UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D. C. 20549

FORM 10-K

☑ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2023

OR

 \square Transition report pursuant to section 13 or 15(d) of the securities exchange act of 1934

For the transition period from to Commission File Number 001-36713

LIBERTY BROADBAND CORPORATION

(Exact name of Registrant as specified in its charter)

State of Delaware (State or other jurisdiction of incorporation or organization) 47-1211994 (I.R.S. Employer Identification No.)

12300 Liberty Boulevard Englewood, Colorado (Address of principal executive offices)

80112 (Zip Code)

Registrant's telephone number, including area code: (720) 875-5700

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Series A common stock	LBRDA	The Nasdaq Stock Market LLC
Series C common stock	LBRDK	The Nasdaq Stock Market LLC
Series A Cumulative Redeemable preferred stock	LBRDP	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act, Yes 🗵 No 🗆

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes \square No \boxtimes

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T ($\S232.405$ of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes \boxtimes No \square

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

Emerging growth company □

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. \boxtimes

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes \square No \boxtimes

The aggregate market value of the voting and non-voting common stock held by non-affiliates of Liberty Broadband Corporation computed by reference to the last sales price of such stock, as of the closing of trading on June 30, 2023, was \$10.7 billion.

 $The number of outstanding shares of Liberty Broadband Corporation common stock as of January 31, 2024 \ was: 100 \ mathematical common stock as of January 31, 2024 \ was: 100 \ mathema$

 Series A
 Series B
 Series C

 Liberty Broadband Corporation common stock
 18,235,373
 2,023,432
 122,667,679

Documents Incorporated by Reference

The Registrant's definitive proxy statement for its 2024 Annual Meeting of Stockholders is hereby incorporated by reference into Part III of this Annual Report on Form 10-K.

LIBERTY BROADBAND CORPORATION 2023 ANNUAL REPORT ON FORM 10-K

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PART I.

Item 1. Business

General Development of Business

Liberty Broadband Corporation ("Liberty Broadband," "the Company," "us," "we," or "our") is primarily comprised of GCI Holdings, LLC ("GCI Holdings" or "GCI"), a wholly owned subsidiary, and an equity method investment in Charter Communications, Inc. ("Charter").

During May 2014, the board of directors of Liberty Media Corporation and its subsidiaries ("Liberty") authorized management to pursue a plan to spin-off to its stockholders common stock of a wholly-owned subsidiary, Liberty Broadband, and to distribute subscription rights to acquire shares of Liberty Broadband's common stock (the "Broadband Spin-Off"). Liberty Broadband was formed in 2014 as a Delaware corporation.

On December 18, 2020, GCI Liberty, Inc. ("GCI Liberty"), the parent company of GCI Holdings, was acquired by Liberty Broadband (the "Combination").

In connection with the Broadband Spin-Off, Liberty and Liberty Broadband entered into certain agreements in order to govern certain of the ongoing relationships between the two companies after the Broadband Spin-Off and to provide for an orderly transition, including a services agreement and a facilities sharing agreement. Additionally, in connection with a prior transaction, GCI Liberty and Qurate Retail, Inc. ("Qurate Retail") entered into a tax sharing agreement, which was assumed by Liberty Broadband as a result of the Combination. The tax sharing agreement provides for the allocation and indemnification of tax liabilities and benefits between Qurate Retail and Liberty Broadband and other agreements related to tax matters. Under the facilities sharing agreement, Liberty Broadband shares office space with Liberty and related amenities at Liberty's corporate headquarters.

Pursuant to the services agreement, Liberty provides Liberty Broadband with general and administrative services including legal, tax, accounting, treasury, information technology, cybersecurity and investor relations support. Liberty Broadband reimburses Liberty for direct, out-of-pocket expenses incurred by Liberty in providing these services which are negotiated semi-annually, as necessary. Pursuant to the services agreement, in connection with Liberty's employment arrangement with Gregory B. Maffei, the Company's President and Chief Executive Officer, components of Mr. Maffei's compensation are either paid directly to him or reimbursed to Liberty, based on allocations set forth in the services agreement. For the years ended December 31, 2023, 2022 and 2021, the allocation percentage for Liberty Broadband was 23%, 33% and 37%, respectively, but is subject to adjustment on an annual basis and upon the occurrence of certain events.

Cautionary Note Regarding Forward-Looking Statements

Certain statements in this Annual Report on Form 10-K constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding business, product and marketing strategies; new service and product offerings; revenue growth; future expenses; anticipated changes to regulations; the recognition of deferred revenue; the recoverability of our goodwill and other long-lived assets; competition; the performance, results of operations and cash flows of our equity affiliate, Charter; the expansion of Charter's network; projected sources and uses of cash; renewal of licenses; the effects of regulatory developments; the Rural Health Care ("RHC") Program; indebtedness and the anticipated impact of certain contingent liabilities related to legal and tax proceedings and other matters arising in the ordinary course of business. In particular, statements under Item 1. "Business," Item 1A. "Risk Factors," Item 2. "Properties," Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 7A. "Quantitative and Qualitative Disclosures About Market Risk" contain forward-looking statements. Forward-looking statements inherently involve many risks and uncertainties that could cause actual results to differ materially from those projected in these statements. Where, in any forward-looking statement, we express an expectation or belief as to future results or events, such expectation or belief is expressed in good faith and believed to have a reasonable basis, but such statements necessarily involve risks and uncertainties

and there can be no assurance that the expectation or belief will result or be achieved or accomplished. The following include some but not all of the factors that could cause actual results or events to differ materially from those anticipated:

- our, GCI Holdings, GCI, LLC and Charter's ability to obtain cash in sufficient amounts to service financial obligations and meet other commitments;
- our ability to use net operating loss carryforwards and disallowed business interest carryforwards;
- our, GCI Holdings, GCI, LLC and Charter's ability to obtain additional financing, or refinance existing indebtedness, on acceptable terms;
- the impact of our, GCI, LLC and Charter's significant indebtedness and the ability to comply with any covenants in our and their respective debt instruments;
- general business conditions, unemployment levels, the level of activity in the housing sector, economic uncertainty or downturn and inflationary pressures on input costs and labor;
- competition faced by GCI Holdings and Charter;
- the ability of GCI Holdings and Charter to acquire and retain subscribers;
- the impact of governmental legislation and regulation including, without limitation, regulations of the Federal Communications
 Commission (the "FCC"), on GCI Holdings and Charter, their ability to comply with regulations, and adverse outcomes from regulatory
 proceedings;
- changes in the amount of data used on the networks of GCI Holdings and Charter;
- the ability of third-party providers to supply equipment, services, software or licenses;
- the ability of GCI Holdings and Charter to respond to new technology and meet customer demands for new products and services;
- changes in customer demand for the products and services of GCI Holdings and Charter and their ability to adapt to changes in demand;
- the ability of GCI Holdings and Charter to license or enforce intellectual property rights;
- natural or man-made disasters, terrorist attacks, armed conflicts, pandemics, cyberattacks, network disruptions, service interruptions and system failures and the impact of related uninsured liabilities;
- the ability to hire and retain key personnel;
- the ability to procure necessary services and equipment from GCI Holdings' and Charter's vendors in a timely manner and at reasonable costs including in connection with Charter's network evolution and rural construction initiatives;
- risks related to the Investment Company Act of 1940;
- the outcome of any pending or threatened litigation; and
- changes to general economic conditions, including economic conditions in Alaska, and their impact on potential customers, vendors and third parties.

These forward-looking statements and such risks, uncertainties and other factors speak only as of the date of this Annual Report, and we expressly disclaim any obligation or undertaking to disseminate any updates or revisions to any forward-looking statement contained herein, to reflect any change in our expectations with regard thereto, or any other change in events, conditions or circumstances on which any such statement is based. When considering such forward-looking statements, you should keep in mind the factors described in Item 1A, "Risk Factors" and other cautionary statements contained in this Annual Report. Such risk factors and statements describe circumstances which could cause actual results to differ materially from those contained in any forward-looking statement.

This Annual Report includes information concerning Charter, a public company that files reports and other information with the Securities and Exchange Commission (the "SEC") in accordance with the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Information in this Annual Report concerning Charter has been derived from the reports and other

information filed by it with the SEC. If you would like further information about Charter, the reports and other information it files with the SEC can be accessed on the Internet website maintained by the SEC at www.sec.gov. Those reports and other information are not incorporated by reference in this Annual Report.

Description of Business

The following table identifies the Company's more significant subsidiaries and minority investments:

Consolidated Subsidiaries

GCI Holdings

Equity Method Investments

Charter Communications, Inc. (Nasdaq: CHTR)

GCI Holdings

GCI Holdings, a wholly owned subsidiary of the Company, provides a full range of data, wireless, video, voice, and managed services to residential customers, businesses, governmental entities, and educational and medical institutions primarily in Alaska under the GCI brand. Due to the unique nature of the markets it serves, including harsh winter weather and remote geographies, its customers rely extensively on its systems to meet their communication and entertainment needs.

Since its founding in 1979 as a competitive long distance provider, GCI Holdings has consistently expanded its product portfolio and facilities to become the leading integrated communication services provider in markets it serves. Its facilities include redundant and geographically diverse digital undersea fiber optic cable systems linking its Alaska terrestrial networks to the networks of other carriers in the lower 48 contiguous states and a statewide wireless network.

Throughout its history, GCI Holdings has successfully added and expects to continue to add new products to its product portfolio. GCI Holdings has a demonstrated history of new product evaluation, development and deployment for its customers, and it continues to assess revenue-enhancing opportunities that create value for its customers. Where feasible and where economic analysis supports geographic expansion of its network coverage, it is currently pursuing or expects to pursue opportunities to increase the scale of its facilities, enhance its ability to serve existing customers' needs and attract new customers. Additionally, due to the unique market conditions in Alaska, GCI Holdings, and in some cases its customers, participate in several federally (and to a lesser extent locally) subsidized programs designed to financially support the implementation and purchase of telecommunications services in high cost areas. With these programs, GCI Holdings has been able to expand its network into previously undeveloped areas of Alaska and offer comprehensive communications services in many rural parts of the state where it would not otherwise be able to construct facilities within appropriate return-on-investment requirements. As part of GCI Holdings' expansion initiatives, it actively pursues government grants designed to help fund rural expansion. In current and prior years, the Company has been awarded, as either the recipient or subrecipient, federal government grants to construct broadband infrastructure to unserved and underserved communities in rural Alaska. During the year ended December 31, 2023, the Company was publicly awarded a total of \$38 million in federal grants.

GCI Holdings' revenue was comprised of the following:

	Ye	Years ended December 31,			
	2023	2022	2021		
Data services	67%	65%	60%		
Wireless services	25%	25%	27%		
Other services	8%	10%	13%		

GCI Holdings sells new and enhanced services and products to its existing customer base to achieve increased revenue and penetration of its services. Through close coordination of its customer service and sales and marketing efforts, its customer service representatives suggest to its customers other services they can purchase or enhanced versions of services they already

purchase. Many calls into the customer service centers or visits into one of the retail stores result in sales of additional services and products.

GCI Holdings has empowered its customer service representatives to handle most service issues and questions on a single call. GCI Holdings prioritizes its customer services to expedite handling of its most valuable customers' issues, particularly for its largest commercial customers. GCI Holdings believes its integrated approach to customer service, including service set-up, programming various network databases with the customer's information, installation, and ongoing service, allows it to provide a customer experience that fosters customer loyalty.

GCI Holdings continues to expand and evolve its integrated network for the delivery of its services. For its existing network, GCI Holdings' bundled strategy and integrated approach to serving customers creates efficiencies of scale and maximizes network utilization. By offering multiple services, GCI Holdings is better able to leverage its network assets and increase returns on its invested capital. GCI Holdings periodically evaluates its network assets and continually monitors technological developments that it can potentially deploy to increase network efficiency and performance.

GCI Holdings holds a number of federally registered service marks used by its business. It owns two utility patents issued in 2017 pertaining to device diagnostics and network connectivity. The Communications Act of 1934, as amended (the "Communications Act"), gives the FCC the authority to license and regulate the use of the electromagnetic spectrum for radio communications. GCI Holdings holds licenses for its satellite and microwave transmission facilities for provision of long-distance services. GCI Holdings holds various licenses for wireless spectrum. These licenses may be revoked and license renewal applications may be denied for cause. However, GCI Holdings expects these licenses to be renewed in due course when, at the end of the license period, a renewal application will be filed.

GCI Holdings has licenses for earth stations that are generally licensed for fifteen years. The FCC also issues a single blanket license for a large number of earth stations operating in specific frequency bands. Its operations may require additional licenses in the future.

GCI Holdings is certified through the Regulatory Commission of Alaska ("RCA") to provide local, long distance, and video service by Certificates of Public Convenience and Necessity ("CPCN"). These CPCNs are nonexclusive certificates defining each authorized service area. Although CPCNs have no stated expiration date, they may be revoked due to cause.

Network Services Facilities. GCI Holdings operates an advanced, diverse communications network providing data, mobile, video, voice, and managed services to consumer, business, government, and carrier customers throughout Alaska.

GCI Holdings serves urban and rural Alaska utilizing a combination of fiber, microwave, and satellite technologies. GCI Holdings is currently expanding its fiber network to the Aleutian Chain and has launched urban-level service in the region. GCI Holdings' extensive use of microwave and satellite technologies also enables it to deliver connectivity to some of Alaska's most-remote communities.

GCI Holdings owns and operates a statewide wireless network providing voice and data services to Alaskans. Its statewide wireless network provides fifth generation ("5G") data service, 4G Long Term Evolution ("LTE") voice and data service, EVDO, 3G UMTS/HSPA+, 2G CDMA, and 2G GSM/EDGE service. It continues to expand and upgrade these services to provide a modern network for Alaska.

GCI Holdings' dedicated internet access and suite of managed services, including voice, WiFi, firewall, detection and response operate on the highest-capacity backbone in Alaska, with numerous peering partners in Seattle and Portland. The availability and quality of service, as well as statistical information on traffic loading, are continuously monitored for quality assurance. The management platform has the capability to remotely access network elements and service end-points, permitting changes in configuration without the need to physically be at the service end-point. This management platform allows GCI Holdings to offer network monitoring and management services to businesses and governmental entities.

GCI Holdings' video businesses are located throughout Alaska. Its facilities include hybrid-fiber-coax plant and head-end distribution equipment. The majority of its locations on the fiber routes are served from head-end distribution equipment in Anchorage. All of its cable systems are completely digital. In preparation for GCI Holdings' progression to 10 gigabit internet, it is transitioning from traditional delivery methods to an Internet Protocol ("IP") video solution.

Charter Communications, Inc.

Introduction

Charter is a leading broadband connectivity company and cable operator serving more than 32 million customers in 41 states through its Spectrum brand. Over an advanced communications network, Charter offers 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. Charter also distributes award-winning news coverage and sports programming to its customers through Spectrum Networks.

Charter's network, which it owns and operates, passes nearly an estimated 57 million households and businesses across the United States. Its strategy is focused on the evolution of its network and products, expansion of its footprint, and the execution of high quality operations, including customer service. This strategy allows Charter 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, offers advanced services to consumers at highly attractive prices, together with outstanding customer service.

Evolution - Expanding the Capability of Charter's Network and Products

Charter's network and product evolution plan is progressing, with a clear path to delivering symmetrical and multi-gig speeds to its customers across its footprint, meeting the needs of today and anticipating the demand for faster speeds for years to come. Charter continues to evolve its 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 Charter expects to complete in 2026, it will transform its network to enable multi-gigabit data speeds to customers. Those faster speeds will be offered in conjunction with the Spectrum Mobile product and Advanced WiFi, providing customers seamless and convenient, ultra-fast converged connectivity in attractively priced packages, such as Charter's Spectrum One offer. In addition, Charter expects its network evolution to enable it to offer fiber on demand across the majority of its footprint. In October 2023, Charter 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 Charter's Spectrum TV® app, Xumo is now Charter's preferred go-to-market platform for new video sales.

Expansion – Building Charter's Future by Extending Its Network

Since inception in the beginning of 2022, Charter has spent \$3.4 billion on its 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, Charter expects to invest over \$8 billion in total in its subsidized rural construction initiative, a portion of which it expects 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. Charter also expects to participate in additional federal, state and municipal grant programs over the coming years, including the Broadband Equity, Access and Deployment ("BEAD") program, if favorable regulatory conditions are conducive to private investment. Charter's rural investments will allow Charter 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 it currently operates. Charter has also renewed its focus on building to more passings inside and at the edge of its existing and expanding network. To accomplish all of this, Charter has invested in new teams, new training and new equipment. These investments will allow Charter to generate long-term infrastructure-style returns by taking further advantage of Charter's scale efficiencies, network quality and construction capabilities, while offering its high quality products and services to more homes and businesses.

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Execution – Turning Charter's Strategy Into Success

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

Products and Services

Charter offers its 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 Charter's services. Bundled services, including some combination of Charter's Internet, video, voice and/or mobile products, are available to substantially all of Charter's passings.

The following table from Charter's Form 10-K for the year ended December 31, 2023 summarizes Charter's 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 (a)		2022 (a)
Customer Relationships (b)			
Residential	29,904		29,988
Small and Medium Business ("SMB")	2,222		2,207
Total Customer Relationships	 32,126		32,195
Monthly Residential Revenue per Residential Customer (c)	\$ 119.89	\$	119.38
Monthly SMB Revenue per SMB Customer (d)	\$ 163.64	\$	166.36
<u>Internet</u>			
Residential	28,544		28,412
SMB	2,044		2,021
Total Internet Customers	 30,588		30,433
Video			
Residential	13,503		14,497
SMB	619		650
Total Video Customers	 14,122		15,147
Voice			
Residential	6,712		7,697
SMB	1,293		1,286
Total Voice Customers	8,005		8,983
Mobile Lines (e)			
Residential	7,519		5,116
SMB	247		176
Total Mobile Lines	 7,766		5,292
Enterprise Primary Service Units ("PSUs") (f)	303		284

⁽a) Charter calculates the aging of customer accounts based on the monthly billing cycle for each account in accordance with its 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 Charter's 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.

- (b) 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.
- (c) Monthly residential revenue per residential customer is calculated as total residential annual revenue divided by average residential customer relationships during the respective year and excludes mobile-only customers.
- (d) 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 Charter's 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

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

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

Charter's in-home WiFi product provides its Internet customers with high performance wireless routers and a managed WiFi service to maximize their wireless Internet experience. Charter offers Advanced WiFi service across all of its 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 the 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.

Charter also offers Spectrum Security Shield across its 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 its 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.

Charter also offers 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.

The Spectrum Mobile service is offered to customers subscribing to Charter's Internet service and uses both its Spectrum Mobile network (comprised of out-of-home WiFi access points across its footprint combined with out-of-home WiFi access points from other networks with which Charter partners) as well as leveraging Verizon Communications Inc.'s ("Verizon") cellular network. Charter leverages the Verizon cellular network to provide nationwide coverage including unlimited calls, text and data using Verizon's fourth generation and 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, Charter continues to focus on improving the customer experience and integrating its 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.

Charter provides wireline voice communications services using voice over Internet protocol ("VoIP") technology to transmit digital voice signals over its network. Charter's 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 Charter's voice and video offerings, caller ID on TV is also available in most areas. Charter also offers Call Guard, an advanced caller ID and robocall blocking solution, for its residential and SMB voice customers. Call Guard reduces customer frustration and improves security by blocking malicious calls while ensuring customers continue to receive the legitimate automated calls they need from schools or healthcare providers.

Video Services

Charter provides its customers with a choice of video programming services on a variety of platforms including through a digital Spectrum Receiver or an IP device. Video customers have access to a variety of programming packages with approximately 375 channels available in home and out of home allowing its customers to access the programming they want, when they want it, on any device. Charter's 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.

Charter's video service also includes access to an interactive programming guide with parental controls, and in virtually all of its 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. Charter also offers digital video recorder ("DVR") service that enables customers to digitally record programming and to pause and rewind live programming on set-top boxes. Charter's 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, Charter 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 the Spectrum TV app, Xumo is now Charter's preferred go-to-market platform for new video sales. Customers are increasingly accessing their subscription video content through Charter's 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 Charter's cloud DVR offering.

Commercial Services

Charter offers 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 its hybrid fiber coaxial network. In 2023, Charter 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, Charter

offers its Spectrum Mobile service to SMB customers. Spectrum Business includes a full range of video programming and offers Internet speeds up to 1 Gbps across Charter's 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 its customers' remote and office employees to stay more easily connected regardless of their location. Charter also offers Wireless Internet Backup to its 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-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, WiFi) and security (e.g., firewall, Distributed Denial of Service 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. Charter offers 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 customer costs.

Advertising Services

Charter's 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. Charter receives revenue from the sale of local advertising across various platforms for networks such as TBS, CNN and ESPN. Charter inserts local advertising on up to 100 channels in over 90 markets. Charter's 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. Charter's size also provides scale to invest in new technology to create more targeted and addressable advertising capabilities.

Available advertising time is generally sold by Charter's advertising sales force. In some service areas, Charter has formed advertising interconnects or entered into representation agreements with other video distributors, including, among others, Verizon, DirecTV Entertainment Holdings LLC and Comcast Corporation, under which Charter sells advertising on behalf of those operators. In other service areas, Charter enters into representation agreements under which another operator in the area will sell advertising on its behalf. These arrangements enable Charter and its 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, Charter enters 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, Charter sells the advertising inventory of its owned and operated local sports and news channels, of its 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 Charter's footprint, charging them an enablement fee. Charter also offers Ad Portal, which allows small businesses to purchase local cable advertising and/or creative services via its web portal with limited sales personnel interaction at a price within their budgets. Charter's fully deployed Audience App, which uses its proprietary set-top box viewership data (all anonymized and aggregated), allows Charter 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 its 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

Charter has an agreement with the Los Angeles Lakers for rights to distribute all locally available Los Angeles Lakers' games through 2033. Charter broadcasts those games on its 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, Charter acts as the network's exclusive affiliate and advertising sales representative and has certain branding and programming rights with respect to the network. In addition, Charter provides certain production and technical services to American Media Productions. The affiliate, advertising, production and programming agreements continue through 2038. Charter also owns 26.8% of Sterling Entertainment Enterprises, LLC (doing business as SportsNet New York), a New York Citybased regional sports network that carries New York Mets' baseball games as well as other regional sports programming.

News Channels

Charter owns and manages 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. Charter's local news channels connect the diverse communities and neighborhoods Charter serves providing 24/7 news, weather and community content focused on hyperlocal stories that address the deeper needs and interests of its customers. Customers can also read, watch and listen to news stories by its Spectrum News journalists and local partner publications on their mobile device on its 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 Charter's 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 Charter's non-bulk MDU salesforce covering sales within existing, serviceable MDU properties. Charter's SCS bulk customers are serviced by dedicated call centers.

Pricing of Charter's Products and Services

Charter's revenue is principally derived from the monthly fees customers pay for the services Charter provides. Charter typically charges a one-time installation fee which is sometimes waived or discounted in certain sales channels during certain promotional periods.

Charter's Spectrum pricing and packaging ("SPP") generally offers a standardized price across its services and add-on services allowing customers to design a bundle offering that fits their needs. Charter also has specialized offerings to enhance affordability of its 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 Charter's customers are eligible for a subsidy through the 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.

Charter's 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, Charter's 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. Charter's device portfolio includes 5G models from Apple, Google and Samsung and Charter offers trade-in options along with a bring-your-own device program which lowers the costs for its customers switching to Spectrum Mobile from other mobile operators.

Charter's Network Technology

Charter's network includes three key components: a national backbone, regional/metro networks and a "last-mile" network. Both its 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.

Charter's 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, Charter delivers its signals via fiber optic cable from the headend to a group of nodes, and uses coaxial cable to deliver the signal from individual nodes to the homes served by that node. Charter's 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 Charter's Spectrum Enterprise customers, fiber optic cable is extended to the customer's site. For most new buildouts, including for its rural construction initiative, and MDU sites, Charter utilizes a fiber deployment. Charter believes 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 Charter's competitors; and
- a powered network enabling out-of-home Advanced WiFi and 5G small cell access points.

Charter's 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 its estimated passings. This bandwidth-rich network enables Charter to offer a large selection of HD channels and Spectrum Internet Gig across all of its footprint which enables Charter to provide fast, reliable and secure online connections, meeting current customer demands.

Through Charter's network evolution initiatives, Charter is currently expanding its 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, Charter will be able to deliver even faster speeds. Next, Charter will begin to deploy DOCSIS 4.0 technology in the network, and further increase its spectrum to 1.8 Ghz enabling even higher speed capabilities. This network evolution will also allow Charter to extend fiber services to the home in a success based "Fiber on Demand" manner.

Charter plans to complement its wireline investments with planned WiFi upgrades for in-home routers. With nearly 500 million devices connected wirelessly to Charter's network in its customers' homes and businesses, Charter is unlocking its 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.

Charter owns 210 Citizen Broadband Radio Service ("CBRS") Priority Access Licenses ("PALs"). Charter intends to use these licenses along with unlicensed CBRS spectrum to build its own 5G data-only mobile network on targeted 5G small cell sites leveraging its 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 Charter's cost structure through offload of wireless data onto its owned networks. In 2023, Charter commercialized its first market with its 5G network and will continue deploying 5G small cell sites in targeted areas of its footprint, as part of a broader multi-year 5G mobile network buildout, based on disciplined cost reduction targets.

Subsidized Rural Construction Initiative

In 2023, Charter continued its subsidized rural construction initiative in which it intends to expand its 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 it currently operates. Since inception in the beginning of 2022, Charter has spent \$3.4 billion on its subsidized rural construction initiative and activated approximately 420,000 passings. Including amounts spent to date, Charter expects to invest over \$8 billion in total over the next several years, a portion of which it expects 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. Charter also expects 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, Charter expects to continue rural construction in areas near its current plant and in areas surrounding subsidized construction where synergies can be achieved. These investments will allow Charter to generate long-term infrastructure-style returns by further taking advantage of Charter's scale efficiencies, network quality and construction capabilities, while offering its high quality products and services to more homes and businesses. Charter expects 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 Charter's high-value SPP structure including its voice and mobile offerings, as well as its 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 Charter to financial penalties.

Management, Customer Operations and Marketing

Charter's 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 Charter's network which is located outdoors. Charter's field operations strategy includes completing a significant portion of its activity with its employees which Charter finds drives consistent and higher quality services. In 2023, Charter's in-house field operations workforce handled approximately 80% of its customer premise service transactions. In addition, Charter has been growing its in-house construction teams to perform a portion of its network expansion initiatives.

Charter continues to focus on improving the customer experience through enhanced product offerings, reliability of services, and delivery of quality customer service. As part of Charter's operating strategy, Charter insources most of its customer operations workload. Charter's in-house call centers handle all of Charter's customer service calls. Charter manages its customer service call centers centrally to ensure a consistent, high quality customer experience. In addition, Charter routes 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 Charter's call centers continues to become more efficient as a result of new tool enhancements that give its 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. Charter's call center agent desktop interface tool enables virtualization of all call centers thereby better serving its customers. Virtualization allows calls to be routed across Charter's call centers regardless of the location origin of the call, reducing call wait times, and saving costs.

Charter also provides customers with the opportunity to interact with it in the manner they choose through self-service options on its customer website and mobile device application, or via telephonic communication, online chat and social media. Charter's 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, Charter's self-install program has been beneficial for customers who need flexibility in the timing of their installation.

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

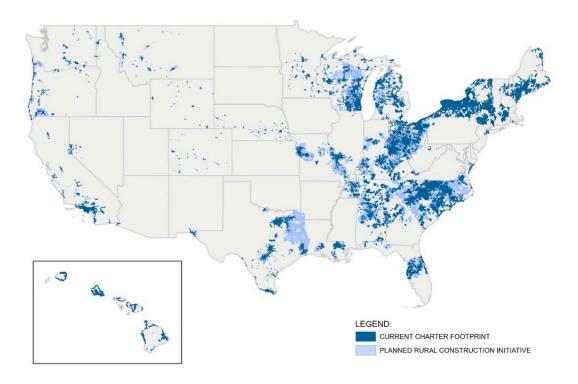
Programming

Charter believes that offering a wide variety of video programming choices influences a customer's decision to subscribe to and retain its video and Internet services. Charter obtains basic and premium programming, usually pursuant to written contracts from a number of suppliers. Charter is 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 Charter for a license fee, which is generally paid based on the number of customers to whom it makes 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. Charter receives revenue to carry home shopping channels. Charter also offers VOD and pay-per-view channels of movies and events that are subject to a revenue split with the content provider.

Footprint

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



Ownership Interests

We own an approximate 31.9% economic ownership interest in Charter, based on shares of Charter's Class A common stock issued and outstanding as of December 31, 2023.

Upon the closing of the Time Warner Cable merger, the Second Amended and Restated Stockholders Agreement, dated as of May 23, 2015, by and among Charter, Liberty Broadband and Advance/Newhouse Partnership, as amended (the "Stockholders Agreement"), became fully effective. Pursuant to the Stockholders Agreement, Liberty Broadband's equity ownership in Charter (on a fully diluted basis) is capped at the greater of 26% or the voting cap ("Equity Cap"). As of December 31, 2023, due to Liberty Broadband's voting interest exceeding the current voting cap of 25.01%, our voting control of the aggregate voting power of Charter is 25.01%. Under the Stockholders Agreement, Liberty Broadband has agreed to vote (subject to certain exceptions) all voting securities beneficially owned by it, or over which it has voting discretion or control that are in excess of the voting cap in the same proportion as all other votes cast by public stockholders of Charter with respect to the applicable matter.

In February 2021, Liberty Broadband was notified that its ownership interest, on a fully diluted basis, had exceeded the Equity Cap set forth in the Stockholders Agreement. On February 23, 2021, Charter and Liberty Broadband entered into a letter agreement in order to implement, facilitate and satisfy the terms of the Stockholders Agreement with respect to the Equity Cap. Pursuant to this letter agreement, following any month during which Charter purchases, redeems or buys back shares of its Class A common stock, and prior to certain meetings of Charter's stockholders, Liberty Broadband will be obligated to sell to Charter, and Charter will be obligated to purchase, such number of shares of Class A common stock as is necessary (if any) to reduce Liberty Broadband's percentage equity interest, on a fully diluted basis, to the Equity Cap (such transaction, a "Charter Repurchase"). The per share sale price for each share of Charter will be equal to the volume weighted average price paid by Charter in its repurchases, redemptions and buybacks of its common stock (subject to certain exceptions) during the month prior to the Charter Repurchase (or, if applicable, during the relevant period prior to the relevant meeting of Charter stockholders). Under the terms of the letter agreement, Liberty Broadband sold 950,721, 6,168,174 and 6,077,664 shares of Charter Class A common stock to Charter for \$394 million, \$3.0 billion and \$4.2 billion during the years ended December 31, 2023, 2022 and 2021, respectively, to maintain our fully diluted ownership percentage at 26%. Subsequent to December 31, 2023, Liberty Broadband sold 213,216 shares of Charter Class A common stock to Charter for \$811 million.

Under the Stockholders Agreement, we have the right to designate three directors to the Charter board of directors, subject to certain exclusions and requirements. Charter has agreed to cause the appointment of at least one of our designees to serve on the nominating and corporate governance, finance, audit and compensation and benefits committees of the board, provided they meet the independence and other qualifications for membership on those committees.

Regulatory Matters

The following summary addresses the key regulatory and legislative developments affecting the cable industry and Charter and GCI Holdings' 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 both Charter and GCI Holdings to substantial penalties. The following summary of regulatory issues does not purport to describe all existing and proposed federal, state, and local laws and regulations, or judicial and regulatory proceedings that affect these businesses. These businesses 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. Charter and GCI Holdings could be materially disadvantaged in the future if they are subject to new laws, regulations or regulatory actions that do not equally impact key competitors. For example, Internet-delivered streaming video services compete with traditional video service, but they are not subject to the same level of federal, state, and local regulation. There is no assurance that the already extensive regulation of Charter and GCI Holdings' businesses will not be expanded in the future.

Video Service and Products

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 operating costs. The current rules do not require any cable operator to carry multiple digital programming streams from a single broadcast television station, but should the FCC change this policy, additional cable capacity would need to be devoted to carrying additional broadcast television programming streams, a step that could require the removal of other programming services.

Pole Attachments

The Communications Act requires investor-owned utilities to provide cable systems with access to poles and conduits upon nondiscriminatory 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. There can be 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 permit requests, especially when the FCC pole attachment rules do not apply.

For the state of Alaska, in which GCI Holdings' subsidiaries operate, the RCA does not use the federal formula and instead has adopted its own formula that has been in place since 1987. This formula could be subject to further revisions upon petition to the RCA. In addition, in 2011, the FCC adopted an order to rationalize different pole attachment rates among types of services, and in 2015, took further steps to bring telecommunications and cable pole attachment rates into parity. Though the general purpose of the rule changes was to ensure pole attachment rates as low and as uniform as possible, GCI Holdings does not expect the rules to have an impact on the terms under which it accesses poles. GCI Holdings cannot predict the likelihood of the RCA changing its formula, adopting the federal formula, or relinquishing its oversight of pole attachments to the FCC, any of which could increase the cost of its operations.

Other FCC Regulatory Matters

The Communications Act and FCC regulations cover a variety of additional areas applicable to Charter's and GCI Holdings' 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 ownership interests in channels carried; (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 Charter and GCI Holdings' operations.

The FCC regulates spectrum usage in ways that could impact Charter and GCI Holdings' operations including for microwave backhaul, broadcast, unlicensed WiFi and CBRS. These businesses' 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 these businesses' 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. Charter and GCI Holdings cannot predict at this time what new requirements may be adopted and how such changes might impact their businesses.

Copyright

The carriage of television and radio broadcast signals by cable systems are subject to a federal compulsory copyright license. In exchange for filing certain reports and contributing a percentage of their revenue to a federal copyright royalty pool that varies depending on the size of the system, the number of distant broadcast television signals carried, and the location of the cable system, cable operators can obtain blanket permission to retransmit copyrighted material included in broadcast signals. The copyright law provides copyright owners the right to audit 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 Charter and GCI Holdings' ability to obtain desired broadcast programming. Copyright clearances for non-broadcast programming services are arranged through private negotiations.

Franchise Matters

Charter and GCI Holdings' 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 revenue 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 revenue 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 RCA is the franchising authority for all of Alaska, and issues CPCNs for communities. GCI Holdings believes that it has generally met the terms of its CPCNs, which do not require periodic renewal, and has provided quality levels of service. Military franchise requirements also affect its ability to provide video services to military bases.

The Communications Act provides for an orderly franchise renewal process in which granting authorities may not unreasonably deny renewals. If Charter fails to obtain renewals of franchises representing a significant number of its customers, it could have a material adverse effect on Charter's consolidated financial condition, results of operations, or its 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.

Data Services and Products

General. There is no one entity or organization that governs the global operation of the Internet. Each facilities-based network provider that is interconnected with the global Internet controls operational aspects of its own network. Certain functions, such as IP addressing, domain name routing, and the definition of the TCP/IP protocol, are coordinated by an array of quasi-governmental, intergovernmental, and non-governmental bodies. The legal authority of these bodies is not precisely defined.

The vast majority of users connect to the Internet over facilities of existing communications carriers. Those communications carriers are subject to varying levels of regulation at both the federal and state level. Thus, non-Internet-specific regulatory decisions exercise a significant influence over the economics of the Internet market.

Many aspects of the coordination and regulation of Internet activities and the underlying networks over which those activities are conducted are evolving. Internet-specific and non-Internet-specific changes in the regulatory environment, including changes that affect communications costs or increase competition from Incumbent Local Exchange Carriers ("ILECs") or other communications services providers, could adversely affect the costs and the prices for Internet-based services.

The FCC originally classified broadband Internet access services, such as those Charter and GCI Holdings 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 an order released in 2018, the FCC reversed its 2015 decision and eliminated the 2015 rules, other than a transparency requirement, which obligates Charter and GCI Holdings 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 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. Charter and GCI Holdings 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 Internet

access services. The application of new legal requirements to both Charter and GCI Holdings' Internet services could adversely affect their respective businesses.

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 Charter and GCI Holdings' broadband Internet access services similar to the format of food nutrition labels for each of their currently available consumer Internet offerings. The rules require disclosure of information regarding broadband prices, introductory rates, data allowances, and broadband speeds. These new rules are scheduled to become applicable to Charter and GCI Holdings' services in April 2024.

The 2018 FCC order 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. Charter and GCI Holdings 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 Federal Trade Commission ("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 video and voice services. Charter and GCI Holdings cannot predict the outcome of that proceeding or legal challenges to any new rules. The application of the proposed rules could adversely affect Charter and GCI Holdings' businesses.

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 challenges cannot be predicted.

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 the IIJA. Charter and GCI Holdings 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 their 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. Charter has been awarded over \$2 billion in the RDOF auction and other federal, state and municipal grants that will partially fund, along with its substantial additional investment, the construction of new broadband infrastructure to more than one million estimated passings. Charter's 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 Charter fails to meet these obligations, Charter could be subject to substantial government penalties.

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 and the FCC can also fine a provider for filing incorrect maps.

The markets for Charter and GCI Holdings' Internet services are 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. Charter and GCI Holdings elected to participate in the EBB and

ACP, and the FCC regulates many of the terms on which ACP services are provided, including restrictions on Charter and GCI Holdings' 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 Charter and GCI Holdings' ACP customer base and could assess fines or recoup subsidies if customer qualifications were inappropriate. The ACP discount enables eligible households to purchase Charter's 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 on January 11, 2024, the FCC issued an order detailing wind-down procedures for the ACP, including a freeze on ACP enrollments effective on February 8, 2024.

RHC Program. The Universal Service Fund ("USF") RHC Program provides funding to eligible healthcare providers for telecommunications and broadband services. The RHC Telecommunications Program subsidizes the rates for telecommunications services provided to rural health care providers based on the difference between the urban and rural rates for such services. The Healthcare Connect Fund Program provides support for high-capacity broadband connectivity to eligible health care providers. In connection with receiving these subsidies, GCI Holdings prepares annual cost studies in support of the rates it charges and submits these studies to the FCC for review.

FCC Rate Reduction. In November 2017, the Universal Service Administrative Company ("USAC") requested further information in support of the rural rates charged to a number of GCI Holdings' RHC customers in connection with the funding requests for the year that ran July 1, 2017 through June 30, 2018. On October 10, 2018, GCI Holdings received a letter from the FCC's Wireline Competition Bureau ("Bureau") notifying it of the Bureau's decision to reduce the rural rates charged to RHC customers for the funding year that ended on June 30, 2018 by approximately 26% resulting in a reduction of total support payments of \$28 million. The FCC also informed GCI Holdings that the same cost methodology used for the funding year that ended on June 30, 2018 would be applied to rates charged to RHC customers in subsequent funding years. In response to the Bureau's letter, GCI Holdings filed an Application for Review with the FCC.

On October 20, 2020, the Bureau issued two separate letters approving the cost-based rural rates GCI Holdings historically applied when recognizing revenue for services provided to its RHC customers for the funding years that ended on June 30, 2019 and June 30, 2020. GCI Holdings collected approximately \$175 million in accounts receivable relating to these two funding years during the year ended December 31, 2021. GCI Holdings also filed an Application for Review of these determinations. Subsequently, GCI identified rates for similar services provided by a competitor that would justify higher rates for certain GCI satellite services in the funding years that ended on June 30, 2018, June 30, 2019, and June 30, 2020. GCI submitted that information to the Bureau on September 7, 2021.

On June 25, 2020, GCI Holdings submitted cost studies with respect to a number of its rates for services provided to its RHC customers for the funding year ended June 30, 2021, which require approval by the Bureau. GCI Holdings further updated those studies on November 12, 2020, to reflect the completion of the bidding season for that funding year. On May 24, 2021, the FCC approved the cost studies submitted by GCI Holdings for the funding year ended June 30, 2021. Subsequently, on August 16, 2021, GCI submitted a request for approval of rates for 17 additional sites, all of which the FCC approved.

RHC Program Funding Cap. The RHC program has a funding cap for each individual funding year that is annually adjusted for inflation, and which the FCC can increase by carrying forward unused funds from prior funding years. In recent years, including the current year, this funding cap has not limited the amount of funding received by participants; however, management continues to monitor the funding cap and its potential impact on funding in future years.

Enforcement Bureau and Related Inquiries. On March 23, 2018, GCI Holdings received a letter of inquiry and request for information from the Enforcement Bureau of the FCC relating to the period beginning January 1, 2015 and including all future periods. This included inquiry into the rates charged by GCI Holdings and other aspects related to the Enforcement Bureau's review of GCI Holdings' compliance with program rules, which are discussed separately below. The ongoing uncertainty in program funding, as well as the uncertainty associated with the rate review, could have an adverse effect on its business, financial position, results of operations or liquidity.

In the fourth quarter of 2019, GCI Holdings became aware of potential RHC Program compliance issues related to certain of GCI Holdings' currently active and expired contracts with certain of its RHC customers. The Company and its external experts performed significant and extensive procedures to determine whether GCI Holdings' currently active and expired contracts with its RHC customers would be deemed to be in compliance with the RHC Program rules. GCI Holdings notified the FCC of the potential compliance issues in the fourth quarter of 2019.

On May 28, 2020, GCI Holdings received a second letter of inquiry from the Enforcement Bureau in the same matter noted above. This second letter, which was in response to a voluntary disclosure made by GCI Holdings to the FCC, extended the scope of the original inquiry to also include various questions regarding compliance with the records retention requirements related to the (i) original inquiry and (ii) RHC Program.

On December 17, 2020, GCI Holdings received a Subpoena Duces Tecum from the FCC's Office of the Inspector General requiring production of documents from January 1, 2009 to the present related to a single RHC customer and related contracts, information regarding GCI Holdings' determination of rural rates for a single customer, and to provide information regarding persons with knowledge of pricing practices generally.

On April 21, 2021, representatives of the Department of Justice ("DOJ") informed GCI Holdings that a qui tam action had been filed in the Western District of Washington arising from the subject matter under review by the Enforcement Bureau. The DOJ was investigating whether GCI Holdings submitted false claims and/or statements in connection with GCI's participation in the FCC's RHC Program. On July 14, 2021, the DOJ issued a Civil Investigative Demand with regard to the qui tam action.

The FCC's Enforcement Bureau and GCI Holdings held discussions regarding GCI Holdings potential RHC Program compliance issues related to certain of its contracts with its RHC customers for which GCI Holdings had previously recognized an estimated liability for a probable loss of approximately \$12 million in 2019 for contracts that were deemed probable of not complying with the RHC Program rules. During the year ended December 31, 2022, GCI Holdings recorded an additional estimated settlement expense of \$15 million relating to a settlement offer made by GCI Holdings resulting in a total estimated liability of \$27 million.

The DOJ and GCI Holdings held discussions regarding the qui tam action whereby the DOJ clarified that its investigation relates to the years from 2010 through 2019 and alleged that GCI Holdings had submitted false claims under the RHC Program during this time period. During the year ended December 31, 2022, GCI Holdings recorded a \$14 million estimated settlement expense to reflect discussions and settlement offers that GCI Holdings made to the DOJ.

Separately, during the third quarter of 2022, GCI Holdings became aware of possible RHC Program compliance issues relating to potential conflicts of interest identified in the historical competitive bidding process with respect to certain of its contracts with its RHC customers. GCI Holdings notified the FCC's Enforcement Bureau of the potential compliance issues; however, the Company is unable to assess the ultimate outcome of the potential compliance issues and is unable to reasonably estimate any range of loss or possible loss.

On May 10, 2023, GCI Holdings entered into a final settlement agreement with both the FCC and the DOJ to resolve all Enforcement Bureau and Related Inquiries discussed above except for the matter that was separately identified during the third quarter of 2022, which continues to remain outstanding. The settlement with the FCC and the DOJ resulted in a total cash payment of \$41 million of which \$27 million was paid to the FCC and \$14 million was paid to the DOJ in 2023, which had been previously recorded as liabilities. Additionally, as part of the settlement with the FCC and the DOJ, GCI Holdings withdrew all of its open Applications for Review related to FCC rate reduction matters.

Revision of Support Calculations. On August 20, 2019, the FCC released an order changing the manner in which support issued under the RHC Program would be calculated and approved. Some of these changes became effective beginning with the funding year ended June 30, 2021, while others became effective with the funding year ended June 30, 2022. On October 21, 2019, GCI Holdings appealed the order to the United States Court of Appeals for the District of Columbia Circuit, but that appeal was withdrawn as part of the settlement with the FCC. At the direction of the FCC, USAC released a database that purported to determine a median rate that would have capped the amount of support available for each service sold under the program, starting in the funding year ended June 30, 2022. GCI Holdings sought FCC review of various aspects of the database implementation. On September 30, 2020, USAC released a refreshed version of the database incorporating limited changes submitted by interested parties. On January 19, 2021, the Bureau issued an Order that waived the requirement to use the database for health care providers in Alaska for the two funding years ended June 30, 2022 and June 30, 2023. On April 8, 2021, the Bureau issued an Order further extending the January 19, 2021 waiver to carriers nationwide and eliminating the ability or requirement to use the database to establish the healthcare provider payments for services subsidized by the RHC Telecom Program. On April 12, 2022 and May 25, 2022, the Bureau issued Orders further extending the January 19, 2021 and April 8, 2021 waivers regarding use of the database by health care providers seeking support under the RHC Program through the funding year ending June 30, 2024. On January 26, 2023, the FCC adopted an Order on Reconsideration, Report and Order, and Second Further Notice of Proposed Rulemaking,

which grants the petitions challenging the rates database, returns the RHC Telecom Program to the rate determination rules in place prior to the adoption of the rates database, permits providers to determine rural rates based on previously approved rates through the funding years ending June 30, 2025 and June 30, 2026, and seeks comment on future revisions to the rate determination rules.

Schools and Libraries Program. In 2014, the FCC adopted orders modernizing the USF Schools and Libraries Program ("E-Rate"), which aids schools and libraries in obtaining affordable broadband. These orders, among other things, increased the annual E-Rate cap by approximately \$1.5 billion, designated funds for internal connections within schools and libraries, and eliminated funding for certain legacy services, such as voice, to increase the availability of 21st century connectivity to support digital learning in schools nationwide. These orders did not have a material effect on the overall E-Rate support available to GCI Holdings' schools and libraries customers, and therefore did not materially affect its revenue from such customers. See Item 1A. Risk Factors for additional risks related to GCI Holdings' participation in this USF program.

Other Federal Activities. Congress and certain federal agencies are considering ways to streamline federal permitting obligations and are in the process of providing significant additional financial support for broadband services in areas that are difficult to serve. GCI Holdings continues to monitor these activities and cannot predict at this time whether those efforts will make a material difference to its ability to deploy broadband infrastructure.

Wireline Voice Services and Products

General. The FCC has never classified the VoIP wireline telephone services that Charter and GCI Holdings 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), USF 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 VoIP telephone services in the future.

Charter and GCI Holdings' 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, Charter has chosen in the RDOF areas to offer Lifeline VoIP telephone services subject to traditional federal and state common carrier regulations. Except where Charter has chosen to offer VoIP telephone services in such a manner it believes that its VoIP telephone services should be governed primarily by federal regulation. A federal appellate court affirmed Charter's successful challenge to Minnesota's attempt to generally apply telephone regulation to its 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 Charter and GCI Holdings' VoIP telephone service, to state level regulation. California has imposed reporting and other obligations on Charter's 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. Charter has registered with or obtained certificates or authorizations from the FCC and the state regulatory authorities in those states in which Charter offers competitive voice services in order to ensure the continuity of its 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 Charter's fixed wireline voice telephone services.

As an interexchange carrier, GCI Holdings is subject to regulation by the FCC and the RCA as a non-dominant provider of interstate, international, and intrastate long-distance services. As a state-certificated competitive local exchange carrier, GCI Holdings is subject to regulation by the FCC and the RCA as a non-dominant provider of local communications services. However, as of November 2019, the Alaska Legislature eliminated the RCA's regulation of rates but retained its certificate authority for intrastate long-distance and local communications services. Military franchise requirements also affect GCI Holdings' ability to provide communications services to military bases.

Universal Service for Rural and High Cost Areas. The USF provides support to Eligible Telecommunications Carriers ("ETCs") related to their provision of facilities-based wireline telephone service in high cost areas. Under the Alaska High Cost Order issued by the FCC in 2016, GCI Holdings receives this support for its incumbent local exchange carrier operations, which are ETCs under FCC regulations and RCA Orders. This support is frozen at the 2011 levels for High Cost Loop Support and

Interstate Common Line Support, with certain adjustments. The support has a ten-year term, from January 1, 2017 to December 31, 2026. Without ETC status, GCI Holdings would not qualify for USF support in these areas, and its net cost of providing local telephone services in these areas would be materially adversely affected. See "Description of Business – Regulatory Matters - Wireless Services and Products - Universal Service" for information on USF reform. Pursuant to the Alaska High Cost Order, GCI Holdings must meet certain performance requirements with respect to the offering of broadband services in its incumbent local exchange carrier areas. The FCC directed the Bureau to reassess those performance commitments before December 31, 2021, and the Bureau approved revised performance commitments on December 23, 2021. If GCI Holdings fails to meet these performance requirements, it will be subject to repayment of a portion of the high cost support received, as specified in the Alaska High Cost Order. On October 19, 2023, the FCC adopted a notice of proposed rulemaking to consider how to support fixed and mobile broadband service in Alaska following the wind-down of the Alaska High Cost Order and other FCC support programs over the next few years.

Rural Exemption and Interconnection. A Rural Telephone Company is exempt from compliance with certain material interconnection requirements under Section 251(c) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996, including the obligation to negotiate Section 251(b) and (c) interconnection requirements in good faith, unless and until a state regulatory commission lifts such "rural exemption" or otherwise finds it does not apply. All ILECs in Alaska are Rural Telephone Companies except Alaska Communications Systems Group, Inc. in its Anchorage study area. GCI Holdings participated in numerous proceedings regarding the rural exemptions of various ILECs in order to achieve the necessary interconnection agreements with the remaining ILECs. In other cases, the interconnection agreements were reached by negotiation without regard to the implications of the ILEC's rural exemption.

GCI Holdings has negotiated and will continue to negotiate interconnection agreements as necessary. GCI Holdings has entered all of the major Alaskan markets with local access services.

See "Description of Business — Competition — Voice Services and Products" for more information.

Access Charges and Other Regulated Fees. The FCC regulates the fees that local telephone companies charge long-distance companies for access to their local networks. In 2011, the FCC released rules to restructure and reduce over time terminating interstate access charges, along with a proposal to adopt similar reforms applicable to originating interstate access charges. The details of implementation in general and between different classes of technology continue to be addressed by the FCC and could affect the economics of some aspects of GCI Holdings' business. GCI Holdings cannot predict at this time the impact of this implementation or future implementation of adopted reforms, but GCI Holdings does not expect it to have a material adverse impact on its operations.

Unbundled Network Elements. Although GCI Holdings primarily provides communications services over its own facilities, the ability to obtain access to other providers' networks is an important element of its local access services business. Changes in applicable regulations and the wholesale offerings of suppliers could affect GCI Holdings' ability to provide service.

Wireless Services and Products

General. The FCC regulates the licensing, leasing, construction, interconnection, operation, acquisition, and transfer of wireless network systems in the United States pursuant to the Communications Act. GCI Holdings' wireless licensee subsidiaries are subject to regulation by the FCC and must comply with certain build-out and other license conditions, as well as with the FCC's specific regulations governing wireless services. The FCC imposes significant regulation on licensees of wireless spectrum with respect to how radio spectrum is used by licensees, the nature of services licensees may offer and how such services may be offered, and the resolution of issues of interference between spectrum bands. The FCC does not currently regulate rates for services offered by commercial mobile radio service providers (the official legal description for wireless service providers).

Commercial mobile radio service wireless systems are subject to Federal Aviation Administration and FCC regulations governing the location, lighting, construction, modification, and registration of antenna structures on which GCI Holdings' antennas and associated equipment are located and are also subject to regulation under federal environmental laws and the FCC's environmental regulations, including limits on radio frequency radiation from wireless handsets and antennas.

Universal Service. Under FCC regulations and RCA orders, GCI Holdings is an authorized ETC for purposes of providing wireless telephone service in many rural areas throughout Alaska. Without ETC status, GCI Holdings would not qualify

for USF support in these areas or other rural areas where it proposes to offer facilities-based wireless telephone services, and its net cost of providing wireless telephone services in these areas would be materially adversely affected.

Per the Alaska High Cost Order, as of January 1, 2017, Remote (as defined by the Alaska High Cost Order) high cost support payments to Alaska High Cost participants are frozen on a per-company basis at adjusted December 2014 levels for a ten-year term in exchange for meeting individualized performance obligations to offer voice and broadband services meeting the service obligations at specified minimum speeds by five-year and ten-year service milestones to a specified number of locations. Remote high cost support is no longer dependent upon line counts and line count filings are no longer required. Under the terms of the Alaska High Cost Order, the FCC was to initiate a process in 2021 to eliminate duplicate support in areas that were served by more than one subsidized mobile wireless carrier as of December 31, 2020. As part of the Alaska High Cost Order, the FCC issued a Notice of Proposed Rulemaking seeking comment on how to implement that process. The FCC has not to date issued any further orders with respect to that process.

On January 4, 2023, the Alaska Telecom Association filed a Petition for Expedited Rulemaking at the FCC, seeking to begin a rulemaking proceeding to extend the Alaska High Cost Order through December 31, 2034 and increase support to account for past and future inflation.

Emergency 911. The FCC has imposed rules requiring carriers to provide emergency 911 services, including E911 services that provide the caller's phone number and approximate location to local public safety dispatch agencies. Providers are required to transmit the geographic coordinates of the customer's location, for both indoor and outdoor locations, within accuracy parameters revised by the FCC, to be implemented over a phase-in period. The FCC also imposed requirements to allow users to text-to-911 if the local public safety dispatch agency requests and is able to receive such texts. Providers may not demand cost recovery as a condition of providing E911, although they are permitted to negotiate cost recovery if it is not mandated by the state or local governments. On June 1, 2020 and subsequently on May 24, 2021, GCI Holdings timely sought waivers from the FCC concerning the percentage of wireless calls required to meet 911 location accuracy benchmarks pursuant to the FCC's phase-in period. In December 2021, GCI Holdings met the 2020 benchmark. GCI Holdings has been able to meet FCC requirements for text-to-911 obligations to date. Additionally, on an ongoing basis, GCI Holdings is subject to FCC-imposed rules requiring timely reporting of outages impacting access to emergency 911 services. Failure to comply with reporting requirements could result in the imposition of fines and other administrative remedies.

State and Local Regulation. While the Communications Act generally preempts state and local governments from regulating the entry of, and the rates charged by, wireless carriers, it also permits a state to petition the FCC to allow it to impose commercial mobile radio service rate regulation when market conditions fail to adequately protect customers and such service is a replacement for a substantial portion of the telephone wireline exchange service within a state. The State of Alaska currently has no such petition on file.

In addition, the Communications Act does not expressly preempt the states from regulating the "terms and conditions" of wireless service. Several states have invoked this "terms and conditions" authority to impose or propose various consumer protection regulations on the wireless industry. State attorneys general have also become more active in enforcing state consumer protection laws against sales practices and services of wireless carriers. States also may impose their own universal service support requirements on wireless and other communications carriers, similar to the contribution requirements that have been established by the FCC.

States have become more active in attempting to impose new taxes and fees on wireless carriers, such as gross receipts taxes. Where successful, these taxes and fees are generally passed through to customers and result in higher costs to customers.

At the local level, wireless facilities typically are subject to zoning and land use regulation. Neither local nor state governments may categorically prohibit the construction of wireless facilities in any community or take actions, such as indefinite moratoria, which have the effect of prohibiting construction. Pursuant to Section 6409(a) of the Middle Class Tax Relief Act of 2012, state and local governments are further constrained in their regulation of changes to existing wireless infrastructure. Nonetheless, securing federal, state and local government approvals for new antenna structures has been and is likely to continue to be difficult, lengthy, and costly.

Charter's Spectrum Mobile Service

Charter's Spectrum Mobile service offers mobile Internet access and telephone service. Charter provides this service as a mobile virtual network operator ("MVNO") using Verizon's network and its network through Spectrum WiFi. As an MVNO, Charter is 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 Charter 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 Charter's 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 Charter and GCI Holdings' ability to collect, use, and disclose customers' personally identifiable information for its Internet, video and voice services. Charter and GCI Holdings 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 their customers, including the content of their communications. Further, the FCC, the 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 Charter and GCI Holdings' use and disclosure of certain customer information.

Charter and GCI Holdings' 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 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. One such standard is the voluntary Cybersecurity Framework ("CSF") 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 CSF provides a prioritized and flexible model for organizations to identify and manage cyber risks inherent to their business. It was designed to supplement, not supersede, existing cybersecurity regulations and requirements. Several government agencies have encouraged compliance with the NIST CSF, including the FCC and Department of Homeland Security's Cybersecurity and Infrastructure Security Agency ("CISA"). Charter and GCI Holdings' overall cybersecurity program is informed by the NIST and other industry standards and best practices. The FCC is considering expansion of its cybersecurity guidelines or the adoption of cybersecurity requirements. CISA 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 Charter's 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 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 15, 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 Charter's business. The FTC has an ongoing Advance Notice of Proposed Rulemaking 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. Charter 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 its business.

Environmental Regulations

GCI Holdings undertakes activities that may, under certain circumstances, affect the environment. Accordingly, it may be subject to federal, state, and local laws designed to preserve or protect the environment, including the Clean Water Act and the Emergency Planning and Community Right-to-Know Act. The FCC, Bureau of Land Management, U.S. Forest Service, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Bureau of Indian Affairs, and National Park Service are among the federal agencies required by the National Environmental Policy Act of 1969 and National Historic Preservation Act to consider the environmental impact of actions they authorize, including facility construction.

The principal effect of GCI Holdings' facilities on the environment would be in the form of construction of facilities and networks at various locations in Alaska and between Alaska, Washington, and Oregon. GCI Holdings' facilities have been constructed in accordance with federal, state and local building codes and zoning regulations whenever and wherever applicable. GCI Holdings obtains federal, state, and local permits, as required, for its projects and operations. GCI Holdings is unaware of any material violations of federal, state, or local regulations or permits.

Competition

Charter and GCI Holdings operate in intensely competitive industries and compete with a number of companies that provide a broad range of communication, entertainment, and information products and services. Technological changes are further intensifying and complicating the competitive landscape and consumer behavior.

Residential/Consumer Services

Charter and GCI Holdings 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

The Internet industry is highly competitive, rapidly evolving and subject to constant technological change. Competition is based upon price, service bundles, the services and enhancements offered, the technologies used, customer service, billing services, and perceived quality, reliability and availability.

Charter and GCI Holdings' residential Internet services face competition across their footprints from fiber-to-the-home ("FTTH"), fixed wireless broadband, Internet delivered via low earth orbit ("LEO") or geostationary satellite and digital subscriber line ("DSL") services. AT&T, Inc. ("AT&T"), Frontier Communications Corporation ("Frontier") and Verizon are Charter's primary FTTH competitors. Given the FTTH deployments of Charter's 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 Charter's footprint. Additionally, several national mobile network operators offer LTE or 5G delivered fixed wireless home Internet service in Charter's markets. In several markets, Charter and GCI Holdings also face competition from one or more fixed wireless providers that deliver point-to-point Internet connectivity. Internet services based on LEO technology have been gaining market share. DSL service is offered across Charter's footprint and a portion of GCI Holdings' footprint, often at prices lower than Charter and GCI Holdings' Internet services, although typically at speeds much lower than

the minimum speeds offered by Charter and GCI Holdings. 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. Charter faces 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 its operating footprint, respectively.

Video competition

Charter and GCI Holdings' residential video services face growing competition across their footprints 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 Charter currently purchases 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, Charter has generally viewed SVOD online video services as complementary to its 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 Charter's video product.

Charter and GCI Holdings' residential video services also face competition from direct broadcast satellite ("DBS") service providers, which have a national footprint and compete in all of Charter's 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 Charter and GCI Holdings' residential video service. Charter's residential video service also faces competition from large telecommunications companies, primarily Verizon, which offer wireline video services in significant portions of Charter's operating areas.

Voice competition

Charter and GCI Holdings' residential voice services compete with wireless and wireline phone providers across their footprints, as well as other forms of communication, such as text messaging on cellular phones, instant messaging, social networking services, video conferencing and email. Charter and GCI Holdings 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 Charter and GCI Holdings operate their residential voice services.

GCI Holdings also competes against ILECs, long-distance resellers and certain smaller rural local telephone companies for local access and long-distance. GCI Holdings has competed by offering what it believes is excellent customer service and by providing desirable bundles of services.

Mobile Competition

Charter and GCI Holdings' mobile services face 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. As a regional wireless carrier, GCI Holdings may not have immediate access to some wireless handsets that are available to these national wireless carriers.

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.

Charter also competes for retail activations with other resellers that buy bulk wholesale service from wireless service providers for resale.

Regional Competitors

In some of Charter's operating areas, other competitors have built networks that offer Internet, video and voice services that compete with its services. For example, in certain service areas, Charter's residential Internet, video and voice services compete with WOW, altafiber, 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 systems serving MDUs, such as condominiums, apartment complexes, and private residential communities.

Business Services

Charter and GCI Holdings face intense competition across each of their business service product offerings. Charter's SMB Internet, video and voice services face competition from a variety of providers as described above. Charter's 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. GCI Holdings' business data, wireless and voice services face similar competition as described above for its consumer products.

Advertising

Charter and GCI Holdings 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. Charter and GCI Holdings 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.

Human Capital Resources

Employees

As described above, Liberty Broadband is party to a services agreement with Liberty, pursuant to which 86 Liberty corporate employees provide certain management services to Liberty Broadband for a determined fee. As a result, Liberty Broadband is not responsible for the hiring, retention and compensation of these individuals (except that Liberty Broadband does grant equity incentive awards to these individuals). However, Liberty Broadband directly benefits from the efforts undertaken by Liberty to attract and retain talented employees. Liberty strives to create a diverse, inclusive and supportive workplace, with opportunities for its employees to grow and develop in their careers, supported by competitive compensation, benefits and health and wellness programs, and by programs that build connections between its employees and their communities. Liberty Broadband fully supports these efforts.

As of December 31, 2023, the Company's consolidated subsidiaries had an aggregate of approximately 1,900 full and part-time employees and the Company is not party to any union contracts with its employees. Liberty Broadband believes that its employee relations are good.

GCI Holdings

GCI Holdings has been operating in Alaska for more than 40 years and most of its employees live in the communities it serves. While most employees live in Alaska, GCI Holdings has employees located throughout the United States, and approximately 70% of GCI's employees work from home. Many of GCI's employees have been with the company for decades and, in some cases, their children have joined the GCI team and have become the next generation of the GCI family. This sense of family and valuing its employees is a strong part of GCI's culture and is one that generates pride among employees and

company leadership. GCI is committed to creating and maintaining an environment that is inclusive, supportive and provides opportunities for excellence and advancements. To that end, GCI is committed to ensuring its employees, at all levels of the company, are experts in their fields, and provides opportunities for training, including certifications relating to various technical aspects of the GCI business, training in people skills, management best practices and team-building, as well as tuition reimbursement to employees who are pursuing college or technical schools degrees while working for GCI. In 2020, GCI launched an initiative to evaluate the incorporation of diversity, equity and inclusion principles in all corporate operations and continues to assess and evolve its practices to create a focus on these principles.

Available Information

All of our filings with the SEC including our Form 10-Ks, Form 10-Qs and Form 8-Ks, as well as amendments to such filings are available on our Internet website free of charge generally within 24 hours after we file such material with the SEC. Our website address is www.libertybroadband.com.

Our corporate governance guidelines, code of business conduct and ethics, compensation committee charter, nominating and corporate governance committee charter, and audit committee charter are available on our website. In addition, we will provide a copy of any of these documents, free of charge, to any shareholder who calls or submits a request in writing to Investor Relations, Liberty Broadband Corporation, 12300 Liberty Boulevard, Englewood, Colorado 80112, Tel. No. (844) 826-8735.

The information contained on our website and the websites of GCI Holdings and Charter are not incorporated by reference herein.

Item 1A. Risk Factors

The risks described below and elsewhere in this annual report are not the only ones that relate to our businesses or our capitalization. The risks described below are considered to be the most material. However, there may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that also could have material adverse effects on our businesses. Past financial performance may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods. If any of the events described below were to occur, our businesses, prospects, financial condition, results of operations and/or cash flows could be materially adversely affected.

Risk Factor Summary

The following is a summary of the material risk factors that could adversely affect our business, financial condition, and results of operations:

Factors Relating to Our Corporate History and Structure

- As a holding company, we could be unable to obtain cash in amounts sufficient to service our financial obligations or meet our other commitments.
- Other than cash generated from our participation in Charter's stock repurchase program, we do not have access to the cash that Charter generates from its operating activities.
- We rely on Charter to provide us with the financial information that we use in accounting for our ownership interest in Charter as well as
 information regarding Charter that we include in our public filings.
- We may become subject to the Investment Company Act (as defined below).
- Our company has overlapping directors and officers with Liberty, Qurate Retail, Liberty TripAdvisor Holdings, Inc. ("TripCo"), and Atlanta Braves Holdings, Inc. ("ABH"), which may lead to conflicting interests.
- Certain of our inter-company agreements were negotiated while we were a subsidiary of Liberty, and hence may not be the result of arms' length negotiations.
- Our ability to use net operating loss and disallowed business interest carryforwards to reduce future tax payments could be negatively
 impacted if there is an "ownership change".
- Recently enacted tax legislation and future interpretive regulatory guidance could affect our financial performance.

Factors Related to Our and Our Subsidiaries' Indebtedness

- Our company may have future capital needs and may not be able to obtain additional financing, or refinance or renew our existing indebtedness, on acceptable terms.
- We and our subsidiaries have significant indebtedness, which could adversely affect our business and financial condition.
- The agreements that govern our and our subsidiaries' current and future indebtedness may contain various affirmative and restrictive
 covenants that will limit our discretion in the operation of our business.
- Variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

Factors Relating to GCI

- GCI faces competition that may reduce its market share and harm its financial performance.
- If GCI experiences customer losses, our company's financial performance will be negatively impacted.
- Adverse economic conditions in the U.S. and inflationary pressures on input costs and labor could impact GCI's results of operations.
- GCI may be unable to obtain or maintain the roaming services it needs to remain competitive.
- Changes to or interpretations of existing statutes, rules, regulations, or the adoption of new ones, could adversely affect GCI's business, financial position, results of operations or liquidity.
- USF receivables and contributions are subject to change due to regulatory actions taken by the FCC or legislative actions that change the
 rules and regulations governing the USF program.
- Failure to comply with USF program requirements may have an adverse effect on GCI's business and our company's financial position.
- Loss of GCI's ETC status would disqualify it for USF support, which would have an adverse effect on our company's business, financial
 position, results of operations or liquidity.
- GCI may not meet its performance plan milestones under the Alaska High Cost Order.
- GCI may lose USF high cost support if another carrier adds 4G LTE service in an area where it currently provides 4G LTE service.
- GCI may lose or experience disruption in the distribution of USF support if ongoing litigation challenging the constitutionality of the
 Universal Service Fund is successful, which would have an adverse effect on GCI and our company's business, financial position, results
 of operations, or liquidity.
- The decline in GCI's Other revenue results of operations may accelerate.
- Failure to stay abreast of new technology could affect GCI's ability to compete in the industry.
- GCI's operations, which are geographically concentrated in Alaska, are impacted by the economic conditions in Alaska, and GCI may not
 be able to increase its share of the existing market for its services.
- Natural or man-made disasters or terrorist attacks could have an adverse effect on GCI's business.
- Cyberattacks or other network disruptions could have an adverse effect on our company and GCI's business.
- The processing, storage, sharing, use, disclosure and protection of personal data could give rise to liabilities as a result of governmental regulation, conflicting legal requirements or differing views of personal privacy rights.
- Increases in data usage on GCI's wired and wireless networks may cause network capacity limitations, resulting in service disruptions, reduced capacity or slower transmission speeds for GCI's customers.
- Prolonged service interruptions or system failures could affect GCI's business.
- GCI's ability to immediately restore the entirety of its service may be limited and our company could incur significant costs if failures
 occur in GCI's undersea fiber optic cable systems or its TERRA facilities.
- GCI's ability to immediately restore the entirety of its service may be limited if a failure occurs in GCI's satellite communications systems.
- GCI will not be able to meet the needs of its customers if it does not obtain the necessary communications equipment.
- If GCI becomes subject to substantial uninsured liabilities due to damage or loss to certain of its transmission facilities, our company's financial position, results of operations or liquidity may be adversely affected.
- Climate change and increasingly stringent environmental laws, rules and regulations, and customer expectations could adversely affect GCI's business
- Any errors, cyber-attacks or other operational disruption to GCI's third-party vendor's customer billing systems could have adverse
 operational, financial and reputational effects on our company's business.
- Any significant impairment of GCI's indefinite-lived intangible assets would lead to a reduction in its net operating performance and a
 decrease in its assets.

Factors Relating to Charter

- Charter operates in a competitive business environment affecting its ability to attract and retain customers.
- If Charter is unable to procure the necessary services, equipment, software or licenses from its third-party service providers, suppliers and licensors on reasonable terms and on a timely basis, its ability to offer services could be impaired.
- Charter may not have the ability to pass on to its customers all of the increases in programming costs, which could adversely affect its
 cash flow and operating margins.
- Any failure to respond to technological developments and meet customer demand for new products and services could adversely affect its
 ability to compete effectively.
- Charter's business may be adversely affected if it cannot continue to license or enforce the intellectual property rights on which its business depends.
- Events could disrupt or result in unauthorized access to Charter's networks, information systems or properties and could impair its
 operating activities and negatively impact Charter's reputation and financial results.
- Issues related to the development and use of artificial intelligence ("AI") could give rise to legal or regulatory action, damage Charter's
 reputation or otherwise materially harm its business.
- Charter's exposure to the economic conditions of its current and potential customers, vendors and third parties could adversely affect its
 cash flow, results of operations and financial condition.
- If Charter is unable to retain key employees, its ability to manage its business could be adversely affected.
- Charter has a significant amount of debt and expects to incur significant additional debt in the future, which could adversely affect its
 financial condition and its ability to react to changes in its business.
- The agreements and instruments governing Charter's debt contain restrictions and limitations that could significantly affect its ability to
 operate its business, as well as significantly affect its liquidity.
- Charter's business is subject to extensive governmental legislation and regulation, which could adversely affect its business.
- Changes to the existing legal and regulatory framework under which Charter operates or the regulatory programs in which Charter or its
 competitors participate, including the possible elimination of the federal broadband ACP subsidy for low-income consumers, could
 adversely affect Charter's business.
- Tax legislation and administrative initiatives or challenges to Charter's tax and fee positions could adversely affect its results of
 operations and financial condition.
- The failure of Charter to renew a franchise or the grant of additional franchises in one or more service areas could adversely affect its business.

Factors Relating to our Common Stock and the Securities Market

- Our stock price is directly affected by the results of operations of Charter and developments in its business.
- There is no meaningful trading market for our Series B common stock quoted on the OTC Markets.
- It may be difficult for a third party to acquire us, even if doing so may be beneficial to our stockholders.
- Holders of a single series of our common stock may not have any remedies if an action by our directors has an adverse effect on only that series of our common stock.

Factors Relating to Our Corporate History and Structure

We are a holding company, and we could be unable to obtain cash in amounts sufficient to service our financial obligations or meet our other commitments.

Our ability to meet our current and future financial obligations, including to make debt service obligations under the Margin Loan Agreement (defined below) and the Company Debenture (defined below), and other contractual commitments depends upon our ability to access cash. We are a holding company, and our sources of cash include our available cash balances, net cash from the operating activities of our whollyowned subsidiaries, any dividends and interest we may receive from our investments, available funds under the Margin Loan Agreement (defined below) (which was \$840 million as of December 31, 2023) and proceeds from any asset sales or other forms of asset monetization we may undertake in the future. In addition, the ability of our operating subsidiaries to pay dividends or to make other payments or advances to us depends on their operating results and any statutory, regulatory or contractual restrictions to which they may be or may become subject. Some state regulators have imposed, and others may consider imposing on regulated companies, including us, cash management practices that could limit the ability of such regulated companies to transfer cash between subsidiaries or to the parent company. While none of the

existing state regulations materially affect our cash management, any changes to the existing regulations or imposition of new regulations or restrictions may materially adversely affect our ability to transfer cash within our consolidated companies.

Other than cash generated from our participation in Charter's stock repurchase program, we do not have access to the cash that Charter generates from its operating activities.

Notwithstanding our ownership interest in Charter and our having three nominees on its thirteen-member board of directors, we have no ability to cause Charter to pay dividends to us, and we cannot cause Charter to make funds available to us except to the extent we are obligated to participate in Charter's stock repurchase program pursuant to the terms of the Stockholders Agreement and the letter agreement entered into on February 23, 2021 in order to reduce our percentage equity interest, on a fully diluted basis, to the Equity Cap. Charter generated approximately \$14.4 billion, \$14.9 billion and \$16.2 billion of cash from its operations during the years ended December 31, 2023, 2022 and 2021, respectively. Charter uses the cash it generates from its operations primarily to fund its business operations, service its debt and other financial obligations and repurchase shares of its common stock. We do not have access to the cash that Charter generates unless Charter declares a dividend on its capital stock payable in cash, engages in stock repurchases for cash or otherwise distributes or makes payments to its stockholders, including us. Historically, Charter has not paid any dividends on its capital stock or, with limited exceptions, otherwise distributed cash to its stockholders and instead has used all of its available cash in the expansion of its business, to service its debt obligations and to repurchase shares of its common stock. Covenants in Charter's existing debt instruments also restrict the payment of dividends and cash distributions to stockholders. We expect that Charter will continue to apply its available cash as described above.

We rely on Charter to provide us with the financial information that we use in accounting for our ownership interest in Charter as well as information regarding Charter that we include in our public filings.

We account for our approximately 31.9% economic ownership interest in Charter using the equity method of accounting and, accordingly, in our financial statements we record our share of Charter's net income or loss. Within the meaning of U.S. accounting rules, we rely on Charter to provide us with financial information prepared in accordance with generally accepted accounting principles, which we use in the application of the equity method. We also rely on Charter to provide us with the information regarding their company that we include in our public filings. In addition, we cannot change the way in which Charter reports its financial results or require Charter to change its internal controls over financial reporting. No assurance can be given that Charter will provide us with the information necessary to enable us to complete our public filings on a timely basis or at all. Furthermore, any material misstatements or omissions in the information Charter provides to us or publicly files could have a material adverse effect on our financial statements and filing status under federal securities laws.

We may become subject to the Investment Company Act of 1940.

We do not believe we are currently subject to regulation under the Investment Company Act of 1940, as amended (the "Investment Company Act") because our investment in Charter enables us to exercise significant influence over Charter. We have substantial involvement in the management and affairs of Charter, including through our board nominees. We nominated three of Charter's thirteen current directors. In connection with the Transactions, on May 23, 2015, we entered into the Stockholders Agreement, which continues to provide us with board nomination rights. If, however, our investment in Charter was deemed to become passive (such as in the event that our equity interests were significantly diluted and our nominees ceased to serve as directors of Charter), we could become subject to regulation under the Investment Company Act. In such event, we would be required to register as an investment company, which could result in significant registration and compliance costs, could require changes to our corporate governance structure and financial reporting and could restrict our activities going forward. Our restated certificate of incorporation includes a provision that would enable us, at the option of our board of directors, to automatically convert each outstanding share of our Series B common stock into one share of our Series A common stock at such time as we have outstanding less than 20% of the total number of shares of our Series B common stock issued in our 2014 spin-off from Liberty. In addition, if we were to become inadvertently subject to the Investment Company Act and failed to register as an investment company in violation of the Investment Company Act, such violation could subject us to material adverse consequences, including potentially significant regulatory penalties and the possibility that our contracts would be deemed unenforceable.

Our company has overlapping directors and officers with Liberty, Qurate Retail, TripCo and ABH, which may lead to conflicting interests.

As a result of our spin-off from Liberty in 2014 and other transactions between 2011 and 2023 that resulted in the separate corporate existence of Liberty, Qurate Retail, TripCo and ABH, all of our executive officers also serve as executive officers of Liberty, Qurate Retail, TripCo and ABH, and there are overlapping directors. None of these companies has any ownership interest in any of the others. Our executive officers and members of our company's board of directors have fiduciary duties to our stockholders. Likewise, any such persons who serve in similar capacities at Liberty, Qurate Retail, TripCo, ABH or any other public company have fiduciary duties to that company's stockholders. For example, there may be the potential for a conflict of interest when our company, Liberty, Qurate Retail, TripCo or ABH pursues acquisitions and other business opportunities that may be suitable for each of them. Therefore, such persons may have conflicts of interest or the appearance of conflicts of interest with respect to matters involving or affecting more than one of the companies to which they owe fiduciary duties. Each of our company, TripCo and ABH has renounced its rights to certain business opportunities and their respective restated certificate of incorporation provides that no director or officer of the respective company will breach their fiduciary duty and therefore be liable to the respective company or its stockholders by reason of the fact that any such individual directs a corporate opportunity to another person or entity (including Liberty, Qurate Retail, TripCo and ABH) instead of the respective company, or does not refer or communicate information regarding such corporate opportunity to our company, unless (x) such opportunity was expressly offered to such person solely in his or her capacity as a director or officer of the respective company or as a director or officer of any of the respective company's subsidiaries, and (y) such opportunity relates to a line of business in which the respective company or any of its subsidiaries is then directly engaged. In addition, any potential conflict that qualifies as a "related party transaction" (as defined in Item 404 of Regulation S-K) is subject to review by an independent committee of the applicable issuer's board of directors in accordance with its corporate governance guidelines. Any other potential conflicts that arise will be addressed on a case-by-case basis, keeping in mind the applicable fiduciary duties owed by the executive officers and directors of each issuer. From time to time, we may enter into transactions with Liberty, Qurate Retail, TripCo, ABH and/or their respective subsidiaries or other affiliates. There can be no assurance that the terms of any such transactions will be as favorable to our company, Liberty, Qurate Retail, TripCo, ABH or any of their respective subsidiaries or affiliates as would be the case where there is no overlapping officer or director.

Certain of our inter-company agreements were negotiated while we were a subsidiary of Liberty.

We entered into a number of inter-company agreements covering matters such as tax sharing and our responsibility for certain liabilities previously undertaken by Liberty for certain of our businesses. In addition, we entered into a services agreement with Liberty pursuant to which it provides to us certain management, administrative, financial, treasury, accounting, tax, legal and other services, for which we reimburse them on a fixed fee basis, which was amended to provide that components of our President and Chief Executive Officer's compensation will either be paid directly to him by our company or reimbursed to Liberty, in each case, based on the allocation set forth in the amendment. The terms of all of these agreements (other than the amendment to the services agreement) were established while we were a wholly-owned subsidiary of Liberty, and hence may not be the result of arms' length negotiations. We believe that the terms of these inter-company agreements are commercially reasonable and fair to all parties under the circumstances; however, conflicts could arise in the interpretation or any extension or renegotiation of the foregoing agreements.

Our ability to use net operating loss and disallowed business interest carryforwards to reduce future tax payments could be negatively impacted if there is an "ownership change" as defined under Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), of our Company.

At December 31, 2023, we had deferred tax assets attributable to federal and state net operating losses and disallowed business interest carryforwards of \$36 million and under the Code, we may carry forward our federal net operating losses and disallowed business interest deductions in certain circumstances to offset current and future taxable income and reduce our federal income tax liability, subject to certain requirements and restrictions. If we experience an "ownership change," as defined in Section 382 of the Code and related Treasury regulations (generally, a cumulative change in ownership that exceeds 50% of the value of a corporation's stock over a rolling three-year period) at a time when our market capitalization is below a certain level or proposed Treasury regulations under Section 382 of the Code issued during 2019 have become final and are applicable (taking into account the delayed effective date of such regulations), our ability to use our federal net operating loss and disallowed business interest carryforwards could be substantially limited. This limit could impact the timing of the usage of our net operating loss and disallowed business interest carryforwards, thus accelerating federal cash tax payments or causing certain federal net operating loss carryforwards to expire prior to their use, which could affect the ultimate realization of that deferred tax asset. Similar limitations may also apply at the state level.

Recently enacted tax legislation and future interpretive regulatory guidance could affect our financial performance.

On August 16, 2022, the U.S. government enacted the Inflation Reduction Act of 2022 (the "IRA"). The IRA includes, among other provisions, a new 15% corporate alternative minimum tax (the "CAMT"), effective for taxable years beginning after December 31, 2022, imposed on the adjusted financial statement income of certain large corporations. Based on interpretations of the CAMT rules and current guidance, we believe we will be subject to the CAMT for the year ended December 31, 2023. However, we do not expect the CAMT to have a material impact on our consolidated financial results for the year ended December 31, 2023. The full impact of the CAMT in the future depends on several factors, including interpretive regulatory guidance, that has not yet been released. We expect U.S. cash tax to increase in the short term as a result of the CAMT but do not expect our effective tax rate to be impacted as the CAMT is expected to be recovered as a credit in future years.

Factors Related to Our and Our Subsidiaries' Indebtedness

Our company may have future capital needs and may not be able to obtain additional financing, or refinance or renew our existing indebtedness, on acceptable terms. Further, our and our subsidiaries' ability to service our respective debt and any other obligations will require access to funds, which may be restricted.

As of December 31, 2023, we and our subsidiaries had approximately \$3.7 billion principal amount of debt outstanding, consisting of (i) \$1.5 billion outstanding under a credit agreement (as amended, the "Margin Loan Agreement") governing a multi-draw margin loan agreement credit facility entered into in 2017 by a bankruptcy remote wholly owned subsidiary ("SPV") of Liberty Broadband; (ii) \$1,265 million outstanding under our 3.125% Exchangeable Senior Debentures due 2053 (the "Company Debenture"); (iii) \$600 million outstanding under GCI, LLC's 4.750% senior notes due 2028 (the "Senior Notes"); (iv) \$394 million in outstanding term and revolving loans under GCI, LLC's senior secured credit facility with a syndicate of banks (the "Senior Credit Facility"); and (v) \$5 million outstanding under a note payable to Wells Fargo originally issued by GCI Holdings. We also had, at December 31, 2023, \$840 million remaining available to be drawn, subject to certain terms and conditions, until five business days prior to May 12, 2026 under the Margin Loan Agreement.

Our and our subsidiaries' ability to service the respective financial obligations will depend on our and their ability to access cash, and cash flows from operations may be insufficient to satisfy the respective financial obligations under indebtedness outstanding from time to time. Accessing cash at operating subsidiaries will depend on those subsidiaries' individual operating results and any statutory, regulatory or contractual restrictions to which they may be or may become subject. The obligations under the Margin Loan Agreement are secured by a portion of our ownership interest in Charter. Such equity interests are held through SPV. The terms of the Margin Loan Agreement limit our company's ability to secure additional financing with our ownership interest in Charter on favorable terms. In addition, covenants included in the Senior Notes and Senior Credit Facility will limit the ability of certain subsidiaries to upstream or downstream cash for this purpose. Our and our subsidiaries' other potential sources of cash include available cash balances, dividends and interest from its investments, monetization of public investments, and proceeds from asset sales.

Moreover, our and our subsidiaries' ability to secure additional financing will depend upon the operating performance of our subsidiaries, the value of our investment in Charter, prevailing general economic and credit market conditions, including interest rate levels and the availability of credit generally, the state of competition in our subsidiaries' respective markets, the outcome of certain legislative and regulatory issues and financial, business and other factors, many of which are beyond our control. There can be no assurance that sufficient financing will be available, or that we will be able to renew or refinance existing indebtedness, on desirable terms or at all. In particular, during 2023, uncertainty surrounding global growth rates, bank failures and rising inflation and interest rates continued to produce volatility in the credit and equity markets. As of December 31, 2023, the markets remain volatile and the economic outlook remains uncertain. If financing is not available when needed or is not available on favorable terms, we and our subsidiaries may be unable to take advantage of business or market opportunities as they arise, which could have a material adverse effect on our business and financial condition.

We and our subsidiaries have significant indebtedness, which could adversely affect our business and financial condition.

As discussed above, as of December 31, 2023, we and our subsidiaries had approximately \$3.7 billion principal amount of debt outstanding. As a result of this significant indebtedness, we and our subsidiaries may:

- experience increased vulnerability to general adverse economic and industry conditions;
- be required to dedicate a substantial portion of cash flow from operations to principal and interest payments on its indebtedness, thereby reducing the availability of cash flow to fund working capital, capital expenditures, strategic acquisitions and investments and other general corporate purposes;
- be impeded in our and their ability to optimally capitalize and manage cash flows;
- be restricted from making strategic acquisitions or required to make non-strategic divestitures;
- be exposed to the risk of increased interest rates with respect to any variable rate portion of indebtedness; and
- be limited in planning for, or reacting to, changes in business or market conditions and placing us and our subsidiaries at a competitive disadvantage compared to competitors who are less highly leveraged and who, therefore, may be able to take advantage of opportunities that our and our subsidiaries' leverage may prevent us and them from exploiting.

In addition, it is possible that we may need to incur additional indebtedness in the future. For example, at December 31, 2023, we had \$840 million remaining available to be drawn, subject to certain terms and conditions, until five business days prior to May 12, 2026 under the Margin Loan Agreement and we could issue additional exchangeable senior debentures. If new debt is added to the current debt levels, the risks described above could intensify. For additional limitations on our company's ability to potentially service our direct debt obligations, see "We are a holding company, and we could be unable to obtain cash in amounts sufficient to service our financial obligations or meet our other commitments" and "Other than cash generated from our participation in Charter's stock repurchase program, we do not have access to the cash that Charter generates from its operating activities" above.

The agreements that govern our and our subsidiaries' current and future indebtedness may contain various affirmative and restrictive covenants that will limit our discretion in the operation of our business.

As discussed above, SPV entered into the Margin Loan Agreement pursuant to which SPV had outstanding borrowings of \$1.5 billion, with \$840 million remaining available to be drawn, subject to certain terms and conditions, until five business days prior to May 12, 2026, at December 31, 2023. The Margin Loan Agreement contains various covenants, including those that limit our ability to, among other things, incur indebtedness either directly, through another of our subsidiaries, or by having SPV enter into financing arrangements with respect to the stock of Charter, and cause SPV to enter into unrelated businesses or otherwise conduct business other than owning common stock of Charter and other assets as permitted under the Margin Loan Agreement documents.

Further, the agreements governing our and our subsidiaries' other indebtedness contain various covenants that could materially and adversely affect our and our subsidiaries' ability to finance future operations or capital needs and to engage in other business activities that may be in our and their best interest.

We may also enter into certain other indebtedness arrangements in the future. The instruments governing such indebtedness often contain covenants that, among other things, place certain limitations on a borrower's ability to incur more debt, exceed specified leverage ratios, pay dividends, make distributions, make investments, repurchase stock, create liens, enter into transactions with affiliates, merge or consolidate, and transfer or sell assets. Any failure to comply with such covenants could result in an event of default, which, if not cured or waived, could have a material adverse effect on our business and financial condition.

The various covenants in existing or future indebtedness may restrict our and our subsidiaries' ability to expand or to pursue business strategies. Our and our subsidiaries' ability to comply with these covenants may be affected by events beyond our and their control, such as prevailing economic conditions and changes in regulations, and if such events occur, we cannot be sure that we and our subsidiaries will be able to comply. A breach of these covenants could result in a default under the indentures and/or the credit agreements. If there were an event of default under the Margin Loan Agreement, the indentures and/or the credit agreements, of such defaulted debt could cause all amounts borrowed under these instruments to be due and payable immediately. Additionally, if we or our subsidiaries fail to repay the debt under any secured indebtedness when it becomes due, the lenders under such indebtedness could proceed against the assets that are pledged to them as security. Our and our subsidiaries' assets or cash flow may not be sufficient to repay borrowings under outstanding debt instruments in the event of a default thereunder.

Variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

Borrowings under the Margin Loan Agreement and the Senior Credit Facility are at variable rates of interest and expose us to interest rate risk. If interest rates increase, our debt service obligations on any variable rate indebtedness could increase even though the amount borrowed remained the same, and net income and cash flow could decrease.

In order to manage our exposure to interest rate risk, in the future, we may enter into derivative financial instruments, typically interest rate swaps and caps, involving the exchange of floating for fixed rate interest payments. If we are unable to enter into interest rate swaps, it may adversely affect our cash flow and may impact our ability to make required principal and interest payments on our indebtedness and, even if we use these instruments to selectively manage risks, there can be no assurance that we will be fully protected against material interest rate fluctuations.

Factors Relating to GCI

Additional risks and uncertainties not currently known to our company or that it currently deems to be immaterial may also materially and adversely affect the business operations of GCI Holdings, which our company refers to as "GCI" in the following risk factors relating to the business of GCI Holdings. Any of the following risks could materially and adversely affect our company's business, financial position, results of operations or liquidity.

GCI faces competition that may reduce its market share and harm its financial performance.

There is substantial competition in the telecommunications and entertainment industries. Through mergers, various service integration strategies, and business alliances, major providers are striving to strengthen their competitive positions. GCI faces increased wireless services competition from national carriers in the Alaska market and increasing video services competition from DBS providers and over-the-top content providers who are often able to offer more flexible subscription packages and exclusive content.

Our company expects competition to increase as a result of the rapid development of new technologies, services, and products, and the availability of increased federal funding of broadband infrastructure. Our company cannot predict which of many possible future technologies, products or services will be important to maintain GCI's competitive position or what expenditures will be required to develop and provide these technologies, products or services. GCI's ability to compete successfully will depend on marketing and on its ability to anticipate and respond to various competitive factors affecting the industry, including new services that may be introduced, improvements in network quality, changes in consumer preferences or habits, demographic trends, economic conditions, and pricing strategies by competitors. To the extent GCI does not keep pace with technological advances or fails to timely respond to changes in competitive factors in its industry and in its markets, GCI

could lose market share or experience a decline in its revenue and net income. Competitive conditions create a risk of market share loss and the risk that customers shift to less profitable lower margin services. Competitive pressures also create challenges for its ability to grow new businesses or introduce new services successfully and execute its business plan. GCI also faces the risk of potential price cuts by our company's competitors partially driven by federal funding for broadband infrastructure that could materially adversely affect its market share and gross margins.

GCI's wholesale customers, including its major roaming customers, may construct facilities in locations where they currently contract with GCI to use its network to provide service on their behalf. Our company could experience a decline in revenue and net income if any of GCI's wholesale customers constructed or expanded their existing networks in places where service is currently provided by GCI's network. Some of GCI's wholesale customers have greater access to financial, technical, and other resources than GCI does. GCI expects to continue to offer competitive alternatives to such customers in order to retain significant traffic on GCI's network. Our company cannot predict whether such customers will continue to see GCI's network as a compelling alternative. GCI's inability to negotiate renewals of such contracts could have a material adverse effect on our company's business, financial condition, and results of operations.

If GCI experiences customer losses, our company's financial performance will be negatively impacted.

GCI is in the business of selling communications and entertainment services to subscribers, and its economic success is based on its ability to retain current subscribers and attract new subscribers. If GCI is unable to retain and attract subscribers, its and our company's financial performance will be impaired. GCI's rates of subscriber acquisition and turnover are affected by a number of competitive factors, including the size of its service areas, network performance and reliability issues, changing technologies including the transition to internet protocol television, its device and service offerings, subscribers' perceptions of its services, and customer care quality. Managing these factors and subscribers' expectations is essential in attracting and retaining subscribers. Although GCI has implemented programs to attract new subscribers and address subscriber turnover, our company cannot make assurances that these programs or GCI's strategies to address subscriber acquisition and turnover will be successful. A high rate of turnover or subscriber loss would reduce revenue and increase the total marketing expenditures required to attract the minimum number of subscribers required to sustain GCI's business plan which, in turn, could have a material adverse effect on our company's business, financial condition, and results of operations.

Adverse economic conditions in the U.S. and inflationary pressures on input costs and labor could impact GCI's results of operations.

In recent years, varying factors have contributed to significant volatility and disruption of financial markets and global supply chains. Additionally, the U.S. Federal Reserve began steadily increasing interest rates in March 2022 through 2023. Mounting inflationary cost pressures and recessionary fears have negatively impacted the U.S. and global economy. Unfavorable economic conditions, such as a recession or economic slowdown in the U.S., or inflation in the markets in which GCI operates, could negatively affect the affordability of and demand for GCI's products and services and its cost of doing business. GCI has experienced increased interest expense as a result of higher interest rates, as well as higher labor, information technologies and capital expenditure costs due to inflation.

The Alaska economy is dependent upon the oil industry, state and federal spending, investment earnings and tourism. A decline in oil prices would put significant pressure on the Alaska state government budget. The Alaska state government has financial reserves that GCI believes may be able to help fund the state government for the next couple of years. The Alaska economy is subject to recessionary pressures as a result of the economic impacts of volatility in oil prices, inflation, and other causes that could result in a decrease in economic activity. While it is difficult for GCI to predict the future impact of a recession on its business, these conditions have had an adverse impact on its business and could adversely affect the affordability of and demand for some of its products and services and cause customers to shift to lower priced products and services or to delay or forgo purchases of its products and services. GCI's customers may not be able to obtain adequate access to credit, which could affect their ability to make timely payments to GCI and could lead to an increase in accounts receivable and bad debt expense. If a recession occurs, it could negatively affect GCI's business including its financial position, results of operations, or liquidity, as well as its ability to service debt, pay other obligations, and enhance shareholder returns.

In addition, during 2022 and continuing in 2023, GCI began to experience the impact of inflation-sensitive items, including upward pressure on the costs of materials, labor, and other items that are critical to GCI's business. GCI continues to

monitor these impacts closely and, if costs continue to rise, GCI may be unable to recoup losses or offset diminished margins by passing these costs through to its customers or implementing offsetting cost reductions.

GCI may be unable to obtain or maintain the roaming services it needs from other carriers to remain competitive.

Some of GCI's competitors have national networks that enable them to offer nationwide coverage to their subscribers at a lower cost than GCI can offer. The networks GCI operates do not, by themselves, provide national coverage, and GCI must pay fees to other carriers that provide roaming services to it. GCI currently relies on roaming agreements with several carriers for the majority of its roaming services.

The FCC requires commercial mobile radio service providers to provide roaming, upon request, for voice and SMS text messaging services on just, reasonable, and non-discriminatory terms. The FCC also requires carriers to offer data roaming services. The rules do not provide or mandate any specific mechanism for determining the reasonableness of roaming rates for voice, SMS text messaging or data services and require that roaming complaints be resolved on a case-by-case basis, based on a non-exclusive list of factors that can be taken into account in determining the reasonableness of particular conduct or rates. If GCI were to lose the benefit of one or more key roaming or wholesale agreements unexpectedly, it may be unable to obtain similar replacement agreements and as a result may be unable to continue providing nationwide voice and data roaming services for its customers or may be unable to provide such services on a cost-effective basis. GCI's inability to obtain new or replacement roaming services on a cost-effective basis may limit its ability to compete effectively for wireless customers, which may increase customer turnover and decrease GCI's revenue, which in turn could materially adversely affect our company's business, financial condition and results of operations.

GCI's business is subject to extensive governmental legislation and regulation. Changes to or interpretations of existing statutes, rules, regulations, or the adoption of new ones, could adversely affect GCI's business, financial position, results of operations, or liquidity.

As described above in "Item 1. Business – Regulatory Matters," GCI's business is subject to extensive federal and state governmental legislation and regulation. There can be no assurance that future changes or additions to the regulatory system under which GCI operates will benefit or have no adverse effect on GCI. Similarly, these rules and regulations are subject to interpretation by the applicable agencies, and new interpretations, which could impact GCI's operations and have an adverse effect on GCI's business, position, results of operations, or liquidity. There can be no assurance that future regulatory actions taken by Congress, the FCC or other federal, state or local government authorities will not have a similar effect.

With respect to wireless services provided by GCI, the licensing, leasing, construction, operation, sale and interconnection arrangements of wireless communications systems are regulated by the FCC, Alaska, and potentially other state and local regulatory agencies. In particular, the FCC grants wireless licenses and imposes significant regulation on licensees of wireless spectrum. There can be no guarantee that GCI's existing licenses will be renewed. In addition, while the FCC does not currently regulate wireless service providers' rates, states may exercise authority over such things as certain billing practices and consumer-related issues. These regulations could increase the costs of GCI's wireless operations, including with respect to the maintenance of existing licenses granted by the FCC, due to failure to comply with applicable regulations. GCI is also subject to FCC rules relating to E911 capabilities and failure to comply with these rules could subject GCI to significant fines. With respect to video services provided by GCI, GCI is subject to changes in regulation that could potentially result in rate reductions or refunds of previously collected fees in the future.

With respect to Internet services provided by GCI, GCI would be adversely impacted by the reclassification of Internet service as a telecommunications service under Title II of the Communications Act. In 2015, the FCC classified Internet service as a telecommunication service. The FCC's implementing regulations prohibited broadband providers from blocking or throttling most lawful public Internet traffic, from engaging in paid prioritization of that traffic, and from unreasonably interfering with or disadvantaging end users' and edge providers' ability to send traffic to, from, and among each other. Although a 2018 FCC order returned to a Title I classification of Internet service and eliminated many of the requirements imposed in its initial 2015 order, on October 19, 2023 the FCC adopted a Notice of Proposed Rulemaking that proposes again to reclassify Internet services as a Title II service and to adopt "net neutrality" rules regulating the Internet under Title II. In addition, Congress and state legislatures may undertake similar efforts. For example, California and Vermont have undertaken such efforts. The increased regulatory burden if the FCC adopts its proposed rules likely would increase GCI's costs and could adversely affect the manner and price of providing service, which could have a material adverse effect on GCI's business, financial position, results of operations, or liquidity.

USF receivables and contributions are subject to change due to regulatory actions taken by the FCC, including the FCC's interpretations of the USF program rules, or legislative actions that change the rules and regulations governing the USF program.

GCI participates in various USF programs, which provide government subsidies to customers in low income areas, including schools, libraries and other facilities. This support was 39% and 35% of GCI's revenue for the years ended December 31, 2023 and December 31, 2022, respectively. GCI had USF net receivables of \$102 million and \$116 million at December 31, 2023 and 2022, respectively. In addition, the USF programs require GCI, Charter and other telecommunications providers to make contributions, based on certain revenue earned, into a fund used to subsidize the provision of voice services and broadband-capable voice networks in high-cost areas, the provision of voice and broadband services to low-income consumers, and the provision of internet, voice and telecommunications services to schools, libraries and certain health care providers. The USF programs in which GCI participates are highly regulated. While the rules and regulations governing the USF programs are fairly robust, there can be no assurance that any new rules or regulations adopted will not impact GCI's USF program anticipated receivables or contributions. Further, the FCC and USAC may interpret or apply the applicable rules and regulations in ways that are unexpected to GCI or other program participants. As a result, material changes to receivables and contributions may occur, which could have an adverse effect on GCI's business and our company's financial position, results of operations or liquidity. As described above in "Item 1. Business - Regulatory Matters," GCI has experienced material changes to receivables and contributions from the USF programs in recent years. For example, in October 2018, the Bureau notified GCI of its decision to reduce rural rates charged to RHC customers for the funding year that ended on June 30, 2018 by approximately 26%, resulting in a reduction of total support payments of \$28 million, and applied the same cost methodology for the funding years ended on June 30, 2019 and June 30, 2020. In addition, although the FCC has adjusted the RHC Program funding cap and committed to annual adjustments in future years for inflation, there is no guarantee that aggregate funding will be available to pay in full the approved funding for future years. Furthermore, the FCC has adopted a series of changes to the manner in which support issued under the RHC Program will be calculated and approved and has continued to seek comment about future changes. GCI is currently unable to assess the substance, impact on funding or timing of any such changes.

Failure to comply with USF program requirements may have an adverse effect on GCI's business and our company's financial position.

The USF programs in which GCI participates are highly regulated, and, in many cases, require highly technical and nuanced processes and procedures in order to obtain funding and to ensure compliance with the USF programs. For example, telecommunication providers and their customers are subject to regulations that set forth procedures that must be followed by both the provider and the customer, and there are limitations on communications between these parties. If a customer or a provider is found to have not complied with any aspect of these regulations, regardless of whether such noncompliance was unintentional or accidental, the FCC may deny funding and/or require disgorgement of any amounts received under the affected contracts. The FCC may also invalidate any affected contract and impose fines or penalties. Accordingly, failure to comply with these rules and regulations could have a material adverse effect on GCI's business and our company's financial position, results of operations or liquidity.

Loss of GCI's ETC status would disqualify it for USF support.

The USF pays support to ETCs to support the provision of facilities-based wireline and wireless telephone service in high cost areas. If GCI were to lose its ETC status in any of the high cost areas where it is currently an authorized ETC whether due to legislative or regulatory reform or its failure to comply with applicable laws and regulations, GCI would be ineligible to receive high cost or low income USF support for providing service in that area, which would have an adverse effect on our company's business, financial position, results of operations or liquidity.

A successful legal challenge to the constitutionality of the USF could disrupt or eliminate GCI's USF support.

Legal challenges to the constitutionality of the USF are currently pending in the 5th, 6th, 11th, and D.C. Circuit Courts. While all such challenges have been ineffective to date, petitioners continue to file additional cases and appeals. A successful challenge could disrupt or eliminate GCI's USF support until any identified legal defects with the program structure or administration are remedied.

GCI may not meet its performance plan milestones under the Alaska High Cost Order.

As an ETC, GCI receives support from the USF to support the provision of wireline local access and wireless service in high cost areas. In 2016, the FCC published the Alaska High Cost Order which requires GCI to submit to the FCC a performance plan with five-year and ten-year commitments. The FCC approved revised performance obligations in 2021. If GCI is unable to meet the final performance plan milestones approved by the FCC it will be required to repay 1.89 times the average amount of support per location received over the ten-year term for the relevant number of locations that GCI failed to deploy to, plus potentially ten percent of its total Alaska High Cost Order support received over the ten-year term. Inability to meet GCI's performance plan milestones could have an adverse effect on its business, financial position, results of operations, or liquidity.

GCI may lose USF high cost support if another carrier adds 4G LTE service in an area where it currently provides 4G LTE service.

Under the Alaska High Cost Order, the FCC stated that it would revisit after five years whether and to what extent there is duplicative support for 4G LTE service in rural Alaska and to take steps to eliminate such duplicative support levels in the second half of the ten-year term. As a result, if another carrier builds 4G LTE service in an area where GCI is the sole provider and the FCC decides to redistribute the support, GCI's high cost support may be reduced, which could have an adverse effect on its business, financial position, results of operations or liquidity.

The decline in GCI's Other revenue, which includes video, long-distance, and local access services, may accelerate.

Our company expects GCI's Other revenue, which includes video, long-distance and local access services, will continue to decline. GCI has experienced declines in video and voice subscribers, consistent with the industry. Video revenue has seen further losses as a result of the transition from traditional linear video delivery to IP delivery and GCI's decision to discontinue selling bulk video packages for multi-dwelling units. GCI expects a continued decrease in video revenue and video subscribers.

As competition from wireless carriers, as well as competition from GCI's own product offerings, increases, our company expects GCI's long-distance and local access services' subscribers and revenue will continue to decline and the rate of decline may accelerate. In addition, GCI's success in the local telephone market depends on its continued ability to obtain interconnection, access, and related services from local exchange carriers on terms that are reasonable and that are based on the cost of providing these services. GCI's ability to provide service in the local telephone market depends on its negotiation or arbitration with local exchange carriers to allow interconnection to the carrier's existing local telephone network (in some Alaska markets at cost-based rates), to establish dialing parity, to obtain access to rights-of-way, to resell services offered by the local exchange carrier, and in some cases, to allow the purchase, at cost-based rates, of access to certain unbundled network elements. Future negotiations or arbitration proceedings with respect to new or existing markets could result in a change in GCI's cost of serving these markets via the facilities of the Incumbent Local Exchange Carriers or via wholesale offerings. GCI's local telephone services business faces the risk of unfavorable changes in regulation or legislation or the introduction of new regulations.

Failure to stay abreast of new technology could affect GCI's ability to compete in the industry.

GCI tests and deploys various new technologies and support systems intended to enhance its competitiveness and increase the utility of its services. As GCI's operations grow in size and scope, it must continuously improve and upgrade its systems and infrastructure while maintaining or improving the reliability and integrity of its systems and infrastructure. The emergence of alternative platforms such as mobile or tablet computing devices and the emergence of niche competitors who may be able to optimize products, services, or strategies for such platforms will require new investment in technology. Replacing or upgrading GCI's infrastructure to keep pace with such technological changes could result in significant capital expenditures. Further, current and new wireless internet technologies such as 4G and 5G wireless broadband services continue to evolve rapidly to allow for greater speed and reliability, and our company expects other advances in communications technology to occur in the future. GCI may not successfully complete the rollout of new technology and related features or services in a timely manner, and they may not be widely accepted by GCI's customers or may not be profitable, in which case GCI could not recover its investment in the technology. There can be no assurance that GCI will be able to compete with advancing technology or introduce new technologies and systems as quickly as it would like or in a cost-effective manner. Deployment of technology supporting new service offerings may also adversely affect the performance or reliability of its networks with respect to both the new and existing services. Any resulting customer dissatisfaction could adversely affect GCI's ability to retain customers and attract new customers and may have an adverse effect on our company's financial position, results of operations, or liquidity. In addition to introducing

new technologies and offerings, GCI must phase out outdated and unprofitable technologies and services. If GCI is unable to do so on a cost-effective basis, GCI could experience reduced profits.

GCI's operations are geographically concentrated in Alaska and are impacted by the economic conditions in Alaska, and GCI may not be able to increase its share of the existing market for its services.

GCI offers products and services to customers primarily throughout Alaska. Because of this geographic concentration, growth of GCI's business and operations depends upon economic conditions in Alaska, which have been negatively impacted in recent years by a recession and the COVID-19 pandemic.

In addition, the customer base in Alaska is limited, and GCI has already achieved significant market penetration with respect to its service offerings in Anchorage and other locations in Alaska. GCI may not be able to continue to increase its share of the existing markets for its services, and no assurance can be given that the Alaskan economy will grow and increase the size of the markets GCI serves or increase the demand for the services it offers. The markets in Alaska for wireless and wireline telecommunications and video services are unique and distinct within the U.S. due to Alaska's large geographical size, its sparse population located in a limited number of clusters, and its distance from the rest of the U.S.

Natural or man-made disasters or terrorist attacks could have an adverse effect on GCI's business.

GCI's technical infrastructure (including its communications network infrastructure and ancillary functions supporting its network such as service activation, billing and customer care) is vulnerable to damage or interruption from technology failures, power surges or outages, natural disasters, fires, human error, terrorism, intentional wrongdoing, or similar events. As a communications provider, there is an increased risk that GCI's technological infrastructure may be targeted in connection with terrorism, either as a primary target, or as a means of facilitating additional attacks on other targets.

In addition, earthquakes, floods, fires, and other unforeseen natural disasters or events could materially disrupt GCI's business operations or its provision of service in one or more markets. Specifically, the majority of GCI's facilities are located in areas with known significant seismic activity. Costs GCI incurs to restore, repair or replace its network or technical infrastructure, as well as costs associated with detecting, monitoring, or reducing the incidence of unauthorized use, may be substantial and increase GCI's cost of providing service. Many of the areas in which GCI operates have limited emergency response services and may be difficult to reach in an emergency situation. Should a natural disaster or other event occur, it could be weeks or longer before remediation efforts could be implemented, if they could be implemented at all. Further, any failure in or interruption of systems that GCI or third parties maintain to support ancillary functions, such as billing, point of sale, inventory management, customer care, and financial reporting, could materially impact GCI's ability to timely and accurately record, process, and report information important to our company's business. If any of the above events were to occur, GCI could experience higher churn, reduced revenue, and increased costs, any of which could harm its reputation and have a material adverse effect on our company's business, financial condition, or results of operations.

Additionally, our company's insurance may not be adequate to cover the costs associated with a natural disaster or terrorist attack.

Cyberattacks or other network disruptions could have an adverse effect on our company and GCI's business.

Our company's operations depend upon the transmission of information over the Internet. Unauthorized parties attempt to gain access to our company's and its vendors' information systems by, among other things, hacking into its systems or those of third parties, through fraud or other means of deceiving our company's employees or its vendors, burglaries, errors by our company or its vendors' employees, misappropriation of data by employees, or other irregularities that may result in persons obtaining unauthorized access to its data. The techniques used to gain such access to our company's or its vendors' information systems, data or customer information, disable or degrade service, or sabotage systems are constantly evolving, may be difficult to detect quickly, and often are not recognized until launched against a target.

Cyberattacks against GCI's or our company's vendors' technological infrastructure or breaches of information systems may cause equipment failures, disruption of its or their operations, and potentially unauthorized access to confidential customer or employee data, which could subject our company to increased costs and other liabilities as discussed further below. Cybersecurity incidents and cybersecurity threats, which include the use of malware, computer viruses, and other means for

service disruption or unauthorized access to confidential customer or employee data, have increased in frequency, scope, and potential harm for businesses in recent years. It is possible for such cybersecurity incidents and cybersecurity threats to go undetected for an extended period of time, increasing the potential harm to GCI's or our company's respective customers, employees, assets, and reputation.

To date, our company and GCI have not been subject to cybersecurity incidents or disruptions of information systems that, individually or in the aggregate, have been material to our or GCI's operations or financial condition. Although our company and GCI have not detected a material security breach or cybersecurity incident to date, our company and GCI have been the target of events of this nature and expect to be subject to similar attacks in the future. Our company and GCI engage in a variety of preventive measures at an increased cost intended to reduce the risk of cyberattacks and safeguard our information systems and confidential customer information, but as with all companies, these measures may not be sufficient for all eventualities, and there is no guarantee that they will be adequate to safeguard against all cybersecurity incidents, system compromises, or misuses of data. Such measures include, but are not limited to, the following practices: application whitelisting, anti-malware, message and spam filtering, encryption, advanced firewalls, threat detection, and URL filtering. Despite these preventive and detective actions, our and GCI's efforts may be insufficient to repel a cybersecurity incident, detect all cybersecurity threats, or prevent disruption of information systems in the future and prevent the risks described above.

In addition, some of the most significant risks to GCI's information systems, networks, and infrastructure include:

- cyberattacks that disrupt, damage, or allow unauthorized access to GCI's network and computer systems by criminal or terrorist
 actors, which may result in data breaches or network disruptions;
- undesired human actions including intentional or accidental errors, misconfigurations, and break-ins;
- malware (including viruses, worms, and Trojan horses), software defects, unsolicited mass advertising, denial of service attacks, ransomware, and other malicious or abusive attacks by third parties; and
- unauthorized access to GCI's information technology, billing, customer care, and provisioning systems and networks and those of its vendors and other providers.

If hackers or cybercriminals gain access to our or GCI's information systems, networks, or infrastructure, they may be able to access, steal, publish, delete, misappropriate, modify or otherwise disrupt access to confidential customer or employee data. Moreover, additional harm to customers or employees could be perpetrated by third parties who obtain unauthorized access to the confidential customer data. A network or other disruption of information systems (including one resulting from a cyberattack or other cybersecurity incident) could cause an interruption or degradation of service and diversion of management attention, as well as permit access, theft, publishing, deletion, misappropriation, or modification of confidential customer data. Due to the evolving techniques used in cyberattacks to disrupt or gain unauthorized access to technology networks, our company or GCI may not be able to anticipate or prevent such disruption or unauthorized access.

The costs imposed on our company and GCI as a result of a cybersecurity incident or disruption of information systems could be significant. Among others, such costs could include increased expenditures on cybersecurity measures, litigation, regulatory actions, fines, sanctions, lost revenue from business interruption, and damage to our or GCI's reputation and the public's perception regarding GCI's ability to provide a secure service. As a result, a cybersecurity incident could have a material adverse effect on GCI's and our company's business, financial condition, and operating results. Our company and GCI also face similar risks associated with security breaches and other cybersecurity incidents affecting third parties with which we affiliate or otherwise conduct business. While GCI maintains cyber liability insurance that provides both third-party liability and first-party insurance coverage, its insurance may not be sufficient to protect against all of its losses from any future disruptions or breaches of its systems or other events as described above.

The processing, storage, sharing, use, disclosure and protection of personal data could give rise to liabilities as a result of governmental regulation, conflicting legal requirements or differing views of personal privacy rights.

Through our company's operations, sales and marketing activities, it collects and stores certain non-public personal information related to its customers. Our company also gathers and retains information about employees in the normal course of business. Our company may share information about such persons with vendors, contractors and other third-parties that assist with certain aspects of its business. The collection, storage, sharing, use, disclosure and protection of this information are governed by the privacy and data security policies maintained by these businesses. Moreover, there are federal, state and international laws regarding privacy and the collection, storage, sharing, use, disclosure and protection of personally identifiable

information and user data. Specifically, personally identifiable information is increasingly subject to changing legislation and regulations, in numerous jurisdictions around the world, which are intended to protect the privacy of personal information that is collected, processed and transmitted in or from the governing jurisdiction. Compliance with these laws and regulations may be onerous and expensive and may be inconsistent from jurisdiction to jurisdiction, further increasing the cost of compliance.

For example, California has enacted the CCPA, which, among other things, allows California consumers to request that certain companies disclose the types of personal information collected by such companies. The CCPA became effective on January 1, 2020. The California Attorney General has issued regulations and guidance regarding the law. In November 2020, California voters approved the CPRA, which amends and expands the CCPA and establishes the California Privacy Protection Agency to implement and enforce consumer privacy laws. Most of the CPRA's provisions became effective on January 1, 2023. In addition, Maine, Virginia, Colorado, Utah and Connecticut enacted privacy and data protection laws in recent years. New privacy laws enacted in Florida, Oregon, Texas, Montana, Iowa, Delaware, New Jersey, Tennessee and Indiana will take effect over the next two years. Other states in the U.S. are also separately proposing laws to regulate privacy and security of personal data. GCI's failure, and/or the failure by the various third party vendors and service providers with which GCI does business, to comply with applicable privacy policies or federal or state laws or changes in applicable laws and regulations, or any compromise of security that results in the unauthorized release of personally identifiable information or other user data could damage GCI's and our reputations and the reputation of their third party vendors and service providers, discourage potential users from trying their products and services and/or result in fines and/or proceedings by governmental agencies and/or consumers, any one or all of which could adversely affect GCI's business, financial condition and results of operations and, as a result, our Company. In addition, we, our subsidiaries or our business affiliates may not have adequate insurance coverage to compensate for losses.

Increases in data usage on GCI's wired and wireless networks may cause network capacity limitations, resulting in service disruptions, reduced capacity, or slower transmission speeds for GCI's customers.

Video streaming services and peer-to-peer file sharing applications use significantly more bandwidth than traditional Internet activity such as web browsing and email. As use of these services continues to grow, GCI's customers will likely use more bandwidth than in the past. Additionally, new wireless handsets and devices may place a higher demand for data on GCI's wireless network. If this occurs, GCI could be required to make significant capital expenditures to increase network capacity in order to avoid service disruptions, service degradation, or slower transmission speeds for its customers. Alternatively, GCI could choose to implement network management practices to reduce the network capacity available to bandwidth-intensive activities during certain times in market areas experiencing congestion, which could negatively affect its ability to retain and attract customers in affected areas. While our company believes demand for these services may drive customers to pay for faster speeds, competitive or regulatory constraints may preclude GCI from recovering the costs of the necessary network investments, which could result in an adverse impact to its business, financial condition, and operating results.

Prolonged service interruptions or system failures could affect GCI's business.

GCI relies heavily on its network equipment, communications providers, data, and software to support all of its functions. GCI relies on its networks and the networks of others for substantially all of its revenue. GCI is able to deliver services and serve its customers only to the extent that it can protect its network systems against damage from power or communication failures, computer viruses, natural disasters, unauthorized access, and other disruptions. While GCI endeavors to account for failures in the network by providing back-up systems and procedures, GCI cannot guarantee that these back-up systems and procedures will operate satisfactorily in an emergency. Disruption to its billing systems due to a failure of existing hardware and backup protocols could have an adverse effect on our company's revenue and cash flow. Should GCI experience a prolonged failure, it could seriously jeopardize its ability to continue operations. In particular, should a significant service interruption occur, GCI's ongoing customers may choose a different provider, and its reputation may be damaged, reducing its attractiveness to new customers.

If failures occur in GCI's undersea fiber optic cable systems or GCI's TERRA facilities and its extensions, or in terrestrial facilities owned by a third party upon which GCI relies for significant capacity, GCI's ability to immediately restore the entirety of GCI's service may be limited and our company could incur significant costs.

GCI's communications facilities include undersea fiber optic cable systems that carry a large portion of its traffic to and from the contiguous Lower 48 states, one of which provides an alternative geographically diverse backup communication facility to the other. GCI's facilities also include TERRA and its extensions some of which are unringed, operating in a remote environment, and are at times difficult to access for repairs. Damage to an undersea fiber optic cable system or TERRA and its

extensions could result in significant unplanned expense. For example, in January 2020, a fiber break occurred in GCI's TERRA ring in Alaska's Cook Inlet. Although service was not materially affected and has since been fully restored, and the financial impact was not significant, full functionality was not restored until March 2020 due to the uniquely challenging environmental conditions in the location of the fiber break. Similarly, in June 2023 a fiber break occurred in the network of a third-party provider of terrestrial capacity to GCI. GCI immediately re-routed customer services to be carried by GCI's TERRA facilities, but service quality in several communities was materially impacted until full restoration was completed in September. If a failure of both sides of the ring of GCI's undersea fiber optic facilities or GCI's ringed TERRA facility and its unringed extensions occurs and GCI is not able to secure alternative facilities, some of the communications services GCI offers to its customers could be interrupted, which could have a material adverse effect on our company's business, financial position, results of operations, or liquidity.

If a failure occurs in GCI's satellite communications systems, GCI's ability to immediately restore the entirety of its service may be limited.

GCI's communications facilities include satellite transponders that GCI uses to serve many rural and remote Alaska locations. Each of GCI's C-band and Ku-band satellite transponders are backed up using on-board transponder redundancy. In the event of a complete spacecraft failure the services are restored using capacity on other spacecraft that are held in reserve. If a failure of GCI's satellite transponders occurs and GCI is not able to secure alternative facilities, some of the communications services GCI offers to its customers could be interrupted, which could have a material adverse effect on our company's business, financial position, results of operations, or liquidity.

GCI depends on a limited number of third-party vendors to supply communications equipment. If GCI does not obtain the necessary communications equipment, GCI will not be able to meet the needs of its customers.

GCI depends on a limited number of third-party vendors to supply wireless, Internet, video, and other telephony-related equipment. If GCI's providers of this equipment are unable to timely supply the equipment necessary to meet GCI's needs or provide them at an acceptable cost, GCI may not be able to satisfy demand for its services and competitors may fulfill this demand. Due to the unique characteristics of the Alaska communications markets (i.e., remote locations, rural, satellite-served, and low-density populations), in many situations GCI deploys and utilizes specialized, advanced technology and equipment that may not have a large market or demand. GCI's vendors may not succeed in developing sufficient market penetration to sustain continuing production and may fail. Vendor bankruptcy, or acquisition without continuing product support by the acquiring company, may require GCI to replace technology before its otherwise useful end of life due to lack of on-going vendor support and product development. New restrictions on sourcing of equipment utilized in federally-supported projects may further exacerbate these risks.

The suppliers and vendors on which GCI relies may also be subject to litigation with respect to technology on which GCI depends, including litigation involving claims of patent infringement. Such claims have been growing rapidly in the communications industry. Our company is unable to predict whether GCI's business will be affected by any such litigation. Our company expects GCI's dependence on key suppliers to continue as they develop and introduce more advanced generations of technology. The failure of GCI's key suppliers to provide products or product support could have a material adverse effect on our company's business, financial position, and results of operations.

Supply chain disruptions could impact GCI's ability to obtain equipment and other supplies for its business from its key suppliers and vendors on acceptable terms or at all. To date, GCI's supply chain disruptions have been limited, but it may experience more severe supply chain disruptions in the future or supplier inability to manufacture or deliver equipment or parts. Any suspension or delay in GCI suppliers' and vendors' ability to provide us adequate equipment or supplies, or in GCI's ability to procure equipment or supplies from other sources in a timely manner or at all, could impair its ability to meet customer demand and therefore could have a material adverse effect on our company's business, financial condition, or results of operations.

Climate change and increasingly stringent environmental laws, rules and regulations, and customer expectations could adversely affect GCI's

There is a heightened public focus on climate change, sustainability, and environmental issues, and customer, regulatory, and shareholder expectations are evolving rapidly, with a focus on companies' climate change readiness, response, and mitigation strategies. This has led to increased government regulation. Our company expects that the trend of increasing environmental awareness will continue, which will result in higher costs of operations. GCI is committed to incorporating environmentally sustainable practices into its business. While undertaken in a manner designed to be as efficient and cost effective as possible, this may result in increases in GCI's costs of operations relative to its competitors.

The potential impact of climate change on GCI's operations and customers remains uncertain. The primary risk that climate change poses to GCI's business is the potential for increases in severe weather in the areas in which it operates. Potential physical effects of climate change, such as damage to GCI's network infrastructure, could result in increased costs and loss of revenue. In addition, governmental initiatives to address climate change could, if adopted, restrict GCI's operations, require GCI to make capital expenditures to comply with these initiatives, increase GCI's costs, and impact GCI's ability to compete. GCI's inability to timely respond to the risks posed by climate change and the costs of compliance with climate change laws and regulations could have a material adverse impact on GCI.

GCI does not have insurance to cover certain risks to which it is subject, which could lead to the occurrence of uninsured liabilities.

As is typical in the communications industry, GCI is self-insured for damage or loss to certain of its transmission facilities, including its buried, undersea, and above-ground fiber optic cable systems. If GCI becomes subject to substantial uninsured liabilities due to damage or loss to such facilities, our company's financial position, results of operations or liquidity may be adversely affected.

GCI uses a third-party vendor for its customer billing systems. Any errors, cyber-attacks or other operational disruption could have adverse operational, financial, and reputational effects on our company's business.

GCI's third-party billing services vendor may experience errors, cybersecurity incidents, or other operational disruptions of its information systems that could negatively impact GCI and over which GCI may have limited control. Interruptions and/or failure of this billing services system could disrupt GCI's operations and impact its ability to provide or bill for its services, retain customers, or attract new customers, and negatively impact overall customer experience. Any occurrence of the foregoing could cause material adverse effects on our company's operations and financial condition, material weaknesses in its internal control over financial reporting and reputational damage.

Any significant impairment of GCI's indefinite-lived intangible assets would lead to a reduction in its net operating performance and a decrease in its assets.

GCI had \$1.3 billion of indefinite-lived intangible assets as of December 31, 2023, consisting of goodwill of \$755 million, cable certificates of \$550 million and other intangibles of \$40 million. Goodwill represents the excess of cost over fair value of net assets acquired in connection with business acquisitions and the future economic benefits expected to arise from other intangible assets acquired that do not qualify for separate recognition. GCI's cable certificates represent agreements or authorizations with government entities that allow access to homes in cable service areas, including the future economic benefits of the right to solicit and service potential customers and the right to deploy and market new services to potential customers. GCI's wireless licenses are from the FCC and give GCI the right to provide wireless service within a certain geographical area.

If GCI makes changes in its business strategy or if market or other conditions adversely affect its operations, it may be forced to record an impairment charge, which would lead to a decrease in its assets and a reduction in its net operating performance. GCI's indefinite-lived intangible assets are tested annually for impairment during the fourth quarter and at any time upon the occurrence of certain events or substantive changes in circumstances that indicate the assets might be impaired. If the testing performed indicates that impairment has occurred, GCI is required to record an impairment charge for the difference between the carrying value and the fair value of the goodwill and/or the indefinite-lived intangible assets, as appropriate, in the period in which the determination is made. The testing of goodwill and indefinite-lived intangible assets for impairment requires GCI to make significant estimates about its future performance and cash flows, as well as other assumptions. These estimates can

be affected by numerous factors, including changes in economic, industry, or market conditions, changes in underlying business operations, future operating performance, changes in competition, or changes in technologies. Any changes to key assumptions, or actual performance compared with those assumptions, about GCI's business and its future prospects or other assumptions could affect the fair value, resulting in an impairment charge.

Factors Relating to Charter

The following risks relate specifically to our equity affiliate Charter. If any of these risks were realized, they could have a material adverse effect on the value of our equity interest in Charter, which could negatively impact our stock price and our financial prospects.

Charter operates in a very competitive business environment, which affects its ability to attract and retain customers and can adversely affect its business, operations and financial results.

The industry in which Charter operates is highly competitive and has become more so in recent years. In some instances, Charter competes 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 Charter's competitors, either through access to financing, resources, or efficiencies of scale including the ability to launch new products and services.

Charter's 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. Charter's 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 Charter's ability to attract and retain customers.

Charter's 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 Charter faces.

The increasing number of choices available to audiences, including low-cost or free choices, could negatively impact not only consumer demand for Charter's products and services, but also advertisers' willingness to purchase advertising from Charter. Charter competes 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 Charter's service offerings to businesses continues to increase as well, as more companies deploy more fiber to more buildings, which may negatively impact Charter's growth and put pressure on margins.

A failure to effectively anticipate or adapt to new technologies (including those that use AI) and changes in customer expectations and behavior could significantly adversely affect its competitive position with respect to the leisure time and discretionary spending of its customers and, as a result, affect its business and results of operations. Competition may also reduce its expected growth of future cash flows which may contribute to future impairments of Charter's franchises and goodwill and Charter's ability to meet cash flow requirements, including debt service requirements.

Charter depends on third-party service providers, suppliers and licensors; thus, if it is unable to procure the necessary services, equipment, software or licenses on reasonable terms and on a timely basis, its ability to offer services could be impaired, and Charter's growth, operations, business, financial results and financial condition could be materially adversely affected.

Charter depends 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 its services and execute its network evolution and rural construction initiatives. Some of Charter's hardware, software and operational support vendors and service providers represent its sole source of supply or have, either through contract or as a result of intellectual property rights, a position of some exclusivity. Charter's ability to provide some services and complete its 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 its 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 Charter 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 Charter pays;
- · experience operating or financial difficulties;
- significantly increase the amount Charter is 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 Charter needs in a timely manner at its 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 Charter's ability to retain and attract customers and its operations, business, financial results and financial condition.

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

Programming costs are one of Charter's largest expense items. Charter's 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, Charter expects contractual programming rates per service subscriber to continue to increase as a result of annual increases pursuant to its programming contracts and contract renewals with programmers. Although Charter passes along amounts paid for local broadcast station retransmission consent to the majority of its customers, the inability to fully pass programming cost increases on to customers has had, and is expected in the future to have, an adverse impact on Charter's 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 Charter to carry their most popular networks to a large percentage of its video subscribers, have limited Charter's flexibility in selling more tailored and cost-sensitive programming packages for consumers. In order to mitigate impacts to operating margins due to increasing programming rates, Charter continues to review its 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 Charter's customers through their current video subscription, despite increasing rates, driving customer dissatisfaction and in turn, customer losses. Charter is seeking to obtain access to these DTC apps, where applicable, as it renews agreements, so that Charter may include in its 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 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, Charter is 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 programming expenses, which could have an adverse effect on Charter's business and financial results.

Charter's programming contracts are generally for a fixed period of time, with potentially significant spend subject to negotiated renewal in any particular year. Charter will seek to renew these agreements on terms that it believes are favorable. There can be no assurance that these agreements will be renewed on favorable or comparable terms. To the extent that Charter is unable to reach agreement with certain programmers on terms that it believes are reasonable, Charter has been, and may in the future be, forced to remove such programming channels from its line-up, which may result in a loss of customers. Any failure to

carry programming that is attractive to Charter's customers could adversely impact Charter's 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 its ability to compete effectively.

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

The ability of some of Charter's competitors to introduce new technologies, products and services more quickly than Charter does may adversely affect its competitive position. Furthermore, advances in technology, decreases in the cost of existing technologies or changes in competitors' product and service offerings may require Charter 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 Charter currently offers to customers separately or at a premium. In addition, the uncertainty of Charter's ability, and the costs, to obtain intellectual property rights from third parties could impact its ability to respond to technological advances in a timely and effective manner.

Any failure to maintain and expand its upgraded systems and provide advanced services in a timely manner, or to anticipate the demands of the marketplace, could materially adversely affect Charter's ability to attract and retain customers. In addition, as Charter continues to grow its mobile services using virtual network operator rights from a third party, Charter expects 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 Charter provides devices pursuant to equipment installation plans. Charter also continues 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, Charter now holds CBRS PALs to support existing and future mobile services. These licenses are subject to revocation and expiration. Although Charter expects to be able to maintain and renew these licenses, the loss of one or more licenses could significantly impair its ability to offload mobile traffic and achieve cost reductions. If Charter is unable to continue to grow its mobile business and achieve the outcomes it expects from its investments in the mobile business, Charter's growth, financial condition and results of operations could be adversely affected.

Charter's business may be adversely affected if Charter cannot continue to license or enforce the intellectual property rights on which its business depends.

Charter relies on patent, copyright, trademark and trade secret laws and licenses and other agreements with its employees, customers, suppliers and other parties to establish and maintain Charter's intellectual property rights in technology and the products and services used in its operations. Also, because of the rapid pace of technological change, Charter both develops its own technologies, products and services and relies on technologies developed or licensed by third parties. However, any of Charter's intellectual property rights, or the rights of its suppliers, could be challenged or invalidated, or such intellectual property rights may not be sufficient to permit Charter 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. Charter 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 Charter 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 Charter to change its business practices or offerings and limit its 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 Charter's business. Infringement claims continue to be brought frequently in

the communications and entertainment industries, and Charter is also often a party to such litigation alleging that certain of its services or technologies infringe the intellectual property rights of others.

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

Network and information systems technologies are critical to Charter's operating activities, both for its internal uses, such as network management, and supplying services to Charter's 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, "cyberattacks" such as ransomware, process breakdowns, denial of service attacks and other malicious activity pose increasing risks. Both unsuccessful and successful "cyberattacks" 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 Charter develops and maintains 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. Charter, and the third parties on which Charter relies, may be unable to anticipate these techniques or implement adequate preventive measures. While from time to time attempts have been made to access Charter's network, these events have not as yet resulted in any material release of information, degradation or disruption to its network and information systems.

Charter's 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. Charter's system redundancy may be ineffective or inadequate, and Charter's disaster recovery planning may not be sufficient for all eventualities.

Any of these events, if directed at, or experienced by, Charter or technologies upon which Charter depends, could have adverse consequences on Charter's network, customers and business, including degradation of service, service disruption, excessive call volume to call centers, and damage to Charter's or its 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 Charter maintains against losses resulting from any such events or security breaches may not be sufficient to cover Charter's losses or otherwise adequately compensate Charter for any disruptions to its business that may result. Any such significant service disruption could result in damage to Charter's 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 Charter's growth, financial condition and results of operations.

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

Charter processes, stores and transmits large amounts of data, including the personal information of its 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 Charter's information-related risks. Charter could be exposed to significant costs if such risks were to materialize, and such events could damage Charter's reputation, credibility and business and have a negative impact on its revenue. Charter 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. Charter 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 Charter's reputation or otherwise materially harm its business.

Charter currently incorporates AI technology in certain parts of its business operations. Charter's research and development of such technology remains ongoing. AI presents risks, challenges and unintended consequences that could affect Charter and Charter's customers' adoption and use of this technology. AI algorithms and training methodologies may be flawed.

Additionally, AI technologies are complex and rapidly evolving. While Charter aims to develop and use AI responsibly and attempt to identify and mitigate ethical and legal issues presented by its use, Charter 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 Charter's reputation or otherwise materially harm its business.

Charter's exposure to the economic conditions of its current and potential customers, vendors and third parties could adversely affect its cash flow, results of operations and financial condition.

Charter is exposed to risks associated with the economic conditions of its current and potential customers, the potential financial instability of its customers and their financial ability to purchase its products. If there were a prolonged general economic downturn, Charter may experience increased cancellations or non-payment by its 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 Charter's ability to attract customers, increase rates and maintain or increase revenue. In addition, Charter's ability to gain new customers is dependent to some extent on growth in occupied housing in its service areas, which is influenced by both national and local economic conditions. Weak economic conditions may also have a negative impact on Charter's advertising revenue. These events have adversely affected Charter in the past, and may adversely affect its cash flow, results of operations and financial condition if a downturn were to continue.

In addition, Charter is susceptible to risks associated with the potential financial instability of the vendors and third parties on which Charter relies to provide products and services or to which it outsources certain functions. The same economic conditions that may affect Charter's 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 Charter's vendors or third parties upon which Charter relies. Further, inflationary pressures may impact the ability of vendors and other third parties to satisfy their obligations to Charter. Any interruption in the services provided by Charter's vendors or by third parties could adversely affect Charter's cash flow, results of operation and financial condition.

If Charter is unable to retain key employees, its ability to manage its business could be adversely affected.

Charter's operational results have depended, and its future results will depend, upon the retention and continued performance of its management team. Charter's 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 Charter's ability to manage its business and its future operational and financial results.

Charter has a significant amount of debt and expects to incur significant additional debt, including secured debt, in the future, which could adversely affect its financial condition and its ability to react to changes in its business.

Charter has a significant amount of debt and expects to (subject to applicable restrictions in its 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, Charter's 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 Charter's debt was rated investment grade and \$27.3 billion was rated high yield debt. This split rating allows Charter to access both the investment grade debt market and the high yield debt market.

Charter's significant amount of debt could have adverse consequences, such as:

- impact its ability to raise additional capital at reasonable rates, or at all;
- make it vulnerable to interest rate increases, in part because approximately 14% of its borrowings as of December 31, 2023 were, and may continue to be, subject to variable rates of interest;
- expose it to increased interest expense to the extent it refinances existing debt with higher cost debt;
- require it to dedicate a significant portion of its cash flow from operating activities to make payments on its debt, reducing its funds available for capital expenditures and other general corporate purposes;

- limit its flexibility in planning for, or reacting to, changes in its business, the cable and telecommunications industries, and the
 economy at large;
- place it at a disadvantage compared to its competitors that have proportionately less debt; and
- · adversely affect its relationship with customers and suppliers.

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

The agreements and instruments governing Charter's debt contain restrictions and limitations that could significantly affect its ability to operate its business, as well as significantly affect its liquidity.

The indentures governing the CCO Holdings, LLC ("CCO Holdings") notes contain a number of significant covenants that could adversely affect Charter's 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 senior notes and debentures, and the Time Warner Cable Enterprises, LLC 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 Charter's 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 Charter's long-term indebtedness. In addition, the secured lenders under Charter's secured notes and the Charter Operating credit facilities could foreclose on their collateral, which includes equity interests in substantially all of Charter's subsidiaries, and exercise other rights of secured creditors.

Charter's business is subject to extensive governmental legislation and regulation, which could adversely affect its business.

The services Charter offers are subject to numerous laws and regulations that can increase operational and administrative expenses and reduce revenue, 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 Charter's advertised prices and bills, and the means by which its 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 Charter's ability to enter into exclusive agreements with multiple dwelling unit complexes and control Charter's inside wiring;
- equal employment opportunity;
- the resiliency of Charter's 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 Charter's costs or impose additional restrictions on Charter's businesses.

Changes to the existing legal and regulatory framework under which Charter operates or the regulatory programs in which Charter or its competitors participate, including the possible elimination of the federal broadband ACP subsidy for low-income consumers, could adversely affect Charter's business.

There are ongoing efforts to amend or expand the federal, state and local regulation of some of the services offered over Charter's cable systems, particularly its retail broadband Internet access service. Potential legislative and regulatory changes could adversely impact its business by increasing costs and competition and limiting Charter's ability to offer services in a manner that would maximize its 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 Charter manages its Internet access services and networks; the adoption of new customer service or service quality requirements for its Internet access services; the adoption of new privacy restrictions on its 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 Charter's business; new restraints on Charter's discretion over programming decisions; new restrictions on the rates Charter charges to consumers for one or more of the services or equipment options it offers; 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 Charter's Internet service revenue 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 its 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 Charter's receipt of universal service funds, including but not limited to FCC RDOF grants to expand its 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 Charter's VoIP telephone service and its ability to interconnect its VoIP telephone service with incumbent providers of traditional telecommunications service.

Charter participates in the federal ACP that provides up to a \$30 monthly subsidy enabling eligible low-income households to purchase its 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 Charter's business. Charter will lose customers and revenue 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, Charter must comply with numerous FCC and state requirements to continue receiving such funding. To comply with these requirements, in RDOF areas, Charter has chosen to offer certain of its VoIP telephone services, such as its Lifeline services, subject to certain traditional federal and state common carrier regulations. Additionally, in some areas where Charter is building pursuant to subsidy programs, Charter will offer certain of its broadband Internet access services subject to required discounts and other marketing-related terms. If Charter fails to comply with those requirements, the governing regulatory agency could consider Charter in default and Charter could incur substantial penalties or forfeitures. If Charter fails 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 being suspended or disbarred from future governmental programs or contracts for a significant period of time, which could adversely affect its results of operations and financial condition.

If any laws or regulations are enacted that would expand the regulation of Charter's services, they could affect Charter's operations and require significant expenditures. Charter cannot predict future developments in these areas, and any changes to the regulatory framework for Charter's Internet, video, mobile or VoIP services could have a negative impact on its 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 Charter, including on the operation of its 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 Charter's tax and fee positions could adversely affect its results of operations and financial condition.

Charter offers services and operates cable systems in locations throughout the U.S. and, as a result, is 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 Charter's effective tax rate or tax payments. Certain states and localities have imposed or are considering imposing new or additional taxes or fees on Charter's services or changing the methodologies or base on which certain fees and taxes are computed. Potential changes include additional taxes or fees on Charter's services which could impact its 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 Charter's 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 Charter's tax positions will not be challenged by relevant tax authorities or that it would be successful in any such challenge.

Charter's 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 its business.

Charter's 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 Charter has operated and is operating under either temporary operating agreements or without a franchise while negotiating renewal terms with the local franchising authorities.

There can be no assurance that Charter will be able to comply with all significant provisions of its franchise agreements and certain of its franchisors have from time to time alleged that Charter has not complied with these agreements. Additionally, although historically Charter has renewed its franchises without incurring significant costs, there can be no assurance that Charter

will be able to renew, or to renew as favorably, its franchises in the future. A termination of or a sustained failure to renew a franchise in one or more service areas could adversely affect Charter's business in the affected geographic area.

Charter's 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 Charter on more favorable terms.

Factors Relating to our Common Stock and the Securities Market

We expect our stock price to continue to be directly affected by the results of operations of Charter and developments in its business.

The fair value of our investment in Charter, on an as-converted basis, was approximately \$18.0 billion as of December 31, 2023, which represents a meaningful portion of our total market value. As a result, our stock price will continue to be directly affected by the results of operations of Charter and the developments in its business.

Although our Series B common stock is quoted on the OTC Markets, there is no meaningful trading market for the stock.

Our Series B common stock is not widely held, with approximately 93% of the outstanding shares beneficially owned by John C. Malone, the Chairman of the Board and a director of our company, as of January 31, 2024. Although it is quoted on the OTC Markets, it is sparsely traded and does not have an active trading market. The OTC Markets tend to be highly illiquid, in part, because there is no national quotation system by which potential investors can track the market price of shares except through information received or generated by a limited number of broker-dealers that make markets in particular stocks. There is also a greater chance of market volatility for securities that trade on the OTC Markets as opposed to a national exchange or quotation system. This volatility is due to a variety of factors, including a lack of readily available price quotations, lower trading volume, absence of consistent administrative supervision of "bid" and "ask" quotations, and market conditions. Each share of the Series B common stock is convertible, at any time at the option of the holder, into one share of our Series A common stock, which is listed and traded on the Nasdaq Global Select Market under the symbol "LBRDA."

It may be difficult for a third party to acquire us, even if doing so may be beneficial to our stockholders.

Certain provisions of our certificate of incorporation and bylaws may discourage, delay or prevent a change in control of our company that a stockholder may consider favorable. These provisions include the following:

- authorizing a capital structure with multiple series of common stock: a Series B that entitles the holders to ten votes per share, a Series A that entitles the holders to one vote per share and a Series C that, except as otherwise required by applicable law, entitles the holders to no voting rights;
- authorizing the issuance of "blank check" preferred stock, which could be issued by our board of directors to increase the number of
 outstanding shares and thwart a takeover attempt;
- classifying our board of directors with staggered three-year terms, which may lengthen the time required to gain control of our board of directors;
- limiting who may call special meetings of stockholders;
- prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of the stockholders;
- establishing advance notice requirements for nominations of candidates for election to our board of directors or for proposing matters
 that can be acted upon by stockholders at stockholder meetings;
- requiring stockholder approval by holders of at least 66 2/3% of our voting power or the approval by at least 75% of our board of directors with respect to certain extraordinary matters, such as a merger or consolidation of our company, a sale of all or substantially all of our assets or an amendment to our restated certificate of incorporation; and

the existence of authorized and unissued stock which would allow our board of directors to issue shares to persons friendly to current
management, thereby protecting the continuity of its management, or which could be used to dilute the stock ownership of persons
seeking to obtain control of us.

In addition, John C. Malone currently beneficially owns shares representing the power to direct approximately 49% of the aggregate voting power in our company, due to his beneficial ownership of approximately 93% of the outstanding shares of our Series B common stock as of January 31, 2024.

Holders of a single series of our common stock may not have any remedies if an action by our directors has an adverse effect on only that series of our common stock.

Principles of Delaware law and the provisions of our certificate of incorporation may protect decisions of our board of directors that have a disparate impact upon holders of any single series of our common stock. Under Delaware law, the board of directors has a duty to act with due care and in the best interests of all of our stockholders, including the holders of all series of our common stock. Principles of Delaware law established in cases involving differing treatment of multiple classes or series of stock provide that a board of directors owes an equal duty to all common stockholders regardless of class or series and does not have separate or additional duties to any group of stockholders. As a result, in some circumstances, our directors may be required to make a decision that is viewed as adverse to the holders of one series of our common stock. Under the principles of Delaware law and the business judgment rule, holders may not be able to successfully challenge decisions that they believe have a disparate impact upon the holders of one series of our stock if our board of directors is disinterested and independent with respect to the action taken, is adequately informed with respect to the action taken and acts in good faith and in the honest belief that the board of directors is acting in the best interest of all of our stockholders.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

Risk Management and Strategy

Liberty Broadband's corporate level IT and cybersecurity functions are provided by Liberty as part of the services agreement described in Item 1. Business. Through the services agreement, we participate in Liberty's processes for assessing, identifying, and managing risks from cybersecurity threats at the corporate headquarters, as detailed below. GCI operates its own cybersecurity function with oversight from Liberty Broadband.

Charter, an equity method affiliate, as a separate publicly traded company from Liberty Broadband, operates its own cybersecurity function. Oversight for Charter's cybersecurity functions rests with its board of directors and Audit Committee of which our Chief Executive Officer is a member.

We are committed to protecting the security and integrity of our systems, networks, databases and applications and, as a result, have implemented processes designed to prevent, assess, identify, and manage material risks associated with cybersecurity threats.

Cybersecurity risks are assessed as part of our enterprise risk assessment and risk management program and our cybersecurity risk management program is designed and assessed based on recognized frameworks, including the National Institute of Standards and Technology Cybersecurity Framework ("NIST CSF").

We rely on a multidisciplinary team, including our information security function, legal department, management, and third-party consultants, as described further below, to identify, assess, and manage cybersecurity threats and risks. We identify and assess risks from cybersecurity threats by monitoring and evaluating our threat environment and our risk profile using various methods including, using manual and automated tools such as vulnerability scanning software, monitoring existing and emerging cybersecurity threats, analyzing reports of threats and threat actors, conducting scans of the threat environment, evaluating our industry's risk profile, utilizing internal and external audits and assessments, and conducting threat and vulnerability assessments.

To manage and mitigate material risks from cybersecurity threats to our information systems and data, we implement and maintain various technical, physical and organizational measures, processes and policies. These measures include risk assessments, incident detection and response, vulnerability management, disaster recovery and business continuity plans, internal controls within our IT, Security and other departments, encryption of data, network security controls, access controls, physical security, asset management, system monitoring, vendor risk management program, employee cybersecurity awareness and training, phishing tests, and penetration testing. Cybersecurity awareness training is also made available annually to our board of directors.

In the event of a potential cybersecurity incident, or a series of related cybersecurity incidents, we have cybersecurity incident response frameworks in place at the corporate level and at GCI. These frameworks are a set of coordinated procedures and tasks that our incident response teams execute with the goal of ensuring timely and accurate identification, resolution and reporting of cybersecurity incidents both internally and externally, as necessary.

To operate our businesses, we utilize certain third-party service providers to perform a variety of operational functions. We have implemented a third-party risk management program to evaluate the cybersecurity practices of higher risk vendors and vendors that encounter our systems or data. We additionally engage and retain third-party consultants, legal advisors and assessors to keep us appraised of emerging third-party risk, defense and mitigation strategies, and governance best practices.

Impact of cybersecurity risks on business strategy, results of operations or financial condition

As of the date of this Annual Report on Form 10-K, we are not aware of any risks from cybersecurity threats that have materially affected or are reasonably likely to materially affect our business strategy, results of operations or financial condition.

For additional information on our cybersecurity risks, see "Risk Factors" under the section entitled "Cyberattacks or other network disruptions could have an adverse effect on our company and GCI's business" in Part I, Item 1A of this Annual Report on Form 10-K.

Governance

Role of the Board of Directors

Our board of directors has overall responsibility for risk oversight and has delegated to the Audit Committee primary enterprise risk oversight responsibility, including privacy and cybersecurity risk exposures, policies and practices, the steps management takes to detect, monitor and mitigate such risks and the potential impact of those exposures on our business, financial results, operations and reputation. The Audit Committee receives quarterly updates on the enterprise risk management program, including cybersecurity risks and the 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, employee education initiatives, and internal audit observations, if applicable.

In addition to the efforts undertaken by the Audit Committee, the full board of directors regularly reviews matters relating to cybersecurity risk and cybersecurity risk management. Any material cybersecurity events would be brought to the attention of the full board of directors once the event is deemed material. We additionally use our incident response framework as part of the process we employ to keep our management and board of directors informed and to monitor the prevention, detection, mitigation, and remediation of cybersecurity incidents.

Role of Management

Through our services agreement with Liberty discussed in Item 1 of this 10-K, we have established a cross functional Information Security Steering Committee ("ISSC") with executives from our Legal, Accounting, Internal Audit and Risk Management, Cybersecurity and Facilities departments. The ISSC has management oversight responsibility for assessing and managing technology and operational risk, including information security, fraud, vendor, data protection and privacy, business continuity and resilience, and cybersecurity risks at the corporate level and our subsidiaries.

At GCI, there is an Enterprise Security Office ("ESO"), led by the Chief Information Security Officer ("CISO"), which is responsible for day-to-day management and oversight of subsidiary cybersecurity, including assessing, monitoring and mitigating cybersecurity risk. The CISO provides regular reporting to GCI executive management and the ISSC.

Liberty Broadband has also established a Compliance Committee responsible for overseeing and monitoring all corporate compliance initiatives at GCI, including cybersecurity. The Compliance Committee is composed of members of Liberty Broadband's ISSC as well as GCI's executive leadership team, including the President & Chief Operating Officer, General Counsel, and Chief Financial Officer. The CISO reports periodically to the Compliance Committee on cybersecurity risks and initiatives as well as any cybersecurity events, as applicable.

Our management team's experience includes a diverse background in telecom and other industries, with decades of experience in various aspects of cybersecurity. Liberty's Head of Cybersecurity has more than 25 years of cybersecurity and information technology experience and holds Certified Information Security Manager and Certified in Risk and Information System Control certifications. GCI's CISO has more than 20 years of experience and hold multiple certifications including Certified Information Security Systems Professional and Certified in Risk and Information System Control. Both have worked at a variety of companies, including large publicly traded companies, implementing and managing IT and cybersecurity programs and teams, developing tools and processes to protect internal networks, customer payment systems and telecommunications networks used by customers to transmit data.

Item 2. Properties

Liberty Broadband

In connection with the Broadband Spin-Off, a wholly-owned subsidiary of Liberty entered into a facilities sharing agreement with Liberty Broadband, pursuant to which Liberty Broadband shares office facilities with Liberty located at 12300 Liberty Boulevard, Englewood, Colorado, 80112.

GCI Holdings

GCI Holdings' properties do not lend themselves to description by location of principal units. The majority of GCI Holdings' properties are located in Alaska.

GCI Holdings leases a large portion of its executive, corporate and administrative facilities and business offices. GCI Holdings' operating, executive, corporate and administrative properties are in good condition. GCI Holdings considers its properties suitable and adequate for its present needs.

GCI Holdings' properties consist primarily of undersea and terrestrial fiber optic cable networks, switching equipment, satellite transponders and earth stations, microwave radio, cable and wire facilities, cable head-end equipment, wireless towers and equipment, coaxial distribution networks, connecting lines (aerial, underground and buried cable), routers, servers, transportation equipment, computer equipment, general office equipment, land, land improvements, landing stations and other buildings. See note 2 to the accompanying consolidated financial statements found in Part II of this report for additional information on its properties. Substantial amounts of GCI Holdings' properties are located on or in leased real property or facilities. Substantially all of GCI Holdings' properties secure the Senior Credit Facility. See note 7 to the accompanying consolidated financial statements found in Part II of this report for additional information on the Senior Credit Facility.

Item 3. Legal Proceedings

Charter Proceedings

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 Time Warner Cable, LLC was initiated in February 2012. Charter is cooperating with these investigations. While Charter 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.

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.

In addition to the Entropic litigation described above, Charter is a defendant or co-defendant in several lawsuits involving alleged infringement of various intellectual property relating to various aspects of its businesses. Other industry participants are also defendants in certain of these cases or related cases. In the event that a court ultimately determines that Charter infringes on any intellectual property, Charter may be subject to substantial damages and/or an injunction that could require Charter or its vendors to modify certain products and services it offers to its subscribers, as well as negotiate royalty or license agreements with respect to the intellectual property at issue. While Charter 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 Charter's consolidated financial condition, results of operations, or liquidity. Charter cannot predict the outcome of any such claims nor can it reasonably estimate a range of possible loss.

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

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

Market Information

Our Series A and Series C common stock trade on the Nasdaq Global Select Market under the symbols "LBRDA" and "LBRDK," respectively. Our Series B common stock is quoted on the OTC Markets under the symbol "LBRDB," but it is not actively traded. Stock price information for securities traded on the Nasdaq Global Select Market can be found on the Nasdaq's website at www.nasdaq.com.

The following table sets forth the quarterly range of high and low sales prices of our Series B common stock for the years ended December 31, 2023 and 2022. There is no established public trading market for our Series B common stock, which is quoted on the OTC Markets. Such over-the-counter market quotations reflect inter-dealer prices without retail mark-ups, mark-downs or commissions, and may not necessarily represent actual transactions.

	Liberty Broadband Corporation Series B common stock (LBRDB)			
	 High	Low		
<u>2022</u>				
First quarter	\$ 159.61	130.58		
Second quarter	\$ 133.46	105.76		
Third quarter	\$ 117.75	93.00		
Fourth quarter	\$ 89.95	73.75		
<u>2023</u>				
First quarter	\$ 93.00	80.00		
Second quarter	\$ 85.00	70.00		
Third quarter	\$ 95.00	79.19		
Fourth quarter	\$ 86.75	78.50		

Holders

As of January 31, 2024, there were 607, 73 and 2,091 holders of our Series A, Series B and Series C common stock, respectively. The foregoing numbers of record holders do not include the number of stockholders whose shares are held nominally by banks, brokerage houses or other institutions, but include each such institution as one shareholder.

Dividends

We have not paid any cash dividends on our common stock, and we have no present intention of so doing. Payment of cash dividends, if any, in the future will be determined by our board of directors in light of our earnings, financial condition and other relevant considerations.

Securities Authorized for Issuance Under Equity Compensation Plans

Information required by this item is incorporated by reference to our definitive proxy statement for our 2024 Annual Meeting of Stockholders.

Purchases of Equity Securities by the Issuer

As of December 31, 2023, the Company had \$1.8 billion available to be used for share repurchases under the Company's share repurchase program.

A summary of the repurchase activity for the three months ended December 31, 2023 is as follows:

	Series A Com	mon Stock	Series C Common Stock				
	(a) Total Number of Shares	(b) Average Price Paid per	(a) Total Number of Shares	(b) Average Price Paid per		(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or	(d) Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or
Period	Purchased	Share	Purchased		Share	Programs	Programs
October 1 - 31, 2023	_	s —	148,854	\$	88.18	148,854	\$1,949 million
November 1 - 30, 2023	_	\$ —	808,485	\$	83.33	808,485	\$1,881 million
December 1 - 31, 2023		\$ <u> </u>	1,356,244	\$	78.65	1,356,244	\$1,775 million
Total		\$ —	2,313,583	\$	80.90	2,313,583	

There were no repurchases of Liberty Broadband Series B common stock or Liberty Broadband Series A Cumulative Preferred Stock ("Liberty Broadband Preferred Stock") during the three months ended December 31, 2023.

During the three months ended December 31, 2023, 56 shares of Liberty Broadband Series A common stock, zero shares of Liberty Broadband Series B common stock, 208 shares of Series C common stock and zero shares of Liberty Broadband Preferred Stock were surrendered by our officers and employees to pay withholding taxes and other deductions in connection with the vesting of their restricted stock.

Item 6. [Reserved]

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

The following discussion and analysis provides information concerning our results of operations and financial condition. This discussion should be read in conjunction with our accompanying consolidated financial statements and the notes thereto.

Overview

Liberty Broadband Corporation ("Liberty Broadband," "the Company," "us," "we," or "our") is primarily comprised of GCI Holdings, LLC ("GCI Holdings" or "GCI"), a wholly owned subsidiary, and an equity method investment in Charter Communications, Inc. ("Charter").

During May 2014, the board of directors of Liberty Media Corporation and its subsidiaries ("Liberty") authorized management to pursue a plan to spin-off to its stockholders common stock of a wholly-owned subsidiary, Liberty Broadband, and to distribute subscription rights to acquire shares of Liberty Broadband's common stock (the "Broadband Spin-Off").

On December 18, 2020, GCI Liberty, Inc. ("GCI Liberty"), the parent company of GCI Holdings, was acquired by Liberty Broadband (the "Combination").

Through a number of prior years' transactions, including the Combination, Liberty Broadband has acquired an interest in Charter. Liberty Broadband controls 25.01% of the aggregate voting power of Charter.

Skyhook Holdings, Inc. ("Skyhook") was a wholly owned subsidiary of Liberty Broadband until its sale on May 2, 2022 for aggregate consideration of approximately \$194 million, including amounts held in escrow of approximately \$23 million that were released to Liberty Broadband on May 3, 2023. Liberty Broadband recognized a gain on the sale of \$179 million, net of closing fees, in the second quarter of 2022, which is recorded in Gain (loss) on dispositions, net in the accompanying consolidated statement of operations. Skyhook is included in Corporate and other through April 30, 2022 and is not presented as a discontinued operation as the sale did not represent a strategic shift that had a major effect on Liberty Broadband's operations and financial results.

Strategies and Challenges

Executive Summary

GCI Holdings, a wholly owned subsidiary of the Company, provides a full range of data, wireless, video, voice, and managed services to residential customers, businesses, governmental entities, and educational and medical institutions primarily in Alaska under the GCI brand.

Charter is a leading broadband connectivity company and cable operator serving more than 32 million customers in 41 states through its Spectrum brand. Over an advanced communications network, Charter offers 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. Charter also distributes award-winning news coverage and sports programming to its customers through Spectrum Networks. At December 31, 2023, Liberty Broadband owned approximately 46.3 million shares of Charter Class A common stock, representing an approximate 31.9% economic ownership interest in Charter's issued and outstanding shares.

Key Drivers of Revenue

GCI Holdings earns revenue from the monthly fees customers pay for data, wireless, video, voice, and managed services. Through close coordination of its customer service and sales and marketing efforts, its customer service representatives suggest to its customers other services they can purchase or enhanced versions of services they already purchase to achieve increased revenue and penetration of its multiple service offerings.

Charter's revenue is principally derived from the monthly fees customers pay for services it provides. Charter also earns revenue from one-time installation fees and advertising sales. Charter's marketing organization creates and executes marketing programs intended to grow customer relationships, increase the number of services they sell per relationship, retain existing customers and cross-sell additional products to current customers.

Current Trends Affecting Our Business

GCI Holdings and Charter must stay abreast of rapidly evolving technological developments and offerings to remain competitive and increase the utility of their products and services. These companies must be able to incorporate new technologies into their products and services in order to address the needs of their customers.

GCI Holdings

GCI Holdings offers wireless and wireline telecommunication services, data services, video services, and managed services to customers primarily throughout Alaska. Because of this geographic concentration, growth of GCI Holdings' business and operations depends upon economic conditions in Alaska. In recent years, varying factors have contributed to significant volatility and disruption of financial markets and global supply chains. Additionally, the U.S. Federal Reserve increased interest rates starting in March 2022 and throughout 2023. Mounting inflationary cost pressures and recessionary fears have negatively impacted the U.S. and global economy. Unfavorable economic conditions, such as a recession or economic slowdown in the U.S., or inflation in the markets in which GCI operates, could negatively affect the affordability of and demand for GCI's products and services and its cost of doing business.

The Alaska economy is dependent upon the oil industry, state and federal spending, investment earnings and tourism. A decline in oil prices would put significant pressure on the Alaska state government budget. The Alaska state government has financial reserves that GCI Holdings believes may be able to help fund the state government for the next couple of years. The Alaska economy is subject to recessionary pressures as a result of the economic impacts of volatility in oil prices, inflation, and other causes that could result in a decrease in economic activity. While it is difficult for GCI Holdings to predict the future impact of a recession on its business, these conditions have had an adverse impact on its business and could adversely affect the affordability of and demand for some of its products and services and cause customers to shift to lower priced products and services or to delay or forgo purchases of its products and services. GCI Holdings' customers may not be able to obtain adequate

access to credit, which could affect their ability to make timely payments to GCI Holdings and could lead to an increase in accounts receivable and bad debt expense. If a recession occurs, it could negatively affect GCI Holdings' business including its financial position, results of operations, or liquidity, as well as its ability to service debt, pay other obligations and enhance shareholder returns.

In addition, during 2022 and continuing in 2023, GCI Holdings began to experience the impact of inflation-sensitive items, including upward pressure on the costs of materials, labor, and other items that are critical to GCI Holdings' business. GCI Holdings continues to monitor these impacts closely and, if costs continue to rise, GCI Holdings may be unable to recoup losses or offset diminished margins by passing these costs through to its customers or implementing offsetting cost reductions.

Rural Health Care ("RHC") Program

GCI Holdings receives support from various Universal Service Fund ("USF") programs including the RHC Program. The USF programs are subject to change by regulatory actions taken by the Federal Communications Commission ("FCC"), interpretations of or compliance with USF program rules, or legislative actions. Changes to any of the USF programs that GCI Holdings participates in could result in a material decrease in revenue and accounts receivable, which could have an adverse effect on GCI Holdings' business and the Company's financial position, results of operations or liquidity. The following paragraphs describe certain separate matters related to the RHC Program that impact or could impact the revenue earned and receivables recognized by the Company. As of December 31, 2023, the Company had net accounts receivable from the RHC Program in the amount of approximately \$74 million, which is included within Trade and other receivables in the consolidated balance sheets.

FCC Rate Reduction. In November 2017, the Universal Service Administrative Company ("USAC") requested further information in support of the rural rates charged to a number of GCI Holdings' RHC customers in connection with the funding requests for the year that ran July 1, 2017 through June 30, 2018. On October 10, 2018, GCI Holdings received a letter from the FCC's Wireline Competition Bureau ("Bureau") notifying it of the Bureau's decision to reduce the rural rates charged to RHC customers for the funding year that ended on June 30, 2018 by approximately 26% resulting in a reduction of total support payments of \$28 million. The FCC also informed GCI Holdings that the same cost methodology used for the funding year that ended on June 30, 2018 would be applied to rates charged to RHC customers in subsequent funding years. In response to the Bureau's letter, GCI Holdings filed an Application for Review with the FCC.

On October 20, 2020, the Bureau issued two separate letters approving the cost-based rural rates GCI Holdings historically applied when recognizing revenue for services provided to its RHC customers for the funding years that ended on June 30, 2019 and June 30, 2020. GCI Holdings collected approximately \$175 million in accounts receivable relating to these two funding years during the year ended December 31, 2021. GCI Holdings also filed an Application for Review of these determinations. Subsequently, GCI identified rates for similar services provided by a competitor that would justify higher rates for certain GCI satellite services in the funding years that ended on June 30, 2018, June 30, 2019, and June 30, 2020. GCI submitted that information to the Bureau on September 7, 2021.

On June 25, 2020, GCI Holdings submitted cost studies with respect to a number of its rates for services provided to its RHC customers for the funding year ended June 30, 2021, which require approval by the Bureau. GCI Holdings further updated those studies on November 12, 2020, to reflect the completion of the bidding season for that funding year. On May 24, 2021, the FCC approved the cost studies submitted by GCI Holdings for the funding year ended June 30, 2021. Subsequently, on August 16, 2021, GCI submitted a request for approval of rates for 17 additional sites, all of which the FCC approved.

RHC Program Funding Cap. The RHC program has a funding cap for each individual funding year that is annually adjusted for inflation, and which the FCC can increase by carrying forward unused funds from prior funding years. In recent years, including the current year, this funding cap has not limited the amount of funding received by participants; however, management continues to monitor the funding cap and its potential impact on funding in future years.

Enforcement Bureau and Related Inquiries. On March 23, 2018, GCI Holdings received a letter of inquiry and request for information from the Enforcement Bureau of the FCC relating to the period beginning January 1, 2015 and including all future periods. This included inquiry into the rates charged by GCI Holdings and other aspects related to the Enforcement Bureau's review of GCI Holdings' compliance with program rules, which are discussed separately below. The ongoing uncertainty in program funding, as well as the uncertainty associated with the rate review, could have an adverse effect on its business, financial position, results of operations or liquidity.

In the fourth quarter of 2019, GCI Holdings became aware of potential RHC Program compliance issues related to certain of GCI Holdings' currently active and expired contracts with certain of its RHC customers. The Company and its external experts performed significant and extensive procedures to determine whether GCI Holdings' currently active and expired contracts with its RHC customers would be deemed to be in compliance with the RHC Program rules. GCI Holdings notified the FCC of the potential compliance issues in the fourth quarter of 2019.

On May 28, 2020, GCI Holdings received a second letter of inquiry from the Enforcement Bureau in the same matter noted above. This second letter, which was in response to a voluntary disclosure made by GCI Holdings to the FCC, extended the scope of the original inquiry to also include various questions regarding compliance with the records retention requirements related to the (i) original inquiry and (ii) RHC Program.

On December 17, 2020, GCI Holdings received a Subpoena Duces Tecum from the FCC's Office of the Inspector General requiring production of documents from January 1, 2009 to the present related to a single RHC customer and related contracts, information regarding GCI Holdings' determination of rural rates for a single customer, and to provide information regarding persons with knowledge of pricing practices generally.

On April 21, 2021, representatives of the Department of Justice ("DOJ") informed GCI Holdings that a qui tam action had been filed in the Western District of Washington arising from the subject matter under review by the Enforcement Bureau. The DOJ was investigating whether GCI Holdings submitted false claims and/or statements in connection with GCI's participation in the FCC's RHC Program. On July 14, 2021, the DOJ issued a Civil Investigative Demand with regard to the qui tam action.

The FCC's Enforcement Bureau and GCI Holdings held discussions regarding GCI Holdings potential RHC Program compliance issues related to certain of its contracts with its RHC customers for which GCI Holdings had previously recognized an estimated liability for a probable loss of approximately \$12 million in 2019 for contracts that were deemed probable of not complying with the RHC Program rules. During the year ended December 31, 2022, GCI Holdings recorded an additional estimated settlement expense of \$15 million relating to a settlement offer made by GCI Holdings resulting in a total estimated liability of \$27 million.

The DOJ and GCI Holdings held discussions regarding the qui tam action whereby the DOJ clarified that its investigation relates to the years from 2010 through 2019 and alleged that GCI Holdings had submitted false claims under the RHC Program during this time period. During the year ended December 31, 2022, GCI Holdings recorded a \$14 million estimated settlement expense to reflect discussions and settlement offers that GCI Holdings made to the DOJ.

Separately, during the third quarter of 2022, GCI Holdings became aware of possible RHC Program compliance issues relating to potential conflicts of interest identified in the historical competitive bidding process with respect to certain of its contracts with its RHC customers. GCI Holdings notified the FCC's Enforcement Bureau of the potential compliance issues; however, the Company is unable to assess the ultimate outcome of the potential compliance issues and is unable to reasonably estimate any range of loss or possible loss.

On May 10, 2023, GCI entered into a final settlement agreement with both the FCC and the DOJ to resolve all Enforcement Bureau and Related Inquiries discussed above except for the matter that was separately identified during the third quarter of 2022, which continues to remain outstanding. The settlement with the FCC and the DOJ resulted in a total cash payment of \$41 million of which \$27 million was paid to the FCC and \$14 million was paid to the DOJ in 2023, which had been previously recorded as liabilities. Additionally, as part of the settlement with the FCC and the DOJ, GCI Holdings withdrew all of its open Applications for Review related to FCC rate reduction matters.

Revision of Support Calculations. On August 20, 2019, the FCC released an order changing the manner in which support issued under the RHC Program would be calculated and approved. Some of these changes became effective beginning with the funding year ended June 30, 2021, while others became effective with the funding year ended June 30, 2022. On October 21, 2019, GCI Holdings appealed the order to the United States Court of Appeals for the District of Columbia Circuit, but that appeal was withdrawn as part of the settlement with the FCC. At the direction of the FCC, USAC released a database that purported to determine a median rate that would have capped the amount of support available for each service sold under the program, starting in the funding year ended June 30, 2022. GCI Holdings sought FCC review of various aspects of the database implementation. On September 30, 2020, USAC released a refreshed version of the database incorporating limited changes submitted by interested parties. On January 19, 2021, the Bureau issued an Order that waived the requirement to use the database for health care providers

in Alaska for the two funding years ended June 30, 2022 and June 30, 2023. On April 8, 2021, the Bureau issued an Order further extending the January 19, 2021 waiver to carriers nationwide and eliminating the ability or requirement to use the database to establish the healthcare provider payments for services subsidized by the RHC Telecom Program. On April 12, 2022 and May 25, 2022, the Bureau issued Orders further extending the January 19, 2021 and April 8, 2021 waivers regarding use of the database by health care providers seeking support under the RHC Program through the funding year ending June 30, 2024. On January 26, 2023, the FCC adopted an Order on Reconsideration, Report and Order, and Second Further Notice of Proposed Rulemaking, which grants the petitions challenging the rates database, returns the RHC Telecom Program to the rate determination rules in place prior to the adoption of the rates database, permits providers to determine rural rates based on previously approved rates through the funding years ending June 30, 2025 and June 30, 2026, and seeks comment on future revisions to the rate determination rules.

Charter

Charter faces 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. With respect to its residential business, Charter competes with other providers of video, Internet access, telephone and mobile services, and other sources of home entertainment. Charter's principal competitors for video services are virtual multichannel video programming distributors such as Hulu Live, YouTube TV, Sling TV, Philo and DirecTV Stream, as well as direct broadcast satellite service providers. Charter's principal competitors for Internet services are the broadband services provided by companies, including fiber-to-the-home, fixed wireless broadband, Internet delivered via satellite and digital subscriber line services. A growing number of 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. In addition, providers are constructing open access networks that can deliver services from multiple underlying Internet service providers. Charter's principal competitors for voice and mobile services are other mobile and wireline phone providers, as well as other forms of communication, such as text messaging on cellular phones, instant messaging, social networking services, video conferencing and email. 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 Charter operates its residential voice service.

During the year ended December 31, 2023, Charter added 2,474,000 mobile lines and 155,000 Internet customers. Charter spent \$1.9 billion on its subsidized rural construction initiative during the year ended December 31, 2023 and activated approximately 295,000 subsidized rural passings. Charter's mobile line and Internet customer additions were supported by its 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 Charter's legacy and new subsidized rural markets.

Charter continues to upgrade its network to provide higher Internet speeds and reliability and invest in its products and customer service platforms. Charter also continues to develop its video product. In September 2023, Charter entered into a new affiliation agreement with The Walt Disney Company ("Disney"), which provides a template for a new programming affiliation approach where Charter partners with content providers to provide access to both linear and app-based direct-to-consumer content. In October 2023, Charter 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. By continually improving its product set and offering consumers the opportunity to save money by switching to Charter's services, Charter believes it can continue to penetrate its expanding footprint and sell additional products to existing customers. Charter is also beginning to see operational benefits from the targeted investments it is making in employee wages and benefits to build employee skill sets and tenure, as well as the continued investments in digitization of customer service platforms and proactive maintenance, all with the goal of improving the customer experience, reducing transactions and driving customer growth and retention.

Results of Operations—Consolidated

General. We provide information regarding our consolidated operating results and other income and expenses, as well as information regarding the contribution to those items from our reportable segments in the tables below. The "Corporate and other" category consists of those assets or businesses which do not qualify as a separate reportable segment. See note 14 to the accompanying consolidated financial statements for more discussion regarding our reportable segments. For a more detailed discussion and analysis of GCI Holdings' results, see "Results of Operations – GCI Holdings, LLC" below.

A discussion regarding our financial condition and results of operations for fiscal year 2023 compared to fiscal year 2022 is presented below. A discussion regarding our financial condition and results of operations for fiscal year 2022 compared to fiscal year 2021 can be found in Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on February 17, 2023.

Operating Results

	Years ended December 31,		
		2023	2022
		amounts in millions	
Revenue			
GCI Holdings	\$	981	969
Corporate and other		<u> </u>	6
Consolidated	\$	981	975
Operating Income (Loss)			
GCI Holdings	\$	117	54
Corporate and other		(44)	(93)
Consolidated	\$	73	(39)
Adjusted OIBDA			
GCI Holdings	\$	361	358
Corporate and other		(24)	(31)
Consolidated	\$	337	327

Revenue

Revenue increased \$6 million for the year ended December 31, 2023, as compared to the same period in 2022. Revenue at GCI Holdings increased \$12 million for the year ended December 31, 2023, as compared to the corresponding prior year period. See "Results of Operations – GCI Holdings, LLC" below for a more complete discussion of the results of operations of GCI Holdings.

Revenue for Corporate and other decreased for the year ended December 31, 2023, as compared to the same period in 2022, due to the sale of Skyhook. With the sale of Skyhook in May 2022, Corporate and other revenue was minimal during the first half of 2022 and will be zero in future periods as all Corporate and other revenue was generated by Skyhook.

Operating Income (Loss)

Consolidated operating income increased \$112 million for the year ended December 31, 2023, as compared to the same period in 2022. Operating income increased \$63 million at GCI Holdings for the year ended December 31, 2023, as compared to the same period in 2022. See "Results of Operations – GCI Holdings, LLC" below for a more complete discussion of the results of operations of GCI Holdings.

Operating loss for Corporate and other improved \$49 million for the year ended December 31, 2023, as compared to the same period in 2022. Operating loss for Corporate and other included net litigation settlements of \$38 million during the year ended December 31, 2022. Operating loss for Corporate and other also improved due to decreased professional service fees.

Adjusted OIBDA

To provide investors with additional information regarding our financial results, we also disclose Adjusted OIBDA, which is a non-GAAP financial measure. We define Adjusted OIBDA as operating income (loss) plus depreciation and amortization, stock-based compensation, separately reported litigation settlements, restructuring, and impairment charges. Our chief operating decision maker and management team use this measure of performance in conjunction with other measures to evaluate our businesses and make decisions about allocating resources among our businesses. We believe this is an important indicator of the operational strength and performance of our businesses by identifying those items that are not directly a reflection of each business' performance or indicative of ongoing business trends. In addition, this measure allows us to view operating results, perform analytical comparisons and benchmarking between businesses and identify strategies to improve performance. Accordingly, Adjusted OIBDA should be considered in addition to, but not as a substitute for, operating income, net income, cash flow provided by operating activities and other measures of financial performance prepared in accordance with U.S. generally accepted accounting principles. The following table provides a reconciliation of Operating income (loss) to Adjusted OIBDA.

	 Years ended December 31,			
	 2023	2022		
	amounts in millions			
Operating income (loss)	\$ 73	(39)		
Depreciation and amortization	230	262		
Stock-based compensation	34	37		
Litigation settlement	_	67		
Adjusted OIBDA	\$ 337	327		

Adjusted OIBDA improved \$10 million in the year ended December 31, 2023, as compared to the same period in 2022. GCI Holdings' Adjusted OIBDA improved \$3 million in the year ended December 31, 2023, as compared to the same period in 2022. See "Results of Operations – GCI Holdings, LLC" below for a more complete discussion of the results of operations of GCI Holdings.

Corporate and other Adjusted OIBDA changed due to the fluctuations in operating income (loss) as discussed above.

Other Income and Expense:

Components of Other income (expense) are presented in the table below.

	Years ended December 31,			
	2023		2022	
		amounts in millions		
Other income (expense):				
Interest expense	\$	(206)	(133)	
Share of earnings (losses) of affiliate		1,155	1,326	
Gain (loss) on dilution of investment in affiliate		(60)	(63)	
Realized and unrealized gains (losses) on financial instruments, net		(101)	334	
Gain (loss) on dispositions, net		_	179	
Other, net		27	(70)	
	\$	815	1,573	
Gain (loss) on dilution of investment in affiliate Realized and unrealized gains (losses) on financial instruments, net Gain (loss) on dispositions, net	\$	(60) (101) — 27		

Interest expense

Interest expense increased \$73 million during the year ended December 31, 2023, as compared to the same period in 2022. The increase was driven by higher interest rates on our variable rate debt and by higher amounts outstanding on the Margin Loan Facility (as defined in note 7 to the accompanying consolidated financial statements). The interest rates on our fixed rate

debt also increased with the closing of the 3.125% Exchangeable Senior Debentures due 2053 (the "3.125% Debentures") and repurchase of other exchangeables, as further described in note 7 to the accompanying consolidated financial statements.

Share of earnings (losses) of affiliates

Share of earnings from affiliates decreased \$171 million during the year ended December 31, 2023, as compared to the same period in 2022. Share of earnings (losses) from affiliates is attributable to the Company's ownership interest in Charter. Upon the Company's initial investment in Charter, the Company allocated the excess basis, between the book basis of Charter and fair value of the shares acquired and ascribed remaining useful lives of 7 years and 13 years to property and equipment and customer relationships, respectively, and indefinite lives to franchise fees, trademarks and goodwill. As of December 31, 2023, property and equipment and customer relationships have weighted average remaining useful lives of approximately 4 years and 7 years, respectively. Outstanding debt is amortized over the contractual period using the straight-line method. Amortization related to debt and intangible assets with identifiable useful lives is included in the Company's share of earnings (losses) from affiliates line item in the accompanying consolidated statements of operations and aggregated \$277 million and \$232 million, net of related taxes, for the years ended December 31, 2023 and 2022, respectively.

The following is a discussion of Charter's stand alone results of operations. In order to provide a better understanding of Charter's operations, we have included a summarized presentation of Charter's results from operations. Charter is a separate publicly traded company and additional information about Charter can be obtained through its website and public filings, which are not incorporated by reference. The amounts included in the table below, derived from Charter's public filings, represent Charter's results for each of the years ended December 31, 2023 and 2022.

	Years ended	d December 31,
	2023	2022
	amount	s in millions
Revenue	\$ 54,607	54,022
Operating expenses, excluding stock-based compensation	(32,660)	(32,687)
Adjusted OIBDA	21,947	21,335
Depreciation and amortization	(8,696)	(8,903)
Stock-based compensation	(692)	(470)
Operating income (loss)	12,559	11,962
Other income (expense), net	(5,705)	(4,500)
Net income (loss) before income taxes	6,854	7,462
Income tax benefit (expense)	(1,593)	(1,613)
Net income (loss)	\$ 5,261	5,849

Charter's revenue increased \$585 million during the year ended December 31, 2023, as compared to the same period in 2022, primarily due to growth in residential Internet revenue, mobile device sales and residential mobile service revenue partly offset by lower residential video and advertising sales revenue, as well as \$68 million of total customer credits related to the temporary loss of Disney programming during 2023.

During the year ended December 31, 2023, operating expenses, excluding stock-based compensation, decreased \$27 million, as compared to the same period in 2022. Operating costs during the year ended December 31, 2023, as compared to the same period in 2022, were impacted by lower programming costs as a result of a higher mix of lower cost video packages within Charter's 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. Additionally, operating costs were impacted by higher mobile device sales and higher other mobile direct costs due to an increase in mobile lines, as well as increased costs to service customers and higher corporate labor costs. The increased costs to service customers was 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.

The decrease in operating expenses, excluding stock-based compensation, was also due to a \$262 million gain on sale of towers during the year ended December 31, 2023.

Charter's Adjusted OIBDA increased \$612 million during the year ended December 31, 2023, as compared to the same period in 2022, for the reasons described above.

Depreciation and amortization expense decreased \$207 million during the year ended December 31, 2023, as compared to the same 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 expense, net increased \$1.2 billion during the year ended December 31, 2023, as compared to the same period in 2022. The increase in other expenses, net was primarily due to increased interest expense caused by an increase in weighted average interest rates, as well as an increase in weighted average debt outstanding, an increase in net periodic pension costs and increased losses on equity investments, partly offset by increased gains on financial instruments, net.

Charter recognized income tax expense of \$1.6 billion for both the years ended December 31, 2023 and 2022.

Gain (loss) on dilution of investment in equity affiliate

The loss on dilution of investment in affiliate decreased by \$3 million during the year ended December 31, 2023, as compared to the same period in 2022. The loss on dilution of investment in affiliate decreased primarily due to a decrease in issuance of Charter common stock from the exercise of stock options and restricted stock units held by employees and other third parties, partially offset by a smaller gain on dilution related to Charter's repurchase of Liberty Broadband's Charter shares.

Realized and unrealized gains (losses) on financial instruments, net

Realized and unrealized gains (losses) on financial instruments, net are comprised of changes in the fair value of the following:

	 Years ended December 31,			
	 2023 2022			
	amounts in millions			
Indemnification obligation	\$ 5	273		
Exchangeable senior debentures	(106)	61		
	\$ (101)	334		

The changes in these accounts are primarily due to market factors and changes in the fair value of the underlying stocks or financial instruments to which these related (see notes 4 and 7 to the accompanying consolidated financial statements for additional discussion). The changes in realized and unrealized gains (losses) for the year ended December 31, 2023, as compared to the same period in 2022, were primarily due to decreases in realized and unrealized gains on the indemnification obligation, as well as the changes in fair value of the debentures outstanding for the respective periods related to changes in market price of the underlying Charter stock. See note 4 to the accompanying consolidated financial statements for more discussion regarding the indemnification obligation, which was settled as of December 31, 2023.

Gain (loss) on dispositions, net

Liberty Broadband recognized a gain on the sale of Skyhook of \$179 million, net of closing fees, in the second quarter of 2022, which is recorded in Gain (loss) on dispositions, net in the accompanying consolidated statement of operations.

Other, net

Other, net income increased \$97 million for the year ended December 31, 2023, as compared to the same period in 2022. The increase was primarily due to a tax sharing receivable with Qurate Retail, Inc. ("Qurate Retail"). The tax sharing receivable with Qurate Retail resulted in tax sharing income of \$11 million and tax sharing loss of \$79 million for the years ended December 31, 2023 and 2022, respectively. See more discussion about the tax sharing agreement with Qurate Retail in note 1 to the accompanying consolidated financial statements. The remaining increase is the result of increased dividend and interest income primarily from movement in market interest rates.

Income taxes

Earnings (losses) before income taxes and income tax (expense) benefit are as follows:

		Years ended December 31,			
	<u></u>	2023 2022			
		amounts in millions			
Earnings (loss) before income taxes	\$	888	1,534		
Income tax (expense) benefit		(200)	(277)		
Effective income tax rate		23%	18%		

Our effective tax rate for the year ended December 31, 2023 was 23%. Our effective tax rate was higher than the federal tax rate of 21% in 2023 primarily due to the effect of state income taxes and certain non-deductible expenses.

Our effective tax rate for the year ended December 31, 2022 was 18%. Our effective tax rate was lower than the federal tax rate of 21% in 2022 primarily due to the nontaxable decrease in the fair value of the indemnification obligation owed to Qurate Retail and tax benefits from the sale of stock of a subsidiary.

Net earnings (losses)

We had net earnings of \$688 million and \$1.3 billion for the years ended December 31, 2023 and 2022, respectively. The change in net earnings (losses) was the result of the above-described fluctuations in our revenue, expenses and other gains and losses.

Liquidity and Capital Resources

As of December 31, 2023, substantially all of our cash and cash equivalents are invested in U.S. Treasury securities, other government securities or government guaranteed funds, AAA rated money market funds and other highly rated financial and corporate debt instruments.

The following are potential sources of liquidity: available cash balances, cash generated by the operating activities of our privately-owned subsidiaries (to the extent such cash exceeds the working capital needs of the subsidiaries and is not otherwise restricted), monetization of investments (including Charter Repurchases (as defined in note 5 to the accompanying consolidated financial statements and discussed below)), outstanding or anticipated debt facilities (as discussed in note 7 to the accompany consolidated financial statements), debt and equity issuances, and dividend and interest receipts.

As of December 31, 2023, Liberty Broadband had a cash balance of \$158 million.

		Years ended December 31,		
	2	2023 2022		
	•	amounts in millions		
Cash flow information				
Net cash provided by (used in) operating activities	\$	16	(56)	
Net cash provided by (used in) investing activities	\$	150	3,047	
Net cash provided by (used in) financing activities	\$	(390)	(2,797)	

The increase in cash provided by operating activities in 2023, as compared to the same period in 2022, was primarily driven by increased operating income, partly offset by timing differences in working capital accounts (including litigation payments).

During the years ended December 31, 2023 and 2022, net cash flows provided by investing activities were primarily related to the sale of Charter Class A common stock for \$394 million and \$3.0 billion, respectively, to maintain our fully diluted ownership percentage of Charter at 26%. In February 2021, Liberty Broadband entered into a letter agreement in order to implement, facilitate and satisfy the terms of the Stockholders Agreement with respect to the Equity Cap (see more information

in note 5 to the accompanying consolidated financial statements). The Company expects the Charter Repurchases to be a significant source of liquidity in future periods. Additionally, the Company received \$163 million of cash proceeds, net of closing fees, from the sale of Skyhook during the year ended December 31, 2022. During the years ended December 31, 2023 and 2022, net cash flows used in investing activities were primarily related to capital expenditures of \$222 million and \$181 million, respectively, and purchases of equity securities during 2023.

During the year ended December 31, 2023, net cash flows used in financing activities were primarily for the repurchase of approximately \$1,415 million in principal amount of outstanding exchangeable senior debentures, partially offset by the issuance of \$1,265 million aggregate original principal amount of the 3.125% Debentures (see more information in note 7 to the accompanying consolidated financial statements), as well as net borrowings of debt of approximately \$60 million of outstanding Revolving Loans (as defined in note 7 to the accompanying consolidated financial statements) under the Margin Loan Facility. Additionally, net cash flows used in financing activities included repurchases of Liberty Broadband Series A and Series C common stock of \$227 million and indemnification payments of \$45 million made by Liberty Broadband to Qurate Retail in connection with the LI LLC 1.75% Exchangeable Debentures (as defined in note 4 to the accompanying consolidated financial statements).

During the year ended December 31, 2022, net cash flows used in financing activities were primarily repurchases of Liberty Broadband Series A and Series C common stock of \$2.9 billion, partially offset by net borrowings of debt of approximately \$100 million of outstanding Revolving Loans under the Margin Loan Facility.

The projected uses of our cash are the potential buyback of common stock under the approved share buyback program, net capital expenditures of approximately \$200 million, approximately \$210 million for interest payments on outstanding debt, approximately \$15 million for preferred stock dividends, funding of any operational needs of our subsidiaries, to reimburse Liberty for amounts due under various agreements and to fund potential investment opportunities. We expect corporate cash and other available sources of liquidity to cover corporate expenses for the foreseeable future.

Off-Balance Sheet Arrangements and Material Cash Requirements

We have contingent liabilities related to legal and tax proceedings and other matters arising in the ordinary course of business. Although it is reasonably possible we may incur losses upon conclusion of such matters, an estimate of any loss or range of loss cannot be made, except for those matters disclosed in notes 9 and 13 to the accompanying consolidated financial statements.

Information concerning the amount and timing of current and long-term material cash requirements, both accrued and off-balance sheet, excluding loss contingencies and uncertain tax positions, if any, where it is indeterminable when payments will be made, is summarized below:

	Payments due by period					
		Less than				After
		Total	1 year	2 - 3 years	4 - 5 years	5 years
			aı	mounts in millions	3	
Material Cash Requirements						
Debt (1)	\$	3,724	3	1,616	838	1,267
Preferred stock liquidation value		180	_	_	_	180
Interest expense and preferred stock dividends (2)		1,847	221	370	169	1,087
Finance and operating lease obligations		122	49	47	13	13
Tower obligations, including interest		132	8	16	17	91
Purchase obligations		158	116	37	5	_
Total	\$	6,163	397	2,086	1,042	2,638

⁽¹⁾ Amounts are reflected in the table at the outstanding principal amount at December 31, 2023, assuming the debt instrument will remain outstanding until the stated maturity date and may differ from the amounts stated in our consolidated balance sheet to the extent debt instruments (i) were issued at a discount or premium or (ii) have elements which are reported at fair value in our consolidated balance sheets. Amounts do not assume additional borrowings or refinancings of existing debt.

(2) Amounts (i) are based on our outstanding debt at December 31, 2023, (ii) assume the interest rates on our variable rate debt remain constant at the December 31, 2023 rates and (iii) assume that our existing debt is repaid at contractual maturity.

Critical Accounting Estimates and Policies

The preparation of our financial statements in conformity with generally accepted accounting principles in the United States ("GAAP") requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the accompanying consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Listed below are the accounting estimates and accounting policies that we believe are critical to our financial statements due to the degree of uncertainty regarding the estimates or assumptions involved and the magnitude of the asset, liability, revenue or expense being reported. All of these accounting estimates and assumptions, as well as the resulting impact to our financial statements, have been discussed with our audit committee.

Application of the Equity Method of Accounting for Investments in Affiliates. For those investments in affiliates in which the Company has the ability to exercise significant influence, the equity method of accounting is used. Under this method, the investment, originally recorded at cost, is adjusted to recognize the Company's share of net earnings or losses of the affiliate as they occur rather than as dividends or other distributions are received. Losses are limited to the extent of the Company's investment in, advances to and commitments for the equity method investee. The Company determines the difference between the purchase price of the equity method investee and the underlying equity which results in an excess basis in the investment. This excess basis is allocated to the underlying assets and liabilities of the Company's equity method investee through an acquisition accounting exercise and is allocated within memo accounts used for equity method accounting purposes. Depending on the applicable underlying assets, these amounts are either amortized over the applicable useful lives or determined to be indefinite lived.

Changes in the Company's proportionate share of the underlying equity of an equity method investee, which result from the issuance of additional equity securities by such equity method investee, to investors other than the Company, are recognized in the statement of operations through the gain (loss) on dilution of investment in affiliate line item. We periodically evaluate our equity method investment to determine if decreases in fair value below our cost basis are other than temporary. If a decline in fair value is determined to be other than temporary, we are required to reflect such decline in our consolidated statements of operations. Other than temporary declines in fair value of our equity method investment would be included in share of earnings (losses) of affiliates in our consolidated statement of operations.

The primary factors we consider in our determination of whether declines in fair value are other than temporary are the length of time that the fair value of the investment is below our carrying value; the severity of the decline; and the financial condition, operating performance and near term prospects of the equity method investee. In addition, we consider the reason for the decline in fair value, be it general market conditions, industry specific or equity method investee specific; analysts' ratings and estimates of 12 month share price targets for the equity method investee; changes in stock price or valuation subsequent to the balance sheet date; and our intent and ability to hold the investment for a period of time sufficient to allow for a recovery in fair value.

Our evaluation of the fair value of our investments and any resulting impairment charges are made as of the most recent balance sheet date. Changes in fair value subsequent to the balance sheet date due to the factors described above are possible. Subsequent decreases in fair value will be recognized in our consolidated statement of operations in the period in which they occur to the extent such decreases are deemed to be other than temporary. Subsequent increases in fair value will be recognized in our consolidated statement of operations only upon our ultimate disposition of the investment.

Fair Value of Non-Financial Instruments. The Company's non-financial instrument valuations are primarily comprised of its determination of the estimated fair value allocation of net tangible and identifiable intangible assets acquired in business combinations, the Company's annual assessment of the recoverability of its goodwill and other nonamortizable intangibles, and the Company's evaluation of the recoverability of its other long-lived assets upon certain triggering events.

The Company periodically reviews the carrying value of its intangible assets with definite lives and other long-lived assets to be used in operations whenever events or changes in circumstances indicate that the carrying amount of the assets or asset groups might not be recoverable. Factors that would necessitate an impairment assessment include a significant adverse change in the extent or manner in which an asset is used, a significant adverse change in legal factors or the business climate that

could affect the value of the asset group, or a significant decline in the observable market value of an asset group, among others. If such facts indicate a potential impairment, the recoverability of the asset group is assessed by determining whether the carrying value of the asset group exceeds the sum of the projected undiscounted cash flows expected to result from the use and eventual disposition of the asset group over the remaining economic life of the asset group. If the carrying amount of the asset group is greater than the expected undiscounted cash flows to be generated by such asset group, including its ultimate disposition, an impairment adjustment is recognized.

If the carrying value of the Company's amortizing intangible or long-lived assets exceeds their estimated fair value, the Company is required to write the carrying value down to fair value. Any such write down is included in impairment expense in the Company's consolidated statements of operations. A high degree of judgment is required to estimate the fair value of the Company's amortizing intangible and long-lived assets. The Company may use quoted market prices, prices for similar assets, present value techniques and other valuation techniques to prepare these estimates. The Company may need to make estimates of future cash flows and discount rates as well as other assumptions in order to implement these valuation techniques. Due to the high degree of judgment involved in our estimation techniques, any value ultimately derived from the Company's amortizing intangible or long-lived assets may differ from its estimate of fair value.

The Company utilizes the cost approach as the primary method used to establish fair value for its property and equipment in connection with business combinations. The cost approach considers the amount required to replace an asset by constructing or purchasing a new asset with similar utility, then adjusts the value in consideration of physical depreciation and functional and technological obsolescence as of the appraisal date. The cost approach relies on management's assumptions regarding current material and labor costs required to rebuild and repurchase significant components of the Company's property and equipment along with assumptions regarding the age and estimated useful lives of its property and equipment.

The accounting guidance permits entities to first perform a qualitative assessment to determine whether it is more likely than not that an indefinite-lived intangible asset is impaired. If the qualitative assessment supports that it is more likely than not that the carrying value of the Company's indefinite-lived intangible assets, other than goodwill, exceeds its fair value, then a quantitative assessment is performed.

The Company utilizes an income approach as the primary method used to establish fair value for its customer relationships and cable certificates in connection with business combinations and annual impairment testing when deemed necessary. The income approach quantifies the expected earnings of the Company's customer relationships and cable certificates, by isolating the after tax cash flows attributable to the respective asset and then discounting the cash flows to their present value. The income approach relies on management's assumptions such as projected revenue, market penetration, expenses, capital expenditures, customer trends, and a discount rate applied to the estimated after tax cash flows.

The Company performs an annual assessment of the recoverability of its goodwill during the fourth quarter, or more frequently, if events and circumstances indicate impairment may have occurred. In evaluating goodwill on a qualitative basis, the Company reviews the business performance of each reporting unit and evaluates other relevant factors as identified in the relevant accounting guidance to determine whether it is more likely than not that an indicated impairment exists for any of its reporting units. The Company considers whether there are any negative macroeconomic conditions, industry specific conditions, market changes, increased competition, increased costs in doing business, management challenges, legal environments and how these factors might impact company specific performance in future periods. As part of the analysis, the Company also considers fair value determinations for certain reporting units that have been made at various points throughout the current and prior year for other purposes. If based on the qualitative analysis it is more likely than not that an impairment exists, the Company performs the quantitative impairment test.

The quantitative goodwill impairment test compares the estimated fair value of a reporting unit to its carrying value. The estimated fair value of a reporting unit has historically been determined using an income approach, when deemed necessary. The Company's income approach model used for its reporting unit valuation is consistent with that used for the cable certificates except that cash flows from the entire business enterprise are used.

Income Taxes. We are required to estimate the amount of tax payable or refundable for the current year and the deferred income tax liabilities and assets for the future tax consequences of events that have been reflected in our financial statements or tax returns for each taxing jurisdiction in which we operate. This process requires our management to make judgments regarding the timing and probability of the ultimate tax impact of the various agreements and transactions that we enter into. Based on these judgments we may record tax reserves or adjustments to valuation allowances on deferred tax assets to reflect the expected

realizability of future tax benefits. Actual income taxes could vary from these estimates due to future changes in income tax law, significant changes in the jurisdictions in which we operate, our inability to generate sufficient future taxable income or unpredicted results from the final determination of each year's liability by taxing authorities. These changes could have a significant impact on our financial position.

Results of Operations—GCI Holdings, LLC

GCI Holdings provides a full range of data, wireless, video, voice, and managed services to residential, businesses, governmental entities, and educational and medical institutions primarily in Alaska. The following table highlights selected key performance indicators used in evaluating GCI Holdings.

	December 31	,
	2023	2022
Consumer		
Data:		
Cable modem subscribers ¹	159,700	157,200
Wireless:		
Wireless lines in service ²	197,300	191,100

¹ A cable modem subscriber is defined by the purchase of cable modem service regardless of the level of service purchased. If one entity purchases multiple cable modem service access points, each access point is counted as a subscriber. Data cable modem subscribers as of December 31, 2023 include 1,100 subscribers that were reclassified from GCI Business to GCI Consumer subscribers in the first quarter of 2023 and are not new additions.

GCI Holdings' operating results for the years ended December 31, 2023 and 2022 are as follows:

	 Years ended December 31,		
	2023	2022	
	amounts in millio	ns	
Revenue	\$ 981	969	
Operating expenses (excluding stock-based compensation included below):			
Operating expense	(245)	(250)	
Selling, general and administrative expenses	(375)	(361)	
Adjusted OIBDA	 361	358	
Stock-based compensation	(14)	(13)	
Depreciation and amortization	(230)	(262)	
Litigation settlement	_	(29)	
Operating income (loss)	\$ 117	54	

² A wireless line in service is defined as a wireless device with a monthly fee for services. Wireless lines in service as of December 31, 2023 include 1,400 lines that were reclassified from GCI Business to GCI Consumer lines in the first quarter of 2023 and are not new additions.

Revenue

The components of revenue are as follows:

	Years ended Dece	mber 31,
	 2023	2022
	amounts in mi	llions
Consumer		
Data	\$ 233	231
Wireless	193	193
Other	42	55
Business		
Data	427	395
Wireless	50	53
Other	36	42
Total revenue	\$ 981	969

Consumer data revenue increased \$2 million for the year ended December 31, 2023, as compared to the same period in 2022. The increase was primarily driven by an increase in the number of subscribers.

Consumer wireless revenue was flat for the year ended December 31, 2023, as compared to the same period in 2022. Although consumer wireless lines in service increased during 2023, revenue per customer declined partially due to GCI's efforts to transition customers to its new GCI+ product, resulting in similar revenue for both periods.

Consumer other revenue decreased \$13 million for the year ended December 31, 2023, as compared to the same period in 2022. Consumer other revenue consists of consumer video and voice revenue. The decrease was due to a decrease in video revenue primarily driven by decreased video subscribers. This was the result of both the transition from traditional linear video delivery to IP delivery and GCI Holdings' decision to discontinue selling bulk video packages for multi-dwelling units. Historically, GCI Holdings has seen declines in video and voice subscribers and revenue and expects a continued decrease as customers make decisions to move to alternative services.

Business data revenue increased \$32 million for the year ended December 31, 2023, as compared to the same period in 2022, primarily due to increased sales to health care and school customers due to service upgrades as well as new customer growth. These increases were partially offset by decreases in professional services revenue, driven by a reduction in time and material project work.

Business wireless revenue decreased \$3 million for the year ended December 31, 2023, as compared to the same period in 2022. The decrease was primarily due to a decrease in roaming revenue and a decrease in data plan fees due to decreased business wireless subscribers.

Business other revenue decreased \$6 million for the year ended December 31, 2023, as compared to the same period in 2022. Business other revenue consists of business video and voice revenue. The decrease was primarily due to decreased local and long distance voice revenue. Historically, GCI Holdings has seen declines in video and voice subscribers and revenue and has not focused business efforts on growth in these

Operating expenses decreased \$5 million for the year ended December 31, 2023, as compared to the same period in 2022, primarily due to decreases in costs paid to content producers driven by reduced video subscribers, as well as decreases in other distribution costs.

Selling, general and administrative expenses increased \$14 million for the year ended December 31, 2023, as compared to the same period in 2022. The increase was primarily due to increases in labor related costs, software contracts, bad debt and property taxes. The increases in bad debt and property taxes were due to one-time decreases in these costs during the quarter ended March 31, 2022.

Stock-based compensation was relatively flat for the year ended December 31, 2023, as compared to the same period in 2022.

Depreciation and amortization decreased \$32 million for the year ended December 31, 2023, as compared to the same period in 2022. The decrease was due to lower depreciation expense as certain assets became fully depreciated during 2022 as a result of acquisition accounting being applied in the Combination and certain assets being attributed shorter lives.

Litigation settlement decreased \$29 million for the year ended December 31, 2023, as compared to the same period in 2022. The litigation settlement of \$29 million recorded during 2022 was an increase in the estimated liability relating to compliance with RHC Program rules which reflect settlement offers that GCI Holdings made to the DOJ in June and September 2022. The RHC Program litigation was ultimately settled during 2023, as described above and in note 13 to the accompanying consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk in the normal course of business due to our ongoing investing and financial activities. Market risk refers to the risk of loss arising from adverse changes in stock prices and interest rates. The risk of loss can be assessed from the perspective of adverse changes in fair values, cash flows and future earnings. We have established policies, procedures and internal processes governing our management of market risks and the use of financial instruments to manage our exposure to such risks.

We are exposed to changes in interest rates primarily as a result of our borrowing and investment activities, which could include investments in fixed and floating rate debt instruments and borrowings used to maintain liquidity and to fund business operations. The nature and amount of our long-term and short-term debt are expected to vary as a result of future requirements, market conditions and other factors. We manage our exposure to interest rates by maintaining what we believe is an appropriate mix of fixed and variable rate debt. We believe this best protects us from interest rate risk. We could achieve this mix by (i) issuing fixed rate debt that we believe has a low stated interest rate and significant term to maturity, (ii) issuing variable rate debt with appropriate maturities and interest rates and (iii) entering into interest rate swap arrangements when we deem appropriate.

As of December 31, 2023, our debt is comprised of the following amounts:

	_	Variable r	ate debt		Fixed rate debt			
		Principal	Weighted avg	Principal	Weighted avg			
	_	amount	interest rate	amount	interest rate			
			dollar amou	ınts in millions				
GCI Holdings	\$	399	7.3 %	\$	600 4.8 %			
Corporate and other	\$	1,460	7.2 %	\$ 1	,265 3.1 %			

Our investment in Charter (our equity method affiliate) is publicly traded and not reflected at fair value in our balance sheet. Our investment in Charter is subject to market risk that is not directly reflected in our financial statements.

Item 8. Financial Statements and Supplementary Data

The consolidated financial statements of Liberty Broadband Corporation are filed under this Item, beginning on Page II-23. The financial statement schedules required by Regulation S-X are filed under Item 15 of this Annual Report on Form 10-K.

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

None.

Item 9A. Controls and Procedures

In accordance with Exchange Act Rules 13a-15 and 15d-15, the Company carried out an evaluation, under the supervision and with the participation of management, including its chief executive officer and its principal accounting and financial officer (the "Executives"), and under the oversight of its Board of Directors, of the effectiveness of the design and operation of its disclosure controls and procedures as of December 31, 2023. Based on that evaluation, the Executives concluded that the Company's disclosure controls and procedures were effective as of December 31, 2023 to provide reasonable assurance that information required to be disclosed in its reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

See page II-19 for Management's Report on Internal Control Over Financial Reporting.

See page II-20 for Report of Independent Registered Public Accounting Firm for their attestation regarding our internal control over financial reporting.

There has been no change in the Company's internal control over financial reporting that occurred during the quarter ended December 31, 2023 that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

Item 9B. Other Information

Insider Trading Arrangements

None of the Company's directors or officers adopted or terminated a Rule 10b5-1 trading arrangement or a non-Rule 10b5-1 trading arrangement during the Company's fiscal quarter ended December 31, 2023.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of the Company is responsible for establishing and maintaining adequate internal control over the Company's financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate.

The Company's management assessed the effectiveness of internal control over financial reporting as of December 31, 2023, using the criteria in *Internal Control-Integrated Framework (2013)*, issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management has concluded that, as of December 31, 2023, the Company's internal control over financial reporting is effective

The Company's independent registered public accounting firm audited the consolidated financial statements and related notes in the Annual Report on Form 10-K and have issued an audit report on the effectiveness of the Company's internal control over financial reporting. Their report appears on page II-20 of this Annual Report on Form 10-K.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors Liberty Broadband Corporation:

Opinion on Internal Control Over Financial Reporting

We have audited Liberty Broadband Corporation and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2023 and 2022, the related consolidated statements of operations, comprehensive earnings (loss), cash flows, and equity for each of the years in the three-year period ended December 31, 2023, and the related notes (collectively, the consolidated financial statements), and our report dated February 16, 2024 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ KPMG LLP

Denver, Colorado February 16, 2024

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors Liberty Broadband Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Liberty Broadband Corporation and subsidiaries (the Company) as of December 31, 2023 and 2022, the related consolidated statements of operations, comprehensive earnings (loss), cash flows, and equity 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 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.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 16, 2024 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

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 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. 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 Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate 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 critical audit matters 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 matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Equity method accounting for the Company's investment in Charter

As discussed in notes 2 and 5 to the consolidated financial statements, the Company has recorded an investment in Charter of \$12,116 million as of December 31, 2023, accounted for using the equity method. The investment represents approximately 77.5% of the total assets of the Company as of December 31, 2023. The investment, originally recorded at cost, is adjusted to recognize the Company's share of net earnings or losses as they occur and for additional purchases and sales of Charter shares. The Company's investment in Charter differs from the underlying equity of Charter which results in excess basis in the investment. This excess basis is allocated to the underlying assets and liabilities of the Company's investee within memo accounts used for equity method accounting.

We identified the evaluation of the equity method of accounting for the Company's investment in Charter as a critical audit matter. Evaluating the Company's application of the equity method of accounting for the Company's investment in Charter required a higher degree of complex auditor judgment to determine the nature and extent of audit effort required to address the matter.

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 related to the critical audit matter. This included controls related to the Company's application of its equity method accounting, including the related share of earnings calculation, the amortization of the excess basis, and the gain or loss on dilution. We performed risk assessment procedures, including sensitivity analyses, and applied auditor judgment to determine the nature and extent of procedures to be performed over the investment. We developed independent expectations of (1) the Company's share of earnings of Charter, and (2) the gain or loss on dilution and compared such expectations to the amounts recorded by the Company. We recalculated the excess basis amortization.

Sufficiency of audit evidence over certain data, wireless, video, and voice revenue streams

As discussed in note 2 to the consolidated financial statements and disclosed in the consolidated statements of operations, the Company reported revenue of \$981 million for the year ended December 31, 2023, which included \$904 million of revenue related to data, wireless, video, and voice services at GCI Holdings. The Company's accounting for these revenue streams involves multiple processes and information technology (IT) systems.

We identified the evaluation of sufficiency of audit evidence over certain data, wireless, video, and voice revenue streams at GCI Holdings as a critical audit matter. Evaluating the sufficiency of audit evidence required subjective auditor judgment due to the number of revenue streams and related IT applications utilized throughout the revenue recognition process. Subjective auditor judgment was required to evaluate whether relevant revenue data was captured and aggregated throughout these various processes and IT applications, which included the involvement of IT professionals with specialized skills and knowledge. We applied auditor judgment in determining the revenue streams over which procedures would be performed and evaluating the nature and extent of evidence obtained over each relevant revenue stream.

The following are the primary procedures we performed to address this critical audit matter. We applied auditor judgment to determine the nature and extent of procedures to be performed over revenue. For each revenue stream where procedures were performed, we (1) evaluated the design and tested the operating effectiveness of certain internal controls related to the revenue recognition process, including controls related to accurately recording amounts for certain of the Company's data, wireless, video, and voice revenue streams, and (2) assessed the recorded revenue for a selection of transactions by comparing the amounts recognized to underlying documentation, including evidence of contracts with customers. For one revenue stream, we performed a software-assisted data analysis to test relationships among certain revenue transactions. We involved IT professionals with specialized skills and knowledge, who assisted in:

- testing relevant IT applications and internal controls over the Company's revenue recognition processes
- testing the transfer of relevant revenue data between different IT systems used in the Company's revenue recognition processes

We evaluated the sufficiency of audit evidence obtained by assessing the results of the procedures performed, including the appropriateness of the nature and extent of such evidence.

/s/ KPMG LLP

We have served as the Company's auditor since 2014.

Denver, Colorado February 16, 2024

Consolidated Balance Sheets December 31, 2023 and 2022

		2023 amounts in m	2022 millions	
Assets		uvuy	viig	
Current assets:				
Cash and cash equivalents	\$	158	375	
Trade and other receivables, net		178	201	
Prepaid and other current assets		94	84	
Total current assets	'-	430	660	
Investment in Charter, accounted for using the equity method (note 5)		12,116	11,433	
Property and equipment, net (note 2)		1,053	1,011	
Intangible assets not subject to amortization				
Goodwill (note 6)		755	755	
Cable certificates		550	550	
Other		40	37	
Intangible assets subject to amortization, net (note 6)		461	516	
Other assets, net		236	180	
Total assets	\$	15,641	15,142	

Consolidated Balance Sheets (Continued)

December 31, 2023 and 2022

	2023 amounts in mil except share an		2022	
Liabilities and Equity		except share an	iounts	
Current liabilities:				
Accounts payable and accrued liabilities	\$	86	92	
Deferred revenue		30	20	
Current portion of debt, including zero and \$1,373 measured at fair value, respectively (note 7)		3	1,376	
Indemnification obligation (note 4)		_	50	
Other current liabilities		59	137	
Total current liabilities		178	1,675	
Long-term debt, net, including \$1,255 and zero measured at fair value, respectively (note 7)		3,733	2,425	
Obligations under tower obligations and finance leases, excluding current portion (note 8)		83	86	
Long-term deferred revenue		65	63	
Deferred income tax liabilities (note 9)		2,216	2,040	
Preferred stock (note 10)		202	202	
Other liabilities		141	150	
Total liabilities		6,618	6,641	
Equity		· ·		
Series A common stock, \$.01 par value. Authorized 500,000,000 shares; issued and outstanding				
18,233,573 and 18,528,468 at December 31, 2023 and 2022 respectively		_	_	
Series B common stock, \$.01 par value. Authorized 18,750,000 shares; issued and outstanding				
2,025,232 and 2,106,636 at December 31, 2023 and 2022, respectively		_	_	
Series C common stock, \$.01 par value. Authorized 500,000,000 shares; issued and outstanding				
123,704,814 and 125,962,296 at December 31, 2023 and 2022, respectively		1	1	
Additional paid-in capital		3,107	3,318	
Accumulated other comprehensive earnings (loss), net of taxes		52	9	
Retained earnings		5,843	5,155	
Total stockholders' equity		9,003	8,483	
Non-controlling interests		20	18	
Total equity		9,023	8,501	
Commitments and contingencies (note 13)				
Total liabilities and equity	\$	15,641	15,142	

Consolidated Statements of Operations

Years Ended December 31, 2023, 2022 and 2021

			2022 ounts in millions, t per share amounts	2021
Revenue	\$	981	975	988
Operating costs and expenses:	,			
Operating expense (exclusive of depreciation and amortization shown separately				
below)		245	253	282
Selling, general and administrative, including stock-based compensation (note 11)		433	432	442
Depreciation and amortization		230	262	267
Litigation settlement, net of recoveries (note 13)		_	67	95
		908	1,014	1,086
Operating income (loss)		73	(39)	(98)
Other income (expense):				
Interest expense (including amortization of deferred loan fees)		(206)	(133)	(117)
Share of earnings (losses) of affiliate (note 5)		1,155	1,326	1,194
Gain (loss) on dilution of investment in affiliate (note 5)		(60)	(63)	(102)
Realized and unrealized gains (losses) on financial instruments, net (note 4)		(101)	334	67
Gain (loss) on dispositions, net (note 1)		_	179	12
Other, net		27	(70)	(6)
Earnings (loss) before income taxes		888	1,534	950
Income tax benefit (expense)		(200)	(277)	(218)
Net earnings (loss)	<u>-</u>	688	1,257	732
Less net earnings (loss) attributable to the non-controlling interests		_	_	_
Net earnings (loss) attributable to Liberty Broadband shareholders	\$	688	1,257	732
Basic net earnings (loss) attributable to Series A, Series B and Series C Liberty				
Broadband shareholders per common share (note 2)	\$	4.71	8.01	3.97
Diluted net earnings (loss) attributable to Series A, Series B and Series C Liberty Broadband shareholders per common share (note 2)	\$	4.68	7.96	3.93
	-			2.,0

Consolidated Statements of Comprehensive Earnings (Loss)

Years ended December 31, 2023, 2022 and 2021

	2023		2022	2021
			amounts in millions	
Net earnings (loss)	\$	688	1,257	732
Other comprehensive earnings (loss), net of taxes:				
Credit risk on fair value debt instruments gains (loss)		43	(5)	(1)
Other comprehensive earnings (loss), net of taxes		43	(5)	(1)
Comprehensive earnings (loss)		731	1,252	731
Less comprehensive earnings (loss) attributable to the non-controlling interests		_		
Comprehensive earnings (loss) attributable to Liberty Broadband shareholders	\$	731	1,252	731

Consolidated Statements of Cash Flows

Years ended December 31, 2023, 2022 and 2021

	 2023	2022 amounts in millions	2021
Cash flows from operating activities:		amounts in inimons	
Net earnings (loss)	\$ 688	1,257	732
Adjustments to reconcile net earnings (loss) to net cash from operating activities:		,	
Depreciation and amortization	230	262	267
Stock-based compensation	34	37	41
Litigation settlement, net of recoveries	_	67	_
Share of (earnings) losses of affiliate, net	(1,155)	(1,326)	(1,194)
(Gain) loss on dilution of investment in affiliate	60	63	102
Realized and unrealized (gains) losses on financial instruments, net	101	(334)	(67)
Deferred income tax expense (benefit)	168	54	(15)
(Gain) loss on dispositions, net	_	(179)	(12)
Other, net	(4)	(4)	(3)
Changes in operating assets and liabilities:			
Current and other assets	20	140	214
Payables and other liabilities	(126)	(93)	(62)
Net cash provided by (used in) operating activities	 16	(56)	3
Cash flows from investing activities:	 		
Capital expenditures	(222)	(181)	(134)
Grant proceeds received for capital expenditures	6	25	_
Cash received for Charter shares repurchased by Charter	394	3,034	4,179
Cash proceeds from dispositions, net	_	163	15
Cash released from escrow related to dispositions	23	_	_
Purchase of investments	(53)	_	_
Other investing activities, net	2	6	2
Net cash provided by (used in) investing activities	 150	3,047	4,062
Cash flows from financing activities:			
Borrowings of debt	1,501	325	1,467
Repayments of debt, tower obligations and finance leases	(1,616)	(231)	(2,476)
Repurchases of Liberty Broadband common stock	(227)	(2,882)	(4,272)
Indemnification payment to Qurate Retail	(45)	_	_
Other financing activities, net	(3)	(9)	(11)
Net cash provided by (used in) financing activities	(390)	(2,797)	(5,292)
Net increase (decrease) in cash, cash equivalents and restricted cash	(224)	194	(1,227)
Cash, cash equivalents and restricted cash, beginning of period	400	206	1,433
Cash, cash equivalents and restricted cash, end of period	\$ 176	400	206

Consolidated Statements of Equity

Years ended December 31, 2023, 2022 and 2021

	C Series A	ommon stock Series B	Series C	Additional paid-in capital	Accumulated other comprehensive earnings (loss) ounts in millions	Retained earnings (accumulated deficit)	Noncontrolling interest in equity of subsidiaries	Total equity
Balance at December 31, 2020	\$ —	_	2	10,320	15	3,166	12	13,515
Net earnings (loss)	_	_	_	_	_	732	_	732
Other comprehensive earnings (loss), net of taxes	_	_	_	_	(1)	_	_	(1)
Stock-based compensation	_	_	_	41	_	_	_	41
Liberty Broadband stock repurchases	_	_	(1)	(4,271)	_	_	_	(4,272)
Noncontrolling interest activity at Charter and other				124				124
Balance at December 31, 2021	_	_	1	6,214	14	3,898	12	10,139
Net earnings (loss)	_	_	_	_	_	1,257	_	1,257
Other comprehensive earnings (loss), net of taxes	_	_	_	_	(5)	_	_	(5)
Stock-based compensation	_	_	_	37	_	_	_	37
Liberty Broadband stock repurchases	_	_	_	(2,882)	_	_	_	(2,882)
Noncontrolling interest activity at Charter and other				(51)			6	(45)
Balance at December 31, 2022	_	_	1	3,318	9	5,155	18	8,501
Net earnings (loss)	_	_	_	_	_	688	_	688
Other comprehensive earnings (loss), net of taxes	_	_	_	_	43	_	_	43
Stock-based compensation	_	_	_	34	_	_	_	34
Liberty Broadband stock repurchases	_	_	_	(227)	_	_	_	(227)
Noncontrolling interest activity at Charter and other				(18)			2	(16)
Balance at December 31, 2023	<u>\$</u>		1	3,107	52	5,843	20	9,023

Notes to Consolidated Financial Statements

December 31, 2023, 2022 and 2021

(1) Basis of Presentation

The accompanying consolidated financial statements include the accounts of Liberty Broadband Corporation and its controlled subsidiaries (collectively, "Liberty Broadband," the "Company," "us," "we," or "our" unless the context otherwise requires). Liberty Broadband Corporation is primarily comprised of GCI Holdings, LLC ("GCI Holdings" or "GCI"), a wholly owned subsidiary, and an equity method investment in Charter Communications, Inc. ("Charter").

GCI Holdings provides a full range of data, wireless, video, voice, and managed services to residential customers, businesses, governmental entities, and educational and medical institutions primarily in Alaska under the GCI brand. Charter is a leading broadband connectivity company and cable operator. Over an advanced communications network, Charter offers 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. Charter also distributes award-winning news coverage and sports programming to its customers through Spectrum Networks.

On December 18, 2020, GCI Liberty, Inc. ("GCI Liberty"), the parent company of GCI Holdings, was acquired by Liberty Broadband (the "Combination").

Skyhook Holdings, Inc. ("Skyhook") was a wholly owned subsidiary of Liberty Broadband until its sale on May 2, 2022 for aggregate consideration of approximately \$194 million, including amounts held in escrow of approximately \$23 million that were released to Liberty Broadband on May 3, 2023. Liberty Broadband recognized a gain on the sale of \$179 million, net of closing fees, in the second quarter of 2022, which is recorded in Gain (loss) on dispositions, net in the accompanying consolidated statement of operations. Skyhook is included in Corporate and other through April 30, 2022 and is not presented as a discontinued operation as the sale did not represent a strategic shift that had a major effect on Liberty Broadband's operations and financial results. Included in Revenue in the accompanying consolidated statements of operations is \$6 million and \$18 million for the years ended December 31, 2022 and 2021, respectively, related to Skyhook. Included in Net earnings (loss) in the accompanying consolidated statement of operations are earnings of \$4 million and less than \$1 million for the years ended December 31, 2022 and 2021, respectively, related to Skyhook.

Spin-Off Arrangements

During May 2014, the board of directors of Liberty Media Corporation and its subsidiaries ("Liberty") authorized management to pursue a plan to spin-off to its stockholders common stock of a wholly owned subsidiary, Liberty Broadband, and to distribute subscription rights to acquire shares of Liberty Broadband's common stock (the "Broadband Spin-Off"). In connection with the Broadband Spin-Off, Liberty and Liberty Broadband entered into certain agreements in order to govern certain of the ongoing relationships between the two companies and to provide for an orderly transition, including a services agreement and a facilities sharing agreement. Additionally, in connection with a prior transaction, GCI Liberty and Qurate Retail, Inc. ("Qurate Retail") entered into a tax sharing agreement, which was assumed by Liberty Broadband as a result of the Combination. The tax sharing agreement provides for the allocation and indemnification of tax liabilities and benefits between Qurate Retail and Liberty Broadband and other agreements related to tax matters. Under the facilities sharing agreement, Liberty Broadband shares office space with Liberty and related amenities at Liberty's corporate headquarters.

Pursuant to the services agreement, Liberty provides Liberty Broadband with general and administrative services including legal, tax, accounting, treasury, information technology, cybersecurity and investor relations support. Liberty Broadband reimburses Liberty for direct, out-of-pocket expenses incurred by Liberty in providing these services which are negotiated semi-annually, as necessary. Pursuant to the services agreement, in connection with Liberty's employment arrangement with Gregory B. Maffei, the Company's President and Chief Executive Officer, components of Mr. Maffei's compensation are either paid directly to him or reimbursed to Liberty, based on allocations set forth in the services agreement.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

For the years ended December 31, 2023, 2022 and 2021, the allocation percentage for Liberty Broadband was 23%, 33% and 37%, respectively, but is subject to adjustment on an annual basis and upon the occurrence of certain events.

Under these various agreements, amounts reimbursable to Liberty were approximately \$7 million and \$10 million for the years ended December 31, 2023 and 2022, respectively. Liberty Broadband had a tax sharing receivable with Qurate Retail of approximately \$16 million and \$7 million as of December 31, 2023 and 2022, respectively, included in Other assets.

The accompanying consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP") and represent the historical consolidated financial information of GCI Holdings and the Company's interest in Charter, as well as certain other assets and liabilities. All significant intercompany accounts and transactions have been eliminated in the consolidated financial statements

(2) Summary of Significant Accounting Policies

Cash and Cash Equivalents

Cash consists of cash deposits held in global financial institutions. Cash equivalents consist of highly liquid investments with original maturities of three months or less at the time of acquisition. Cash that has restrictions upon its usage has been excluded from cash and cash equivalents. Financial instruments, which potentially subject the Company to concentration of credit risk, consist primarily of cash and cash equivalents and corporate debt securities. The Company maintains some cash and cash equivalents balances with financial institutions that are in excess of Federal Deposit Insurance Corporation insurance limits.

Accounts Receivable and Allowance for Credit Losses

Trade accounts receivable are recorded at the invoiced amount and interest is not billed to the customer. For financed device contracts with customers, which is included within trade accounts receivable and other assets, the Company imputes interest and records the imputed interest as a reduction to the related accounts receivable. Interest is recognized over the financed device payment term. The allowance for credit losses is the Company's best estimate of the amount of expected credit losses in its existing accounts receivable. The Company bases its estimates on the aging of its accounts receivable balances, financial health of specific customers, regional economic data, changes in its collections process, regulatory requirements and its customers' compliance with the Federal Communications Commission ("FCC") rules. The Company reviews its allowance for credit losses methodology at least annually.

Depending upon the type of account receivable, the Company's allowance is calculated using a pooled basis using a percentage of related accounts, or a specific identification method. When a specific identification method is used, potentially uncollectible accounts due to bankruptcy or other issues are reviewed individually for collectability. Write-offs of accounts receivable balances occur when the Company deems the receivables are uncollectible. The Company does not have any off-balance-sheet credit exposure related to its customers.

A summary of activity in the allowance for credit losses for the years ended December 31, 2023, 2022 and 2021 is as follows (amounts in millions):

	begin	nce at ning of ear	Charged to costs and expenses	Write-offs net	Balance at end of year
2023	\$	4	5	(4)	5
2022	\$	4	4	(4)	4
2021	\$	_	4	_	4

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Derivative Instruments and Hedging Activities

All of the Company's derivatives, whether designated in hedging relationships or not, are recorded on the balance sheet at fair value. None of the Company's derivatives are currently designated as hedges, as a result, changes in the fair value of the derivative are recognized in earnings.

The fair value of certain of the Company's derivative instruments are estimated using the Black Scholes Merton option-pricing model ("Black-Scholes model"). The Black-Scholes model incorporates a number of variables in determining such fair values, including expected volatility of the underlying security and an appropriate discount rate. The Company obtained volatility rates from pricing services based on the expected volatility of the underlying security over the remaining term of the derivative instrument. A discount rate was obtained at the inception of the derivative instrument and updated each reporting period, based on the Company's estimate of the discount rate at which it could currently settle the derivative instrument. The Company considered its own credit risk as well as the credit risk of its counterparties in estimating the discount rate. Management judgment was required in estimating the Black-Scholes variables. The Company had no outstanding derivative instruments at December 31, 2023 or December 31, 2022.

Investments in Equity Method Affiliates

For those investments in affiliates in which the Company has the ability to exercise significant influence, the equity method of accounting is used. Under this method, the investment, originally recorded at cost, is adjusted to recognize the Company's share of net earnings or losses of the affiliate as they occur rather than as dividends or other distributions are received. Losses are limited to the extent of the Company's investment in, advances to and commitments for the equity method investee. The Company determines the difference between the purchase price of the equity method investee and the underlying equity which results in an excess basis in the investment. This excess basis is allocated to the underlying assets and liabilities of the Company's equity method investee through an acquisition accounting exercise and is allocated within memo accounts used for equity method accounting purposes. Depending on the applicable underlying assets, these amounts are either amortized over the applicable useful lives or determined to be indefinite lived. Changes in the Company's proportionate share of the underlying equity of an equity method investee, which result from the issuance of additional equity securities by such equity method investee, are recognized in the statement of operations through the gain (loss) on dilution of investment in affiliate line item. We periodically evaluate our equity method investment to determine if decreases in fair value below our cost basis are other than temporary. If a decline in fair value is determined to be other than temporary, we are required to reflect such decline in our consolidated statements of operations. Other than temporary declines in fair value of our equity method investment would be included in share of earnings (losses) of affiliates in our consolidated statements of operations.

The primary factors we consider in our determination of whether declines in fair value are other than temporary are the length of time that the fair value of the investment is below our carrying value; the severity of the decline; and the financial condition, operating performance and near term prospects of the equity method investee. In addition, we consider the reason for the decline in fair value, be it general market conditions, industry specific or equity method investee specific; analysts' ratings and estimates of 12 month share price targets for the equity method investee; changes in stock price or valuation subsequent to the balance sheet date; and our intent and ability to hold the investment for a period of time sufficient to allow for a recovery in fair value.

As Liberty Broadband does not control the decision making process or business management practices of our affiliates accounted for using the equity method, Liberty Broadband relies on management of its affiliates to provide it with accurate financial information prepared in accordance with GAAP that the Company uses in the application of the equity method. In addition, Liberty Broadband relies on the audit reports that are provided by the affiliates' independent auditors on the financial statements of such affiliate. The Company is not aware, however, of any errors in or possible misstatements of the financial information provided by its equity affiliates that would have a material effect on Liberty Broadband's consolidated financial statements. See note 5 for additional discussion regarding our investment in Charter.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Other Investments

All marketable equity and debt securities held by the Company are carried at fair value, generally based on quoted market prices and changes in the fair value of such securities are reported in realized and unrealized gain (losses) on financial instruments in the accompanying consolidated statements of operations. The Company elected the measurement alternative (defined as the cost of the security, adjusted for changes in fair value when there are observable prices, less impairments) for its equity securities without readily determinable fair values.

The Company performs a qualitative assessment each reporting period for its equity securities without readily determinable fair values to identify whether an equity security could be impaired. When the Company's qualitative assessment indicates that an impairment could exist, it estimates the fair value of the investment and to the extent the fair value is less than the carrying value, it records the difference as an impairment in the consolidated statements of operations.

Property and Equipment

Property and equipment is stated at depreciated cost less impairments, if any. Construction costs of facilities are capitalized. Construction in progress represents transmission equipment and support equipment and systems not placed in service on December 31, 2023, that management intends to place in service when the assets are ready for their intended use. Depreciation is computed using the straight-line method based upon the shorter of the estimated useful lives of the assets or the lease term, if applicable.

Net property and equipment consists of the following:

	December 31,		
		2023	2022
		amounts in mi	llions
Land	\$	16	16
Buildings (25 years)		108	105
Telephony transmission equipment and distribution facilities (5-20 years)		832	810
Cable transmission equipment and distribution facilities (5-30 years)		118	108
Support equipment and systems (3-20 years)		112	106
Fiber optic cable systems (15-25 years)		128	73
Other (2-20 years)		72	52
Construction in progress		197	126
	<u></u>	1,583	1,396
Accumulated depreciation		(530)	(385)
Property and equipment, net	\$	1,053	1,011

Depreciation of property and equipment under finance leases is included in depreciation and amortization expense in the consolidated statements of operations. Depreciation expense for the years ended December 31, 2023, 2022 and 2021 was \$166 million, \$195 million and \$192 million, respectively.

Repairs and maintenance are charged to expense as incurred. Expenditures for major renewals and betterments are capitalized. Accumulated depreciation is removed and gains or losses are recognized at the time of sales or other dispositions of property and equipment.

Material interest costs incurred during the construction period of non-software capital projects are capitalized. Interest is capitalized in the period commencing with the first expenditure for a qualifying capital project and ending when the capital project is substantially complete and ready for its intended use. Capitalized interest costs for the years ended December 31, 2023, 2022 and 2021 were \$7 million, \$4 million and \$2 million, respectively.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Impairment of Long-lived Assets

The Company periodically reviews the carrying amounts of its property and equipment and its intangible assets (other than goodwill and indefinite-lived intangible assets) to determine whether current events or circumstances indicate that such carrying amounts may not be recoverable. If the carrying amount of the asset group is greater than the expected undiscounted cash flows to be generated by such asset group, including its ultimate disposition, an impairment adjustment is to be recognized. Such adjustment is measured by the amount that the carrying value of such asset groups exceeds its fair value. The Company generally measures fair value by considering sale prices for similar asset groups or by discounting estimated future cash flows using an appropriate discount rate. Considerable management judgment is necessary to estimate the fair value of asset groups. Accordingly, actual results could vary significantly from such estimates. Asset groups to be disposed of are carried at the lower of their financial statement carrying amount or fair value less costs to sell.

Asset Retirement Obligations

The Company records the fair value of a liability for an asset retirement obligation in the period in which it is incurred in Other liabilities in the consolidated balance sheets. When the liability is initially recorded, the Company capitalizes a cost by increasing the carrying amount of the related long-lived asset. In periods subsequent to initial measurement, changes in the liability for an asset retirement obligation resulting from revisions to either the timing or the amount of the original estimate of undiscounted cash flows are recognized. Over time, the liability is accreted to its present value each period, and the capitalized cost is depreciated over the useful life of the related asset. Upon settlement of the liability, the Company either settles the obligation for its recorded amount or incurs a gain or loss upon settlement.

The majority of the Company's asset retirement obligations are the estimated cost to remove telephony transmission equipment and support equipment from leased property. The asset retirement obligation is in Other liabilities in the consolidated balance sheets. Following is a reconciliation of the beginning and ending aggregate carrying amounts of the liability for asset retirement obligations (amounts in millions):

Balance at December 31, 2021	\$	79
Liability incurred		_
Accretion expense		2
Liability settled		
Balance at December 31, 2022	·	81
Liability incurred		1
Accretion expense		2
Liability settled		_
Balance at December 31, 2023	\$	84

Certain of the Company's network facilities are on property that requires it to have a permit and the permit contains provisions requiring the Company to remove its network facilities in the event the permit is not renewed. The Company expects to continually renew its permits and therefore cannot reasonably estimate any liabilities associated with such agreements. A remote possibility exists that the Company would not be able to successfully renew a permit, which could result in it incurring significant expense in complying with restoration or removal provisions.

Intangible Assets

Internally used software, whether developed or purchased and installed as is, is capitalized and amortized using the straight-line method over an estimated useful life of three to five years. The Company capitalizes certain costs associated with internally developed software such as payroll costs of employees devoting time to the projects, external direct costs for materials and services, and interest costs incurred. Costs associated with internally developed software to be used internally are expensed until the point the project has reached the development stage. Subsequent additions, modifications or upgrades to

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

internal-use software are capitalized only to the extent that they allow the software to perform a task it previously did not perform. Software maintenance and training costs are expensed in the period in which they are incurred. The capitalization of software requires judgment in determining when a project has reached the development stage.

The Company has Software as a Service ("SaaS") arrangements which are accounted for as service agreements and are not capitalized. Internal and other third party costs for SaaS arrangements are capitalized or expensed in accordance with the internal use software guidance as discussed in the preceding paragraph.

Intangible assets with estimable useful lives are amortized over their respective estimated useful lives to their estimated residual values and reviewed for impairment upon certain triggering events. Intangible assets with estimable useful lives are being amortized over three to 16 year periods with a weighted-average life of 13 years.

Goodwill, cable certificates (certificates of convenience and public necessity) and other intangible assets with indefinite useful lives are not amortized, but instead are tested for impairment at least annually. Cable certificates represent agreements or authorizations with government entities that allow access to homes in cable service areas, including the future economic benefits of the right to solicit and service potential customers and the right to deploy and market new services to potential customers. Goodwill represents the excess of cost over fair value of net assets acquired in connection with a business acquisition. The Company's annual impairment assessment of its indefinite-lived intangible assets is performed during the fourth quarter of each year.

The accounting guidance allows entities the option to perform a qualitative impairment test for goodwill. The entity may resume performing the quantitative assessment in any subsequent period. In evaluating goodwill on a qualitative basis, the Company reviews the business performance of each reporting unit and evaluates other relevant factors as identified in the relevant accounting guidance to determine whether it was more likely than not that an indicated impairment exists for any of its reporting units. The Company considers whether there are any negative macroeconomic conditions, industry specific conditions, market changes, increased competition, increased costs in doing business, management challenges, the legal environments and how these factors might impact company specific performance in future periods. As part of the analysis, the Company also considers fair value determinations for certain reporting units that have been made at various points throughout the current year and prior year for other purposes. If based on the qualitative analysis it is more likely than not that an impairment exists, the Company performs the quantitative impairment test.

The quantitative goodwill impairment test compares the estimated fair value of a reporting unit to its carrying value and to the extent the carrying value is greater than the fair value, the difference is recorded as an impairment in the consolidated statements of operations. Developing estimates of fair value requires significant judgments, including making assumptions about appropriate discount rates, perpetual growth rates, relevant comparable market multiples, public trading prices and the amount and timing of expected future cash flows. The cash flows employed in the Company's valuation analyses are based on management's best estimates considering current marketplace factors and risks as well as assumptions of growth rates in future years. There is no assurance that actual results in the future will approximate these forecasts.

The accounting guidance also permits entities to first perform a qualitative assessment to determine whether it is more likely than not that an indefinite-lived intangible asset, other than goodwill, is impaired. The accounting guidance also allows entities the option to bypass the qualitative assessment for any indefinite-lived intangible asset in any period and proceed directly to the quantitative impairment test. The entity may resume performing the qualitative assessment in any subsequent period. If the qualitative assessment supports that it is more likely than not that the carrying value of the Company's indefinite-lived intangible assets, other than goodwill, exceeds its fair value, then a quantitative assessment is performed. If the carrying value of an indefinite-lived intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Revenue Recognition

GCI Holdings

Revenue is measured based on consideration specified in a contract with a customer and excludes any sales incentives and amounts collected on behalf of third parties. GCI Holdings recognizes revenue when it satisfies a performance obligation by transferring control of a product or service to a customer. Substantially all of GCI Holdings' revenue is earned from services transferred over time. If at contract inception, GCI Holdings determines the time period between when it transfers a promised good or service to a customer and when the customer pays for that good or service is one year or less, it does not adjust the promised amount of consideration for the effects of a significant financing component.

Certain of GCI Holdings' customers have guaranteed levels of service. If an interruption in service occurs, GCI Holdings does not recognize revenue for any portion of the monthly service fee that will be refunded to the customer or not billed to the customer due to these service level agreements.

Taxes assessed by a governmental authority that are both imposed on, and concurrent with, a specific revenue-producing transaction that are collected by GCI Holdings from a customer, are excluded from revenue from contracts with customers.

Nature of Services and Products

Data

Data revenue is generated by providing data network access, high-speed internet services, and product sales. Monthly service revenue for data network access and high-speed internet services is billed in advance, recorded as deferred revenue on the balance sheet, and recognized as the associated services are provided to the customer. Internet service excess usage revenue is recognized when the services are provided. GCI Holdings recognizes revenue for product sales when a customer takes possession of the equipment. GCI Holdings provides telecommunications engineering services on a time and materials basis. Revenue is recognized for these services as-invoiced.

Wireless

Wireless revenue is generated by providing access to, and usage of GCI Holdings' network by consumer, business, and wholesale carrier customers. Additionally, GCI Holdings generates revenue by selling wireless equipment such as handsets and tablets. In general, access revenue is billed in advance, recorded as deferred revenue on the balance sheet, and recognized as the associated services are provided to the customer. Equipment sales revenue associated with the sale of wireless devices and accessories is generally recognized when the products are delivered to and control transfers to the customer. Consideration received from the customer is allocated to the service and products based on stand-alone selling prices when purchased together.

New and existing wireless customers have the option to purchase certain wireless devices in installments over a period of up to 36 months. Under the Upgrade Now program, participating customers have the right to trade-in the original equipment for a new device after making the equivalent of 12 monthly installment payments, provided their handset is in good working condition. Upon upgrade, the outstanding balance of the wireless equipment installment plan is exchanged for the used handset. GCI Holdings accounts for this upgrade option as a right of return with a reduction of Revenue and Operating expense for handsets expected to be upgraded based on historical data.

Other

Other revenue consists of video and voice revenue. Video revenue is generated primarily from residential and business customers that subscribe to GCI Holdings' cable video plans. Video revenue is billed in advance, recorded as deferred revenue on the balance sheet, and recognized as the associated services are provided to the customer. Voice revenue is for fixed monthly fees for voice plans as well as usage based fees for long-distance service usage. Voice plan fees are billed in advance, recorded

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

as deferred revenue on the balance sheet, and recognized as the associated services are provided to the customer. Usage based fees are recognized as services are provided.

Arrangements with Multiple Performance Obligations

Contracts with customers may include multiple performance obligations as customers purchase multiple services and products within those contracts. For such arrangements, revenue is allocated to each performance obligation based on the relative standalone selling price for each service or product within the contract. Standalone selling prices are generally determined based on the prices charged to customers.

Significant Judgments

Some contracts with customers include variable consideration and may require significant judgment to determine the total transaction price, which impacts the amount and timing of revenue recognized. GCI Holdings uses historical customer data to estimate the amount of variable consideration included in the total transaction price and reassess its estimate at each reporting period. Any change in the total transaction price due to a change in the estimated variable consideration is allocated to the performance obligations on the same basis as at contract inception. Any portion of a change in transaction price that is allocated to a satisfied or partially satisfied performance obligation is recognized as revenue (or a reduction in revenue) in the period of the transaction price change. Variable consideration has been constrained to reduce the likelihood of a significant revenue reversal.

Often contracts with customers include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment.

Judgment is required to determine the standalone selling price for each distinct performance obligation. Services and products are generally sold separately, which helps establish standalone selling price for services and products GCI Holdings provides.

Remaining Performance Obligations

The Company expects to recognize revenue in the future related to performance obligations that are unsatisfied (or partially unsatisfied) as of December 31, 2023 of \$278 million in 2024, \$143 million in 2025, \$76 million in 2026, \$26 million in 2027 and \$26 million in 2028 and thereafter.

The Company applies certain practical expedients as permitted and does not disclose information about remaining performance obligations that have original expected durations of one year or less, information about revenue remaining from usage based performance obligations that are recognized over time as-invoiced, or variable consideration allocated to wholly unsatisfied performance obligations.

Contract Balances

The Company had receivables of \$181 million and \$189 million at December 31, 2023 and 2022, respectively, the long-term portion of which are included in Other assets, net. The Company had deferred revenue of \$43 million and \$33 million at December 31, 2023 and 2022, respectively, the long-term portion of which are included in Other liabilities. The receivables and deferred revenue are only from contracts with customers. GCI Holdings' customers generally pay for services in advance of the performance obligation and therefore these prepayments are recorded as deferred revenue. The deferred revenue is recognized as revenue in the accompanying consolidated statements of operations as the services are provided. Changes in the contract liability balance for the Company during 2023 was not materially impacted by other factors.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Assets Recognized from the Costs to Obtain a Contract with a Customer

Management expects that incremental commission fees paid to intermediaries as a result of obtaining customer contracts are recoverable and therefore the Company capitalizes them as contract costs.

Capitalized commission fees are amortized based on the transfer of goods or services to which the assets relate which typically range from two to five years, and are included in Selling, general, and administrative expenses.

The Company recognizes the incremental costs of obtaining contracts as an expense when incurred if the amortization period of the assets that otherwise would have been recognized is one year or less. These costs are included in Selling, general, and administrative expenses.

Revenue from contracts with customers, classified by customer type and significant service offerings, is as follows:

	Years ended December 31,				
	 2023	2022	2021		
2007	an	nounts in millions			
GCI Holdings					
Consumer Revenue					
Data	\$ 233	231	214		
Wireless	143	143	134		
Other	41	55	86		
Business Revenue					
Data	424	392	364		
Wireless	45	47	68		
Other	18	24	27		
Lease, grant, and revenue from subsidies	77	77	77		
Total GCI Holdings	981	969	970		
Corporate and other	_	6	18		
Total	\$ 981	975	988		

Advertising Costs

Advertising costs generally are expensed as incurred. Advertising expense aggregated \$5 million, \$4 million and \$5 million for the years ended December 31, 2023, 2022 and 2021, respectively. Advertising costs are reflected in the Selling, general and administrative, including stock-based compensation line item in our consolidated statements of operations.

Stock-Based Compensation

As more fully described in note 11, Liberty Broadband has granted to its directors, employees and employees of certain of its subsidiaries, restricted stock and stock options to purchase shares of Liberty Broadband common stock (collectively, "Awards"). Liberty Broadband measures the cost of employee services received in exchange for an equity classified Award (such as stock options and restricted stock) based on the grant-date fair value of the Award and recognizes that cost over the period during which the employee is required to provide service (usually the vesting period of the Award). Liberty Broadband measures the cost of employee services received in exchange for a liability classified Award based on the current fair value of the Award and remeasures the fair value of the Award at each reporting date.

Income Taxes

The Company accounts for income taxes using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts and

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

income tax bases of assets and liabilities and the expected benefits of utilizing net operating loss and tax credit carryforwards. The deferred tax assets and liabilities are calculated using enacted tax rates in effect for each taxing jurisdiction in which the Company operates for the year in which those temporary differences are expected to be recovered or settled. Net deferred tax assets are then reduced by a valuation allowance if the Company believes it more likely than not that such net deferred tax assets will not be realized. We consider all relevant factors when assessing the likelihood of future realization of our deferred tax assets, including our recent earnings experience by jurisdiction, expectations of future taxable income, and the carryforward periods available to us for tax reporting purposes, as well as assessing available tax planning strategies. The effect on deferred tax assets and liabilities of an enacted change in tax rates is recognized in the consolidated statements of operations in the period that includes the enactment date. Due to inherent complexities arising from the nature of our businesses, future changes in income tax law, tax sharing agreements or variances between our actual and anticipated operating results, we make certain judgments and estimates. Therefore, actual income taxes could materially vary from these estimates.

When the tax law requires interest to be paid on an underpayment of income taxes, the Company recognizes interest expense from the first period the interest would begin accruing according to the relevant tax law. Such interest expense is included in Interest expense in the accompanying consolidated statements of operations. Any accrual of penalties related to underpayment of income taxes on uncertain tax positions is included in Other, net in the accompanying consolidated statements of operations.

We recognize in our consolidated financial statements the impact of a tax position, if that position is more likely than not to be sustained upon an examination, based on the technical merits of the position.

Certain Risks and Concentrations

GCI Holdings offers wireless and wireline telecommunication services, data services, video services, and managed services to customers primarily throughout Alaska. Because of this geographic concentration, growth of GCI Holdings' business and operations depends upon economic conditions in Alaska.

GCI Holdings receives support from each of the various Universal Service Fund ("USF") programs: rural health care, schools and libraries, high-cost, and lifeline. The programs are subject to change by regulatory actions taken by the FCC or legislative actions, therefore, changes to the programs could result in a material decrease in revenue that the Company has recorded. Historical revenue recognized from the programs was 39%, 35% and 32% of GCI Holdings' revenue for the years ended December 31, 2023, 2022 and 2021, respectively. The Company had USF net receivables of \$102 million at December 31, 2023. See note 13 for more information regarding the rural health care receivables.

Loss Contingencies

Periodically, we review the status of all significant outstanding matters to assess any potential financial exposure. When it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated, we record the estimated loss in our consolidated statements of operations. We provide disclosure in the notes to the consolidated financial statements for loss contingencies that do not meet both these conditions if there is a reasonable possibility that a loss may have been incurred that would be material to the financial statements. Significant judgment is required to determine the probability that a liability has been incurred and whether such liability is reasonably estimable. We base accruals made on the best information available at the time which can be highly subjective. The final outcome of these matters could vary significantly from the amounts included in the accompanying consolidated financial statements.

Comprehensive Earnings (Loss)

Comprehensive earnings (loss) consists of net earnings (loss), comprehensive earnings (loss) attributable to debt credit risk adjustments and the Company's share of the comprehensive earnings (loss) of our equity method affiliate.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Earnings Attributable to Liberty Broadband Stockholders per Common Share

Basic earnings (loss) per common share ("EPS") is computed by dividing net earnings (loss) attributable to Liberty Broadband stockholders by the weighted average number of common shares outstanding ("WASO") for the period. Diluted EPS presents the dilutive effect on a per share basis of potential common shares as if they had been converted at the beginning of the periods presented. Excluded from diluted EPS for the years ended December 31, 2023, 2022 and 2021 are approximately 2 million, 2 million and 1 million potential common shares, respectively, because their inclusion would have been antidilutive.

		Years ended December 31,				
	2023	2023 2022				
		number of shares in millions				
Basic WASO	146	157	185			
Potentially dilutive shares (1)	1	1	1			
Diluted WASO	147	158	186			

⁽¹⁾ Potentially dilutive shares are excluded from the computation of diluted EPS during periods in which losses are reported since the result would be antidilutive.

Reclassifications

Reclassifications have been made to the prior years' consolidated financial statements to conform to the classifications used in the current year.

Estimates

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 at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. The Company considers (i) the application of the equity method of accounting for its affiliates, (ii) non-recurring fair value measurements of non-financial instruments and (iii) accounting for income taxes to be its most significant estimates.

Recent Accounting Pronouncements

In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2023-07, *Improvements to Reportable Segment Disclosures*, which is intended to improve reportable segment disclosure requirements, primarily through additional disclosures about significant segment expenses. The standard is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The amendments should be applied retrospectively to all prior periods presented in the financial statements. The Company is in the process of evaluating the disclosure requirements related to the new standard.

In December 2023, the FASB issued ASU 2023-09, *Improvements to Income Tax Disclosures*, which requires more detailed income tax disclosures. The guidance requires entities to disclose disaggregated information about their effective tax rate reconciliation as well as expanded information on income taxes paid by jurisdiction. The disclosure requirements will be applied on a prospective basis, with the option to apply them retrospectively. The effective date for the standard is for fiscal years beginning after December 15, 2024, with early adoption permitted. The Company is in the process of evaluating the impact of the new standard on the related disclosures.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Government Assistance

In current and prior years, the Company has been awarded, as either the recipient or subrecipient, federal government grants to construct broadband infrastructure to unserved and underserved communities in rural Alaska. During the years ended December 31, 2023 and 2022, the Company received approximately \$6 million and \$25 million, respectively, for grants awarded in current and/or prior years.

For accounting purposes, these grants are accounted for using a grant accounting model by analogy to International Accounting Standard 20, Accounting for Government Grants and Disclosure of Government Assistance. These grants were recorded as deferred revenue since the primary conditions for the receipt of the grant are the build out and operation of the broadband services over the established time frames, which range from 12 to 18 years for assets already placed in service and will be based on the property's useful life for assets currently being constructed. During the years ended December 31, 2023 and 2022, revenue recorded in the consolidated financial statements was not material. Both short-term and long-term deferred revenue have been recorded for the amounts of the grants received, with a non-material amount recorded as short-term and approximately \$41 million and \$37 million recorded as long-term deferred revenue, respectively, as of December 31, 2023 and 2022.

(3) Supplemental Disclosures to Consolidated Statements of Cash Flows

	Years ended December 31,				
		2023	2022	2021	
		amo	ounts in millions		
Cash paid for interest, net of amounts capitalized	\$	211	137	125	
Cash paid for taxes, net	\$	49	266	238	
Noncash activity:					
Property and equipment expenditures incurred but not yet paid	\$	15	22	19	

The following table reconciles cash and cash equivalents and restricted cash reported in the Company's consolidated balance sheets to the total amount presented in its consolidated statements of cash flows:

	Years ended December 31,				
	2	2023	2022	2021	
		am	ounts in millions		
Cash and cash equivalents	\$	158	375	191	
Restricted cash included in other current assets		16	24	15	
Restricted cash included in other long-term assets		2	1	_	
Total cash and cash equivalents and restricted cash at end of period	\$	176	400	206	

Restricted cash primarily relates to cash restricted for use on GCI Holdings' various arrangements to help fund projects that extended terrestrial broadband service for the first time to rural Alaska communities via a high capacity hybrid fiber optic and microwave network.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

(4) Assets and Liabilities Measured at Fair Value

For assets and liabilities required to be reported at fair value, GAAP provides a hierarchy that prioritizes inputs to valuation techniques used to measure fair value into three broad levels. Level 1 inputs are quoted market prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 2 inputs are inputs, other than quoted market prices included within Level 1, that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability. The Company does not have any recurring assets or liabilities measured at fair value that would be considered Level 3.

The Company's assets and liabilities measured at fair value are as follows:

		December 31, 2023			December 31, 2022	
<u>Description</u>	Total	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2) amounts in	Total	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)
Cash equivalents	\$ 78	78		288	288	_
Indemnification obligation	\$ _	_	_	50	_	50
Exchangeable senior						
debentures	\$ 1,255	_	1,255	1,373	_	1,373

Pursuant to an indemnification agreement initially entered into by GCI Liberty and assumed by Liberty Broadband in connection with the Combination, Liberty Broadband had agreed to indemnify Liberty Interactive LLC ("LI LLC"), a subsidiary of Qurate Retail, for certain payments made to holders of LI LLC's 1.75% exchangeable debentures due 2046 (the "LI LLC 1.75% Exchangeable Debentures"). The indemnification liability due to LI LLC pertained to the holders' ability to exercise their exchange right according to the terms of the LI LLC 1.75% Exchangeable Debentures on or before October 5, 2023. Such amount equaled the difference between the exchange value and par value of the LI LLC 1.75% Exchangeable Debentures at the time the exchange occurred. The indemnification obligation recorded in the consolidated balance sheet as of December 31, 2022 represented the fair value of the estimated exchange feature included in the LI LLC 1.75% Exchangeable Debentures primarily based on observable market data as significant inputs (Level 2). As of December 31, 2023, all remaining LI LLC 1.75% Exchangeable Debentures were either retired or exchanged and indemnification payments of \$45 million were made by Liberty Broadband to Qurate Retail in connection with exchanges of \$330 million of the LI LLC 1.75% Exchangeable Debentures that settled in the period.

The Company's exchangeable senior debentures are debt instruments with quoted market value prices that are not considered to be traded on "active markets," as defined in GAAP, and are reported in the foregoing table as Level 2 fair value.

Other Financial Instruments

Other financial instruments not measured at fair value on a recurring basis include trade receivables, trade payables, accrued and other current liabilities, equity securities, current portion of debt (with the exception of the 1.25% Debentures prior to their redemption in the third quarter of 2023, and the 2.75% Debentures and the 1.75% Debentures prior to their redemption in the first quarter of 2023 (each as defined in note 7)) and long-term debt (with the exception of the 3.125% Debentures (as defined in note 7)). With the exception of long-term debt and preferred stock, the carrying amount approximates fair value due to the short maturity of these instruments as reported on our consolidated balance sheets. The carrying value of the Margin Loan Facility, the Senior Credit Facility and the Wells Fargo Note Payable (each as defined in note 7) all bear interest at a variable rate and therefore are also considered to approximate fair value.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Realized and Unrealized Gains (Losses) on Financial Instruments

Realized and unrealized gains (losses) on financial instruments are comprised of changes in the fair value of the following:

		Years ended December 31,			
	202	2023 2022			
		amounts in millions			
Indemnification obligation	\$	5	273	21	
Exchangeable senior debentures (1)		(106)	61	46	
	\$	(101)	334	67	

(1) The Company has elected to account for its exchangeable senior debentures using the fair value option. Changes in the fair value of the exchangeable senior debentures recognized in the consolidated statements of operations are primarily due to market factors driven by changes in the fair value of the underlying shares into which the debt is exchangeable. The Company isolates the portion of the unrealized gain (loss) attributable to the change in the instrument specific credit risk and recognizes such amount in other comprehensive income. The change in the fair value of the exchangeable senior debentures attributable to changes in the instrument specific credit risk before tax was a gain of \$55 million, a loss of \$7 million and a loss of \$2 million for the years ended December 31, 2023, 2022 and 2021, respectively. The cumulative change was a gain of \$55 million as of December 31, 2023.

(5) Investment in Charter Accounted for Using the Equity Method

Through a number of prior years' transactions and the Combination, Liberty Broadband has acquired an interest in Charter. The investment in Charter is accounted for as an equity method affiliate based on our voting and ownership interest and the board seats held by individuals appointed by Liberty Broadband. As of December 31, 2023, the carrying and market value of Liberty Broadband's ownership in Charter was approximately \$12.1 billion and \$18.0 billion, respectively. We own an approximate 31.9% economic ownership interest in Charter, based on shares of Charter's Class A common stock issued and outstanding as of December 31, 2023.

Upon the closing of the Time Warner Cable, LLC merger, the Second Amended and Restated Stockholders Agreement, dated as of May 23, 2015, by and among Charter, Liberty Broadband and Advance/Newhouse Partnership, as amended (the "Stockholders Agreement"), became fully effective. Pursuant to the Stockholders Agreement, Liberty Broadband's equity ownership in Charter (on a fully diluted basis) is capped at the greater of 26% or the voting cap (as defined below) ("Equity Cap"). As of December 31, 2023, due to Liberty Broadband's voting interest exceeding the current voting cap of 25.01%, our voting control of the aggregate voting power of Charter is 25.01%. Under the Stockholders Agreement, Liberty Broadband has agreed to vote (subject to certain exceptions) all voting securities beneficially owned by it, or over which it has voting discretion or control that are in excess of the voting cap in the same proportion as all other votes cast by public stockholders of Charter with respect to the applicable matter.

In February 2021, Liberty Broadband was notified that its ownership interest, on a fully diluted basis, had exceeded the Equity Cap set forth in the Stockholders Agreement. On February 23, 2021, Charter and Liberty Broadband entered into a letter agreement in order to implement, facilitate and satisfy the terms of the Stockholders Agreement with respect to the Equity Cap. Pursuant to this letter agreement, following any month during which Charter purchases, redeems or buys back shares of its Class A common stock, and prior to certain meetings of Charter's stockholders, Liberty Broadband will be obligated to sell to Charter, and Charter will be obligated to purchase, such number of shares of Class A common stock as is necessary (if any) to reduce Liberty Broadband's percentage equity interest, on a fully diluted basis, to the Equity Cap (such transaction, a "Charter Repurchase"). The per share sale price for each share of Charter will be equal to the volume weighted average price paid by Charter in its repurchases, redemptions and buybacks of its common stock (subject to certain exceptions) during the month prior to the Charter Repurchase (or, if applicable, during the relevant period prior to the relevant meeting of Charter stockholders).

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Under the terms of the letter agreement, Liberty Broadband sold Charter Class A common stock to Charter to maintain our fully diluted ownership percentage at 26% as follows:

		Years ended December 31,				
		2023 2022				
		lar amounts in millions				
Number of Charter Class A shares sold to Charter		950,721	6,168,174	6,077,664		
Amount of Charter Class A shares sold to Charter	\$	394	3,034	4,179		

Subsequent to December 31, 2023, Liberty Broadband sold 213,216 shares of Charter Class A common stock to Charter for \$81 million.

During the years ended December 31, 2023, 2022 and 2021, there were dilution losses of \$60 million, \$63 million, and \$102 million, respectively, in the Company's investment in Charter. The dilution losses were primarily attributable to the exercise of stock options and restricted stock units by employees and other third parties, offset by a gain on dilution related to Charter's repurchase of Liberty Broadband's Charter shares during the periods presented.

The excess basis has been allocated within memo accounts used for equity method accounting purposes as follows (amounts in millions):

	Years ended December 31,		
		2023	2022
Property and equipment, net	\$	403	524
Customer relationships, net		2,049	2,230
Franchise fees		3,843	3,809
Trademarks		29	29
Goodwill		4,049	3,975
Debt		(317)	(450)
Deferred income tax liability		(1,472)	(1,505)
	\$	8,584	8,612

Property and equipment and customer relationships have weighted average remaining useful lives of approximately 4 years and 7 years, respectively, and franchise fees, trademarks and goodwill have indefinite lives. The excess basis of outstanding debt is amortized over the contractual period using the straight-line method. The change in excess basis for the year ended December 31, 2023 was primarily due to an increase in excess basis due to Charter's share buyback program, partially offset by Liberty Broadband's participation in Charter's share buyback program. These impacts were more than offset by amortization expense during the period, resulting in a slight decrease in the excess basis in Charter from December 31, 2022 to December 31, 2023. Included in our share of earnings from Charter of \$1,155 million, \$1,326 million and \$1,194 million for the years ended December 31, 2023, 2022 and 2021, respectively, are \$277 million, \$232 million and \$234 million, respectively, of losses, net of taxes, due to the amortization of the excess basis related to assets with identifiable useful lives and debt.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Summarized financial information for Charter is as follows:

Consolidated Balance Sheets

	D	ecember 31, 2023	December 31, 2022	
		amounts in mil	lions	
Current assets	\$	4,132	4,017	
Property and equipment, net		39,520	36,039	
Goodwill		29,668	29,563	
Intangible assets, net		69,141	70,135	
Other assets		4,732	4,769	
Total assets	\$	147,193	144,523	
Current liabilities	\$	13,214	12,065	
Deferred income taxes		18,954	19,058	
Long-term debt		95,777	96,093	
Other liabilities		4,530	4,758	
Equity		14,718	12,549	
Total liabilities and shareholders' equity	\$	147,193	144,523	

Consolidated Statements of Operations

	Years ended December 31,			
		2023	2022	2021
		an	nounts in millions	
Revenue	\$	54,607	54,022	51,682
Cost and expenses:				
Operating costs and expenses (excluding depreciation and amortization)		33,405	32,876	31,482
Depreciation and amortization		8,696	8,903	9,345
Other operating (income) expense, net		(53)	281	329
	'	42,048	42,060	41,156
Operating income	' <u></u>	12,559	11,962	10,526
Interest expense, net		(5,188)	(4,556)	(4,037)
Other income (expense), net		(517)	56	(101)
Income tax (expense) benefit		(1,593)	(1,613)	(1,068)
Net earnings (loss)		5,261	5,849	5,320
Less: Net income attributable to noncontrolling interests		(704)	(794)	(666)
Net Income (loss) attributable to Charter shareholders	\$	4,557	5,055	4,654

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

(6) Goodwill and Intangible Assets

Goodwill and Indefinite Lived Assets

Changes in the carrying amount of goodwill are as follows:

	GCI	Holdings	Corporate and other amounts in millions	Total
Balance at December 31, 2021	\$	755	7	762
Dispositions		_	(7)	(7)
Balance at December 31, 2022		755		755
Balance at December 31, 2023	\$	755		755

As presented in the accompanying consolidated balance sheets, cable certificates are the majority of the other significant indefinite lived intangible assets.

Intangible Assets Subject to Amortization, net

]	December 31, 2023		December 31, 2022			
	ca	Gross arrying mount	Accumulated amortization	Net carrying amount amounts in	Gross carrying amount	Accumulated amortization	Net carrying amount	
Customer relationships	\$	515	(132)	383	515	(91)	424	
Other amortizable intangible assets		156	(78)	78	147	(55)	92	
Total	\$	671	(210)	461	662	(146)	516	

Intangible assets are being amortized generally on an accelerated basis as reflected in amortization expense and in the future amortization table below.

Amortization expense for intangible assets with finite useful lives was \$64 million, \$67 million and \$75 million for the years ended December 31, 2023, 2022 and 2021, respectively. Amortization expense for amortizable intangible assets for each of the five succeeding fiscal years is estimated to be (amounts in millions):

2024	\$ 58
2025	\$ 53
2026	\$ 51
2027	\$ 48
2028	\$ 47

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

(7) Debt

Debt is summarized as follows:

	Outstanding principal		Carrying value		
	Dece	ember 31, 2023	December 31, 2023	December 31, 2022	
			amounts in millions		
Margin Loan Facility	\$	1,460	1,460	1,400	
3.125% Exchangeable Senior Debentures due 2053		1,265	1,255	_	
1.25% Exchangeable Senior Debentures due 2050		_	_	798	
2.75% Exchangeable Senior Debentures due 2050		_	_	560	
1.75% Exchangeable Senior Debentures due 2046		_	_	15	
Senior notes		600	623	628	
Senior credit facility		394	394	397	
Wells Fargo note payable		5	5	5	
Deferred financing costs			(1)	(2)	
Total debt	\$	3,724	3,736	3,801	
Debt classified as current			(3)	(1,376)	
Total long-term debt			\$ 3,733	2,425	

Margin Loan Facility

On May 17, 2023, a bankruptcy remote wholly owned subsidiary of the Company ("SPV") entered into Amendment No. 7 to Margin Loan Agreement (the "Seventh Amendment"), which amends SPV's margin loan agreement, dated as of August 31, 2017 (as amended by the Seventh Amendment, the "Margin Loan Agreement"), with a group of lenders. The Margin Loan Agreement provides for (x) a term loan credit facility in an aggregate principal amount of \$1.15 billion (the "Term Loan Facility" and proceeds of such facility, the "Term Loans"), (y) a revolving credit facility in an aggregate principal amount of \$1.15 billion (the "Revolving Loan Facility" and proceeds of such facility, the "Revolving Loans"; the Revolving Loans, collectively with the Term Loans, the "Loans") and (z) an uncommitted incremental term loan facility in an aggregate principal amount of up to \$200 million (collectively, the "Margin Loan Facility"). No additional borrowings under the Margin Loan Agreement were made in connection with the Seventh Amendment. SPV's obligations under the Margin Loan Facility are secured by shares of Charter owned by SPV. The Seventh Amendment provided for, among other things, (i) the extension of the scheduled maturity dates to May 12, 2026, (ii) the interest under the Margin Loan Agreement to be determined by reference to the Secured Overnight Financing Rate ("SOFR") instead of the London Interbank Offered Rate ("LIBOR"), (iii) an increase in the Base Spread (as defined below) applicable to all loans funded under the Margin Loan Agreement and (iv) the removal of certain conditions precedent to the release of pledged shares.

Outstanding borrowings under the Margin Loan Agreement were \$1.5 billion and \$1.4 billion as of December 31, 2023 and December 31, 2022, respectively. As of December 31, 2023, SPV was permitted to borrow an additional \$840 million under the Margin Loan Agreement, subject to certain funding conditions, which may be drawn until five business days prior to the maturity date. The maturity date of the loans under the Margin Loan Agreement is May 12, 2026. Pursuant to the Seventh Amendment, the borrowings under the Margin Loan Agreement will accrue interest at a rate equal to the three-month SOFR rate plus a per annum spread of 1.875% (the "Base Spread") (unless and until the replacement of such rate as provided for under the Margin Loan Agreement). The Margin Loan Agreement also has a commitment fee equal to 0.50% per annum on the daily unused amount of the Revolving Loans.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Borrowings under the Margin Loan Agreement prior to the Seventh Amendment bore interest at the three-month LIBOR rate plus a per annum spread of 1.5%, effective with the Fourth Amendment on May 12, 2021. Prior to the Fourth Amendment effective date on May 12, 2021, the per annum spread was 1.85%.

The Margin Loan Agreement contains various affirmative and negative covenants that restrict the activities of SPV (and, in some cases, the Company and its subsidiaries with respect to shares of Charter owned by the Company and its subsidiaries). The Margin Loan Agreement does not include any financial covenants. The Margin Loan Agreement does contain restrictions related to additional indebtedness and events of default customary for margin loans of this type.

SPV's obligations under the Margin Loan Agreement are secured by first priority liens on a portion of the Company's ownership interest in Charter, sufficient for SPV to meet the loan to value requirements under the Margin Loan Agreement. The Margin Loan Agreement indicates that no lender party shall have any voting rights with respect to the shares pledged as collateral, except to the extent that a lender party buys any shares in a sale or other disposition made pursuant to the terms of the loan agreement. As of December 31, 2023, 19.1 million shares of Charter common stock with a value of \$7.4 billion were held in collateral accounts related to the Margin Loan Agreement.

Exchangeable Senior Debentures

On August 27, 2020, the Company closed a private offering of \$575 million aggregate original principal amount of its 2.75% Exchangeable Senior Debentures due 2050 (the "2.75% Debentures"), including debentures with an aggregate original principal amount of \$75 million issued pursuant to the exercise of an option granted to the initial purchasers. During the first quarter of 2023, the Company repurchased all of the outstanding 2.75% Debentures using proceeds from the issuance of the 3.125% Debentures, as defined and further described below.

On November 23, 2020, the Company closed a private offering of \$825 million aggregate original principal amount of its 1.25% Exchangeable Senior Debentures due 2050 (the "1.25% Debentures"), including debentures with an aggregate original principal amount of \$75 million issued pursuant to the exercise of an option granted to the initial purchasers. During the first quarter of 2023, the Company repurchased a significant portion of the 1.25% Debentures using proceeds from the issuance of the 3.125% Debentures, as defined and further described below. On October 5, 2023, the remaining 1.25% Debentures were redeemed.

In connection with the closing of the Combination on December 18, 2020, the Company assumed all of GCI Liberty's outstanding 1.75% exchangeable senior debentures due 2046 (the "1.75% Debentures") with an original outstanding principal amount of \$15 million at fair value. The total fair value of the acquired 1.75% Debentures was approximately \$26 million. The 1.75% Debentures were initially issued on June 18, 2018 by GCI Liberty. During the first quarter of 2023, the Company repurchased all of the outstanding 1.75% Debentures using proceeds from the issuance of the 3.125% Debentures, as defined and further described below.

On February 28, 2023, the Company closed a private offering of \$1,265 million aggregate original principal amount of its 3.125% Exchangeable Senior Debentures due 2053 (the "3.125% Debentures"), including debentures with an aggregate original principal amount of \$165 million issued pursuant to the exercise of an option granted to the initial purchasers. Upon an exchange of the 3.125% Debentures, the Company, at its election, may deliver shares of Charter Class A common stock, the value thereof in cash, or any combination of shares of Charter Class A common stock are attributable to each \$1,000 original principal amount of 3.125% Debentures, representing an initial exchange price of approximately \$529.07 for each share of Charter Class A common stock. A total of 2,390,977 shares of Charter Class A common stock are attributable to the 3.125% Debentures. Interest is payable quarterly on March 31, June 30, September 30 and December 31 of each year, commencing June 30, 2023. The 3.125% Debentures may be redeemed by the Company, in whole or in part, on or after April 6, 2026. Holders of the 3.125% Debentures also have the right to require the Company to purchase their 3.125% Debentures on April 6, 2026. The redemption and purchase price will generally equal 100% of the adjusted principal amount of the 3.125% Debentures plus accrued and unpaid interest to the redemption date, plus any final period distribution. As

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

of December 31, 2023, a holder of the 3.125% Debentures does not have the ability to exchange their debentures and, accordingly, the 3.125% Debentures have been classified as long-term debt within the consolidated balance sheet as of December 31, 2023.

As mentioned above, the Company used the net proceeds of the offering of the 3.125% Debentures, together with existing cash on hand, to repurchase all of the outstanding 1.75% Debentures, all of the outstanding 2.75% Debentures and a significant portion of the outstanding 1.25% Debentures. On October 5, 2023, the remaining portion of the 1.25% Debentures were retired at the adjusted principal amount plus accrued interest and, pursuant to a supplemental indenture entered into in February 2023, the Company delivered solely cash to satisfy its obligations.

The Company has elected to account for all of its exchangeable senior debentures at fair value in its consolidated financial statements. Accordingly, changes in the fair value of these instruments are recognized in Realized and unrealized gains (losses) on financial instruments, net in the accompanying consolidated statements of operations. See note 4 for information related to unrealized gains (losses) on debt measured at fair value. The Company reviews the terms of all the debentures on a quarterly basis to determine whether an event has occurred to require current classification on the consolidated balance sheets.

Senior Notes

In connection with the closing of the Combination on December 18, 2020, GCI, LLC became an indirect wholly owned subsidiary of the Company. GCI, LLC is the issuer of \$600 million aggregate principal amount of 4.75% senior notes due 2028 (the "Senior Notes"). The Senior Notes were issued by GCI, LLC on October 7, 2020 and are unsecured. Interest on the Senior Notes is payable semi-annually in arrears. The Senior Notes are redeemable at the Company's option, in whole or in part, at a redemption price defined in the indenture, and accrued and unpaid interest (if any) to the date of redemption. The Senior Notes are stated net of an aggregate unamortized premium of \$23 million at December 31, 2023. Such premium is being amortized to interest expense in the accompanying consolidated statements of operations.

Senior Credit Facility

In connection with the closing of the Combination on December 18, 2020, GCI, LLC became an indirect wholly owned subsidiary of the Company. GCI, LLC is the borrower under the Senior Credit Facility (as defined below).

On October 15, 2021, GCI, LLC entered into an Eighth Amended and Restated Credit Agreement (the "Senior Credit Facility Eighth Amendment"), which includes a \$550 million revolving credit facility, with a \$25 million sublimit for standby letters of credit, that matures on October 15, 2026 and a \$250 million Term Loan A (the "Term Loan A") that matures on October 15, 2027. Additionally, the \$400 million Term Loan B (the "Term Loan B") which existed prior to the Senior Credit Facility Eighth Amendment, was repaid in full using the proceeds from the Term Loan A together with \$150 million in borrowings under the revolving credit facility. On June 12, 2023, GCI, LLC entered into Amendment No. 1 to the Eighth Amended and Restated Credit Agreement (as amended, the "Senior Credit Facility") which modified the interest rates to reference SOFR instead of LIBOR.

Following the amendment in June 2023, the revolving credit facility borrowings under the Senior Credit Facility that are alternate base rate loans bear interest at a per annum rate equal to the alternate base rate plus a margin that varies between 0.50% and 1.75% depending on GCI, LLC's total leverage ratio. The revolving credit facility borrowings under the Senior Credit Facility that are SOFR loans bear interest at a per annum rate equal to the applicable SOFR plus a Credit Spread Adjustment (as defined in the Senior Credit Facility) plus a margin that varies between 1.50% and 2.75% depending on GCI, LLC's total leverage ratio. Term Loan A borrowings that are alternate base rate loans bear interest at a per annum rate equal to the alternate base rate plus a margin that varies between 1.00% and 2.25% depending on GCI, LLC's total leverage ratio. Term Loan A borrowings that are SOFR loans bear interest at a per annum rate equal to the applicable SOFR plus a margin that varies between 2.00% and 3.25% depending on GCI, LLC's total leverage ratio. Principal payments are due quarterly on the Term Loan A equal to 0.25% of the original principal amount, which may step up to 1.25% of the original principal amount of the Term Loan A depending on GCI, LLC's secured leverage ratio. Each loan may be prepaid at any time and from time to time without penalty other than customary breakage costs. Any amounts prepaid on the revolving credit facility may be reborrowed. Prior to the amendment in

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

June 2023, all rates indexed to SOFR were previously indexed to LIBOR. The Senior Credit Facility also has a commitment fee that accrues at a per annum rate between 0.375% and 0.500% on the daily unused amount of the revolving credit facility depending on GCI, LLC's total leverage ratio.

Prior to the Senior Credit Facility Eighth Amendment in October 2021, the borrowings under the Senior Credit Facility bore interest at either the alternate base rate or LIBOR (based on an interest period selected by GCI, LLC of one month, two months, three months or six months) at the election of GCI, LLC in each case plus a margin. The revolving credit facility borrowings that were alternate base rate loans bore interest at a per annum rate equal to the alternate base rate plus a margin that varied between 0.50% and 1.75% depending on GCI, LLC's total leverage ratio. The revolving credit facility borrowings that were LIBOR loans bore interest at a per annum rate equal to the applicable LIBOR plus a margin that varied between 1.50% and 2.75% depending on GCI, LLC's total leverage ratio. Term Loan B borrowings that were alternate base rate loans bore interest at a per annum rate equal to the alternate base rate plus a margin of 1.75%. Term Loan B borrowings that were LIBOR loans bore interest at a per annum rate equal to the applicable LIBOR plus a margin of 2.75% with a LIBOR floor of 0.75%.

GCI, LLC's First Lien Leverage Ratio (as defined in the Senior Credit Facility) may not exceed 4.00 to 1.00.

The terms of the Senior Credit Facility include customary representations and warranties, customary affirmative and negative covenants and customary events of default. At any time after the occurrence of an event of default under the Senior Credit Facility, the lenders may, among other options, declare any amounts outstanding under the Senior Credit Facility immediately due and payable and terminate any commitment to make further loans under the Senior Credit Facility. The obligations under the Senior Credit Facility are secured by a security interest on substantially all of the assets of GCI, LLC and the subsidiary guarantors, as defined in the Senior Credit Facility, and on the stock of GCI Holdings.

As of December 31, 2023, there was \$244 million outstanding under the Term Loan A, \$150 million outstanding under the revolving portion of the Senior Credit Facility and \$3 million in letters of credit under the Senior Credit Facility, leaving \$397 million available for borrowing.

Wells Fargo Note Payable

In connection with the closing of the Combination on December 18, 2020, the Company assumed GCI Holdings' outstanding \$6 million under its Wells Fargo Note Payable (as defined below). Outstanding borrowings on the Wells Fargo Note Payable were \$5 million as of both December 31, 2023 and December 31, 2022.

GCI Holdings issued a note to Wells Fargo that matures on July 15, 2029 and is payable in monthly installments of principal and interest (the "Wells Fargo Note Payable"). On May 1, 2023, the Wells Fargo Note Payable was amended to update the interest rate to reference SOFR instead of LIBOR. After this amendment, the interest rate is variable at SOFR plus 1.75%. Prior to the amendment, the interest rate was variable at one month LIBOR plus 2.25%.

The note is subject to similar affirmative and negative covenants as the Senior Credit Facility. The obligations under the note are secured by a security interest and lien on the building purchased with the note.

Debt Covenants

GCI, LLC is subject to covenants and restrictions under its Senior Notes and Senior Credit Facility. The Company and GCI, LLC are in compliance with all debt maintenance covenants as of December 31, 2023.

Notes to Consolidated Financial Statements (Continued)

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Five Year Maturities

The annual principal maturities of debt, based on stated maturity dates, for each of the next five years is as follows (amounts in millions):

2024	\$ 3
2025	\$ 3
2026	\$ 1,613
2027	\$ 238
2028	\$ 601

Fair Value of Debt

The fair value of the Senior Notes was \$556 million at December 31, 2023 (Level 2).

Due to the variable rate nature of the Margin Loan, Senior Credit Facility and Wells Fargo Note Payable, the Company believes that the carrying amount approximates fair value at December 31, 2023.

(8) Leases

In 2016 and 2017, GCI Holdings sold certain tower sites and entered into a master lease agreement in which it leased back space on those tower sites. GCI Holdings determined that it is precluded from applying sales-leaseback accounting.

GCI Holdings has entered into finance lease agreements with satellite providers for transponder capacity to transmit voice and data traffic in rural Alaska. GCI Holdings is also party to finance lease agreements for an office building and certain retail store locations. GCI Holdings also leases office space, land for towers and communication facilities, satellite transponders, fiber capacity, and equipment. These leases are classified as operating leases. Operating lease right-of-use ("ROU") assets and operating lease liabilities are recognized based on the present value of the future lease payments using our incremental borrowing rate at the commencement date of the lease. If lease terms are modified, the ROU assets and operating lease liabilities are adjusted to reflect the updated future lease payments and changes in the incremental borrowing rate.

The Company has leases with remaining lease terms that range from less than one year up to 27 years. Certain of the Company's leases may include an option to extend the term of the lease with such options to extend ranging from 2 years up to 35 years. The Company also has the option to terminate certain of its leases early with such options to terminate ranging from as early as 30 days up to 14 years from December 31, 2023.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

The components of lease cost during the years ended December 31, 2023, 2022 and 2021 were as follows:

	Years ended December 31,				
	2023	2022	2021		
	am	ounts in millions			
Operating lease cost (1)	\$ 62	59	60		
Finance lease cost					
Depreciation of leased assets	\$ 1	1	1		
Total finance lease cost	\$ 1	1	1		

⁽¹⁾ Included within operating lease costs were short-term lease costs and variable lease costs, which were not material to the consolidated financial statements.

The remaining weighted-average lease term and the weighted-average discount rate were as follows:

	D	December 31,			
	2023	2022	2021		
Weighted-average remaining lease term (years):					
Finance leases	2.5	3.5	4.5		
Operating leases	4.1	3.9	4.2		
Weighted-average discount rate:					
Finance leases	4.3 %	4.3 %	4.3 %		
Operating leases	7.7 %	6.0 %	4.0 %		

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Supplemental balance sheet information related to leases was as follows:

	December 31,			
	 2023	2022		
	amounts in m	illions		
Operating leases:				
Operating lease ROU assets, net (1)	\$ 105	114		
Current operating lease liabilities (2)	\$ 45	45		
Operating lease liabilities (3)	56	65		
Total operating lease liabilities	\$ 101	110		
·	 			
Finance Leases:				
Property and equipment, at cost	\$ 8	4		
Accumulated depreciation	 (2)	(1)		
Property and equipment, net	\$ 6	3		
Current obligations under finance leases (4)	\$ 1	1		
Obligations under finance leases	1	2		
Total finance lease liabilities	\$ 2	3		

- (1) Operating lease ROU assets, net are included within the Other assets, net line item in the accompanying consolidated balance sheets.
- (2) Current operating lease liabilities are included within the Other current liabilities line item in the accompanying consolidated balance sheets.
- (3) Operating lease liabilities are included within the Other liabilities line item in the accompanying consolidated balance sheets.
- (4) Current obligations under finance leases are included within the Other current liabilities line item in the accompanying consolidated balance sheets.

Supplemental cash flow information related to leases was as follows:

	Years ended December 31,				
	2023		2022	2021	
		amo	unts in millions		
Cash paid for amounts included in the measurement of lease liabilities:					
Operating cash outflows from operating leases	\$	59	57	55	
Financing cash outflows from finance leases	\$	1	1	2	
ROU assets obtained in exchange for lease obligations					
Operating leases	\$	41	11	108	

Notes to Consolidated Financial Statements (Continued)

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Future lease payments under finance leases, operating leases and tower obligations with initial terms of one year or more at December 31, 2023 consisted of the following:

	Finance Leases		Operating Leases amounts in millions	Tower Obligations
2024	\$	1	48	8
2025		1	24	8
2026		_	22	8
2027		_	8	8
2028		_	5	9
Thereafter		_	13	91
Total payments		2	120	132
Less: imputed interest			19	48
Total liabilities	\$	2	101	84

(9) Income Taxes

Income tax benefit (expense) consists of:

	Years ended December 31,			
		2023	2022	2021
		am	ounts in millions	
Current:				
Federal	\$	(30)	(222)	(233)
State and local		(2)	(1)	
		(32)	(223)	(233)
Deferred:				
Federal		(160)	(51)	4
State and local		(8)	(3)	11
		(168)	(54)	15
Income tax benefit (expense)	\$	(200)	(277)	(218)

Notes to Consolidated Financial Statements (Continued)

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Income tax benefit (expense) differs from the amounts computed by applying the applicable U.S. federal income tax rate of 21% as a result of the following:

	Years ended December 31,			
		2023		2021
		am	ounts in millions	
Computed expected tax benefit (expense)	\$	(186)	(322)	(200)
State and local taxes, net of federal income taxes		(8)	(4)	(8)
Nontaxable equity contribution		4	41	2
Change in valuation allowance		_	1	4
Sale of consolidated subsidiary		2	15	_
Change in tax rate - other		_	_	14
Executive compensation		(5)	(7)	(14)
Litigation settlement		_	_	(22)
Other		(7)	(1)	6
Income tax (expense) benefit	\$	(200)	(277)	(218)

For the year ended December 31, 2023, the significant reconciling items, as noted in the table above, are primarily due to state income taxes and certain non-deductible expenses.

For the year ended December 31, 2022, the significant reconciling items, as noted in the table above, are primarily due to the nontaxable decrease in the fair value of the indemnification obligation owed to Qurate Retail and tax benefits from the sale of stock of a subsidiary.

For the year ended December 31, 2021, the significant reconciling items, as noted in the table above, are primarily due to a non-deductible litigation settlement and non-deductible executive compensation, partially offset by tax benefits from a change in effective tax rate used to measure deferred taxes on certain Charter shares.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

The tax effects of temporary differences and tax attributes that give rise to significant portions of the deferred income tax assets and deferred income tax liabilities are presented below:

	December 31,		
	2023	2022	
	amounts in	millions	
Deferred tax assets:			
Tax loss and tax credit carryforwards	\$ 36	32	
Accrued stock-based compensation	15	16	
Deferred revenue	27	20	
Operating lease liabilities	28	31	
Other accrued liabilities	7	28	
Other future deductible amounts	35	41	
Total deferred tax assets	 148	168	
Less: valuation allowance	(1)	(1)	
Net deferred tax assets	 147	167	
Deferred tax liabilities:			
Investments	(1,871)	(1,688)	
Fixed assets	(196)	(201)	
Intangible assets	(262)	(276)	
Debt	(5)	(10)	
Operating lease ROU assets	(29)	(32)	
Total deferred tax liabilities	(2,363)	(2,207)	
Net deferred tax asset (liability)	\$ (2,216)	(2,040)	

The Company's valuation allowance was unchanged in 2023.

At December 31, 2023, Liberty Broadband had deferred tax assets of \$36 million for federal and state net operating losses, interest expense carryforwards and tax credit carryforwards. Of the \$36 million, \$32 million are carryforwards with no expiration. The remaining carryforwards expire at certain future dates. These carryforwards are expected to be utilized prior to expiration, except for \$1 million which based on current projections, may expire unused and accordingly are subject to a valuation allowance. The carryforwards that are expected to be utilized begin to expire in 2028.

As of December 31, 2023, the Company had not recorded tax reserves related to unrecognized tax benefits for uncertain tax positions.

As of December 31, 2023, Liberty Broadband's federal tax years prior to 2020 are closed. However, because Liberty Broadband generated a net operating loss ("NOL") in 2016, 2017, 2018, and 2019, utilization of the NOLs in future years is still subject to adjustment. Liberty Broadband's 2020 and 2021 tax years are not under IRS examination. Liberty Broadband's 2022 and 2023 tax years are being examined currently as part of the IRS's Compliance Assurance Process ("CAP") program. Because Liberty Broadband's ownership of Charter is less than the required 80%, Charter is not consolidated with Liberty Broadband for federal income tax purposes. As of December 31, 2023, all GCI tax years prior to 2020 are closed. However, because GCI generated NOLs in tax years prior to 2020, utilization of the NOLs in future years are subject to adjustment. GCI Liberty's 2020 tax year is not currently under IRS examination, but remains "open" until the statute of limitations expires on October 15, 2024. Prior to the March 9, 2018 GCI Liberty split-off from Qurate Retail, certain GCI Liberty businesses were part of the Qurate Retail, Inc. consolidated federal tax group. Qurate Retail's tax years prior to 2019 are closed for federal income tax purposes. Various states are currently examining Qurate Retail's prior years' state income tax returns.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

(10) Stockholders' Equity

Preferred Stock

Liberty Broadband's preferred stock is issuable, from time to time, with such designations, preferences and relative participating, optional or other rights, qualifications, limitations or restrictions thereof, as shall be stated and expressed in a resolution or resolutions providing for the issue of such preferred stock adopted by Liberty Broadband's board of directors.

Liberty Broadband Series A Cumulative Redeemable Preferred Stock ("Liberty Broadband Preferred Stock") was issued as a result of the Combination on December 18, 2020. Each share of Series A Cumulative Redeemable Preferred Stock of GCI Liberty outstanding immediately prior to the closing of the Combination was converted into one share of newly issued Liberty Broadband Preferred Stock. The Company is required to redeem all outstanding shares of Liberty Broadband Preferred Stock out of funds legally available, at the liquidation price plus all unpaid dividends (whether or not declared) accrued from the most recent dividend payment date through the redemption date, on the first business day following March 8, 2039. There were 7,300,000 shares of Liberty Broadband Preferred Stock authorized and 7,183,812 shares issued and outstanding at December 31, 2023. An additional 42,700,000 shares of preferred stock of the Company are authorized and are undesignated as to series. The Liberty Broadband Preferred Stock is accounted for as a liability on the Company's consolidated balance sheets because it is mandatorily redeemable. As a result, all dividends paid on the Liberty Broadband Preferred Stock are recorded as interest expense in the Company's consolidated statements of operations. Liberty Broadband Preferred Stock has one-third of a vote per share.

The liquidation price is measured per share and shall mean the sum of (i) \$25, plus (ii) an amount equal to all unpaid dividends (whether or not declared) accrued with respect to such share have been added to and then remain part of the liquidation price as of such date. The fair value of Liberty Broadband Preferred Stock of \$203 million was recorded at the time of the Combination. The fair value of Liberty Broadband Preferred Stock as of December 31, 2023 was \$158 million (Level 1).

The holders of shares of Liberty Broadband Preferred Stock are entitled to receive, when and as declared by the Liberty Broadband board of directors, out of legally available funds, preferential dividends that accrue and cumulate as provided in the certificate of designations for the Liberty Broadband Preferred Stock.

Dividends on each share of Liberty Broadband Preferred Stock accrue on a daily basis at a rate of 7.00% per annum of the liquidation price.

Accrued dividends are payable quarterly on each dividend payment date, which is January 15, April 15, July 15, and October 15 of each year, commencing January 15, 2021. If Liberty Broadband fails to pay cash dividends on the Liberty Broadband Preferred Stock in full for any four consecutive or non-consecutive dividend periods then the dividend rate shall increase by 2.00% per annum of the liquidation price until cured. On December 13, 2023, the Company announced that its board of directors had declared a quarterly cash dividend of approximately \$0.44 per share of Liberty Broadband Preferred Stock which was paid on January 16, 2024 to shareholders of record of the Liberty Broadband Preferred Stock at the close of business on January 2, 2024.

Common Stock

Liberty Broadband's Series A common stock ("LBRDA") has one vote per share, Liberty Broadband's Series B common stock ("LBRDB") has ten votes per share and Liberty Broadband's Series C common stock ("LBRDK") has no votes per share (except as otherwise required by applicable law). Each share of the Series B common stock is exchangeable at the option of the holder for one share of Series A common stock. All series of our common stock participate on an equal basis with respect to dividends and distributions.

As of December 31, 2023, Liberty Broadband reserved 4 million shares of LBRDB and LBRDK common stock for issuance under exercise privileges of outstanding stock Awards.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Purchases of Common Stock

During the year ended December 31, 2023, the Company repurchased 3 million shares of LBRDA and LBRDK for aggregate cash consideration of \$227 million. There were no repurchases of LBRDB during the year ended December 31, 2023.

During the year ended December 31, 2022, the Company repurchased 24 million shares of LBRDA and LBRDK for aggregate cash consideration of \$2.9 billion. There were no repurchases of LBRDB during the year ended December 31, 2022.

During the year ended December 31, 2021, the Company repurchased 26 million shares of LBRDA and LBRDK for aggregate cash consideration of \$4.3 billion under the authorized repurchase program. There were no repurchases of LBRDB during the year ended December 31, 2021.

All of the foregoing shares obtained have been retired and returned to the status of authorized and available for issuance. As of December 31, 2023, the Company had approximately \$1.8 billion available to be used for share repurchases under the Company's share repurchase program.

Exchange Agreement with Chairman

On June 13, 2022, Liberty Broadband entered into an Exchange Agreement with its Chairman of the board of directors, John C. Malone, and a revocable trust of which Mr. Malone is the sole trustee and beneficiary (the "JM Trust") (the "Exchange Agreement"), whereby, among other things, Mr. Malone agreed to an arrangement under which his aggregate voting power in the Company would not exceed 49% (the "Target Voting Power") plus 0.5% (under certain circumstances).

The Exchange Agreement provides for exchanges by the Company and Mr. Malone or the JM Trust of shares of LBRDB for shares of LBRDK in connection with certain events, including (i) any event that would result in a reduction in the outstanding votes that may be cast by holders of the Company's voting securities or an increase of Mr. Malone's beneficially-owned voting power in the Company (an "Accretive Event"), in each case, such that Mr. Malone's voting power in the Company would exceed the Target Voting Power plus 0.5%; or (ii) from and after the occurrence of any Accretive Event, in connection with any event that would result in an increase in the outstanding votes that may be cast by holders of the Company's voting securities or a decrease of Mr. Malone's beneficially-owned voting power in the Company (a "Dilutive Event"), in each case, such that Mr. Malone's voting power in the Company falls below the Target Voting Power less 0.5%. Additionally, the Exchange Agreement contains certain provisions with respect to fundamental events at the Company, meaning any combination, consolidation, merger, exchange offer, split-off, spin-off, rights offering or dividend, in each case, as a result of which holders of LBRDB are entitled to receive securities of the Company, securities of another person, property or cash, or a combination thereof.

In connection with an Accretive Event, Mr. Malone or the JM Trust will be required to exchange with the Company shares of LBRDB (as exchanged, the "Exchanged Series B Shares") for an equal number of shares of LBRDK (as exchanged, the "Exchanged Series C Shares") so as to maintain Mr. Malone's voting power as close as possible to, without exceeding, the Target Voting Power, on the terms and subject to the conditions of the Exchange Agreement.

In connection with a Dilutive Event, Mr. Malone and the JM Trust may exchange the Exchanged Series C Shares with the Company for an equal number of shares of LBRDB equal to the lesser of (i) the number of shares of LBRDB which would maintain Mr. Malone's voting power as close as possible to, without exceeding, the Target Voting Power and (ii) the number of Exchanged Series B Shares at such time, on the terms and subject to the conditions of the Exchange Agreement.

Under the Exchange Agreement, the JM Trust exchanged 215,647 shares of LBRDB for the same number of LBRDK on June 13, 2022, and exchanged 211,255 shares of LBRDB for the same number of LBRDK on July 19, 2022. Additionally, the JM Trust exchanged 54,247 shares of LBRDB for the same number of LBRDK on January 23, 2023.

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(11) Stock-Based Compensation

Included in Selling, general and administrative expenses in the accompanying consolidated statements of operations are \$34 million, \$37 million and \$41 million of stock-based compensation during the years ended December 31, 2023, 2022 and 2021, respectively.

Incentive Plans

Liberty Broadband grants, to certain of its directors, employees and employees of its subsidiaries, restricted stock units ("RSUs") and stock options to purchase shares of its common stock (collectively, "Awards"). The Company measures the cost of employee services received in exchange for an equity classified Award (such as stock options and restricted stock) based on the grant-date fair value ("GDFV") of the Award and recognizes that cost over the period during which the employee is required to provide service (usually the vesting period of the Award). The Company measures the cost of employee services received in exchange for a liability classified Award based on the current fair value of the Award and re-measures the fair value of the Award at each reporting date.

Pursuant to the Liberty Broadband 2019 Omnibus Incentive Plan, as amended, the Company may grant Awards to be made in respect of a maximum of 6.0 million shares of Liberty Broadband common stock.

Awards generally vest over 1-5 years and have a term of 7-10 years. Liberty Broadband issues new shares upon exercise of equity awards.

Grants

During the years ended December 31, 2023, 2022 and 2021, Liberty Broadband granted 129 thousand, 136 thousand and 167 thousand options, respectively, to purchase shares of LBRDK to our Chief Executive Officer. Such options had a weighted average GDFV of \$27.83, \$39.10 and \$40.05 per share, respectively, at the time they were granted and vested on December 29, 2023, December 30, 2022 and December 31, 2021, respectively.

During the years ended December 31, 2023, 2022 and 2021, Liberty Broadband granted to its employees 407 thousand, 11 thousand and 30 thousand options, respectively, to purchase shares of LBRDK. Such options had a weighted average GDFV of \$27.68, \$30.43 and \$40.61 per share, respectively, and vest between one and three years.

During the years ended December 31, 2023, 2022 and 2021, Liberty Broadband granted 21 thousand, 24 thousand and 26 thousand options, respectively, to purchase shares of LBRDK to its non-employee directors with a weighted average GDFV of \$27.73, \$30.43 and \$41.71 per share, respectively, which mainly cliff vest over a one year vesting period.

During the years ended December 31, 2023, 2022 and 2021, Liberty Broadband granted 227 thousand, 227 thousand and 79 thousand time-based and performance-based RSUs, respectively, of LBRDK to its employees, employees of subsidiaries and non-employee directors. The RSUs had a weighted average GDFV of \$84.02, \$120.70 and \$153.34 per share, respectively. The time-based RSUs generally vest between one and five years for employees and employees of subsidiaries and in one year for non-employee directors. The performance-based RSUs mainly cliff vest one year from the month of grant, subject to the satisfaction of certain performance objectives. Performance objectives, which are subjective, are considered in determining the timing and amount of the compensation expense recognized. When the satisfaction of the performance objectives becomes probable, the Company records compensation expense. The probability of satisfying the performance objectives is assessed at the end of each reporting period.

There were no options to purchase shares of LBRDA or LBRDB granted during 2023, 2022 and 2021.

The Company has calculated the GDFV for all of its equity classified awards and any subsequent re-measurement of its liability classified awards using the Black-Scholes Model. The Company estimates the expected term of the Awards based on

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

historical exercise and forfeiture data. For grants made in 2023, 2022 and 2021, the range of expected terms was 5.1 to 5.3 years. The volatility used in the calculation for Awards is based on the historical volatility of Liberty Broadband common stock. For grants made in 2023, 2022 and 2021, the range of volatilities was 27.1% to 31.3%. The Company uses a zero dividend rate and the risk-free rate for Treasury Bonds with a term similar to that of the subject option.

Outstanding Awards

The following table presents the number and weighted average exercise price ("WAEP") of options to purchase Liberty Broadband common stock granted to certain officers, employees and directors of the Company, as well as the weighted average remaining life and aggregate intrinsic value of the options.

	LBRDK (in thousands)	_	WAEP	Weighted average remaining contractual life (in years)	Aggres intrin valu (in mill	sic e
Outstanding at January 1, 2023	3,602	\$	98.62	, ,		
Granted	558	\$	77.98			
Exercised	(60)	\$	69.76			
Forfeited/Cancelled	(37)	\$	95.42			
Outstanding at December 31, 2023	4,063	\$	96.23	3.1	\$	50
Exercisable at December 31, 2023	3,113	\$	88.02	2.4	\$	49

As of December 31, 2023, there were no outstanding options to purchase shares of LBRDA common stock.

During the year ended December 31, 2023, Liberty Broadband had 69 thousand LBRDB options with a WAEP of \$97.21 that were forfeited. During the years ended December 31, 2022 and 2021, the Company's Chief Executive Officer exercised 37 thousand and 370 thousand LBRDB options at an exercise price of \$97.21 per share for each exercise. Immediately following these exercises, the resulting LBRDB shares were exchanged for the same number of LBRDK shares pursuant to the terms of a stipulation and order where Mr. Maffei agreed to exchange LBRDB shares for LBRDK shares following the exercise of certain stock options. As of December 31, 2023, Liberty Broadband had 246 thousand LBRDB options outstanding and exercisable at a WAEP of \$95.98, a weighted average remaining contractual life of 0.7 years and aggregate intrinsic value of zero.

As of December 31, 2023, the total unrecognized compensation cost related to unvested Awards was approximately \$38 million. Such amount will be recognized in the Company's consolidated statements of operations over a weighted average period of approximately 1.6 years.

As of December 31, 2023, Liberty Broadband reserved approximately 4 million shares of LBRDB and LBRDK for issuance under exercise privileges of outstanding stock options.

Exercises

The aggregate intrinsic value of all options exercised during the years ended December 31, 2023, 2022 and 2021 was \$1 million, \$3 million and \$27 million, respectively.

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

Restricted Stock and Restricted Stock Units

The aggregate fair value of all LBRDA and LBRDK RSAs and RSUs that vested during the years ended December 31, 2023, 2022 and 2021 was \$12 million, \$18 million and \$28 million, respectively.

As of December 31, 2023, the Company had approximately 371 thousand unvested RSAs and RSUs of LBRDA and LBRDK held by certain directors, officers and employees of the Company with a weighted average GDFV of \$101.09 per share.

(12) Employee Benefit Plans

Subsidiaries of the Company sponsor 401(k) plans, which provide their employees an opportunity to make contributions to a trust for investment. The Company's subsidiaries make matching contributions to their plans based on a percentage of the amount contributed by employees. Employer cash contributions to all plans aggregated \$11 million, \$12 million and \$12 million for the years ended December 31, 2023, 2022 and 2021, respectively.

(13) Commitments and Contingencies

Guaranteed Service Levels

Certain customers have guaranteed levels of service with varying terms. In the event the Company is unable to provide the minimum service levels, it may incur penalties or issue credits to customers.

Charter and Liberty Broadband - Delaware Litigation

In August 2015, a purported stockholder of Charter, Matthew Sciabacucchi, filed a lawsuit in the Delaware Court of Chancery, on behalf of a putative class of Charter stockholders, challenging the transactions involving Charter, Time Warner Cable Inc., Advance/Newhouse Partnership, and Liberty Broadband announced by Charter on May 26, 2015. The lawsuit, which named as defendants Liberty Broadband, Charter and the board of directors of Charter, alleged that the transactions resulted from breaches of fiduciary duty by Charter's directors and that Liberty Broadband improperly benefited from the challenged transactions at the expense of other Charter stockholders. On January 12, 2023, the parties reached a tentative agreement to settle the lawsuit. The court approved the settlement at a fairness hearing on June 22, 2023 and Liberty Broadband paid approximately \$38 million to Charter as a result of the settlement, which had been accrued as a current liability in the consolidated balance sheet and recorded as a litigation settlement expense within operating income in the fourth quarter of 2022.

General Litigation

The Company has contingent liabilities related to legal and tax proceedings and other matters arising in the ordinary course of business. Although it is reasonably possible the Company may incur losses upon conclusion of such matters, an estimate of any loss or range of loss cannot be made. In the opinion of management, it is expected that amounts, if any, which may be required to satisfy such contingencies will not be material in relation to the accompanying consolidated financial statements.

Hollywood Firefighters' Pension Fund, et al. v. GCI Liberty, Inc., et al. On October 9, 2020, a putative class action complaint was filed by two purported GCI Liberty stockholders in the Court of Chancery of the State of Delaware under the caption Hollywood Firefighters' Pension Fund, et al. v. GCI Liberty, Inc., et al., Case No. 2020-0880. A new version of the complaint was filed on October 11, 2020. The complaint named as defendants GCI Liberty, as well as the members of the GCI Liberty board of directors. The complaint alleged, among other things, that Mr. Gregory B. Maffei, a director and the President and Chief Executive Officer of Liberty Broadband and, prior to the Combination, GCI Liberty, and Mr. John C. Malone, the Chairman of the board of directors of Liberty Broadband and, prior to the Combination, GCI Liberty, in their purported capacities as controlling stockholders and directors of GCI Liberty, and the other directors of GCI Liberty, breached their fiduciary duties by approving the Combination. The complaint also alleged that various prior and current relationships among members of the

Notes to Consolidated Financial Statements (Continued)

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GCI Liberty special committee, Mr. Malone and Mr. Maffei rendered the members of the GCI Liberty special committee not independent.

During 2021 and in advance of the expenditure of significant time and costs, the parties began negotiations with the class of plaintiffs for a potential settlement of this action and entered into an agreement in principle to settle the litigation in return for a settlement payment of \$110 million, which was recorded as a litigation settlement expense within operating income in the consolidated statements of operations. During the second half of 2021, the Company made a payment of \$110 million in accordance with the settlement agreement and an additional \$9 million mootness fee, which was also recorded as a litigation expense within operating income in the consolidated statements of operation.

In addition, during the third quarter of 2021, the Company agreed to final settlement amounts with all five of its insurance carriers for insurance recoveries of approximately \$24 million, which is recorded net of the litigation settlement expense on the consolidated statement of operations.

Rural Health Care ("RHC") Program

GCI Holdings receives support from various USF programs including the RHC Program. The USF programs are subject to change by regulatory actions taken by the FCC, interpretations of or compliance with USF program rules, or legislative actions. Changes to any of the USF programs that GCI Holdings participates in could result in a material decrease in revenue and accounts receivable, which could have an adverse effect on GCI Holdings' business and the Company's financial position, results of operations or liquidity. The following paragraphs describe certain separate matters related to the RHC Program that impact or could impact the revenue earned and receivables recognized by the Company. As of December 31, 2023, the Company had net accounts receivable from the RHC Program in the amount of approximately \$74 million, which is included within Trade and other receivables in the consolidated balance sheets.

FCC Rate Reduction. In November 2017, the Universal Service Administrative Company requested further information in support of the rural rates charged to a number of GCI Holdings' RHC customers in connection with the funding requests for the year that ran July 1, 2017 through June 30, 2018. On October 10, 2018, GCI Holdings received a letter from the FCC's Wireline Competition Bureau ("Bureau") notifying it of the Bureau's decision to reduce the rural rates charged to RHC customers for the funding year that ended on June 30, 2018 by approximately 26% resulting in a reduction of total support payments of \$28 million. The FCC also informed GCI Holdings that the same cost methodology used for the funding year that ended on June 30, 2018 would be applied to rates charged to RHC customers in subsequent funding years. In response to the Bureau's letter, GCI Holdings filed an Application for Review with the FCC.

On October 20, 2020, the Bureau issued two separate letters approving the cost-based rural rates GCI Holdings historically applied when recognizing revenue for services provided to its RHC customers for the funding years that ended on June 30, 2019 and June 30, 2020. GCI Holdings collected approximately \$175 million in accounts receivable relating to these two funding years during the year ended December 31, 2021. GCI Holdings also filed an Application for Review of these determinations. Subsequently, GCI identified rates for similar services provided by a competitor that would justify higher rates for certain GCI satellite services in the funding years that ended on June 30, 2018, June 30, 2019, and June 30, 2020. GCI submitted that information to the Bureau on September 7, 2021.

On June 25, 2020, GCI Holdings submitted cost studies with respect to a number of its rates for services provided to its RHC customers for the funding year ended June 30, 2021, which require approval by the Bureau. GCI Holdings further updated those studies on November 12, 2020, to reflect the completion of the bidding season for that funding year. On May 24, 2021, the FCC approved the cost studies submitted by GCI Holdings for the funding year ended June 30, 2021. Subsequently, on August 16, 2021, GCI submitted a request for approval of rates for 17 additional sites, all of which the FCC approved.

RHC Program Funding Cap. The RHC program has a funding cap for each individual funding year that is annually adjusted for inflation, and which the FCC can increase by carrying forward unused funds from prior funding years. In recent

Notes to Consolidated Financial Statements (Continued)

December 31, 2023, 2022 and 2021

years, including the current year, this funding cap has not limited the amount of funding received by participants; however, management continues to monitor the funding cap and its potential impact on funding in future years.

Enforcement Bureau and Related Inquiries. On March 23, 2018, GCI Holdings received a letter of inquiry and request for information from the Enforcement Bureau of the FCC relating to the period beginning January 1, 2015 and including all future periods. This included inquiry into the rates charged by GCI Holdings and other aspects related to the Enforcement Bureau's review of GCI Holdings' compliance with program rules, which are discussed separately below. The ongoing uncertainty in program funding, as well as the uncertainty associated with the rate review, could have an adverse effect on its business, financial position, results of operations or liquidity.

In the fourth quarter of 2019, GCI Holdings became aware of potential RHC Program compliance issues related to certain of GCI Holdings' currently active and expired contracts with certain of its RHC customers. The Company and its external experts performed significant and extensive procedures to determine whether GCI Holdings' currently active and expired contracts with its RHC customers would be deemed to be in compliance with the RHC Program rules. GCI Holdings notified the FCC of the potential compliance issues in the fourth quarter of 2019.

On May 28, 2020, GCI Holdings received a second letter of inquiry from the Enforcement Bureau in the same matter noted above. This second letter, which was in response to a voluntary disclosure made by GCI Holdings to the FCC, extended the scope of the original inquiry to also include various questions regarding compliance with the records retention requirements related to the (i) original inquiry and (ii) RHC Program.

On December 17, 2020, GCI Holdings received a Subpoena Duces Tecum from the FCC's Office of the Inspector General requiring production of documents from January 1, 2009 to the present related to a single RHC customer and related contracts, information regarding GCI Holdings' determination of rural rates for a single customer, and to provide information regarding persons with knowledge of pricing practices generally.

On April 21, 2021, representatives of the Department of Justice ("DOJ") informed GCI Holdings that a qui tam action had been filed in the Western District of Washington arising from the subject matter under review by the Enforcement Bureau. The DOJ was investigating whether GCI Holdings submitted false claims and/or statements in connection with GCI's participation in the FCC's RHC Program. On July 14, 2021, the DOJ issued a Civil Investigative Demand with regard to the qui tam action.

The FCC's Enforcement Bureau and GCI Holdings held discussions regarding GCI Holdings potential RHC Program compliance issues related to certain of its contracts with its RHC customers for which GCI Holdings had previously recognized an estimated liability for a probable loss of approximately \$12 million in 2019 for contracts that were deemed probable of not complying with the RHC Program rules. During the year ended December 31, 2022, GCI Holdings recorded an additional estimated settlement expense of \$15 million relating to a settlement offer made by GCI Holdings resulting in a total estimated liability of \$27 million.

The DOJ and GCI Holdings held discussions regarding the qui tam action whereby the DOJ clarified that its investigation relates to the years from 2010 through 2019 and alleged that GCI Holdings had submitted false claims under the RHC Program during this time period. During the year ended December 31, 2022, GCI Holdings recorded a \$14 million estimated settlement expense to reflect discussions and settlement offers that GCI Holdings made to the DOJ.

Separately, during the third quarter of 2022, GCI Holdings became aware of possible RHC Program compliance issues relating to potential conflicts of interest identified in the historical competitive bidding process with respect to certain of its contracts with its RHC customers. GCI Holdings notified the FCC's Enforcement Bureau of the potential compliance issues; however, the Company is unable to assess the ultimate outcome of the potential compliance issues and is unable to reasonably estimate any range of loss or possible loss.

Notes to Consolidated Financial Statements (Continued)

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On May 10, 2023, GCI entered into a final settlement agreement with both the FCC and the DOJ to resolve all Enforcement Bureau and Related Inquiries discussed above except for the matter that was separately identified during the third quarter of 2022, which continues to remain outstanding. The settlement with the FCC and the DOJ resulted in a total cash payment of \$41 million of which \$27 million was paid to the FCC and \$14 million was paid to the DOJ in 2023, which had been previously recorded as liabilities. Additionally, as part of the settlement with the FCC and the DOJ, GCI Holdings withdrew all of its open Applications for Review related to FCC rate reduction matters.

Off-Balance Sheet Arrangements

Liberty Broadband did not have any off-balance sheet arrangements, except for those matters discussed above, that have, or are reasonably likely to have, a current or future effect on the Company's financial condition, results of operations, liquidity, capital expenditures or capital resources.

(14) Segment Information

Liberty Broadband identifies its reportable segments as (A) those consolidated companies that represent 10% or more of its consolidated annual revenue, annual Adjusted OIBDA or total assets and (B) those equity method affiliates whose share of earnings or losses represent 10% or more of Liberty Broadband's annual pre-tax earnings (losses).

Liberty Broadband evaluates performance and makes decisions about allocating resources to its operating segments based on financial measures such as revenue and Adjusted OIBDA. In addition, Liberty Broadband reviews nonfinancial measures such as subscriber growth.

For segment reporting purposes, Liberty Broadband defines Adjusted OIBDA as revenue less operating expenses and selling, general and administrative expenses (excluding stock-based compensation). Liberty Broadband believes this measure is an important indicator of the operational strength and performance of its businesses by identifying those items that are not directly a reflection of each business' performance or indicative of ongoing business trends. In addition, this measure allows management to view operating results and perform analytical comparisons and benchmarking between businesses and identify strategies to improve performance. This measure of performance excludes depreciation and amortization, stock based compensation, separately reported litigation settlements and restructuring and impairment charges that are included in the measurement of operating income pursuant to GAAP. Accordingly, Adjusted OIBDA should be considered in addition to, but not as a substitute for, operating income, net earnings, cash flow provided by operating activities and other measures of financial performance prepared in accordance with GAAP. Liberty Broadband generally accounts for intersegment sales and transfers as if the sales or transfers were to third parties, that is, at current prices.

For the year ended December 31, 2023, Liberty Broadband has identified the following consolidated company and equity method investment as its reportable segments:

- GCI Holdings a wholly owned subsidiary of the Company that provides a full range of data, wireless, video, voice, and managed services to residential, businesses, governmental entities, and educational and medical institutions primarily in Alaska.
- Charter an equity method investment that is one of the largest providers of cable services in the United States, offering a variety of entertainment, information and communications solutions to residential and commercial customers.

Liberty Broadband's operating segments are strategic business units that offer different products and services. They are managed separately because each segment requires different technologies, distribution channels and marketing strategies. The accounting policies of the segments that are also consolidated companies are the same as those described in the Company's summary of significant accounting policies in the Company's annual financial statements. We have included amounts attributable to Charter in the tables below. Although Liberty Broadband owns less than 100% of the outstanding shares of Charter, 100% of

Notes to Consolidated Financial Statements (Continued)

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the Charter amounts are included in the schedule below and subsequently eliminated in order to reconcile the account totals to the Liberty Broadband consolidated financial statements.

Performance Measures

	Years ended December 31,								
		2023		2022		2021			
		Adjusted Adjusted Revenue OIBDA Revenue OIBDA amounts in millions		Revenue	Adjusted OIBDA				
GCI Holdings	\$	981	361	969	358	970	354		
Charter		54,607	21,947	54,022	21,335	51,682	20,301		
Corporate and other		_	(24)	6	(31)	18	(49)		
		55,588	22,284	54,997	21,662	52,670	20,606		
Eliminate equity method									
affiliate		(54,607)	(21,947)	(54,022)	(21,335)	(51,682)	(20,301)		
Consolidated Liberty Broadband	\$	981	337	975	327	988	305		

Other Information

			December 31, 2023		December 31, 2022			
	Total assets				Total assets	Investments in affiliates	Capital expenditures	
				amounts in m	illions			
GCI Holdings	\$	3,340	_	222	3,378	_	181	
Charter		147,193	_	11,115	144,523	_	9,376	
Corporate and other		12,301	12,116	_	11,764	11,433	_	
		162,834	12,116	11,337	159,665	11,433	9,557	
Eliminate equity method								
affiliate		(147,193)		(11,115)	(144,523)		(9,376)	
Consolidated Liberty								
Broadband	\$	15,641	12,116	222	15,142	11,433	181	

Revenue by Geographic Area

	Yea	rs ended December 31,	
	 2023	2022	2021
	 	amounts in millions	
United States	\$ 981	975	986
Other countries	_	_	2
	\$ 981	975	988

Notes to Consolidated Financial Statements (Continued)

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The following table provides a reconciliation of Adjusted OIBDA to Operating income (loss) and earnings (loss) before income taxes:

	Years ended December 31,			
		2023	2022	2021
			amounts in millions	
Consolidated segment Adjusted OIBDA	\$	337	327	305
Stock-based compensation		(34)	(37)	(41)
Depreciation and amortization		(230)	(262)	(267)
Litigation settlement, net of recoveries		_	(67)	(95)
Operating income (loss)		73	(39)	(98)
Interest expense		(206)	(133)	(117)
Share of earnings (loss) of affiliates, net		1,155	1,326	1,194
Gain (loss) on dilution of investment in affiliate		(60)	(63)	(102)
Realized and unrealized gains (losses) on financial instruments, net		(101)	334	67
Gain (loss) on dispositions, net		_	179	12
Other, net		27	(70)	(6)
Earnings (loss) before income taxes	\$	888	1,534	950

PART III

The following required information is incorporated by reference to our definitive proxy statement for our 2024 Annual Meeting of Stockholders presently scheduled to be held in the second quarter of 2024:

<u>Item 10.</u>	Directors, Executive Officers and Corporate Governance
<u>Item 11.</u>	Executive Compensation
<u>Item 12.</u>	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters
<u>Item 13.</u>	Certain Relationships and Related Transactions, and Director Independence
<u>Item 14.</u>	Principal Accountant Fees and Services

We expect to file our definitive proxy statement for our 2024 Annual Meeting of Shareholders with the Securities and Exchange Commission on or before April 29, 2024.

PART IV.

Item 15. Exhibits and Financial Statement Schedules.

(a)(1) Financial Statements

Included in Part II of this report:

	<u>rage No.</u>
Liberty Broadband Corporation:	
Reports of Independent Registered Public Accounting Firm (KPMG LLP, Denver, CO, Auditor Firm ID: 185)	II-20 - 21
Consolidated Balance Sheets, December 31, 2023 and 2022	II-23
Consolidated Statements of Operations, Years ended December 31, 2023, 2022 and 2021	II-25
Consolidated Statements of Comprehensive Earnings (loss), Years ended December 31, 2023, 2022 and 2021	II-26
Consolidated Statements of Cash Flows, Years ended December 31, 2023, 2022 and 2021	II-27
Consolidated Statements of Equity, Years ended December 31, 2023, 2022 and 2021	II-28
Notes to Consolidated Financial Statements, December 31, 2023, 2022 and 2021	II-29

(a)(2) Financial Statement Schedules

- (i) All schedules have been omitted because they are not applicable, not material or the required information is set forth in the financial statements or notes thereto.
- (ii) The audited consolidated financial statements of Charter Communications, Inc. as of December 31, 2023 and 2022, and for each of the years ended December 31, 2023, 2022 and 2021, as well as the accompanying notes thereto and the related Report of Independent Registered Public Accounting Firm, are contained in Charter Communications, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on February 2, 2024 and are incorporated herein by reference as Exhibit 99.1.

(a)(3) Exhibits

Listed below are the exhibits which are filed as a part of this Report (according to the number assigned to them in Item 601 of Regulation S-K):

- 2 Plan of Acquisition, Reorganization, Arrangement, Liquidation or Succession:
 - 2.1 Agreement and Plan of Merger, dated as of August 6, 2020, by and among GCI Liberty, Inc., the Registrant, Grizzly Merger Sub 1, LLC, and Grizzly Merger Sub 2, Inc. (incorporated by reference to Annex A to the Prospectus filed by the Registrant on October 30, 2020 with the SEC pursuant to Rule 424(b)(3) of the Securities Act (File No. 333-248854) (the "Prospectus")).
- 3 Articles of Incorporation and Bylaws:
 - 3.1 Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on November 10, 2014 (File No. 001-36713)).
 - 3.2 Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on August 13, 2015 (File No. 001-3671)).
 - 3.3 <u>Certificate of Designations of Series A Cumulative Redeemable Preferred Stock of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed December 22, 2020 (File No. 001-36713)).</u>

4 - Instrument	ts Defining the Rights of Securities Holders, including Indentures:
4.1	Specimen Certificate for shares of Series A Common Stock of the Registrant (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 filed on July 25, 2014 (File No. 333-197619) (the "S-1")).
4.2	Specimen Certificate for shares of Series B Common Stock of the Registrant (incorporated by reference to Exhibit 4.2 to the S-1).
4.3	Specimen Certificate for shares of Series C Common Stock of the Registrant (incorporated by reference to Exhibit 4.3 to the S-1).
4.4	Margin Loan Agreement, dated as of August 31, 2017, among LBC Cheetah 6, LLC, as Borrower, various lenders and Bank of America, N.A., as Calculation Agent and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 filed on November 1, 2017 (File No. 001-36713)).
4.5	Form of Amendment No. 1 to Margin Loan Agreement, dated as of August 24, 2018 (incorporated by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018 filed on November 1, 2018 (File No. 001-36713)).
4.6	Form of Amendment No. 2 to Margin Loan Agreement and Amendment No. 1 to Collateral Account Control Agreement, dated as of August 19, 2019 (incorporated by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 filed on November 1, 2019 (File No. 001-36713)).
4.7	Form of Amendment No. 3 to Margin Loan Agreement and Amendment No. 2 to Collateral Account Control Agreement, dated as of August 12, 2020 (incorporated by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 filed on November 4, 2020 (File No. 001-36713)).
4.8	Form of Amendment No. 4 to Margin Loan Agreement and Amendment No. 4 to Collateral Account Control Agreement, dated as of May 12, 2021 (incorporated by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021 filed on August 6, 2021 (File No. 001-36713)).
4.9	Form of Amendment Agreement to Margin Loan Agreement, dated as of August 31, 2017, among LBC Cheetah 6, LLC, as Borrower, and the various parties thereto, dated as of September 30, 2022 (incorporated by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 filed on November 4, 2022 (File No. 001-36713).
4.10	Form of Amendment No. 6 to Margin Loan Agreement, dated as of November 8, 2022 (incorporated by reference to Exhibit 4.10 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2022 filed on February 17, 2023 (File No. 001-36713)).
4.11	Form of Amendment No. 7 to Margin Loan Agreement, dated as of May 17, 2023, among LBC Cheetah 6, LLC, as Borrower, and the other various parties thereto (incorporated by reference to Exhibit 4.1 of the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023 filed on August 4, 2023 (File No. 001-36713)).
4.12	Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (incorporated by reference to Exhibit 4.8 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2020 filed on February 26, 2021 (File No. 001-36713) (the "2020 Form 10-K")).
4.13	Specimen Certificate for shares of Series A Cumulative Redeemable Preferred Stock of the Registrant (incorporated by reference to Exhibit 4.3 to the Registrant's Amendment No. 2 to its Registration Statement on Form S-4 filed on October 29, 2020 (File No. 333-248854)).

4.14 The Registrant undertakes to furnish to the Securities and Exchange Commission, upon request, a copy of all instruments with respect to long-term debt not filed herewith.

10 - Material Contracts:

10.1 +Liberty Broadband Corporation 2014 Omnibus Incentive Plan (Amended and Restated as of March 11, 2015) (incorporated by reference to Annex A to the Registrant's Proxy Statement on Schedule 14A filed on April 22, 2015 (File No. 001-36713)). 10.2 Second Amended and Restated Stockholders Agreement, dated May 23, 2015, by and among Charter Communications, Inc., CCH J, LLC, the Registrant, and Advance/Newhouse Partnership (incorporated by reference to Annex C to CCH J, LLC's Registration Statement on Form S-4 filed on June 26, 2015 (File No. 333-205240)). 10.3 Letter Agreement to the Second Amended and Restated Stockholders Agreement, dated May 18, 2016, by and among the Registrant, Advance/Newhouse Partnership, CCH I, LLC and Charter Communications, Inc. (incorporated by reference to Exhibit 7(p) to Amendment No. 3 to the Registrant's Schedule 13D in respect of common stock of Charter Communications, Inc., filed on May 26, 2016 (File No. 005-57191)). Aircraft Time Sharing Agreements, dated as of November 6, 2015, by and between the Registrant and Liberty Media 10.4 Corporation (incorporated by reference to Exhibit 10.19 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2015 filed on February 12, 2016 (File No. 001-36713) (the "2015 10-K")). 10.5 +Form of Non-Qualified Stock Option Agreement under the Liberty Broadband Corporation 2014 Omnibus Incentive Plan (Amended and Restated as of March 11, 2015) (incorporated by reference to Exhibit 10.21 to the 2015 10-K). Form of Restricted Stock Award Agreement under the Liberty Broadband Corporation 2014 Omnibus Incentive Plan 10.6 +(Amended and Restated as of March 11, 2015) (incorporated by reference to Exhibit 10.22 to the 2015 10-K). 10.7 Registration Rights Agreement, dated as of May 18, 2016, by and among the Registrant, Advance/Newhouse Partnership and Charter Communications, Inc. (incorporated by reference to Exhibit 10.3 to Charter Communications, Inc.'s Current Report on Form 8-K filed on May 20, 2016 (File No. 001-33664)). 10.8 +Amendment, dated March 12, 2018, of certain of the Registrant's incentive plans (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 filed on May 2, 2018 (File No. 001-36713)). 10.9 Form of Amended and Restated Indemnification Agreement between the Registrant and its executive officers/directors (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 filed on May 2, 2019 (File No. 001-36713)). 10.10 +Liberty Broadband Corporation 2019 Omnibus Incentive Plan (incorporated by reference to Annex A to the Registrant's Proxy Statement on Schedule 14A, filed on April 18, 2019 (File No. 001-36713)). 10.11 +Form of Non-Qualified Stock Option Agreement under the Liberty Broadband Corporation 2019 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.17 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2019 filed on February 3, 2020 (File No. 001-36713) (the "2019 10-K")). $10.12 \pm$ Form of Performance-Based Restricted Stock Units Award Agreement under the Liberty Broadband Corporation 2019 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.18 to the 2019 10-K). 10.13 +Services Agreement, dated as of November 4, 2014, by and between Liberty Media Corporation and the Registrant

(File No. 001-36713)).

(incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, filed on November 14, 2014

10.14+	Form of First Amendment to Services Agreement, effective as of December 13, 2019, between Liberty Media Corporation and Qurate Retail, Inc., the Registrant, GCI Liberty, Inc. and Liberty TripAdvisor Holdings, Inc. (incorporated by reference to Exhibit 10.20 to the 2019 10-K).
10.15+	Executive Employment Agreement, dated effective as of December 13, 2019, between Liberty Media Corporation and Gregory B. Maffei (incorporated by reference to Exhibit 10.1 to Liberty Media Corporation's Current Report on Form 8-K, filed on December 19, 2019 (File No. 001-35707)).
10.16+	Form of Annual Option Award Agreement between the Registrant and Gregory B. Maffei under the Liberty Broadband Corporation 2019 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on December 19, 2019 (Filed No. 001-36713) (the "December 2019 8-K")).
10.17+	Form of Annual Performance-based Restricted Stock Unit Award Agreement between the Registrant and Gregory B. Maffei under the Liberty Broadband Corporation 2019 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.4 to the December 2019 8-K).
10.18+	Form of Upfront Award Agreement between the Registrant and Gregory B. Maffei under the Liberty Broadband Corporation 2019 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.5 to the December 2019 8-K).
10.19	Assumption and Joinder Agreement to Tax Sharing Agreement, made and entered into as of August 6, 2020, by and among the Registrant, GCI Liberty, Inc. and Ourate Retail, Inc. (incorporated by reference to Annex H to the Prospectus).
10.20	Tax Sharing Agreement, dated as of March 9, 2019, by and between GCI Liberty, Inc. and Qurate Retail, Inc. (incorporated by reference to Exhibit 10.1 to GCI Liberty, Inc.'s Current Report on Form 8-K filed on March 14, 2018 (File No. 001-38385) (the "March 2018 8-K")).
10.21	Assumption and Joinder Agreement to Indemnification Agreement, made and entered into as of August 6, 2020, by and among the Registrant, GCI Liberty, Inc., Qurate Retail, Inc., Liberty Interactive LLC and LV Bridge, LLC (incorporated by reference to Annex I to the Prospectus).
10.22	Indemnification Agreement, dated as of March 9, 2018, by and among GCI Liberty, Inc., Liberty Interactive Corporation, Liberty Interactive LLC and LV Bridge, LLC (incorporated by reference to Exhibit 10.2 to the March 2018 8-K).
10.23	Assignment and Assumption Agreement, dated as of August 6, 2020, by and among the Registrant, GCI Liberty, Inc., Grizzly Merger Sub 1, LLC, Qurate Retail, Inc. and Liberty Interactive LLC (incorporated by reference to Annex J to the Prospectus).
10.24+	GCI Liberty, Inc. Transitional Stock Adjustment Plan (incorporated by reference to Exhibit 99.1 to GCI Liberty, Inc.'s Registration Statement on Form S-8 filed on March 15, 2018 (File No. 333-223667)).
10.25+	GCI Liberty, Inc. 2018 Omnibus Incentive Plan (incorporated by reference to Annex A to GCI Liberty's Proxy Statement on Schedule 14A filed on May 22, 2018 (File No. 001-38385)).
10.26+	Amendment to the Liberty Broadband Corporation 2019 Omnibus Incentive Plan (incorporated by reference to Exhibit 99.7 to the Registrant's Registration Statement on Form S-8 filed on December 22, 2020 (File No. 333-251570)).
10.27+	Form of Nonqualified Stock Option Agreement under the Liberty Broadband Corporation 2019 Omnibus Incentive Plan, as amended from time to time, for Nonemployee Directors (incorporated by reference to Exhibit 10.35 to the 2020 Form 10-K).
10.28+	Form of Restricted Stock Units Agreement under the Liberty Broadband Corporation 2019 Omnibus Incentive Plan, as amended from time to time, for Nonemployee Directors (incorporated by reference to Exhibit 10.36 to the 2020 Form 10-K).

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10.29+	Form of Nonqualified Stock Option Agreement under the Liberty Broadband Corporation 2019 Omnibus Incentive Plan, as amended from time to time, for certain officers (incorporated by reference to Exhibit 10.37 to the 2020 Form 10-K).
10.30+	Form of Performance-Based Restricted Stock Units Agreement under the Liberty Broadband Corporation 2019 Omnibus Incentive Plan, as amended from time to time, for certain officers (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021 filed on May 7, 2021 (File No. 001-36713)).
10.31	Exchange Agreement, dated as of June 13, 2022, by and among John C. Malone, the John C. Malone 1995 Revocable Trust U/A DTD 3/6/1995 and the Registrant (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on June 13, 2022 (File No. 001-36713)).
21	Subsidiaries of Liberty Broadband Corporation.*
23.1	Consent of KPMG LLP*
23.2	Consent of KPMG LLP.*
31.1	Rule 13a-14(a)/15d - 14(a) Certification.*
31.2	Rule 13a-14(a)/15d - 14(a) Certification.*
32	Section 1350 Certification.**
97	<u>Liberty Broadband Corporation Policy for the Recovery of Erroneously Awarded Compensation*</u>
99.1	Audited consolidated financial statements of Charter Communications, Inc. as of December 31, 2023 and 2022 and for each of the years ended December 31, 2023, 2022 and 2021 (incorporated by reference to Charter Communications, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2023 (File No. 001-33664), filed on February 2, 2024).
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded with the Inline XBRL document.*
101.SCH	Inline XBRL Taxonomy Extension Schema Document.*
101.CAL	Inline XBRL Taxonomy Calculation Linkbase Document.*
101.LAB	Inline XBRL Taxonomy Label Linkbase Document.*
101.PRE	Inline XBRL Taxonomy Presentation Linkbase Document.*
101.DEF	Inline XBRL Taxonomy Definition Document.*
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

^{*} Filed herewith.

Item 16. Form 10-K Summary.

Not applicable.

^{**} Furnished herewith.

⁺ This document has been identified as a management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

	LIBERTY BROADBAND CORPORATION		
Date: February 16, 2024	By:	/s/ GREGORY B. MAFFEI	
		Gregory B. Maffei	
		President and Chief Executive Officer	
Date: February 16, 2024	By:	/s/ BRIAN J. WENDLING	
		Brian J. Wendling	
		Chief Accounting Officer and Principal Financial Officer	

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the date indicated.

Signature	<u>Title</u>	<u>Date</u>
/s/John C. Malone John C. Malone	Chairman of the Board and Director	February 16, 2024
/s/Gregory B. Maffei Gregory B. Maffei	_ Director, Chief Executive Officer and President	February 16, 2024
/s/Brian J. Wendling Brian J. Wendling	Chief Accounting Officer and Principal Financial Officer	February 16, 2024
/s/J. David Wargo J. David Wargo	_ Director	February 16, 2024
/s/Richard R. Green Richard R. Green	Director	February 16, 2024
/s/John E. Welsh III John E. Welsh III	_ Director	February 16, 2024
/s/Sue Ann Hamilton Sue Ann Hamilton	Director	February 16, 2024
/s/Gregg L. Engles Gregg L. Engles	_ Director	February 16, 2024
/s/ Julie D. Frist Julie D. Frist	Director	February 16, 2024

As of December 31, 2023

A table of subsidiaries of Liberty Broadband Corporation is set forth below, indicating as to each the state or jurisdiction of organization and the names under which such subsidiaries do business. Subsidiaries not included in the table are inactive or, considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary.

Entity Name	Domicile
Alaska United Fiber System Partnership	AK
BBN, Inc.	AK
Bortek, LLC	DE
Broadband Holdco, LLC	DE
Celebrate Interactive LLC (fka Celebrate Interactive Holdings, LLC)	DE
Communication Capital, LLC (fka Communication Capital Corp.)	DE
Cycle30, Inc.	AK
Denali Media Anchorage, Corp.	AK
Denali Media Holdings, Corp.	AK
Denali Media Juneau, Corp.	AK
Denali Media Southeast, Corp.	AK
GCI Cable, Inc.	AK
GCI Communication Corp.	AK
GCI Fiber Communication Co., Inc.	AK
GCI Holdings, LLC	DE
GCI NADC LLC	AK
GCI SADC LLC	AK
GCI Wireless Holdings, LLC	AK
GCI, LLC	DE
Grizzly Merger Sub 1, LLC	DE
Integrated Logic, LLC	AK
Kodiak-Kenai Cable Company, LLC	AK
Kodiak Kenai Fiber Link, Inc.	AK
LBC Cheetah 1, LLC	DE
LBC Cheetah 5, LLC	DE
LBC Cheetah 6, LLC	DE
LMC Cheetah 1, LLC	DE
LMC Cheetah 4, LLC	DE
LMC Social, LLC	DE
LV Bridge, LLC	DE
Potter View Development Co., Inc.	AK
Provide Gifts, Inc.	DE
Supervision, Inc.	AK
The Alaska Wireless Network, LLC	DE
Unicom, Inc.	AK
United Utilities, Inc.	AK
United2, LLC	AK
United-KUC, Inc.	AK
Ventures Holdco, LLC	DE

Ventures Holdco II, LLC	DE
Yukon Tech, Inc.	AK
Yukon Telephone Company, Inc.	AK

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (Nos. 333-200436, 333-200438, 333-233258, 333-251570, and 333-276092) on Form S-8 of our reports dated February 16, 2024, with respect to the consolidated financial statements of Liberty Broadband Corporation and the effectiveness of internal control over financial reporting.

/s/ KPMG LLP

Denver, Colorado February 16, 2024

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statement Nos. 333-200436, 333-200438, 333-233258, 333-251570 and 333-276092 on Form S-8 of Liberty Broadband Corporation of our report dated February 1, 2024, with respect to the consolidated financial statements of Charter Communications, Inc., which report is incorporated by reference in the Form 10-K of Liberty Broadband Corporation dated February 16, 2024.

/s/ KPMG LLP

St. Louis, Missouri February 15, 2024

CERTIFICATION

I, Gregory B. Maffei, certify that:

- 1. I have reviewed this annual report on Form 10-K of Liberty Broadband Corporation, Inc.;
- 2. Based on my knowledge, this annual 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 annual report;
- 3. Based on my knowledge, the financial statements and other financial information included in this annual 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 annual report;
- 4. The registrant's other certifying officers 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 we have:
 - 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 annual report is being prepared;
 - 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;
 - evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about
 the effectiveness of the disclosure controls and procedures as of the end of the period covered by this annual report based on such
 evaluation; and
 - d) disclosed in this annual 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; and
- 5. The registrant's other certifying officers 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 function):
 - 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 16, 2024
	/s/ GREGORY B. MAFFEI
	Gregory B. Maffei
	President and Chief Executive Officer

CERTIFICATION

I, Brian J. Wendling, certify that:

- 1. I have reviewed this annual report on Form 10-K of Liberty Broadband Corporation, Inc.;
- 2. Based on my knowledge, this annual 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 annual report;
- Based on my knowledge, the financial statements and other financial information included in this annual 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 annual report;
- 4. The registrant's other certifying officers 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 we have:
 - 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 annual
 report is being prepared;
 - 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;
 - evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our
 conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this
 annual report based on such evaluation; and
 - d) disclosed in this annual 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; and
- 5. The registrant's other certifying officers 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 function):
 - 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 16, 2024			
	/s/ BRIAN J. WENDLING			
	Brian J. Wendling	_		
	Chief Accounting Officer and Principal Financial Officer			

Certification

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Liberty Broadband Corporation, a Delaware corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Annual Report on Form 10-K for the period ended December 31, 2023 (the "Form 10-K") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated:	February 16, 2024	/s/ GREGORY B. MAFFEI		
		Gregory B. Maffei		
		President and Chief Executive Officer		
Dated:	February 16, 2024	/s/ BRIAN J. WENDLING		
		Brian J. Wendling		
		Chief Accounting Officer and Principal Financial Officer		

The foregoing certification is being furnished solely pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code) and is not being filed as part of the Form 10-K or as a separate disclosure document.

POLICY FOR THE RECOVERY OF ERRONEOUSLY AWARDED COMPENSATION

- 1. <u>Purpose</u>. The purpose of this Policy is to describe circumstances in which the Company will recover Erroneously Awarded Compensation and the process for such recovery. This Policy is intended to comply with (a) Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, as codified in Section 10D of the Exchange Act, and implemented by Rule 10D-1 thereunder adopted by the Commission and (b) Rule 5608 of the Nasdaq Stock Market LLC Rules.
- Administration. This Policy shall be administered by the Compensation Committee. Any determinations made by the Compensation Committee shall be final and binding on all affected individuals.
- 3. <u>Definitions</u>. For purposes of this Policy, the following capitalized terms shall have the meanings set forth below.
 - a. "Audit Committee" means the Audit Committee of the Board.
 - b. "Board" means the Board of Directors of the Company.
 - c. "Commission" means the United States Securities and Exchange Commission.
 - d. "Company" means Liberty Broadband Corporation, a Delaware corporation.
 - e. "Compensation Committee" means the Compensation Committee of the Board.
- f. "Compensation Eligible for Recovery" means Incentive-based Compensation received by an individual:
 - i. after beginning service as an Executive Officer,
 - ii. who served as an Executive Officer at any time during the performance period for the applicable Incentive-based Compensation (regardless of whether such individual is serving as an Executive Officer at the time the Erroneously Awarded Compensation is required to be repaid to the Company),
 - iii. while the Company had a class of securities listed on a national securities exchange or a national securities association,
 - iv. during the applicable Recovery Period, and
 - v. on or after the Effective Date.
 - g. "Effective Date" means October 2, 2023.

- h. "*Erroneously Awarded Compensation*" means the Compensation Eligible for Recovery less the amount of such compensation as it would have been determined based on the restated amounts, computed without regard to any taxes paid.
 - i. "Exchange Act" means the Securities Exchange Act of 1934, as amended.
- j. "Executive Officer" means the Company's principal executive officer, principal financial officer, principal accounting officer (or if there is no such accounting officer, the controller), any vice president of the Company in charge of a principal business unit, division, or function (such as sales, administration or finance) and any other officer who performs a significant policy-making function, and any other person who performs similar policy-making functions for the Company. For purposes of this policy, Executive Officers would include, at a minimum, executive officers identified pursuant to 17 C.F.R. 229.401(b).
- k. "Financial Reporting Measure" means measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures. Stock price and total shareholder return are considered Financial Reporting Measures. For the avoidance of doubt, a Financial Reporting Measure need not be presented within the financial statements or included in a filing with the Commission.
- 1. "Incentive-based Compensation" means any compensation, including, for the avoidance of doubt, any cash bonus, cash award, option, equity award, or other non-equity incentive award, in each case, that is granted, earned, or vested based wholly or in part upon the attainment of a Financial Reporting Measure.
 - m. "NASDAQ" means the Nasdaq Stock Market LLC.
- n. "Policy" means this Policy for the Recovery of Erroneously Awarded Compensation, as the same may be amended or amended and restated from time to time.
- o. "*Recovery Period*" means the three completed fiscal years immediately preceding the Restatement Date and any transition period (that results from a change in the Company's fiscal year) of less than nine months within or immediately following those three completed fiscal years.
 - p. "Restatement" means an accounting restatement:
 - due to material noncompliance of the Company with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or
 - ii. that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.
 - q. "Restatement Date" means the earlier of:

- i. the date the Audit Committee concludes, or reasonably should have concluded, that the Company is required to prepare a Restatement, or
- ii. the date a court, regulator, or other legally authorized body directs the Company to prepare a Restatement.

4. Recovery of Erroneously Awarded Compensation.

- a. The Principal Financial Officer and Chief Accounting Officer or Corporate Controller of the Company shall promptly report to the Audit Committee any instance in which the Company is required to prepare a Restatement.
- b. Upon learning of a required Restatement, the Audit Committee shall determine the Restatement Date and shall promptly report to the Compensation Committee such determination.
- c. The Principal Financial Officer and Chief Accounting Officer or Corporate Controller (or another appropriate officer or third party designated by the Compensation Committee) shall promptly (but in any event within 90 days following the Restatement) calculate the Erroneously Awarded Compensation for each affected individual, which calculation shall be subject to Compensation Committee approval. For purposes of calculating Erroneously Awarded Compensation:
 - Incentive-based Compensation shall be deemed received in the Company's fiscal period during which the Financial Reporting Measure specified in the Incentive-based Compensation award is attained, even if the payment or grant of the Incentive-based Compensation occurs after the end of that period.
 - ii. Incentive-based Compensation based on (or derived from) stock price or total shareholder return, where the amount of Erroneously Awarded Compensation is not subject to mathematical recalculation directly from the information in a Restatement, shall be based on a reasonable estimate of the effect of the Restatement on the stock price or total shareholder return upon which the Incentive-based Compensation was received. The Company shall maintain documentation of the determination of such reasonable estimate and provide such documentation to NASDAQ.
- d. Promptly following the Compensation Committee's approval of the Erroneously Awarded Compensation calculated by the Principal Financial Officer and Chief Accounting Officer or Corporate Controller (or another appropriate officer or third party designated by the Compensation Committee), the Company shall notify in writing each individual who received Erroneously Awarded Compensation of the amount of Erroneously Awarded Compensation received by such individual and shall demand payment or return, as applicable, of such Erroneously Award Compensation.

- e. The Company shall demand recovery and recover Erroneously Awarded Compensation in compliance with this Policy except to the extent that the Compensation Committee determines that (I) recovery of the Erroneously Awarded Compensation would be duplicative of compensation recovered by the Company from the individual pursuant to Section 304 of the Sarbanes-Oxley Act or pursuant to other recovery obligations (in which case, the amount of Erroneously Awarded Compensation shall be appropriately reduced to avoid such duplication), or (II) recovery would be impracticable, and one of the following conditions applies:
 - the direct expense paid to a third party to assist in enforcing this Policy would exceed the amount to be recovered. Before concluding that it would be impracticable to recover any amount of Erroneously Awarded Compensation based on expense of enforcement, the Company must make a reasonable attempt to recover such Erroneously Awarded Compensation, document such reasonable attempt(s) to recover, and provide that documentation to NASDAQ;
 - ii. recovery would violate home country law where that law was adopted prior to November 28, 2022. Before concluding that it would be impracticable to recover any amount of Erroneously Awarded Compensation based on violation of home country law, the Company must obtain an opinion of home country counsel, acceptable to NASDAQ, that recovery would result in such a violation, and must provide such opinion to NASDAQ; or
 - iii. recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and regulations thereunder.
- f. Except as provided in Section 4(e), in no event may the Company accept repayment from the affected individual of less than the full amount of the Erroneously Awarded Compensation received by such individual.
- g. The Compensation Committee shall determine, in its sole discretion, the method of recovering any Erroneously Awarded Compensation pursuant to this Policy, taking into account all facts and circumstances (including the time value of money and the cost to shareholders of delayed recovery), so long as such method complies with the terms of Rule 5608 of the Nasdaq Stock Market LLC Rules. If the Compensation Committee determines that an appropriate method of recovery is one other than the prompt repayment by the affected individual in cash or property, the Company may offer to enter into a repayment agreement with the affected individual (in a form and with terms reasonably acceptable to the Compensation Committee).
- h. If the affected individual fails to repay to the Company when due the full amount of the Erroneously Awarded Compensation received by such affected individual, the

Company shall take all actions reasonable and appropriate to recover the full amount of the Erroneously Awarded Compensation from the affected individual.

- 5. <u>Disclosure</u>. The Company shall file all disclosures with respect to this Policy in accordance with the requirements of the securities laws, including the disclosure required by the applicable Commission filings.
- 6. <u>No Indemnification</u>. The Company shall not indemnify any current or former Executive Officer against the loss of Erroneously Awarded Compensation, and shall not pay, or reimburse any current or former Executive Officers for premiums for any insurance policy to fund such Executive Officer's potential recovery obligations.
 - 7. Effective Date. This Policy shall be effective as of the Effective Date.
- 8. Amendment and Interpretation. The Compensation Committee may amend this Policy from time to time in its discretion and shall amend this Policy as it deems necessary or advisable to reflect the regulations adopted by the Commission and to comply with any rules or standards adopted by NASDAQ. The Compensation Committee may at any time in its sole discretion, supplement, amend or terminate any provision of this Policy in any respect as the Compensation Committee determines to be necessary or appropriate. The Compensation Committee shall interpret and construe this Policy and make all determinations necessary or advisable for the administration of this Policy. It is intended that this Policy be interpreted in a manner that is consistent with the requirements of Section 10D of the Exchange Act and Rule 10D-1 thereunder and Rule 5608 of the Nasdaq Stock Market LLC Rules and any other applicable rules adopted by the Commission.
- 9. Other Recoupment Rights. The Compensation Committee intends that this Policy will be applied to the fullest extent of the law. The Compensation Committee may require that any employment agreement, equity award agreement or similar agreement entered into on or after the Effective Date shall, as a condition to the grant of any benefit thereunder, require the party thereto to agree to abide by the terms of this Policy or implement arrangements designed to facilitate the administration hereof. Although not a prerequisite to enforcement of this Policy, each Executive Officer shall be required to sign and return to the Company the Acknowledgment Form attached hereto as Exhibit A pursuant to which such Executive Officer will agree to be bound by the terms and comply with this Policy. Any right of recovery under this Policy is in addition to, and not in lieu of, any other remedies or rights of recovery that may be available to the Company pursuant to the terms of any employment agreement, equity award agreement, or similar agreement and any other legal remedies available to the Company.
- 10. <u>Successors</u>. This Policy shall be binding and enforceable against all current and former Executive Officers and their beneficiaries, heirs, executors, administrators or other legal representatives.

EXHIBIT A

LIBERTY BROADBAND CORPORATION

POLICY FOR THE RECOVERY OF ERRONEOUSLY AWARDED COMPENSATION

ACKNOWLEDGEMENT FORM

By signing below, the undersigned acknowledges and confirms the undersigned has received and reviewed a copy of the Liberty Broadband Corporation Policy for the Recovery of Erroneously Awarded Compensation (the "*Policy*"). Capitalized terms used but not otherwise defined in this Acknowledgement Form shall have the meanings ascribed to such terms in the Policy.

By signing this Acknowledgement Form, the undersigned acknowledges and agrees that the undersigned is and will continue to be subject to the Policy and that the Policy will apply both during and after the undersigned's employment with the Company. Further, by signing below, the undersigned agrees to abide by the terms of the Policy, including, without limitation, by returning any Erroneously Awarded Compensation (as defined in the Policy) to the Company to the extent required by, and in a manner permitted by, the Policy. [For the avoidance of doubt, any recovery affected under the Policy shall not constitute grounds to terminate the undersigned's employment for "Good Reason" (or any term of similar meaning) under any employment or compensation arrangements, agreements, plans or programs.]

Signed	 	
Name (Printed)	 	
Date	 	