

SHENANDOAH TELECOMMUNICATIONS CO/VA/  
Form 10-K  
March 05, 2013

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UNITED STATES OF AMERICA  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D. C. 20549  
FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2012

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File No.: 000-09881  
SHENANDOAH TELECOMMUNICATIONS COMPANY  
(Exact name of registrant as specified in its charter)  
VIRGINIA  
(State or other jurisdiction of incorporation or organization)

500 Shentel Way, Edinburg, Virginia  
(Address of principal executive offices)  
54-1162807  
(I.R.S. Employer Identification No.)

22824  
(Zip Code)

(540) 984-4141 (Registrant's telephone number, including area code)

SECURITIES REGISTERED PURSUANT TO SECTION 12(B) OF THE ACT:

Common Stock (No Par Value)  
(Title of Class)

NASDAQ Global Select Market  
(Name of Exchange on which Registered)

SECURITIES REGISTERED PURSUANT TO SECTION 12(G) OF THE ACT: NONE

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

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

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

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

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

Exchange Act. Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

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

The aggregate market value of the registrant's voting stock held by non-affiliates of the registrant at June 30, 2012 based on the closing price of such stock on the Nasdaq Global Select Market on such date was approximately \$307,000,000.

The number of shares of the registrant's common stock outstanding on February 13, 2013 was 23,962,224.

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#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement relating to its 2013 annual meeting of shareholders (the "2013 Proxy Statement") are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. The 2013 Proxy Statement will be filed with the U.S. Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The words “may,” “will,” “anticipate,” “estimate,” “expect,” “intend,” “p,” “continue” and similar expressions as they relate to us or our management are intended to identify these forward-looking statements. All statements by us regarding our expected financial position, revenues, cash flow and other operating results, business strategy, financing plans, forecasted trends related to the markets in which we operate and similar matters are forward-looking statements. Our expectations expressed or implied in these forward-looking statements may not turn out to be correct. Our results could be materially different from our expectations because of various risks, including the risks discussed in this report under “Business” and “Risk Factors.”

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PART I

Some of the information contained in this report concerning the markets and industry in which we operate is derived from publicly available information and from industry sources. Although we believe that this publicly available information and the information provided by these industry sources are reliable, we have not independently verified the accuracy of any of this information.

Unless we indicate otherwise, references in this report to “we,” “us,” “our” and “the Company” means Shenandoah Telecommunications Company and its subsidiaries.

ITEM 1. BUSINESS

Overview

Shenandoah Telecommunications Company is a diversified telecommunications holding company that, through its operating subsidiaries, provides both regulated and unregulated telecommunications services to end-user customers and other communications providers in Virginia, West Virginia, central Pennsylvania and western Maryland. The Company offers a comprehensive suite of voice, video and data communications services based on the products and services provided by the Company’s operating subsidiaries.

As of December 31, 2011, the Company had twelve operating subsidiaries. During 2012, the Company implemented an internal reorganization to improve operating efficiencies and achieve other benefits. As part of the reorganization, we converted our two Wireless segment subsidiaries, our two Cable segment subsidiaries, and one of our Wireline segment subsidiaries, from corporations to limited liability companies. We consolidated our two Cable segment limited liability companies and merged four of our other Wireline segment subsidiaries into Shentel Communications, LLC. These conversions and mergers had no impact on the composition of our reported segments. As of December 31, 2012, the Company had a total of seven operating subsidiaries.

Operating Segments

The Company provides integrated voice, video and data communications services to end-user customers and other communications providers. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision makers. The Company has three reportable segments: (1) Wireless, (2) Cable, and (3) Wireline; and a fourth segment, Other, which primarily consists of parent company activities.

Wireless Segment

The business of the Wireless segment is conducted principally by the Company’s Shenandoah Personal Communications, LLC (“PCS”) subsidiary. As a Sprint PCS Affiliate of Sprint Nextel, this subsidiary provides digital wireless service to a portion of a four-state area extending from Harrisburg, York and Altoona, Pennsylvania, to Harrisonburg, Virginia. Through the Company’s Shenandoah Mobile, LLC subsidiary, the Wireless segment provides tower rental space to affiliates and non-affiliates in the Company’s PCS service area. This subsidiary owns 150 towers, leases tower space to PCS and had 216 leases with other wireless communications providers at December 31, 2012.

PCS has offered personal communications services through a digital wireless telephone and data network since 1995. In 1999, this subsidiary executed a management agreement with Sprint Nextel. The network, which utilizes code division multiple access, or CDMA, currently covers 269 miles of Interstates 81 and 83, and a 177 mile section

of the Pennsylvania Turnpike between Pittsburgh and Philadelphia, as well as many of the communities near these routes. This territory includes approximately 2.4 million residents, and our network currently covers more than 86% of them. Effective February 1, 2012, the Company announced that it had amended its Management Agreement with Sprint Nextel Corporation in connection with the Company's commitment to build a 4G LTE network in the company's service area. Under its agreements with Sprint Nextel, the Company is the exclusive Sprint PCS Affiliate of Sprint Nextel in the Company's territory, providing wireless mobility communications network products and services in the 800 and 1900 megahertz spectrum ranges. The Company had 262,892 postpaid PCS customers at December 31, 2012, an increase of 5.7% compared to December 31, 2011. Effective July 8, 2010, the Company announced that it had amended its Management Agreement with Sprint Nextel Corporation to allow the Company to begin selling Sprint Nextel's Boost and Virgin Mobile prepaid wireless services in its territory. The Company also purchased from Sprint Nextel the right to receive a share of revenues from approximately 50,000 Virgin Mobile prepaid wireless subscribers receiving service in its territory for \$138 per subscriber. The Company had 128,177 prepaid wireless customers at December 31, 2012, an increase of 21,077 from December 31, 2011. Of the Company's total operating revenues, 58.6% in 2012, 56.6% in 2011 and 60.0% in 2010 were generated by or through Sprint Nextel and its customers using the Company's portion of Sprint Nextel's nationwide PCS network. No other customer relationship generated more than 2.5% of the Company's total operating revenues in 2012, 2011 or 2010.

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Under the Sprint Nextel agreements, Sprint Nextel provides the Company significant support services, such as customer service, billing, collections, long distance, national network operations support, inventory logistics support, use of the Sprint Nextel brand names, national advertising, national distribution and product development.

The Company records its postpaid PCS revenues, with the exception of certain roaming and equipment sales revenues, based on the net PCS revenues billed by Sprint Nextel, net of an 8% Management Fee and a Net Service Fee retained by Sprint Nextel. The Net Service Fee, which began at 8.8% effective with an amendment to the Management Agreement effective January 1, 2007, was increased to 12.0% effective June 1, 2010. Effective July 1, 2013, the cap on this charge increases to 14%. Net PCS revenues billed by Sprint Nextel consist of gross monthly recurring charges for service, net of both recurring and non-recurring customer credits, account write offs and other billing adjustments. In the computation of advance billing deferred revenue, neither the Management Fee nor the Net Service Fee are deferred.

Prepaid revenues are recorded net of a 6% Management Fee retained by Sprint Nextel. The Company is charged separately for support services provided by Sprint Nextel to prepaid customers. These charges are calculated based on Sprint Nextel's national averages for its prepaid programs, and are billed per user or per gross additional customer, as appropriate. The Company is also charged for its proportionate share of customer acquisition costs and handset subsidies.

The Sprint Nextel agreements require the Company to maintain certain minimum network performance standards and to meet other performance requirements. The Company was in compliance in all material respects with these requirements as of December 31, 2012.

Cable Segment

The business of the Company's Cable segment has historically been conducted by its Shenandoah Cable Television Company ("Shenandoah Cable") subsidiary. This subsidiary provides coaxial cable-based television service throughout portions of Shenandoah County, Virginia, under franchise agreements with the County and the incorporated municipalities within the County. Through Shenandoah Cable's wholly-owned subsidiary Shentel Cable Company ("Shentel Cable"), in recent years the Company has expanded its cable franchise holdings into West Virginia, southern and southwestern Virginia, and western Maryland. As described above, during 2012, the Company initially converted these corporations to limited liability companies and subsequently merged them, leaving Shenandoah Cable Television, LLC as the surviving subsidiary as of December 31, 2012.

Effective December 1, 2008, Shentel Cable acquired certain cable assets and customers from Rapid Communications, LLC. Effective July 30, 2010, Shentel Cable completed its acquisition of the cable operations of JetBroadband Holdings, LLC ("JetBroadBand"). Effective December 1, 2010, Shentel Cable completed its acquisition of cable operations from Cequel III Communications II LLC, doing business as Suddenlink Communications ("Suddenlink").

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The Company acquired these cable networks with the intention to upgrade and integrate the networks, with the goal of improving existing services and offering expanded video, voice and internet services. As of December 31, 2012, the Company has upgraded all but one of the markets acquired in these transactions, and the Company expects to complete the remaining market upgrade during 2013. Most of these markets are connected by a fiber network of 2,077 miles.

There were 114,891 cable revenue generating units at December 31, 2012. A revenue generating unit consists of each separate service (video, voice and internet) subscribed to by a customer.

### Wireline Segment

The business of the Company's Wireline segment is conducted primarily by its Shenandoah Telephone Company subsidiary. This subsidiary provides both regulated and unregulated telephone services and leases fiber optic facilities primarily throughout the Northern Shenandoah Valley.

Shenandoah Telephone Company provides telephone services to approximately 22,297 customers as of December 31, 2012, primarily in Shenandoah County and small service areas in Rockingham, Frederick, and Warren counties in Virginia, and in northwestern Augusta County, Virginia. This subsidiary provides access for interexchange carriers to the local exchange network and switching for voice products offered through the Cable segment. This subsidiary has a 20 percent ownership interest in ValleyNet, which offers fiber network facility capacity to business customers and other communications providers in western, central, and northern Virginia, as well as the Interstate 81 corridor from Johnson City, Tennessee to Carlisle, Pennsylvania.

The Wireline segment also includes Shentel Communications, LLC, which was created through the merger of four other Wireline subsidiaries into Shentel Communications, LLC. The following services are provided through this entity:

- Internet access to customers in the northern Shenandoah Valley and surrounding areas. The Internet service has approximately 996 dial-up customers and 12,567 digital subscriber line, or DSL, customers at December 31, 2012. DSL service is available to all customers in the Company's regulated telephone service area. Many of the Company's remaining dial-up customers are located outside the Company's regulated telephone service area where the Company does not provide DSL service.
- Operation of the Maryland and West Virginia portions of a fiber optic network along the Interstate 81 corridor. In conjunction with the telephone subsidiary, Shentel Communications, LLC is associated with the ValleyNet fiber optic network. Shentel Communications, LLC's fiber network also extends south from Harrisonburg, Virginia, through Covington, Virginia, then westward to Charleston, West Virginia. This extension of the fiber network was acquired to connect to and support the Company's cable business, and the provision of facility leases of fiber optic capacity to end users, in these areas.
- Resale of long distance service for calls placed to locations outside the regulated telephone service area by telephone customers. There were approximately 10,175 long distance customers at December 31, 2012. This operation purchases billing and collection services from the telephone company subsidiary similar to other long distance providers. In addition, Shentel Communications, LLC, markets facility leases of fiber optic capacity, owned by itself and Shenandoah Telephone Company, in surrounding counties and into Herndon, Virginia.



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### Other Segment

The Other segment includes Shenandoah Telecommunications Company, which provides investing and management services to its subsidiaries. This segment also includes certain corporate and general overhead costs historically charged to Converged Services as described below.

Additional information concerning the Company's operating segments is set forth in Note 16 of the Company's consolidated financial statements appearing elsewhere in this report.

### Discontinued Operation

Following its acquisition of NTC Communications LLC ("NTC") in November 2004, the Company provided high speed Internet, video and local and long distance voice services to multi-dwelling unit ("MDU") communities (primarily off-campus student housing) in the southeastern United States. NTC was merged into Shentel Converged Services, Inc. ("Converged Services") as of January 1, 2007.

In September 2008, the Company announced its intention to dispose of Converged Services, classified its assets and liabilities as held for sale, and reclassified its operating results as discontinued operations for all periods. Since then, management has been actively pursuing its plan to sell the assets. During 2011, the Company sold service contracts and assets for cash and receivables totaling approximately \$5.2 million. During 2012, the Company sold service contracts and assets for cash and receivables totaling approximately \$1.9 million in cash and receivables, as well as collecting on \$2.3 million of receivables. Approximately \$0.1 million of receivables remain to be collected from these sales as of December 31, 2012. As of December 31, 2012, the Company was in the process of finalizing the dispositions of the remaining five properties for an aggregate of \$0.2 million in cash.

### Competition

The communications industry is highly competitive. We compete primarily on the basis of the price, availability, reliability, variety and quality of our offerings and on the quality of our customer service. Our ability to compete effectively depends on our ability to maintain high-quality services at prices competitive with those charged by our competitors. In particular, price competition in the integrated communications services markets generally has been intense and is expected to increase. Our competitors include, among others, larger providers such as AT&T Inc., Verizon Communications Inc., and various competitive service providers. The larger providers have substantially greater infrastructure, financial, personnel, technical, marketing and other resources, larger numbers of established customers and more prominent name recognition than the Company.

In markets where we provide cable services, we also compete in the provision of local telephone services against the incumbent local telephone company. Incumbent carriers enjoy substantial competitive advantages arising from their historical monopoly position in the local telephone market, including pre-existing customer relationships with virtually all end-users. Wireless communications providers also are competing with wireline local telephone service providers, which further increases competition.

Competition is intense in the wireless communications industry. Competition has caused, and we anticipate that competition will continue to cause, the market prices for wireless products and services to be constrained. Many wireless providers have upgraded, or are in the process of upgrading, their wireless services to better accommodate real-time and downloadable audio and video content as well as Internet browsing capabilities and other services. Some local governments are deploying broadband or high-speed wireless communications networks within their jurisdictional boundaries to support wireless Internet access at a fixed monthly cost, or in some cases, no charge, to consumers. Our ability to compete effectively will depend, in part, on our ability to anticipate and respond to

various competitive factors affecting the wireless industry.

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One competitive factor affecting the wireless industry is handset exclusivity. Until October 2011, the Company did not have access to the very popular iPhone. If we are unable to obtain access to popular handsets, or provide comparable phones, our ability to add or retain wireless customers may be adversely impacted.

Competition also is intense and growing in the market for video services. Incumbent cable television companies, which have historically provided video service, face competition from direct broadcast satellite providers, on-line video services and more recently from large wireline providers of telecommunications services (such as Verizon and AT&T) which have begun to upgrade their networks to provide video services in addition to voice and high-speed Internet access services. These entities are large and have substantially greater infrastructure, financial, personnel, technical, marketing and other resources, larger numbers of established customers and more prominent name recognition than the Company. Our ability to compete effectively will depend, in part, on the extent to which our service offerings overlap with these entities, and on our ability to anticipate and respond to the competitive forces affecting the market for video and other services.

A continuing trend toward consolidation, mergers, acquisitions and strategic alliances in the communications industry also could increase the level of competition we face by further strengthening our competitors.

## Regulation

Our operations are subject to regulation by the Federal Communications Commission (“FCC”), the Virginia State Corporation Commission (“VSCC”), the West Virginia Public Service Commission, the Maryland Public Service Commission, and other federal, state, and local governmental agencies. The laws governing these agencies, and the regulations and policies that they administer, are subject to constant review and revision, and some of these changes could have material impacts on our revenues and expenses.

The discussion below focuses on the regulation of our wireless subsidiaries, Shenandoah Personal Communications, LLC and Shenandoah Mobile, LLC, our incumbent local exchange carrier (“ILEC”) subsidiary, Shenandoah Telephone Company, and our cable business, conducted by Shenandoah Cable Television, LLC.

## Regulation of Wireless PCS Operations

We operate our PCS business using radio spectrum licensed to Sprint Nextel under the Sprint Nextel management agreements. Nonetheless, we are directly or indirectly subject to, or affected by, a number of regulations and requirements of the FCC and other governmental authorities.

**Interconnection.** The FCC has the authority to order interconnection between commercial mobile radio service (“CMRS”) providers (which includes us) and other telecommunications common carriers. The FCC has ordered local exchange carriers (“LECs”) and CMRS providers to provide reciprocal compensation for the termination of traffic to one another. Interconnection agreements typically are negotiated on a statewide basis and are subject to state approval. If an agreement cannot be reached, parties to interconnection negotiations can submit outstanding disputes to federal or state regulators for arbitration. The Company does not presently have any interconnection disputes.

On October 27, 2011, the FCC adopted a report and order intended to comprehensively reform and modernize the agency’s intercarrier compensation (“ICC”) rules governing the telecommunications industry. Under the new FCC regime, local traffic between CMRS providers and most LECs will be compensated pursuant to a default bill-and-keep framework where there is no pre-existing agreement between the CMRS provider and the LEC. A number of parties have challenged the legality of the FCC’s report and order. Additionally, the FCC is considering a number of petitions for declaratory ruling and other proceedings regarding disputes among carriers relating to interconnection payment obligations. Resolution of these proceedings and any additional FCC rules regarding interconnection could directly

affect us in the future. Interconnection costs represent a significant expense item for us and any significant changes in the intercarrier compensation scheme may have a material impact on our business. We are unable to determine with any certainty at this time whether any such changes would be beneficial to or detrimental to our wireless operations.

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Universal Service Contribution Requirements. Sprint Nextel is required to contribute to the federal universal service fund (the “USF”) based in part on the revenues it receives in connection with our wireless operations. The purpose of this fund is to subsidize telecommunications services in rural areas, for low-income consumers, and for schools, libraries, and rural healthcare facilities. Sprint Nextel is permitted to, and does, pass through these mandated payments as surcharges paid by customers.

Sprint Nextel also receives disbursements from the USF with respect to certain service areas served by its business. USF disbursements relating to our service area are passed through to us. In November 2008, as a condition for the FCC’s approval of Sprint Nextel’s acquisition of a controlling interest in Clearwire Corp., the FCC imposed requirements that Sprint Nextel’s disbursements be reduced by 20% during calendar year 2009, and by an additional 20% per year for each subsequent calendar year, until such funding reaches zero in 2013. This reduction in Sprint Nextel’s universal service disbursements also applies to the amounts of funding passed through to us.

Congress and the FCC from time to time consider major changes to the universal service rules that could affect us. On October 27, 2011, the FCC adopted comprehensive reforms to the universal service fund (“USF”) and has subsequently released additional guidance regarding the scope of those regulatory changes. Among other changes, the new rules impose a fixed budget for high-cost programs within USF, require certain carriers receiving USF support to offer broadband service at a minimum service level, create a new support fund dedicated to promoting mobile broadband networks in unserved and underserved areas of the country, and change the manner in which support for mobile competitive carriers is determined. The FCC has sought further comment on a number of additional issues relating to USF, including various proposals to reform the USF contribution system. While the FCC’s reforms are now subject to various legal challenges, these changes, and any future changes, to the USF program may cause the share of payments from wireless companies to increase or decrease, and the overall size of the fund to increase, resulting in greater payment obligations for all carriers, including wireless carriers. The Company is not able to predict if or when additional changes will be made to the USF, or whether and how such changes will affect us. Likewise, we cannot predict the timing or likely outcome of any proceedings challenging the FCC’s USF reforms.

Transfers, Assignments and Changes of Control of PCS Licenses. The FCC must give prior approval to the assignment of ownership or control of a PCS license, as well as transfers involving substantial changes in such ownership or control. The FCC also requires licensees to maintain effective working control over their licenses. Our agreements with Sprint Nextel reflect an alliance that the parties believe meets the FCC requirements for licensee control of licensed spectrum. If the FCC were to determine that the Sprint Nextel PCS agreements need to be modified to increase the level of licensee control, we have agreed with Sprint Nextel under the terms of our Sprint Nextel PCS agreements to use our best efforts to modify the agreements as necessary to cause the agreements to comply with applicable law and to preserve to the extent possible the economic arrangements set forth in the agreements. If the agreements cannot be modified, the agreements may be terminated pursuant to their terms. The FCC could also impose sanctions on the Company for failure to meet these restrictions.

PCS licenses are granted for ten-year terms. The PCS licenses for our service area are scheduled to expire on various dates between December 1, 2014 and June 30, 2015. Licensees have an expectation of license renewal if they have provided “substantial” performance of license terms, and have complied with FCC rules and policies, and with the Communications Act of 1934. All of the PCS licenses used in the wireless business have been successfully renewed since their initial grant.

Construction and Operation of Wireless Facilities. Wireless systems must comply with certain FCC and Federal Aviation Administration regulations regarding the registration, siting, marking, lighting and construction of transmitter towers and antennas. The FCC also requires that aggregate radio wave emissions from every site location meet certain standards. These regulations affect site selection for new network build-outs and may increase the costs of improving our network. The increased costs and delays from these regulations could have a material adverse effect

on our operations.

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The FCC's decision to authorize a proposed tower may be subject to environmental review pursuant to the National Environmental Policy Act of 1969 ("NEPA"), which requires federal agencies to evaluate the environmental impacts of their decisions under some circumstances. FCC regulations implementing NEPA place responsibility on each applicant to investigate any potential environmental effects of a proposed operation, including health effects relating to radio frequency emissions, and impacts on endangered species such as certain migratory birds, and to disclose any significant effects on the environment to the agency prior to commencing construction. On December 9, 2011, the FCC instituted a new pre-application notification process to enable members of the public to comment on the environmental effects of a proposed antenna structure that requires registration with the FCC. In the event that the FCC determines that a proposed tower would have a significant environmental impact, the FCC would require preparation of an environmental impact statement. In addition, tower construction is subject to regulations implementing the National Historic Preservation Act. Compliance with environmental or historic preservation requirements could significantly delay or prevent the registration or construction of a particular tower, or make tower construction more costly. In some jurisdictions, local laws or regulations may impose similar requirements.

**Wireless Facilities Siting.** States and localities are authorized to engage in forms of regulation, including zoning and land-use regulation, that affect our ability to select and modify sites for wireless facilities. States and localities may not engage in forms of regulation that effectively prohibit the provision of wireless services, discriminate among providers of such services, or use radio frequency health effects as a basis to regulate the placement, construction or operation of wireless facilities. Courts and the FCC are routinely asked to review whether state and local zoning and land-use actions should be preempted by federal law, and the FCC also is routinely asked to consider other issues affecting wireless facilities siting in other proceedings. We cannot predict the outcome of these proceedings or the effect they may have on us.

**Communications Assistance for Law Enforcement Act.** The Communications Assistance for Law Enforcement Act ("CALEA") was enacted in 1994 to preserve electronic surveillance capabilities by law enforcement officials in the face of rapidly changing telecommunications technology. CALEA requires telecommunications carriers, including us, to modify their equipment, facilities, and services to allow for authorized electronic surveillance based on either industry or FCC standards. Following adoption of interim standards and a lengthy rulemaking proceeding, including an appeal and remand proceeding, all carriers were required to be in compliance with the CALEA requirements as of June 30, 2002. We are currently in compliance with the CALEA requirements.

**Local Number Portability.** All covered CMRS providers, including us, are required to allow wireless customers to retain their existing telephone numbers when switching from one telecommunications carrier to another. These rules are generally referred to as wireless local number portability ("WLNP"). The future volume of any porting requests, and the processing costs related thereto, may increase our operating costs in the future.

**Number Pooling.** The FCC regulates the assignment and use of telephone numbers by wireless and other telecommunications carriers to preserve numbering resources. CMRS providers in the top 100 markets are required to be capable of sharing blocks of 10,000 numbers among themselves in subsets of 1,000 numbers ("1000s-block number pooling"); the FCC considers state requests to implement 1000s-block number pooling in smaller markets on a case-by-case basis, and has granted such requests in the past. In addition, all CMRS carriers, including those operating outside the top 100 markets, must be able to support roaming calls on their network placed by users with pooled numbers. Wireless carriers must also maintain detailed records of the numbers they have used, subject to audit. The pooling requirements may impose additional costs and increase operating expenses on us and limit our access to numbering resources.

**Telecommunications Relay Services ("TRS").** Federal law requires wireless service providers to take steps to enable the hearing impaired and other disabled persons to have reasonable access to wireless services. The FCC has adopted rules and regulations implementing this requirement to which we are subject, and requires that we pay a regulatory

assessment to support such telecommunications relay services for the disabled. The Company is in compliance with these requirements.



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Consumer Privacy. The Company is subject to various federal and state laws intended to protect the privacy of end-users who subscribe to the Company's services. For example, the FCC has regulations that place restrictions on the permissible uses that we can make of customer-specific information, known as Customer Proprietary Network Information ("CPNI"), received from subscribers, and that govern procedures for release of such information in order to prevent identity theft schemes. Other laws impose criminal and other penalties for the violation of certain CPNI requirements and related privacy protections. In addition, restrictions exist, and new restrictions are considered from time to time by Congress, federal agencies and states, on the extent to which wireless data customers may receive unsolicited text messages, junk e-mail or spam. Congress, federal agencies and certain states also are considering, and may in the future consider imposing, additional requirements on entities that possess consumer information to protect the privacy of consumers. Complying with these requirements may impose costs on us or compel us to alter the way we provide or promote our services.

Consumer Protection. Many members of the wireless industry, including us, have voluntarily committed to comply with the CTIA Consumer Code for Wireless, which includes consumer protection provisions regarding the content and format of bills; advance disclosures regarding rates, terms of service, contract provisions, and network coverage; and the right to terminate service after a trial period or after changes to contract provisions are implemented. The FCC and/or some state commissions have considered or are considering imposing additional consumer protection requirements upon wireless service providers, including billing-related disclosures and usage alerts, as well as the adoption of standards for responses to customers and limits on early termination fees. Adoption of those consumer protection requirements could increase the expenses or decrease the revenue of our wireless business. Courts also have had, and in the future may continue to have, an effect on the extent to which matters pertaining to the content and format of wireless bills can be regulated at the state level. Any further changes to these and similar requirements could increase our costs of doing business and our costs of acquiring and retaining customers.

Net Neutrality. In 2010, the FCC imposed new transparency and "no blocking" requirements on mobile broadband Internet providers. Under the transparency rule, mobile broadband Internet providers must disclose the network management practices, performance characteristics, and terms and conditions of their broadband services. Under the "no blocking" rule, mobile broadband providers may not block lawful websites or applications that compete with their voice or video telephony services, subject to providers being permitted to engage in "reasonable network management." These requirements could increase the expenses or decrease the revenues of our wireless business. It is not possible to determine what disclosures, broadband network management techniques, or related business arrangements may be deemed reasonable or unreasonable in the future. We cannot predict how any future regulatory decision relating to net neutrality might affect our ability to manage our broadband network or develop new products or services.

Several parties have filed court challenges to the FCC's rules. In addition, there has been legislative activity regarding overturning the FCC's requirements. We cannot predict the outcome of these judicial or legislative proceedings or the effect they might have on our ability to manage our broadband network or develop new products or services.

Radio Frequency Emissions. Some studies (and media reports) have suggested that radio frequency emissions from handsets, wireless data devices and cell sites may raise various health concerns, including cancer, and may interfere with various electronic medical devices, including hearing aids and pacemakers. Most of the expert reviews conducted to date have concluded that the evidence does not support a finding of adverse health effects but that further research is appropriate. Courts have dismissed a number of lawsuits filed against other wireless service operators and manufacturers, asserting claims relating to radio frequency transmissions to and from handsets and wireless data devices. However, there can be no assurance that the outcome of other lawsuits, or general public concerns over these issues, will not have a material adverse effect on the wireless industry, including us.



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**Accessibility.** The FCC imposes obligations on telecommunications service providers, including wireless providers, intended to ensure that individuals with disabilities received access to communications services and equipment. For example, in 2012, certain FCC rules became effective that require providers of advanced communications services (such as email and text messaging) to make their services and products accessible to disabled persons, unless doing so is not achievable. Similarly, existing FCC rules require us to offer a minimum number of hearing aid-compatible handsets to consumers. We cannot predict if or when additional changes will be made to the current FCC accessibility rules, or whether and how such changes will affect us.

**911 Services.** We are subject to FCC rules that require wireless carriers to make emergency 911 services available to their subscribers, including enhanced 911 services that convey the caller's telephone number and detailed location information to emergency responders. The FCC has also sought public comment to investigate further requirements regarding the accuracy of wireless location information transmitted during an emergency 911 call. Additionally, the FCC has recently proposed rules that would require all wireless carriers to support the ability of consumers to send text messages to 911 in all areas of the country where 911 Public Safety Answering Points are capable of receiving text messages. We are not able to predict the outcome of these proceedings or the effect that any changes to the 911 service rules will have on our operations.

### Regulation of Incumbent Local Exchange Carrier Operations

As an ILEC, Shenandoah Telephone Company's operations are regulated by federal and state regulatory agencies.

**State Regulation.** Shenandoah Telephone's rates for local exchange service, intrastate toll service, and intrastate access charges are subject to the approval of the VSCC. The VSCC also establishes and oversees implementation of the provisions of the federal and state telecommunications laws, including interconnection requirements, promotion of competition, and the deployment of advanced services. The VSCC also regulates rates, service areas, service standards, accounting methods, affiliated charge transactions and certain other financial transactions. Pursuant to the FCC's October 27, 2011 order adopting comprehensive reforms to the federal intercarrier compensation and universal service policies and rules (as discussed above and further below), the FCC preempted state regulatory commissions' jurisdiction over all terminating access charges, including intrastate terminating access charges, which historically have been within the states' jurisdiction. However, the FCC vested in the states the obligation to monitor the tariffing of intrastate rate reductions for a transition period, to oversee interconnection negotiations and arbitrations, and to determine the network edge for purposes of the new "bill-and-keep" framework. Numerous judicial challenges to the FCC's order have been filed and remain pending, and additional challenges remain possible, any of which could modify or delay the effectiveness of the FCC's rule changes. We are therefore unable to predict the ultimate effect that the FCC's order will have on the state regulatory landscape or our operations.

**Regulation of Intercarrier Compensation.** Shenandoah Telephone participates in the access revenue pools administered by the FCC-supervised National Exchange Carrier Association ("NECA"), which collects and distributes the revenues from interstate access charges that long-distance carriers pay us for originating and terminating interstate calls over our network. Shenandoah Telephone also participates in some NECA tariffs that govern the rates, terms, and conditions of our interstate access offerings. Some of those tariffs are under review by the FCC, and we may be obligated to refund affected access charges collected in the past or in the future if the FCC ultimately finds that the tariffed rates were unreasonable. We cannot predict whether, when, and to what extent such refunds may be due.

On October 27, 2011, the FCC adopted a number of broad changes to the ICC rules governing the interstate access rates charged by small-to-mid-sized ILECs such as Shenandoah Telephone. For example, the FCC adopted a national "bill-and-keep" framework, which may result in substantial reductions in the access charges paid by long distance carriers and other interconnecting carriers, possibly to zero, accompanied by increases to the subscriber line charges paid by business and residential end users. In addition, the FCC has changed some of the rules that determine what

compensation carriers, including but not limited to wireless carriers, competitive local exchange carriers, VOIP providers and providers of other Internet-enabled services, should pay (and receive) for their traffic that is interconnected with ILEC networks. Although the legality of the FCC's recent changes to the ICC rules has been challenged by various parties, these changes, and potential future changes, to such compensation regulations could increase our expenses or reduce our revenues. At this time we cannot estimate the amount of such additional expense or revenue changes.

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The VSCC has jurisdiction over local telephone companies' intrastate access charges, and has indicated in the past that it might open a generic proceeding on the rates charged for intrastate access, although the scope and likelihood of such a proceeding is unclear in light of the FCC's overhaul of the ICC rules, which affected states' jurisdiction over intrastate access charges. The VSCC issued a Final Order on August 9, 2011 that requires elimination of common carrier line charges in three stages. Pursuant to the order, the Company's revenue is expected to decline by approximately \$0.3 million annually beginning in 2012 until such charges are eliminated by mid-2014.

Interstate and intrastate access charges are an important source of revenues for Shenandoah Telephone's operations. Unless these revenues can either be recovered as they are at present, or through a new universal service mechanism, or unless they can be reflected in higher rates to the local end user, or recovered through other newly created methods of cost recovery, the loss of revenues to us could be significant. There can be no assurance that access charges in their present form will be continued or that sufficient substitutes for the lost revenues will be provided. If access charges are reduced without sufficient substitutes for the lost revenues, this could have a material adverse impact on our financial condition, results of operations and cash flows. In addition, changes to the intercarrier compensation rules and policies could have a material impact on our competitive position vis-à-vis other service providers, particularly in our ability to proactively make improvements in our networks and systems.

Universal Service Fund. Shenandoah Telephone receives revenues from the USF. In October 2011, the FCC adopted comprehensive changes to the universal service program that are intended in part to stabilize the USF, the total funding of which has increased considerably in recent years. Some of the FCC's reforms impact the rules that govern disbursements from the USF to rural ILECs such as Shenandoah Telephone, and to other providers. Although a number of challenges to the FCC's reforms remain pending, such changes, and additional future changes, may reduce the size of the USF and payments to Shenandoah Telephone, which could have an adverse impact on the Company's financial position, results of operations, and cash flows. The Company is not able to predict if or when additional changes will be made to the USF, or whether and how such changes would affect the extent of our total federal universal service assessments, the amounts we receive, or our ability to recover costs associated with the USF.

If the Universal Service Administrative Company ("USAC") were required to account for the USF program in accordance with generally accepted accounting principles for federal agencies under the Anti-Deficiency Act (the "ADA"), it could cause delays in USF payments to fund recipients and significantly increase the amount of USF contribution payments charged to wireline and wireless consumers. Each year since 2004, Congress has adopted short-term exemptions for the USAC from the ADA. Congress has from time to time considered adopting a longer term exemption for the USAC from the ADA, but we cannot predict whether any such exemption will be adopted or the effect it may have on the Company.

The FCC, USAC and other authorities have conducted, and in the future are expected to continue to conduct, more extensive audits of USF support recipients, as well as other heightened oversight activities. The impact of these activities on the Company, if any, is uncertain.

Other Regulatory Obligations. Shenandoah Telephone is subject to requirements relating to CPNI, CALEA implementation, interconnection, access to rights of way, number portability, number pooling, accessibility of telecommunications for those with disabilities, protection for consumer privacy, and other obligations similar to those discussed above for our PCS operations.

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Broadband Services. The FCC and other authorities continue to consider policies to encourage nationwide advanced broadband infrastructure development. For example, the FCC has largely eliminated unbundling obligations relating to broadband facilities, and has largely deregulated DSL and other broadband services offered by ILECs. Such changes benefit our ILEC, but could make it more difficult for us (or for NECA) to tariff and pool DSL costs. Broadband networks and services are subject to CALEA rules, requirements relating to consumer privacy, and other regulatory mandates.

Net Neutrality. In 2010, the FCC imposed new transparency, “no blocking,” and non-discrimination requirements on fixed broadband Internet providers, which are more extensive than the requirements for mobile broadband Internet providers. Under the transparency rule, fixed broadband providers must disclose the network management practices, performance characteristics, and terms and conditions of their broadband services. Under the “no blocking” rule, fixed broadband providers may not block lawful content, applications, services, or non-harmful devices, subject to providers being permitted to engage in “reasonable network management.” Under the non-discrimination rule, fixed broadband providers may not unreasonably discriminate in transmitting lawful network traffic. These requirements could increase the expenses or decrease the revenue of our wireline business. It is not possible to determine what disclosures, broadband network management techniques, or related business arrangements may be deemed reasonable or unreasonable in the future. We cannot predict how any future regulatory decision relating to net neutrality might affect our ability to manage our broadband network or develop new products or services.

Several parties have filed court challenges to the FCC’s rules. In addition, there has been legislative activity regarding overturning the FCC’s requirements. We cannot predict the outcome of these judicial or legislative proceedings or the effect they might have on our ability to manage our broadband network or develop new products or services.