

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

**FORM 10-Q**

(Mark One)

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

For the quarterly period ended September 30, 2019

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)

**54-1162807**

(I.R.S. Employer Identification No.)

500 Shentel Way, Edinburg, Virginia 22824  
(Address of principal executive offices) (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)	SHEN	NASDAQ Global Select Market	49,857,142
(Title of Class)	(Trading Symbol)	(Name of Exchange on which Registered)	(The number of shares of the registrant's common stock outstanding on October 25, 2019)

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files). Yes  No

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

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company  Emerging growth company

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

SHENANDOAH TELECOMMUNICATIONS COMPANY  
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**SHENANDOAH TELECOMMUNICATIONS COMPANY AND SUBSIDIARIES**  
**UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS**

(in thousands)

	September 30, 2019	December 31, 2018
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 97,415	\$ 85,086
Accounts receivable, net of allowance for doubtful accounts of \$563 and \$534, respectively	60,084	54,407
Income taxes receivable	2,983	5,282
Inventory, net of allowances of \$196 and \$113, respectively	4,561	5,265
Prepaid expenses and other	56,597	60,162
Total current assets	221,640	210,202
Investments	11,851	10,788
Property, plant and equipment, net	688,516	701,359
Intangible assets, net	328,831	366,029
Goodwill	149,070	146,497
Operating lease right-of-use assets	400,489	—
Deferred charges and other assets	50,469	49,891
Total assets	\$ 1,850,866	\$ 1,484,766
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Current maturities of long-term debt, net of unamortized loan fees	\$ 31,634	\$ 20,618
Accounts payable	26,470	35,987
Advanced billings and customer deposits	8,127	7,919
Accrued compensation	6,915	9,452
Current operating lease liabilities	44,178	—
Accrued liabilities and other	14,731	14,563
Total current liabilities	132,055	88,539
Long-term debt, less current maturities, net of unamortized loan fees	696,378	749,624
Other long-term liabilities:		
Deferred income taxes	129,651	127,453
Deferred lease	—	22,436
Asset retirement obligations	29,956	28,584
Retirement plan obligations	10,311	11,519
Noncurrent operating lease liabilities	359,985	—
Other liabilities	16,676	14,364
Total other long-term liabilities	546,579	204,356
Shareholders' equity:		
Common stock, no par value, authorized 96,000; 49,857 and 49,630 issued and outstanding at September 30, 2019 and December 31, 2018, respectively	—	—
Additional paid in capital	48,083	47,456
Retained earnings	427,925	386,511
Accumulated other comprehensive income (loss), net of taxes	(154)	8,280
Total shareholders' equity	475,854	442,247
Total liabilities and shareholders' equity	\$ 1,850,866	\$ 1,484,766

See accompanying notes to unaudited condensed consolidated financial statements.

## SHENANDOAH TELECOMMUNICATIONS COMPANY AND SUBSIDIARIES

## UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

(in thousands, except per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Operating revenue:				
Service revenue and other	\$ 138,832	\$ 142,768	\$ 424,122	\$ 419,819
Equipment revenue	16,320	15,963	48,787	49,551
Total operating revenue	155,152	158,731	472,909	469,370
Operating expenses:				
Cost of services	50,164	47,886	149,179	146,362
Cost of goods sold	15,825	15,036	46,336	46,007
Selling, general and administrative	27,178	27,452	83,070	86,117
Depreciation and amortization	36,626	40,028	120,158	124,632
Total operating expenses	129,793	130,402	398,743	403,118
Operating income	25,359	28,329	74,166	66,252
Other income (expense):				
Interest expense	(7,505)	(9,001)	(22,981)	(27,184)
Other	1,099	1,054	3,562	2,882
Income before income taxes	18,953	20,382	54,747	41,950
Income tax expense	4,599	4,848	13,333	10,207
Net income	14,354	15,534	41,414	31,743
Other comprehensive income (loss):				
Unrealized gain (loss) on interest rate hedge, net of tax	(1,494)	465	(8,434)	4,360
Comprehensive income	\$ 12,860	\$ 15,999	\$ 32,980	\$ 36,103
Net income per share, basic and diluted:				
Basic net income per share	\$ 0.29	\$ 0.31	\$ 0.83	\$ 0.64
Diluted net income per share	\$ 0.29	\$ 0.31	\$ 0.83	\$ 0.63
Weighted average shares outstanding, basic	49,857	49,559	49,827	49,527
Weighted average shares outstanding, diluted	50,129	50,117	50,110	50,044

See accompanying notes to unaudited condensed consolidated financial statements.

**SHENANDOAH TELECOMMUNICATIONS COMPANY AND SUBSIDIARIES**  
**UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**

(in thousands, except per share amounts)

	Shares of Common Stock (no par value)	Additional Paid in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total
<b>Balance, June 30, 2019</b>	49,857	\$ 47,138	\$ 413,571	\$ 1,340	\$ 462,049
Net income	—	—	14,354	—	14,354
Other comprehensive loss, net of tax	—	—	—	(1,494)	(1,494)
Stock based compensation	—	936	—	—	936
Stock options exercised	—	—	—	—	—
Common stock issued	—	9	—	—	9
Shares retired for settlement of employee taxes upon issuance of vested equity awards	—	—	—	—	—
<b>Balance, September 30, 2019</b>	<u>49,857</u>	<u>\$ 48,083</u>	<u>\$ 427,925</u>	<u>\$ (154)</u>	<u>\$ 475,854</u>
	Shares of Common Stock (no par value)	Additional Paid in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total
<b>Balance, December 31, 2018</b>	49,630	\$ 47,456	\$ 386,511	\$ 8,280	\$ 442,247
Net income	—	—	41,414	—	41,414
Other comprehensive loss, net of tax	—	—	—	(8,434)	(8,434)
Stock based compensation	184	3,433	—	—	3,433
Stock options exercised	29	81	—	—	81
Common stock issued	—	25	—	—	25
Shares retired for settlement of employee taxes upon issuance of vested equity awards	(62)	(2,912)	—	—	(2,912)
Common stock issued to acquire non-controlling interest in nTelos	76	—	—	—	—
<b>Balance, September 30, 2019</b>	<u>49,857</u>	<u>\$ 48,083</u>	<u>\$ 427,925</u>	<u>\$ (154)</u>	<u>\$ 475,854</u>
	Shares of Common Stock (no par value)	Additional Paid in Capital	Retained Earnings	Accumulated Other Comprehensive Income	Total
<b>Balance, June 30, 2018</b>	49,558	\$ 46,172	\$ 369,511	\$ 12,125	\$ 427,808
Net income	—	—	15,534	—	15,534
Other comprehensive gain, net of tax	—	—	—	465	465
Stock based compensation	1	1,171	—	—	1,171
Common stock issued	—	8	—	—	8
Shares retired for settlement of employee taxes upon issuance of vested equity awards	—	(1)	—	—	(1)
<b>Balance, September 30, 2018</b>	<u>49,559</u>	<u>\$ 47,350</u>	<u>\$ 385,045</u>	<u>\$ 12,590</u>	<u>\$ 444,985</u>
	Shares of Common Stock (no par value)	Additional Paid in Capital	Retained Earnings	Accumulated Other Comprehensive Income	Total
<b>Balance, December 31, 2017</b>	49,328	\$ 44,787	\$ 297,205	\$ 8,230	\$ 350,222
Change in Accounting Principle - Adoption of ASU 2014-09	—	—	56,097	—	56,097
Net income	—	—	31,743	—	31,743
Other comprehensive gain, net of tax	—	—	—	4,360	4,360
Stock based compensation	206	4,578	—	—	4,578
Stock options exercised	15	104	—	—	104
Common stock issued	—	18	—	—	18
Shares retired for settlement of employee taxes upon issuance of vested equity awards	(66)	(2,137)	—	—	(2,137)
Common stock issued to acquire non-controlling interest in nTelos	76	—	—	—	—
<b>Balance, September 30, 2018</b>	<u>49,559</u>	<u>\$ 47,350</u>	<u>\$ 385,045</u>	<u>\$ 12,590</u>	<u>\$ 444,985</u>

See accompanying notes to unaudited condensed consolidated financial statements.

SHENANDOAH TELECOMMUNICATIONS COMPANY AND SUBSIDIARIES  
 UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS  
 (in thousands)

	Nine Months Ended September 30,	
	2019	2018
<b>Cash flows from operating activities:</b>		
Net income	\$ 41,414	\$ 31,743
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	104,503	106,002
Amortization	15,655	18,630
Accretion of asset retirement obligations	1,093	710
Bad debt expense	1,215	1,362
Stock based compensation expense, net of amount capitalized	3,158	4,578
Deferred income taxes	4,999	(1,989)
Net gain from patronage and investments	(3,035)	(2,412)
Amortization of long-term debt issuance costs	2,596	3,472
Changes in assets and liabilities:		
Accounts receivable	(4,894)	(5,492)
Inventory, net	704	741
Current income taxes	2,299	14,932
Waived management fee	29,016	28,164
Other assets	(15,073)	(13,393)
Operating lease right-of-use assets	38,262	—
Lease liabilities	(32,173)	—
Accounts payable	7,023	(1,913)
Deferred lease	—	4,159
Other deferrals and accruals	(3,303)	(494)
Net cash provided by operating activities	<u>193,459</u>	<u>188,800</u>
<b>Cash flows from investing activities:</b>		
Capital expenditures	(107,038)	(92,309)
Cash disbursed for acquisitions	(10,000)	(52,000)
Cash disbursed for FCC spectrum licenses	(16,742)	—
Proceeds from sale of assets and other	156	539
Net cash used in investing activities	<u>(133,624)</u>	<u>(143,770)</u>
<b>Cash flows from financing activities:</b>		
Principal payments on long-term debt	(44,666)	(46,375)
Proceeds from revolving credit facility borrowings	—	15,000
Principal payments on revolving credit facility	—	(15,000)
Proceeds from exercises of stock options	81	—
Taxes paid for equity award issuances	(2,912)	(2,033)
Other	(9)	—
Net cash used in financing activities	<u>(47,506)</u>	<u>(48,408)</u>
Net increase (decrease) in cash and cash equivalents	12,329	(3,378)
Cash and cash equivalents, beginning of period	85,086	78,585
<b>Cash and cash equivalents, end of period</b>	<u>\$ 97,415</u>	<u>\$ 75,207</u>

See accompanying notes to unaudited condensed consolidated financial statements.

**SHENANDOAH TELECOMMUNICATIONS COMPANY AND SUBSIDIARIES**  
**NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS****Note 1. Basis of Presentation**

The interim condensed consolidated financial statements of Shenandoah Telecommunications Company and Subsidiaries (collectively, the “Company”) are unaudited. In the opinion of management, all adjustments necessary for a fair presentation of the interim results have been reflected therein in accordance with accounting principles generally accepted in the United States (“GAAP”) for interim financial reporting and as required by Rule 10-01 of Regulation S-X. Accordingly, the unaudited condensed consolidated financial statements may not include all of the information and notes required by GAAP for audited financial statements. The information contained herein should be read in conjunction with the audited financial statements included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2018.

**Adoption of New Accounting Principles**

There have been no developments related to recently issued accounting standards, including the expected dates of adoption and estimated effects on the Company’s unaudited condensed consolidated financial statements and note disclosures, from those disclosed in the Company’s 2018 Annual Report on Form 10-K, that would be expected to impact the Company except for the following:

The Company adopted ASU No. 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220)*, as of January 1, 2019. The Company elected not to reclassify stranded income tax effects from accumulated other comprehensive income (OCI) to retained earnings and has implemented this election as its accounting policy as of January 1, 2019. The Company utilizes the portfolio approach as its policy to release the income tax effects from accumulated OCI as the entire portfolio is liquidated, sold, or extinguished.

The Company adopted ASU No. 2016-02, *Leases (“Topic 842” or “the new lease standard”)* on January 1, 2019. Topic 842 replaces previous leasing guidance with a comprehensive lease measurement and recognition standard and expanded disclosure requirements. Topic 842 requires lessees to recognize most leases on their balance sheet as liabilities, with corresponding right-of-use, or ROU assets. The Company adopted the new lease standard utilizing the modified retrospective approach. As a result, comparable period information has not been retrospectively updated. The modified retrospective approach includes a package of optional practical expedients that we elected to apply. As a result, the Company did not reassess prior conclusions regarding lease identification, lease classification and initial direct costs under the new standard. In those circumstances where the Company is the lessee, we have elected to account for non-lease components associated with our leases (e.g., maintenance costs) and lease components as a single lease component for substantially all of our asset classes under Topic 842.

**Note 2. Leases**

The Company leases various cell sites, warehouses, retail stores, and office facilities for use in our business. These agreements include fixed rental payments as well as variable rental payments, such as those based on relevant inflation indices. The accounting lease term includes optional renewal periods that we are reasonably certain to exercise based on our assessment of relevant contractual and economic factors. The related lease payments are discounted at lease commencement using the Company’s incremental borrowing rate in order to measure the lease liability and ROU asset.

The incremental borrowing rate is determined using a portfolio approach based on the rate of interest that the Company would have to pay to borrow an amount equal to the lease payments on a collateralized basis over a similar term. The Company uses the observable unsecured borrowing rate and risk-adjusts that rate to approximate a collateralized rate. Under the new lease standard, leases are remeasured upon the occurrence of certain events or modifications.

Adoption of the new lease standard did not materially impact the Company’s consolidated net earnings, cash flows, liquidity, or loan covenants.

The cumulative effect of the changes made to the consolidated January 1, 2019 balance sheet for the adoption of the new lease standard were as follows:

<i>(in thousands)</i>	<b>December 31, 2018 As Previously Reported</b>	<b>Effect of the Adoption of ASC Topic 842 (Leases)</b>	<b>January 1, 2019 As Adjusted</b>
<b>Assets</b>			
Prepaid expenses and other	\$ 60,162	\$ (11,580)	\$ 48,582
Property, plant and equipment, net	701,359	1,789	703,148
Operating lease right-of-use assets	—	369,344	369,344
Intangible assets, net	366,029	(13,828)	352,201
<b>Liabilities</b>			
Current operating lease liabilities	—	38,773	38,773
Accrued liabilities and other	14,563	(412)	14,151
Deferred Lease	22,436	(22,436)	—
Noncurrent operating lease liabilities	—	328,156	328,156
Other liabilities	14,364	1,644	16,008

In addition to recognizing the operating lease liabilities and right-of-use assets, Topic 842 also reclassified prepaid and deferred rent balances, off-market leases, and lease incentives into the right-of-use assets.

The following table shows the components of lease income and costs:

<i>(in thousands)</i>	<b>Three Months Ended September 30, 2019</b>	<b>Nine Months Ended September 30, 2019</b>
Lease income from operating leases - fixed	\$ 2,149	\$ 6,219
Operating lease expense	18,151	51,811
Amortization of finance lease assets	158	399
Interest on finance lease liabilities	14	59
Subtotal finance lease cost	172	458
Total lease expense	\$ 18,323	\$ 52,269

Substantially all of the Company's sublease income from operating leases relates to fixed lease payments.

All operating lease expenses, including short-term and variable lease expenses, are split between cost of service and selling, general and administrative expense in the condensed consolidated statements of operations based on the use of the facility that the rent is being paid on. Operating lease expense includes variable lease payments and short-term lease expense, both of which are immaterial. Variable lease expenses represent payments that are dependent on a rate or index, or on usage of the asset.

The following table summarizes other information related to operating and finance leases:

<i>(in thousands)</i>	<b>Three Months Ended September 30, 2019</b>	<b>Nine Months Ended September 30, 2019</b>
Operating cash flows used by leases	\$ 16,002	\$ 46,546
Leased assets obtained in exchange for new operating lease liabilities	43,647	69,407



The following table summarizes the lease terms and discount rates:

	<u>September 30, 2019</u>
Weighted-average remaining lease term (years)	
Operating leases	8
Finance leases	16
Weighted-average discount rate	
Operating leases	4.6%
Finance leases	5.2%

The following table summarizes the expected maturity of lease liabilities at September 30, 2019:

<i>(in thousands)</i>	<u>Operating Leases</u>	<u>Finance Leases</u>	<u>Total</u>
2019	\$ 12,742	\$ 63	\$ 12,805
2020	64,474	174	64,648
2021	65,087	174	65,261
2022	63,341	174	63,515
2023	59,885	174	60,059
2024 and thereafter	242,115	1,704	243,819
Total lease payments	507,644	2,463	510,107
Less: Interest	103,481	748	104,229
Present value of lease liabilities	<u>\$ 404,163</u>	<u>\$ 1,715</u>	<u>\$ 405,878</u>

The Company's finance lease liabilities are presented in the accrued liabilities and other and the other liabilities lines of the unaudited condensed consolidated balance sheets. The related finance lease assets are included in the property, plant and equipment line.

Our commitments under leases existing as of December 31, 2018 were approximately \$55.1 million for the year ending December 31, 2019, \$104.4 million in total for the years ending December 31, 2020 and 2021, \$97.6 million in total for the years ending December 31, 2022 and 2023 and \$168.5 million in total for years thereafter.

The Company is also the lessor on agreements to lease assets such as collocation space at cell sites and dedicated fiber-optic strands to third parties. These agreements have been accounted for as operating leases both before and after adoption of the new lease standard. The new lease standard did not have a significant impact on the recognition of lease revenue associated with these agreements. The following table summarizes the total minimum rental receipts under lease agreements at September 30, 2019:

<i>(in thousands)</i>	<u>Operating Leases</u>
2019	\$ 1,774
2020	6,621
2021	4,526
2022	3,432
2023	1,801
2024 and thereafter	4,978
Total lease income	<u>\$ 23,132</u>

### Note 3. Revenue from Contracts with Customers

The Company earns revenue primarily through the sale of its wireless service. Additional revenue is earned from the sale of wireless equipment; from business, residential and enterprise services which provide video, broadband, and voice services; and

from tower and other services. Refer to Note 14, *Segment Reporting*, for a tabular summary of revenue for the three and nine months ended September 30, 2019.

#### Wireless service

The Company earns revenue primarily through the sale of its wireless service by providing network access to Sprint under the affiliate agreement. Wireless service revenue is variable based on billed revenue to Sprint's subscribers that originated in the Company's affiliate area, less applicable fees retained by Sprint.

The Company's revenue related to Sprint's postpaid customers is the amount that Sprint bills its postpaid subscribers, reduced by customer credits, estimates of bad debt, and 8% management and 8.6% service fees. The Company is also charged for the costs of subsidized handsets sold through Sprint's national channels as well as commissions paid by Sprint to third-party resellers in the Company's service territory.

The Company's revenue related to Sprint's prepaid customers is the amount that Sprint bills its prepaid subscribers, reduced by costs to acquire and support the customers, based on national averages for Sprint's prepaid programs, and a 6% management fee.

Under our affiliate agreement with Sprint, we have historically earned and recognized monthly revenue of \$1.5 million for providing service to Sprint customers who pass through our network area ("Travel Revenue"). While we continue to provide these services to Sprint, the agreed upon payments were suspended by Sprint on April 30, 2019. Accordingly, we have ceased recognizing revenue for the services provided after that date until a new prospective fee can be agreed. We have commenced final dispute resolution proceedings to settle this dispute and expect it to be settled by early 2020.

The Company considers Sprint, rather than Sprint's subscribers, to be the customer and the Company's performance obligation is to provide Sprint a series of continuous network access services within the Sprint Affiliate Area. The Company determined that reimbursements to Sprint including the cost of prepaid handsets and commissions, and postpaid commissions paid by Sprint to third-party resellers, represent consideration payable to a customer. These reimbursements are initially recorded as a contract asset and are subsequently recognized as a reduction of revenue over the expected benefit period between 21 and 53 months. Contract asset balances and activity for 2019 were as follows:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Beginning balance	\$ 73,789	\$ 57,256	\$ 65,674	\$ 51,103
Contract payments	20,761	16,421	56,477	44,790
Contract amortization	(14,930)	(11,861)	(42,531)	(34,077)
Ending balance	<u>\$ 79,620</u>	<u>\$ 61,816</u>	<u>\$ 79,620</u>	<u>\$ 61,816</u>

#### Wireless equipment

The Company also earns revenue through the sale of wireless equipment. The Company owns and operates Sprint-branded retail stores within the Sprint Affiliate Area from which the Company sells equipment, primarily wireless handsets, and service to Sprint subscribers. The Company's equipment is predominantly sold to subscribers through Sprint's equipment financing plans. Under the equipment financing plans, Sprint purchases the equipment from the Company and resells the equipment to its subscribers. The Company is the principal in these equipment financing transactions, as it controls and bears the risk of ownership of the inventory prior to sale, and accordingly, revenue and handset costs are recorded on a gross basis, and the corresponding cost of the equipment is recorded separately to cost of goods sold.

#### Business, residential and enterprise

The Company also earns revenue in the Cable and Wireline segments from the sale of business, residential, and enterprise services to customers where the performance obligations are to provide cable, broadband, and telephone network services, sell and lease equipment and wiring services, and lease fiber-optic cable. The Company's arrangements for residential services are generally composed of contracts that are cancellable at the customer's discretion without penalty at any time. As there are multiple performance obligations in these arrangements, the Company recognizes revenue based on the standalone selling price of each distinct good or service. The Company generally recognizes this revenue over time as customers simultaneously receive and consume the benefits of the service, with the exception of equipment sales and home wiring which are recognized as revenue at a point in time when control transfers and when installation is complete, respectively.

Installation fees are allocated to services and are recognized ratably over the longer of the contract term or the period the unrecognized portion of the fee remains material to the contract, typically 10 and 11 months for Cable and Wireline customers, respectively. Additionally, the Company incurs commission and installation costs related to in-house employees and third-party vendors which are capitalized and amortized over the expected benefit period which is approximately 44 months and 72 months for Cable and Wireline, respectively.

#### *Tower and Other*

The Company also earns revenue from tower and other services. Tower revenue consists primarily of tower collocation space on cell towers owned by the Company accounted for under Topic 842, *Leases*. Other revenue includes network access-related charges for service provided to customers across the segments.

#### **Future performance obligations**

On September 30, 2019, the Company had approximately \$3.5 million allocated to unsatisfied performance obligations, which excludes contracts with original expected duration of one year or less. The following table summarizes the approximate amounts expected to be recognized as revenue after September 30, 2019.

	<b>Amount Expected to be Recognized as Revenue:</b>	
<i>(in thousands)</i>		
2019	\$	219
2020		850
2021		770
2022 and thereafter		1,707
Total	<u>\$</u>	<u>3,546</u>

#### **Contract acquisition costs and costs to fulfill contracts**

Capitalized contract costs represent contract fulfillment costs and contract acquisition costs which include commissions and installation costs in the Cable and Wireline segments. Capitalized contract assets, including commissions and installation costs, are amortized on a straight-line basis over the average customer life of 44 months and 72 months for Cable and Wireline, respectively. The Company elected to apply the practical expedient to expense contract acquisition costs when incurred, if the amortization period would be twelve months or less. The amortization of these costs is included in cost of services, and selling, general and administrative expenses. Amortized and capitalized costs for Cable and Wireline contracts were as follows:

<i>(in thousands)</i>	<b>Three Months Ended September 30,</b>		<b>Nine Months Ended September 30,</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
Beginning Balance	\$ 10,476	\$ 9,755	\$ 10,091	\$ 9,841
Contract payments	1,840	1,613	4,996	4,246
Contract amortization	(1,399)	(1,339)	(4,170)	(4,058)
Ending Balance	<u>\$ 10,917</u>	<u>\$ 10,029</u>	<u>\$ 10,917</u>	<u>\$ 10,029</u>

#### **Note 4. Acquisitions**

##### *Big Sandy*

On February 28, 2019, the Company completed its preliminary valuation for the acquisition of the assets of Big Sandy Broadband, Inc. ("Big Sandy") for \$10 million and recorded \$4.6 million of property, plant and equipment; \$2.8 million of subscriber relationships; and \$2.6 million of goodwill which is reported in the Cable segment and was accounted for as a business combination under ASC 805, *Business Combinations*. The estimated remaining useful lives of the acquired property, plant and equipment were approximately 2.5 years to 12.5 years and the estimated useful lives for subscriber relationships were 7 years at the time of the acquisition. Big Sandy was a provider of cable television, telephone and high speed internet services. Our preliminary allocation of the acquisition price is based on our preliminary estimate of fair value for each of the acquired assets and liabilities. These estimates may be revised during the one year measurement period provided by the authoritative guidance applicable to business combinations.

**Note 5. Customer Concentration**

*Significant Contractual Relationship*

In 1999, the Company executed a Management Agreement (the "Agreement") with Sprint whereby the Company committed to construct and operate a PCS network using CDMA air interface technology. The Agreement has been amended numerous times. Under the amended Agreement, the Company is the exclusive PCS Affiliate of Sprint providing wireless mobility communications network products and services on the 800 MHz, 1900 MHz and 2.5 GHz spectrum ranges in its territory across a multi-state area covering large portions of central and western Virginia, south-central Pennsylvania, West Virginia, and portions of Maryland, North Carolina, Kentucky, and Ohio. Effective February 1, 2018, the Company amended its Agreement with Sprint to expand its wireless service area to include certain areas in Kentucky, Pennsylvania, Virginia and West Virginia.

As an exclusive PCS Affiliate of Sprint, the Company has the exclusive right to build, own and maintain its portion of Sprint's nationwide PCS network, in the aforementioned areas, to Sprint's specifications. The initial term of the Agreement extends through November 2029, with two successive 10-year renewal periods, unless terminated by either party under provisions outlined in the Agreement. Upon non-renewal by either party, the Company may cause Sprint to buy or Sprint may cause the Company to sell the business, at 90% of Entire Business Value ("EBV") as defined in the Agreement. EBV is defined as i) the fair market value of a going concern paid by a willing buyer to a willing seller; ii) valued as if the business will continue to utilize existing brands and operate under existing agreements; and, iii) valued as if Shentel has continued access to the spectrum. Determination of EBV is made by an independent appraisal process.

**Note 6. Earnings Per Share ("EPS")**

Basic EPS was computed by dividing net income by the weighted average number of shares of common stock outstanding. Diluted EPS was computed under the treasury stock method by dividing net income by the sum of the weighted average number of shares of common stock outstanding and potentially dilutive securities outstanding during the period under the treasury stock method. Potentially dilutive securities include unvested equity awards that are expected to vest and shares that the Company is contractually obligated to issue in the future.

The following table indicates the computation of basic and diluted earnings per share:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
<i>(in thousands, except per share amounts)</i>				
Calculation of net income per share:				
Net income	\$ 14,354	\$ 15,534	\$ 41,414	\$ 31,743
Basic weighted average shares outstanding	49,857	49,559	49,827	49,527
Basic net income per share	\$ 0.29	\$ 0.31	\$ 0.83	\$ 0.64
Effect of stock options outstanding:				
Basic weighted average shares outstanding	49,857	49,559	49,827	49,527
Effect from dilutive shares and options outstanding	272	558	283	517
Diluted weighted average shares outstanding	50,129	50,117	50,110	50,044
Diluted net income per share	\$ 0.29	\$ 0.31	\$ 0.83	\$ 0.63

The computation of diluted EPS does not include certain unvested awards, on a weighted average basis, because their inclusion would have an anti-dilutive effect on EPS. The awards excluded because of their anti-dilutive effect were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
<i>(in thousands)</i>				
Awards excluded from the computation of diluted net income per share because their inclusion would have been anti-dilutive	93	13	109	60

**Note 7. Investments**

Investments consist of the following:

<i>(in thousands)</i>	<b>September 30, 2019</b>	<b>December 31, 2018</b>
Domestic equity funds	\$ 1,681	\$ 1,409
International equity funds	421	370
Total investments carried at fair value	<u>2,102</u>	<u>1,779</u>
CoBank	8,368	7,705
Equity in other telecommunications partners	767	782
Total investments carried at cost	<u>9,135</u>	<u>8,487</u>
Other	614	522
Total equity method investments	<u>614</u>	<u>522</u>
Total investments	<u>\$ 11,851</u>	<u>\$ 10,788</u>

The Company determines classification for investments at the date individual investments are acquired. The appropriateness of such classification is periodically reassessed. The Company monitors the value of all investments, and based on factors such as market conditions, financial information and industry conditions, the Company reflects impairments in values when warranted. The domestic and international equity funds are carried at their fair value as determined by using the net asset value expedient.

**Note 8. Property, Plant and Equipment**

Property, plant and equipment consisted of the following:

<i>(in thousands)</i>	<b>Estimated Useful Lives</b>	<b>September 30, 2019</b>	<b>December 31, 2018</b>
Land		\$ 6,936	\$ 6,723
Buildings and structures	10 - 40 years	231,962	213,657
Cable and fiber	15 - 40 years	321,963	309,928
Equipment and software	3 - 20 years	839,624	791,401
Plant in service		<u>1,400,485</u>	<u>1,321,709</u>
Plant under construction		70,674	81,409
Total property, plant and equipment		<u>1,471,159</u>	<u>1,403,118</u>
Less: accumulated amortization and depreciation		782,643	701,759
Property, plant and equipment, net		<u>\$ 688,516</u>	<u>\$ 701,359</u>

The Company prospectively changed the estimated useful life of certain tower, antenna, and fiber assets during 2019 based on the Company's experience as well as observable examples in the industry. Depreciation expense was approximately \$0.8 million lower as a result for the three and nine months ended September 30, 2019.

**Note 9. Goodwill and Other Intangible Assets**

Goodwill by segment consisted of the following:

<i>(in thousands)</i>	<b>September 30, 2019</b>	<b>December 31, 2018</b>
Wireless	\$ 146,383	\$ 146,383
Cable	2,677	104
Wireline	10	10
Total Goodwill	<u>\$ 149,070</u>	<u>\$ 146,497</u>

Intangible assets consisted of the following:

<i>(in thousands)</i>	<b>September 30, 2019</b>			<b>December 31, 2018</b>		
	<b>Gross Carrying Amount</b>	<b>Accumulated Amortization and Other</b>	<b>Net</b>	<b>Gross Carrying Amount</b>	<b>Accumulated Amortization and Other</b>	<b>Net</b>
<b>Non-amortizing intangibles:</b>						
Cable franchise rights	\$ 64,334	\$ —	\$ 64,334	\$ 64,334	\$ —	\$ 64,334
FCC spectrum licenses	13,839	—	13,839	—	—	—
Railroad crossing rights	141	—	141	141	—	141
Total non-amortizing intangibles	<u>78,314</u>	<u>—</u>	<u>78,314</u>	<u>64,475</u>	<u>—</u>	<u>64,475</u>
<b>Finite-lived intangibles:</b>						
Sprint affiliate contract expansion - Wireless	455,305	(212,194)	243,111	455,305	(167,830)	287,475
FCC spectrum licenses	4,659	(39)	4,620	—	—	—
Favorable leases - Wireless	—	—	—	15,743	(1,919)	13,824
Acquired subscribers - Cable	28,065	(25,499)	2,566	25,265	(25,250)	15
Other intangibles	463	(243)	220	463	(223)	240
Total finite-lived intangibles	<u>488,492</u>	<u>(237,975)</u>	<u>250,517</u>	<u>496,776</u>	<u>(195,222)</u>	<u>301,554</u>
Total intangible assets	<u>\$ 566,806</u>	<u>\$ (237,975)</u>	<u>\$ 328,831</u>	<u>\$ 561,251</u>	<u>\$ (195,222)</u>	<u>\$ 366,029</u>

Affiliate contract expansion is amortized over the expected benefit period and is further reduced by the amount of waived management fees received from Sprint which were \$9.7 million and \$29.0 million for the three and nine months ended September 30, 2019, respectively. Since May 6, 2016, the date of the non-monetary exchange, waived management fees received from Sprint have totaled \$127.4 million, and the Company expects to collect another \$128.2 million, up to \$4.2 million per month, through 2022.

**FCC Spectrum Licenses**

During the third quarter of 2019, the Company purchased certain indefinite-lived spectrum licenses for \$13.8 million. Spectrum licenses are issued by the Federal Communications Commission (“FCC”) which provide us the exclusive right to utilize designated radio frequency spectrum within specific geographic service areas to provide wireless communication services. While some spectrum licenses are issued for a fixed time (generally up to fifteen years), renewals have been granted routinely and at nominal costs. The Company believes it will be able to meet all requirements necessary to secure renewal of its spectrum licenses. Moreover, the Company has determined that there are currently no legal, regulatory, contractual, competitive, economic or other factors that limit the useful lives of our spectrum licenses and as a result, we account for spectrum licenses as indefinite-lived intangible assets. During the third quarter of 2019, the Company also acquired certain definite-lived spectrum licenses for \$4.7 million. These licenses are being amortized over their remaining contractual lives of approximately 20 years.

**Note 10. Derivatives and Hedging**

The Company uses derivative financial instruments to manage its exposure to interest rate risk for its long-term variable-rate debt through interest rate swaps. The Company's interest rate swaps are all designated as cash flow hedges, and involve the receipt of variable-rate amounts from counterparties in exchange for the Company making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount.

The outstanding notional amounts of these swaps was \$292.6 million and \$384.0 million as of September 30, 2019 and December 31, 2018, respectively.

The table below presents the fair value of the Company's derivative financial instruments as well as their classification in the condensed consolidated balance sheets. The fair value of these instruments was estimated using an income approach and observable market inputs (Level II):

<i>(in thousands)</i>	September 30, 2019	December 31, 2018
Balance sheet location of derivative financial instruments:		
Prepaid expenses and other	\$ 1,483	\$ 4,930
Deferred charges and other assets, net	536	8,323
Total derivatives designated as hedging instruments	\$ 2,019	\$ 13,253

The table below summarizes changes in accumulated other comprehensive income (loss) by component:

<i>(in thousands)</i>	Nine Months Ended September 30, 2019		
	Accumulated Gains (Losses) on Cash Flow Hedges	Income Tax (Expense) Benefit	Accumulated Other Comprehensive Income (Loss), net of taxes
Balance as of December 31, 2018	\$ 13,253	\$ (4,973)	\$ 8,280
Unrealized gain (loss)	(7,741)	1,929	(5,812)
Amounts reclassified from accumulated other comprehensive income to interest expense	(3,493)	871	(2,622)
Net current period other comprehensive income (loss)	(11,234)	2,800	(8,434)
Balance as of September 30, 2019	\$ 2,019	\$ (2,173)	\$ (154)

**Note 11. Other Assets and Accrued Liabilities**

Prepaid expenses and other, classified as current assets, included the following:

<i>(in thousands)</i>	September 30, 2019	December 31, 2018
Prepaid rent	\$ —	\$ 11,245
Prepaid maintenance expenses	3,788	3,981
Interest rate swaps	1,483	4,930
Wireless contract asset	41,878	33,323
Contract acquisition and fulfillment costs	4,861	4,634
Other	4,587	2,049
Prepaid expenses and other	\$ 56,597	\$ 60,162

Deferred charges and other assets, classified as long-term assets, included the following:

<i>(in thousands)</i>	<b>September 30, 2019</b>	<b>December 31, 2018</b>
Interest rate swaps	\$ 536	\$ 8,323
Wireless contract asset	37,742	32,351
Contract acquisition and fulfillment costs	6,056	5,457
Other	6,135	3,760
Deferred charges and other assets	<u>\$ 50,469</u>	<u>\$ 49,891</u>

Accrued liabilities and other, classified as current liabilities, included the following:

<i>(in thousands)</i>	<b>September 30, 2019</b>	<b>December 31, 2018</b>
Sales and property taxes payable	\$ 4,409	\$ 4,281
Asset retirement obligations	407	582
Accrued programming costs	3,125	2,886
Financing leases	89	—
FCC spectrum licenses	87	—
Other current liabilities	6,614	6,814
Accrued liabilities and other	<u>\$ 14,731</u>	<u>\$ 14,563</u>

Other liabilities, classified as long-term liabilities, included the following:

<i>(in thousands)</i>	<b>September 30, 2019</b>	<b>December 31, 2018</b>
Noncurrent portion of deferred lease revenue	\$ 12,613	\$ 12,593
FCC spectrum licenses	1,687	—
Noncurrent portion of financing leases	1,627	—
Other	749	1,771
Other liabilities	<u>\$ 16,676</u>	<u>\$ 14,364</u>

Topic 842 requires the Company to include fixed payments for maintenance activities in its measurement of lease liabilities since the Company elected not to separate lease and non-lease components. Liabilities for the Company's financing leases were established with the adoption of Topic 842, as of January 1, 2019, to reflect the present value of fixed payments for maintenance activities. Refer to Note 2, *Leases*, for additional information.

#### **Note 12. Long-Term Debt**

Total debt consisted of the following:

<i>(in thousands)</i>	<b>September 30, 2019</b>	<b>December 31, 2018</b>
Term loan A-1	\$ 265,855	\$ 287,699
Term loan A-2	474,715	497,537
	<u>740,570</u>	<u>785,236</u>
Less: unamortized loan fees	12,558	14,994
Total debt, net of unamortized loan fees	<u>\$ 728,012</u>	<u>\$ 770,242</u>
Current maturities of long-term debt, net of current unamortized loan fees	\$ 31,634	\$ 20,618
Long-term debt, less current maturities, net of unamortized loan fees	\$ 696,378	\$ 749,624



As of September 30, 2019, the Company's indebtedness totaled approximately \$728.0 million, net of unamortized loan fees of \$12.6 million, with an annualized overall weighted average interest rate of approximately 3.63%. In September of 2019, the Company's interest rate decreased by 25 basis points as the net leverage ratio, as defined in the Company's credit facility, dropped below the 2.25x threshold. As of September 30, 2019, the Term Loan A-1 bears interest at one-month London Interbank Offered Rate ("LIBOR") plus a base rate of 1.50%, while the Term Loan A-2 bears interest at one-month LIBOR plus a base rate of 1.75%. LIBOR resets monthly.

The amended Term Loan A-1 requires quarterly principal repayments of \$3.6 million, which began on December 31, 2018 and continued through September 30, 2019, increasing to \$7.3 million quarterly from December 31, 2019 through September 30, 2022; then increasing to \$10.9 million quarterly from December 31, 2022 through September 30, 2023, with the remaining balance due November 8, 2023. The amended Term Loan A-2 requires quarterly principal repayments of \$1.2 million which began on December 31, 2018 and continue through September 30, 2025, with the remaining balance due November 8, 2025. In addition to its required quarterly repayments, the Company paid an additional \$15.0 million in the first quarter of 2019 and an additional \$15.0 million in the third quarter of 2019, with no prepayment penalties.

The Company's cash payments for interest were \$21.6 million and \$25.1 million during the nine months ended September 30, 2019 and 2018, respectively.

As shown below, as of September 30, 2019, the Company was in compliance with the financial covenants in its credit agreement.

	Actual	Covenant Requirement
Total leverage ratio	2.38	3.50 or Lower
Debt service coverage ratio	6.21	2.00 or Higher
Minimum liquidity balance (in millions)	\$ 172.2	\$25.0 or Higher

#### Note 13. Income Taxes

The Company files U.S. federal income tax returns and various state income tax returns. The Company is not subject to any state or federal income tax audits as of September 30, 2019. The Company's returns are generally open to examination from 2015 forward and the net operating losses acquired in the acquisition of nTelos are open to examination from 2002 forward.

The Company's effective tax rate for the three months ended September 30, 2019 was approximately 24.3%, as compared with approximately 23.8% for the three months ended September 30, 2018. The Company's effective tax rate for the nine months ended September 30, 2019 was approximately 24.4%, which was consistent with approximately 24.3% for the nine months ended September 30, 2018. The Company's cash payments for income taxes were \$6.1 million in the nine months ended September 30, 2019. The Company received cash refunds for income taxes of \$2.7 million in the nine months ended September 30, 2018.

#### Note 14. Segment Reporting

The Company's reportable segments, which the Company operates and manages as strategic business units that are organized according to major product and service offerings, include: Wireless, Cable, Wireline and Other. A general description of the products and services offered and the customers served by each of these segments is as follows:

- Wireless provides digital wireless service as a Sprint PCS Affiliate to a portion of a multi-state area covering large portions of central and western Virginia, south-central Pennsylvania, West Virginia, and portions of Maryland, North Carolina, Kentucky, and Ohio. In these areas, the Company is the exclusive provider of Sprint-branded wireless mobility communications network products and services on the 800 MHz, 1900 MHz and 2.5 GHz spectrum bands.
- Cable provides video, broadband and voice services in the cable franchise areas in portions of Virginia, West Virginia, western Maryland, and eastern Kentucky, and leases fiber optic facilities and provides fiber transport services throughout its service area. It does not include video, broadband and voice services provided to customers in Shenandoah County, Virginia.
- Wireline provides video and broadband services in the cable franchise area and regulated and unregulated voice and broadband services in Shenandoah County, Virginia, and leases fiber optic facilities and provides fiber transport services throughout portions of Virginia, West Virginia, Maryland and Pennsylvania.
- Other operations are represented by Shenandoah Telecommunications Company, the parent holding company that provides investing and management services to its subsidiaries.

**Three Months Ended September 30, 2019**

<i>(in thousands)</i>	Wireless	Cable	Wireline	Other	Eliminations	Consolidated
External revenue						
Service revenue	\$ 91,108	\$ 30,829	\$ 5,446	\$ —	\$ —	\$ 127,383
Equipment revenue	15,975	292	53	—	—	16,320
Tower revenue	1,660	—	—	—	—	1,660
Other revenue	395	2,392	7,002	—	—	9,789
Total external revenue	109,138	33,513	12,501	—	—	155,152
Internal revenue	1,290	1,591	6,643	—	(9,524)	—
Total operating revenue	110,428	35,104	19,144	—	(9,524)	155,152
Operating expenses						
Cost of services	34,044	15,790	9,104	—	(8,774)	50,164
Cost of goods sold	15,571	156	98	—	—	15,825
Selling, general and administrative	9,882	6,636	1,938	9,472	(750)	27,178
Depreciation and amortization	27,200	6,226	3,077	123	—	36,626
Total operating expenses	86,697	28,808	14,217	9,595	(9,524)	129,793
Operating income (loss)	\$ 23,731	\$ 6,296	\$ 4,927	\$ (9,595)	\$ —	\$ 25,359

**Three Months Ended September 30, 2018**

<i>(in thousands)</i>	Wireless	Cable	Wireline	Other	Eliminations	Consolidated
External revenue						
Service revenue	\$ 96,299	\$ 28,578	\$ 5,443	\$ —	\$ —	\$ 130,320
Equipment revenue	15,666	234	63	—	—	15,963
Tower revenue	1,639	—	—	—	—	1,639
Other revenue	1,232	2,104	7,473	—	—	10,809
Total external revenue	114,836	30,916	12,979	—	—	158,731
Internal revenue	1,263	1,266	6,643	—	(9,172)	—
Total operating revenue	116,099	32,182	19,622	—	(9,172)	158,731
Operating expenses						
Cost of services	32,253	14,837	9,266	(12)	(8,458)	47,886
Cost of goods sold	14,940	78	19	(1)	—	15,036
Selling, general and administrative	11,191	5,331	1,780	9,864	(714)	27,452
Depreciation and amortization	30,363	6,102	3,435	128	—	40,028
Total operating expenses	88,747	26,348	14,500	9,979	(9,172)	130,402
Operating income (loss)	\$ 27,352	\$ 5,834	\$ 5,122	\$ (9,979)	\$ —	\$ 28,329

**Nine Months Ended September 30, 2019**

<i>(in thousands)</i>	Wireless	Cable	Wireline	Other	Eliminations	Consolidated
External revenue						
Service revenue	\$ 282,533	\$ 91,250	\$ 16,489	\$ —	\$ —	\$ 390,272
Equipment revenue	47,814	817	156	—	—	48,787
Tower revenue	4,985	—	—	—	—	4,985
Other revenue	1,060	6,895	20,910	—	—	28,865
Total external revenue	336,392	98,962	37,555	—	—	472,909
Internal revenue	3,830	4,541	20,025	—	(28,396)	—
Total operating revenue	340,222	103,503	57,580	—	(28,396)	472,909
Operating expenses						
Cost of services	101,085	47,138	27,234	—	(26,278)	149,179
Cost of goods sold	45,740	443	153	—	—	46,336
Selling, general and administrative	31,836	17,898	5,769	29,685	(2,118)	83,070
Depreciation and amortization	90,469	19,239	10,057	393	—	120,158
Total operating expenses	269,130	84,718	43,213	30,078	(28,396)	398,743
Operating income (loss)	\$ 71,092	\$ 18,785	\$ 14,367	\$ (30,078)	\$ —	\$ 74,166

**Nine Months Ended September 30, 2018**

<i>(in thousands)</i>	Wireless	Cable	Wireline	Other	Eliminations	Consolidated
External revenue						
Service revenue	\$ 284,154	\$ 85,797	\$ 16,052	\$ —	\$ —	\$ 386,003
Equipment revenue	48,859	537	155	—	—	49,551
Tower revenue	4,934	—	—	—	—	4,934
Other revenue	1,963	6,276	20,643	—	—	28,882
Total external revenue	339,910	92,610	36,850	—	—	469,370
Internal revenue	3,746	3,394	21,591	—	(28,731)	—
Total operating revenue	343,656	96,004	58,441	—	(28,731)	469,370
Operating expenses						
Cost of services	99,491	45,118	28,441	—	(26,688)	146,362
Cost of goods sold	45,749	197	61	—	—	46,007
Selling, general and administrative	35,693	14,940	5,183	32,344	(2,043)	86,117
Depreciation and amortization	95,853	18,305	10,069	405	—	124,632
Total operating expenses	276,786	78,560	43,754	32,749	(28,731)	403,118
Operating income (loss)	\$ 66,870	\$ 17,444	\$ 14,687	\$ (32,749)	\$ —	\$ 66,252

**Note 15. Subsequent Events***Dividend Declaration & Share Repurchase Program*

On October 29, 2019, the Company's Board of Directors approved a dividend of \$0.29 per common share and authorized a stock repurchase program that will enable the Company to repurchase an aggregate of \$80 million of its outstanding common stock. The dividend will be payable on December 2, 2019 to shareholders of record as of the close of business on November 14, 2019. The share repurchase program will become effective November 4, 2019, and is expected to be executed over the next twelve months subject to market conditions.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*This management's discussion and analysis 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. When used in this report, the words "anticipate," "believe," "estimate," "expect," "intend," "plan" and similar expressions as they relate to Shenandoah Telecommunications Company or its management are intended to identify these forward-looking statements. All statements regarding Shenandoah Telecommunications Company's expected future financial position and operating results, business strategy, financing plans, forecasted trends relating to the markets in which Shenandoah Telecommunications Company operates and similar matters are forward-looking statements. We cannot assure you that the Company's expectations expressed or implied in these forward-looking statements will turn out to be correct. The Company's actual results could be materially different from its expectations because of various factors, including those discussed below and under the caption "Risk Factors" in the Company's Annual Report on Form 10-K for its fiscal year ended December 31, 2018. The following management's discussion and analysis should be read in conjunction with the Company's Annual Report on Form 10-K for its fiscal year ended December 31, 2018, including the consolidated financial statements and related notes included therein.*

### Overview

Shenandoah Telecommunications Company (Shentel) provides a broad range of diversified communications services through its high speed, state-of-the-art network to customers in the Mid-Atlantic United States. The Company's services include: wireless voice and data; cable video, internet and digital voice; fiber network and services; and regulated local and long distance telephone. Shentel is the exclusive personal communications service ("PCS") Affiliate of Sprint in a multi-state area covering large portions of central and western Virginia, south-central Pennsylvania, West Virginia, and portions of Maryland, North Carolina, Kentucky, and Ohio. For more information, please visit [www.shentel.com](http://www.shentel.com).

### 2019 Developments

*Big Sandy Broadband, Inc. Acquisition:* On February 28, 2019, the Company acquired the assets of Big Sandy Broadband, Inc., ("Big Sandy"), a provider of cable television, telephone and high speed internet services in eastern Kentucky. The Company's investment will allow the Cable segment to expand its footprint into the adjacent markets of eastern Kentucky. See Note 4, *Acquisitions*, for additional information.

*Fiber to the Home (FTTH):* During the second quarter of 2019, we initiated the deployment of our new FTTH product, in our Cable segment, which leverages our existing robust fiber network and commercial customer base to target certain residential areas in three initial markets within our wireless service territory. We incurred \$0.8 million and \$1.8 million of FTTH business development expenses in the three and nine months ending September 30, 2019, respectively. We expect to continue to incur expenses related to the initiation of FTTH in the select markets, in advance of generating revenue from this new product.

**Results of Operations****Three Months Ended September 30, 2019 Compared with the Three Months Ended September 30, 2018**

The Company's consolidated results from operations are summarized as follows:

(\$ in thousands)	Three Months Ended September 30,				Change	
	2019	% of Revenue	2018	% of Revenue	\$	%
Operating revenue	\$ 155,152	100.0 %	\$ 158,731	100.0 %	(3,579)	(2.3)%
Operating expenses	129,793	83.7 %	130,402	82.2 %	(609)	(0.5)%
Operating income	25,359	16.3 %	28,329	17.8 %	(2,970)	(10.5)%
Interest expense	(7,505)	(4.8)%	(9,001)	(5.7)%	(1,496)	(16.6)%
Other income, net	1,099	0.7 %	1,054	0.7 %	45	4.3 %
Income before taxes	18,953	12.2 %	20,382	12.8 %	(1,429)	(7.0)%
Income tax expense	4,599	3.0 %	4,848	3.1 %	(249)	(5.1)%
Net income	\$ 14,354	9.3 %	\$ 15,534	9.8 %	(1,180)	(7.6)%

**Operating revenue**

During the three months ended September 30, 2019, operating revenue decreased approximately \$3.6 million, or 2.3%, compared with the three months ended September 30, 2018, driven by the continued dispute of the travel fee with Sprint in the Wireless segment, partially offset by growth in the Cable segment. Refer to the discussion of the results of operations for the Wireless and Cable segments, included within this quarterly report, for additional information.

**Operating expenses**

During the three months ended September 30, 2019, operating expenses decreased approximately \$0.6 million, or 0.5%, compared with the three months ended September 30, 2018. The decrease was primarily due to lower advertising and depreciation expense in the Wireless segment, partially offset by the expansion of our network that resulted in higher cost of services in the Wireless and Cable segments.

**Interest expense**

During the three months ended September 30, 2019, interest expense decreased approximately \$1.5 million, or 16.6%, compared with the three months ended September 30, 2018. The decrease in interest expense was primarily attributable to the reduction of applicable base interest rate by 75 basis points and principal repayments, partially offset by the effect of increases in LIBOR.

**Other income, net**

During the three months ended September 30, 2019, other income remained consistent with the prior period.

**Income tax expense**

During the three months ended September 30, 2019, income tax expense decreased approximately \$0.2 million, or 5.1%, compared with the three months ended September 30, 2018, consistent with our lower income before taxes.

Our effective tax rate for the three months ended September 30, 2019 was approximately 24.3%, as compared with approximately 23.8% for the three months ended September 30, 2018.

**Nine Months Ended September 30, 2019 Compared with the Nine Months Ended September 30, 2018**

The Company's consolidated results from operations are summarized as follows:

(\$ in thousands)	Nine Months Ended September 30,				Change	
	2019	% of Revenue	2018	% of Revenue	\$	%
Operating revenue	\$ 472,909	100.0 %	\$ 469,370	100.0 %	3,539	0.8 %
Operating expenses	398,743	84.3 %	403,118	85.9 %	(4,375)	(1.1)%
Operating income	74,166	15.7 %	66,252	14.1 %	7,914	11.9 %
Interest expense	(22,981)	(4.9)%	(27,184)	(5.8)%	(4,203)	(15.5)%
Other income, net	3,562	0.8 %	2,882	0.6 %	680	23.6 %
Income before taxes	54,747	11.6 %	41,950	8.9 %	12,797	30.5 %
Income tax expense	13,333	2.8 %	10,207	2.2 %	3,126	30.6 %
Net income	\$ 41,414	8.8 %	\$ 31,743	6.8 %	9,671	30.5 %

**Operating revenue**

During the nine months ended September 30, 2019, operating revenue increased approximately \$3.5 million, or 0.8%, compared with the nine months ended September 30, 2018, driven by growth in the Cable segment and was partially offset by a decline in Wireless segment revenue due to the continued dispute of the travel fee with Sprint.

**Operating expenses**

During the nine months ended September 30, 2019, operating expenses decreased approximately \$4.4 million, or 1.1%, compared with the nine months ended September 30, 2018. The decrease was primarily due to a \$5.4 million decline in Wireless depreciation and amortization expense as certain assets acquired from nTelos became fully depreciated.

**Interest expense**

During the nine months ended September 30, 2019, interest expense decreased approximately \$4.2 million, or 15.5%, compared with the nine months ended September 30, 2018. The decrease in interest expense was primarily attributable to the reduction of applicable base interest rate by 75 basis points and principal repayments, partially offset by the effect of increases in LIBOR.

**Other income, net**

During the nine months ended September 30, 2019, other income, net increased approximately \$0.7 million, or 23.6%, compared with the nine months ended September 30, 2018. The increase in other income, net was primarily due to an increase in interest and dividend income on our investments.

**Income tax expense**

During the nine months ended September 30, 2019, income tax expense increased approximately \$3.1 million, or 30.6%, compared with the nine months ended September 30, 2018. The increase was consistent with the increase in our income before taxes.

Our effective tax rate was 24.4%, consistent with the prior year period.

**Wireless**

The following tables indicate selected operating statistics of Wireless, including Sprint subscribers:

	<b>September 30,</b>		<b>September 30,</b>	
	<b>2019</b>		<b>2018</b>	
Retail PCS subscribers - postpaid	823,417		785,537	
Retail PCS subscribers - prepaid	271,551		255,462	
PCS market POPS (000) (1)	7,227		7,024	
PCS covered POPS (000) (1)	6,294		5,921	
CDMA base stations (sites)	1,920		1,788	
Towers owned	221		193	
Cell site leases	203		192	

  

	<b>Three Months Ended</b>		<b>Nine Months Ended</b>	
	<b>September 30,</b>		<b>September 30,</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018 (2)</b>
Gross PCS subscriber additions - postpaid	60,477	48,111	164,123	135,817
Net PCS subscriber additions - postpaid	11,698	4,879	28,241	48,940
Gross PCS subscriber additions - prepaid	38,014	38,486	112,746	112,437
Net PCS subscriber additions - prepaid	2,512	3,408	12,847	29,640
PCS average monthly retail churn % - postpaid	1.99%	1.84%	1.87%	1.80%
PCS average monthly retail churn % - prepaid	4.38%	4.62%	4.17%	4.42%

(1) "POPS" refers to the estimated population of a given geographic area. Market POPS are those within a market area which we are authorized to serve under our Sprint PCS affiliate agreement, and Covered POPS are those covered by our network. The data source for POPS is U.S. census data.

(2) Beginning February 1, 2018 includes Richmond Expansion Area except for gross PCS subscriber additions.

Except for gross additions, the subscriber statistics above include the Richmond Expansion Area as follows:

	<b>February 1,</b>
	<b>2018</b>
	<b>Expansion Area</b>
PCS subscribers - postpaid	38,343
PCS subscribers - prepaid	15,691
Acquired PCS market POPS (000)	1,082
Acquired PCS covered POPS (000)	602
Acquired CDMA base stations (sites)	105

**Three Months Ended September 30, 2019 Compared with the Three Months Ended September 30, 2018**

(\$ in thousands)	Three Months Ended September 30,				Change	
	2019	% of Revenue	2018	% of Revenue	\$	%
Wireless operating revenue						
Wireless service revenue	\$ 91,108	82.5%	\$ 96,299	82.9%	(5,191)	(5.4)%
Tower lease revenue	2,950	2.7%	2,902	2.5%	48	1.7 %
Equipment revenue	15,975	14.5%	15,666	13.5%	309	2.0 %
Other revenue	395	0.3%	1,232	1.1%	(837)	(67.9)%
Total Wireless operating revenue	110,428	100.0%	116,099	100.0%	(5,671)	(4.9)%
Wireless operating expenses						
Cost of services	34,044	30.8%	32,253	27.8%	1,791	5.6 %
Cost of goods sold	15,571	14.1%	14,940	12.9%	631	4.2 %
Selling, general and administrative	9,882	8.9%	11,191	9.6%	(1,309)	(11.7)%
Depreciation and amortization	27,200	24.6%	30,363	26.2%	(3,163)	(10.4)%
Total Wireless operating expenses	86,697	78.5%	88,747	76.4%	(2,050)	(2.3)%
Wireless operating income	\$ 23,731	21.5%	\$ 27,352	23.6%	(3,621)	(13.2)%

**Operating Revenue**

Under our affiliate agreement with Sprint, we have historically earned and recognized monthly revenue of \$1.5 million for providing service to Sprint customers who pass through our network area ("Travel Revenue"). While we continue to provide these services to Sprint, the agreed upon payments were suspended by Sprint on April 30, 2019. Accordingly, we have ceased recognizing revenue for the services provided after that date until a new prospective fee can be agreed. We have triggered the final dispute resolution option with Sprint which we expect will lead to a resolution for travel fee revenue by early 2020.

Wireless operating revenue decreased \$5.7 million or 4.9% to \$110.4 million for the three months ended September 30, 2019, compared with \$116.1 million for the three months ended September 30, 2018. The decreases in revenue were primarily attributable to a decline in travel revenue of \$4.5 million, lower postpaid Average Revenue Per User ("ARPU"), increased contract asset amortization which is recorded as contra revenue and due to increases in Sprint customer bad debt expense which reduces the revenues we earn from Sprint. These decreases were partially offset by the overall growth in subscribers.



The table below provides additional detail for Wireless service revenue.

(\$ in thousands)	Three Months Ended September 30,		Change	
	2019	2018	\$	%
Wireless service revenue:				
Postpaid billings (1)	\$ 96,417	\$ 96,813	(396)	(0.4)%
Amortization of deferred contract and other costs	(5,973)	(4,708)	(1,265)	(26.9)%
Sprint management fee	(7,770)	(7,763)	(7)	(0.1)%
Net service fee	(8,352)	(8,345)	(7)	(0.1)%
Total postpaid service revenue	74,322	75,997	(1,675)	(2.2)%
Prepaid billings	30,860	28,460	2,400	8.4%
Amortization of deferred contract and other costs	(15,242)	(13,594)	(1,648)	(12.1)%
Sprint management fee	(1,926)	(1,795)	(131)	(7.3)%
Total prepaid service revenue	13,692	13,071	621	4.8%
Travel and other revenue	3,094	7,231	(4,137)	(57.2)%
Total service revenue	\$ 91,108	\$ 96,299	(5,191)	(5.4)%

(1) Postpaid net billings are defined under the terms of the affiliate contract with Sprint to be the gross billings to customers within our wireless network coverage area less billing credits and adjustments and allocated write-offs of uncollectible accounts.

#### **Cost of services**

During the three months ended September 30, 2019, cost of services increased approximately \$1.8 million or 5.6%, compared with the three months ended September 30, 2018 due to higher cell site rent expense of \$2.8 million related to our network expansion, partially offset by continued network optimization and construction of fiber to our towers which results in more cost effective backhaul circuits.

#### **Cost of goods sold**

During the three months ended September 30, 2019, cost of goods sold increased approximately \$0.6 million, or 4.2%, compared with the three months ended September 30, 2018 on higher unit volume.

#### **Selling, general and administrative**

During the three months ended September 30, 2019, selling, general and administrative costs decreased approximately \$1.3 million, or 11.7%, compared with the three months ended September 30, 2018. This was driven by a \$1.7 million reduction in advertising expense, partially offset by a \$0.5 million increase in sales and use tax expense.

#### **Depreciation and amortization**

During the three months ended September 30, 2019, depreciation and amortization decreased approximately \$3.2 million, or 10.4%, compared with the three months ended September 30, 2018, as certain assets acquired from nTelos became fully depreciated.

**Nine Months Ended September 30, 2019 Compared with the Nine Months Ended September 30, 2018**

(\$ in thousands)	Nine Months Ended September 30,				Change	
	2019	% of Revenue	2018	% of Revenue	\$	%
Wireless operating revenue						
Wireless service revenue	\$ 282,533	83.0%	\$ 284,154	82.7%	(1,621)	(0.6)%
Tower lease revenue	8,810	2.6%	8,676	2.5%	134	1.5 %
Equipment revenue	47,814	14.1%	48,859	14.2%	(1,045)	(2.1)%
Other revenue	1,065	0.3%	1,967	0.6%	(902)	(45.9)%
Total Wireless operating revenue	<u>340,222</u>	<u>100.0%</u>	<u>343,656</u>	<u>100.0%</u>	<u>(3,434)</u>	<u>(1.0)%</u>
Wireless operating expenses						
Cost of services	101,085	29.7%	99,491	29.0%	1,594	1.6 %
Cost of goods sold	45,740	13.4%	45,749	13.3%	(9)	— %
Selling, general and administrative	31,836	9.4%	35,693	10.4%	(3,857)	(10.8)%
Depreciation and amortization	90,469	26.6%	95,853	27.9%	(5,384)	(5.6)%
Total Wireless operating expenses	<u>269,130</u>	<u>79.1%</u>	<u>276,786</u>	<u>80.5%</u>	<u>(7,656)</u>	<u>(2.8)%</u>
Wireless operating income	<u>\$ 71,092</u>	<u>20.9%</u>	<u>\$ 66,870</u>	<u>19.5%</u>	<u>4,222</u>	<u>6.3 %</u>

**Operating Revenue**

Under our affiliate agreement with Sprint, we have historically earned and recognized monthly revenue of \$1.5 million for providing service to Sprint customers who pass through our network area. While we continue to provide these services to Sprint, the agreed upon fee was suspended on April 30, 2019. Accordingly, we have ceased recognizing revenue for the services provided after that date until a new prospective fee can be agreed. We have commenced the final dispute resolution proceedings to settle this dispute and expect it to be settled by early 2020.

During the nine months ended September 30, 2019, operating revenue decreased approximately \$3.4 million, or 1.0%, compared with the nine months ended September 30, 2018. The decreases in revenue were primarily attributable to a decline in Sprint travel revenue of \$7.5 million, lower postpaid ARPU and increased contract asset amortization which is recorded as contra revenue. These decreases were partially offset by the overall growth in subscribers. Prepaid service revenue was up \$2.2 million primarily due to subscriber growth and an increase in prepaid ARPU.

The table below provides additional detail for Wireless service revenue.

(\$ in thousands)	Nine Months Ended September 30,		Change	
	2019	2018	\$	%
Wireless service revenue:				
Postpaid billings (1)	\$ 291,672	\$ 286,230	5,442	1.9 %
Amortization of deferred contract and other costs	(16,797)	(13,788)	(3,009)	21.8 %
Sprint management fee	(23,313)	(22,966)	(347)	1.5 %
Net service fee	(25,061)	(24,603)	(458)	1.9 %
Total postpaid service revenue	226,501	224,873	1,628	0.7 %
Prepaid billings	90,721	82,716	8,005	9.7 %
Amortization of deferred contract and other costs	(44,593)	(39,258)	(5,335)	13.6 %
Sprint management fee	(5,703)	(5,198)	(505)	9.7 %
Total prepaid service revenue	40,425	38,260	2,165	5.7 %
Travel and other revenue	15,607	21,021	(5,414)	(25.8)%
Total service revenue	\$ 282,533	\$ 284,154	(1,621)	(0.6)%

(1) Postpaid net billings are defined under the terms of the affiliate contract with Sprint to be the gross billings to customers within our wireless network coverage area less billing credits and adjustments and allocated write-offs of uncollectible accounts.

**Cost of services**

During the nine months ended September 30, 2019, cost of services increased approximately \$1.6 million or 1.6%, compared with the nine months ended September 30, 2018 primarily due to higher cell site rent expense related to our network expansion, partially offset by continued network optimization and construction of fiber to our towers which results in more cost effective backhaul circuits.

**Cost of goods sold**

During the nine months ended September 30, 2019, cost of goods sold remained consistent with the prior period.

**Selling, general and administrative**

During the nine months ended September 30, 2019, selling, general and administrative costs decreased approximately \$3.9 million, or 10.8%, compared with the nine months ended September 30, 2018 primarily due to lower marketing and advertising expenses of approximately \$1.9 million, reduced sales and use and property tax expenses of \$1.3 million, and a \$0.6 million decline in store rent expense.

**Depreciation and amortization**

During the nine months ended September 30, 2019, depreciation and amortization decreased approximately \$5.4 million, or 5.6%, compared with the nine months ended September 30, 2018. Amortization expense declined by \$3.2 million, primarily because our Sprint affiliate contract expansion asset is amortized under an accelerated method that declines over time. Depreciation expense also declined by \$2.2 million as certain assets acquired from nTelos in 2016 became fully depreciated.

## Cable and Wireline Operating Statistics

The following table indicates selected operating statistics of Cable and Wireline:

	September 30, 2019			September 30, 2018		
	Cable	Wireline	Total	Cable	Wireline	Total
Cable homes passed (1)	189,762	16,500	206,262	185,119	16,500	201,619
Cable customer relationships (2)	39,195	4,249	43,444	41,807	5,300	47,107
Non-cable customers	45,564	13,429	58,993	37,619	13,538	51,157
Total cable customer relationships	84,759	17,678	102,437	79,426	18,838	98,264
Video RGUs:						
RGUs former methodology	41,331	4,438	45,769	44,093	4,796	48,889
Bulk adjustment	8,632	614	9,246	9,624	817	10,441
RGUs revised methodology (3)	49,963	5,052	55,015	53,717	5,613	59,330
Penetration (4)	26.3%	30.6%		29.0%	34.0%	
Digital video penetration (5)	95.9%	100.0%		77.8%	100.0%	
Broadband RGUs:						
RGUs former methodology	73,557	14,061	87,618	67,089	14,734	81,823
Less: Rural Local Exchange Carrier ("RLEC")	—	(8,112)	(8,112)	—	(9,625)	(9,625)
Bulk adjustment	2,601	306	2,907	1,939	(456)	1,483
RGUs revised methodology (3)	76,158	6,255	82,413	69,028	4,653	73,681
Penetration (4)	40.1%	37.9%		37.3%	28.2%	
Voice RGUs:						
RGUs former methodology	23,636	19,135	42,771	23,268	17,786	41,054
Less: RLEC	—	(14,594)	(14,594)	—	(15,002)	(15,002)
Bulk adjustment	434	2,345	2,779	504	105	609
RGUs revised methodology (3)	24,070	6,886	30,956	23,772	2,889	26,661
Penetration (4)	12.7%	41.7%		12.8%	17.5%	
Total RGUs former methodology	138,524	37,634	176,158	134,450	37,316	171,766
Less: RLEC	—	(22,706)	(22,706)	—	(24,627)	(24,627)
Bulk adjustment	11,667	3,265	14,932	12,067	466	12,533
Total RGUs revised methodology	150,191	18,193	168,384	146,517	13,155	159,672
RLEC homes passed	—	25,495	25,495	—	25,457	25,457
RLEC RGUs:						
Data RLEC	—	8,112	8,112	—	9,625	9,625
Penetration (4)	—	31.8%		—	37.8%	
Voice RLEC	—	14,594	14,594	—	15,002	15,002
Penetration (4)	—	57.2%		—	58.9%	
Total RLEC RGUs	—	22,706	22,706	—	24,627	24,627
Average revenue generating units	150,022	17,851	167,873	145,516	12,058	157,574
Fiber route miles	3,678	2,186	5,864	3,436	2,112	5,548
Total fiber miles (6)	147,331	164,371	311,702	134,411	158,526	292,937

(1) Homes and businesses are considered passed ("homes passed") if we can connect them to our distribution system without further extending the transmission lines. Homes passed is an estimate based upon the best available information. Homes passed have access to video, broadband and voice services.

(2) Customer relationships represent the number of billed customers who receive at least one of our services.

- (3) As of September 30, 2019, the Company revised its methodology for counting RGUs associated with hotels, multiple dwelling units ("MDUs") and certain commercial customers. We now count each dwelling or unit of service as a separate RGU. Prior year information has been recast to reflect our revised methodology. Previously we counted RGUs on an equivalent basis consistent with carriage fee practices.
- (4) Penetration is calculated by dividing the number of users by the number of homes passed or available homes, as appropriate.
- (5) Digital video penetration is calculated by dividing the number of digital video users by total video users. Digital video users are video customers who receive any level of video service via digital transmission. A dwelling with one or more digital set-top boxes or digital adapters counts as one digital video user.
- (6) Total fiber miles are measured by taking the number of fiber strands in a cable and multiplying that number by the route distance. For example, a 10 mile route with 144 fiber strands would equal 1,440 fiber miles.

## Cable

### Three Months Ended September 30, 2019 Compared with the Three Months Ended September 30, 2018

(\$ in thousands)	Three Months Ended September 30,				Change	
	2019	% of Revenue	2018	% of Revenue	\$	%
Cable operating revenue						
Residential & SMB	\$ 30,829	87.8%	\$ 28,578	88.8%	2,251	7.9%
Equipment revenue	292	0.8%	234	0.7%	58	24.8%
Enterprise & other revenue	3,983	11.4%	3,370	10.5%	613	18.2%
Total Cable operating revenue	35,104	100.0%	32,182	100.0%	2,922	9.1%
Cable operating expenses						
Cost of services	15,790	45.0%	14,837	46.1%	953	6.4%
Cost of goods sold	156	0.4%	78	0.2%	78	100.0%
Selling, general and administrative	6,636	18.9%	5,331	16.6%	1,305	24.5%
Depreciation and amortization	6,226	17.8%	6,102	19.0%	124	2.0%
Total Cable operating expenses	28,808	82.1%	26,348	81.9%	2,460	9.3%
Cable operating income	\$ 6,296	17.9%	\$ 5,834	18.1%	462	7.9%

#### Residential & Small and Medium Business ("SMB") revenue

During the three months ended September 30, 2019, revenue increased approximately \$2.3 million, or 7.9%, compared with the three months ended September 30, 2018. The increase was primarily attributable to a full quarter of results from the Big Sandy acquisition and growth in ARPU from an increase in video rates.

#### Enterprise & other revenue

Enterprise & other revenue is mainly comprised of fiber services, backhaul and installation services. During the three months ended September 30, 2019, Enterprise & other revenue increased approximately \$0.6 million, or 18.2%, compared with the three months ended September 30, 2018 primarily attributable to expansion of the Company's fiber network and increased demand for fiber services.

#### Operating expenses

During the three months ended September 30, 2019, operating expenses increased approximately \$2.5 million, or 9.3%, compared with the three months ended September 30, 2018 primarily due to \$0.8 million of expenses incurred that were associated with starting our FTTH product offering, higher repair and maintenance expenses of \$0.8 million associated with maintaining our growing network, higher sales and marketing expenses of \$0.6 million and \$0.2 million in higher programming costs. We expect to continue to incur expenses related to the initiation of FTTH in select markets, in advance of generating revenue from this new product.

**Nine Months Ended September 30, 2019 Compared with the Nine Months Ended September 30, 2018**

(\$ in thousands)	Nine Months Ended September 30,				Change	
	2019	% of Revenue	2018	% of Revenue	\$	%
Cable operating revenue						
Residential & SMB revenue	\$ 91,250	88.2%	\$ 85,797	89.4%	5,453	6.4%
Equipment revenue	817	0.8%	537	0.6%	280	52.1%
Enterprise & other revenue	11,436	11.0%	9,670	10.0%	1,766	18.3%
Total Cable operating revenue	103,503	100.0%	96,004	100.0%	7,499	7.8%
Cable operating expenses						
Cost of services	47,138	45.5%	45,118	47.0%	2,020	4.5%
Cost of goods sold	443	0.4%	197	0.2%	246	124.9%
Selling, general and administrative	17,898	17.3%	14,940	15.6%	2,958	19.8%
Depreciation and amortization	19,239	18.7%	18,305	19.0%	934	5.1%
Total Cable operating expenses	84,718	81.9%	78,560	81.8%	6,158	7.8%
Cable operating income	\$ 18,785	18.1%	\$ 17,444	18.2%	1,341	7.7%

**Residential & SMB revenue**

During the nine months ended September 30, 2019, revenue increased approximately \$5.5 million, or 6.4%, compared with the nine months ended September 30, 2018. The increase was primarily attributable to a full quarter of results from the Big Sandy acquisition and growth in ARPU from an increase in video rates.

**Enterprise & other revenue**

During the nine months ended September 30, 2019, Enterprise & other revenue increased approximately \$1.8 million, or 18.3%, compared with the nine months ended September 30, 2018 primarily attributable to expansion of the Company's fiber network and increased demand for fiber services.

**Operating expenses**

During the nine months ended September 30, 2019, operating expenses increased approximately \$6.2 million, or 7.8%, compared with the nine months ended September 30, 2018 primarily due to \$1.8 million of expenses incurred for starting our FTTH product offering, \$1.5 million of higher sales and marketing expenses, \$1.4 million of higher repair and maintenance expenses, \$0.9 million of higher depreciation and amortization expense, and \$0.7 million of higher programming fees. We expect to continue to incur expenses related to the initiation of FTTH in select markets, in advance of generating revenue from this new product.

## Wireline

### Three Months Ended September 30, 2019 Compared with the Three Months Ended September 30, 2018

(\$ in thousands)	Three Months Ended September 30,				Change	
	2019	% of Revenue	2018	% of Revenue	\$	%
Wireline operating revenue						
Service revenue	\$ 5,892	30.8%	\$ 5,824	29.7%	68	1.2 %
Carrier access and fiber revenue	12,504	65.3%	13,019	66.3%	(515)	(4.0)%
Equipment revenue	53	0.3%	63	0.3%	(10)	(15.9)%
Other revenue	695	3.6%	716	3.7%	(21)	(2.9)%
Total Wireline operating revenue	19,144	100.0%	19,622	100.0%	(478)	(2.4)%
Wireline operating expenses						
Cost of services	9,104	47.6%	9,266	47.2%	(162)	(1.7)%
Costs of goods sold	98	0.5%	19	0.1%	79	415.8 %
Selling, general and administrative	1,938	10.1%	1,780	9.1%	158	8.9 %
Depreciation and amortization	3,077	16.1%	3,435	17.5%	(358)	(10.4)%
Total Wireline operating expenses	14,217	74.3%	14,500	73.9%	(283)	(2.0)%
Wireline operating income	\$ 4,927	25.7%	\$ 5,122	26.1%	(195)	(3.8)%

#### Operating revenue

During the three months ended September 30, 2019, total operating revenue decreased approximately \$0.5 million compared with the three months ended September 30, 2018. The decrease was primarily attributable to a reduction in regulatory support funds.

#### Operating expenses

During the three months ended September 30, 2019, total operating expenses were comparable to the three months ended September 30, 2018.

### Nine Months Ended September 30, 2019 Compared with the Nine Months Ended September 30, 2018

(\$ in thousands)	Nine Months Ended September 30,				Change	
	2019	% of Revenue	2018	% of Revenue	\$	%
Wireline operating revenue						
Service revenue	\$ 17,700	30.7%	\$ 17,439	29.8%	261	1.5 %
Carrier access and fiber revenue	37,668	65.4%	38,341	65.6%	(673)	(1.8)%
Equipment revenue	156	0.3%	155	0.3%	1	0.6 %
Other revenue	2,056	3.6%	2,506	4.3%	(450)	(18.0)%
Total Wireline operating revenue	57,580	100.0%	58,441	100.0%	(861)	(1.5)%
Wireline operating expenses						
Cost of services	27,234	47.3%	28,441	48.7%	(1,207)	(4.2)%
Costs of goods sold	153	0.3%	61	0.1%	92	150.8 %
Selling, general and administrative	5,769	10.0%	5,183	8.9%	586	11.3 %
Depreciation and amortization	10,057	17.4%	10,069	17.2%	(12)	(0.1)%
Total Wireline operating expenses	43,213	75.0%	43,754	74.9%	(541)	(1.2)%
Wireline operating income	\$ 14,367	25.0%	\$ 14,687	25.1%	(320)	(2.2)%

**Operating revenue**

During the nine months ended September 30, 2019, total operating revenue decreased approximately \$0.9 million compared with the nine months ended September 30, 2018. Lower switched access terminating volume drove \$0.6 million of the decline, and lower governmental support payments drove a further \$0.3 million decrease.

**Operating expenses**

During the nine months ended September 30, 2019, total operating expenses decreased approximately \$0.5 million compared with the nine months ended September 30, 2018 primarily due primarily to reductions in payroll expenses.

**Non-GAAP Financial Measures****Adjusted OIBDA**

Adjusted OIBDA represents Operating income before depreciation, amortization, stock-based compensation and certain other items of revenue, expense, gain or loss not reflective of our operating performance, which may or may not be recurring in nature.

Adjusted OIBDA is a non-GAAP financial measure that we use to evaluate our operating performance in comparison to our competitors. Management believes that analysts and investors use Adjusted OIBDA as a supplemental measure of operating performance to facilitate comparisons with other telecommunications companies. This measure isolates and evaluates operating performance by excluding the cost of financing (e.g., interest expense), as well as the non-cash depreciation and amortization of past capital investments, non-cash share-based compensation expense, and certain other items of revenue, expense, gain or loss not reflective of our operating performance, which may or may not be recurring in nature.

Adjusted OIBDA has limitations as an analytical tool and should not be considered in isolation or as a substitute for operating income, net income or any other measure of financial performance reported in accordance with U.S. Generally Accepted Accounting Principles ("GAAP").

The following tables reconcile Adjusted OIBDA to operating income, which we consider to be the most directly comparable GAAP financial measure:

**Three Months Ended September 30, 2019***(in thousands)*

	Wireless	Cable	Wireline	Other	Consolidated
Operating income	\$ 23,731	\$ 6,296	\$ 4,927	\$ (9,595)	\$ 25,359
Depreciation and amortization	27,200	6,226	3,077	123	36,626
OIBDA	50,931	12,522	8,004	(9,472)	61,985
Share-based compensation expense	—	—	—	851	851
Adjusted OIBDA	\$ 50,931	\$ 12,522	\$ 8,004	\$ (8,621)	\$ 62,836

Additionally, we realized cash savings of \$9.7 million during the period from the waiver of Sprint's Management Fee. These cash savings are accounted for as a reduction of the Sprint affiliate contract expansion asset, which was recognized in conjunction with the 2016 nTelos acquisition. The remaining waived management fee balance at September 30, 2019 was \$128.2 million, which we expect to realize through 2022.

**Three Months Ended September 30, 2018***(in thousands)*

	Wireless	Cable	Wireline	Other	Consolidated
Operating income	\$ 27,352	\$ 5,834	\$ 5,122	\$ (9,979)	\$ 28,329
Depreciation and amortization	30,363	6,102	3,435	128	40,028
OIBDA	57,715	11,936	8,557	(9,851)	68,357
Share-based compensation expense	—	—	—	1,171	1,171
Adjusted OIBDA	\$ 57,715	\$ 11,936	\$ 8,557	\$ (8,680)	\$ 69,528

Additionally, we realized cash savings of \$9.6 million during the period from the waiver of Sprint's Management Fee, as discussed above.



**Nine Months Ended September 30, 2019***(in thousands)*

	<b>Wireless</b>	<b>Cable</b>	<b>Wireline</b>	<b>Other</b>	<b>Consolidated</b>
Operating income	\$ 71,092	\$ 18,785	\$ 14,367	\$ (30,078)	\$ 74,166
Depreciation and amortization	90,469	19,239	10,057	393	120,158
OIBDA	<u>161,561</u>	<u>38,024</u>	<u>24,424</u>	<u>(29,685)</u>	<u>194,324</u>
Share-based compensation expense	—	—	—	3,158	3,158
Adjusted OIBDA	<u>\$ 161,561</u>	<u>\$ 38,024</u>	<u>\$ 24,424</u>	<u>\$ (26,527)</u>	<u>\$ 197,482</u>

Additionally, we realized cash savings of \$29.0 million during the period from the waiver of Sprint's Management Fee, as discussed above.

**Nine Months Ended September 30, 2018***(in thousands)*

	<b>Wireless</b>	<b>Cable</b>	<b>Wireline</b>	<b>Other</b>	<b>Consolidated</b>
Operating income	\$ 66,870	\$ 17,444	\$ 14,687	\$ (32,749)	\$ 66,252
Depreciation and amortization	95,853	18,305	10,069	405	124,632
OIBDA	<u>162,723</u>	<u>35,749</u>	<u>24,756</u>	<u>(32,344)</u>	<u>190,884</u>
Share-based compensation expense	—	—	—	4,578	4,578
Adjusted OIBDA	<u>\$ 162,723</u>	<u>\$ 35,749</u>	<u>\$ 24,756</u>	<u>\$ (27,766)</u>	<u>\$ 195,462</u>

Additionally, we realized cash savings of \$28.2 million during the period from the waiver of Sprint's Management Fee, as discussed above.

## Liquidity and Capital Resources

### *Sources and Uses of Cash.*

Our principal sources of liquidity are our cash and cash equivalents, cash generated from operations, and proceeds available under our Credit Facility.

As of September 30, 2019 our cash and cash equivalents totaled \$97.4 million and the availability under our revolving line of credit was \$75.0 million, for total available liquidity of \$172.4 million.

The Company generated approximately \$193.5 million of net cash from operations in the first nine months of 2019, representing an increase of \$4.7 million or 2.5%, compared with the first nine months of 2018, primarily driven by:

- a \$9.7 million increase in net income, and was partially offset by
- \$4.8 million as the result of a change in working capital.

Net cash used in investing activities decreased \$10.1 million, or 7.1%, for the nine months ended September 30, 2019. Cash used in investing activities for the nine months ended September 30, 2019, was primarily for:

- \$14.7 million increase in capital expenditures primarily driven by \$6.0 million of capacity upgrades and network expansion across our Wireless network and a \$8.7 million increase in our Cable segment to support the launch of our FTTH initiative;
- \$16.7 million for the purchase of FCC spectrum licenses; and
- in 2018, we acquired the Sprint Territory Expansion Area for \$52.0 million and in 2019 we acquired Big Sandy for \$10.0 million which was integrated into our Cable segment.

We expect our investments in our networks and infrastructure to expand in support of our continued growth.

Net cash used in financing activities decreased \$0.9 million, or 1.9%, for the nine months ended September 30, 2019 due to an increase in taxes paid for equity award issuances.

*Borrowing Capacity.* As of September 30, 2019, the Company's outstanding debt, under the Credit Facility, totaled \$740.6 million, with an estimated annualized effective interest rate of 3.63% after considering the impact of the interest rate swap contracts and unamortized loan costs.

As of September 30, 2019, the Company was in compliance with the financial covenants in its Credit Facility agreement.

We believe that cash on hand, cash flow from operations and borrowings expected to be available under our existing credit facilities will provide sufficient cash to enable us to fund planned capital expenditures, make scheduled principal and interest payments on our long-term debt, meet our other cash requirements and maintain compliance with the terms of our financing agreements for at least the next twelve months. There can be no assurance that we will continue to generate cash flows at or above current levels or that we will be able to maintain our ability to borrow under our credit facilities. Thereafter, capital expenditures will likely be required to continue planned capital upgrades to the acquired wireless network and provide increased capacity to meet our expected growth in demand for our products and services. The actual amount and timing of our future capital requirements may differ materially from our estimate depending on the demand for our products, new market developments and expansion opportunities.

Our cash flows from operations could be adversely affected by events outside our control, including, without limitation, changes in overall economic conditions, regulatory requirements, changes in technologies, demand for our products, availability of labor resources and capital, changes in our relationship with Sprint, and other conditions. The Wireless segment's operations are dependent upon Sprint's ability to execute certain functions such as billing, customer care, and collections; our ability to develop and implement successful marketing programs and new products and services; and our ability to effectively and economically manage other operating activities under our agreements with Sprint. Our ability to attract and maintain a sufficient customer base, particularly in our cable markets, is also critical to our ability to maintain a positive cash flow from operations. The foregoing events individually or collectively could affect our results.

## Critical Accounting Policies

Critical accounting policies are those policies that affect our more significant judgments and estimates used in the preparation of our unaudited condensed consolidated financial statements. For a more detailed discussion of our critical accounting policies, please refer to our 2018 Form 10-K.

### ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company's market risks relate primarily to changes in interest rates. The Company's interest rate risk generally involves two components. The first component is outstanding debt with variable rates. As of September 30, 2019, the Company had \$740.6 million of gross variable rate debt outstanding, bearing interest at a weighted average rate of 3.63%. An increase in market interest rates of 1.00% would add approximately \$7.3 million to annual interest expense, excluding the effect of the interest rate swap. The swaps cover notional principal equal to \$292.6 million, or approximately 39.5% as of September 30, 2019. The Company is required to pay a combined fixed rate of approximately 1.16% and receive a variable rate based on one month LIBOR (2.11% for September 2019), to manage a portion of its interest rate risk. Changes in the net interest paid or received under the swaps would offset approximately 60.5% of the change in interest expense on the variable rate debt outstanding. The swap agreements currently reduce annual interest expense by approximately \$1.4 million, based on the spread between the fixed rate and the variable rate currently in effect on our debt.

#### ITEM 4. CONTROLS AND PROCEDURES

##### **Evaluation of Disclosure Controls and Procedures**

Management, with the participation of our President and Chief Executive Officer, who is the Principal Executive Officer, and the Senior Vice President - Finance and Chief Financial Officer, who is the Principal Financial Officer, and the Vice President and Chief Accounting Officer, who is the Principal Accounting Officer, conducted an evaluation of our disclosure controls and procedures, (as defined by Rule 13a-15(e) under the Securities Exchange Act of 1934), as of the end of the period covered by this Quarterly report on Form 10-Q.

As disclosed in our Annual Report on Form 10-K for our fiscal year ended December 31, 2018, we identified material weaknesses in internal control over financial reporting. The material weaknesses will not be considered remediated until the applicable enhanced controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively. As remediation has not yet been completed, our President and Chief Executive Officer and our Senior Vice President - Finance and Chief Financial Officer, and our Vice President - Chief Accounting Officer, have concluded that our disclosure controls and procedures continued to be ineffective as of September 30, 2019.

Notwithstanding the material weaknesses, management has concluded that the unaudited condensed consolidated financial statements included in this Quarterly Report on Form 10-Q fairly state, in all material respects, our financial position, results of operations and cash flows for the periods presented.

##### **Changes in Internal Control Over Financial Reporting**

There have been no changes in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) as of September 30, 2019, that have materially affected or are reasonably likely to materially affect, the Company's internal control over financial reporting.

##### **Remediation Efforts**

Management is continuing to implement the material weakness remediation plans as disclosed in our Annual Report on Form 10-K for our fiscal year ended December 31, 2018. We believe that these actions and the improvements we expect to achieve will effectively remediate the material weaknesses. However, these material weaknesses will not be considered remediated until the enhanced controls operate for a sufficient period of time and management has concluded that these controls are operating effectively.

**PART II. OTHER INFORMATION**

**ITEM 1A. Risk Factors**

We discuss in our Annual Report on Form 10-K various risks that may materially affect our business. We use this section to update this discussion to reflect material developments since our Form 10-K was filed. As of September 30, 2019, the Company has not identified any updates to the risk factors included in our most recent Form 10-K.

**ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds**

*Unregistered Sales of Equity Securities*

None.

*Use of Proceeds from Registered Securities*

None.

*Purchases of Equity Securities by the Issuer or Affiliated Purchasers*

There have been no repurchases of shares during the months of July, August and September 2019.

**ITEM 6. Exhibits**

(a) The following exhibits are filed with this Quarterly Report on Form 10-Q:

- 3.1 Amended and Restated Bylaws of Shenandoah Telecommunications Company, as amended effective April 16, 2019
- 3.2 Amended and Restated Articles of Incorporation, as amended effective August 31, 2019
- 3.3 Amended and Restated Bylaws of Shenandoah Telecommunications Company, as amended effective October 29, 2019
- 31.1\* Certification of Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.
- 31.2\* Certification of Principal Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.
- 31.3\* Certification of Principal Accounting Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.
- 32\*\* Certifications pursuant to Rule 13a-14(b) under the Securities Exchange Act of 1934 and 18 U.S.C. § 1350.

(101) Formatted in XBRL (Extensible Business Reporting Language)

101.INS	XBRL Instance Document - the instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

\* Filed herewith

\*\* This certification is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (Exchange Act), or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended (Securities Act), or the Exchange Act.

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Exhibit</u>
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SIGNATURES

Pursuant to the requirements 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.

SHENANDOAH TELECOMMUNICATIONS COMPANY

/s/James J. Volk

James J. Volk

Senior Vice President - Chief Financial Officer  
*(Principal Financial Officer)*

Date: October 31, 2019



**ARTICLES OF RESTATEMENT OF  
SHENANDOAH TELECOMMUNICATIONS COMPANY**

The undersigned, on behalf of the corporation set forth below, pursuant to Title 13.1, Chapter 9, Article 11 of the Code of Virginia, states as follows:

1. The name of the corporation immediately prior to restatement is Shenandoah Telecommunications Company.

2. The restatement contains an amendment to the articles of incorporation.

3. The text of the amended and restated articles of incorporation is attached hereto.

4. The restatement was adopted by the corporation on August 21, 2019.

5. The adoption of the restatement was duly approved by the board of directors. Shareholder approval of the restatement was not required because the restatement effects a change described in § 13.1-706 of the Code of Virginia.

6. The Certificate of Amendment and Restatement shall become effective on August 31, 2019.

Executed in the name of the corporation by:

\_\_\_\_\_  
(Signature)

Christopher E. French  
\_\_\_\_\_  
(Printed Name)

0214053-1  
\_\_\_\_\_  
(Corporation's SCC ID no.)

\_\_\_\_\_  
(Date)

President and Chief Executive Officer  
\_\_\_\_\_  
(Corporate Title)

SHENANDOAH TELECOMMUNICATIONS COMPANY

Date of Incorporation: February 4, 1981

Effective Date of Amended and Restated Articles of Incorporation: August 31, 2019

**AMENDED AND RESTATED ARTICLES OF INCORPORATION**

ARTICLE I

The name of the Corporation is SHENANDOAH TELECOMMUNICATIONS COMPANY.

ARTICLE II

The purpose of the Corporation is to conduct any or all lawful business not required to be specifically stated in these articles.

ARTICLE III

The Corporation shall have authority to issue 96,000,000 shares.

ARTICLE IV

No stockholder shall have the preemptive right to acquire unissued shares of the Corporation or securities convertible into such shares or warrants, options or rights to acquire such shares.

ARTICLE V

[INTENTIONALLY OMITTED.]

ARTICLE VI

The authorized number of directors of this Corporation shall be not less than seven (7) and not more than nine (9). The number of directors within this range shall be stated in the Corporation's Bylaws, as may be amended from time to time. When the number of directors is changed the Board of Directors shall determine the class or classes to which the increased or decreased number of directors shall be apportioned; provided that the directors in each class shall be as nearly equal in number as possible. No decrease in the number of directors shall have the effect of shortening the term of any incumbent director.

Effective as of the annual meeting of shareholders in 1998, the Board of Directors shall be divided into three classes, designated as Class I, Class II and Class III, as nearly equal in number as possible, and the term of office of directors of one class shall expire at each annual meeting of shareholders, and in all cases until their successors shall be elected and shall qualify, or until their earlier resignation, removal from office, death or incapacity. The initial term of

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office of Class I shall expire at the annual meeting of shareholders in 1999, that of Class II shall expire at the annual meeting in 2000, and that of Class III shall expire at the annual meeting in 2001, and in all cases as to each director until such director's successor shall be elected and shall qualify, or until the director's earlier resignation, removal from office, death or incapacity.

Subject to the foregoing, at each meeting of shareholders the successors to the class of directors whose term shall then expire shall be elected to hold office for a term expiring at the third succeeding annual meeting and until their successors shall be elected and qualified.

The directors remaining in office acting by a majority vote, or a sole remaining director, although less than a quorum, are hereby expressly delegated the power to fill any vacancies in the Board of Directors, however occurring, whether by an increase in the number of directors, death, resignation, retirement, disqualification, removal from office or otherwise, and any director so chosen shall hold office until the next shareholder meeting at which directors are elected and until a successor shall have been elected and qualified, or until such director's earlier resignation, removal from office, death or incapacity.

Any director may be removed from office at a meeting called expressly for that purpose by the vote of shareholders holding not less than 75% of the shares entitled to vote at the election of directors.

## ARTICLE VII

1. In this Article:

“applicant” means the person seeking indemnification pursuant to this Article.

“expenses” includes counsel fees.

“liability” means the obligation to pay a judgment, settlement, penalty, fine, including any excise tax assessed with respect to an employee benefit plan, or reasonable expenses incurred with respect to a proceeding.

“party” includes an individual who was, is, or is threatened to be, made a named defendant or respondent in a proceeding.

“proceeding” means any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal administrative or investigative and whether formal or informal.

2. In any proceeding brought by a shareholder of the Corporation in the right of the Corporation or brought by or on behalf of shareholders of the Corporation, no director or officer of the Corporation shall be liable to the Corporation or its shareholders for monetary damages with respect to any transaction, occurrence or course of conduct, whether prior or subsequent to the effective date of this Article, except for liability resulting from such person's having engaged in willful misconduct or a knowing violation of the criminal law or any federal or state securities law.

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3. The Corporation shall indemnify (a) any person who was or is a party to any proceeding, including a proceeding brought by a shareholder in the right of the Corporation or brought by or on behalf of shareholders of the Corporation, by reason of the fact that such person is or was a director or officer of the Corporation, or (b) any director or officer who is or was serving at the request of the Corporation as a director, trustee, partner or officer of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against any liability incurred by such person in connection with such proceeding unless such person engaged in willful misconduct or a knowing violation of the criminal law. A person is considered to be serving an employee benefit plan at the Corporation's request if that person's duties to the Corporation also impose duties on, or otherwise involve services by, such person to the plan or to participants in or beneficiaries of the plan. The Board of Directors is hereby empowered, by a majority vote of a quorum of disinterested directors, to enter into a contract to indemnify any director or officer in respect of any proceedings arising from any act or omission, whether occurring before or after the execution of such contract.
4. The provisions of this Article shall be applicable to all proceedings commenced after the adoption hereof by the shareholders of the Corporation, arising from any act or omission, whether occurring before or after such adoption. No amendment or repeal of this Article shall have any effect on the rights provided under this Article with respect to any act or omission occurring prior to such amendment or repeal. The Corporation shall promptly take all such actions, and make all such determinations, as shall be necessary or appropriate to comply with its obligation to make any indemnity under this Article and shall promptly pay or reimburse all reasonable expenses, including attorneys' fees, incurred by any such director, officer, employee or agent in connection with such actions and determinations or proceedings of any kind arising therefrom.
5. The termination of any proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not of itself create a presumption that the applicant did not meet the standard of conduct described in Section 2 or 3 of this Article.
6. Any indemnification under Section 3 of this Article (unless ordered by a court) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of the applicant is proper in the circumstances because the applicant has met the applicable standard of conduct set forth in Section 3.

The determination shall be made:

- (a) By the Board of Directors by a majority vote of a quorum consisting of directors not at the time parties to the proceeding;
  - (b) If a quorum cannot be obtained under Subsection (a) of this section, by majority vote of a committee duly designated by the Board of Directors (in which designation directors who are parties may not participate), consisting solely of two or more directors not at the time parties to the proceeding;
-

- (c) By special legal counsel;
  - (i) Selected by the Board of Directors or its committee in the manner prescribed in Subsection (a) or (b) of this section; or
  - (ii) If a quorum of the Board of Directors cannot be obtained under Subsection (a) of this section and a committee cannot be designated under Subsection (b) of this section, selected by majority vote of the full Board of Directors, in which selection directors who are parties may participate; or
- (d) By the shareholders, but shares owned by or voted under the control of directors who are at the time parties to the proceeding may not be voted on the determination.

Any evaluation as to reasonableness of expenses shall be made in the same manner as the determination that indemnification is appropriate, except that if the determination is made by special legal counsel, such evaluation as to reasonableness of expenses shall be made by those entitled under Subsection (c) of this Section 6 to select counsel.

Notwithstanding the foregoing, in the event there has been a change in the composition of a majority of the Board of Directors after the date of the alleged act or omission with respect to which indemnification is claimed, any determination as to indemnification and advancement of expenses with respect to any claim for indemnification made pursuant to this Article shall be made by special legal counsel agreed upon by the Board of Directors and the applicant. If the Board of Directors and the applicant are unable to agree upon such special legal counsel, the Board of Directors and the applicant each shall select a nominee, and the nominees shall select such special legal counsel.

- 7. (a) The Corporation shall pay for or reimburse the reasonable expenses incurred by any applicant who is a party to a proceeding in advance of final disposition of the proceeding or the making of any determination under Section 3 if the applicant furnishes the Corporation:
    - (i) a written statement of the applicant's good faith belief that the applicant has met the standard of conduct described in Section 3; and
    - (ii) a written undertaking, executed personally or on the applicant's behalf, to repay the advance if it is ultimately determined that the applicant did not meet such standard of conduct.
  - (b) The undertaking required by Paragraph (ii) of Subsection (a) of this section shall be an unlimited general obligation of the applicant but need not be secured and may be accepted without reference to financial ability to make repayment.
  - (c) Authorizations of payments under this section shall be made by the persons specified in Section 6.
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8. The Board of Directors is hereby empowered, by a majority vote of a quorum consisting of disinterested directors, to cause the Corporation to indemnify or contract to indemnify any person not specified in Section 2 or 3 of this Article who was, is or may become a party to any proceeding, by reason of the fact that such person is or was an employee or agent of the Corporation, or is or was serving at the request of the Corporation as director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, to the same extent as if such person were specified as one to whom indemnification is granted in Section 3. The provisions of Sections 4 through 7 of this Article shall be applicable to any indemnification provided hereafter pursuant to this Section 8.
  9. The Corporation may purchase and maintain insurance to indemnify it against the whole or any portion of the liability assumed by it in accordance with this Article and may also procure insurance, in such amounts as the Board of Directors may determine, on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against any liability asserted against or incurred by such person in any such capacity or arising from the person's status as such, whether or not the Corporation would have power to indemnify such person against such liability under the provisions of this Article.
  10. Every reference herein to directors, officers, employees or agents shall include former directors, officers, employees and agents and their respective heirs, executors and administrators. The indemnification hereby provided and provided hereafter pursuant to the power hereby conferred by this Article on the Board of Directors shall not be exclusive of any other rights to which any person may be entitled, including any right under policies of insurance that may be purchased and maintained by the Corporation or others, with respect to claims, issues or matters in relation to which the Corporation would not have the power to indemnify such person under the provisions of this Article. Such rights shall not prevent or restrict the power of the Corporation to make or provide for any further indemnity, or provisions for determining entitlement to indemnity, pursuant to one or more indemnification agreements, bylaws, or other arrangements (including, without limitation, creation of trust funds or security interests funded by letters of credit or other means) approved by the Board of Directors (whether or not any of the directors of the Corporation shall be a party to or beneficiary of any such agreements, bylaws or arrangements); provided however that any provision of such agreements, bylaws or other arrangements shall not be effective if and to the extent that it is determined to be contrary to this Article or applicable laws of the Commonwealth of Virginia.
  11. Each provision of this Article shall be severable, and an adverse determination as to such provision shall in no way affect the validity of any other provision.
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## CERTIFICATION

I, Christopher E. French, certify that:

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

/S/ CHRISTOPHER E. FRENCH

Christopher E. French, President and Chief Executive Officer

Date: October 31, 2019



## CERTIFICATION

I, James J. Volk, certify that:

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

/s/JAMES J. VOLK

James J. Volk, Senior Vice President - Chief Financial Officer

(Principal Financial Officer)

Date: October 31, 2019

## CERTIFICATION

I, Chase Stobbe, certify that:

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

/s/CHASE STOBBE

Chase Stobbe, Vice President - Chief Accounting Officer

(Principal Accounting Officer)

Date: October 31, 2019

**Written Statement of Chief Executive Officer and Chief Financial Officer  
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

Each of the undersigned, the President and Chief Executive Officer and the Vice President - Finance and Chief Financial Officer, of Shenandoah Telecommunications Company (the "Company"), hereby certifies that, on the date hereof:

(1) The quarterly report on Form 10-Q of the Company for the three months ended September 30, 2019 filed on the date hereof with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) Information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/S/CHRISTOPHER E. FRENCH

Christopher E. French  
President and Chief Executive Officer  
October 31, 2019

/S/JAMES J. VOLK

James J. Volk  
Senior Vice President - Chief Financial Officer  
(Principal Financial Officer)  
October 31, 2019

The foregoing certification is being furnished solely pursuant to Rule 13a-14(b) under the Securities Exchange Act of 1934 (the "Exchange Act") and 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document. This certification shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to liability under that section. This certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act except to the extent this Exhibit 32 is expressly and specifically incorporated by reference in any such filing.