II. Item 8. Financial Statements and Supplementary Data" for additional discussion on these assumptions.

## Results of Operations

A discussion of changes in our results of operations during the year ended December 31, 2022 compared to the year ended December 31, 2021 has been omitted from this Annual Report on Form 10-K, but may be found in “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on January 27, 2023, which is available free of charge on the SEC’s website at [www.sec.gov](http://www.sec.gov) and on Charter’s investor relations website at [ir.charter.com](http://ir.charter.com).

The following table sets forth the consolidated statements of operations for the periods presented (dollars in millions):

	Year Ended December 31,	
	2023	2022
Revenues	\$ 54,607	\$ 54,020
Costs and Expenses:		
Operating costs and expenses (exclusive of items shown separately below)	33,552	32,977
Depreciation and amortization	8,667	8,874
Other operating expense, net	11	287
	<u>42,230</u>	<u>42,138</u>
Income from operations	12,377	11,882
Other Income (Expense):		
Interest expense, net	(5,154)	(4,533)
Other income (expense), net	(505)	5
	<u>(5,659)</u>	<u>(4,528)</u>
Income before income taxes	6,718	7,354
Income tax expense	(19)	(47)
Consolidated net income	6,699	7,307
Less: Net income attributable to noncontrolling interests	(2)	(2)
Net income attributable to CCO Holdings member	<u>\$ 6,697</u>	<u>\$ 7,305</u>

**Revenues.** Total revenues grew \$587 million or 1.1% during the year ended December 31, 2023 as compared to 2022 primarily due to growth in residential Internet revenue, mobile device sales and residential mobile service revenues partly offset by lower residential video and advertising sales revenues as well as \$68 million of total customer credits related to the temporary loss of Disney programming during 2023.

Revenues by service offering were as follows (dollars in millions; all percentages are calculated using whole numbers; minor differences may exist due to rounding):

	Years ended December 31,		
	2023	2022	Growth
Internet	\$ 23,032	\$ 22,222	3.6 %
Video	16,351	17,460	(6.4)%
Voice	1,510	1,559	(3.1)%
Mobile service	2,243	1,698	32.1 %
Residential revenue	<u>43,136</u>	<u>42,939</u>	0.5 %
Small and medium business	4,353	4,350	0.1 %
Enterprise	2,770	2,677	3.5 %
Commercial revenue	<u>7,123</u>	<u>7,027</u>	1.4 %
Advertising sales	1,551	1,882	(17.6)%
Other	2,797	2,172	28.8 %
	<u>\$ 54,607</u>	<u>\$ 54,020</u>	1.1 %

The increase in Internet revenues from our residential customers was attributable to the following (dollars in millions):

	2023 compared to 2022
Increase related to rate and product mix changes	\$ 632
Increase in average residential Internet customers	178
	<u>\$ 810</u>

The increase related to rate and product mix was primarily due to promotional rate step-ups and rate adjustments, partly offset by lower bundled revenue allocation. Residential Internet customers grew by 132,000 in 2023 compared to 2022.

Video revenues consist primarily of revenues from video services provided to our residential customers, as well as franchise fees, equipment service fees and video installation revenue. The decrease in video revenues was attributable to the following (dollars in millions):

	2023 compared to 2022
Decrease in average residential video customers	\$ (981)
Decrease related to rate and product mix changes	(128)
	<u>\$ (1,109)</u>

Residential video customers decreased by 994,000 in 2023 compared to 2022. The decrease related to rate and product mix was primarily due to a higher mix of lower cost video packages within our video customer base and \$63 million of customer credits related to the temporary loss of Disney programming in 2023, offset by the pass-through of programming cost increases and promotional rate step-ups.

The decrease in voice revenues from our residential customers was attributable to the following (dollars in millions):

	2023 compared to 2022
Decrease in average residential voice customers	\$ (184)
Increase related to rate adjustments	135
	<u>\$ (49)</u>

Residential wireline voice customers decreased by 985,000 in 2023 compared to 2022.

The increase in mobile service revenues from our residential customers is attributable to the following (dollars in millions):

	<b>2023 compared to 2022</b>
Increase in average residential mobile lines	\$ 883
Decrease related to rate	(338)
	<u>\$ 545</u>

Residential mobile lines increased by 2,403,000 in 2023 compared to 2022. The decrease related to rate is primarily related to the Spectrum One offering and is partly offset by higher bundled revenue allocation.

The increase in SMB revenues is attributable to the following (dollars in millions):

	<b>2023 compared to 2022</b>
Increase in SMB customers	\$ 76
Decrease related to rate and product mix changes	(73)
	<u>\$ 3</u>

SMB customers grew by 15,000 in 2023 compared to 2022. The decrease related to rate and product mix changes were primarily due to a higher mix of lower priced video packages and a lower number of voice lines per SMB customer relationship.

Enterprise revenues increased \$93 million during the year ended December 31, 2023 as compared to the corresponding period in 2022 primarily due to an increase in Internet PSUs partly offset by lower wholesale PSUs. Enterprise PSUs increased by 19,000 in 2023 compared to 2022.

Advertising sales revenues consist primarily of revenues from commercial advertising customers, programmers and other vendors, as well as local cable and advertising on regional sports and news channels. Advertising sales revenues decreased \$331 million during the year ended December 31, 2023 as compared to the corresponding period in 2022 primarily due to a decrease in political revenue.

Other revenues consist of revenue from mobile and video device sales, processing fees, regional sports and news channels (excluding intercompany charges or advertising sales on those channels), subsidy revenue, home shopping, wire maintenance fees and other miscellaneous revenues. Other revenues increased approximately \$625 million during the year ended December 31, 2023 as compared to the corresponding period in 2022 primarily due to higher mobile device sales partially offset by lower processing fees.

**Operating costs and expenses.** The increase in our operating costs and expenses, exclusive of items shown separately in the consolidated statements of operations, was attributable to the following (dollars in millions):

	<b>2023 compared to 2022</b>
Programming	\$ (982)
Other costs of revenue	783
Costs to service customers	328
Sales and marketing	68
Other	378
	<u>\$ 575</u>

Programming costs were approximately \$10.6 billion and \$11.6 billion for the years ended December 31, 2023 and 2022, representing 32% and 35% of total operating costs and expenses, respectively. Programming costs consist primarily of costs paid to programmers for basic, premium, video on demand, and pay-per-view programming. Programming costs decreased as a

result of a higher mix of lower cost video packages within our video customer base, fewer customers and a \$61 million benefit related to the temporary loss of Disney programming during 2023, partly offset by contractual rate adjustments, including renewals and increases in amounts paid for retransmission consent.

Other costs of revenue increased \$783 million during the year ended December 31, 2023 compared to the corresponding period in 2022 primarily due to higher mobile device sales and higher other mobile direct costs due to an increase in mobile lines, partially offset by lower regulatory pass-through fees and original content costs.

Costs to service customers increased \$328 million during the year ended December 31, 2023 compared to the corresponding period in 2022 primarily due to adjustments to job structure, pay and benefits to build a more skilled and longer tenured workforce resulting in lower frontline employee attrition compared to 2022, and additional activity to support the accelerated growth of Spectrum Mobile.

Sales and marketing costs increased \$68 million during the year ended December 31, 2023 compared to the corresponding period in 2022 primarily due to higher staffing across sales channels and the accelerated growth of Spectrum Mobile.

The increase in other expense was attributable to the following (dollars in millions):

	<b>2023 compared to 2022</b>
Stock compensation expense	\$ 222
Corporate costs	84
Costs to sell and service bulk properties	48
Enterprise	24
Property tax and insurance	(35)
Other	35
	<u>\$ 378</u>

Stock compensation expense increased during the year ended December 31, 2023 compared to the corresponding prior period primarily due to an increase in equity awards granted. Corporate, costs to sell and service bulk properties and enterprise costs increased primarily due to higher labor costs while property tax and insurance expense decreased during the year ended December 31, 2023 compared to the corresponding prior period primarily as a result of adjustments related to favorable development on prior year workers' compensation claims.

**Depreciation and amortization.** Depreciation and amortization expense decreased by \$207 million during the year ended December 31, 2023 compared to the corresponding period in 2022 primarily due to certain assets acquired in acquisitions becoming fully depreciated offset by an increase in depreciation as a result of more recent capital expenditures.

**Other operating expense, net.** The change in other operating expense, net was attributable to the following (dollars in millions):

	<b>2023 compared to 2022</b>
Special charges, net	\$ (17)
(Gain) loss on disposal of assets, net	(259)
	<u>\$ (276)</u>

For more information, see Note 12 to the accompanying consolidated financial statements contained in "Part II. Item 8. Financial Statements and Supplementary Data."

**Interest expense, net.** Net interest expense increased by \$621 million in 2023 from 2022 primarily due to an increase in weighted average interest rates as well as an increase in weighted average debt outstanding of approximately \$2.2 billion.

**Other income (expense), net.** The change in other income (expense), net is attributable to the following (dollars in millions):

	<b>2023 compared to 2022</b>
Gain (loss) on financial instruments, net (see Note 9)	\$ 140
Net periodic pension benefit (cost) (see Note 18)	(470)
Loss on equity investments, net (see Note 5)	(180)
	<u>\$ (510)</u>

See Note 13 and the Notes referenced above to the accompanying consolidated financial statements contained in “Item 1. Financial Statements” for more information.

**Income tax expense.** We recognized income tax expense of \$19 million and \$47 million for the years ended December 31, 2023 and 2022, respectively. For more information, see Note 15 to the accompanying consolidated financial statements contained in “Part II. Item 8. Financial Statements and Supplementary Data.”

**Net income attributable to noncontrolling interest.** Net income attributable to noncontrolling interest relates to our third-party interest in CV of Viera, LLP, a consolidated joint venture in a small cable system in Florida.

**Net income attributable to CCO Holdings member.** Net income attributable to CCO Holdings member was \$6.7 billion and \$7.3 billion for the years ended December 31, 2023 and 2022, respectively, primarily as a result of the factors described above.

#### **Use of Adjusted EBITDA and Free Cash Flow**

We use certain measures that are not defined by U.S. generally accepted accounting principles (“GAAP”) to evaluate various aspects of our business. Adjusted EBITDA and free cash flow are non-GAAP financial measures and should be considered in addition to, not as a substitute for, net income attributable to CCO Holdings member and net cash flows from operating activities reported in accordance with GAAP. These terms, as defined by us, may not be comparable to similarly titled measures used by other companies. Adjusted EBITDA and free cash flow are reconciled to net income attributable to CCO Holdings member and net cash flows from operating activities, respectively, below.

Adjusted EBITDA eliminates the significant non-cash depreciation and amortization expense that results from the capital-intensive nature of our businesses as well as other non-cash or special items, and is unaffected by our capital structure or investment activities. However, this measure is limited in that it does not reflect the periodic costs of certain capitalized tangible and intangible assets used in generating revenues and our cash cost of financing. These costs are evaluated through other financial measures.

Free cash flow is defined as net cash flows from operating activities, less capital expenditures and changes in accrued expenses related to capital expenditures.

Management and Charter’s Board of Directors use Adjusted EBITDA and free cash flow to assess our performance and our ability to service our debt, fund operations and make additional investments with internally generated funds. In addition, Adjusted EBITDA generally correlates to the leverage ratio calculation under our credit facilities or outstanding notes to determine compliance with the covenants contained in the facilities and notes (all such documents have been previously filed with the SEC). For the purpose of calculating compliance with leverage covenants, we use Adjusted EBITDA, as presented, excluding certain expenses paid by our operating subsidiaries to other Charter entities. Our debt covenants refer to these expenses as management fees, which fees were in the amount of \$1.4 billion for each of the years ended December 31, 2023 and 2022.

A reconciliation of Adjusted EBITDA and free cash flow to net income attributable to CCO Holdings member and net cash flows from operating activities, respectively, is as follows (dollars in millions):

	<b>Years ended December 31,</b>	
	<b>2023</b>	<b>2022</b>
Net income attributable to CCO Holdings member	\$ 6,697	\$ 7,305
Plus: Net income attributable to noncontrolling interest	2	2
Interest expense, net	5,154	4,533
Income tax expense	19	47
Depreciation and amortization	8,667	8,874
Stock compensation expense	692	470
Other, net	516	282
Adjusted EBITDA	<u>\$ 21,747</u>	<u>\$ 21,513</u>
Net cash flows from operating activities	\$ 15,729	\$ 16,131
Less: Purchases of property, plant and equipment	(11,115)	(9,376)
Change in accrued expenses related to capital expenditures	172	553
Free cash flow	<u>\$ 4,786</u>	<u>\$ 7,308</u>

## Liquidity and Capital Resources

### Overview

We have significant amounts of debt and require significant cash to fund principal and interest payments on our debt. The principal amount of our debt as of December 31, 2023 was \$97.6 billion, consisting of \$12.4 billion of credit facility debt, \$57.9 billion of investment grade senior secured notes and \$27.3 billion of high-yield senior unsecured notes. Our split credit rating allows us to access both the investment grade debt market and the high yield debt market.

Our projected cash needs and projected sources of liquidity depend upon, among other things, our actual results, and the timing and amount of our expenditures. As we continue to grow our market penetration of our mobile product, we will continue to experience negative working capital impacts from the timing of device-related cash flows when we sell devices to customers pursuant to equipment installment plans. Further, in 2022, Charter became a meaningful federal cash tax payer as the majority of their net operating losses had been utilized, which will be funded by distributions from us. Free cash flow was \$4.8 billion and \$7.3 billion for the years ended December 31, 2023 and 2022, respectively. See table below for factors impacting free cash flow during the year ended December 31, 2023 compared to 2022. As of December 31, 2023, the amount available under our credit facilities was approximately \$5.2 billion and cash on hand was approximately \$471 million. We expect to utilize free cash flow, cash on hand and availability under our credit facilities as well as future refinancing transactions to further extend the maturities of our obligations. The timing and terms of any refinancing transactions will be subject to market conditions among other considerations. Additionally, we may, from time to time, and depending on market conditions and other factors, use cash on hand and the proceeds from securities offerings or other borrowings to retire our debt through open market purchases, privately negotiated purchases, tender offers or redemption provisions. We believe we have sufficient liquidity from cash on hand, free cash flow and Charter Operating's revolving credit facility as well as access to the capital markets to fund our projected cash needs.

We continue to evaluate the deployment of our cash on hand and anticipated future free cash flow, including investing in our business growth and other strategic opportunities, including expanding the capacity of our network, the expansion of our network through our rural broadband construction initiative, the build-out and deployment of our CBRS spectrum, and mergers and acquisitions as well as distributions to parent companies for stock repurchases and dividends. Charter's target leverage of net debt to the last twelve months Adjusted EBITDA remains at 4 to 4.5 times Adjusted EBITDA, and up to 3.5 times Adjusted EBITDA at the Charter Operating first lien level. Charter's leverage ratio was 4.42 times Adjusted EBITDA as of December 31, 2023. As Adjusted EBITDA grows, we expect to increase the total amount of our indebtedness to maintain leverage within Charter's target leverage range. Excluding purchases from Liberty Broadband discussed below, during the years ended December 31, 2023 and 2022, Charter purchased in the public market approximately 6.9 million and 14.5 million shares, respectively, of Charter Class A common stock for approximately \$2.7 billion and \$7.1 billion, respectively. Since the beginning of its buyback program in September 2016 through the year ended December 31, 2023, Charter has purchased in the

public market approximately 158.3 million shares of Class A common stock and Charter Holdings common units for approximately \$72.0 billion, including purchases from Liberty Broadband and A/N discussed below.

In February 2021, Charter and Liberty Broadband entered into a letter agreement (the "LBB Letter Agreement"). The LBB Letter Agreement implements Liberty Broadband's obligations under the Stockholders Agreement to participate in share repurchases by Charter. Under the LBB Letter Agreement, Liberty Broadband will sell to Charter, generally on a monthly basis, a number of shares of Charter Class A common stock representing an amount sufficient for Liberty Broadband's ownership of Charter to be reduced such that it does not exceed the ownership cap then applicable to Liberty Broadband under the Stockholders Agreement at a purchase price per share equal to the volume weighted average price per share paid by Charter for shares repurchased during such immediately preceding calendar month other than (i) purchases from A/N, (ii) purchases in privately negotiated transactions or (iii) purchases for the withholding of shares of Charter Class A common stock pursuant to equity compensation programs of Charter. Charter purchased from Liberty Broadband 1.0 million and 6.2 million shares of Charter Class A common stock for approximately \$394 million and \$3.0 billion during the years ended December 31, 2023 and 2022, respectively.

In December 2016, Charter and A/N entered into a letter agreement, as amended in December 2017 (the "A/N Letter Agreement"), that requires A/N to sell to Charter or to Charter Holdings, on a monthly basis, a number of shares of Charter Class A common stock or Charter Holdings common units that represents a pro rata participation by A/N and its affiliates in any repurchases of shares of Charter Class A common stock from persons other than A/N effected by Charter during the immediately preceding calendar month, at a purchase price equal to the average price paid by Charter for the shares repurchased from persons other than A/N during such immediately preceding calendar month. A/N and Charter both have the right to terminate or suspend the pro rata repurchase arrangement on a prospective basis. During the years ended December 31, 2023 and 2022, Charter Holdings purchased from A/N 1.1 million and 3.2 million Charter Holdings common units, respectively, for approximately \$427 million and \$1.6 billion, respectively.

As of December 31, 2023, Charter had remaining board authority to purchase an additional \$170 million of Charter's Class A common stock and/or Charter Holdings common units, excluding purchases from Liberty Broadband. Although Charter expects to continue to buy back its common stock consistent with its leverage target range, Charter is not obligated to acquire any particular amount of common stock, and the timing of any purchases that may occur cannot be predicted and will largely depend on market conditions and other potential uses of capital. Purchases may include open market purchases, tender offers or negotiated transactions. To the extent such purchases occur, CCO Holdings and its subsidiaries are the primary source for funding such purchases through distributions to their parent companies.

As possible acquisitions, swaps or dispositions arise, we actively review them against our objectives including, among other considerations, improving the operational efficiency, geographic clustering of assets, product development or technology capabilities of our business and achieving appropriate return targets, and we may participate to the extent we believe these possibilities present attractive opportunities. However, there can be no assurance that we will actually complete any acquisitions, dispositions or system swaps, or that any such transactions will be material to our operations or results.

### ***Recent Events***

In January and February 2024, Charter Operating and Charter Communications Operating Capital Corp. redeemed all of their outstanding senior secured floating rate notes due 2024 and paid in full all of their outstanding 4.500% senior secured notes due 2024 at maturity.

## Free Cash Flow

Free cash flow decreased \$2.5 billion during the year ended December 31, 2023 compared to the corresponding prior period due to the following (dollars in millions):

	2023 compared to 2022
Increase in capital expenditures	\$ (1,739)
Changes in working capital, excluding mobile devices	(733)
Increase in cash paid for interest, net	(505)
Changes in working capital, mobile devices	(184)
Increase in Adjusted EBITDA	234
Other, net	405
	<u>\$ (2,522)</u>

## Financial Information about Guarantors, Issuers of Guaranteed Securities, Affiliates Whose Securities Collateralize a Registrant's Securities and Consolidated Subsidiaries

Each of CCO Holdings, Charter Operating, Time Warner Cable, LLC and Time Warner Cable Enterprises LLC (collectively, the "Issuers") and substantially all of Charter Operating's direct and indirect subsidiaries (the "Obligor Subsidiaries" and together with the Issuers, collectively, the "Obligor Group" and each an "Obligor") jointly, severally, fully and unconditionally guarantee the outstanding debt securities of the respective Issuers (other than the CCO Holdings unsecured notes) and Charter Operating's credit facilities on a senior basis (collectively, the "Guaranteed and Secured Debt"). Such guarantees are pari passu in right of payment with all senior indebtedness of the guarantors and senior in right of payment to subordinated obligations of the guarantors. Each guarantee will be limited to the maximum amount that can be guaranteed by the relevant guarantor without rendering the relevant guarantee, as it relates to that guarantor, voidable or otherwise ineffective or limited under applicable law, and enforcement of each guarantee would be subject to certain generally available defenses. The Guaranteed and Secured Debt is structurally subordinated to the creditors (including trade creditors) and preference shareholders (if any) of Charter Operating's non-guarantor subsidiaries.

The Guaranteed and Secured Debt and the subsidiary guarantees thereof are also secured by (i) a lien on substantially all of the assets of Charter Operating and the Obligor Subsidiaries, to the extent such lien can be perfected under the Uniform Commercial Code by the filing of a financing statement, and (ii) a pledge of substantially all of the equity interests of subsidiaries owned by Charter Operating or the Obligor Subsidiaries (the "Pledged Equity Interests"), as well as intercompany obligations owing to it by any of such entities ((i) and (ii) collectively, the "Collateral"). In addition, payments of a mortgage note, currently outstanding for approximately \$296 million, incurred by a single-asset special purpose entity to finance construction of the first building of the new Charter headquarters in Stamford, Connecticut are guaranteed by the Obligor Group and rank equally with the liens on the Collateral securing the Guaranteed and Secured Debt. No assets of any of Charter Operating's non-guarantor subsidiaries (including any capital stock owned by any such subsidiary) will constitute Collateral. The subsidiary guarantees are effectively senior to all unsecured debt or debt secured by junior liens of the subsidiary guarantors, in each case to the extent of the value of the collateral securing the guarantee obligations of the subsidiary guarantors. Upon the occurrence and during the continuance of an event of default under the Guaranteed and Secured Debt, subject to the terms of an intercreditor agreement, the security documents governing the Guaranteed and Secured Debt provide for (among other available remedies) the foreclosure upon and sale of the Collateral by the collateral agent(s) of the respective Guaranteed and Secured Debt and the distribution of the net proceeds of any such sale to the holders and/or the lenders of the Guaranteed and Secured Debt on a pro rata basis, subject to any prior liens on the Collateral. We believe there is no separate trading market for the Pledged Equity Interests.

Certain Charter Operating subsidiaries that are regulated entities are only designated as guarantor subsidiaries, and certain related assets (including the capital stock of such regulated entities) are only required to be pledged as Collateral, upon approval by regulators. The guaranteed obligations and collateral of an Obligor Subsidiary (including Pledged Equity Interests) may be released under certain circumstances permitted under the documentation governing the Guaranteed and Secured Debt, including if an Obligor Subsidiary no longer qualifies as a "Subsidiary" of Charter Operating under transactions not prohibited by the Charter Operating credit agreement.

See Note 8 to the consolidated financial statements contained in “Part II. Item 8. Financial Statements and Supplementary Data” for further details about the terms, conditions and other factors that may affect payments to holders and the collateral arrangements of the Guaranteed and Secured Debt.

Because the assets, liabilities and results of operations of the combined Obligor Group are not materially different than corresponding amounts presented in the consolidated financial statements of CCO Holdings, summarized financial information of the Obligor Group have been omitted pursuant to SEC Regulation S-X Rule 13-01, *Financial Statements of Guarantors and Issuers of Guaranteed Securities Registered or Being Registered* and S-X Rule 13-02, *Affiliates Whose Securities Collateralize Securities Registered Or Being Registered*.

### ***Historical Operating, Investing, and Financing Activities***

***Cash and Cash Equivalents.*** We held \$471 million and \$392 million in cash and cash equivalents as of December 31, 2023 and 2022, respectively.

***Operating Activities.*** Net cash provided by operating activities decreased \$402 million during the year ended December 31, 2023 compared to the year ended December 31, 2022, primarily due to a negative change in working capital and an increase in cash paid for interest, partly offset by an increase in Adjusted EBITDA and the payment of litigation settlements in 2022.

***Investing Activities.*** Net cash used in investing activities for the years ended December 31, 2023 and 2022 was \$11.1 billion and \$9.1 billion, respectively. The increase in cash used was primarily due to an increase in capital expenditures and changes in accrued expenses related to capital expenditures.

***Financing Activities.*** Net cash used in financing activities decreased \$2.4 billion during the year ended December 31, 2023 compared to the year ended December 31, 2022 primarily due to a decrease in distributions to parent companies partly offset by a decrease in the amount by which borrowings of long-term debt exceeded repayments.

### ***Capital Expenditures***

We have significant ongoing capital expenditure requirements. Capital expenditures were \$11.1 billion and \$9.4 billion for the years ended December 31, 2023 and 2022, respectively. The increase was primarily due to an increase in line extensions in connection with our subsidized rural construction initiative and continued residential and commercial network expansion. The increase in capital expenditures excluding line extensions was primarily driven by higher spend on network evolution, support capital and customer premise equipment, particularly Xumo. See the table below for more details.

We currently expect full year 2024 capital expenditures to total between \$12.2 billion and \$12.4 billion, including line extensions of approximately \$4.5 billion and network evolution spend of approximately \$1.6 billion. The actual amount of capital expenditures in 2024 will depend on a number of factors including, but not limited to, the pace of our network evolution and expansion initiatives, supply chain timing and growth rates in our residential and commercial businesses.

Our capital expenditures are funded primarily from cash flows from operating activities and borrowings on our credit facility. In addition, our accrued liabilities related to capital expenditures increased \$172 million and \$553 million for the years ended December 31, 2023 and 2022, respectively.

The following tables present our major capital expenditures categories in accordance with National Cable and Telecommunications Association (“NCTA”) disclosure guidelines for the years ended December 31, 2023 and 2022. These disclosure guidelines are not required disclosures under GAAP, nor do they impact our accounting for capital expenditures under GAAP (dollars in millions):

	<b>Year Ended December 31,</b>	
	<b>2023</b>	<b>2022</b>
Customer premise equipment <sup>(a)</sup>	\$ 2,286	\$ 2,207
Scalable infrastructure <sup>(b)</sup>	1,368	1,711
Upgrade/rebuild <sup>(c)</sup>	1,719	938
Support capital <sup>(d)</sup>	1,727	1,533
<b>Capital expenditures, excluding line extensions</b>	<b>7,100</b>	<b>6,389</b>
Subsidized rural construction line extensions	1,822	1,436
Other line extensions	2,193	1,551
<b>Total line extensions <sup>(e)</sup></b>	<b>4,015</b>	<b>2,987</b>
<b>Total capital expenditures</b>	<b>\$ 11,115</b>	<b>\$ 9,376</b>
<b>Of which:</b>		
Commercial services	\$ 1,560	\$ 1,511
Subsidized rural construction initiative <sup>(f)</sup>	1,870	1,504
Mobile	314	376

- <sup>(a)</sup> Customer premise equipment includes equipment and devices located at the customer's premise used to deliver our Internet, video and voice services (e.g., modems, routers and set-top boxes), as well as installation costs.
- <sup>(b)</sup> Scalable infrastructure includes costs, not related to customer premise equipment or our network, to secure growth of new customers or provide service enhancements (e.g., headend equipment).
- <sup>(c)</sup> Upgrade/rebuild includes costs to modify or replace existing fiber/coaxial cable networks, including our network evolution initiative which started in 2022.
- <sup>(d)</sup> Support capital includes costs associated with the replacement or enhancement of non-network assets (e.g., back-office systems, non-network equipment, land and buildings, vehicles, tools and test equipment).
- <sup>(e)</sup> Line extensions include network costs associated with entering new service areas (e.g., fiber/coaxial cable, amplifiers, electronic equipment, make-ready and design engineering).
- <sup>(f)</sup> The subsidized rural construction initiative subcategory includes projects for which we are receiving subsidies from federal, state and local governments (for which separate reporting was initiated in 2022), excluding customer premise equipment and installation.

## Debt

As of December 31, 2023, the accreted value of our total debt was approximately \$97.8 billion, as summarized below (dollars in millions):

	<b>December 31, 2023</b>		<b>Interest Payment Dates</b>	<b>Maturity Date <sup>(b)</sup></b>
	<b>Principal Amount</b>	<b>Accreted Value <sup>(a)</sup></b>		
<b>CCO Holdings, LLC:</b>				
5.500% senior notes due 2026	\$ 750	\$ 748	5/1 & 11/1	5/1/2026
5.125% senior notes due 2027	3,250	3,236	5/1 & 11/1	5/1/2027
5.000% senior notes due 2028	2,500	2,483	2/1 & 8/1	2/1/2028
5.375% senior notes due 2029	1,500	1,500	6/1 & 12/1	6/1/2029
6.375% senior notes due 2029	1,500	1,488	3/1 & 9/1	9/1/2029
4.750% senior notes due 2030	3,050	3,044	3/1 & 9/1	3/1/2030
4.500% senior notes due 2030	2,750	2,750	2/15 & 8/15	8/15/2030
4.250% senior notes due 2031	3,000	3,001	2/1 & 8/1	2/1/2031

7.375% senior notes due 2031	1,100	1,090	3/1 & 9/1	3/1/2031
4.750% senior notes due 2032	1,200	1,190	2/1 & 8/1	2/1/2032
4.500% senior notes due 2032	2,900	2,922	5/1 & 11/1	5/1/2032
4.500% senior notes due 2033	1,750	1,732	6/1 & 12/1	6/1/2033
4.250% senior notes due 2034	2,000	1,984	1/15 & 7/15	1/15/2034
<b>Charter Communications Operating, LLC:</b>				
Senior floating rate notes due 2024	900	900	2/1, 5/1, 8/1 & 11/1	2/1/2024
4.500% senior notes due 2024	1,100	1,100	2/1 & 8/1	2/1/2024
4.908% senior notes due 2025	4,500	4,491	1/23 & 7/23	7/23/2025
6.150% senior notes due 2026	1,100	1,091	5/10 & 11/10	11/10/2026
3.750% senior notes due 2028	1,000	993	2/15 & 8/15	2/15/2028
4.200% senior notes due 2028	1,250	1,245	3/15 & 9/15	3/15/2028
2.250% senior notes due 2029	1,250	1,243	1/15 & 7/15	1/15/2029
5.050% senior notes due 2029	1,250	1,244	3/30 & 9/30	3/30/2029
2.800% senior notes due 2031	1,600	1,588	4/1 & 10/1	4/1/2031
2.300% senior notes due 2032	1,000	993	2/1 & 8/1	2/1/2032
4.400% senior notes due 2033	1,000	991	4/1 & 10/1	4/1/2033
6.650% senior notes due 2034	900	892	2/1 & 8/1	2/1/2034
6.384% senior notes due 2035	2,000	1,985	4/23 & 10/23	10/23/2035
5.375% senior notes due 2038	800	788	4/1 & 10/1	4/1/2038
3.500% senior notes due 2041	1,500	1,484	6/1 & 12/1	6/1/2041
3.500% senior notes due 2042	1,350	1,332	3/1 & 9/1	3/1/2042
6.484% senior notes due 2045	3,500	3,470	4/23 & 10/23	10/23/2045
5.375% senior notes due 2047	2,500	2,506	5/1 & 11/1	5/1/2047
5.750% senior notes due 2048	2,450	2,394	4/1 & 10/1	4/1/2048
5.125% senior notes due 2049	1,250	1,241	1/1 & 7/1	7/1/2049
4.800% senior notes due 2050	2,800	2,797	3/1 & 9/1	3/1/2050
3.700% senior notes due 2051	2,050	2,032	4/1 & 10/1	4/1/2051
3.900% senior notes due 2052	2,400	2,324	6/1 & 12/1	6/1/2052
5.250% senior notes due 2053	1,500	1,480	4/1 & 10/1	4/1/2053
6.834% senior notes due 2055	500	495	4/23 & 10/23	10/23/2055
3.850% senior notes due 2061	1,850	1,810	4/1 & 10/1	4/1/2061
4.400% senior notes due 2061	1,400	1,389	6/1 & 12/1	12/1/2061
3.950% senior notes due 2062	1,400	1,380	6/30 & 12/30	6/30/2062
5.500% senior notes due 2063	1,000	986	4/1 & 10/1	4/1/2063
Credit facilities	12,413	12,359		Varies
<b>Time Warner Cable, LLC:</b>				
5.750% sterling senior notes due 2031 <sup>(c)</sup>	797	836	6/2	6/2/2031
6.550% senior debentures due 2037	1,500	1,648	5/1 & 11/1	5/1/2037
7.300% senior debentures due 2038	1,500	1,735	1/1 & 7/1	7/1/2038
6.750% senior debentures due 2039	1,500	1,685	6/15 & 12/15	6/15/2039
5.875% senior debentures due 2040	1,200	1,249	5/15 & 11/15	11/15/2040
5.500% senior debentures due 2041	1,250	1,257	3/1 & 9/1	9/1/2041
5.250% sterling senior notes due 2042 <sup>(d)</sup>	828	803	7/15	7/15/2042
4.500% senior debentures due 2042	1,250	1,153	3/15 & 9/15	9/15/2042
<b>Time Warner Cable Enterprises LLC:</b>				
8.375% senior debentures due 2033	1,000	1,220	1/15 & 7/15	7/15/2033
	<u>\$ 97,588</u>	<u>\$ 97,777</u>		

<sup>(a)</sup> The accreted values presented in the table above represent the principal amount of the debt adjusted for original issue discount or premium at the time of sale, deferred financing costs, and, in regards to debt assumed in acquisitions, fair value premium adjustments as a result of applying acquisition accounting plus the accretion of those amounts to the balance sheet date. However, the amount that is currently payable if the debt becomes immediately due is equal to the principal amount of the debt. In regards to the Sterling Notes, the principal amount of the debt and any premium or discount is remeasured

- into US dollars as of each balance sheet date. We had availability under our credit facilities of approximately \$5.2 billion as of December 31, 2023.
- (b) In general, the obligors have the right to redeem all of the notes set forth in the above table in whole or in part at their option, beginning at various times prior to their stated maturity dates, subject to certain conditions, upon the payment of the outstanding principal amount (plus a specified redemption premium) and all accrued and unpaid interest.
  - (c) Principal amount includes £625 million valued at \$797 million as of December 31, 2023 using the exchange rate as of December 31, 2023.
  - (d) Principal amount includes £650 million valued at \$828 million as of December 31, 2023 using the exchange rate as of December 31, 2023.

In 2023, CCO Holdings and CCO Holdings Capital Corp. jointly issued \$1.1 billion aggregate principal amount of senior unsecured notes and Charter Operating and Charter Communications Operating Capital Corp. jointly issued \$2.0 billion aggregate principal amount of senior secured notes. The notes were issued at varying rates, prices and maturity dates and the net proceeds were used to pay related fees and expenses and for general corporate purposes, including distributions to parent companies to fund buybacks of Charter Class A common stock and Charter Holdings common units as well as repaying certain indebtedness.

In 2023, Charter Operating entered into amendments to its credit agreement to (i) replace London Interbank Offering Rate (“LIBOR”) as the benchmark rate applicable to the credit facilities with Secured Overnight Financing Rate (“SOFR”), (ii) incur a new Term B-3 Loan and a new Term B-4 Loan; and (iii) concurrently cancel certain of Charter Operating’s existing Term B-1 Loan (upon assignment to Charter Operating and conversion into Term B-4 Loan) and Term B-2 Loan (upon assignment to Charter Operating), among other amendments.

See Note 8 to the accompanying consolidated financial statements contained in “Part II. Item 8. Financial Statements and Supplementary Data” for further details regarding our outstanding debt and other financing arrangements, including certain information about maturities, covenants and restrictions related to such debt and financing arrangements. The agreements and instruments governing our debt and financing arrangements are complicated and you should consult such agreements and instruments which are filed with the SEC for more detailed information.

At December 31, 2023, Charter Operating had a consolidated leverage ratio of approximately 3.0 to 1.0 and a consolidated first lien leverage ratio of 3.0 to 1.0. Both ratios are in compliance with the ratios required by the Charter Operating credit facilities of 5.0 to 1.0 consolidated leverage ratio and 4.0 to 1.0 consolidated first lien leverage ratio. A failure by Charter Operating to maintain the financial covenants would result in an event of default under the Charter Operating credit facilities and the debt of CCO Holdings. See “Part I. Item 1A. Risk Factors — The agreements and instruments governing our debt contain restrictions and limitations that could significantly affect our ability to operate our business, as well as significantly affect our liquidity.”

#### **Recently Issued Accounting Standards**

See Note 19 to the accompanying consolidated financial statements contained in “Part II. Item 8. Financial Statements and Supplementary Data” for a discussion of recently issued accounting standards.

#### **Item 7A. *Quantitative and Qualitative Disclosures About Market Risk.***

Cross-currency derivative instruments are used to manage foreign exchange risk on the Sterling Notes by effectively converting £1.275 billion aggregate principal amount of fixed-rate British pound sterling denominated debt, including annual interest payments and the payment of principal at maturity, to fixed-rate U.S. dollar denominated debt. The fair value of our cross-currency derivatives included in other long-term liabilities on our consolidated balance sheets was \$440 million and \$570 million as of December 31, 2023 and 2022, respectively. For more information, see Note 9 to the accompanying consolidated financial statements contained in “Part II. Item 8. Financial Statements and Supplementary Data.”

As of December 31, 2023 and 2022, the weighted average interest rate on the credit facility debt was approximately 7.0% and 5.9%, respectively, and the weighted average interest rate on the senior notes was approximately 5.0% and 5.0%, respectively, resulting in a blended weighted average interest rate of 5.3% and 5.1%, respectively. The interest rate on approximately 86% and 85% of the total principal amount of our debt was fixed as of December 31, 2023 and 2022, respectively.

The table set forth below summarizes the fair values and contract terms of financial instruments subject to interest rate risk maintained by us as of December 31, 2023 (dollars in millions):

	2024	2025	2026	2027	2028	Thereafter	Total	Fair Value
Debt:								
Fixed Rate	\$ 1,100	\$ 4,500	\$ 1,850	\$ 3,250	\$ 4,750	\$ 68,825	\$ 84,275	\$ 74,592
Average Interest Rate	4.50 %	4.91 %	5.89 %	5.13 %	4.53 %	5.01 %	4.99 %	
Variable Rate	\$ 1,290	\$ 700	\$ 387	\$ 7,939	\$ 390	\$ 2,607	\$ 13,313	\$ 13,137
Average Interest Rate	6.26 %	4.82 %	4.41 %	4.54 %	4.74 %	5.40 %	4.89 %	

Interest rates on variable-rate debt are estimated using the average implied forward SOFR for the year of maturity based on the yield curve in effect at December 31, 2023 including applicable bank spread.

#### **Item 8. Financial Statements and Supplementary Data.**

Our consolidated financial statements, the related notes thereto, and the report of independent registered public accounting firm are included in this annual report beginning on page F-1.

#### **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.**

None.

#### **Item 9A. Controls and Procedures.**

#### **Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures**

As of the end of the period covered by this report, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we have evaluated the effectiveness of the design and operation of disclosure controls and procedures with respect to the information generated for use in this annual report. The evaluation was based upon reports and certifications provided by a number of executives. Based on, and as of the date of that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures were effective to provide reasonable assurances that information required to be disclosed in the reports we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

In designing and evaluating the disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives, and management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based upon the above evaluation, we believe that our controls provide such reasonable assurances.

During the quarter ended December 31, 2023, there was no change in our internal control over financial reporting that has materially affected, or is 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) under the Exchange Act) for the Company. Our internal control system was designed to provide reasonable assurance to our management and Board of Directors regarding the preparation and fair presentation of published financial statements.

Management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2023. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in *Internal Control — Integrated Framework* (2013). Based on management's assessment utilizing these criteria we believe that, as of December 31, 2023, our internal control over financial reporting was effective.

**Item 9B. Other Information.**

None.

**Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.**

Not applicable.

## PART III

### **Item 14. *Principal Accountant Fees and Services.***

#### **Principal Accounting Firm**

KPMG acted as Charter and its subsidiaries' independent registered public accounting firm since 2002, and, subject to ratification by stockholders at Charter's annual meeting, KPMG is expected to serve as our independent registered public accounting firm for 2024.

#### **Services of Independent Registered Public Accounting Firm**

Charter's Audit Committee has adopted policies and procedures requiring the pre-approval of non-audit services that may be provided by our independent registered public accounting firm. We have also complied and will continue to comply with the provisions of the Sarbanes-Oxley Act of 2002 and the related SEC rules pertaining to auditor independence and audit committee pre-approval of audit and non-audit services.

#### ***Audit Fees***

During the years ended December 31, 2023 and 2022, we incurred fees and related expenses for professional services rendered by KPMG for the audits of Charter and its subsidiaries' financial statements (including CCO Holdings), for the review of Charter and its subsidiaries' interim financial statements (including CCO Holdings), registration statement filings and offering memoranda filings totaling approximately \$7 million and \$8 million, respectively.

#### ***Audit-Related Fees***

No audit-related fees to KPMG were incurred during the years ended December 31, 2023 and 2022.

#### ***Tax Fees***

Charter incurred tax fees to KPMG of approximately \$1 million during each of the years ended December 31, 2023 and 2022.

#### ***All Other Fees***

None.

Charter's Audit Committee appoints, retains, compensates and oversees the independent registered public accounting firm (subject, if applicable, to board of director and/or stockholder ratification), and approves in advance all fees and terms for the audit engagement and non-audit engagements where non-audit services are not prohibited by Section 10A of the Securities Exchange Act of 1934, as amended, with respect to independent registered public accounting firms. Pre-approvals of non-audit services are sometimes delegated to a single member of Charter's Audit Committee. However, any pre-approvals made by Charter's Audit Committee's designee are presented at Charter's Audit Committee's next regularly scheduled meeting. Charter's Audit Committee has an obligation to consult with management on these matters. Charter's Audit Committee approved 100% of the KPMG fees for the years ended December 31, 2023 and 2022. Each year, including 2023, with respect to the audit engagement, Charter's Audit Committee reviews the risk assessment process in establishing the scope of examination and the reports to be rendered.

In its capacity as a committee of the board, Charter's Audit Committee oversees the work of the independent registered public accounting firm (including resolution of disagreements between management and the public accounting firm regarding financial reporting) for the purpose of preparing or issuing an audit report or performing other audit, review or attest services. The independent registered public accounting firm reports directly to Charter's Audit Committee. In performing its functions, Charter's Audit Committee undertakes those tasks and responsibilities that, in its judgment, most effectively contribute to and implement the purposes of Charter's Audit Committee charter. For more detail of Charter's Audit Committee's authority and responsibilities, see Charter's Audit Committee charter on Charter's website, [ir.charter.com](http://ir.charter.com).

## PART IV

### **Item 15. Exhibits and Financial Statement Schedules.**

(a) The following documents are filed as part of this annual report:

(1) Financial Statements.

A listing of the financial statements, notes and reports of independent public accountants required by "Part II. Item 8. Financial Statements and Supplementary Data" begins on page F-1 of this annual report.

(2) Financial Statement Schedules.

No financial statement schedules are required to be filed by Items 8 and 15(c) because they are not required or are not applicable, or the required information is set forth in the applicable financial statements or notes thereto.

(3) The index to the exhibits begins on page E-1 of this annual report.

### **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, CCO Holdings, LLC and CCO Holdings Capital Corp. have duly caused this annual report to be signed on their behalf by the undersigned, thereunto duly authorized.

CCO HOLDINGS, LLC  
Registrant

By: /s/ Kevin D. Howard  
Kevin D. Howard  
Executive Vice President, Chief Accounting Officer and Controller

Date: February 2, 2024

CCO HOLDINGS CAPITAL CORP.  
Registrant

By: /s/ Kevin D. Howard  
Kevin D. Howard  
Executive Vice President, Chief Accounting Officer and Controller

Date: February 2, 2024

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of CCO Holdings, LLC and CCO Holdings Capital Corp. and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Christopher L. Winfrey</u> Christopher L. Winfrey	President and Chief Executive Officer (Principal Executive Officer)	February 2, 2024
<u>/s/ Jessica M. Fischer</u> Jessica M. Fischer	Chief Financial Officer (Principal Financial Officer)	February 2, 2024
<u>/s/ Kevin D. Howard</u> Kevin D. Howard	Executive Vice President, Chief Accounting Officer and Controller (Principal Accounting Officer)	February 2, 2024

CHARTER COMMUNICATIONS, INC., in its sole capacity as  
manager of CCO Holdings, LLC

By: /s/ Kevin D. Howard  
Kevin D. Howard  
Executive Vice President, Chief Accounting Officer and Controller

Date: February 2, 2024

## Exhibit Index

Exhibits are listed by numbers corresponding to the Exhibit Table of Item 601 in Regulation S-K.

<b>Exhibit</b>	<b>Description</b>
2.1	<a href="#"><u>Agreement and Plan of Mergers, dated as of May 23, 2015, among Time Warner Cable Inc., Charter Communications, Inc., CCH I, LLC, Nina Corporation I, Inc., Nina Company II, LLC and Nina Company III, LLC (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 29, 2015 (File No. 001-33664)).</u></a>
2.2	<a href="#"><u>Contribution Agreement, dated March 31, 2015, by and among Advance/Newhouse Partnership, A/NPC Holdings LLC, Charter Communications, Inc., CCH I, LLC, and Charter Communications Holding Company, LLC (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 1, 2015 (File No. 001-33664)).</u></a>
3.1	<a href="#"><u>Certificate of Formation of CCO Holdings, LLC, as amended (incorporated herein by reference to Exhibit 3.5 to CCO Holdings, LLC's Registration Statement on Form S-4 filed with the SEC on October 7, 2016 (File No. 333-214024)).</u></a>
3.2	<a href="#"><u>Second Amended and Restated Limited Liability Company Agreement of CCO Holdings, LLC (incorporated herein by reference to Exhibit 3.6 to CCO Holdings, LLC's Registration Statement on Form S-4 filed with the SEC on October 7, 2016 (File No. 333-214024)).</u></a>
3.3	<a href="#"><u>Amended and Restated Certificate of Incorporation of CCO Holdings Capital Corp. (incorporated by reference to Exhibit 3.3 to the annual report on Form 10-K of CCO Holdings, LLC and CCO Holdings Capital Corp. filed on March 30, 2010 (File No. 333-112593)).</u></a>
3.4	<a href="#"><u>By-laws of CCO Holdings Capital Corp. (incorporated by reference to Exhibit 3.6 to the registration statement on Form S-4 of CCO Holdings, LLC and CCO Holdings Capital Corporation filed on February 6, 2004 (File No. 333-112593)).</u></a>
4.1(a)	<a href="#"><u>Amended and Restated Stockholders Agreement, dated March 31, 2015, by and among Charter Communications, Inc., Liberty Broadband Corporation and Advance/Newhouse Partnership (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 1, 2015 (File No. 001-33664)).</u></a>
4.1(b)	<a href="#"><u>Second Amended and Restated Stockholders Agreement, dated May 23, 2015, by and among Charter Communications, Inc., CCH I, LLC, Liberty Broadband Corporation and Advance/Newhouse Partnership (incorporated by reference to Annex C to the registration statement on Form S-4 filed by CCH I, LLC on June 26, 2015 (File No. 333-205240)).</u></a>
4.2	<a href="#"><u>Indenture dated as of November 5, 2014, by and among CCO Holdings, LLC, CCO Holdings Capital Corp. and CCOH Safari, LLC, as Issuers, Charter Communications, Inc., as Parent Guarantor, and The Bank of New York Mellon Trust Company, N.A., as Trustee (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on November 10, 2014 (File No. 001-33664)).</u></a>
4.3	<a href="#"><u>Indenture, dated as of July 23, 2015, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp. and CCO Safari II, LLC, as issuers, and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 27, 2015 (File No. 001-33664)).</u></a>
4.4	<a href="#"><u>First Supplemental Indenture, dated as of July 23, 2015, among CCO Safari II, LLC, as escrow issuer, CCH II, LLC, as limited guarantor, and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 27, 2015 (File No. 001-33664)).</u></a>
4.5	<a href="#"><u>Form of 4.908% Senior Secured Notes due 2025 (incorporated by reference to Exhibit 4.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 27, 2015 (File No. 001-33664)).</u></a>
4.6	<a href="#"><u>Form of 6.384% Senior Secured Notes due 2035 (incorporated by reference to Exhibit 4.6 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 27, 2015 (File No. 001-33664)).</u></a>
4.7	<a href="#"><u>Form of 6.484% Senior Secured Notes due 2045 (incorporated by reference to Exhibit 4.7 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 27, 2015 (File No. 001-33664)).</u></a>
4.8	<a href="#"><u>Form of 6.834% Senior Secured Notes due 2055 (incorporated by reference to Exhibit 4.8 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 27, 2015 (File No. 001-33664)).</u></a>
4.9	<a href="#"><u>Indenture, dated as of November 20, 2015, among CCO Holdings, LLC, CCO Holdings Capital Corp. and CCOH Safari, LLC, as issuers, and The Bank of New York Mellon Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on November 25, 2015 (File No. 001-33664)).</u></a>

- 4.10 [Seventh Supplemental Indenture, dated as of April 21, 2016, among CCO Holdings, LLC, CCO Holdings Capital Corp., Charter Communications, Inc., as guarantor, and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 27, 2016 \(File No. 001-33664\)\).](#)
- 4.11 [Form of 5.500% Senior Notes due 2026 \(incorporated herein by reference to Exhibit 4.2 to the Current Report on Form 8-K of Charter Communications, Inc. filed April 27, 2016\).](#)
- 4.12 [Second Supplemental Indenture, dated as of May 18, 2016, by and among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., CCO Safari II, LLC and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 24, 2016 \(File No. 001-33664\)\).](#)
- 4.13 [Third Supplemental Indenture, dated as of May 18, 2016, by and among CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 24, 2016 \(File No. 001-33664\)\).](#)
- 4.14 [Second Supplemental Indenture, dated as of May 18, 2016, by and among CCO Holdings, LLC, CCO Holdings Capital Corp., CCOH Safari, LLC and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 24, 2016 \(File No. 001-33664\)\).](#)
- 4.15 [Fourth Supplemental Indenture, dated as of November 1, 2016, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, as parent guarantor, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.5 to Registration Statement on Form S-4 filed by CCO Holdings, LLC on October 6, 2017 \(File No. 333-220863\)\).](#)
- 4.16 [Third Supplemental Indenture, dated as of February 6, 2017, among CCO Holdings, LLC, CCO Holdings Capital Corp., and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated herein by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 6, 2017 \(File No. 001-33664\)\).](#)
- 4.17 [Form of 5.125% Senior Notes due 2027 \(incorporated herein by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 6, 2017 \(File No. 001-33664\)\).](#)
- 4.18 [Fifth Supplemental Indenture, dated as of April 20, 2017, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., the guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 26, 2017 \(File No. 001-33664\)\).](#)
- 4.19 [Form of 5.375% Senior Secured Notes due 2047 \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 26, 2017 \(File No. 001-33664\)\).](#)
- 4.20 [Sixth Supplemental Indenture, dated as of July 6, 2017, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., the guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 12, 2017 \(File No. 001-33664\)\).](#)
- 4.21 [Form of 3.750% Senior Secured Notes due 2028 \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 12, 2017 \(File No. 001-33664\)\).](#)
- 4.22 [Fourth Supplemental Indenture, dated as of August 8, 2017, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on August 14, 2017 \(File No. 001-33664\)\).](#)
- 4.23 [Form of 5.000% Senior Notes due 2028 \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on August 14, 2017 \(File No. 001-33664\)\).](#)
- 4.24 [Seventh Supplemental Indenture, dated as of September 18, 2017, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., the guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on September 21, 2017 \(File No. 001-33664\)\).](#)
- 4.25 [Form of 4.200% Senior Secured Notes due 2028 \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on September 21, 2017 \(File No. 001-33664\)\).](#)
- 4.26 [Eighth Supplemental Indenture, dated as of December 21, 2017, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., CCO Holdings, LLC, the subsidiary guarantor parties thereto and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.5 to Form S-3 filed by Charter Communications, Inc. on December 22, 2017 \(File No. 333-222241\)\).](#)

- 4.27 [Ninth Supplemental Indenture, dated as of April 17, 2018, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 20, 2018 \(File No. 001-33664\)\).](#)
- 4.28 [Form of 5.375% Senior Secured Notes due 2038 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 20, 2018 \(File No. 001-33664\)\).](#)
- 4.29 [Form of 5.750% Senior Secured Notes due 2048 \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 20, 2018 \(File No. 001-33664\)\).](#)
- 4.30 [Tenth Supplemental Indenture, dated as of July 3, 2018, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 9, 2018 \(File No. 001-33664\)\).](#)
- 4.31 [Form of Senior Secured Floating Notes due 2024 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 9, 2018 \(File No. 001-33664\)\).](#)
- 4.32 [Form of 4.500% Senior Secured Notes due 2024 \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 9, 2018 \(File No. 001-33664\)\).](#)
- 4.33 [Eleventh Supplemental Indenture dated as of July 27, 2018 among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.7 to Form S-3 filed by Charter Communications, Inc. on October 30, 2023 \(File No. 333-275214-116\)\).](#)
- 4.34 [Twelfth Supplemental Indenture, dated as of January 17, 2019, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 24, 2019 \(File No. 001-33664\)\).](#)
- 4.35 [Form of 5.050% Senior Secured Notes due 2029 \(incorporated by reference to Exhibit 4.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 24, 2019 \(File No. 001-33664\)\).](#)
- 4.36 [Indenture, dated as of May 23, 2019, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 30, 2019 \(File No. 001-33664\)\).](#)
- 4.37 [First Supplemental Indenture, dated as of May 23, 2019, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 30, 2019 \(File No. 001-33664\)\).](#)
- 4.38 [Form of 5.375% Senior Notes due 2029 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 30, 2019 \(File No. 001-33664\)\).](#)
- 4.39 [Thirteenth Supplemental Indenture dated as of June 21, 2019 among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.8 to Form S-3 filed by Charter Communications, Inc. on October 30, 2023 \(File No. 333-275214-116\)\).](#)
- 4.40 [Fourteenth Supplemental Indenture, dated as of July 10, 2019, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 10, 2019 \(File No. 001-33664\)\).](#)
- 4.41 [Form of 5.125% Senior Secured Notes due 2049 \(incorporated by reference to Exhibit 4.6 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 10, 2019 \(File No. 001-33664\)\).](#)
- 4.42 [Second Supplemental Indenture, dated as of October 1, 2019, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 7, 2019\).](#)
- 4.43 [Form of 4.750% Senior Notes due 2030 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 7, 2019 \(File No. 001-33664\)\).](#)
- 4.44 [Fifteenth Supplemental Indenture, dated as of October 24, 2019, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 30, 2019 \(File No. 001-33664\)\).](#)

- 4.45 [Form of 4.800% Senior Secured Notes due 2050 \(incorporated by reference to Exhibit 4.6 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 30, 2019 \(File No. 001-33664\)\).](#)
- 4.46 [Third Supplemental Indenture, dated as of February 18, 2020, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 21, 2020 \(File No. 001-33664\)\).](#)
- 4.47 [Form of 4.500% Senior Notes due 2030 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 21, 2020 \(File No. 001-33664\)\).](#)
- 4.48 [Fourth Supplemental Indenture, dated as of March 18, 2020, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 23, 2020 \(File No. 001-33664\)\).](#)
- 4.49 [Form of 4.500% Senior Notes due 2032 \(incorporated by reference to Exhibit 4.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 23, 2020 \(File No. 001-33664\)\).](#)
- 4.50 [Sixteenth Supplemental Indenture, dated as of April 17, 2020, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 17, 2020 \(File No. 001-33664\)\).](#)
- 4.51 [Form of 2.800% Senior Secured Notes due 2031 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 17, 2020 \(File No. 001-33664\)\).](#)
- 4.52 [Form of 3.700% Senior Secured Notes due 2051 \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 17, 2020 \(File No. 001-33664\)\).](#)
- 4.53 [Fifth Supplemental Indenture, dated as of July 9, 2020, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 13, 2020 \(File No. 001-33664\)\).](#)
- 4.54 [Form of 4.250% Senior Notes due 2031 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 13, 2020 \(File No. 001-33664\)\).](#)
- 4.55 [Seventeenth Supplemental Indenture dated as of November 19, 2020 among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.9 to Form S-3 filed by Charter Communications, Inc. on October 30, 2023 \(File No. 333-275214-116\)\).](#)
- 4.56 [Eighteenth Supplemental Indenture, dated as of December 4, 2020, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on December 4, 2020 \(File No. 001-33664\)\).](#)
- 4.57 [Form of 2.300% Senior Secured Notes due 2032 \(incorporated by reference to Exhibit 4.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on December 4, 2020 \(File No. 001-33664\)\).](#)
- 4.58 [Form of 3.850% Senior Secured Notes due 2061 \(incorporated by reference to Exhibit 4.6 to the Current Report on Form 8-K filed by Charter Communications, Inc. on December 4, 2020 \(File No. 001-33664\)\).](#)
- 4.59 [Nineteenth Supplemental Indenture, dated as of March 4, 2021, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 4, 2021 \(File No. 001-33664\)\).](#)
- 4.60 [Form of 3.500% Senior Secured Notes due 2041 \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 4, 2021 \(File No. 001-33664\)\).](#)
- 4.61 [Form of 3.900% Senior Secured Notes due 2052 \(incorporated by reference to Exhibit 4.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 4, 2021 \(File No. 001-33664\)\).](#)
- 4.62 [Sixth Supplemental Indenture, dated as of April 22, 2021, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 27, 2021 \(File No. 001-33664\)\).](#)
- 4.63 [Form of 4.500% Senior Notes due 2033 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 27, 2021 \(File No. 001-33664\)\).](#)

- 4.64 [Twentieth Supplemental Indenture, dated as of June 2, 2021, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.6 to the Current Report on Form 8-K filed by Charter Communications, Inc. on June 2, 2021, 2021 \(File No. 001-33664\)\).](#)
- 4.65 [Form of 4.400% Senior Notes due 2061 \(incorporated by reference to Exhibit 4.8 to the Current Report on Form 8-K filed by Charter Communications, Inc. on June 2, 2021, 2021 \(File No. 001-33664\)\).](#)
- 4.66 [Seventh Supplemental Indenture, dated as of August 16, 2021, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on August 18, 2021 \(File No. 001-33664\)\).](#)
- 4.67 [Form of 4.250% Senior Notes due 2034 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on August 18, 2021 \(File No. 001-33664\)\).](#)
- 4.68 [Twenty-First Supplemental Indenture, dated as of October 12, 2021, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 12, 2021 \(File No. 001-33664\)\).](#)
- 4.69 [Form of 2.250% Senior Secured Notes due 2029 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 12, 2021 \(File No. 001-33664\)\).](#)
- 4.70 [Form of 3.500% Senior Secured Notes due 2042 \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 12, 2021 \(File No. 001-33664\)\).](#)
- 4.71 [Form of 3.950% Senior Secured Notes due 2062 \(incorporated by reference to Exhibit 4.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 12, 2021 \(File No. 001-33664\)\).](#)
- 4.72 [Eighth Supplemental Indenture, dated as of January 19, 2022, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee. \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 25, 2022 \(File No. 001-33664\)\).](#)
- 4.73 [Form of 4.750% Senior Notes due 2032 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 25, 2022 \(File No. 001-33664\)\).](#)
- 4.74 [Twenty-Second Supplemental Indenture, dated as of March 15, 2022, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent. \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 15, 2022 \(File No. 001-33664\)\).](#)
- 4.75 [Form of 4.400% Senior Notes due 2033 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 15, 2022 \(File No. 001-33664\)\).](#)
- 4.76 [Form of 5.250% Senior Notes due 2053 \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 15, 2022 \(File No. 001-33664\)\).](#)
- 4.77 [Form of 5.500% Senior Notes due 2063 \(incorporated by reference to Exhibit 4.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 15, 2022 \(File No. 001-33664\)\).](#)
- 4.78 [Ninth Supplemental Indenture, dated as of August 9, 2022, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on August 15, 2022 \(File No. 001-33664\)\).](#)
- 4.79 [Form of 6.375% Senior Notes due 2029 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on August 15, 2022 \(File No. 001-33664\)\).](#)
- 4.80 [Tenth Supplemental Indenture, dated as of February 13, 2023, among CCO Holdings, LLC, CCO Holdings Capital Corp. and The Bank of New York Mellon Trust Company, N.A., as trustee \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 16, 2023 \(File No. 001-33664\)\).](#)
- 4.81 [Form of 7.375% Senior Notes due 2031 \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 16, 2023 \(File No. 001-33664\)\).](#)
- 4.82 [Twenty-Third Supplemental Indenture, dated as of November 7, 2023, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent \(incorporated by reference to Exhibit 4.82 to the Annual Report on Form 10-K of Charter Communications, Inc. filed on February 2, 2024 \(File No. 001-33664\)\).](#)

- 4.83 [Twenty-Fourth Supplemental Indenture, dated as of November 10, 2023, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., as issuers, CCO Holdings, LLC, the subsidiary guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent, \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on November 13, 2023 \(File No. 001-33664\)\).](#)
- 4.84 [Form of 6.150% Senior Notes due 2026 \(incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on November 13, 2023 \(File No. 001-33664\)\).](#)
- 4.85 [Form of 6.650% Senior Notes due 2034 \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on November 13, 2023 \(File No. 001-33664\)\).](#)
- 4.86 Indenture, dated as of April 30, 1992 (the “TWCE Indenture”), as amended by the First Supplemental Indenture, dated as of June 30, 1992, among Time Warner Entertainment Company, L.P. (“TWE”), Time Warner Companies, Inc. (“TWCI”), certain of TWCI’s subsidiaries that are parties thereto and The Bank of New York, as Trustee (incorporated herein by reference to Exhibits 10(g) and 10(h) to TWCI’s Current Report on Form 8-K dated June 26, 1992 and filed with the SEC on July 15, 1992 (File No. 1-8637)). (P)
- 4.87 Second Supplemental Indenture to the TWCE Indenture, dated as of December 9, 1992, among TWE, TWCI, certain of TWCI’s subsidiaries that are parties thereto and The Bank of New York, as Trustee (incorporated herein by reference to Exhibit 4.2 to Amendment No. 1 to TWE’s Registration Statement on Form S-4 dated and filed with the SEC on October 25, 1993 (Registration No. 33-67688) (the “TWE October 25, 1993 Registration Statement”)). (P)
- 4.88 Third Supplemental Indenture to the TWCE Indenture, dated as of October 12, 1993, among TWE, TWCI, certain of TWCI’s subsidiaries that are parties thereto and The Bank of New York, as Trustee (incorporated herein by reference to Exhibit 4.3 to the TWE October 25, 1993 Registration Statement). (P)
- 4.89 Fourth Supplemental Indenture to the TWCE Indenture, dated as of March 29, 1994, among TWE, TWCI, certain of TWCI’s subsidiaries that are parties thereto and The Bank of New York, as Trustee (incorporated herein by reference to Exhibit 4.4 to TWE’s Annual Report on Form 10-K for the year ended December 31, 1993 and filed with the SEC on March 30, 1994 (File No. 1-12878)). (P)
- 4.90 Fifth Supplemental Indenture to the TWCE Indenture, dated as of December 28, 1994, among TWE, TWCI, certain of TWCI’s subsidiaries that are parties thereto and The Bank of New York, as Trustee (incorporated herein by reference to Exhibit 4.5 to TWE’s Annual Report on Form 10-K for the year ended December 31, 1994 and filed with the SEC on March 30, 1995 (File No. 1-12878)). (P)
- 4.91 [Sixth Supplemental Indenture to the TWCE Indenture, dated as of September 29, 1997, among TWE, TWCI, certain of TWCI’s subsidiaries that are parties thereto and The Bank of New York, as Trustee \(incorporated herein by reference to Exhibit 4.7 to Historic TW Inc.’s \(“Historic TW”\) Annual Report on Form 10-K for the year ended December 31, 1997 and filed with the SEC on March 25, 1998 \(File No. 1-12259\) \(the “Time Warner 1997 Form 10-K”\).](#)
- 4.92 [Seventh Supplemental Indenture to the TWCE Indenture, dated as of December 29, 1997, among TWE, TWCI, certain of TWCI’s subsidiaries that are parties thereto and The Bank of New York, as Trustee \(incorporated herein by reference to Exhibit 4.8 to the Time Warner 1997 Form 10-K\).](#)
- 4.93 [Eighth Supplemental Indenture to the TWCE Indenture, dated as of December 9, 2003, among Historic TW, TWE, Warner Communications Inc. \(“WCI”\), American Television and Communications Corporation \(“ATC”\), TWC and The Bank of New York, as Trustee \(incorporated herein by reference to Exhibit 4.10 to Time Warner Inc.’s \(“Time Warner”\) Annual Report on Form 10-K for the year ended December 31, 2003 \(File No. 1-15062\)\).](#)
- 4.94 [Ninth Supplemental Indenture to the TWCE Indenture, dated as of November 1, 2004, among Historic TW, TWE, Time Warner NY Cable Inc., WCI, ATC, TWC and The Bank of New York, as Trustee \(incorporated herein by reference to Exhibit 4.1 to Time Warner’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2004 \(File No. 1-15062\)\).](#)
- 4.95 [Tenth Supplemental Indenture to the TWCE Indenture, dated as of October 18, 2006, among Historic TW, TWE, TW NY Cable Holding Inc. \(“TW NY”\), Time Warner NY Cable LLC \(“TW NY Cable”\), TWC, WCI, ATC and The Bank of New York, as Trustee \(incorporated herein by reference to Exhibit 4.1 to Time Warner’s Current Report on Form 8-K dated and filed October 18, 2006 \(File No. 1-15062\)\).](#)
- 4.96 [Eleventh Supplemental Indenture to the TWCE Indenture, dated as of November 2, 2006, among TWE, TW NY, TWC and The Bank of New York, as Trustee \(incorporated herein by reference to Exhibit 99.1 to Time Warner’s Current Report on Form 8-K dated and filed November 2, 2006 \(File No. 1-15062\)\).](#)
- 4.97 [Twelfth Supplemental Indenture to the TWCE Indenture, dated as of September 30, 2012, among Time Warner Cable Enterprises LLC \(“TWCE”\), TWC, TW NY, Time Warner Cable Internet Holdings II LLC \(“TWC Internet Holdings II”\) and The Bank of New York Mellon, as trustee, supplementing the Indenture dated April 30, 1992, as amended \(incorporated herein by reference to Exhibit 4.2 to TWC’s Current Report on Form 8-K dated September 30, 2012 and filed with the SEC on October 1, 2012 \(File No. 1-33335\) \(the “TWC September 30, 2012 Form 8-K”\).](#)

- 4.98 [Thirteenth Supplemental Indenture, dated as of May 18, 2016, by and among Time Warner Cable Enterprises LLC, the guarantors party thereto and The Bank of New York Mellon \(formerly known as The Bank of New York\), as trustee \(incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 24, 2016 \(File No. 001-33664\)\).](#)
- 4.99 [Indenture, dated as of April 9, 2007 \(the "TWC Indenture"\), among TWC, TW NY, TWE and The Bank of New York, as trustee \(incorporated herein by reference to Exhibit 4.1 to TWC's Current Report on Form 8-K dated April 9, 2007 and filed with the SEC on April 9, 2007 \(File No. 1-33335\) \(the "TWC April 4, 2007 Form 8-K"\).](#)
- 4.100 [First Supplemental Indenture to the TWC Indenture, dated as of April 9, 2007, among TWC, TW NY, TWE and The Bank of New York, as trustee \(incorporated herein by reference to Exhibit 4.2 to the TWC April 4, 2007 Form 8-K\).](#)
- 4.101 [Second Supplemental Indenture to the TWC Indenture, dated as of September 30, 2012, among TWC, TW NY, TWCE, TWC Internet Holdings II and The Bank of New York Mellon, as trustee, supplementing the Indenture dated April 9, 2007, as amended \(incorporated herein by reference to Exhibit 4.1 to the TWC September 30, 2012 Form 8-K\).](#)
- 4.102 [Third Supplemental Indenture, dated as of May 18, 2016, by and among Time Warner Cable Inc., TWC NewCo LLC and The Bank of New York Mellon \(formerly known as The Bank of New York\), as trustee \(incorporated by reference to Exhibit 4.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 24, 2016 \(File No. 001-33664\)\).](#)
- 4.103 [Fourth Supplemental Indenture, dated as of May 18, 2016, by and among TWC NewCo LLC, the guarantors party thereto and The Bank of New York Mellon \(formerly known as The Bank of New York\), as trustee \(incorporated by reference to Exhibit 4.6 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 24, 2016 \(File No. 001-33664\)\).](#)
- 4.104 [Form of TWC 6.55% Exchange Debentures due 2037 \(included as Exhibit C to the First Supplemental Indenture incorporated herein by reference to Exhibit 4.2 to the TWC April 4, 2007 Form 8-K\).](#)
- 4.105 [Form of TWC 7.30% Debentures due 2038 \(incorporated herein by reference to Exhibit 4.3 to the TWC June 16, 2008 Form 8-K\).](#)
- 4.106 [Form of TWC 6.75% Debentures due 2039 \(incorporated herein by reference to Exhibit 4.1 to TWC's Current Report on Form 8-K dated June 24, 2009 and filed with the SEC on June 29, 2009 \(File No. 1-33335\)\).](#)
- 4.107 [Form of TWC 5.875% Debentures due 2040 \(incorporated herein by reference to Exhibit 4.2 to the TWC November 9, 2010 Form 8-K\).](#)
- 4.108 [Form of TWC 5.75% Note due 2031 \(incorporated herein by reference to Exhibit 4.1 to TWC's Current Report on Form 8-K dated and filed with the SEC on May 26, 2011 \(File No. 1-33335\)\).](#)
- 4.109 [Form of TWC 5.5% Debenture due 2041 \(incorporated herein by reference to Exhibit 4.2 to the TWC Current Report on Form 8-K dated September 7, 2011 and filed with the SEC on September 12, 2011 \(File No. 1-33335\)\).](#)
- 4.110 [Form of TWC 4.5% Debenture due 2042 \(incorporated herein by reference to Exhibit 4.1 to TWC's Current Report on Form 8-K dated August 7, 2012 and filed with the SEC on August 10, 2012 \(File No. 1-33335\)\).](#)
- 4.111 [Form of TWC 5.25% Note due 2042 \(incorporated herein by reference to Exhibit 4.1 to TWC's Current Report on Form 8-K dated and filed with the SEC on June 27, 2012 \(File No. 1-33335\)\).](#)
- 4.112 [Description of Securities \(incorporated herein by reference to Exhibit 4.104 to the Annual Report on Form 10-K filed by Charter Communications, Inc. on January 27, 2023 \(File No. 001-33664\)\).](#)
- 10.1 [Exchange and Registration Rights Agreement, dated July 23, 2015 relating to the 3.579% Senior Secured Notes due 2020, 4.464% Senior Secured Notes due 2022, 4.908% Senior Secured Notes due 2025, 6.384% Senior Secured Notes due 2035, 6.484% Senior Secured Notes due 2045 and 6.834% Senior Secured Notes due 2055, between CCO Safari II, LLC and Goldman, Sachs & Co., Credit Suisse Securities \(USA\) LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated, Deutsche Bank Securities Inc. and UBS Securities LLC, as representatives of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 27, 2015 \(File No. 001-33664\)\).](#)
- 10.2 [Exchange and Registration Rights Agreement, dated April 21, 2016, relating to the 5.500% Senior Notes due 2026, among CCO Holdings, LLC, CCO Holdings Capital Corp., Charter Communications, Inc., as guarantor, and Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc., Credit Suisse Securities \(USA\) LLC, Deutsche Bank Securities Inc., Goldman, Sachs & Co., UBS Securities LLC and Wells Fargo Securities, LLC, as representatives of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 27, 2016 \(File No. 001-33664\)\).](#)

- 10.3 [Exchange and Registration Rights Agreement, dated February 6, 2017, relating to the 5.125% Senior Notes due 2027, among CCO Holdings, LLC, CCO Holdings Capital Corp., and Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc., Credit Suisse Securities \(USA\) LLC, Deutsche Bank Securities Inc., Goldman, Sachs & Co., UBS Securities LLC, and Wells Fargo Securities, LLC, as representatives of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 6, 2017 \(File No. 001-33664\)\).](#)
- 10.4 [Exchange and Registration Rights Agreement, dated March 29, 2017, relating to the 5.125% Senior Notes due 2027, among CCO Holdings, LLC, CCO Holdings Capital Corp., and Deutsche Bank Securities Inc., Merrill Lynch, Pierce, Fenner & Smith Incorporated, Citigroup Global Markets Inc., Credit Suisse Securities \(USA\) LLC, Goldman, Sachs & Co., UBS Securities LLC, and Wells Fargo Securities, LLC, as representatives of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 31, 2017 \(File No. 001-33664\)\).](#)
- 10.5 [Exchange and Registration Rights Agreement, dated April 20, 2017, relating to the 5.125% Senior Notes due 2027, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Citigroup Global Markets Inc., as a representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 26, 2017 \(File No. 001-33664\)\).](#)
- 10.6 [Exchange and Registration Rights Agreement, dated April 20, 2017, relating to the 5.375% Senior Notes due 2047, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., the guarantors party thereto and Citigroup Global Markets Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 26, 2017 \(File No. 001-33664\)\).](#)
- 10.7 [Exchange and Registration Rights Agreement, dated July 6, 2017, relating to the 3.750% Senior Notes due 2028, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., the guarantors party thereto and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 12, 2017 \(File No. 001-33664\)\).](#)
- 10.8 [Exchange and Registration Rights Agreement, dated July 6, 2017, relating to the 5.375% Senior Notes due 2047, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., the guarantors party thereto and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 12, 2017 \(File No. 001-33664\)\).](#)
- 10.9 [Exchange and Registration Rights Agreement, dated August 8, 2017, relating to the 5.000% Senior Notes due 2028, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on August 14, 2017 \(File No. 001-33664\)\).](#)
- 10.10 [Exchange and Registration Rights Agreement, dated September 18, 2017, relating to the 4.200% Senior Secured Notes due 2028, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., the guarantors party thereto and Merrill Lynch, Pierce, Fenner & Smith Incorporated and Citigroup Global Markets Inc., as representatives of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on September 21, 2017 \(File No. 001-33664\)\).](#)
- 10.11 [Exchange and Registration Rights Agreement, dated September 18, 2017, relating to the 5.375% Senior Secured Notes due 2047, among Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., the guarantors party thereto and Merrill Lynch, Pierce, Fenner & Smith Incorporated and Citigroup Global Markets Inc., as representatives of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on September 21, 2017 \(File No. 001-33664\)\).](#)
- 10.12 [Exchange and Registration Rights Agreement, dated October 17, 2017, relating to the 5.000% Senior Notes due 2028, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 20, 2017 \(File No. 001-33664\)\).](#)
- 10.13 [Exchange and Registration Rights Agreement, dated May 23, 2019, relating to the 5.375% Senior Notes due 2029, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Deutsche Bank Securities Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 30, 2019 \(File No. 001-33664\)\).](#)
- 10.14 [Exchange and Registration Rights Agreement, dated July 10, 2019, relating to the 5.375% Senior Notes due 2029, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Deutsche Bank Securities Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 10, 2019 \(File No. 001-33664\)\).](#)

- 10.15 [Exchange and Registration Rights Agreement, dated October 1, 2019, relating to the 4.750% Senior Notes due 2030, among CCO Holdings, LLC, CCO Holdings Capital Corp. and BofA Securities, Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 7, 2019 \(File No. 001-33664\)\).](#)
- 10.16 [Exchange and Registration Rights Agreement, dated October 24, 2019, relating to the 4.750% Senior Notes due 2030, among CCO Holdings, LLC, CCO Holdings Capital Corp. and BofA Securities, Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 30, 2019 \(File No. 001-33664\)\).](#)
- 10.17 [Exchange and Registration Rights Agreement, dated December 16, 2019, relating to the 4.750% Senior Notes due 2030, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Citigroup Global Markets, Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on December 16, 2019 \(File No. 001-33664\)\).](#)
- 10.18 [Exchange and Registration Rights Agreement, dated February 18, 2020, relating to the 4.500% Senior Notes due 2030, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Deutsche Bank Securities, Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 21, 2020 \(File No. 001-33664\)\).](#)
- 10.19 [2030 Exchange and Registration Rights Agreement, dated March 18, 2020, relating to the 4.500% Senior Notes due 2030, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Deutsche Bank Securities, Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 23, 2020 \(File No. 001-33664\)\).](#)
- 10.20 [2032 Exchange and Registration Rights Agreement, dated March 18, 2020, relating to the 4.500% Senior Notes due 2032, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Deutsche Bank Securities, Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 23, 2020 \(File No. 001-33664\)\).](#)
- 10.21 [Exchange and Registration Rights Agreement, dated July 9, 2020, relating to the 4.250% Senior Notes due 2031, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Morgan Stanley & Co. LLC, as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 13, 2020 \(File No. 001-33664\)\).](#)
- 10.22 [Exchange and Registration Rights Agreement, dated July 24, 2020, relating to the 4.250% Senior Notes due 2031, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Morgan Stanley & Co. LLC, as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on July 28, 2020 \(File No. 001-33664\)\).](#)
- 10.23 [Exchange and Registration Rights Agreement, dated October 12, 2020, relating to the 4.500% Senior Notes due 2032, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Deutsche Bank Securities Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 16, 2020 \(File No. 001-33664\)\).](#)
- 10.24 [Exchange and Registration Rights Agreement, dated April 22, 2021, relating to the 4.500% Senior Notes due 2033, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Deutsche Bank Securities Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on April 27, 2021 \(File No. 001-33664\)\).](#)
- 10.25 [Exchange and Registration Rights Agreement, dated June 2, 2021, relating to the 4.500% Senior Notes due 2033, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Deutsche Bank Securities Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on June 2, 2021 \(File No. 001-33664\)\).](#)
- 10.26 [Exchange and Registration Rights Agreement, dated August 16, 2021, relating to the 4.250% Senior Notes due 2034, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Morgan Stanley & Co. LLC, as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on August 18, 2021 \(File No. 001-33664\)\).](#)
- 10.27 [Exchange and Registration Rights Agreement, dated January 19, 2022, relating to the 4.750% Senior Notes due 2032, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Deutsche Bank Securities Inc., as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 25, 2022 \(File No. 001-33664\)\).](#)
- 10.28 [Exchange and Registration Rights Agreement, dated August 9, 2022, relating to the 6.375% Senior Notes due 2029, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Morgan Stanley & Co. LLC, as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on August 15, 2022 \(File No. 001-33664\)\).](#)

- 10.29 [Exchange and Registration Rights Agreement, dated February 13, 2023, relating to the 7.375% Senior Notes due 2031, among CCO Holdings, LLC, CCO Holdings Capital Corp. and Morgan Stanley & Co. LLC, as representative of the several Purchasers \(as defined therein\) \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 16, 2023 \(File No. 001-33664\)\).](#)
- 10.30(a) [Restatement Agreement dated as of May 18, 2016, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, the subsidiary guarantors party thereto, Bank of America, N.A., as administrative agent and the lenders party thereto \(incorporated by reference to Exhibit 10.5 to the Current Report on Form 8-K of Charter Communications, Inc. filed on May 24, 2016 \(File No. 001-33664\)\).](#)
- 10.30(b) [Amendment No. 1 dated as of December 23, 2016, to the Amended and Restated Credit Agreement dated as of March 18, 1999, as amended and restated on May 18, 2016, by and among Chart Communications Operating, LLC, CCO Holdings, LLC, the Lenders Party thereto and Bank of America, N.A., as Administrative Agent \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Charter Communications, Inc. filed on December 30, 2016 \(File No. 001-33664\)\).](#)
- 10.30(c) [Restatement Agreement dated as of December 21, 2017 to the Amended and Restated Credit Agreement dated as of March 18, 1999, as amended and restated on May 18, 2016, as amended by Amendment No. 1, dated as of December 23, 2016 and as further amended by that certain Incremental Activation Notice No. 1, dated as of January 19, 2017, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, the Lenders Party thereto and Bank of America, N.A., as Administrative Agent \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Charter Communications, Inc. filed on December 28, 2017 \(File No. 001-33664\)\).](#)
- 10.30(d) [Amendment No. 1, dated as of January 24, 2019, to \(i\) the Amended and Restated Credit Agreement, dated as of March 18, 1999, as amended and restated on December 21, 2017, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, certain subsidiaries of Charter Communications Operating, LLC, the lenders party thereto and Bank of America, N.A., as Administrative Agent and \(ii\) the Guarantee and Collateral Agreement, dated as of March 18, 1999, as amended and restated as of March 31, 2010, as further amended and restated on May 18, 2016, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, certain subsidiaries of Charter Communications Operating, LLC and Bank of America, N.A., as Administrative Agent \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 30, 2019 \(File No. 001-33664\)\).](#)
- 10.30(e) [Restatement Agreement, dated as of April 26 2019, to the Amended and Restated Credit Agreement, dated as of March 18, 1999, as amended and restated on December 21, 2017 and as amended by Amendment No. 1 as of January 24, 2019, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, certain subsidiaries of Charter Communications Operating, LLC, the lenders party thereto and Bank of America, N.A., as Administrative Agent \(incorporated by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q of Charter Communications, Inc. filed April 30, 2019 \(File No. 001-33664\)\).](#)
- 10.30(f) [Amendment No. 1, dated as of October 24, 2019, to the Amended and Restated Credit Agreement, dated as of March 18, 1999, as amended and restated on April 26, 2019, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, certain subsidiaries of Charter Communications Operating, LLC, the lenders party thereto and Bank of America, N.A., as administrative agent \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on October 30, 2019 \(File No. 001-33664\)\).](#)
- 10.30(g) [Amendment No. 2, dated as of May 26, 2022, to \(i\) the Amended and Restated Credit Agreement, dated as of March 18, 1999, as amended and restated on April 26, 2019 and as amended by Amendment No. 1 on October 24, 2019, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, certain subsidiaries of Charter Communications Operating, LLC, the lenders party thereto and Bank of America, N.A., as administrative agent and \(ii\) the Amended and Restated Guarantee and Collateral Agreement, dated as of March 18, 1999, as amended and restated as of March 6, 2007, as amended and restated as of March 31, 2010, as amended and restated as of May 18, 2016 and as further amended as of January 24, 2019, by Charter Communications Operating, LLC, CCO Holdings, LLC, certain subsidiaries of Charter Communications Operating, LLC and the Bank of America, N.A., as administrative agent \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on June 2, 2022 \(File No. 001-33664\)\).](#)
- 10.30(h) [Amendment No. 3, dated as of February 10, 2023, to the Amended and Restated Credit Agreement, dated as of March 18, 1999, as amended and restated on April 26, 2019, as amended by Amendment No. 1 on October 24, 2019 and as further amended by Amendment No. 2 on May 26, 2022, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, certain of Charter Communications Operating, LLC's subsidiaries, the lenders party thereto and Bank of America, N.A., as administrative agent \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 16, 2023 \(File No. 001-33664\)\).](#)

- 10.30(i) [Amendment No. 4, dated as of March 23, 2023, to the Amended and Restated Credit Agreement, dated as of March 18, 1999, as amended and restated on April 26, 2019, as amended by Amendment No. 1 on October 24, 2019 and as further amended by Amendment No. 2 on May 26, 2022 and as further amended by Amendment No. 3 on February 10, 2023, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, certain of Charter Communications Operating, LLC's subsidiaries, the lenders party thereto and Bank of America, N.A., as administrative agent \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on March 29, 2023 \(File No. 001-33664\)\).](#)
- 10.30(j) [Amendment No. 5, dated as of December 7, 2023, to the Amended and Restated Credit Agreement, dated as of March 18, 1999, as amended and restated on April 26, 2019, as amended by Amendment No. 1 on October 24, 2019 and as further amended by Amendment No. 2 on May 26, 2022 and as further amended by Amendment No. 3 on February 10, 2023 and as further amended by Amendment No. 4 on March 23, 2023, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, certain of Charter Communications Operating, LLC's subsidiaries, the lenders party thereto and Bank of America, N.A., as administrative agent \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on December 13, 2023 \(File No. 001-33664\)\).](#)
- 10.31 [Joinder Agreement to Registration Rights Agreement, dated as of May 18, 2016, by and among CCO Safari II, LLC, CCH II, LLC, Charter Communications Operating, LLC, Charter Communications Operating Capital Corp., CCO Holdings, LLC and the other guarantors party thereto \(incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K of Charter Communications, Inc. filed May 24, 2016\).](#)
- 10.32 [Joinder Agreement to Registration Rights Agreement, dated as of May 18, 2016, by CCO Holdings, LLC and CCO Holdings Capital Corp \(incorporated herein by reference to Exhibit 10.2 to the Current Report on Form 8-K of Charter Communications, Inc. filed May 24, 2016\).](#)
- 10.33 [Escrow Assumption Agreement, dated as of May 18, 2016, by and among CCO Safari III, LLC, Charter Communications Operating, LLC, Bank of America, N.A., as escrow administrative agent and Bank of America, N.A., as administrative agent \(incorporated herein by reference to Exhibit 10.3 to the Current Report on Form 8-K of Charter Communications, Inc. filed May 24, 2016\).](#)
- 10.34 [Incremental Activation Notice, dated as of May 18, 2016, by and among Charter Communications Operating, LLC, CCO Holdings, LLC, the subsidiary guarantors party thereto, Bank of America, N.A., as administrative agent and the lenders party thereto \(incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K of Charter Communications, Inc. filed on May 24, 2016 \(File No. 001-33664\)\).](#)
- 10.35 [Collateral Agreement, dated as of May 18, 2016, by Charter Communications Operating, LLC, Charter Communications Operating Capital Corp. and the other grantors party thereto in favor of The Bank of New York Mellon Trust Company, N.A., as collateral agent \(incorporated by reference to Exhibit 10.6 to the Current Report on Form 8-K of Charter Communications, Inc. filed on May 24, 2016 \(File No. 001-33664\)\).](#)
- 10.36 [First Lien Intercreditor Agreement, dated as of May 18, 2016, by and among Charter Communications Operating, LLC, the other grantors party thereto, Bank of America, N.A., as credit agreement collateral agent for the credit agreement secured parties, The Bank of New York Mellon Trust Company, N.A., as notes collateral agent for the indenture secured parties, and each additional agent from time to time party thereto \(incorporated by reference to Exhibit 10.7 to the Current Report on Form 8-K of Charter Communications, Inc. filed on May 24, 2016 \(File No. 001-33664\)\).](#)
- 10.37 [Amended and Restated Limited Liability Company Agreement of Charter Communications Holdings, LLC, dated as of May 18, 2016, by and among Charter Holdings, Charter, CCH II, LLC, Advance/Newhouse Partnership and the other party or parties thereto \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Charter Communications, Inc. filed on May 19, 2016 \(File No. 001-33664\)\).](#)
- 10.38 [Exchange Agreement, dated as of May 18, 2016, by and among Charter Holdings, Charter, Advance/Newhouse Partnership and the other party or parties thereto \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of Charter Communications, Inc. filed on May 19, 2016 \(File No. 001-33664\)\).](#)
- 10.39 [Registration Rights Agreement, dated as of May 18, 2016, by and among Charter, Advance/Newhouse Partnership and Liberty Broadband \(incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K of Charter Communications, Inc. filed on May 19, 2016 \(File No. 001-33664\)\).](#)
- 10.40 [Tax Receivables Agreement, dated as of May 18, 2016, by and among Charter, Advance/Newhouse Partnership and the other party or parties thereto \(incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K of Charter Communications, Inc. filed on May 19, 2016 \(File No. 001-33664\)\).](#)
- 10.41 [Wireless Operational Cooperation Agreement dated as of May 5, 2017 between Charter Communications, Inc. and Comcast Corporation \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on May 8, 2017 \(File No. 001-33664\)\).](#)
- 10.42+ [Charter Communications, Inc. Executive Bonus Plan \(incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of Charter Communications, Inc. filed on May 8, 2012 \(File No. 001-33664\)\).](#)
- 10.43+ [Form of First Amended and Restated Indemnification Agreement \(incorporated by reference to Exhibit 10.3 to the Quarterly Report on Form 10-Q of Charter Communications, Inc. filed on August 6, 2013 \(File No. 001-33664\)\).](#)

- 10.44+ [Charter Communications, Inc. 2016 Executive Incentive Performance Plan \(incorporated by reference to Appendix A to the proxy statement for the Charter Communications, Inc. 2016 Annual Meeting of Stockholders filed March 17, 2016 \(File No. 001-33664\)\).](#)
- 10.45+ [Charter Communications, Inc. Amended and Restated 2009 Stock Incentive Plan \(incorporated by reference to Exhibit 10.6 to the Current Report on Form 8-K of Charter Communications, Inc. filed on May 19, 2016 \(File No. 001-33664\)\).](#)
- 10.46+ [Amendment to the Charter Communications, Inc. Amended and Restated 2009 Stock Incentive Plan, dated as of October 25, 2016 \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Charter Communications, Inc. filed on October 28, 2016 \(File No. 001-33664\)\).](#)
- 10.47+ [Charter Communications, Inc.'s Amended and Restated Supplemental Deferred Compensation Plan, dated as of September 1, 2011 \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on September 2, 2011 \(File No. 001-33664\)\).](#)
- 10.48+ [Form of Non-Qualified Time Vesting Stock Option Agreement dated April 26, 2011 \(incorporated by reference to Exhibit 10.3 to the Quarterly Report on Form 10-Q filed by Charter Communications, Inc. on August 2, 2011 \(File No. 001-33664\)\).](#)
- 10.49+ [Form of Non-Qualified Price Vesting Stock Option Agreement dated April 26, 2011 \(incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q filed by Charter Communications, Inc. on August 2, 2011 \(File No. 001-33664\)\).](#)
- 10.50+ [Form of Notice of LTIP Award Agreement Changes \(RSU Awards\) \(incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 22, 2014 \(File No. 001-33664\)\).](#)
- 10.51+ [Form of Notice of LTIP Award Agreement Changes \(Time-Vesting Option Awards\) \(incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 22, 2014 \(File No. 001-33664\)\).](#)
- 10.52+ [Form of Notice of LTIP Award Agreement Changes \(Restricted Stock Awards\) \(incorporated by reference to Exhibit 10.5 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 22, 2014 \(File No. 001-33664\)\).](#)
- 10.53+ [Form of Notice of LTIP Award Agreement Changes \(Performance-Vesting Option Awards\) \(incorporated by reference to Exhibit 10.6 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 22, 2014 \(File No. 001-33664\)\).](#)
- 10.54+ [Form of Stock Option Agreement dated January 15, 2014 \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 22, 2014 \(File No. 001-33664\)\).](#)
- 10.55+ [Form of Restricted Stock Unit Agreement dated January 15, 2014 \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on January 22, 2014 \(File No. 001-33664\)\).](#)
- 10.56+ [Form of Amendment to Nonqualified Stock Option Agreements Granted Under the Charter Communications, Inc. Amended and Restated 2009 Stock Incentive Plan, dated as of October 25, 2016 \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of Charter Communications, Inc. filed on October 28, 2016 \(File No. 001-33664\)\).](#)
- 10.57+ [Form of Performance-Vesting Stock Option Agreement granted to certain executive officers in 2016 under the Charter Communications, Inc. Amended and Restated 2009 Stock Incentive Plan \(incorporated by reference to Exhibit 10.102 to the Annual Report on Form 10-K of Charter Communications, Inc. filed on February 16, 2017 \(File No. 001-33664\)\).](#)
- 10.58+ [Form of Performance-Vesting Restricted Stock Unit Agreement granted to certain executive officers in 2016 under the Charter Communications, Inc. Amended and Restated 2009 Stock Incentive Plan \(incorporated by reference to Exhibit 10.103 to the Annual Report on Form 10-K of Charter Communications, Inc. filed on February 16, 2017 \(File No. 001-33664\)\).](#)
- 10.59+ [Charter Communications, Inc. 2019 Stock Incentive Plan \(incorporated by reference to Annex A to the proxy statement for the Charter Communications, Inc. 2019 Annual Meeting of Stockholders filed March 14, 2019 \(File No. 001-33664\)\).](#)
- 10.60+ [Amendment to the Charter Communications, Inc. 2019 Stock Incentive Plan, dated as of January 28, 2020 \(incorporated by reference to Exhibit 10.152 to the Annual Report on Form 10-K of Charter Communications, Inc. filed on January 31, 2020 \(File No. 001-33664\)\).](#)
- 10.61+ [Form of Nonqualified Stock Option Agreement under the Charter Communications, Inc. 2019 Stock Incentive Plan \(incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q of Charter Communications, Inc. filed July 26, 2019 \(File No. 001-33664\)\).](#)
- 10.62+ [Form of Restricted Stock Unit Agreement under the Charter Communications, Inc. 2019 Stock Incentive Plan \(incorporated by reference to Exhibit 10.3 to the Quarterly Report on Form 10-Q of Charter Communications, Inc. filed July 26, 2019 \(File No. 001-33664\)\).](#)

- 10.63+ [Form of Restricted Stock Agreement under the Charter Communications, Inc. 2019 Stock Incentive Plan \(incorporated by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q of Charter Communications, Inc. filed July 26, 2019 \(File No. 001-33664\)\).](#)
- 10.64+ [Form of Performance-Vesting Stock Option Agreement \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 24, 2023 \(File No. 001-33664\)\).](#)
- 10.65+ [Form of Performance-Vesting Restricted Stock Unit Agreement \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 24, 2023 \(File No. 001-33664\)\).](#)
- 10.66+ [Time Warner Cable Inc. 2006 Stock Incentive Plan \(incorporated herein by reference to Exhibit 10.45 to TWC's Current Report on Form 8-K dated February 13, 2007 and filed with the SEC on February 13, 2007\).](#)
- 10.67+ [Time Warner Cable Inc. 2006 Stock Incentive Plan, as amended, effective March 12, 2009 \(incorporated herein by reference to Exhibit 10.1 to TWC's Quarterly Report on Form 10-Q for the quarter ended March 31, 2009\).](#)
- 10.68+ [Time Warner Cable Inc. 2011 Stock Incentive Plan \(incorporated herein by reference to Annex A to TWC's definitive Proxy Statement dated April 6, 2011 and filed with the SEC on April 6, 2011\).](#)
- 10.69+ [Amended and Restated Employment Agreement, dated as of September 20, 2022, by and between Charter Communications, Inc. and Thomas M. Rutledge \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on September 21, 2022 \(File No. 001-33664\)\).](#)
- 10.70+ [Employment Agreement, dated as of August 15, 2023, by and between Charter Communications, Inc. and David G. Ellen \(incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Charter Communications, Inc. on August 21, 2023 \(File No. 001-33664\)\).](#)
- 10.71(a)+ [Amended and Restated Employment Agreement, dated as of September 20, 2022, by and between Charter Communications, Inc. and Christopher L. Winfrey \(incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Charter Communications, Inc. on September 21, 2022 \(File No. 001-33664\)\).](#)
- 10.71(b)+ [Amendment to Amended and Restated Employment Agreement dated as of February 22, 2023 by and between Charter Communications Inc. and Christopher L. Winfrey \(incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 24, 2023 \(File No. 001-33664\)\).](#)
- 10.72(a)+ [Employment Agreement, dated as of September 20, 2022, by and between Charter Communications, Inc. and Richard J. DiGeronimo \(incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed by Charter Communications, Inc. on September 21, 2022 \(File No. 001-33664\)\).](#)
- 10.72(b)+ [Amendment to Employment Agreement dated as of February 22, 2023 by and between Charter Communications Inc. and Richard J. DiGeronimo \(incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed by Charter Communications, Inc. on February 24, 2023 \(File No. 001-33664\)\).](#)
- 10.73+ [Employment Agreement, dated as of January 26, 2023, by and between Charter Communications, Inc. and Jessica Fischer \(incorporated by reference to Exhibit 10.71\(b\) to the Annual Report on Form 10-K of Charter Communications, Inc. filed on January 27, 2023 \(File No. 001-33664\)\).](#)
- 10.74+ [Employment Agreement, dated as of July 1, 2022, by and between Charter Communications, Inc. and Adam Ray \(incorporated by reference to Exhibit 10.74 to the Annual Report on Form 10-K of Charter Communications, Inc. filed on February 2, 2024 \(File No. 001-33664\)\).](#)
- 10.75 [Letter Agreement, dated as of December 23, 2016, between Charter Communications, Inc. and Advance/Newhouse Partnership \(incorporated by reference to Exhibit 99.1 to the Current Report on Form 8-K of Charter Communications, Inc. filed on December 28, 2016 \(File No. 001-33664\)\).](#)
- 10.76 [Amendment to Letter Agreement, dated as of December 21, 2017, between Charter Communications, Inc. and Advance/Newhouse Partnership \(incorporated by reference to Exhibit 99.1 to the Current Report on Form 8-K of Charter Communications, Inc. filed on December 22, 2017 \(File No. 001-33664\)\).](#)
- 10.77 [Letter Agreement, dated as of February 23, 2021, between Charter Communications, Inc. and Liberty Broadband Corporation \(incorporated by reference to Exhibit 99.1 to the Current Report on Form 8-K of Charter Communications, Inc. filed on February 24, 2021 \(File No. 001-33664\)\).](#)
- 22.1\* [Issuers and Guarantors of Guaranteed Securities and Affiliate Securities Pledged as Collateral.](#)
- 23.1\* [Consent of KPMG LLP.](#)
- 31.1\* [Certificate of Chief Executive Officer pursuant to Rule 13a-14\(a\)/Rule 15d-14\(a\) under the Securities Exchange Act of 1934.](#)
- 31.2\* [Certificate of Chief Financial Officer pursuant to Rule 13a-14\(a\)/Rule 15d-14\(a\) under the Securities Exchange Act of 1934.](#)
- 32.1\* [Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 \(Chief Executive Officer\).](#)
- 32.2\* [Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 \(Chief Financial Officer\).](#)

- 97.1 [Charter Communications, Inc. Compensation Recovery Policy, effective as of October 1, 2023 \(incorporated by reference to Exhibit 97 to the Annual Report on Form 10-K of Charter Communications, Inc. filed on February 2, 2024 \(File No. 001-33664\)\)](#).
- 101 The following financial information from CCO Holdings, LLC and CCO Holdings Capital Corp.'s Annual Report on Form 10-K for the year ended December 31, 2023, filed with the Securities and Exchange Commission on February 2, 2024, formatted in iXBRL (inline eXtensible Business Reporting Language) includes: (i) the Consolidated Balance Sheets; (ii) the Consolidated Statements of Operations; (iii) the Consolidated Statements of Changes in Member's Equity; (iv) the Consolidated Statements of Cash Flows; and (vi) the Notes to the Consolidated Financial Statements.
- 104 Cover page, formatted in iXBRL and contained in Exhibit 101.

\* Filed herewith

+ Management compensatory plan or arrangement

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## Report of Independent Registered Public Accounting Firm

To the Manager and Member  
CCO Holdings, LLC:

### Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of CCO Holdings, LLC. and subsidiaries (the Company) as of December 31, 2023 and December 31, 2022, the related consolidated statements of operations, changes in member's equity, and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and December 31, 2022, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles.

### Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

### Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

#### *Testing of residential and SMB revenue*

As discussed in Note 10 to the consolidated financial statements, the Company recorded residential and small and medium-sized business (SMB) revenue of \$47.5 billion for the year ended December 31, 2023. This revenue is derived primarily from monthly subscription charges from its Internet, video, and voice services. Revenue is recognized as the services are provided to a customer on a monthly basis. The processing and recording of revenue are reliant upon multiple information technology (IT) systems.

We identified the evaluation of the sufficiency of audit evidence over residential and SMB revenue as a critical audit matter. Subjective auditor judgment was required in evaluating the sufficiency of audit evidence over residential and SMB revenue due to the volume of data and the number of accounting systems. Specifically, obtaining an understanding of the systems and processes used in the Company's recognition of residential and SMB revenue and evaluating the related internal controls required significant audit effort, including specialized skills and knowledge related to IT.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's residential and SMB revenue processes. This included manual and automated controls over the IT systems used for the processing and recording of residential and SMB revenue. We involved IT professionals with specialized skills and knowledge, who assisted in testing certain IT applications that are used by the Company in its recognition of residential and SMB revenue. We assessed recorded residential and SMB revenue by developing an expectation of revenue recorded in the consolidated financial statements based on cash received during the year. We evaluated the sufficiency of audit evidence obtained by assessing the results of procedures performed, including the appropriateness of the nature and extent of such evidence.

(signed) KPMG LLP

We have served as the Company's auditor since 2003.

St. Louis, Missouri  
February 1, 2024

**CCO HOLDINGS, LLC AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
(dollars in millions)

	December 31,	
	2023	2022
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 471	\$ 392
Accounts receivable, less allowance for doubtful accounts of \$268 and \$219, respectively	2,910	2,869
Prepaid expenses and other current assets	409	402
Total current assets	<u>3,790</u>	<u>3,663</u>
<b>INVESTMENT IN CABLE PROPERTIES:</b>		
Property, plant and equipment, net of accumulated depreciation of \$37,590 and \$36,035, respectively	38,659	35,147
Customer relationships, net	1,745	2,772
Franchises	67,396	67,363
Goodwill	29,668	29,563
Total investment in cable properties, net	<u>137,468</u>	<u>134,845</u>
<b>OTHER NONCURRENT ASSETS</b>	<u>4,222</u>	<u>4,259</u>
Total assets	<u>\$ 145,480</u>	<u>\$ 142,767</u>
<b>LIABILITIES AND MEMBER'S EQUITY</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable, accrued and other current liabilities	\$ 10,185	\$ 9,735
Payables to related party	160	11
Current portion of long-term debt	2,000	1,510
Total current liabilities	<u>12,345</u>	<u>11,256</u>
<b>LONG-TERM DEBT</b>	<u>95,777</u>	<u>96,093</u>
<b>DEFERRED INCOME TAXES</b>	<u>55</u>	<u>54</u>
<b>OTHER LONG-TERM LIABILITIES</b>	<u>3,113</u>	<u>3,471</u>
<b>MEMBER'S EQUITY:</b>		
CCO Holdings member's equity	34,165	31,868
Noncontrolling interests	25	25
Total member's equity	<u>34,190</u>	<u>31,893</u>
Total liabilities and member's equity	<u>\$ 145,480</u>	<u>\$ 142,767</u>

The accompanying notes are an integral part of these consolidated financial statements.

**CCO HOLDINGS, LLC AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(dollars in millions)

	Year Ended December 31,		
	2023	2022	2021
REVENUES	\$ 54,607	\$ 54,020	\$ 51,674
<b>COSTS AND EXPENSES:</b>			
Operating costs and expenses (exclusive of items shown separately below)	33,552	32,977	31,566
Depreciation and amortization	8,667	8,874	9,321
Other operating expense, net	11	287	306
	<u>42,230</u>	<u>42,138</u>	<u>41,193</u>
Income from operations	<u>12,377</u>	<u>11,882</u>	<u>10,481</u>
<b>OTHER INCOME (EXPENSE):</b>			
Interest expense, net	(5,154)	(4,533)	(4,023)
Other income (expense), net	(505)	5	(104)
	<u>(5,659)</u>	<u>(4,528)</u>	<u>(4,127)</u>
Income before income taxes	6,718	7,354	6,354
Income tax expense	(19)	(47)	(41)
Consolidated net income	<u>6,699</u>	<u>7,307</u>	<u>6,313</u>
Less: Net income attributable to noncontrolling interests	(2)	(2)	(2)
Net income attributable to CCO Holdings member	<u>\$ 6,697</u>	<u>\$ 7,305</u>	<u>\$ 6,311</u>

The accompanying notes are an integral part of these consolidated financial statements.

**CCO HOLDINGS, LLC AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CHANGES IN MEMBER'S EQUITY**  
(dollars in millions)

	CCO Holdings Member's Equity	Noncontrolling Interests	Total Member's Equity
BALANCE, December 31, 2020	\$ 47,185	\$ 23	\$ 47,208
Consolidated net income	6,311	2	6,313
Stock compensation expense	430	—	430
Contributions from parent	2	—	2
Distributions to parent	(17,725)	—	(17,725)
Distributions to noncontrolling interest	—	(1)	(1)
BALANCE, December 31, 2021	36,203	24	36,227
Consolidated net income	7,305	2	7,307
Stock compensation expense	470	—	470
Contributions from parent	855	—	855
Distributions to parent	(12,965)	—	(12,965)
Distributions to noncontrolling interest	—	(1)	(1)
BALANCE, December 31, 2022	31,868	25	31,893
Consolidated net income	6,697	2	6,699
Stock compensation expense	692	—	692
Contributions from parent	73	—	73
Distributions to parent	(5,165)	—	(5,165)
Distributions to noncontrolling interest	—	(2)	(2)
BALANCE, December 31, 2023	\$ 34,165	\$ 25	\$ 34,190

The accompanying notes are an integral part of these consolidated financial statements.

**CCO HOLDINGS, LLC AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(dollars in millions)

	Year Ended December 31,		
	2023	2022	2021
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Consolidated net income	\$ 6,699	\$ 7,307	\$ 6,313
Adjustments to reconcile consolidated net income to net cash flows from operating activities:			
Depreciation and amortization	8,667	8,874	9,321
Stock compensation expense	692	470	430
Noncash interest, net	1	(35)	(34)
Deferred income taxes	1	(3)	5
Other, net	279	80	149
Changes in operating assets and liabilities, net of effects from acquisitions and dispositions:			
Accounts receivable	(41)	(330)	(31)
Prepaid expenses and other assets	(564)	(199)	(163)
Accounts payable, accrued liabilities and other	(154)	(68)	246
Receivables from and payables to related party	149	35	(76)
Net cash flows from operating activities	<u>15,729</u>	<u>16,131</u>	<u>16,160</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Purchases of property, plant and equipment	(11,115)	(9,376)	(7,608)
Change in accrued expenses related to capital expenditures	172	553	80
Other, net	(167)	(323)	13
Net cash flows from investing activities	<u>(11,110)</u>	<u>(9,146)</u>	<u>(7,515)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Borrowings of long-term debt	22,062	25,643	20,976
Repayments of long-term debt	(21,938)	(19,311)	(12,146)
Payments for debt issuance costs	(32)	(71)	(102)
Borrowings (repayments) of loans payable - related parties, net	(3)	(1,043)	1
Distributions to parent	(5,165)	(12,965)	(17,725)
Contributions from parent	73	855	2
Distributions to noncontrolling interest	(2)	(1)	(1)
Other, net	465	(21)	(39)
Net cash flows from financing activities	<u>(4,540)</u>	<u>(6,914)</u>	<u>(9,034)</u>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>79</b>	<b>71</b>	<b>(389)</b>
CASH AND CASH EQUIVALENTS, beginning of period	392	321	710
CASH AND CASH EQUIVALENTS, end of period	<u>\$ 471</u>	<u>\$ 392</u>	<u>\$ 321</u>
<b>CASH PAID FOR INTEREST</b>	<b>\$ 4,993</b>	<b>\$ 4,481</b>	<b>\$ 4,022</b>
<b>CASH PAID FOR TAXES</b>	<b>\$ 25</b>	<b>\$ 37</b>	<b>\$ 34</b>

The accompanying notes are an integral part of these consolidated financial statements.

**CCO HOLDINGS, LLC AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**December 31, 2023, 2022 AND 2021**  
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## **1. Organization and Basis of Presentation**

### ***Organization***

CCO Holdings, LLC (together with its subsidiaries, “CCO Holdings,” or the “Company”) is a leading broadband connectivity company and cable operator. Over an advanced communications network, the Company offers a full range of state-of-the-art residential and business services including Spectrum Internet<sup>®</sup>, TV, Mobile and Voice. For small and medium-sized companies, Spectrum Business<sup>®</sup> delivers the same suite of broadband products and services coupled with special features and applications to enhance productivity, while for larger businesses and government entities, Spectrum Enterprise<sup>®</sup> provides highly customized, fiber-based solutions. Spectrum Reach<sup>®</sup> delivers tailored advertising and production for the modern media landscape. The Company also distributes award-winning news coverage and sports programming to its customers through Spectrum Networks.

CCO Holdings is a holding company whose principal assets are the equity interests in its operating subsidiaries. CCO Holdings is a direct subsidiary of CCH I Holdings, LLC, which is an indirect subsidiary of Charter Communications, Inc. (“Charter”), Charter Communications Holdings, LLC (“Charter Holdings”) and Spectrum Management Holding Company, LLC (“Spectrum Management”). All of the outstanding capital stock of CCO Holdings Capital Corp. is owned by CCO Holdings. The consolidated financial statements include the accounts of CCO Holdings and all of its subsidiaries where the underlying operations reside. All significant intercompany accounts and transactions among consolidated entities have been eliminated. Charter, Charter Holdings and Spectrum Management have performed financing, cash management, treasury and other services for CCO Holdings on a centralized basis. Changes in member’s equity in the consolidated balance sheets related to these activities have been considered cash receipts (contributions) and payments (distributions) for purposes of the consolidated statements of cash flows and are reflected in financing activities.

### ***Basis of Presentation***

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) and the rules and regulations of the Securities and Exchange Commission (the “SEC”).

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Areas involving significant judgments and estimates include capitalization of labor and overhead costs, pension benefits and income taxes. Actual results could differ from those estimates. Certain prior period amounts have been reclassified to conform with the 2023 presentation.

Comprehensive income equaled net income attributable to CCO Holdings member for the years ended December 31, 2023, 2022 and 2021.

## **2. Summary of Significant Accounting Policies**

Information on other accounting policies and methods that the Company uses in the preparation of its consolidated financial statements are included, where applicable, in their respective footnotes. Below is a discussion of accounting policies and methods used in the Company's consolidated financial statements that are not presented within other footnotes.

### ***Consolidation***

The accompanying consolidated financial statements include the accounts of CCO Holdings and all entities in which CCO Holdings has a controlling interest. The noncontrolling interest on the Company’s balance sheet represents the third-party interest in CV of Viera, LLP, the Company's consolidated joint venture in a small cable system in Florida. All significant intercompany accounts and transactions among consolidated entities have been eliminated in consolidation.

### ***Cash and Cash Equivalents***

The Company considers all highly liquid investments with original maturities of three months or less to be cash equivalents. These investments are carried at cost, which approximates market value.

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***Valuation of Long-Lived Assets***

The Company evaluates the recoverability of long-lived assets (e.g., property, plant and equipment and finite-lived intangible assets) to be held and used when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Such events or changes in circumstances could include such factors as impairment of the Company's indefinite life assets, changes in technological advances, fluctuations in the fair value of such assets, adverse changes in relationships with local franchise authorities, adverse changes in market conditions or a deterioration of current or expected future operating results. If a review indicates that the carrying value of such asset is not recoverable from estimated undiscounted cash flows, the carrying value of such asset is reduced to its estimated fair value. While the Company believes that its estimates of future cash flows are reasonable, different assumptions regarding such cash flows could materially affect its evaluations of asset recoverability. No impairments of long-lived assets held for use were recorded in 2023, 2022 and 2021. For non-strategic long-lived assets held for sale, the Company recorded impairments of approximately \$36 million during the year ended December 31, 2021 to other operating expense, net (see Note 12).

***Fair Value Measurements***

Accounting guidance establishes a three-level hierarchy for disclosure of fair value measurements, based on the transparency of inputs to the valuation of an asset or liability as of the measurement date, as follows:

- Level 1 – inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 – inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 – inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The Company estimates the fair value of its financial instruments using available market information or other appropriate valuation methodologies. Considerable judgment, however, is required in interpreting market data to develop the estimates of fair value. Accordingly, the estimates presented in the accompanying consolidated financial statements are not necessarily indicative of the amounts the Company would realize in a current market exchange.

The Company's nonfinancial assets such as equity method investments, franchises, property, plant, and equipment, and other intangible assets are not measured at fair value on a recurring basis; however, they are subject to fair value adjustments in certain circumstances, such as when there is evidence that an impairment may exist. When such impairments are recorded, fair values are generally classified within Level 3 of the valuation hierarchy.

The carrying amounts of cash and cash equivalents, receivables, payables and other current assets and liabilities approximate fair value because of the short maturity of those instruments.

***Government Assistance***

The Company's government assistance during the years ending December 31, 2023 and 2022 primarily consists of federal subsidies from the Rural Development Opportunity Fund ("RDOF") and state broadband grants primarily funded by the American Rescue Plan Act of 2021 ("ARPA"). The Company was awarded approximately \$1.2 billion in federal subsidies in phase I of the RDOF auction to be received monthly over ten years to deploy and operate broadband services to unserved communities to more than one million estimated passings. For accounting purposes, RDOF subsidies are recorded as other revenue since the primary conditions for the receipt of the subsidies are the build out and operation of the broadband network over the ten years. During the years ended December 31, 2023 and 2022, other revenues included approximately \$116 million and \$107 million of RDOF subsidy revenue, respectively.

The Company has also been awarded broadband grants to construct broadband infrastructure to unserved and underserved communities by various state and local governments. As of December 31, 2023, the Company has been publicly awarded approximately \$913 million in state grants, of which only \$597 million of these state grants have been formalized into executed agreements. State grants are either a fixed subsidy or variable with a subsidy cap conditioned upon construction. Cash is paid

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either upon project completion, milestone completion, or in some instances a portion of grant is paid in advance. Prefunded grants are subject to recapture if buildouts are not completed. For accounting purposes state broadband grants are generally recorded as a reduction to property, plant and equipment as milestones are met, since the primary conditions for these grants are to build out the broadband network. During the years ended December 31, 2023 and 2022, the amount of state broadband grants recorded in the consolidated financial statements was not material.

***Advertising Costs***

Advertising costs associated with marketing the Company's products and services are generally expensed as costs are incurred.

***Segments***

The Company's operations are managed and reported to its Chief Executive Officer ("CEO"), the Company's chief operating decision maker, on a consolidated basis. The CEO assesses performance and allocates resources based on the consolidated results of operations. Under this organizational and reporting structure, the Company has one reportable segment.

**3. Property, Plant and Equipment**

Additions to property, plant and equipment are recorded at cost, including all material, labor and certain indirect costs associated with the construction of cable transmission and distribution facilities. While the Company's capitalization is based on specific activities, once capitalized, costs are tracked on a composite basis by fixed asset category at the cable system level and not on a specific asset basis. For assets that are sold or retired, the estimated historical cost and related accumulated depreciation is removed. Costs associated with the placement of the customer drop to the dwelling and the placement of outlets within a dwelling along with the costs associated with the deployment of new customer premise equipment necessary to provide video, Internet or voice services are capitalized. Costs capitalized include materials, direct labor and overhead costs. The Company capitalizes direct labor and overhead using standards developed from actual costs and applicable operational data. The Company calculates standards annually (or more frequently if circumstances dictate) for items such as the labor rates, overhead rates, and the actual amount of time required to perform a capitalizable activity. Overhead costs are associated with the activities of the Company's personnel and consist of compensation and other indirect costs associated with support functions. Indirect costs primarily include employee benefits and payroll taxes, and vehicle and occupancy costs. The costs of disconnecting service and removing customer premise equipment from a dwelling and the costs to reconnect a customer drop or to redeploy previously installed customer premise equipment are charged to operating expense as incurred. Costs for repairs and maintenance are charged to operating expense as incurred, while plant and equipment replacement, including replacement of certain components, betterments, including replacement of cable drops and outlets, are capitalized.

Depreciation is recorded using the straight-line composite method over management's estimate of the useful lives of the related assets as follows:

Cable distribution systems	6-22 years
Customer premise equipment and installations	3-8 years
Vehicles and equipment	6-21 years
Buildings and improvements	8-40 years
Furniture, fixtures and equipment	2-10 years

The Company periodically evaluates the estimated useful lives used to depreciate its assets and the estimated amount of assets that will be abandoned or have minimal use in the future. A significant change in assumptions about the extent or timing of future asset retirements, or in the Company's use of new technology and upgrade programs, could materially affect future depreciation expense. Depreciation expense for the years ended December 31, 2023, 2022 and 2021 was \$7.6 billion, \$7.5 billion, and \$7.7 billion, respectively.

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Property, plant and equipment consists of the following as of December 31, 2023 and 2022:

	December 31,	
	2023	2022
Cable distribution systems	\$ 44,561	\$ 39,759
Customer premise equipment and installations	17,043	17,043
Vehicles and equipment	2,109	2,006
Buildings and improvements	4,951	4,874
Furniture, fixtures and equipment	7,585	7,500
	<u>76,249</u>	<u>71,182</u>
Less: accumulated depreciation	(37,590)	(36,035)
	<u>\$ 38,659</u>	<u>\$ 35,147</u>

Certain of the Company's franchise agreements and leases contain provisions requiring the Company to restore facilities or remove equipment in the event that the franchise or lease agreement is not renewed. The Company expects to continually renew its franchise agreements and therefore cannot reasonably estimate any liabilities associated with such agreements. A remote possibility exists that franchise agreements could be terminated unexpectedly, which could result in the Company incurring significant expense in complying with restoration or removal provisions. The Company does not have any significant liabilities related to asset retirements recorded in its consolidated financial statements.

#### 4. Franchises, Goodwill and Other Intangible Assets

Franchise rights represent the value attributed to agreements or authorizations with local and state authorities that allow access to homes in cable service areas. For valuation purposes, they are defined as the future economic benefits of the right to solicit and service potential customers (customer marketing rights), and the right to deploy and market new services to potential customers (service marketing rights).

Management estimates the fair value of franchise rights at the date of acquisition and determines if the franchise has a finite life or an indefinite life. The Company has concluded that all of its franchises qualify for indefinite life treatment given that there are no legal, regulatory, contractual, competitive, economic or other factors which limit the period over which these rights will contribute to the Company's cash flows. The Company reassesses this determination periodically or whenever events or substantive changes in circumstances occur.

All franchises are tested for impairment annually or more frequently as warranted by events or changes in circumstances. Franchise assets are aggregated into essentially inseparable units of accounting to conduct valuations. The franchise units of accounting are geographical clustering of cable systems representing the highest and best use groupings if sold to market participants. The Company assesses qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that an indefinite lived intangible asset has been impaired. If, after this optional qualitative assessment, the Company determines that it is not more likely than not that an indefinite lived intangible asset has been impaired, then no further quantitative testing is necessary. In completing the qualitative impairment testing, the Company evaluates a multitude of factors that affect the fair value of its franchise assets. Examples of such factors include environmental and competitive changes within the Company's operating footprint, actual and projected operating performance, the consistency of its operating margins, equity and debt market trends, including changes in its market capitalization, and changes in its regulatory and political landscape, among other factors. The Company performed a qualitative assessment in 2023. After consideration of the qualitative factors in 2023, the Company concluded that it is more likely than not that the fair value of the franchise assets in each unit of accounting exceeds the carrying value of such assets and therefore did not perform a quantitative analysis at the assessment date. Periodically, the Company may elect to perform a quantitative analysis for impairment testing. If the Company elects or is required to perform a quantitative analysis to test its franchise assets for impairment, the estimated fair value of franchises is determined utilizing an income approach model based on the present value of the estimated discrete future cash flows attributable to each of the intangible assets identified assuming a discount rate.

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The Company has determined that it has one reporting unit for purposes of the assessment of goodwill impairment. Goodwill is tested for impairment as of November 30 of each year, or more frequently as warranted by events or changes in circumstances. Accounting guidance also permits an optional qualitative assessment for goodwill to determine whether it is more likely than not that the carrying value of a reporting unit exceeds its fair value. If, after this qualitative assessment, the Company determines that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount then no further quantitative testing would be necessary. A quantitative assessment is performed if the qualitative assessment results in a more likely than not determination or if a qualitative assessment is not performed. The quantitative assessment considers whether the carrying amount of a reporting unit exceeds its fair value, in which case an impairment charge is recorded to the extent the reporting unit's carrying value exceeds its fair value. As with the Company's franchise impairment testing, in 2023 the Company elected to perform a qualitative goodwill impairment assessment, which incorporated consideration of the same qualitative factors relevant to the Company's franchise impairment testing. As a result of that assessment, the Company concluded that goodwill is not impaired.

Customer relationships are recorded at fair value as of the date acquired less accumulated amortization. Customer relationships are amortized on an accelerated sum of years' digits method over useful lives of 8-15 years based on the period over which current customers are expected to generate cash flows. The Company periodically evaluates the remaining useful lives of its customer relationships to determine whether events or circumstances warrant revision to the remaining periods of amortization. Customer relationships are evaluated for impairment upon the occurrence of events or changes in circumstances indicating that the carrying amount of an asset may not be recoverable. Customer relationships are deemed impaired when the carrying value exceeds the projected undiscounted future cash flows associated with the customer relationships. No impairment of customer relationships was recorded in the years ended December 31, 2023, 2022 or 2021.

The Company owns approximately \$464 million of Citizens Broadband Radio Service ("CBRS") priority access licenses. The wireless spectrum licenses are considered indefinite life intangible assets recorded in other noncurrent assets on the Company's consolidated balance sheets and payments (including deposits) are presented as an investing cash outflow on the Company's statements of cash flows. The Company elected to perform a qualitative impairment assessment in 2023 and concluded that its CBRS priority access licenses are not impaired.

As of December 31, 2023 and 2022, indefinite-lived and finite-lived intangible assets are presented in the following table:

	December 31,					
	2023			2022		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
<b>Indefinite-lived intangible assets:</b>						
Franchises	\$ 67,396	\$ —	\$ 67,396	\$ 67,363	\$ —	\$ 67,363
Goodwill	29,668	—	29,668	29,563	—	29,563
Wireless spectrum licenses	464	—	464	464	—	464
	<u>\$ 97,528</u>	<u>\$ —</u>	<u>\$ 97,528</u>	<u>\$ 97,390</u>	<u>\$ —</u>	<u>\$ 97,390</u>
<b>Finite-lived intangible assets:</b>						
Customer relationships	\$ 18,268	\$ (16,523)	\$ 1,745	\$ 18,250	\$ (15,478)	\$ 2,772
Other intangible assets	450	(278)	172	440	(236)	204
	<u>\$ 18,718</u>	<u>\$ (16,801)</u>	<u>\$ 1,917</u>	<u>\$ 18,690</u>	<u>\$ (15,714)</u>	<u>\$ 2,976</u>

Amortization expense related to customer relationships and other intangible assets for the years ended December 31, 2023, 2022 and 2021 was \$1.1 billion, \$1.3 billion and \$1.6 billion, respectively.

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The Company expects amortization expense on its finite-lived intangible assets will be as follows.

2024	\$ 836
2025	587
2026	329
2027	99
2028	17
Thereafter	49
	<u>\$ 1,917</u>

Actual amortization expense in future periods could differ from these estimates as a result of new intangible asset acquisitions or divestitures, changes in useful lives, impairments, adoption of new accounting standards and other relevant factors.

## 5. Investments

Investments are accounted for under the equity method of accounting or as equity securities, all of which are recorded in other noncurrent assets in the consolidated balance sheets as of December 31, 2023 and 2022. The Company applies the equity method to investments when it has the ability to exercise significant influence over the operating and financial policies of the investee. The Company's share of the investee's earnings (losses) is included in other expense, net in the consolidated statements of operations. The Company monitors its investments for indicators that a decrease in investment value has occurred that is other-than-temporary. If it has been determined that an investment has sustained an other-than-temporary decline in value, the investment is written down to fair value with a charge to earnings. Investments acquired are measured at fair value utilizing the acquisition method of accounting. The difference between the fair value and the amount of underlying equity in net assets for most equity method investments is due to unrecognized intangible assets at the investee. These amounts are amortized as a component of equity earnings (losses), recorded within other income (expense), net over the estimated useful life of the asset.

Investments consisted of the following as of December 31, 2023 and 2022:

	December 31,	
	2023	2022
Equity method investments	\$ 638	\$ 955
Other investments	8	13
Total investments	<u>\$ 646</u>	<u>\$ 968</u>

Equity method investments primarily includes the Company's 50/50 joint venture with Comcast Corporation ("Comcast") in Xumo Services, LLC ("Xumo"), a next generation streaming platform and was approximately \$548 million and \$849 million as of December 31, 2023 and 2022, respectively.

The Company's equity method investments balances reflected in the table above includes differences between the acquisition date fair value of certain investments acquired and the underlying equity in the net assets of the investee, referred to as a basis difference. This basis difference is amortized as a component of equity earnings. The remaining unamortized basis difference was \$333 million and \$424 million as of December 31, 2023 and 2022, respectively.

For the years ended December 31, 2023, 2022 and 2021, net losses from investments were \$331 million, \$151 million and \$179 million, respectively, which were recorded in other income (expense), net in the consolidated statements of operations. Loss on equity investments, net for year ended December 31, 2023 is primarily related to our joint venture in Xumo.

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**6. Accounts Payable, Accrued and Other Current Liabilities**

Accounts payable, accrued and other current liabilities consist of the following as of December 31, 2023 and 2022:

	<b>December 31,</b>	
	<b>2023</b>	<b>2022</b>
Accounts payable – trade	\$ 887	\$ 914
Deferred revenue	509	511
Accrued and other current liabilities:		
Programming costs	1,736	1,914
Labor	1,278	1,306
Capital expenditures	1,944	1,792
Interest	1,328	1,165
Taxes and regulatory fees	436	512
Other	2,067	1,621
	<u>\$ 10,185</u>	<u>\$ 9,735</u>

**7. Leases**

The primary leased asset classes of the Company include real estate, dark fiber, colocation facilities and other equipment. The lease agreements include both lease and non-lease components, which the Company accounts for separately depending on the election made for each leased asset class. For real estate and dark fiber leased asset classes, the Company accounts for lease and non-lease components as a single lease component and includes all fixed payments in the measurement of lease liabilities and lease assets. For colocation facilities leased asset class, the Company accounts for lease and non-lease components separately including only the fixed lease payment component in the measurement of lease liabilities and lease assets.

Lease assets and lease liabilities are initially recognized based on the present value of the future lease payments over the expected lease term. As for most leases the implicit rate is not readily determinable, the Company uses a discount rate in determining the present value of future payments based on the yield-to-maturity of the Company's secured publicly traded United States dollars denominated debt instruments interpolating the duration of the debt to the term of the executed lease.

The Company's leases have base rent periods and some with optional renewal periods. Leases with base rent periods of less than 12 months are not recorded on the balance sheet. For purposes of measurement of lease liabilities, the expected lease terms may include renewal options when it is reasonably certain that the Company will exercise such options.

Operating lease expenses were \$457 million, \$434 million and \$416 million for the years ended December 31, 2023, 2022 and 2021, respectively, inclusive of both short-term lease costs and variable lease costs that were not included in the measurement of operating lease liabilities.

Cash paid for amounts included in the measurement of operating lease liabilities, recorded as operating cash flows in the statements of cash flows, were \$325 million, \$302 million and \$282 million for the years ended December 31, 2023, 2022 and 2021, respectively. Operating lease right-of-use assets obtained in exchange for operating lease obligations were \$313 million, \$203 million and \$323 million for the years ended December 31, 2023, 2022 and 2021, respectively.

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Supplemental balance sheet information related to leases is as follows.

	December 31,	
	2023	2022
<b>Operating lease right-of-use assets:</b>		
Included within other noncurrent assets	\$ 1,129	\$ 1,086
<b>Operating lease liabilities:</b>		
Current portion included within accounts payable, accrued and other current liabilities	\$ 260	\$ 261
Long-term portion included within other long-term liabilities	973	921
	\$ 1,233	\$ 1,182
Weighted average remaining lease term for operating leases	5.4 years	5.6 years
Weighted average discount rate for operating leases	4.5 %	3.7 %

Maturities of operating lease liabilities as of December 31, 2023 are as follows.

2024	\$ 332
2025	300
2026	233
2027	181
2028	144
Thereafter	248
Undiscounted lease cash flow commitments	1,438
Reconciling impact from discounting	(205)
Lease liabilities on consolidated balance sheet as of December 31, 2023	\$ 1,233

## 8. Long-Term Debt

A summary of our debt as of December 31, 2023 and 2022 is as follows:

	December 31, 2023				December 31, 2022			
	Principal Amount	Carrying Value	Fair Value	Weighted Average Interest Rate	Principal Amount	Carrying Value	Fair Value	Weighted Average Interest Rate
Senior unsecured notes	\$ 27,250	\$ 27,168	\$ 24,750	4.9 %	\$ 26,650	\$ 26,567	\$ 22,426	4.8 %
Senior secured notes and debentures <sup>(a)</sup>	57,925	58,250	50,742	5.1 %	56,841	57,213	46,905	5.1 %
Credit facilities <sup>(b)</sup>	12,413	12,359	12,237	7.0 %	13,877	13,823	13,467	5.9 %
Total debt	\$ 97,588	\$ 97,777	\$ 87,729	5.3 %	\$ 97,368	\$ 97,603	\$ 82,798	5.1 %

<sup>(a)</sup> Includes the Company's £625 million aggregate principal amount of fixed-rate British pound sterling denominated notes (the "Sterling Notes") (remeasured at \$797 million and \$755 million as of December 31, 2023 and 2022, respectively, using the exchange rate at the respective dates) and the Company's £650 million aggregate principal amount of Sterling Notes (remeasured at \$828 million and \$786 million as of December 31, 2023 and 2022, respectively, using the exchange rate at the respective dates).

<sup>(b)</sup> The Company had availability under the Charter Communications Operating, LLC ("Charter Operating") credit facilities of approximately \$5.2 billion as of December 31, 2023.

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The estimated fair value of the Company's senior unsecured and secured notes and debentures as of December 31, 2023 and 2022 is based on quoted market prices in active markets and is classified within Level 1 of the valuation hierarchy, while the estimated fair value of the Company's credit facilities is based on quoted market prices in inactive markets and is classified within Level 2.

In 2023, CCO Holdings and CCO Holdings Capital Corp. jointly issued \$1.1 billion aggregate principal amount of senior unsecured notes and Charter Operating and Charter Communications Operating Capital Corp. jointly issued \$2.0 billion aggregate principal amount of senior secured notes. The notes were issued at varying rates, prices and maturity dates and the net proceeds were used to pay related fees and expenses and for general corporate purposes, including distributions to parent companies to fund buybacks of Charter Class A common stock and Charter Holdings common units as well as repaying certain indebtedness.

During the years ended December 31, 2023, 2022 and 2021, the Company repurchased \$1.5 billion, \$3.0 billion and \$5.1 billion, respectively, of various series of senior notes. Losses on extinguishment of debt are recorded in other income (expense), net in the consolidated statements of operations and were \$3 million, \$3 million and \$144 million during the years ended December 31, 2023, 2022 and 2021, respectively.

In January and February 2024, Charter Operating and Charter Communications Operating Capital Corp. redeemed all of their outstanding senior secured floating rate notes due 2024 and paid in full all of their outstanding 4.500% senior secured notes due 2024 at maturity.

### **CCO Holdings Notes**

The CCO Holdings notes are senior debt obligations of CCO Holdings and CCO Holdings Capital Corp. and rank equally with all other current and future unsecured, unsubordinated obligations of CCO Holdings and CCO Holdings Capital Corp. They are structurally subordinated to all obligations of subsidiaries of CCO Holdings.

CCO Holdings may redeem some or all of the CCO Holdings notes at any time at a premium. The optional redemption price declines to 100% of the respective series' principal amount, plus accrued and unpaid interest, if any, on or after varying dates in 2024 through 2031.

In addition, at any time prior to varying dates in 2024 through 2026, CCO Holdings may redeem up to 40% of the aggregate principal amount of certain notes at a premium plus accrued and unpaid interest to the redemption date, with the net cash proceeds of one or more equity offerings (as defined in the indenture); provided that certain conditions are met. In the event of specified change of control events, CCO Holdings must offer to purchase the outstanding CCO Holdings notes from the holders at a purchase price equal to 101% of the total principal amount of the notes, plus any accrued and unpaid interest.

The indentures governing the CCO Holdings notes contain certain covenants that restrict the ability of CCO Holdings, CCO Holdings Capital Corp. and all of their restricted subsidiaries to:

- incur additional debt;
- pay dividends on equity or repurchase equity;
- make investments;
- sell all or substantially all of their assets or merge with or into other companies;
- sell assets;
- in the case of restricted subsidiaries, create or permit to exist dividend or payment restrictions with respect to CCO Holdings, guarantee their parent companies debt, or issue specified equity interests;
- engage in certain transactions with affiliates; and
- grant liens (with respect to only CCO Holdings).

The above limitations in certain circumstances regarding incurrence of debt, payment of dividends and making investments contained in the indentures of CCO Holdings permit CCO Holdings and its restricted subsidiaries to perform the above, so long as, after giving pro forma effect to the above, the leverage ratio would be below a specified level for the issuer. The maximum total leverage ratio under the indentures is 6.0 to 1.0. The leverage ratio was 4.2 as of December 31, 2023.

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### **Charter Operating Notes**

The Charter Operating notes are guaranteed by CCO Holdings and substantially all of the subsidiaries of Charter Operating. In addition, the Charter Operating notes are secured by a perfected first priority security interest in substantially all of the assets of Charter Operating and substantially all of its subsidiaries to the extent such liens can be perfected under the Uniform Commercial Code by the filing of a financing statement and the liens rank equally with the liens on the collateral securing obligations under the Charter Operating credit facilities. Charter Operating may redeem some or all of the Charter Operating notes at any time at a premium.

The Charter Operating notes are subject to the terms and conditions of the indentures governing the Charter Operating notes. The Charter Operating notes indentures contain customary representations and warranties and affirmative covenants with customary negative covenants, including restrictions on the ability of Charter Operating or any of its material subsidiaries to incur liens securing indebtedness for borrowed money and on the ability of Charter Operating to consolidate, merge or convey or transfer substantially all of their assets. The Charter Operating indentures also contain customary events of default.

### **Charter Operating Credit Facilities**

In 2023, Charter Operating entered into amendments to its credit agreement to (i) replace London Interbank Offering Rate (“LIBOR”) as the benchmark rate applicable to the credit facilities with Secured Overnight Financing Rate (“SOFR”), (ii) incur a new Term B-3 Loan and a new Term B-4 Loan; and (iii) concurrently cancel certain of Charter Operating’s existing Term B-1 Loan (upon assignment to Charter Operating and conversion into Term B-4 Loan) and Term B-2 Loan (upon assignment to Charter Operating), among other amendments.

The Charter Operating credit facilities have an outstanding principal amount of \$12.4 billion at December 31, 2023 as follows:

- Term A-5 Loan with a remaining principal amount of approximately \$5.6 billion, which is repayable in quarterly installments and aggregating \$303 million in each loan year, with the remaining balance due at final maturity on August 31, 2027. Pricing on Term A-5 Loan is SOFR plus 1.25%;
- Term A-6 Loan with a remaining principal amount of approximately \$463 million, which is repayable in quarterly installments and aggregating \$25 million in each loan year, with the remaining balance due at final maturity on August 31, 2028. Pricing on Term A-6 Loan is SOFR plus 1.50%;
- Term B-1 Loan with a remaining principal amount of approximately \$316 million, which is repayable in equal quarterly installments and aggregating \$3 million in 2024, with the remaining balance due at final maturity on April 30, 2025. Pricing on Term B-1 Loan is SOFR plus 1.75%;
- Term B-2 Loan with a remaining principal amount of approximately \$3.1 billion, which is repayable in equal quarterly installments and aggregating \$32 million in each loan year, with the remaining balance due at final maturity on February 1, 2027. Pricing on Term B-2 Loan is SOFR plus 1.75%;
- Term B-3 Loan with a remaining principal amount of approximately \$744 million, which is repayable in equal quarterly installments and aggregating \$8 million in each loan year, with the remaining balance due at final maturity on March 31, 2030. Pricing on Term B-3 Loan is SOFR plus 2.25%;
- Term B-4 Loan with a remaining principal amount of approximately \$2.0 billion, which is repayable in equal quarterly installments and aggregating \$20 million in each loan year, with the remaining balance due at final maturity on December 7, 2030. Pricing on Term B-4 Loan is SOFR plus 2.00%;
- a revolving loan with an outstanding balance of \$216 million and allowing for borrowings of up to \$5.5 billion maturing on August 31, 2027. Pricing on the revolving loan is SOFR plus 1.25% with a commitment fee based on Charter’s corporate family rating and not to exceed 0.20%. As of December 31, 2023, \$36 million of the revolving loan was utilized to collateralize a like principal amount of letters of credit out of \$530 million of letters of credit issued on the Company’s behalf.

Amounts outstanding under the Charter Operating credit facilities bear interest, at Charter Operating’s election, at a base rate, SOFR, as defined, plus an applicable margin. SOFR was 5.4% and 4.4% as of December 31, 2023 and 2022, respectively.

The Charter Operating credit facilities also allow us to enter into incremental term loans in the future, with amortization as set forth in the notices establishing such term loans. Although the Charter Operating credit facilities allow for the incurrence of a certain amount of incremental term loans subject to pro forma compliance with its financial maintenance covenants, no

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assurance can be given that the Company could obtain additional incremental term loans in the future if Charter Operating sought to do so or what amount of incremental term loans would be allowable at any given time under the terms of the Charter Operating credit facilities.

The obligations of Charter Operating under the Charter Operating credit facilities are guaranteed by CCO Holdings and substantially all of the subsidiaries of Charter Operating. The obligations are also secured by (i) a lien on substantially all of the assets of Charter Operating and substantially all of its subsidiaries, to the extent such lien can be perfected under the Uniform Commercial Code by the filing of a financing statement, and (ii) a pledge of the equity interests directly or indirectly owned by Charter Operating in substantially all of its subsidiaries, as well as intercompany obligations owing to it and the guarantor subsidiaries by any of their affiliates.

The Charter Operating credit facilities contain representations and warranties, and customary affirmative and negative covenants, including restrictions on the ability of Charter Operating or any of its subsidiaries to incur liens securing indebtedness for borrowed money and on the ability of Charter Operating to consolidate, merge or convey or transfer substantially all of its assets. The financial covenants measure performance against standards set for leverage to be tested as of the end of each quarter. The Charter Operating credit facilities also contain customary events of default and the right to cure with respect to any defaults or events of default.

**Time Warner Cable, LLC Notes and Debentures**

The Time Warner Cable, LLC ("TWC, LLC") senior notes and debentures are guaranteed by CCO Holdings, Charter Operating and substantially all of the subsidiaries of Charter Operating (other than TWC, LLC) and rank equally with the liens on the collateral securing obligations under the Charter Operating notes and credit facilities. Interest on each series of TWC, LLC senior notes and debentures is payable semi-annually (with the exception of the Sterling Notes, which is payable annually) in arrears.

The TWC, LLC indentures contain customary covenants relating to restrictions on the ability of TWC, LLC or any of its material subsidiaries to incur liens securing indebtedness for borrowed money and on the ability of TWC, LLC and Time Warner Cable Enterprises LLC ("TWCE") to consolidate, merge or convey or transfer substantially all of their assets. The TWC, LLC indentures also contain customary events of default.

The TWC, LLC senior notes and debentures may be redeemed in whole or in part at any time at TWC, LLC's option at a redemption price equal to the greater of (i) all of the applicable principal amount being redeemed and (ii) the sum of the present values of the remaining scheduled payments on the applicable TWC, LLC senior notes and debentures discounted to the redemption date on a semi-annual basis (with the exception of the Sterling Notes, which are on an annual basis), at a comparable government bond rate plus a designated number of basis points as further described in the indenture and the applicable note or debenture, plus, in each case, accrued but unpaid interest to, but not including, the redemption date.

The Company may offer to redeem all, but not less than all, of the Sterling Notes in the event of certain changes in the tax laws of the U.S. (or any taxing authority in the U.S.). This redemption would be at a redemption price equal to 100% of the principal amount, together with accrued and unpaid interest on the Sterling Notes to, but not including, the redemption date.

**TWCE Debentures**

The TWCE senior debentures are guaranteed by CCO Holdings, Charter Operating, and substantially all of the subsidiaries of Charter Operating (other than TWCE) and rank equally with the liens on the collateral securing obligations under the Charter Operating notes and credit facilities. Interest on each series of TWCE senior debentures is payable semi-annually in arrears. The TWCE senior debentures are not redeemable before maturity.

The TWCE indentures contain customary covenants relating to restrictions on the ability of TWC, LLC, TWCE or any of its subsidiaries to incur liens securing indebtedness for borrowed money and on the ability of TWC, LLC and TWCE to consolidate, merge or convey or transfer substantially all of their assets. The TWCE indentures also contain customary events of default.

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**Limitations on Distributions**

Distributions by the Company's subsidiaries to a parent company for payment of principal on parent company notes are restricted under the CCO Holdings indentures discussed above, unless there is no default under the applicable indenture, and unless CCO Holdings' leverage ratio test is met at the time of such distribution. As of December 31, 2023, there was no default under any of these indentures and CCO Holdings met its applicable leverage ratio tests based on December 31, 2023 financial results. There can be no assurance that CCO Holdings will satisfy these tests at the time of the contemplated distribution.

In addition to the limitation on distributions under the various indentures, distributions by the Company's subsidiaries may be limited by applicable law, including the Delaware Limited Liability Company Act, under which the Company's subsidiaries may make distributions if they have "surplus" as defined in the act.

**Liquidity and Future Principal and Interest Payments**

The Company continues to have significant amounts of debt, and its business requires significant cash to fund principal and interest payments on its debt, capital expenditures and ongoing operations. As set forth below, the Company has significant future principal and interest payments. The Company continues to monitor the capital markets, and it expects to undertake refinancing transactions and utilize free cash flow and cash on hand to further extend or reduce the maturities of its principal obligations. The timing and terms of any refinancing transactions will be subject to market conditions.

Interest payments on variable debt are estimated using amounts outstanding at December 31, 2023 and the average implied forward SOFR rates applicable for the quarter during the interest rate reset based on the yield curve in effect at December 31, 2023. Actual interest payments will differ based on actual SOFR rates and actual amounts outstanding for applicable periods. Based upon outstanding indebtedness as of December 31, 2023, the amortization of term loans, and the maturity dates for all senior and subordinated notes, total future principal and interest payments on the total borrowings under all debt agreements are as follows.

	<b>Principal</b>	<b>Interest</b>
2024	\$ 2,390	\$ 4,969
2025	5,200	4,763
2026	2,237	4,471
2027	11,189	4,083
2028	5,140	3,726
Thereafter	71,432	41,271
	<u>\$ 97,588</u>	<u>\$ 63,283</u>

**9. Accounting for Derivative Instruments and Hedging Activities**

Cross-currency derivative instruments are used to manage foreign exchange risk on the Sterling Notes by effectively converting £1.275 billion aggregate principal amount of fixed-rate British pound sterling denominated debt, including annual interest payments and the payment of principal at maturity, to fixed-rate U.S. dollar denominated debt. The cross-currency swaps have maturities of June 2031 and July 2042.

The Company's derivative instruments are not designated as hedges and are marked to fair value each period, with the impact recorded as a gain or loss on financial instruments in the consolidated statements of operations in other income (expense), net. While these derivative instruments are not designated as hedges for accounting purposes, management continues to believe such instruments are closely correlated with the respective debt, thus managing associated risk. The fair value of the Company's cross-currency derivatives, which are classified within Level 2 of the valuation hierarchy, was \$440 million and \$570 million

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and is included in other long-term liabilities on its consolidated balance sheets as of December 31, 2023 and 2022, respectively.

The effect of financial instruments are recorded in other income (expense), net in the consolidated statements of operations and consisted of the following.

	<b>Year Ended December 31,</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
Change in fair value of cross-currency derivative instruments	\$ 130	\$ (280)	\$ (106)
Foreign currency remeasurement of Sterling Notes to U.S. dollars	(85)	185	20
Gain (loss) on financial instruments, net	\$ 45	\$ (95)	\$ (86)

**10. Revenues**

The Company's revenues by product line are as follows:

	<b>Year Ended December 31,</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
Internet	\$ 23,032	\$ 22,222	\$ 21,094
Video	16,351	17,460	17,630
Voice	1,510	1,559	1,598
Mobile service	2,243	1,698	1,239
Residential revenue	43,136	42,939	41,561
Small and medium business	4,353	4,350	4,198
Enterprise	2,770	2,677	2,573
Commercial revenue	7,123	7,027	6,771
Advertising sales	1,551	1,882	1,594
Other	2,797	2,172	1,748
	\$ 54,607	\$ 54,020	\$ 51,674

*Residential Services*

Residential customers are offered Internet, video, voice and mobile services primarily on a subscription basis. Mobile services are sold under unlimited data plans or by-the-gig data usage plans. The Company often provides multiple services to a customer. The transaction price for a bundle of services may be less than the sum of the standalone selling prices of each individual service. The Company allocates the bundle discount among the services to which the discount relates based on the relative standalone selling prices of those services. Generally, directly observable standalone selling prices are used for the revenue allocation. Customers are invoiced for subscription services in advance of the service period. Each subscription service provided is accounted for as a distinct performance obligation and revenue is recognized ratably over the monthly service period as the subscription services are delivered. Residential customers may generally cancel their subscriptions at the end of their monthly service period without penalty. Each optional service purchased is generally accounted for as a distinct performance obligation when purchased and revenue is recognized when the service is provided. For customer premise equipment ("CPE") where such CPE would qualify as a lease, the Company combines the operating lease with the subscription service revenue as a single performance obligation as the subscription service is the predominant component. Installation fees are deferred over the period the fee remains material to the customer, which the Company has estimated to be approximately six months. Sales commission costs are expensed as incurred as the amortization period is less than one year. Right-of-entry costs represent upfront costs incurred related to agreements entered into with multiple dwelling units ("MDUs") including landlords,

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real estate companies or owners to gain access to a building in order to market and service customers who reside in the building. Right-of-entry costs are deferred as contract fulfillment costs and recognized over the term of the contracts.

Customers can purchase mobile equipment, including devices and accessory products, and have the option to pay for devices under interest-free monthly installment plans. The Company does not impute interest on equipment installment plans sold through its direct channel as the inherent financing component is not considered significant based on the commercial objective of the plans, interest rates prevailing in the marketplace and credit risks of the Company's customers. The sale of equipment is a separate performance obligation, therefore, revenue is recognized from the sale of equipment upon delivery and acceptance by the customer.

Fees imposed on the Company by various governmental authorities are passed through on a monthly basis to the Company's customers and are periodically remitted to authorities. Fees of \$993 million for the year ended December 31, 2023 and \$1.1 billion for each of the years ended December 31, 2022 and 2021 are reported in revenues on a gross basis with a corresponding operating expense because the Company is acting as a principal. Certain taxes, such as sales taxes imposed on the Company's customers, collected and remitted to state and local authorities, are recorded on a net basis because the Company is acting as an agent in such situations.

*Commercial Services*

Small and medium business ("SMB") customers are offered Internet, video, voice and mobile services similar to those provided to residential customers. SMB customers may generally cancel their subscriptions at the end of their monthly service period without penalty. Each subscription service provided is accounted for as a distinct performance obligation and revenue is recognized ratably over the monthly service period as the subscription services are delivered.

Services to enterprise clients include more tailored communications products and managed service solutions to larger businesses, as well as high-capacity last-mile data connectivity services to mobile and wireline carriers on a wholesale basis. Services are primarily offered on a subscription basis with a contractually specified and non-cancelable service period, which is generally one to seven years with a weighted average term of approximately three years. Each subscription service provided is accounted for as a distinct performance obligation and revenue is recognized ratably over the contract period as the subscription services are delivered. Enterprise subscription services are billed as monthly recurring charges to customers and related installation services, if applicable, are billed upon completion of the customer installation. Installation services are not accounted for as distinct performance obligations, but rather a component of the connectivity services, and therefore upfront installation fees are deferred and recognized as revenue over the related contract period. Enterprise sales commission costs are deferred and recognized using a portfolio approach over a weighted-average contract period.

*Advertising Services*

The Company offers local, regional and national businesses the opportunity to advertise in individual and multiple service areas on cable television networks and digital outlets. Placement of advertising is accounted for as a distinct performance obligation and revenue is recognized at the point in time when the advertising is distributed. In some service areas, the Company has formed advertising interconnects or entered into representation agreements with other video distributors, under which the Company sells advertising on behalf of those distributors. In other service areas, the Company has entered into representation agreements under which another operator in the area will sell advertising on the Company's behalf. For representation arrangements in which the Company controls the sale of advertising and acts as the principal to the transaction, the Company recognizes revenue earned from the advertising customer on a gross basis and the amount remitted to the distributor as an operating expense. For other representation arrangements in which the Company does not control the sale of advertising and acts as an agent to the transaction, the Company recognizes revenue net of any fee remitted to the distributor.

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Other balances that are not separately presented on the consolidated balance sheets that relate to the recognition of revenue and collection of the related cash, as well as the deferred costs associated with our contracts with customers consist of the following for the periods presented:

	December 31,	
	2023	2022
<b>Accounts receivable, net:</b>		
Equipment installment plan receivables, net	\$ 673	\$ 577
<b>Other noncurrent assets:</b>		
Equipment installment plan receivables, net	\$ 687	\$ 261
Contract acquisition and fulfillment costs	\$ 616	\$ 505
<b>Accounts payables, accrued and other current liabilities:</b>		
Customer prepayments and upfront deferred installation fees	\$ 509	\$ 511

Activity in the allowance for doubtful accounts is summarized as follows for the years presented:

	Year Ended December 31,		
	2023	2022	2021
Balance, beginning of period	\$ 219	\$ 157	\$ 217
Charged to expense	743	758	484
Uncollected balances written off, net of recoveries	(694)	(696)	(544)
Balance, end of period	<u>\$ 268</u>	<u>\$ 219</u>	<u>\$ 157</u>

## 11. Operating Costs and Expenses

Operating costs and expenses, exclusive of items shown separately in the consolidated statements of operations, consist of the following for the periods presented:

	Year Ended December 31,		
	2023	2022	2021
Programming	\$ 10,638	\$ 11,620	\$ 11,844
Other costs of revenue	5,587	4,804	4,353
Costs to service customers	8,415	8,087	7,547
Sales and marketing	3,653	3,585	3,256
Other	5,259	4,881	4,566
	<u>\$ 33,552</u>	<u>\$ 32,977</u>	<u>\$ 31,566</u>

Programming costs consist primarily of costs paid to programmers for basic, premium, video on demand and pay-per-view programming. Other costs of revenue include costs directly related to providing Internet, video, voice and mobile services including mobile device costs, payments to franchise and regulatory authorities, payments for sports, local and news content produced by the Company and direct costs associated with selling advertising. Also included in other costs of revenue are content acquisition costs for the Los Angeles Lakers' basketball games and Los Angeles Dodgers' baseball games, which are recorded as games are exhibited over the contract period. Costs to service customers include costs related to field operations, network operations and customer operations for the Company's products, including mobile, sold to non-bulk residential and SMB customers including internal and third-party labor for the non-capitalizable portion of installations, service and repairs, maintenance, bad debt expense, billing and collection, occupancy and vehicle costs. Sales and marketing costs represent the costs of selling and marketing our Internet, video, voice and mobile services to current and potential non-bulk residential and SMB customers, including labor cost. Other expense includes indirect costs associated with the Company's Spectrum

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Enterprise, Spectrum Reach, Spectrum Networks and Spectrum Community Solutions businesses, including sales and marketing and bad debt expenses as well as corporate overhead and stock compensation expense, among others.

**12. Other Operating Expense, Net**

Other operating expense, net consist of the following for the years presented:

	Year Ended December 31,		
	2023	2022	2021
Special charges, net	\$ 262	\$ 279	\$ 261
(Gain) loss on disposal of assets, net	(251)	8	45
	<u>\$ 11</u>	<u>\$ 287</u>	<u>\$ 306</u>

*Special charges, net*

Special charges, net primarily includes net amounts of litigation settlements and employee termination costs. For the year ended December 31, 2022, special charges, net also includes an impairment on non-strategic assets and is offset by a gain related to the settlement of a multiemployer pension plan.

*(Gain) loss on disposal of assets, net*

Gain (loss) on disposal of assets, net includes a \$262 million gain on sale of towers during the year ended December 31, 2023 and a \$36 million impairment of non-strategic assets held for sale during the year ended December 31, 2021.

**13. Other Income (Expense), Net**

Other income (expense), net consist of the following for the periods presented:

	Year Ended December 31,		
	2023	2022	2021
Loss on extinguishment of debt (see Note 8)	\$ (3)	\$ (3)	\$ (144)
Gain (loss) on financial instruments, net (see Note 9)	45	(95)	(86)
Other pension benefits (costs), net (see Note 18)	(216)	254	305
Loss on equity investments, net (see Note 5)	(331)	(151)	(179)
	<u>\$ (505)</u>	<u>\$ 5</u>	<u>\$ (104)</u>

**14. Stock Compensation Plans**

Charter's stock incentive plan provides for grants of nonqualified stock options, incentive stock options, stock appreciation rights, dividend equivalent rights, performance units and performance shares, share awards, phantom stock, restricted stock units and restricted stock. Directors, officers and other employees of the Company and its subsidiaries, as well as others performing consulting services for the Company, are eligible for grants under the stock incentive plan. The stock incentive plan allows for the issuance of up to 16 million shares of Charter Class A common stock (or units convertible into Charter Class A common stock).

Restricted stock, restricted stock units, stock options as well as equity awards with market conditions are measured at the grant date fair value and amortized to stock compensation expense over the requisite service period. The fair value of stock options is estimated on the date of grant using the Black-Scholes option-pricing model and the fair value of equity awards with market conditions is estimated on the date of grant using Monte Carlo simulations. The grant date weighted average assumptions used during the years ended December 31, 2023, 2022 and 2021 were: risk-free interest rate of 3.7%, 1.7% and 0.7%, respectively; expected lives of 4.8 years, 5.7 years and 5.9 years, respectively; and expected volatility of 31%, 28% and 27%, respectively. The Company's volatility assumptions represent management's best estimate and were based on a review of Charter's historical

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and implied volatility. Expected lives were estimated using historical exercise data. The valuations assume no dividends are paid. The Company has elected an accounting policy to assume zero forfeitures for stock awards grants and account for forfeitures when they occur.

Stock options and restricted stock units generally cliff vest three years from the date of grant. Certain stock options and restricted stock units vest based on achievement of stock price hurdles. Stock options generally expire ten years from the grant date and restricted stock units have no voting rights. Restricted stock generally vests one year from the date of grant.

As of December 31, 2023, total unrecognized compensation remaining to be recognized in future periods totaled \$390 million for stock options, \$1 million for restricted stock and \$440 million for restricted stock units and the weighted average period over which they are expected to be recognized is 3 years for stock options, 4 months for restricted stock and 2 years for restricted stock units. The Company recorded \$692 million, \$470 million and \$430 million of stock compensation expense for the years ended December 31, 2023, 2022 and 2021, respectively, which is included in operating costs and expenses.

A summary of the activity for Charter's stock options for the years ended December 31, 2023, 2022 and 2021, is as follows (shares in thousands, except per share data):

	Year Ended December 31,								
	2023			2022			2021		
	Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value	Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value	Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value
Outstanding, beginning of period	9,180	\$ 396.89		8,433	\$ 362.26		8,842	\$ 312.95	
Granted	4,278	\$ 384.50		1,469	\$ 577.64		1,295	\$ 629.57	
Exercised	(563)	\$ 228.69	\$ 102	(552)	\$ 295.51	\$ 133	(1,568)	\$ 295.46	\$ 606
Canceled	(237)	\$ 486.77		(170)	\$ 570.44		(136)	\$ 476.90	
Outstanding, end of period	<u>12,658</u>	<u>\$ 398.51</u>	<u>\$ 638</u>	<u>9,180</u>	<u>\$ 396.89</u>		<u>8,433</u>	<u>\$ 362.26</u>	
Weighted average remaining contractual life	<u>5 years</u>			<u>6 years</u>			<u>6 years</u>		
Options exercisable, end of period	<u>6,051</u>	<u>\$ 325.80</u>	<u>\$ 618</u>	<u>5,320</u>	<u>\$ 266.78</u>		<u>4,102</u>	<u>\$ 237.45</u>	
Options expected to vest, end of period	<u>6,607</u>	<u>\$ 465.11</u>	<u>\$ 20</u>						
Weighted average fair value of options granted	<u>\$ 126.13</u>			<u>\$ 172.24</u>			<u>\$ 171.21</u>		

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A summary of the activity for Charter’s restricted stock for the years ended December 31, 2023, 2022 and 2021, is as follows (shares in thousands, except per share data):

	Year Ended December 31,					
	2023		2022		2021	
	Shares	Weighted Average Grant Price	Shares	Weighted Average Grant Price	Shares	Weighted Average Grant Price
Outstanding, beginning of period	7	\$ 494.72	5	\$ 654.33	6	\$ 504.53
Granted	11	\$ 331.45	7	\$ 494.72	5	\$ 654.33
Vested	(7)	\$ 494.72	(5)	\$ 654.33	(6)	\$ 504.53
Canceled	—	\$ —	—	\$ —	—	\$ —
Outstanding, end of period	<u>11</u>	<u>\$ 331.45</u>	<u>7</u>	<u>\$ 494.72</u>	<u>5</u>	<u>\$ 654.33</u>

A summary of the activity for Charter’s restricted stock units for the years ended December 31, 2023, 2022 and 2021, is as follows (shares in thousands, except per share data):

	Year Ended December 31,					
	2023		2022		2021	
	Shares	Weighted Average Grant Price	Shares	Weighted Average Grant Price	Shares	Weighted Average Grant Price
Outstanding, beginning of period	1,266	\$ 545.00	1,294	\$ 449.03	1,651	\$ 337.82
Granted	1,561	\$ 359.07	638	\$ 522.45	367	\$ 629.47
Vested	(358)	\$ 510.22	(592)	\$ 307.67	(665)	\$ 269.88
Canceled	(98)	\$ 440.14	(74)	\$ 569.11	(59)	\$ 467.26
Outstanding, end of period	<u>2,371</u>	<u>\$ 432.11</u>	<u>1,266</u>	<u>\$ 545.00</u>	<u>1,294</u>	<u>\$ 449.03</u>

**15. Income Taxes**

CCO Holdings is a single member limited liability company not subject to income tax. CCO Holdings holds all operations through indirect subsidiaries. The majority of these indirect subsidiaries are limited liability companies that are not subject to income tax. Charter has elected the accounting policy not to allocate income taxes to its subsidiaries that are not subject to income tax. Certain indirect subsidiaries that are required to file separate returns are subject to federal and state tax. CCO Holdings’ tax provision reflects the tax provision of the entities required to file separate returns.

The Company recognizes deferred tax assets and liabilities for temporary differences between the financial reporting basis and the tax basis of these indirect subsidiaries' assets and liabilities and expected benefits of utilizing loss carryforwards. The impact on deferred taxes of changes in tax rates and tax law, if any, applied to the years during which temporary differences are expected to be settled, are reflected in the consolidated financial statements in the period of enactment.

Generally, the taxable income, gains, losses, deductions and credits of CCO Holdings are passed through to its indirect members, Charter and Advance/Newhouse Partnership (“A/N”). Charter is responsible for its share of taxable income or loss of CCO Holdings allocated to it in accordance with the Charter Holdings Limited Liability Company Agreement and partnership tax rules and regulations. Charter also records financial statement deferred tax assets and liabilities related to its investment, and its underlying net assets, in CCO Holdings.

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***Income Tax Expense***

For the years ended December 31, 2023, 2022, and 2021, the Company recorded income tax expense as shown below. The tax provision in future periods will vary based on current and future temporary differences, as well as future operating results.

	<b>Year Ended December 31,</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
Current expense:			
Federal income taxes	\$ (3)	\$ (2)	\$ (1)
State income taxes	(15)	(48)	(35)
Current income tax expense	<u>(18)</u>	<u>(50)</u>	<u>(36)</u>
Deferred benefit (expense):			
State income taxes	(1)	3	(5)
Deferred income tax benefit (expense)	<u>(1)</u>	<u>3</u>	<u>(5)</u>
Income tax expense	<u>\$ (19)</u>	<u>\$ (47)</u>	<u>\$ (41)</u>

The Company's effective tax rate differs from that derived by applying the applicable federal income tax rate of 21% for the years ended December 31, 2023, 2022 and 2021 as follows:

	<b>Year Ended December 31,</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
Statutory federal income taxes	\$ (1,410)	\$ (1,544)	\$ (1,334)
Statutory state income taxes, net	(16)	(44)	(40)
Income allocated to limited liability companies not subject to income taxes	1,407	1,541	1,333
Income tax expense	<u>\$ (19)</u>	<u>\$ (47)</u>	<u>\$ (41)</u>

***Deferred Tax Assets (Liabilities)***

The tax effects of these temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, 2023 and 2022 are presented below.

	<b>December 31,</b>	
	<b>2023</b>	<b>2022</b>
Deferred tax assets:		
Accrued and other	\$ 9	\$ 8
Total gross deferred tax assets	<u>9</u>	<u>8</u>
Deferred tax liabilities:		
Indefinite-lived intangibles	(44)	(44)
Property, plant and equipment	(19)	(17)
Accrued and other	(1)	(1)
Deferred tax liabilities	<u>(64)</u>	<u>(62)</u>
Net deferred tax liabilities	<u>\$ (55)</u>	<u>\$ (54)</u>

***Uncertain Tax Positions***

The net amount of the unrecognized tax benefits recorded as of December 31, 2023 that could impact the effective tax rate is \$121 million. These uncertain tax positions, if ever recognized in the financial statements, would be recorded in the

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consolidated statements of operations as part of the income tax provision. A reconciliation of the beginning and ending amount of unrecognized tax benefits, exclusive of interest and penalties, is as follows:

BALANCE, December 31, 2021	\$	96
Activity on prior year tax positions		1
Additions on current year tax positions		55
Reductions on settlements with taxing authorities and expirations		(1)
BALANCE, December 31, 2022		151
Additions on current year tax positions		25
Reductions on settlements with taxing authorities and expirations		(33)
BALANCE, December 31, 2023	\$	143

Charter is currently under examination by the Internal Revenue Service ("IRS") for income tax purposes for 2016, 2019, 2020 and 2021. Charter's 2022 tax year remains open for examination and assessment. Charter's 2017 and 2018 tax years remain open solely for purposes of loss and credit carryforwards. Charter's short period return dated May 17, 2016 (prior to the merger with Time Warner Cable Inc. ("TWC") and acquisition of Bright House Networks, LLC) and prior years remain open solely for purposes of examination of Charter's loss and credit carryforwards. The IRS is currently examining Charter Holdings' income tax returns for 2016, 2019, 2020 and 2021. Charter Holdings' 2022 tax year remains open for examination and assessment, while 2017 and 2018 remain open solely for purposes of credit carryforwards. The IRS is currently examining TWC's income tax returns for 2011, 2012 and 2015, while 2013 and 2014 have moved to Appeals. The Company does not anticipate that these examinations will have a material impact on its consolidated financial position or results of operations. In addition, the Company is also subject to ongoing examinations of our tax returns by state and local tax authorities for various periods. Activity related to these state and local examinations did not have a material impact on the Company's consolidated financial position or results of operations during the year ended December 31, 2023, nor does the Company anticipate a material impact in the future.

#### **16. Related Party Transactions**

The following sets forth certain transactions in which the Company and a director, executive officer, or other related party of the Company are involved or, in the case of the management arrangements, subsidiaries that are debt issuers that pay certain of their parent companies for services.

Charter is a party to management arrangements with its subsidiary, Spectrum Management, and certain of their subsidiaries. Under these agreements, Charter, Spectrum Management and Charter Holdco provide management services for the cable systems owned or operated by their subsidiaries. Costs associated with providing these services are charged directly to the Company's operating subsidiaries. All other costs incurred on behalf of Charter's operating subsidiaries are considered a part of the management fee. These costs are recorded as a component of operating costs and expenses, in the accompanying consolidated financial statements. The management fee charged to the Company's operating subsidiaries approximated the expenses incurred by Spectrum Management, Charter Holdco and Charter on behalf of the Company's operating subsidiaries in 2023, 2022 and 2021.

#### ***Liberty Broadband and A/N***

Under the terms of the Amended and Restated Stockholders Agreement among Charter, Liberty Broadband Corporation ("Liberty Broadband") and A/N, dated as of May 23, 2015 (as amended, the "Stockholders Agreement"), the number of Charter's directors is fixed at 13. Two designees selected by A/N are members of the board of directors of Charter and three designees selected by Liberty Broadband are members of Charter's Board of Directors. The remaining eight directors are not designated by either A/N or Liberty Broadband. Each of A/N and Liberty Broadband is entitled to nominate at least one director to each of the committees of Charter's Board of Directors, subject to applicable stock exchange listing rules and certain specified voting or equity ownership thresholds for each of A/N and Liberty Broadband, and provided that the Nominating and Corporate Governance Committee and the Compensation and Benefit Committee each have at least a majority of directors independent from A/N, Liberty Broadband and Charter (referred to as the "unaffiliated directors"). Each of the Nominating and Corporate Governance Committee and the Compensation and Benefits Committee is currently comprised of three unaffiliated

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directors and one designee of each of A/N and Liberty Broadband. A/N and Liberty Broadband also have certain other committee designation and governance rights. Pursuant to the terms of Mr. Thomas Rutledge's employment agreement, Mr. Rutledge stepped down from his position as the Executive Chairman of the Company and the Board of Directors at the end of his employment term on November 30, 2023, but continues to serve as a director emeritus. In conjunction with Mr. Rutledge's retirement from the Board of Directors, Mr. Christopher Winfrey was appointed to the Board of Directors effective November 30, 2023 to fill the vacancy resulting from Mr. Rutledge's resignation. Mr. Eric Zinterhofer was appointed as Non-Executive Chairman of the Board of Directors effective November 30, 2023 upon the retirement of Mr. Rutledge as Executive Chairman.

In December 2016, Charter and A/N entered into a letter agreement, as amended in December 2017 (the "A/N Letter Agreement") that requires A/N to sell to Charter or to Charter Holdings, on a monthly basis, a number of shares of Charter Class A common stock or Charter Holdings common units that represents a pro rata participation by A/N and its affiliates in any repurchases of shares of Charter Class A common stock from persons other than A/N effected by Charter during the immediately preceding calendar month, at a purchase price equal to the average price paid by Charter for the shares repurchased from persons other than A/N during such immediately preceding calendar month. A/N and Charter both have the right to terminate or suspend the pro rata repurchase arrangement on a prospective basis. Pursuant to the TRA between Charter and A/N, Charter must pay to A/N 50% of the tax benefit when realized by Charter from the step-up in tax basis resulting from any future exchange or sale of the common units.

In February 2021, Charter and Liberty Broadband entered into a letter agreement (the "LBB Letter Agreement"). The LBB Letter Agreement implements Liberty Broadband's obligations under the Stockholders Agreement to participate in share repurchases by Charter. Under the LBB Letter Agreement, Liberty Broadband will sell to Charter, generally on a monthly basis, a number of shares of Charter Class A common stock representing an amount sufficient for Liberty Broadband's ownership of Charter to be reduced such that it does not exceed the ownership cap then applicable to Liberty Broadband under the Stockholders Agreement at a purchase price per share equal to the volume weighted average price per share paid by Charter for shares repurchased during such immediately preceding calendar month other than (i) purchases from A/N, (ii) purchases in privately negotiated transactions or (iii) purchases for the withholding of shares of Charter Class A common stock pursuant to equity compensation programs of Charter.

Gregory Maffei, a director of Charter and President and CEO and director and holder of an 8.4% voting interest in Liberty Broadband, is Chairman of the board of directors of Qurate Retail, Inc. ("Qurate") and Dr. John Malone, a director emeritus of Charter, Chairman of the board of directors of Liberty Broadband and holder of a 48.9% voting interest in Liberty Broadband, also serves on the Qurate board of directors. As reported in SEC filings of Qurate, Mr. Maffei and Dr. Malone, Mr. Maffei has ownership of an approximate 20.1% voting interest in Qurate and Dr. Malone has ownership of an approximate 6.6% voting interest in Qurate. Qurate wholly owns HSN, Inc. ("HSN") and QVC, Inc. ("QVC"). The Company has programming relationships with HSN and QVC. For the years ended December 31, 2023, 2022 and 2021, the Company recorded revenue in aggregate of approximately \$47 million, \$43 million and \$48 million, respectively, from HSN and QVC as part of channel carriage fees and revenue sharing arrangements for home shopping sales made to customers in the Company's footprint.

### ***Equity Investments***

The Company and its parent companies have agreements with certain equity investees (see Note 5) pursuant to which the Company has made or received related party transaction payments for the receipt of goods or services. The Company and its parent companies recorded payments to equity investees totaling \$180 million, \$213 million and \$229 million during the years ended December 31, 2023, 2022 and 2021, respectively.

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**17. Commitments and Contingencies**

***Commitments***

The following table summarizes the Company's and its parent companies' payment obligations as of December 31, 2023 for its contractual obligations which consists of guaranteed minimum commitments, including rights negotiated directly with content owners for distribution on company-owned channels or networks, commitments related to our role as an advertising and distribution sales agent for third party-owned channels or networks, commitments to our customer premise equipment and device vendors, contractual obligations related to third-party network augmentation and guaranteed minimum commitments under the Company's programming contracts.

2024	\$	3,171
2025		1,221
2026		1,092
2027		969
2028		633
Thereafter		5,586
	<u>\$</u>	<u>12,672</u>

The following items are not included in the contractual obligation table due to various factors discussed below. However, the Company incurs these costs as part of its operations:

- The Company rents utility poles used in its operations. Generally, pole rentals are cancelable on short notice, but the Company anticipates that such rentals will recur. Rent expense incurred for pole rental attachments for the years ended December 31, 2023, 2022 and 2021 was \$230 million, \$207 million and \$200 million, respectively.
- The Company pays franchise fees under multi-year franchise agreements based on a percentage of revenues generated from video service per year. The Company also pays other franchise related costs, such as public education grants, under multi-year agreements. Franchise fees and other franchise-related costs included in the accompanying statement of operations were \$664 million, \$730 million and \$733 million for the years ended December 31, 2023, 2022 and 2021 respectively.
- The Company has \$530 million in letters of credit, of which \$36 million is secured under the Charter Operating credit facility, primarily to its various casualty carriers as collateral for reimbursement of workers' compensation, auto liability and general liability claims, as well as \$296 million of surety bonds.

***Legal Proceedings***

On April 27, 2022, Entropic Communications, LLC ("Entropic") filed a complaint in the United States District Court for the Eastern District of Texas alleging that Charter infringed six patents relating to the deployment of certain set-top boxes, cable modems and cable modem termination systems. Entropic sought monetary damages, including future license fees. On February 10, 2023, Entropic filed a separate lawsuit against Charter in the United States District Court for the Eastern District of Texas. The lawsuit alleged infringement of three patents that also relate to the deployment of certain set-top boxes and cable modems. Entropic sought monetary damages. On February 10, 2023, Entropic filed two more lawsuits against Charter in the United States District Court for the Eastern District of Texas. The two lawsuits alleged infringement of a total of twelve patents that relate to certain set-top boxes. Entropic sought monetary damages, including future license fees. On December 10, 2023, Charter and Entropic executed a settlement agreement that resolved all of these matters and the litigation was dismissed with prejudice.

The California Attorney General and the Alameda County, California District Attorney are investigating whether certain of Charter's waste disposal policies, procedures and practices are in violation of the California Business and Professions Code and the California Health and Safety Code. That investigation was commenced in January 2014. A similar investigation involving TWC was initiated in February 2012. Charter is cooperating with these investigations. While the Company is unable to predict the outcome of these investigations, it does not expect that the outcome will have a material effect on its operations, financial condition, or cash flows.

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In addition to the Entropic litigation described above, the Company and its parent companies are defendants or co-defendants in several lawsuits involving alleged infringement of various intellectual property relating to various aspects of their businesses. Other industry participants are also defendants in certain of these cases or related cases. In the event that a court ultimately determines that the Company infringes on any intellectual property, the Company may be subject to substantial damages and/or an injunction that could require the Company or its vendors to modify certain products and services the Company offers to its subscribers, as well as negotiate royalty or license agreements with respect to the intellectual property at issue. While the Company believes the lawsuits are without merit and intends to defend the actions vigorously, no assurance can be given that any adverse outcome would not be material to the Company's consolidated financial condition, results of operations, or liquidity. The Company cannot predict the outcome of any such claims nor can it reasonably estimate a range of possible loss.

The Company and its parent companies are party to other lawsuits, claims and regulatory inquiries that arise in the ordinary course of conducting their business. The ultimate outcome of these other legal matters pending against the Company cannot be predicted, and although such lawsuits and claims are not expected individually to have a material adverse effect on the Company's consolidated financial condition, results of operations or liquidity, such lawsuits could have, in the aggregate, a material adverse effect on the Company's consolidated financial condition, results of operations or liquidity. Whether or not the Company ultimately prevails in any particular lawsuit or claim, litigation can be time consuming and costly and injure the Company's reputation.

## **18. Employee Benefit Plans**

### ***Pension Plans***

The Company sponsors qualified and unqualified defined benefit pension plans that provide pension benefits to a majority of employees who were employed by TWC before the merger with TWC. Pension benefits are based on formulas that reflect the employees' years of service and compensation during their employment period. Actuarial gains or losses are changes in the amount of either the benefit obligation or the fair value of plan assets resulting from experience different from that assumed or from changes in assumptions. The Company has elected to follow a mark-to-market pension accounting policy for recording the actuarial gains or losses annually during the fourth quarter, or earlier if a remeasurement event occurs during an interim period.

In June 2023, the Company purchased a buy-in group annuity contract ("GAC") from a highly rated insurer and in October 2023, the Company announced plans to fully terminate the qualified pension plan. The benefit obligation for the qualified pension plan as of December 31, 2023 of \$2.4 billion was therefore determined on a plan termination basis for which it is assumed that a portion of eligible active and deferred vested participants will elect lump sum payments. Pension obligations will be distributed through a combination of lump sum payments to eligible participants who elect such payments and through the GAC.

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Changes in the projected benefit obligation, fair value of plan assets and funded status of the pension plans from January 1 through December 31 are presented below:

	<b>2023</b>	<b>2022</b>
Projected benefit obligation at beginning of year	\$ 2,243	\$ 3,374
Interest cost	117	103
Actuarial (gain) loss	222	(1,032)
Settlement	(97)	(146)
Benefits paid	(59)	(56)
Projected benefit obligation at end of year	<u>\$ 2,426</u>	<u>\$ 2,243</u>
Accumulated benefit obligation at end of year	<u>\$ 2,426</u>	<u>\$ 2,243</u>
Fair value of plan assets at beginning of year	\$ 2,583	\$ 3,457
Actual return on plan assets	124	(675)
Employer contributions	2	3
Settlement	(97)	(146)
Benefits paid	(59)	(56)
Fair value of plan assets at end of year	<u>\$ 2,553</u>	<u>\$ 2,583</u>
Funded status	<u>\$ 127</u>	<u>\$ 340</u>

The components of net periodic benefit (cost) for the years ended December 31, 2023, 2022 and 2021 consisted of the following:

	<b>Year Ended December 31,</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
Interest cost	\$ (117)	\$ (103)	\$ (97)
Expected return on plan assets	124	156	165
Remeasurement gain (loss)	(223)	201	237
Net periodic pension benefit (cost)	<u>\$ (216)</u>	<u>\$ 254</u>	<u>\$ 305</u>

The remeasurement loss recorded during the year ended December 31, 2023 primarily reflects the measurement of the projected benefit obligations under a plan termination basis. The remeasurement gains recorded during the years ended December 31, 2022 and 2021 were primarily driven by changes in the discount rate as well as gains or losses to record pension assets to fair value.

The discount rates used to determine benefit obligations as of December 31, 2023 and 2022 were 4.65% and 5.46%, respectively. The Company utilized the 417(e) Applicable Mortality Table for lump sums for the portion of the benefit obligation not covered by the GAC as of December 31, 2023 and the Pri-2012/MP 2020 mortality table published by the Society of Actuaries to measure the benefit obligations as of December 31, 2022.

Weighted average assumptions used to determine net periodic benefit costs consisted of the following:

	<b>Year ended December 31,</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
Expected long-term rate of return on plan assets	5.00 %	5.00 %	5.00 %
Discount rate	5.46 %	3.01 %	2.7 %

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In developing the expected long-term rate of return on plan assets, the Company considered the pension portfolio's composition, past average rate of earnings and the Company's future asset allocation targets. The weighted average expected long-term rate of return on plan assets and discount rate used to determine net periodic pension benefit (cost) for the year ended December 31, 2024 are expected to be 5.00% and 4.65%, respectively. The Company determined the discount rates used to determine benefit obligations and net periodic pension benefit (cost) based on the yield of a large population of high quality corporate bonds with cash flows sufficient in timing and amount to settle projected future defined benefit payments.

***Pension Plan Assets***

The assets of the qualified pension plan are held in a master trust in which the qualified pension plan is the only participating plan (the "Master Trust"). The investment policy for the qualified pension plan is to manage the assets of the Master Trust with the objective to provide for pension liabilities to be met, seeking to maintain retirement income security for the participants of the plan and their beneficiaries. The investment portfolio is a mix of a GAC and pooled funds invested in fixed income securities, equity securities and certain alternative investments with the objective of matching plan liability performance, diversifying risk and achieving a target investment return. Pension assets are managed in a balanced portfolio comprised of two major components: a return-seeking portion and a liability-matching portion.

As a result of the Company's decision to terminate the qualified pension plan, the Company's investment strategy has transitioned to liquidating and winding down the portfolio's remaining return-seeking investments in a timely and orderly manner, while managing the liability-matching investments to hedge the interest rate risk of the liability for which the Company is still responsible (i.e., the liability not assumed by the GAC).

The following tables set forth the investment assets of the qualified pension plan by level within the fair value hierarchy as of December 31, 2023 and 2022:

	December 31, 2023			December 31, 2022		
	Fair Value	Level 2	Level 3	Fair Value	Level 1	Level 2
Cash	\$ —	\$ —	\$ —	\$ 6	\$ 6	\$ —
Collective trust funds <sup>(a)</sup>	745	745	—	1,858	—	1,858
Group annuity contract <sup>(b)</sup>	1,464	—	1,464	—	—	—
Total investment assets	2,209	\$ 745	\$ 1,464	1,864	\$ 6	\$ 1,858
Accrued investment income and other receivables	4			42		
Accrued liabilities	(2)			(25)		
Investments measured at net asset value <sup>(c)</sup>	342			702		
Fair value of plan assets	\$ 2,553			\$ 2,583		

<sup>(a)</sup> Collective trust funds consist of bond funds with corporate and U.S. treasury debt securities, equity funds with global equity index, infrastructure and real estate securities and short-term investment strategies comprised of instruments issued or fully guaranteed by the U.S. government and/or its agencies and multi-strategy funds, which are valued using the net assets provided by the administrator of the fund. The value of each fund is based on the readily determinable fair value of the underlying assets owned by the fund, less liabilities, and then divided by the number of units outstanding.

<sup>(b)</sup> In June 2023, the Company purchased a buy-in GAC which was initially recorded at the \$1.4 billion purchase price and subsequently adjusted to fair value using changes to market conditions impacting the cash flow assumptions that were priced into the original contract.

<sup>(c)</sup> As a practical expedient, certain investment classes which hold securities that are not readily available for redemption and are measured at fair value using the net asset value ("NAV") per share (or its equivalent) have not been classified in the fair value hierarchy. The primary investment classes include alternative, fixed income and real estate funds. Certain investments report NAV per share on a month or quarter lag. There are no material unfunded commitments with respect to these investment classes.

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The following table represents a rollforward of the Level 3 assets as of December 31, 2023:

	<b>Group Annuity Contract</b>
Balance at December 31, 2022	\$ —
Purchases	1,430
Unrealized gain	34
Balance at December 31, 2023	<u>\$ 1,464</u>

***Pension Plan Contributions***

The Company made no cash contributions to the qualified pension plan during the years ended December 31, 2023, 2022 and 2021; however, the Company may make discretionary cash contributions to the qualified pension plan in the future. Such contributions will be dependent on a variety of factors, including current and expected interest rates, asset performance, the funded status of the qualified pension plan and management's judgment. For the nonqualified unfunded pension plan, the Company will continue to make contributions during 2024 to the extent benefits are paid.

Benefit payments for the pension plans are expected to be \$194 million in 2024, \$183 million in 2025, \$176 million in 2026, \$169 million in 2027, \$162 million in 2028 and \$753 million in 2029 to 2033.

***Defined Contribution Benefit Plans***

The Company's employees may participate in the Charter Communications, Inc. 401(k) Savings Plan (the "401(k) Plan"). Employees that qualify for participation can contribute up to 50% of their salary, on a pre-tax basis, subject to a maximum contribution limit as determined by the IRS. The Company's matching contribution is discretionary and is equal to 100% of the amount of the salary reduction the participant elects to defer (up to 6% of the participant's eligible compensation), excluding any catch-up contributions and is paid by the Company on a per pay period basis.

For employees who are not eligible to participate in the Company's long-term incentive plan and who are not covered by a collective bargaining agreement, the Company offers a contribution to the Retirement Accumulation Plan ("RAP"), equal to 3% of eligible pay. The Company made contributions to the 401(k) plan and RAP totaling \$566 million, \$506 million and \$495 million for the years ended December 31, 2023, 2022 and 2021, respectively.

**19. Recently Issued Accounting Standards**

***Accounting Standards Update ("ASU") No. 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures ("ASU 2023-07")***

In November 2023, the FASB issued ASU 2023-07, that improves disclosures about a public entity's reportable segments and addresses requests from investors and other allocators of capital for additional, more detailed information about a reportable segment's expenses. The standard requires public entities to disclose, on an annual and interim basis, significant segment expenses that are regularly provided to the chief operating decision maker. Additionally, public entities with a single reportable segment must provide all the disclosures required by ASU 2023-07, as well as all existing segment disclosures in accordance with Accounting Standards Codification 280. ASU 2023-07 is effective for annual periods beginning after December 15, 2023 (year ending December 31, 2024 for the Company). Early adoption is permitted. The Company expects the adoption of the standard to result in additional segment footnote disclosures.

***ASU No. 2023-09, Improvements to Income Tax Disclosures ("ASU 2023-09")***

In December 2023, the FASB issued ASU 2023-09, that addresses requests for improved income tax disclosures from investors, lenders, creditors, and other allocators of capital that use the financial statements to make capital allocation decisions. The standard requires enhanced disclosures primarily related to existing rate reconciliation and income taxes paid information to help investors better assess how a company's operations and related tax risks and tax planning and operational opportunities affect the company's tax rate and prospects for future cash flows. ASU 2023-09 improves the transparency of income tax

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disclosures by requiring (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for annual periods beginning after December 15, 2024 (year ending December 31, 2025 for the Company). Early adoption is permitted. The Company expects the adoption of the standard to result in additional disaggregation in the income tax footnote disclosures.

**20. Parent Company Only Financial Statements**

As the result of limitations on, and prohibitions of, distributions, substantially all of the net assets of the consolidated subsidiaries are restricted from distribution to CCO Holdings, the parent company. The following condensed parent-only financial statements of CCO Holdings account for the investment in its subsidiaries under the equity method of accounting. Comprehensive income equaled net income for the years ended December 31, 2023, 2022 and 2021. The financial statements should be read in conjunction with the consolidated financial statements of the Company and notes thereto.

**CCO Holdings, LLC (Parent Company Only)**  
**Condensed Balance Sheets**

	<b>December 31,</b>	
	<b>2023</b>	<b>2022</b>
<b>ASSETS</b>		
Receivables from related party	\$ 23	\$ 25
Investment in subsidiaries	61,701	58,786
Total assets	\$ 61,724	\$ 58,811
<b>LIABILITIES AND MEMBER'S EQUITY</b>		
Current liabilities	\$ 391	\$ 876
Other long-term liabilities	27,168	26,067
Member's equity	34,165	31,868
Total liabilities and member's equity	\$ 61,724	\$ 58,811

**CCO Holdings, LLC (Parent Company Only)**  
**Condensed Statements of Operations**

	<b>Year Ended December 31,</b>		
	<b>2023</b>	<b>2022</b>	<b>2021</b>
Interest expense, net	\$ (1,344)	\$ (1,215)	\$ (1,166)
Loss on extinguishment of debt	—	—	(146)
Equity in income of subsidiaries	8,041	8,520	7,623
Net income	\$ 6,697	\$ 7,305	\$ 6,311

**CCO HOLDINGS, LLC AND SUBSIDIARIES**  
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**CCO Holdings, LLC (Parent Company Only)**  
**Condensed Statements of Cash Flows**

	Year Ended December 31,		
	2023	2022	2021
<b>NET CASH FLOWS FROM OPERATING ACTIVITIES</b>	\$ (1,315)	\$ (1,132)	\$ (1,200)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Contribution to subsidiaries	(1,164)	(4,381)	(3,967)
Distributions from subsidiaries	6,982	14,361	23,246
Net cash flows from investing activities	5,818	9,980	19,279
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Borrowings of long-term debt	1,100	2,700	3,744
Repayments of long-term debt	(500)	—	(4,166)
Payments for debt issuance costs	(11)	(26)	(34)
Contributions from parent	73	855	2
Distributions to parent	(5,165)	(12,965)	(17,725)
Net cash flows from related party loans	—	588	—
Net cash flows from financing activities	(4,503)	(8,848)	(18,179)
<b>NET DECREASE IN CASH AND CASH EQUIVALENTS</b>	—	—	(100)
<b>CASH AND CASH EQUIVALENTS, beginning of period</b>	—	—	100
<b>CASH AND CASH EQUIVALENTS, end of period</b>	\$ —	\$ —	\$ —

Issuers and Guarantors of Guaranteed Securities and Affiliate Securities Pledged as Collateral  
as of December 31, 2023

CCO Holdings, LLC, a Delaware limited liability company (the “Company”) and each of the CCOH Obligor Subsidiaries (as defined below), have fully and unconditionally guaranteed on a joint, several, full and unconditional basis each of the debt securities listed below, unless such subsidiary is an issuer of the listed debt security. Such guarantees are secured by substantially all of the assets of the CCOH Obligor Subsidiaries, including a pledge of the equity interests of substantially all of the subsidiaries owned by CCO and the other CCOH Obligor Subsidiaries (the “Pledged Equity Interests”).

**Debt Securities Issued by Charter Communications Operating, LLC (“CCO”) and Charter Communications Operating Capital Corp. (“CCO Capital”), guaranteed by the Company and each of the CCOH Obligor Subsidiaries (as defined below, other than CCO and CCO Capital) and secured by the Pledged Equity Interests:**

Senior floating rate notes due February 1, 2024  
 4.500% senior notes due February 1, 2024  
 4.908% senior notes due July 23, 2025  
 6.150% senior notes due November 10, 2026  
 3.750% senior notes due February 15, 2028  
 4.200% senior notes due March 15, 2028  
 2.250% senior notes due January 15, 2029  
 5.050% senior notes due March 30, 2029  
 2.800% senior notes due April 1, 2031  
 2.300% senior notes due February 1, 2032  
 4.400% senior notes due April 1, 2033  
 6.650% senior notes due February 1, 2034  
 6.384% senior notes due October 23, 2035  
 5.375% senior notes due April 1, 2038  
 3.500% senior notes due June 1, 2041  
 3.500% senior notes due March 1, 2042  
 6.484% senior notes due October 23, 2045  
 5.375% senior notes due May 1, 2047  
 5.750% senior notes due April 1, 2048  
 5.125% senior notes due July 1, 2049  
 4.800% senior notes due March 1, 2050  
 3.700% senior notes due April 1, 2051  
 3.900% senior notes due June 1, 2052  
 5.250% senior notes due April 1, 2053  
 6.834% senior notes due October 23, 2055  
 3.850% senior notes due April 1, 2061  
 4.400% senior notes due December 1, 2061  
 3.950% senior notes due June 30, 2062  
 5.500% senior notes due April 1, 2063

**Debt Securities Issued by Time Warner Cable, LLC (“TWC”), guaranteed by the Company and each of the CCOH Obligor Subsidiaries (as defined below, other than TWC) and secured by the Pledged Equity Interests:**

5.750% sterling senior notes due June 2, 2031  
 6.550% senior debentures due May 1, 2037  
 7.300% senior debentures due July 1, 2038  
 6.750% senior debentures due June 15, 2039  
 5.875% senior debentures due November 15, 2040

5.500% senior debentures due September 1, 2041  
5.250% sterling senior notes due July 15, 2042  
4.500% senior debentures due September 15, 2042

**Debt Securities Issued by Time Warner Cable Enterprises LLC (“TWCE”), guaranteed by the Company and each of the CCOH Obligor Subsidiaries (as defined below, other than TWCE) and secured by the Pledged Equity Interests:**

8.375% senior debentures due July 15, 2033

**“CCOH Obligor Subsidiaries”:**

Bresnan Broadband Holdings, LLC  
CCO NR Holdings, LLC  
Charter Advanced Services (MO), LLC  
Charter Communications ASC, LLC  
Charter Communications, LLC  
Charter Communications Operating Capital Corp.  
Charter Communications SSC, LLC  
Charter Communications VI HoldCo, LLC  
Charter Communications VI, L.L.C.  
Charter Distribution, LLC  
Charter Leasing Holding Company, LLC  
Charter Procurement Leasing, LLC  
DukeNet Communications, LLC  
Spectrum Advanced Services, LLC  
Spectrum Gulf Coast, LLC  
Spectrum Mid-America, LLC  
Spectrum Mobile Equipment, LLC  
Spectrum Mobile, LLC  
Spectrum New York Metro, LLC  
Spectrum NLP, LLC  
Spectrum Northeast, LLC  
Spectrum Oceanic, LLC  
Spectrum Originals Development, LLC  
Spectrum Originals, LLC  
Spectrum Pacific West, LLC  
Spectrum Reach, LLC  
Spectrum RSN, LLC  
Spectrum Southeast, LLC  
Spectrum Sunshine State, LLC  
Spectrum TV Essentials, LLC  
Spectrum Wireless Holdings, LLC  
Time Warner Cable Enterprises LLC  
Time Warner Cable, LLC  
TWC Administration LLC  
TWC Communications, LLC  
TWC SEE Holdco LLC

**Consent of Independent Registered Public Accounting Firm**

The Manager and Member

CCO Holdings, LLC:

We consent to the incorporation by reference in the registration statement (No. 333-275214) on Form S-3 of our report dated February 1, 2024, with respect to the consolidated financial statements of CCO Holdings, LLC.

(Signed) KPMG LLP

St. Louis, Missouri  
February 1, 2024

I, Christopher L. Winfrey, certify that:

1. I have reviewed this Annual Report on Form 10-K of CCO Holdings, LLC and CCO Holdings Capital Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 2, 2024

/s/ Christopher L. Winfrey

Christopher L. Winfrey  
President and Chief Executive Officer

I, Jessica M. Fischer, certify that:

1. I have reviewed this Annual Report on Form 10-K of CCO Holdings, LLC and CCO Holdings Capital Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 2, 2024

/s/ Jessica M. Fischer

Jessica M. Fischer  
Chief Financial Officer  
(Principal Financial Officer)

**CERTIFICATION OF CHIEF EXECUTIVE  
OFFICER REGARDING PERIODIC REPORT CONTAINING  
FINANCIAL STATEMENTS**

I, Christopher L. Winfrey, the President and Chief Executive Officer of CCO Holdings, LLC and CCO Holdings Capital Corp. (the "Company") in compliance with 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, hereby certify that, the Company's Annual Report on Form 10-K for the year ended December 31, 2023 (the "Report") filed with the Securities and Exchange Commission:

- fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Christopher L. Winfrey

Christopher L. Winfrey  
President and Chief Executive Officer  
February 2, 2024

**CERTIFICATION OF CHIEF FINANCIAL  
OFFICER REGARDING PERIODIC REPORT CONTAINING  
FINANCIAL STATEMENTS**

I, Jessica M. Fischer, the Chief Financial Officer of CCO Holdings, LLC and CCO Holdings Capital Corp. (the "Company"), in compliance with 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, hereby certify that, the Company's Annual Report on Form 10-K for the year ended December 31, 2023 (the "Report") filed with the Securities and Exchange Commission:

- fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Jessica M. Fischer

Jessica M. Fischer  
Chief Financial Officer  
(Principal Financial Officer)  
February 2, 2024