UNITED STATES
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, 2020

or

☐ **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the transition period from __________ to __________

Commission File Number: 001-32358

SPOK HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**16-1694797** **(I.R.S. Employer Identification No.)**
6850 Versar Center, Suite 420 **Springfield, Virginia** **(Address of principal executive offices)**	**22151-4148** **(Zip Code)**

(800) 611-8488
(Registrant's telephone number, including area code)

N/A
(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	SPOK	NASDAQ National Market®

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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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 ☒

19,077,377 shares of the registrant's common stock (par value $0.0001 per share) were outstanding as of October 23, 2020.

SPOK HOLDINGS, INC.

QUARTERLY REPORT ON FORM 10-Q

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PART I. FINANCIAL INFORMATION

ITEM 1. *CONDENSED CONSOLIDATED FINANCIAL STATEMENTS*

SPOK HOLDINGS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands)		September 30, 2020		December 31, 2019
ASSETS		(Unaudited)		
Current assets:				
Cash and cash equivalents	$	49,235	$	47,361
Short-term investments		29,994		29,899
Accounts receivable, net		29,671		30,174
Prepaid expenses		8,056		7,517
Other current assets		1,645		2,714
Total current assets		118,601		117,665
Non-current assets:				
Property and equipment, net		6,933		8,000
Operating lease right-of-use assets		14,342		16,317
Capitalized software development, net		7,784		—
Goodwill		124,182		124,182
Intangible assets, net		1,042		2,917
Deferred income tax assets, net		48,308		48,983
Other non-current assets		1,081		1,808
Total non-current assets		203,672		202,207
Total assets	$	322,273	$	319,872
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	$	5,112	$	3,615
Accrued compensation and benefits		13,845		11,680
Deferred revenue		27,174		25,944
Operating lease liabilities		5,220		5,437
Other current liabilities		4,565		4,507
Total current liabilities		55,916		51,183
Non-current liabilities:				
Asset retirement obligations		6,123		6,061
Operating lease liabilities		9,766		11,575
Other non-current liabilities		2,446		959
Total non-current liabilities		18,335		18,595
Total liabilities		74,251		69,778
Commitments and contingencies (Note 12)				
Stockholders' equity:				
Preferred stock	$	—	$	—
Common stock		2		2
Additional paid-in capital		90,297		86,874
Accumulated other comprehensive loss		(1,656)		(1,601)
Retained earnings		159,379		164,819
Total stockholders' equity		248,022		250,094
Total liabilities and stockholders' equity	$	322,273	$	319,872

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

SPOK HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(Unaudited and in thousands except share and per share amounts)	For the Three Months Ended September 30, 2020	For the Three Months Ended September 30, 2019	For the Nine Months Ended September 30, 2020	For the Nine Months Ended September 30, 2019
Revenue:				
Wireless	$ 20,828	$ 21,814	$ 63,293	$ 66,552
Software	16,865	17,639	47,406	54,189
Total revenue	37,693	39,453	110,699	120,741
Operating expenses:				
Cost of revenue	6,544	7,190	20,709	22,021
Research and development	3,459	7,437	11,662	20,411
Technology operations	7,357	7,805	22,472	23,345
Selling and marketing	4,272	5,595	14,463	17,279
General and administrative	10,994	11,813	33,056	34,255
Depreciation, amortization and accretion	2,335	2,305	6,553	6,999
Total operating expenses	34,961	42,145	108,915	124,310
Operating income (loss)	2,732	(2,692)	1,784	(3,569)
Interest income	127	399	636	1,300
Other income	151	163	113	528
Income (loss) before income taxes	3,010	(2,130)	2,533	(1,741)
Benefit from (provision for) income taxes	155	804	(149)	486
Net income (loss)	$ 3,165	$ (1,326)	$ 2,384	$ (1,255)
Basic net income (loss) per common share	$ 0.17	$ (0.07)	$ 0.13	$ (0.07)
Diluted net income (loss) per common share	$ 0.16	$ (0.07)	$ 0.12	$ (0.07)
Basic weighted average common shares outstanding	19,051,502	19,086,811	19,008,969	19,166,812
Diluted weighted average common shares outstanding	19,208,452	19,086,811	19,273,243	19,166,812
Cash dividends declared per common share	$ 0.125	$ 0.125	$ 0.375	$ 0.375

The accompanying notes are an integral part of these unaudited Condensed Consolidated Financial Statements.

SPOK HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2020	2019	2020	2019
(Unaudited and in thousands)				
Net income (loss)	$ 3,165	$ (1,326)	$ 2,384	$ (1,255)
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	62	(105)	(55)	(198)
Other comprehensive income (loss)	62	(105)	(55)	(198)
Comprehensive income (loss)	$ 3,227	$ (1,431)	$ 2,329	$ (1,453)

The accompanying notes are an integral part of these unaudited Condensed Consolidated Financial Statements.

SPOK HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(Unaudited and in thousands except share amounts)	Outstanding Common Shares	Common Stock	Additional Paid-In Capital & Accumulated Other Comprehensive Loss	Retained Earnings	Total Stockholders' Equity
Balance, January 1, 2019	19,389,066	$ 2	$ 89,258	$ 185,294	$ 274,554
Net income	—	—	—	741	741
Purchase of common stock for tax withholding	(67,648)	—	(1,011)	—	(1,011)
Amortization of stock-based compensation	—	—	528	—	528
Cash dividends declared	—	—	—	(2,479)	(2,479)
Common stock repurchase program including commissions	(131,012)	—	(1,810)	—	(1,810)
Issuance of restricted stock under the 2012 Equity Plan and other	13,650	—	—	71	71
Cumulative translation adjustment	—	—	(60)	—	(60)
Balance, March 31, 2019	19,204,056	$ 2	$ 86,905	$ 183,627	$ 270,534
Net loss	—	—	—	(670)	(670)
Amortization of stock-based compensation	—	—	1,029	—	1,029
Cash dividends declared	—	—	—	(2,480)	(2,480)
Issuance of restricted stock under the 2012 Equity Plan and other	17,910	—	120	—	120
Cumulative translation adjustment	—	—	(33)	—	(33)
Balance, June 30, 2019	19,221,966	$ 2	$ 88,021	$ 180,477	$ 268,500
Net loss	—	—	—	(1,326)	(1,326)
Amortization of stock-based compensation	—	—	964	—	964
Cash dividends declared	—	—	—	(2,471)	(2,471)
Common stock repurchase program including commissions	(401,342)	—	(4,765)	—	(4,765)
Issuance of restricted stock under the 2012 Equity Plan and other	7,146	—	—	—	—
Cumulative translation adjustment	—	—	(105)	—	(105)
Balance, September 30, 2019	18,827,770	$ 2	$ 84,115	$ 176,680	$ 260,797

(Unaudited and in thousands except share amounts)	Outstanding Common Shares	Common Stock	Additional Paid-In Capital & Accumulated Other Comprehensive Loss	Retained Earnings	Total Stockholders' Equity
Balance, January 1, 2020	19,071,614	$ 2	$ 85,273	$ 164,819	$ 250,094
Net loss	—	—	—	(4,540)	(4,540)
Adoption of current expected credit loss ("CECL")	—	—	—	(365)	(365)
Purchase of common stock for tax withholding	(79,981)	—	(903)	—	(903)
Amortization of stock-based compensation	—	—	1,182	—	1,182
Cash dividends declared	—	—	—	(2,488)	(2,488)
Issuance of restricted stock under the 2012 Equity Plan and other	1,918	—	—	20	20
Cumulative translation adjustment	—	—	(220)	—	(220)
Balance, March 31, 2020	18,993,551	$ 2	$ 85,332	$ 157,446	$ 242,780
Net income	—	—	—	3,759	3,759
Amortization of stock-based compensation	—	—	1,362	—	1,362
Cash dividends declared	—	—	—	(2,491)	(2,491)
Issuance of restricted stock under the 2012 Equity Plan and other	30,244	—	166	2	168
Cumulative translation adjustment	—	—	103	—	103
Balance, June 30, 2020	19,023,795	$ 2	$ 86,963	$ 158,716	$ 245,681
Net income	—	—	—	3,165	3,165
Amortization of stock-based compensation	—	—	1,616	—	1,616
Cash dividends declared	—	—	—	(2,494)	(2,494)
Common stock repurchase program including commissions	—	—	—	—	—
Issuance of restricted stock under the Equity Plans and other	28,216	—	—	(8)	(8)
Cumulative translation adjustment	—	—	62	—	62
Balance, September 30, 2020	19,052,011	$ 2	$ 88,641	$ 159,379	$ 248,022

The accompanying notes are an integral part of these unaudited Condensed Consolidated Financial Statements.

SPOK HOLDINGS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Unaudited and in thousands)	For the Nine Months Ended September 30, 2020	2019
Operating activities:		
Net income (loss)	$ 2,384	$ (1,255)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation, amortization and accretion	6,553	6,999
Deferred income tax expense	15	(569)
Stock-based compensation	4,160	2,521
Provision for doubtful accounts, service credits and other	914	652
Changes in assets and liabilities:		
Accounts receivable	(1,019)	252
Prepaid expenses, inventory, and other assets	3,701	2,131
Accounts payable, accrued liabilities and other liabilities	1,566	(1,366)
Deferred revenue	2,680	1,383
Net cash provided by operating activities	20,954	10,748
Investing activities:		
Purchase of property and equipment	(2,824)	(4,162)
Capitalized software development	(8,206)	—
Purchase of short-term investments	(44,870)	(44,499)
Maturity of short-term investments	45,000	19,000
Net cash used in investing activities	(10,900)	(29,661)
Financing activities:		
Cash distributions to stockholders	(7,388)	(7,440)
Purchase of common stock (including commissions)	—	(6,575)
Proceeds from issuance of common stock under the Employee Stock Purchase Plan	166	119
Purchase of common stock for tax withholding on vested equity awards	(903)	(1,017)
Net cash used in financing activities	(8,125)	(14,913)
Effect of exchange rate on cash	(55)	(198)
Net increase (decrease) in cash and cash equivalents	1,874	(34,024)
Cash and cash equivalents, beginning of period	47,361	83,343
Cash and cash equivalents, end of period	$ 49,235	$ 49,319
Supplemental disclosure:		
Income taxes paid	$ 148	$ 927

The accompanying notes are an integral part of these unaudited Condensed Consolidated Financial Statements.

NOTE 1 - ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

Spok Holdings, Inc. (NASDAQ: SPOK) ("Spok," "we," "our" or the "Company"), through its wholly owned subsidiary Spok, Inc., is the global leader in healthcare communications. We deliver clinical information to care teams when and where it matters most to improve patient outcomes. Top hospitals rely on the Spok Care Connect platform to enhance workflows for clinicians, support administrative compliance, and provide a better experience for patients. Our customers send over 100 million messages each month through their Spok solutions.

We offer a focused suite of unified clinical communication and collaboration solutions that include call center operations, clinical alerting and notifications, one-way and advanced two-way wireless messaging services, mobile communications and public safety solutions.

We provide one-way and advanced two-way wireless messaging services including information services throughout the United States. These services are offered on a local, regional and nationwide basis employing digital networks. One-way messaging consists of numeric and alphanumeric messaging services. Numeric messaging services enable subscribers to receive messages that are composed entirely of numbers, such as a phone number, while alphanumeric messages may include numbers and letters, which enable subscribers to receive text messages. Two-way messaging services enable subscribers to send and receive messages to and from other wireless messaging devices, including pagers, mobile devices and personal computers. We also offer voice mail, personalized greetings, message storage and retrieval, and equipment loss and/or maintenance protection to both one-way and two-way messaging subscribers. These services are commonly referred to as wireless messaging and information services.

We also develop, sell and support enterprise-wide systems for hospitals and other organizations needing to automate, centralize and standardize clinical communications and collaboration. These solutions are used for contact centers, clinical alerting and notification, mobile communications and messaging and for public safety notifications. We offer a variety of solutions in both on-premise and Software as a Service ("SaaS") delivery models. The Spok Go platform was made commercially available in early 2020. Spok Go features an integrated cloud-native platform that is built on a foundation of a single, best-in-class architecture with hosting and security handled through our partnership with Amazon Web Services®. These areas of market focus complement the market focus of our wireless services outlined above. These products and services are commonly referred to as software solutions and services.

Basis of Presentation

The accompanying Condensed Consolidated Financial Statements include our accounts and the accounts of our wholly owned direct and indirect subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. Our Condensed Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) and the rules and regulations of the United States Securities and Exchange Commission (the “SEC”). In management's opinion, the unaudited Condensed Consolidated Financial Statements include all adjustments and accruals that are necessary for the presentation of the results of all interim periods reported herein and all such adjustments are of a normal, recurring nature with the exception of our adoption of Accounting Standards Update ("ASU") No. 2016-13, Financial Instruments - Credit Losses *(Topic 326), Measurement of Credit Losses on Financial Instruments*, often referred to as Current Expected Credit Losses ("CECL"). For additional details refer to Note 3, "Recent Accounting Standards."

Amounts shown on the Condensed Consolidated Statements of Operations within the operating expense categories of Cost of revenue; Research and development; Technology operations; Selling and marketing; and General and administrative are recorded exclusive of depreciation, amortization and accretion.

Certain immaterial prior period amounts in the consolidated financial statements have been reclassified to conform to the current period's presentation.These reclassifications had no effect on the reported results of operations or the statement of financial position.

The financial information included herein, other than the Condensed Consolidated Balance Sheet as of December 31, 2019, is unaudited. The Condensed Consolidated Balance Sheet at December 31, 2019 has been derived from, but does not include all, the disclosures contained in the audited Consolidated Financial Statements as of and for the year ended December 31, 2019.

These Condensed Consolidated Financial Statements should be read in conjunction with the Consolidated Financial Statements and accompanying notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2019 (the “2019 Annual Report”). The Condensed Consolidated Statement of Operations for the interim periods presented are not necessarily indicative of the results that may be expected for a full year.

Use of Estimates

The preparation of these Condensed Consolidated Financial Statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. On an on-going basis, we evaluate estimates and assumptions, including, but not limited to, those related to the impairment of long-lived assets; intangible assets subject to amortization and goodwill; accounts receivable allowances; revenue recognition; determining standalone selling price of performance obligations; variable consideration; depreciation expense; asset retirement obligations; income taxes; and capitalization of software costs. We base our estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

NOTE 2 - RISKS AND OTHER IMPORTANT FACTORS

See "Item 1A. Risk Factors" of Part II of this Quarterly Report on Form 10-Q ("Quarterly Report") and "Item 1A. Risk Factors" of Part I of the 2019 Annual Report, which describe key risks associated with our operations and industry.

NOTE 3 - RECENT ACCOUNTING STANDARDS

Recently Adopted

Credit Losses - In June 2016, the Financial Accounting Standards Board issued ASU No. 2016-13, or CECL. CECL requires early recognition of credit losses on financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. This guidance is effective for fiscal years beginning after December 15, 2019.

On January 1, 2020 we adopted ASU No. 2016-13 which resulted in an immaterial adjustment to the beginning balance of retained earnings and an increase to allowance for doubtful accounts.

NOTE 4 - SIGNIFICANT ACCOUNTING POLICIES UPDATE

Our significant accounting policies are detailed in Note 1, "Organization and Significant Accounting Policies" of the 2019 Annual Report. Significant changes to our accounting policies that occurred during the nine months ended September 30, 2020 are discussed below:

Research and Development

Certain costs related to the development of Spok Go qualified for capitalization beginning in the first quarter of 2020.

In accordance with ASC 985-20, *Software to be Sold, Leased, or Marketed*, certain software development costs are charged to operations and expensed as incurred until technological feasibility has been established. Material costs incurred after technological feasibility is established and before the product is ready for general release are capitalized and amortized on a straight-line basis over the estimated remaining economic life of the product or the ratio of current revenues to total projected product revenues, whichever is greater. To date, the time between technological feasibility and general release to the public has been extremely short and consequently expenses available for capitalization have been immaterial. Accordingly, all research and developments costs incurred to date, accounted for in accordance with ASC 985-20, have been expensed as incurred.

In accordance with ASC 350-40, *Internal-use Software*, certain software development costs are capitalized while in the application development stage related to software developed for internal use or software sold in a SaaS arrangement. This includes certain development costs for Spok Go. All other costs incurred during the preliminary project stage or the post-implementation stage, are expensed as incurred. Capitalized software development is amortized on a straight-line basis over the estimated useful life of the asset, typically three years, beginning when those development efforts have been placed into service (e.g., generally once made commercially available). Determining the estimated useful life requires significant judgment as we consider factors such as the rapid and continuous developments in software technology, obsolescence and anticipated life of the service offering before enhancements are necessary. In a SaaS environment, customer needs are rapidly evolving and a shorter useful life is generally expected.

NOTE 5 - REVENUE, DEFERRED REVENUE AND PREPAID COMMISSIONS

Wireless Revenue

Wireless revenue consists of two primary components: paging revenue and product and other revenue. Paging revenue consists primarily of recurring fees associated with the provision of messaging services and fees for paging devices and is net of a provision for service credits. Product and other revenue reflects system sales, the sale of devices and charges for paging devices that are not returned and are net of anticipated credits. Our core offering includes subscriptions to one-way or two-way messaging services for a periodic (monthly, quarterly, semiannual, or annual) service fee. This is generally based upon the type of service provided, the geographic area covered, the number of devices provided to the customer and the period of commitment. A subscriber to one-way messaging services may select coverage on a local, regional or nationwide basis to best meet their messaging needs. Two-way messaging is generally offered on a nationwide basis. (See Item 1. “Business,” in the 2019 Annual Report for more details.)

Software Revenue

Software revenue consists of two primary components: operations revenue and maintenance revenue. Operations revenue consists primarily of license revenues for our healthcare communications solutions, subscription revenue for our Spok Go platform, equipment revenues that facilitate the use of our software solutions, and professional services revenue related to the implementation of our solutions. Maintenance revenue is for ongoing support of our software solutions or related equipment and access to when-and-if available software updates. Maintenance is generally purchased and renewed on an annual basis.

Revenue Recognition

Revenues are recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services. Our software licenses and hardware are generally recognized at a point in time when we have transferred control to the customer. For software licenses, revenue is not recognized until the related license(s) has been made available to the customer and the customer can begin to benefit from its right to use the license(s). Our software licenses represent a right to use Spok’s Intellectual Property ("IP") as it exists at a point in time at which the license is granted. Many of our software licenses have significant standalone functionality due to their ability to process a transaction or perform a function or task, and we do not need to maintain those products, once provided to the customer, for value to exist. While the functionality of the IP that we license may substantively change during the license period, customers are not contractually or practically required to update their license as a result of those changes. Our wireless, professional, subscription, and maintenance services are generally recognized over time due to a customer's simultaneous receipt and consumption of the benefit as we perform the work. As we transfer control over time, we recognize revenue based on the extent of progress towards completion of the performance obligation. The selection of the method to measure progress towards completion requires significant judgment and is based on the nature of the products or services to be provided. Generally, we use the time-elapsed measure of progress for performance obligations which include wireless or maintenance services. We believe this method best depicts the simultaneous transfer and consumption of the benefit based on our performance as these services are generally considered standby services. For professional services, we leverage an input methodology based on the number of hours worked on a project versus the total expected hours necessary to complete the project. Revenues are recognized proportionally as hours are incurred.

The following table presents our revenues disaggregated by revenue type:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
(Dollars in thousands)	**2020**	**2019**	**2020**	**2019**
Wireless products and services	$ 20,828	$ 21,814	$ 63,293	$ 66,552
License	1,988	2,723	3,692	7,239
Services	4,772	4,202	13,132	14,242
Hardware	554	689	1,880	2,493
Subscription	24	—	24	—
Maintenance	9,527	10,025	28,678	30,215
Total revenue	$ 37,693	$ 39,453	$ 110,699	$ 120,741

The U.S. was the only country that accounted for more than 10% of the Company's total revenue for the three and nine months ended September 30, 2020 and 2019. Revenue generated in the U.S. and internationally consisted of the following for the periods stated:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
(Dollars in thousands)	2020	2019	2020	2019
United States	$ 36,819	$ 38,312	$ 108,650	$ 116,525
International	874	1,141	2,049	4,216
Total revenue	$ 37,693	$ 39,453	$ 110,699	$ 120,741

Deferred Revenues

Our deferred revenues represent payments made, or due from, customers in advance of our performance. Changes in the balance of total deferred revenue during the nine months ended September 30, 2020 are as follows:

(Dollars in thousands)	December 31, 2019	Additions	Revenue Recognized	September 30, 2020
Deferred Revenue	$ 26,621	$ 49,477	$ (46,797)	$ 29,301

During the nine months ended September 30, 2020, the Company recognized $25.0 million related to amounts deferred as of December 31, 2019.

Prepaid Commissions

Our prepaid commissions represent payments made to employees in advance of our performance on the related underlying contracts. These costs have been incurred directly in relation to obtaining a contract. As such, these costs are amortized over the estimated period of benefit. Changes in the balance of total prepaid commissions during the nine months ended September 30, 2020 are as follows:

(Dollars in thousands)	December 31, 2019	Additions	Commissions Recognized	September 30, 2020
Prepaid Commissions	$ 2,431	$ 2,974	$ (3,123)	$ 2,282

Prepaid commissions are included within Prepaid expenses on the Condensed Consolidated Balance Sheets and commissions expense is included within Selling and marketing on the Condensed Consolidated Statements of Operations.

Remaining Performance Obligations

The balance of remaining performance obligations at September 30, 2020 was $51.7 million. We expect to recognize approximately $38.4 million of our remaining performance obligations over the next 12 months, with the remaining balance recognized thereafter.

NOTE 6 - Leases

We have operating lease arrangements for corporate offices, cellular towers, storage units and small building space. The building space is used to house infrastructure, such as transmitters, antennae and other various equipment for the Company's wireless paging services. For leases with a term of 12 months or less, renewal terms are generally of an evergreen nature (either month-to-month or year-to-year). For leases with a term greater than 12 months, renewal terms are generally explicit and provide for one to five optional renewals consistent with the initial term. Many of our leases, with the exception of those for our corporate offices, include options to terminate the lease within one year. Variable lease payments, residual value guarantees or purchase options are not generally present in these leases.

Lease costs are included in technology operations and general and administrative expenses on the Condensed Consolidated Statements of Operations. The following table presents lease costs disaggregated by type:

(Dollars in thousands)	For the Three Months Ended September 30, 2020	For the Three Months Ended September 30, 2019	For the Nine Months Ended September 30, 2020	For the Nine Months Ended September 30, 2019
Operating lease cost	$ 1,423	$ 1,285	$ 4,197	$ 4,008
Short-term lease cost	2,108	2,255	6,122	6,427
Short-term lease cost - related party[1]	892	895	2,681	2,718
Total lease cost	$ 4,423	$ 4,435	$ 13,000	$ 13,153
Supplemental Disclosure:				
Cash paid for amounts included in the measurement of lease liabilities - operating leases	$ 1,416			
Weighted-average remaining lease term - operating leases	5.16 years			
Weighted-average discount rate - operating leases	5.24 %			

[1] A member of our Board of Directors also serves as a director for an entity that leases transmission tower sites to the Company. Refer to Note 13, "Related Parties" for additional details.

Maturities of lease liabilities as of September 30, 2020 were as follows:

For the Year Ended December 31,	(Dollars in thousands)
For the remaining three months ending December 31, 2020	$ 1,431
2021	4,948
2022	3,270
2023	2,170
2024	1,559
Thereafter	3,731
Total future lease payments	17,109
Imputed interest	(2,123)
Total	$ 14,986

NOTE 7 - CONSOLIDATED FINANCIAL STATEMENT COMPONENTS

Depreciation, Amortization and Accretion

Depreciation, amortization and accretion expenses consisted of the following for the periods stated:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
(Dollars in thousands)	**2020**	**2019**	**2020**	**2019**
Depreciation				
Leasehold improvements	$ 13	$ 14	$ 43	$ 50
Asset retirement costs	(161)	(191)	(482)	(575)
Paging and computer equipment	1,237	1,627	4,110	4,950
Furniture, fixtures and vehicles	81	92	232	285
Total depreciation	1,170	1,542	3,903	4,710
Amortization	1,047	625	2,297	1,875
Accretion	118	138	353	414
Total depreciation, amortization and accretion expense	$ 2,335	$ 2,305	$ 6,553	$ 6,999

Accounts Receivable, Net

Accounts receivable was recorded net of an allowance of $2.0 million and $1.3 million at September 30, 2020 and December 31, 2019, respectively. Accounts receivable, net includes $8.3 million and $6.4 million of unbilled receivables at September 30, 2020 and December 31, 2019, respectively. Unbilled receivables are defined as the Company's right to consideration in exchange for goods or services that we have transferred to the customer but have not yet billed for, generally as a result of contractual billing terms.

Property and Equipment, Net

Property and equipment, net consisted of the following as of the dates stated:

(Dollars in thousands)	**Useful Life (In Years)**	**September 30, 2020**	**December 31, 2019**
Leasehold improvements	shorter of useful life or lease term	$ 3,620	$ 3,620
Asset retirement costs	1-5	1,922	1,922
Paging and computer equipment	1-5	94,171	96,562
Furniture, fixtures and vehicles	3-5	3,416	3,716
Total property and equipment		103,129	105,820
Accumulated depreciation		(96,196)	(97,820)
Total property and equipment, net		$ 6,933	$ 8,000

Capitalized Software Development

Capitalized software development is amortized on a straight-line basis over the estimated useful life of the asset, typically three years. Capitalized software development costs were $2.9 million and $8.2 million for the three and nine months ended September 30, 2020 and no capitalized costs were recorded for the three and nine months ended September 30, 2019, respectively. Amortization expense with respect to software development costs were $0.4 million for both the three and nine months ended September 30, 2020, and there was no amortization expense for 2019.

NOTE 8 - GOODWILL AND INTANGIBLE ASSETS, NET

Goodwill

During the three months ended September 30, 2020, we performed a qualitative assessment of goodwill and determined that a triggering event had not occurred. While an impairment assessment is performed annually in the fourth quarter, the Company monitors its business environment for potential triggering events on a quarterly basis. There is potential for further impairment charges being recognized in future periods based on these ongoing assessments.

Intangible Assets

Amortizable intangible assets at September 30, 2020 related primarily to customer relationships that resulted from our acquisition of Amcom Software, Inc. in 2011. Such intangibles are being amortized over a period of 10 years. The estimated remaining amortization for the years ending December 31, 2020 and 2021 is $0.6 million and $0.4 million, respectively.

The net consolidated balance of intangible assets consisted of the following at September 30, 2020:

(Dollars in thousands)	Useful Life (In Years)	Gross Carrying Amount	Accumulated Amortization	Net Balance
Customer relationships	10	$ 25,002	$ (23,960)	$ 1,042
Total amortizable intangible assets		$ 25,002	$ (23,960)	$ 1,042

NOTE 9 - ASSET RETIREMENT OBLIGATIONS

The components of the changes in the asset retirement obligation liabilities were:

(Dollars in thousands)	Short-Term Portion	Long-Term Portion	Total
Balance at January 1, 2020	$ 90	$ 6,061	$ 6,151
Accretion	(29)	382	353
Amounts paid	(196)	—	(196)
Reclassifications	320	(320)	—
Balance at September 30, 2020	$ 185	$ 6,123	$ 6,308

The short-term portion balance above is included within Other current liabilities on the Condensed Consolidated Balance Sheet at September 30, 2020 and December 31, 2019.

The cost associated with the estimated removal costs and timing refinements due to ongoing network rationalization activities is expected to accrete to a total liability of $7.6 million. The total estimated liability is based on the transmitter locations remaining after we have consolidated the number of networks we operate and assume the underlying leases continue to be renewed to that future date. Accretion expense related solely to asset retirement obligations and was recorded based on the interest method.

NOTE 10 - STOCKHOLDERS' EQUITY

General

Our authorized capital stock consists of 75 million shares of common stock, par value $0.0001 per share, and 25 million shares of preferred stock, par value $0.0001 per share.

At September 30, 2020 and December 31, 2019, we had no stock options outstanding.

At September 30, 2020 and December 31, 2019, there were 19,052,011 and 19,071,614 shares of common stock outstanding, respectively, and no shares of preferred stock outstanding.

Dividends

The following table details our cash dividends declared in 2020. Cash dividends paid as disclosed in the Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2020 and 2019 include previously declared cash dividends on shares of vested restricted common stock ("restricted stock") issued to our non-executive directors and dividends related to vested restricted stock units ("RSUs") issued to eligible employees. Cash dividends on RSUs and restricted stock have been accrued and are paid when the applicable vesting conditions are met. Accrued cash dividends on forfeited restricted stock and RSUs are also forfeited.

Declaration Date	Record Date	Payment Date	Per Share Amount	Total Declared[(1)] (Dollars in thousands)
February 26, 2020	March 16, 2020	March 30, 2020	$ 0.125	$ 2,488
April 29, 2020	May 25, 2020	June 24, 2020	0.125	2,491
July 29, 2020	August 17, 2020	September 10, 2020	0.125	2,494
	Total		$ 0.375	$ 7,473

(1) The total declared reflects the cash dividends declared in relation to common stock, DSUs and unvested RSUs.

On October 28, 2020, our Board of Directors declared a regular quarterly cash dividend of $0.125 per share of common stock with a record date of November 16, 2020, and a payment date of December 10, 2020. This cash dividend of approximately $2.4 million will be paid from available cash on hand.

Net Income (Loss) per Common Share

Basic net income (loss) per common share is computed on the basis of the weighted average common shares outstanding. Diluted net income (loss) per common share is computed on the basis of the weighted average common shares outstanding plus the effect of all potentially dilutive common shares including outstanding restricted stock and RSUs, which are treated as contingently issuable shares, using the “treasury stock” method.

The components of basic and diluted net income (loss) per common share were as follows for the periods stated:

(in thousands, except for share and per share amounts)	For the Three Months Ended September 30, 2020	For the Three Months Ended September 30, 2019	For the Nine Months Ended September 30, 2020	For the Nine Months Ended September 30, 2019
Numerator:				
Net income (loss)	$ 3,165	$ (1,326)	$ 2,384	$ (1,255)
Denominator:				
Basic and diluted weighted average outstanding shares of common stock	19,051,502	19,086,811	19,008,969	19,166,812
Diluted weighted average outstanding shares of common stock	19,208,452	19,086,811	19,273,243	19,166,812
Basic net income (loss) per common share	$ 0.17	$ (0.07)	$ 0.13	$ (0.07)
Diluted net income (loss) per common share	$ 0.16	$ (0.07)	$ 0.12	$ (0.07)

For the three and nine months ended September 30, 2020 and 2019 the following securities were excluded from the calculation of diluted shares outstanding as the effect would have been anti-dilutive:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2020	2019	2020	2019
Restricted stock units	—	129,973	—	179,576

Share-Based Compensation Plans

On March 23, 2012, our Board of Directors adopted the Spok Holdings, Inc. 2012 Equity Incentive Award Plan (the “2012 Equity Plan”) that was subsequently approved by our stockholders on May 16, 2012. A total of 2,194,986 shares of common stock were reserved for issuance under this plan. Awards under the 2012 Equity Plan were in the form of stock options, common stock, restricted stock, RSUs, performance and time based awards, dividend equivalents, deferred stock, deferred stock units, or stock appreciation rights. Restricted stock awards generally vest one year from the date of grant. Related dividends accumulate during the vesting period and are paid at the time of vesting. Contingent RSUs awards generally vest over a three-year performance period upon successful completion of the performance objectives. Non-contingent RSUs awards generally vest in thirds, annually, over a three-year period. Dividend equivalents rights generally accompany each RSU award and those rights accumulate and vest along with the underlying RSUs.

On April 29, 2020, our Board of Directors adopted the Spok Holdings, Inc. 2020 Equity Incentive Award Plan (the “2020 Equity Plan” and together with the 2012 Equity Plan, the "Equity Plans") that was subsequently approved by our stockholders on July 28, 2020. As of July 28, 2020, a total of 1,699,950 shares of common stock have been reserved for issuance under the 2020 Equity Plan, and no further grants will be made under the 2012 Equity Plan. However, the 2012 Equity Plan will continue to govern all outstanding awards thereunder. Awards under the 2020 Equity Plan may be in the form of stock options, restricted common stock, RSUs, deferred stock units ("DSU"), performance awards, dividend equivalents, stock payment awards, deferred stock, deferred stock units, stock appreciation rights or other stock or cash based awards. Restricted stock awards generally vest one year from the date of grant. Related dividends accumulate during the vesting period and are paid at the time of vesting. Contingent RSUs generally vest over a three-year performance period upon successful completion of the performance objectives. Non-contingent RSUs generally vest in thirds, annually, over a three-year period. Dividend equivalent rights generally accompany each RSU award and those rights accumulate and vest along with the underlying RSU. Dividend equivalent rights generally accompany each DSU award and are paid to participant's in cash on the Company's applicable dividend payment date whether the DSU is vested or unvested. The dividend equivalent right associated with a DSU continues until delivery of the underlying Common Stock is made. Payment of the underlying common stock is made, which occurs at the earliest of a participant's separation from service, disability, death, or a change in control. Any shares subject to an award under the 2012 Equity Plan that are forfeited or expire will be available for the future grant of awards under the 2020 Equity Plan. As of September 30, 2020, there was an aggregate of 923,090 unvested RSUs, DSUs and restricted stock outstanding under the 2012 Equity Plan.

The following table summarizes the activities under the 2012 Equity Plan from January 1, 2020 through September 30, 2020:

	Activity
Shares of common stock available at January 1, 2020	646,480
Additional shares available for issuance under the 2020 Equity Plan	1,600,000
RSU, DSU, and restricted stock awarded to eligible employees, net of forfeitures	(541,798)
Total common stock available at September 30, 2020	1,704,682

The following table details activities with respect to outstanding RSUs, DSUs, and restricted stock under the Equity Plans for the nine months ended September 30, 2020:

	Shares	Weighted-Average Grant Date Fair Value
Unvested at January 1, 2020	419,426	$ 14.00
Granted	577,805	12.06
Vested	(32,384)	13.63
Forfeited	(36,007)	12.51
Unvested at September 30, 2020	928,840	$ 12.86

Of the 928,840 unvested RSUs, DSUs and restricted stock outstanding at September 30, 2020, 475,837 RSUs include contingent performance requirements for vesting purposes. At September 30, 2020, there was $5.4 million of unrecognized net compensation cost related to RSUs and restricted stock, which is expected to be recognized over a weighted average period of 1.7 years.

Employee Stock Purchase Plan.

In 2016, our Board of Directors adopted the Spok Holdings, Inc. Employee Stock Purchase Plan ("ESPP") that was subsequently approved by our stockholders on July 25, 2016. A total of 250,000 shares of common stock have been reserved for issuance under this plan.

The Company's ESPP allows employees to purchase shares of common stock at a discounted rate, subject to plan limitations. Under the ESPP, eligible participants can voluntarily elect to have contributions withheld from their pay for the duration of an offering period, subject to the ESPP limits. At the end of an offering period, contributions will be used to purchase the Company's common stock at a discount to the market price based on the first or last day of the offering period, whichever is lower. Participants are required to hold common stock for a minimum period of two years from the grant date. Participants will begin earning dividends on shares after the purchase date. Each offering period will generally last for no longer than six months. Once an offering period begins, participants cannot adjust their withholding amount. If a participant chooses to withdraw, any previously withheld funds will be returned to the participant, with no stock purchased, and that participant will be eligible to participate in the ESPP at the next offering period. If the participant terminates employment with the Company during the offering period, all contributions will be returned to the employee and no stock will be purchased at a discounted rate.

The Company uses the Black-Scholes model to calculate the fair value of the common stock to be purchased each offering period on their offer date. The Black-Scholes model requires the use of estimates for the expected term, the expected volatility of the underlying common stock over the expected term, the risk-free interest rate and the expected dividend payment.

For the nine months ended September 30, 2020 and 2019, 18,586 and 9,876 shares, respectively, of the Company's common stock were purchased for a total cost of $0.2 million and $0.1 million, respectively.

The following table summarizes the activities under the ESPP from January 1, 2020 through September 30, 2020:

	Activity
Total ESPP equity securities available at January 1, 2020	184,860
ESPP common stock purchased by eligible employees	(18,586)
Total ESPP securities available at September 30, 2020	166,274

Amounts withheld from participants will be classified as Accrued compensation and benefits on the Condensed Consolidated Balance Sheets until funds are used to purchase shares. This liability amount is immaterial to the Condensed Consolidated Financial Statements.

Stock-Based Compensation Expense

We record all stock-based awards, which consist of RSUs, DSUs, restricted stock and the option to purchase common stock under the ESPP, at fair value as of the grant date. Stock-based compensation expense is recognized based on a straight-line amortization basis over the respective service period. Forfeitures and withdrawals are accounted for as incurred.

The following table reflects the items for stock-based compensation expense on the Condensed Consolidated Statements of Operations for the periods stated:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
(Dollars in thousands)	**2020**	**2019**	**2020**	**2019**
Performance-based RSUs	$ 664	$ 397	$ 1,524	$ 939
Time-based RSUs, DSUs and restricted stock	929	546	2,556	1,520
ESPP	23	21	80	62
Total stock-based compensation	$ 1,616	$ 964	$ 4,160	$ 2,521

NOTE 11 - INCOME TAXES

The Coronavirus Aid, Relief, and Economic Security ("CARES") Act was signed into law on March 27, 2020. The CARES Act was initiated to provide stimulus and relief in response to the coronavirus disease 2019 ("COVID-19") pandemic and resulting economic collapse. While the CARES Act provides a number of potential benefits to companies, we believe the following items may provide certain relief for our Company:

- *Payroll Tax Deferral* - Allows for the deferral of payment on the Company's share of the 6.2% Social Security tax on wages paid beginning on March 27, 2020 and ending on December 31, 2020. Deferred amounts are payable in two installments, with 50% of such taxes being due on December 31, 2021, and the remainder due on December 31, 2022. While we continue to assess the impact of the CARES Act, we believe this is likely to result in a deferral of between $1.5 million and $2.5 million in payroll taxes. For the nine months ended September 30, 2020, we have deferred approximately $1.2 million of payroll taxes under this provision.
- *Employee Retention Credits* - Allows for a refundable tax credit for the Company's share of the 6.2% Social Security tax on wages. This tax credit is for the first $10,000 in qualified wages paid to each employee commencing on March 13, 2020. To be eligible, our Company must (i) have had operations fully or partially suspended because of a shut-down order from a governmental authority related to COVID-19, or (ii) have had gross receipts decline by more than 50% in a calendar quarter when compared to the same quarter in 2019. Qualified wages are limited to wages paid to employees who were not providing services due to the COVID-19 crisis. While we continue to assess the impact of the CARES Act, we believe this is likely to result in a tax credit of between $1.2 million and $1.5 million. For the nine months ended September 30, 2020, we have claimed approximately $1.2 million in employee retention credits.
- *Alternative Minimum Tax ("AMT") Credit* - Allows for an immediate refund of all refundable AMT credits resulting from passage of the Tax Cuts and Jobs Act of 2017. This resulted in accelerated collection of approximately $1.3 million of other current assets which was received during the third quarter of 2020.

Spok files a consolidated U.S. Federal income tax return and income tax returns in various state, local and foreign jurisdictions as required.

Our quarterly tax provision, and our quarterly estimate of our annual effective tax rate, is subject to significant variation due to several factors, including variability in accurately predicting our pre-tax and taxable income and loss and the mix of jurisdictions to which they relate, changes in how we do business, changes in our stock price, foreign currency gains (losses), tax law developments (including changes in statutes, regulations, case law, and administrative practices), and relative changes of expenses or losses for which tax benefits are not recognized. Additionally, our effective tax rate can be more or less volatile based on the amount of pre-tax income or loss. For example, the impact of discrete items and non-deductible expenses on our effective tax rate is greater when our pre-tax income is lower.

For 2020, the anticipated effective income tax rate is expected to continue to differ from the Federal statutory rate of 21% primarily due to the effect of state income taxes, research and development credits, permanent differences between book and taxable income and certain discrete items.

At September 30, 2020, we had total deferred income tax assets ("DTAs") of $48.3 million and no valuation allowance. This reflects a decrease of $0.7 million from the December 31, 2019 DTAs of $49.0 million and no valuation allowance.

We consider both positive and negative evidence when evaluating the recoverability of our DTAs. The assessment is required to determine whether, based on all available evidence, it is more likely than not (i.e., greater than a 50% probability) that all or some portion of the DTAs will be realized in the future. During the fourth quarter of each year, we update our multi-year forecast of taxable income for our operations, which assists in analyzing the recoverability of our DTAs.

NOTE 12 - COMMITMENTS AND CONTINGENCIES

There have been no material changes during the nine months ended September 30, 2020 to the commitments and contingencies previously reported in the 2019 Annual Report.

NOTE 13 - RELATED PARTIES

A former member of our Board of Directors, who departed during the third quarter of 2020, also serves as a director for an entity that leases transmission tower sites to the Company. For both the three months ended September 30, 2020 and 2019, we incurred site rent expenses of $0.9 million from the entity on which the individual serves as a director. For both the nine months ended September 30, 2020 and 2019, we incurred site rent expense of $2.7 million from the entity on which the individual serves as a director. Site rent expenses are included in Technology operations expenses on the Condensed Consolidated Statements of Operations.

A member of our Board of Directors, who was appointed at the beginning of 2020, serves as Chief Information Officer for an entity that is also a customer of the Company. For both the three months ended September 30, 2020 and 2019, we recognized revenues of $0.2 million related to contracts from the entity at which the individual is employed. For both the nine months ended September 30, 2020 and 2019, we recognized revenue of $0.5 million related to contracts from the entity at which the individual is employed.

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

Forward-Looking Statements

This Quarterly Report contains forward-looking statements and information relating to Spok Holdings, Inc. and its subsidiaries (collectively, “we,” “Spok,” “our” or the “Company”) that set forth anticipated results based on management’s current plans, known trends and assumptions. These statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Statements that are predictive in nature, that depend upon or refer to future events or conditions, or that include words such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “will,” “target,” “forecast” and similar expressions, as they relate to Spok are forward-looking statements.

Although these statements are based upon current plans, known trends and assumptions that management considers reasonable, they are subject to certain risks, uncertainties and assumptions, including, but not limited to, those discussed in this section and “Risk Factors” below and under the captions “Business,” “Management’s Discussion and Analysis of Financial Condition and Statement of Operations (“MD&A”),” and “Risk Factors” in our 2019 Annual Report. Should known or unknown risks or uncertainties materialize, known trends change, or underlying assumptions prove inaccurate, actual results or outcomes may differ materially from past results and those described herein as anticipated, believed, estimated, expected, intended, targeted or forecasted. Investors are cautioned not to place undue reliance on these forward-looking statements.

The Company undertakes no obligation to update forward-looking statements. Investors are advised to consult all further disclosures the Company makes in its subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K that it will file with the SEC. Also note that, in the risk factors disclosed below in “Risk Factors” and in the Company’s 2019 Annual Report, the Company provides a cautionary discussion of risks, uncertainties and possibly inaccurate assumptions relevant to its business. These are factors that, individually or in the aggregate, could cause the Company’s actual results to differ materially from past results as well as those results that may be anticipated, believed, estimated, expected, intended, targeted or forecasted. It is not possible to predict or identify all such risk factors. Consequently, investors should not consider the risk factor discussion to be a complete discussion of all of the potential risks or uncertainties that could affect Spok's business, statement of operations or financial condition, subsequent to the filing of this Quarterly Report.

Overview

The following MD&A is intended to help the reader understand the results of operations and financial condition of Spok. This MD&A is provided as a supplement to, and should be read in conjunction with, our 2019 Annual Report and our unaudited Condensed Consolidated Financial Statements and accompanying notes. A reference to a “Note” in this section refers to the accompanying Unaudited Notes to Condensed Consolidated Financial Statements.

Spok, acting through its indirect wholly owned operating subsidiary, Spok, Inc., delivers smart, reliable solutions to help protect the health, well-being and safety of people primarily in the United States. Organizations rely on Spok for workflow improvement, secure texting, paging services, contact center optimization and public safety response.

Business

See Note 1, "Organization and Significant Accounting Policies" in Item 1 of Part I of this Quarterly Report on Form 10-Q ("Quarterly Report") and "Item 1. Business" of Part I of the 2019 Annual Report, which describe our business in further detail.

COVID-19

Coronavirus disease 2019 ("COVID-19") has significantly impacted the global economy. While the United States first began experiencing an impact in late February of this year, federal and state restrictions were not widely adopted until late in the first quarter. Given the significant uncertainties that exist regarding COVID-19, it is difficult for us to predict the short and long-term implications that this pandemic will continue to have on our business. There is a high level of uncertainty around COVID-19 including, but not limited to: the length of time in which government restrictions will remain in place or whether the restrictions will be implemented again in certain locations; the ability to contain the spread of the virus; the time it will take for the general economy to recover; the potential for a resurgence of the virus; and the time it will take hospitals to return to a more normal operating state. As a result, we are unable to quantify the potential impact that COVID-19 may have on our business.

Beginning in late February, we have seen, and expect to continue to see, a direct impact on our sales cycle as hospitals delay purchasing decisions and deal with staff reductions. These delays impact our software bookings, which directly impacts license and equipment revenues. We have also seen, and expect to continue to see, delays in our ability to deliver on-site implementation services, which impacts our services revenue. While much of our implementation process can be performed remotely, the on-premise nature of our solutions require some level of on-site availability to complete and finalize customer software solutions. We believe we will continue to see a decrease in our professional services revenue, in comparison to normal operating levels, for the remainder of this year. Our ability to return to normal operating levels will largely be driven by our customers and their ability to bring operations back to levels beyond just critical needs and emergency services. Many hospitals have seen a reduction in elective surgeries as a result of government restrictions, as well as patients delaying or canceling elective procedures during the COVID pandemic. As a result, many hospitals have temporarily furloughed employees in clinical, administrative and technology positions in order to ensure sustained cash flow during these unknown times. The personnel being furloughed are critical to both our sales cycle as well as our on-premise deployments and implementations. Additionally, many hospitals have restrictive social distancing guidelines in place in order to ensure the safety of their personnel and patients. These restrictions can make it difficult for external personnel who are not critical to the immediate operating needs of a hospital, such as our implementation staff, to gain access. These factors can vary considerably depending on the size of an organization, geographical location and local regulations. Thus, we continue to believe there will be a significant impact on our software revenues for the full year ending December 31, 2020 given that we anticipate continued disruptions to our business. With regard to implementation services, these impacts are primarily a delay in timing. The revenue still resides in our backlog of performance obligations ready to deliver at some point in the future.

However, over the last several months we have seen improvements in each of the aforementioned areas that have been impacted by COVID-19 and we are cautiously optimistic that we will continue seeing sequential improvement in these areas over the next several quarters. As facts and circumstances continue to evolve over the coming months, we will continue to assess and communicate the anticipated impact on our business. While our revenue will be impacted for the full year ending December 31, 2020, we are diligently pursuing counter measures to prudently manage operating expenses during this time, with a goal of neutralizing the impact of COVID-19 on our cash flows for the remaining three months ending December 31, 2020. More specifically, the Company enacted a Company-wide plan that reduced work schedules with a related temporary reduction in salary during the second and third quarters of 2020. While we will continue with a similar plan for the fourth quarter, we expect to do so at a reduced level, subject to actual operating conditions experienced in the period. As we continue to see improvements in our operating levels, we are confident that the need to mitigate cash flow impacts through direct expense management will also continue to decline. While the Company has the ability to continue this plan for the foreseeable future, we anticipate re-evaluating our position on a quarterly basis based on the progression of COVID-19, impacts on our business, and other facts and circumstances as deemed relevant by management. Additionally, we believe the Company will continue to see some benefits from the Coronavirus Aid Relief and Economic Security ("CARES") Act discussed in further detail below.

The CARES Act was signed into law on March 27, 2020 to provide stimulus and relief in response to the COVID-19 pandemic and resulting economic collapse. While the CARES Act provides a number of potential benefits to companies, we believe the following items may provide certain relief for our Company:

- *Payroll Tax Deferral* - Allows for the deferral of payment on the Company's share of the 6.2% Social Security tax on wages paid beginning on March 27, 2020 and ending on December 31, 2020. Deferred amounts are payable in two installments, with 50% of such taxes being due on December 31, 2021, and the remainder due on December 31, 2022. While we continue to assess the impact of the CARES Act, we believe this is likely to result in a total deferral of between $1.5 million and $2.5 million in payroll taxes. For the nine months ended September 30, 2020 we have deferred approximately $1.2 million of payroll taxes under this provision.
- *Employee Retention Credits* - Allows for a refundable tax credit for the Company's share of the 6.2% Social Security tax on wages. This tax credit is for the first $10,000 in qualified wages paid to each employee commencing on March 13, 2020. To be eligible, our Company must (i) have had operations fully or partially suspended because of a shut-down order from a governmental authority related to COVID-19, or (ii) have had gross receipts decline by more than 50% in a calendar quarter when compared to the same quarter in 2019. Qualified wages are limited to wages paid to employees who were not providing services due to the COVID-19 crisis. While we continue to assess the impact of the CARES Act, we believe this is likely to result in a tax credit of between $1.2 million and $1.5 million. For the nine months ended September 30, 2020 we have claimed approximately $1.2 million in employee retention credits.
- *Alternative Minimum Tax ("AMT") Credit* - Allows for an immediate refund of all refundable AMT credits resulting from passage of the CARES Act of 2020. This resulted in accelerated collection of approximately $1.3 million of other current assets which was received during the third quarter of 2020.

As previously mentioned, we believe our cost mitigation efforts, in addition to relief provided by the CARES Act and natural cost savings that will materialize as a result of COVID-19 (e.g., reduced travel and events), will allow us to offset any negative cash flow impact resulting from COVID-19 for the remainder of the year.

Revenue

We offer a focused suite of unified clinical communications and collaboration solutions that include call center operations, clinical alerting and notifications, one-way and advanced two-way wireless messaging services, mobile communications and public safety solutions.

We develop, sell and support enterprise-wide systems for healthcare, government, large enterprise and other organizations needing to automate, centralize and standardize their approach to clinical communications and collaboration. Our solutions can be found in prominent hospitals, large government agencies, leading public safety institutions, colleges and universities, large hotels, resorts and casinos, and well-known manufacturers. Our primary market has been the healthcare industry, particularly hospitals. We have identified hospitals with 200 or more beds as the primary targets for our software and wireless solutions.

Revenue generated by wireless messaging services (including voice mail, personalized greeting, message storage and retrieval) and equipment loss and/or maintenance protection for both one-way and two-way messaging subscribers is presented as wireless revenue in our Statement of Operations. Revenue generated by the sale of our software solutions, which includes software license, SaaS, professional services (installation, consulting and training), equipment (to be used in conjunction with the software), and post-contract support (on-going maintenance), is presented as software revenue in our Statement of Operations. Our software is licensed to end users under an industry standard software license agreement. For the nine months ended September 30, 2020, wireless revenue represented approximately 57.2% and software revenue represented approximately 42.8% of our consolidated revenue.

Refer to Note 5, "Revenue, Deferred Revenue and Prepaid Commissions" for additional information on our wireless and software revenue streams.

Operating Expenses

Our operating expenses are presented in functional categories. Certain of our functional categories are especially important to overall expense control and management. These operating expenses are categorized as follows:

- *Cost of revenue*. These are expenses primarily for hardware, third-party software, outside services expenses and payroll and related expenses for our professional services, logistics, customer support and maintenance staff.
- *Research and Development.* These expenses relate primarily to the development of new software products and the ongoing maintenance and enhancement of existing products. This classification consists primarily of employee payroll and related expenses, outside services related to the design, development, testing and enhancement of our solutions and to a lesser extent hardware equipment. The research and development costs exclude any development costs which qualify for capitalization.
- *Technology operations*. These are expenses associated with the operation of our paging networks. Expenses consist largely of site rent expenses for transmitter locations, telecommunication expenses to deliver messages over our paging networks, and payroll and related expenses for our engineering and pager repair functions. We actively pursue opportunities to consolidate transmitters and other technology operations expenses in order to maintain an efficient network while simultaneously ensuring adequate service for our customers. We believe continued reductions in these expenses will occur as our networks continue to be consolidated for the foreseeable future.
- *Selling and marketing*. The sales and marketing staff are involved in selling our communication solutions primarily in the United States. These expenses support our efforts to maintain gross placements of units in service, which mitigated the impact of disconnects on our wireless revenue base, and to identify business opportunities for additional or future software sales. We have a centralized marketing function, which is focused on supporting our products and vertical sales efforts by strengthening our brand, generating sales leads and facilitating the sales process. These marketing functions are accomplished through targeted email campaigns, webinars, regional and national user conferences, monthly newsletters and participation at industry trade shows. Expenses consist largely of payroll and related expenses, commissions and other costs such as travel and advertising costs.
- *General and administrative*. These are expenses associated with information technology and administrative functions, which include finance and accounting, human resources and executive management. This classification consists primarily of payroll and related expenses, stock-based compensation, outside services expenses, taxes, licenses and permit expenses, and facility rent expenses.
- *Depreciation, Amortization and Accretion.* These are expenses that may be associated with one or more of the aforementioned functional categories. This classification generally consists of depreciation from capital expenditures or other assets that are core to our on-going operations, amortization of intangible assets, amortization of capitalized software development costs, and accretion of asset retirement obligations.

Results of Operations

The following table is a summary of our Consolidated Statement of Operations for the Three and Nine Months Ended September 30, 2020 and 2019

(Dollars in thousands)	For the Three Months Ended September 30, 2020	For the Three Months Ended September 30, 2019	Change Total	Change %	For the Nine Months Ended September 30, 2020	For the Nine Months Ended September 30, 2019	Change Total	Change %
Revenue:								
Wireless	$ 20,828	$ 21,814	$ (986)	(4.5)%	$ 63,293	$ 66,552	$ (3,259)	(4.9)%
Software	16,865	17,639	(774)	(4.4)%	47,406	54,189	(6,783)	(12.5)%
Total revenue	37,693	39,453	(1,760)	(4.5)%	110,699	120,741	(10,042)	(8.3)%
Operating expenses:								
Cost of revenue	6,544	7,190	(646)	(9.0)%	20,709	22,021	(1,312)	(6.0)%
Research and development	3,459	7,437	(3,978)	(53.5)%	11,662	20,411	(8,749)	(42.9)%
Technology operations	7,357	7,805	(448)	(5.7)%	22,472	23,345	(873)	(3.7)%
Selling and marketing	4,272	5,595	(1,323)	(23.6)%	14,463	17,279	(2,816)	(16.3)%
General and administrative	10,994	11,813	(819)	(6.9)%	33,056	34,255	(1,199)	(3.5)%
Depreciation, amortization and accretion	2,335	2,305	30	1.3 %	6,553	6,999	(446)	(6.4)%
Total operating expenses	34,961	42,145	(7,184)	(17.0)%	108,915	124,310	(15,395)	(12.4)%
Operating income (loss)	2,732	(2,692)	5,424	(201.5)%	1,784	(3,569)	5,353	(150.0)%
Interest income	127	399	(272)	(68.2)%	636	1,300	(664)	(51.1)%
Other income	151	163	(12)	(7.4)%	113	528	(415)	(78.6)%
Income (loss) before income taxes	3,010	(2,130)	5,140	(241.3)%	2,533	(1,741)	4,274	(245.5)%
Benefit from (provision for) income taxes	155	804	(649)	(80.7)%	(149)	486	(635)	(130.7)%
Net income (loss)	$ 3,165	$ (1,326)	$ 4,491	(338.7)%	$ 2,384	$ (1,255)	$ 3,639	(290.0)%

Supplemental Information	2020	2019	Change Total	Change %
Full-Time Equivalent ("FTE") Employees	613	617	(4)	(0.6)%
Active transmitters	3,716	3,846	(130)	(3.4)%

Revenue

The table below details total revenue for the periods stated:

(Dollars in thousands)	For the Three Months Ended September 30, 2020	For the Three Months Ended September 30, 2019	Change Total	Change %	For the Nine Months Ended September 30, 2020	For the Nine Months Ended September 30, 2019	Change Total	Change %
Revenue - wireless:								
Paging revenue	$ 19,961	$ 21,212	$ (1,251)	(5.9)%	$ 60,403	$ 64,241	$ (3,838)	(6.0)%
Product and other revenue	867	602	265	44.0 %	2,890	2,311	579	25.1 %
Total wireless revenue	20,828	21,814	(986)	(4.5)%	63,293	66,552	(3,259)	(4.9)%
Revenue - software:								
License	1,988	2,723	(735)	(27.0)%	3,692	7,239	(3,547)	(49.0)%
Services	4,772	4,202	570	13.6 %	13,132	14,242	(1,110)	(7.8)%
Equipment	554	689	(135)	(19.6)%	1,880	2,493	(613)	(24.6)%
Subscription	24	—	24	100.0 %	24	—	24	100.0 %
Operations revenue	7,338	7,614	(276)	(3.6)%	18,728	23,974	(5,246)	(21.9)%
Maintenance revenue	9,527	10,025	(498)	(5.0)%	28,678	30,215	(1,537)	(5.1)%
Total software revenue	16,865	17,639	(774)	(4.4)%	47,406	54,189	(6,783)	(12.5)%
Total revenue	$ 37,693	$ 39,453	$ (1,760)	(4.5)%	$ 110,699	$ 120,741	$ (10,042)	(8.3)%

The decrease in wireless revenue for the three and nine months ended September 30, 2020 compared to the same periods in 2019 reflects the decrease in demand for our wireless services. Wireless revenue is generally based upon the number of units in service and the monthly Average Revenue Per User ("ARPU"). On a consolidated basis, ARPU is affected by several factors, including the mix of units in service and the pricing of the various components of our services. The number of units in service changes based on subscribers added, referred to as gross placements, less subscriber cancellations, or disconnects. ARPU for the three months ended September 30, 2020 and 2019 was $7.34 and $7.32, respectively. Total units in service were 0.9 million and 1.0 million as of September 30, 2020 and 2019, respectively. While demand for wireless services continues to decline, it has done so at a slower rate than historically experienced. While we are optimistic that this trend will continue in future periods, we believe that demand will continue to decline for the foreseeable future in line with recent and historical trends. As our wireless products and services are replaced with other competing technologies, such as the shift from narrow band wireless service offerings to broad band technology services, our wireless revenue will continue to decrease.

The following reflects the impact of subscribers and ARPU on the change in wireless revenue:

(in thousands)	Units in Service as of September 30, 2020	Units in Service as of September 30, 2019	Units in Service Change	Revenue for the Three Months Ended September 30, 2020	Revenue for the Three Months Ended September 30, 2019	Revenue Change	Change Due To: ARPU	Change Due To: Units
Total	898	955	(57)	$ 19,961	$ 21,212	$ (1,251)	$ 62	$ (1,313)

(in thousands)	Units in Service as of September 30, 2020	Units in Service as of September 30, 2019	Units in Service Change	Revenue for the Nine Months Ended September 30, 2020	Revenue for the Nine Months Ended September 30, 2019	Revenue Change	Change Due To: ARPU	Change Due To: Units
Total	898	955	(57)	$ 60,403	$ 64,241	$ (3,838)	$ (173)	$ (3,665)

As demand for one-way and two-way messaging has declined, we have developed or added service offerings such as encrypted paging and Spok Mobile with a pager number in order to increase our revenue potential and mitigate the decline in our wireless revenue. We will continue to explore ways to innovate and provide customers the highest value possible.

For the three and nine months ended September 30, 2020, as compared to the same periods in 2019, the decrease in license revenue is related to a decrease in bookings as well as the benefit received in 2019 due to amounts included from software licenses delivered to the customer that were contracted for in a prior period. During 2019, the Company began delivering software licenses to customers in the same month they were contracted for, thus a similar benefit was not seen during the three and nine months ended September 30, 2020. Additionally, the delay in our sales cycle due to COVID-19 resulted in delivery of fewer software licenses and equipment products. Service revenue was lower, primarily resulting from the impact of COVID-19 as social distancing and other restrictions, as well as our customers' focus on COVID-19 mitigation efforts, led to delays in implementation projects, contributing to lower services revenue beginning in March 2020. Given the nature of our projects (e.g. fixed bid), the time taken to complete projects in comparison to the original expectation can vary significantly, resulting from a number of factors including complexity, customer focus and project scope.

For the three and nine months ended September 30, 2020, as compared to the same periods in 2019, the decrease in maintenance revenue primarily relates to lower license bookings, as discussed above, from which new maintenance revenue is derived and certain one-time revenue items reflected in the results for the nine months ended September 30, 2019 that did not occur in 2020. These one-time items generally relate to specific renewal contracts that do not have auto-renewal terms and for which we must negotiate at the end of each term. We are generally precluded from recognizing revenue on these contracts until new terms have been agreed to even though we generally will continue to provide maintenance service for these customers while negotiations are on-going. While certain commercial customers require this type of contract renewal, these contracts are generally limited to government organizations including federal, state and local entities. When a renewal of this nature has been contracted, it is often accompanied by several months of "catch-up" revenue from services performed in past periods resulting in a one-time value that is greater than the normal monthly revenue expected over the life of the remaining term.

As we continue to focus the majority of our development efforts on Spok Go, we anticipate a continued decline in our ability to sell new licenses for the Care Connect Suite of products. While we have not seen a meaningful increase in our normal customer churn, our ability to replace this churn with new revenues will not likely replicate what we have accomplished historically nor do we expect to fully offset this with annual increases of our existing base. Our intent is to replace this churn with the sale of Spok Go as well as transition existing on-premise customers to our cloud based solution over the next several years. Given these dynamics, we believe annual maintenance revenue is likely to be relatively flat or slightly down as we move forward, especially as we begin the process of transitioning existing customers to a subscription model.

Operating Expenses

The following is a review of our operating expense categories for the three and nine months ended September 30, 2020 and 2019. Certain prior period amounts have been reclassified to conform to the current period's presentation.

Cost of revenue. Cost of revenue consisted primarily of the following items:

	For the Three Months Ended September 30,		Change		For the Nine Months Ended September 30,		Change	
(Dollars in thousands)	**2020**	**2019**	**Total**	**%**	**2020**	**2019**	**Total**	**%**
Payroll and related	$ 4,941	$ 5,099	$ (158)	(3.1)%	$ 15,077	$ 14,779	$ 298	2.0 %
Cost of sales	1,064	1,567	(503)	(32.1)%	4,101	5,547	(1,446)	(26.1)%
Stock-based compensation	148	21	127	604.8 %	401	224	177	79.0 %
Other	391	503	(112)	(22.3)%	1,130	1,471	(341)	(23.2)%
Total cost of revenue	$ 6,544	$ 7,190	$ (646)	(9.0)%	$ 20,709	$ 22,021	$ (1,312)	(6.0)%
FTE Employees	199	182	17	9.3 %	199	182	17	9.3 %

For the three months ended September 30, 2020 as compared to the same period in 2019, payroll and related costs decreased primarily as a result of temporary cost reductions implemented by management beginning in the second quarter of 2020, in an effort to negate the impacts of COVID-19, partially offset by an increase in headcount and average cost per Full-Time Equivalent ("FTE") employee. These temporary cost reductions are outlined in more detail within our earlier discussion on COVID-19. The decrease in cost of sales is generally driven by lower software revenue. For the nine months ended September 30, 2020 as compared to the same period in 2019, payroll and related costs increased primarily as a result of an increase in average headcount and average cost per FTE, partially offset by the temporary cost reductions previously discussed.

Research and Development. Research and development expenses consisted of the following items:

(Dollars in thousands)	For the Three Months Ended September 30, 2020	2019	Change Total	%	For the Nine Months Ended September 30, 2020	2019	Change Total	%
Payroll and related	$ 4,147	$ 5,083	$ (936)	(18.4)%	$ 13,023	$ 13,985	$ (962)	(6.9)%
Outside services	2,113	2,027	86	4.2 %	5,500	5,684	(184)	(3.2)%
Capitalized software development	(2,906)	—	(2,906)	100.0 %	(8,206)	—	(8,206)	100.0 %
Stock-based compensation	240	102	138	135.3 %	719	196	523	266.8 %
Other	(135)	225	(360)	(160.0)%	626	546	80	14.7 %
Total research and development	$ 3,459	$ 7,437	$ (3,978)	(53.5)%	$ 11,662	$ 20,411	$ (8,749)	(42.9)%
FTE Employees	125	136	(11)	(8.1)%	125	136	(11)	(8.1)%

Research and development expenses decreased for the three and nine months ended September 30, 2020 compared to the same periods in 2019, primarily due to the capitalization of certain development costs related to Spok Go. Refer to Note 4, "Significant Accounting Policies Update" and Note 7, "Consolidated Financial Statement Components" for further detail. The payroll and related costs decreased primarily as a result of temporary cost reductions implemented by management beginning in the second quarter of 2020, in an effort to negate the impacts of COVID-19. These temporary cost reductions are outlined in more detail within our earlier discussion on COVID-19. We continue to focus on the development efforts of our software solutions and intend to maintain these efforts based on their importance to our continued success. However, increases in development costs have grown at a slower pace when compared to prior years. Excluding the effects of capitalization, these costs will continue to substantially impact margins and our cash flow from operations. The benefits from our development efforts are contingent upon successful adoption of Spok Go in the marketplace, which we expect to gradually take place over the next several years.

Technology Operations. Technology operations expenses consisted primarily of the following items:

(Dollars in thousands)	For the Three Months Ended September 30, 2020	2019	Change Total	%	For the Nine Months Ended September 30, 2020	2019	Change Total	%
Payroll and related	$ 2,246	$ 2,823	$ (577)	(20.4)%	$ 7,170	$ 8,132	$ (962)	(11.8)%
Site rent	3,467	3,269	198	6.1 %	10,265	10,046	219	2.2 %
Telecommunications	949	1,016	(67)	(6.6)%	2,911	3,031	(120)	(4.0)%
Stock-based compensation	52	30	22	73.3 %	142	91	51	56.0 %
Other	643	667	(24)	(3.6)%	1,984	2,045	(61)	(3.0)%
Technology Operations	$ 7,357	$ 7,805	$ (448)	(5.7)%	$ 22,472	$ 23,345	$ (873)	(3.7)%
FTE Employees	89	90	(1)	(1.1)%	89	90	(1)	(1.1)%

Technology operations expense decreased for the three and nine months ended September 30, 2020 compared to the same periods in 2019, primarily due to the decrease in payroll and related and other minor expenses, partially offset by the increase in site rent. The payroll and related costs decreased primarily as a result of temporary cost reductions implemented by management beginning in the second quarter of 2020, in an effort to negate the impacts of COVID-19. These temporary cost reductions are outlined in more detail within our earlier discussion on COVID-19. The increase in site rent for the three and nine months ended September 30, 2020 compared to the same period in 2019 is primarily due to costs incurred in 2020 that were categorized elsewhere in 2019. These costs were reclassified to site rent during the fourth quarter of 2019 and were approximately $0.2 to $0.3 million. This was partially offset by a reduction in the number of active transmitters, which directly impacts the amount of site rent expense we incur on a recurring basis. The number of active transmitters declined 3.4% between September 30, 2020 and September 30, 2019. As we reach certain minimum frequency commitments, as outlined by the United States Federal Communications Commission, we may be unable to continue our efforts to rationalize and consolidate our networks.

Selling and Marketing. Selling and marketing expenses consisted of the following items:

(Dollars in thousands)	For the Three Months Ended September 30, 2020	For the Three Months Ended September 30, 2019	Change Total	Change %	For the Nine Months Ended September 30, 2020	For the Nine Months Ended September 30, 2019	Change Total	Change %
Payroll and related	$ 2,773	$ 3,524	$ (751)	(21.3)%	$ 8,894	$ 10,126	$ (1,232)	(12.2)%
Commissions	1,059	1,114	(55)	(4.9)%	3,123	3,836	(713)	(18.6)%
Stock-based compensation	208	137	71	51.8 %	575	426	149	35.0 %
Advertising and events	151	703	(552)	(78.5)%	1,095	2,293	(1,198)	(52.2)%
Other	81	117	(36)	(30.8)%	776	598	178	29.8 %
Total selling and marketing	$ 4,272	$ 5,595	$ (1,323)	(23.6)%	$ 14,463	$ 17,279	$ (2,816)	(16.3)%
FTE Employees	98	103	(5)	(4.9)%	98	103	(5)	(4.9)%

Selling and marketing expenses decreased for the three and nine months ended September 30, 2020 compared to the same periods in 2019, primarily due to the decrease in payroll and related, commissions and advertising and events. The payroll and related costs decreased primarily as a result of temporary cost reductions implemented by management beginning in the second quarter of 2020, in an effort to negate the impacts of COVID-19. These temporary cost reductions are outlined in more detail within our earlier discussion on COVID-19. The decrease in commissions expenses primarily relates to a corresponding decrease in revenue. The decrease in advertising and events expenses is largely due to management's focused efforts to reduce marketing costs to augment research and development initiatives.

General and Administrative. General and administrative expenses consisted of the following items:

(Dollars in thousands)	For the Three Months Ended September 30, 2020	For the Three Months Ended September 30, 2019	Change Total	Change %	For the Nine Months Ended September 30, 2020	For the Nine Months Ended September 30, 2019	Change Total	Change %
Payroll and related	$ 3,476	$ 4,220	$ (744)	(17.6)%	$ 10,965	$ 12,397	$ (1,432)	(11.6)%
Stock-based compensation	968	674	294	43.6 %	2,323	1,584	739	46.7 %
Bad debt	178	402	(224)	(55.7)%	849	614	235	38.3 %
Facility rent, office, and technology costs	2,259	2,369	(110)	(4.6)%	6,604	7,147	(543)	(7.6)%
Outside services	2,148	2,004	144	7.2 %	6,227	6,086	141	2.3 %
Taxes, licenses and permits	994	888	106	11.9 %	2,657	2,672	(15)	(0.6)%
Other	971	1,256	(285)	(22.7)%	3,431	3,755	(324)	(8.6)%
Total general and administrative	$ 10,994	$ 11,813	$ (819)	(6.9)%	$ 33,056	$ 34,255	$ (1,199)	(3.5)%
FTE Employees	102	106	(4)	(3.8)%	102	106	(4)	(3.8)%

General and administrative expenses decreased for the three and nine months ended September 30, 2020 compared to the same periods in 2019, primarily due to a decrease in payroll and related and various other expenses, partially offset by an increase in stock-based compensation. The payroll and related costs decreased primarily as a result of temporary cost reductions implemented by management beginning in the second quarter of 2020, in an effort to negate the impacts of COVID-19. These temporary cost reductions are outlined in more detail within our earlier discussion on COVID-19. The increase in bad debt for the nine months ended September 30, 2020 is partly due to a change in our methodology resulting from the adoption of CECL, as we now carry an allowance for current unbilled receivables which was not included for the same periods in 2019. The decrease in facility rent, office, and technology costs is largely due to miscellaneous expense reductions stemming from management's cost saving efforts. For the three months ended September 30, 2020 the increase in stock-based compensation was primarily related to accelerated vesting for the departure of one of the Directors as well as expense related to the alternative DSU plan available to the Board of Directors. Refer to Note 10, "Stockholder Equity" for further detail related to the alternative DSU plan. In addition to the alternative DSU plan, for the nine months ended September 30, 2020, the increase in stock-based compensation was largely due to forfeitures related to the resignation of a Named Executive Officer during the nine months ended June 30, 2019 that did not occur during the nine months ended September 30, 2020.

Depreciation, Amortization and Accretion. Depreciation, amortization and accretion expenses were $2.3 million for both the three months ended September 30, 2020 and 2019, and $6.6 million and $7.0 million for the nine months ended September 30, 2020 and 2019, respectively. The decrease of $0.4 million for the nine months ended September 30, 2020 compared to the same period in 2019 is primarily due to certain computer hardware and software assets becoming fully depreciated in 2019 as well as continued efforts to reduce capital expenditures. For additional details regarding depreciation, amortization and accretion expenses refer to Note 7, "Consolidated Financial Statement Components."

Benefit from (provision for) income taxes. Benefit from income taxes was $0.2 million and $0.8 million for the three months ended September 30, 2020 and 2019, respectively. Benefit from income taxes increased $0.6 million for the three months ended September 30, 2020 compared to the same period in 2019. Provision for (benefit from) from income taxes was $0.1 million and $0.5 million for the nine months ended September 30, 2020 and 2019, respectively. The change in the provision for income taxes for the three and nine months ended September 30, 2020 as compared to the same period in 2019 primarily relates to the difference in the anticipated annual effective tax rate as a result of certain permanent tax differences, estimated research and development tax credits and certain discrete items. Further details can be found in Note 11, "Income Taxes."

Liquidity and Capital Resources

At September 30, 2020, we had cash and cash equivalents and short-term investments of $79.2 million.

The available cash and cash equivalents are held in accounts managed by third-party financial institutions and consist of invested cash and cash in our operating accounts. The invested cash is invested in interest bearing funds managed by third-party financial institutions. These funds invest in direct obligations of the government of the United States. To date, we have experienced no loss or lack of access to our invested cash or cash equivalents; however, we can provide no assurance that access to our invested cash and cash equivalents will not be impacted by adverse market conditions. Our short-term investments consist entirely of U.S. Treasury securities which are classified as held-to-maturity and are measured at amortized cost on our Condensed Consolidated Balance Sheets.

At any point in time, we typically have approximately $7.0 million to $15.0 million in our operating accounts that are with third-party financial institutions. While we monitor daily the cash balances in our operating accounts and adjust the cash balances as appropriate, these cash balances could be impacted if the underlying financial institutions fail or are subject to other adverse conditions in the financial markets. To date, we have experienced no loss or lack of access to cash in our operating accounts.

We intend to use our cash on hand to provide working capital, to support operations, to invest in our business, and to return value to stockholders through cash dividends and possible repurchases of our common stock. We may also consider using cash to fund or complete opportunistic investments and acquisitions that we believe will provide a measure of growth or revenue stability while supporting our existing operations. Because we intend to continue to substantially invest in the development of our integrated communications platform over the next several years, commensurate with declining revenues from our wireless business, we anticipate that our cash on hand will decrease significantly during that period, and possibly longer until revenues from Spok Go begin to be realized.

In response to COVID-19, management has enacted certain cost mitigation measures, as previously discussed, that it believes will allow the Company to operate in a cash flow positive manner for the remainder of the year. While we had previously mentioned the potential impact on our revenues, we do not expect COVID-19 will have a material impact on our liquidity at this time given our ability to reduce costs further, if necessary.

Overview

In the event that net cash provided by operating activities and cash on hand are not sufficient to meet future cash requirements, we may be required to reduce planned capital expenses, reduce or eliminate our cash dividends to stockholders, not resume our common stock repurchase program, sell assets and/or seek outside financing. We can provide no assurance that reductions in planned capital expenses or proceeds from asset sales would be sufficient to cover shortfalls in available cash or that outside financing would be available on acceptable terms.

Based on current and anticipated levels of operations, we anticipate that net cash provided by operating activities, together with the available cash on hand at September 30, 2020, should be adequate to meet our anticipated cash requirements for the foreseeable future.

The following table sets forth information on our net cash flows from operating, investing, and financing activities for the periods stated:

	Nine Months Ended September 30,		
(Dollars in thousands)	**2020**	**2019**	**Change**
Net cash provided by operating activities	$ 20,954	$ 10,748	$ 10,206
Net cash used in investing activities	(10,900)	(29,661)	18,761
Net cash used in financing activities	(8,125)	(14,913)	6,788

Net Cash Provided by Operating Activities. For the nine months ended September 30, 2020 cash provided by operating activities was $21.0 million due primarily to net income of $2.4 million, non-cash items such as depreciation, amortization and accretion of $6.6 million, stock-based compensation of $4.1 million, and other non-cash items of $0.9 million. Cash provided by operating activities also increased resulting from the change in prepaid expenses, inventory, and other assets of $3.7 million, accounts payable, accrued liabilities and other of $1.6 million and deferred revenue of $2.7 million, partially offset by changes in account receivable of $1.0 million.

Cash provided by operating activities for the nine months ended September 30, 2019 was $10.7 million, due primarily to non-cash items such as depreciation, amortization and accretion of $7.0 million, stock-based compensation of $2.5 million, and other non-cash items of $0.7 million, partially off set by net loss of 1.3 million deferred income tax expense of $0.6 million. Cash provided by operating activities also increased resulting from the change in account receivable of $0.3 million, prepaid expenses, inventory, and other assets of $2.1 million and deferred revenue of $1.4 million, partially offset by the changes in accounts payable, accrued liabilities, and other of $1.4 million.

Net Cash Used in Investing Activities. Cash used in investing activities for the nine months ended September 30, 2020 was $10.9 million due primarily to the capitalization of software development costs, purchases of property and equipment, and purchase and maturity of short-term investments. Cash used in investing activities for the nine months ended September 30, 2019 was $29.7 million, respectively, due primarily to the purchases of property and equipment and purchase and maturity of short-term investments.

Net Cash Used in Financing Activities. Cash used in financing activities for the nine months ended September 30, 2020 was $8.1 million due primarily to cash distributions to stockholders. Cash used in financing activities for the nine months ended September 30, 2019 was $14.9 million due primarily to cash distributions to stockholder and the purchase of common stock.

Future Cash Dividends to Stockholders. On October 28, 2020, our Board of Directors declared a regular quarterly cash dividend of $0.125 per share of common stock with a record date of November 16, 2020, and a payment date of December 10, 2020. This cash dividend of approximately $2.4 million will be paid from available cash on hand.

Other. For 2020, the Board of Directors currently expects to pay dividends of $0.125 per common share each quarter, subject to declaration by the Board of Directors.

Commitments and Contingencies

Operating Leases. We have operating leases for office and transmitter locations. Substantially all of these leases have lease terms ranging from one month to five years. We continue to review our office and transmitter locations, and intend to replace, reduce or consolidate leases where possible. The current headquarters lease terminates March 2021 and the Company has entered into a new 67 month lease at a new location commencing March 2021. As we reach certain minimum frequency commitments, as outlined by the United States Federal Communications Commission, we may be unable to continue our efforts to rationalize and consolidate our networks. Total rent expense under operating leases was $4.4 million for both the three months ended September 30, 2020 and 2019, respectively and $13.0 million and $13.1 million for the nine months ended September 30, 2020 and 2019.

Off-Balance Sheet Arrangements. We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As such, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in such relationships.

Commitments and Contingencies. See Note 12, "Commitments and Contingencies" for further discussion on our commitments and contingencies.

Related Party Transactions

See Note 13, "Related Parties" for a discussion regarding our related party transactions.

Critical Accounting Policies and Estimates

The preceding discussion and analysis of financial condition and operations is based on our Condensed Consolidated Financial Statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”). The preparation of our Condensed Consolidated Financial Statements requires management to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosures. On an on-going basis, we evaluate estimates and assumptions, including, but not limited to, those related to the impairment of long-lived assets and intangible assets subject to amortization and goodwill, accounts receivable, revenue recognition, asset retirement obligations, and income taxes. We base our estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

There have been no changes to the critical accounting policies reported in the 2019 Annual Report that affect our significant judgments and estimates used in the preparation of our Condensed Consolidated Financial Statements other than those outlined in Note 4, "Significant Accounting Policies Update."

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

Interest Rate Risk

As of September 30, 2020, we had no outstanding debt and no revolving credit facility.

Foreign Currency Exchange Rate Risk

We conduct a limited amount of business outside the United States. The financial impact of transactions billed in foreign currencies is immaterial to our financial results and, consequently, we do not have any material exposure to the risk of foreign currency exchange rate fluctuations.

ITEM 4. ***CONTROLS AND PROCEDURES***

Evaluation of Disclosure Controls and Procedures

Our management carried out an evaluation, as required by Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), with the participation of our principal executive officer and our principal financial officer, of the effectiveness of our disclosure controls and procedures, as of the end of our last fiscal quarter. Disclosure controls and procedures are defined under Rule 13a-15(e) under the Exchange Act as controls and other procedures of an issuer that are designed to ensure that the information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to the issuer’s management, including its principal executive officer and principal financial officer, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure. Based upon this evaluation, our principal executive officer and our principal financial officer have concluded that our disclosure controls and procedures were effective as of September 30, 2020.

Changes in Internal Control Over Financial Reporting

There were no changes made to the Company's internal control over financial reporting during the three months ended September 30, 2020 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. *LEGAL PROCEEDINGS*

Refer to Note 12, "Commitments and Contingencies" in the Notes to Financial Statements for information regarding legal proceedings in which we are involved.

ITEM 1A. *RISK FACTORS*

The risk factors included in "Part I – Item 1A – Risk Factors" of the 2019 Annual Report have not materially changed during the nine months ended September 30, 2020 other than the additional risk factor provided below:

Our business, financial condition and operating results have been, and will continue to be, adversely affected by the recent COVID-19 pandemic.

The COVID-19 pandemic has resulted in a widespread health crisis that has adversely affected businesses, economies and financial markets worldwide, and has caused significant volatility in U.S. and international debt and equity markets. In particular, health care organizations have faced, and will continue to face, substantial challenges in treating patients with COVID-19, such as the diversion of hospital staff and resources from ordinary functions to the treatment of COVID-19, supply, resource and capital shortages and the overburdening of staff and resource capacity.

Our business, financial condition and operating results have been, and will continue to be, adversely affected by the COVID-19 pandemic. For example, the COVID-19 pandemic has caused, and will continue to cause, delays in or the loss of revenue from services that require onsite implementation as well as delays in or the loss of software bookings, which directly impacts license and equipment revenues, as health care organizations are putting these projects on hold to focus limited resources and personnel capacity toward the treatment of COVID-19. We also may be affected by the cancellation of or delay in healthcare information technology and management systems conferences and exhibitions, like the Healthcare Information and Management Systems Society (HIMSS) Global Health Conference & Exhibition, which was scheduled to take place in early March and would have allowed us to continue the rollout of Spok Go. The cancellation of or delay in these types of conferences and exhibitions may negatively affect our growth in Spok Go revenues.

The extent to which COVID-19 impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including actions taken to contain COVID-19 or treat its impact and the length of time any government restrictions will remain in place, whether restrictions will be implemented again in certain locations, the time it will take for the general economy to recover, the potential for a resurgence of the virus and the time it will take hospitals to return to a more normal operating state.

ITEM 2. *UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS*

The Company did not repurchase any shares of its common stock during the three months ended September 30, 2020.

ITEM 6. *EXHIBITS*

The exhibits listed in the accompanying Exhibit Index below are filed or incorporated by reference as part of this report.

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed/Furnished Herewith
		Form	File No.	Exhibit/Appendix	Filing Date	
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended, dated September 30, 2020					Filed
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended, dated September 30, 2020					Filed
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350 dated September 30, 2020					Furnished
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350 dated September 30, 2020					Furnished
101.INS	Inline 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*					Filed
101.SCH	Inline XBRL Taxonomy Extension Schema*					Filed
101.CAL	Inline XBRL Taxonomy Extension Calculation*					Filed
101.DEF	Inline XBRL Taxonomy Extension Definition*					Filed
101.LAB	Inline XBRL Taxonomy Extension Labels*					Filed
101.PRE	Inline XBRL Taxonomy Extension Presentation*					Filed
104	Cover Page Interactive Data File (the cover page XBRL tags are embedded within the Inline XBRL document and included Exhibit 101)					Filed

* The financial information contained in these XBRL documents is unaudited.

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.

SPOK HOLDINGS, INC.

Dated: October 29, 2020

/s/ Michael W. Wallace

Name: Michael W. Wallace

Title: Chief Financial Officer

(Principal Financial Officer and duly authorized officer)

Exhibit 31.1

CERTIFICATIONS

I, Vincent D. Kelly, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Spok Holdings, Inc.;
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.

Dated: October 29, 2020

/s/ Vincent D. Kelly

Vincent D. Kelly
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Michael W. Wallace, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Spok Holdings, Inc.;

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.

Dated: October 29, 2020

/s/ Michael W. Wallace

Michael W. Wallace
Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Spok Holdings, Inc. (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended September 30, 2020 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: October 29, 2020

/s/ Vincent D. Kelly

Vincent D. Kelly
President and Chief Executive Officer

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Spok Holdings, Inc. (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended September 30, 2020 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: October 29, 2020

/s/ Michael W. Wallace

Michael W. Wallace
Chief Financial Officer